{NEW HORIZONS\NEW CHALLENGES}

International Scientific STI Policy Evaluation Conference

evaluation of STI policies, instruments and organisations

PROGRAM BOOKLET

14 - 15 November 2013

Tech Gate, Vienna

AUSTRIA

sticon2013.fteval.at

PLATFORM fteval Research & Technology Policy Evaluation

IFRIS Institute For Research and Innovation in Society

MANCHESTER 1824 The University of Manchester

bmvit Federal Ministry for Transport, Innovation and Technology

bmwfj Bundesministerium für Wirtschaft, Familie und Jugend

BMWF

FWF Der Wissenschaftsfonds.

FFG

WWTF

SciVal

OVERALL STRUCTURE

THURSDAY 14 NOVEMBER 2013

08:00 – 09:00	Registration
09:00 – 09:15	Welcome addresses by organisers
09:15 – 10:00	First key note speech "The Politics and Policies of Evaluation in a Multi-level Research System"
10:00 – 10:45	Panel 1 – New RTI instruments – new intelligence requirements: what has to be considered in RTI evaluations?
10:45 – 11:15	Coffee Break
11:15 – 13:15	Parallel Sessions 1 + 2 + 3
13:15 – 14:15	Lunch
14:15 – 15:45	Parallel Sessions 4a + 5
15:45 – 16:15	Coffee Break
16:15 – 18:00	Parallel Sessions 4b+2b
18:15 – 18:45	Special Session: HORIZON 2020 – the overall evaluation approach: critical reflection and discussion
19:00	Bus to dinner
19:30 – 22:30	Dinner

FRIDAY 15 NOVEMBER 2013

09:00 – 10:00	Second key note speech "Current changes and challenges in the field of STI policy-making and the effects this might have on STI evaluation theory and practice"
10:00 – 12:15	Parallel Sessions 6 + 7 (short coffee break included)
12:15 – 13:30	Lunch + Lunchbreak Panel – Enhancing the use of research information systems for RTI evaluation
13:30 – 15:00	Parallel Sessions 8 + 9 + 10
15:00 – 16:00	Panel 3 – Strategies to successfully transfer evaluation results into policy practices
16:00 – 16:30	Conference conclusions, the way ahead and farewell

CONTENT TOPICS

CONFERENCE WELCOME

On 14 and 15 November 2013 the international evaluation conference "New Horizons / New Challenges: evaluation of STI policies, instruments and organisations" takes place in Vienna. It provides an open forum for evaluators, scientists, research managers, authorities and STI policy makers to debate challenging developments in STI policy and their effects on evaluation theory and practice.

The next generation of STI policy evaluation designs and approaches is challenged by different developments such as the emergence of new demand-side oriented instruments, increasing complexity of appraisals, the demand for impact assessments by taking also non-economic effects into account, an amalgamation between national and European/international interventions in STI or the emphasis on new mission-oriented approaches ("grand challenges"), just to name a few. The conference addresses these challenges in the following thematic sessions:

- New approaches for evaluating STI policies and instruments
- Assessing the variety and long-term impact of research
- STI policy evaluation in new- and non-OECD Countries
- Challenges in assessing new European Research Area polices, programmes and instruments
- Evaluating for selection – challenges and opportunities
- Evaluation practices scrutinised
- Evaluation of STI policy portfolios and policy mixes
- Data, monitoring systems and indicators
- New Developments in Innovation Policy Evaluation
- Evaluation of International RTI Programmes

In addition, the conference provides three panel discussions involving policy-makers and evaluation experts, two key-note speeches and a special session on the evaluation of HORIZON 2020.

The conference is organised by Austrian Platform Research and Technology Policy Evaluation (fteval), the Manchester Institute of Innovation Research (MIOIR) and L'IFRIS - institut Francilien Recherche Innovation Société. The conference language is English.

Klaus Schuch

Austrian Platform for Research and Technology Policy Evaluation

Jakob Edler

University of Manchester - Manchester Institute of Innovation Research

Philippe Laredo

Institut Francilien, Recherche, Innovation et Société/ Université Paris-Est

ORGANIZERS

AUSTRIAN PLATFORM FOR RESEARCH AND TECHNOLOGY POLICY EVALUATION

The Austrian Platform for Research and Technology Policy Evaluation (fteval) was founded in 1996 as an informal cooperation and aims at presenting approaches and methods of evaluation, discussing the current evaluation practice on an international level and thus contributing to the development of a culture of evaluation in Austria. In November 2006, its members re-founded the Austrian Platform for Research and Technology Policy Evaluation as a society. The mission of the platform is to encourage more, better and more transparent evaluations for an optimal strategic planning of RTD-policy in Austria and to develop a culture of evaluation together with decision-makers in the field of Austrian technology and research policy. Since 2012, the office of fteval is hosted by ZSI - Centre for Social Innovation, Vienna.

MANCHESTER INSTITUTE OF INNVATION RESEARCH (MIOIR)

The Manchester Institute of Innovation Research is a centre of excellence in the field of innovation studies, which includes the overlap of innovation with science management and science policy. With over 50 full members, approximately 50 PhD researchers and a range of associated academics, MIoIR is Europe's largest and one of the World's leading research centres in its field. As a dedicated research centre, MIoIR is at the heart of innovation-related research in the Manchester Business School and The University of Manchester. The Institute's key strengths lie in the linkage and cross-fertilisation of economics, management and policy around innovation, science and technology.

INSTITUTE ON RESEARCH AND INNOVATION IN SOCIETY

IFRIS - the institute on research and innovation in Society - was created in 2007 and has been recongised as one of the 150 French 'laboratories of excellence' in the 2010-11 national competition ('programme d'investissement d'avenir'). It is an interdisciplinary institute at the encounter of sociology, economics, history, political sciences and management, gathering together STS and SPS traditions. Ist gathers 180 researchers and doctoral students from 7 research groups and has its headquarters in Cité Descartes at Université Paris-Est. Ist present programme is built around 4 thematic priorities - Responisble innovation, changes of knowledge regimes and institutions, governing the earth system, the construction of futures - and two transversal activities around ST&I indicators and the construction of a digital plarform for the semantic treatment of large textual corpuses - CORTEXT Manager - to support IFRIS researchersin the characterisation and dynamic analysis of the problems they address.

OVERALL PROGRAM

DAY 1, 14 NOVEMBER 2013

08:00 – 09:00

REGISTRATION

09:00 – 09:15

WELCOME ADDRESSES BY ORGANISERS

Katharina WARTA, fteval – Austrian Platform for Research and Technology Policy Evaluation; Jakob EDLER, University of Manchester - Manchester Institute of Innovation Research; Philippe LAREDO, Institut Francilien, Recherche, Innovation et Société/ Université Paris-Est
Room: Atrium

09:15 – 10:00

FIRST KEY NOTE SPEECH

The Politics and Policies of Evaluation in a Multi-level Research System
Wilhelm KRULL, Volkswagenstiftung
Room: Atrium

10:00 – 10:45

PANEL 1

NEW RTI INSTRUMENTS – NEW INTELLIGENCE REQUIREMENTS: WHAT HAS TO BE CONSIDERED IN RTI EVALUATIONS?
Panelists: Katharina WARTA, Technopolis (Moderator); Dominique GUELLEC, OECD, Stefan KUHLMANN, University of Twente, Rupert PICHLER, Austrian Federal Ministry of Transport, Innovation and Technology

10:45 – 11:15

COFFEE BREAK

11:15-13:15

PARALLEL SESSIONS 1 + 2 + 3

SESSION 1: NEW APPROACHES FOR EVALUATING STI POLICIES AND INSTRUMENTS
Chair: Dominique GUELLEC, OECD
Discussant: Matthias WEBER, Austrian Institute of Technology
Room: Atrium

PRESENTATIONS:
Matthias WEBER, AIT and Wolfgang POLT, Joanneum Research:
Assessing mission-orientated R&D programs: combining foresight and evaluation
Pierre-Benoit JOLY, Institut Francilien Recherche Innovation Société (IFRIS) and INRA/SenS, Ariane GAUNAND, Grenoble Applied Economics Lab (GAEL), Philippe LAREDO, IFRIS,

SESSION 2A: ASSESSING THE VARIETY AND LONG-TERM IMPACT OF RESEARCH (ORGANISED BY THE AUSTRIAN SCIENCE FUND)
Chair: Klaus Zinöcker, FWF
Discussant: Jürgen Janger, WIFO - Austrian Institute of Economic ResearchRoom:
Room 2

PRESENTATIONS:
Erik ARNOLD, Technopolis and University of Twente, and Terttu T. LUUKKONEN, The Research Institute of the Finnish Economy:
How to evaluate research funding organisations
Rodrigo COSTAS and Erik Van WIJK, Centre for Science and Technology,

SESSION 3: STI POLICY EVALUATION IN NEW- AND NON-OECD COUNTRIES
Chair: Michael Keenan, OECD
Discussant: Lena TSIPOURI, University of Athens
Room: Room 3

PRESENTATIONS:
Domagoj RACIC, Knowledge Network, Zagreb, Croatia / University of Ljubljana: **Innovation policy in Croatia, Slovenia and Finland: Common framework and/or multiple 'best practices'?**
Erkki KARO, Ly LOOGA, Priit LUMI, Piret TONURIST and Kaija VALDMAA, Tallinn University of Technology, Ragnar Nurkse School of Innovation

DAY 1, 14 NOVEMBER 2013

Mireille MATT, GAEL and Stéphane LEMAIRE, IFRIS: **Designing and implementing a new approach for the ex-post assessment of impact of research – a return of experience from the ASIRPA project**
Stephanie DAIMER, Fraunhofer Institute for Systems and Innovation Research: **Evaluating the novel German "VIP" measure – addressing the stage of translational research between basic research and valorisation**
Stephan ROPER, University of Warwick/ Warwick Business School: **An experimental approach to industrial policy evaluation: The case of Creative Credits**
Abdullah GÖK, University of Manchester/ Manchester Institute of Innovation Research: **The Use of Experimental and Quasi-Experimental Methods in Innovation Policy Evaluation**

University Leiden: **Bibliometric study of FWF Austrian Science Fund (2001-2010/11): main results**
Ralph REIMANN, Austrian Science Fund: **Bibliometric study of FWF Austrian Science Fund (2001-2010/11): from the funder´s perspective**
Chris L. S. CORYN, Western Michigan University: **Central Findings and Lessons Learned from an Evaluation of the Swiss National Science Foundation**

and Governance: **Challenges to science policy and its evaluation in small and catching-up countries: experiences from the Estonian science system**
Yuri SIMACHEV, Mikhail KUZYK and Vera FEYGINA, Interdepartmental Analytical Center: **Evaluation of State Policy for Industrial Innovation Support in Russia: Instruments, Beneficiaries, and Limitations**
Olha KRASOVSKA, State Fund for Fundamental Research, State Agency of Ukraine of Science, Innovation and Information, Vitalii GRYGA and Victor RYBACHUK, STEPS Center, National Academy of Sciences of Ukraine: **Evaluation of R&D Institutions in Ukraine – The New Approach**
Manfred HORVAT, Vienna University of Technology: **S&T Policy Peer Review for Kazakhstan – A Case Study**

13:15 – 14:15 **LUNCH**

14:15-15:45 **PARALLEL SESSIONS 4A + 5**

SESSION 4A: CHALLENGES IN ASSESSING NEW EUROPEAN RESEARCH AREA POLICES, PROGRAMMES AND INSTRUMENTS
Chair: Wolfgang POLT, Joanneum Research
Discussant: Jakob EDLER, Manchester Institute of Innovation Research
Room: Atrium

PRESENTATIONS:
Emanuela REALE, CERIS CNR Institute for research on firm and growth, Maria NEDEVA and Thomas DUNCAN, University of Manchester/ Manchester Institute of Innovation Research, Emilia PRIMERI, CERIS CNR:

SESSION 5: EVALUATING FOR SELECTION – CHALLENGES AND OPPORTUNITIES
Chair: Jordi Molas GALLART, Spanish Council for Scientific Research (CSIC)
Discussant: Leonhard JÖRG, FFG – Austrian Research Promotion Agency
Room: Room 2

PRESENTATIONS:
Ina DREJER and Poul-H. ANDERSEN, Aalborg University: **Is the tail wagging the dog? An analysis of possible isomorphism effects in innovation project applications**
Peter BIEGELBAUER and Thomas PALFINGER, AIT –

DAY 1, 14 NOVEMBER 2013

Assessing the impact of joint and open research programmes: a process-centred approach
Martin-Felix GAJDUSEK, ZSI – Centre for Social Innovation and Nikos SIDIROPOULOS, University of Athens, Centre of Financial Studies: **Monitoring and Evaluation in joint calls of "horizontal – INCO" ERA-NET and ERA-NET PLUS actions**
Martin MAREK and Erich PREM, eutema Technology Management GmbH & Co KG: **Visualizing programme participations with interactive maps**
Karel HAEGEMAN and Mathieu DOUSSINEAU, Institute for Prospective Technological Studies, Joint Research Centre, European Commission: **Bridging the innovation gap: Private sector involvement in public-to-public R&D funding co-operation**

Austrian Institute of Technology: **Selecting Innovation: Project Selection Procedures in Research Funding Agencies**
Susanne BÜHRER, Fraunhofer Institute for Systems and Innovation Research: **New modes of stakeholder involvement in ex ante impact assessments**
Kathy WHITELEGG, AIT – Austrian Institute of Technology and Boris KRAGELJ, European Research Executive Council: **Can bibliometric indicators be used to support the European Research Council identify frontier research – and if so how?**

15:45 – 16:15 **COFFEE BREAK**

16:15 – 18:00 **PARALLEL SESSIONS 4B+2B**

SESSION 4B: CHALLENGES IN ASSESSING NEW EUROPEAN RESEARCH AREA POLICES, PROGRAMMES AND INSTRUMENTS
Chair: Stefan KUHLMANN, Department of Science, Technology, and Policy Studies/ University of Twente
Discussant: Elke DALL, ZSI – Centre for Social Innovation
Room: Atrium

PRESENTATIONS:
Pieter HERINGA and Laurens HESSELS, Rathenau Institute, Marielle van der ZOUWEN, KWR Watercycle Research Institute: **The potential of proximity indicators for evaluating international research networks: a case study of the water sector**
André MARTINUZZI and Markus HAMETNER, Vienna University of Economics and Business, Research Institute for Managing Sustainability (RIMAS): **The FP7-4-SD.eu monitoring system – how does the 7th EU Framework Programme contribute to Sustainable Development?**
Nathalie HUBER and Antje WEGNER, Institute for Research Information and Quality Assurance: **How funding of "excellent" young researchers may contribute to the European Research Area –**

SESSION 2B: ASSESSING THE VARIETY AND LONG-TERM IMPACT OF RESEARCH
Chair: Maria NEDEVA, MIoIR
Discussant: Göran MELIN, Technopolis Stockholm
Room: Room 2

PRESENTATIONS:
Federica ROSSI, Birkbeck, University of London, Annalisa Caloffi, University of Padova, Margherita RUSSO, University of Modena and Reggio Emilia: **Can policy constraints support the development of capabilities for collaborative innovation?**
Ariane GAUNAND and Mireille MATT, Grenoble Applied Economics Lab (GAEL), Stéphane LEMARIE and Amandine HOCDE, Institut Francilien Recherche Innovation Société (IFRIS), Elisabeth De TRUCKHEIM, INRA: **How does public agricultural research impact society? Towards a characterization of various patterns**
Claudia MICHEL, University of Bern, Centre for Development and Environment CDE, Simon HEARN, Overseas Development Institute ODI, Gabriela WUELSER, Swiss Federal Institute of Technology Zurich, Environmental Philosophy, Thomas BREU, University of

DAY 1, 14 NOVEMBER 2013

Reflections on empirical results obtained from evaluating the "Starting Grants" program
Ana FERNANDES-ZUBIETA, Institute for Advanced Social Studies -Spanish National Research Council (IESA-CSIC), Elisabetta MARINELLI and Susana Elena PEREZ, Institute for Prospective Technological Studies, Joint Research Centre, European Commission: **Research-mobility or job-stability? Challenges to the ERA**

Bern/CDE: **Assessing the impacts of transdisciplinary research in reducing poverty: the case of the NCCR North-South**
Laurence COLINET, INRA, Pierre-Benoit JOLY and Philippe LAREDO, Institut Francilien Recherche Innovation Société (IFRIS), Ariane GAUNAND, Grenoble Applied Economics Lab (GAEL): **Public research organizsations and their impact on public policy from observations towards the characterization of impact**

18:00 – 18:45

SPECIAL SESSION:

HORIZON 2020 – THE OVERALL EVALUATION APPROACH: CRITICAL REFLECTION AND DISCUSSION
Impulse presentation by Peter FISCH, European Commission,
Panel: Jakob EDLER, University of Manchester - Manchester Institute of Innovation Research (moderator), Peter Van den BESSELAAR, VU University Amsterdam Network Institute & Department of Organization Studies, Erik ARNOLD, Technopolis
Room: Atrium

19:00 **BUS TO DINNER**

19:30 – 22:30 **DINNER**

DAY 2, 15 NOVEMBER 2013

09:00 – 10:00

SECOND KEY NOTE SPEECH

CURRENT CHANGES AND CHALLENGES IN THE FIELD OF STI POLICY-MAKING AND THE EFFECTS THIS MIGHT HAVE ON STI EVALUATION THEORY AND PRACTICE

Irwin FELLER, Prof. Em., Economics, Pennsylvania State University
Room: Atrium

10:00 - 12:15

PARALLEL SESSIONS 6 + 7 (SHORT COFFEE BREAK INCLUDED)

SESSION 6: EVALUATION PRACTICES SCRUTINISED
Chair: Michael STAMPFER, WWTF- Vienna Science and Technology Fund
Discussant: Abdullah GÖK, University of Manchester - Manchester Institute of Innovation Research
Room: Atrium

PRESENTATIONS:
Erich PREM, eutema Technology Management GmbH & Co KG: **Evaluation as the construction of policy narratives**
Jürgen STREICHER, Vienna University of Economics and Business: **The Influence of Evaluations on STI Policy Making**
Franz BARJAK, University of Applied Sciences and Arts Northwestern Switzerland FHNW: **Supporting policy learning by means of an evaluation synthesis: findings from a study on Swiss innovation policies**
Wolfgang POLT, Joanneum Research, Kaisa LÄJTEEMÄKI-SMITH and Kimmo HALME, Ramboll Management Consulting: **How to evaluate large-scale 'transformative' STI funding programmes**

SESSION 7: EVALUATION OF STI POLICY PORTFOLIOS AND POLICY MIXES
Chair: Benedetto LEPORI, Centre for Organisational Research/ USI-Università della Svizzera italiana
Discussant: Sonja SHEIKH, SME Research Austria
Room: Room 2

PRESENTATIONS:
Peter Van den BESSELAAR, VU University Amsterdam Network Institute & Department of Organization Studies, Ulf SANDSTRÖM, Royal Institute of Technology - KTH: **Evaluation at the research systems level: Funding ecologies as policy portfolio**
Christiane KERLEN, Dr Kerlen Evaluation, Christian Von DRACHENFELS, Leo WANGLER and Jan WESSELS, Institut für Innovation und Technik, Volker WIEDMER, Hochschule Magdeburg-Stendal: **Portfolio evaluations: Evaluating policy portfolios and evaluation in a portfolio**
Ly LOOGA, Tallinn University of Technology, Ragnar Nurkse School of Innovation and Governance: **How STI policy instruments affect science and business cooperation in the Estonian ICT sector?**
Edurne MAGRO and James R. WILSOM, Basque Institute of Competitiveness and Deusto Business School, University of Deusto: **Territorial Strategy Evaluation: Beyond Evaluating Policy-Mix**

12:15 – 13:30

LUNCH + LUNCHBREAK PANEL

ENHANCING THE USE OF RESEARCH INFORMATION SYSTEMS FOR RTI EVALUATION

Panelists: Sybille HINZE, ifq – Institute for Research Information and QA (Moderator); Gretchen JORDAN, Innovation LLC; Göran MARKLUND, Vinnova; Sabine MAYER, Austrian Research Promotion Agency; Christina SCHUH, Humboldt Foundation
Room: Atrium

DAY 2, 15 NOVEMBER 2013

13:30-15:

PARALLEL SESSIONS 8 + 9 + 10

SESSION 8: DATA, MONITORING SYSTEMS AND INDICATORS

Chair: Sybille HINZE, IFQ-Institute for Research Information and Quality Assurance
Discussant: Michael STRASSNIG, WWTF- Vienna Science and Technology Fund
Room: Room 2
Presentations:
E. Brooks APPLEGATE, Western Michigan University: **Management and Aggregation of Disparate Data from Disparate Sources: Illustrations from an Evaluation of the Swiss National Science Foundation**
Michael DINGES, AIT – Austrian Institute of Technology, Jakob EDLER, University of Manchester - Manchester Institute of Innovation Research and Matthias, WEBER, AIT: **Measures and means to position competence centres via monitoring data: evidence from the Austrian Competence Centre Programmes Kplus and K_Ind/K_net**
Matteo RAZZANELLI, Science Europe: **Data availability for STI policy portfolio evaluations: a process-related challenge requiring new models for stakeholder engagement**
Torger MÖLLER, Marion SCHMIDT and Daniel SIRTES, iFQ – Institute for Research Information and Quality Assurance: **A Bibliometric Evaluation of the German Excellence Initiative Based on Three Data Selection Methods**

SESSION 9: NEW DEVELOPMENTS IN INNOVATION POLICY EVALUATION

Chair: Philippe, LAREDO, Institut Francilien, Recherche, Innovation et Société/ Université Paris-Est
Discussant: Djuro KUTLACA, Mihail Pupin Institute
Room: Atrium
Presentations:
Abdullah GÖK, University of Manchester - Manchester Institute of Innovation Research, Cornelia LAWSON, University of Turin/ BRICK - Bureau of Research in Innovation, Complexity and Knowledge: **Unfolding the Additionality of Innovation Policy**
Marco MARIANI and Chiara BOCCI, IRPET – Tuscany's Regional Institute for Economic Planning: **Evaluating the effects of subsidy intensity on future R&D investment using the generalized propensity score. Evidence from an Italian small-business program**
Christiane KERLEN, Dr Kerlen Evaluation, Ernst A. HARTMANN, Institut für Innovation und Technik: **Measuring product innovation and innovative capacity: new indicators to evaluate research programmes**
Sonja KIND, iit - Insitute for Innovation + Technology: **The Cluster Impact Analysis: A practice-oriented evaluation approach to measure the impacts achieved by companies that are committed members of cluster and network initiatives**

SESSION 10: EVALUATION OF INTERNATIONAL RTI PROGRAMMES

Chair: Gretchen JORDAN, Innovation LLC
Discussant: Katharina WARTA, Technopolis
Room: Room 3
Presentations:
Pattharaporn SUNTHARASAJ, National Science and Technology Development Agency of Thailand (NSTDA), Dundar F. KOCAOGLU, Engineering and Technology Management Department, Portland State Unviersity, Oregon: **Evaluating of the International Collaboration in Science and Technology Proposal: How to align the "Curiosity–driven Research"with the "Mission-oriented Goal"**
Isabella E. WAGNER and Stefanie SMOLINER, ZSI – Centre for Social Innovation: **Evaluation of the Austrian bilateral intergovernmental Programme for Science and Technology Cooperation**
Christina SCHUH, Humboldt Foundation: **Expectations on the long-term impact of international research fellowships from a political and an evaluation perspective: challenges and limits to measure side-effects**

DAY 2, 15 NOVEMBER 2013

15:00 – 16:00

PANEL 3

STRATEGIES TO SUCCESSFULLY TRANSFER EVALUATION RESULTS INTO POLICY PRACTICES

Panelists: Andreas REINSTALLER, WIFO- Austrian Institute of Economic Research (Moderator); Robert KERGER, Ministère de l'Enseignement supérieur et de la Recherche en Luxembourg, Jordi Molas GALLART, CSIC – Spanish National Research Council, Peter STERN, Technopolis Stockholm, Simone MESNER, Austrian Federal Ministry of Science and Research
Room: Atrium

16:00 – 16:30

CONFERENCE CONCLUSIONS, THE WAY AHEAD AND FAREWELL

Philippe LAREDO, Institut Francilien, Recherche, Innovation et Société/ Université Paris-Est
Klaus SCHUCH, fteval – Austrian Platform for Research and Technology Policy Evaluation
Room: Atrium

FIRST KEY NOTE SPEECH

THE POLITICS AND POLICIES OF EVALUATION IN A MULTI-LEVEL RESEARCH SYSTEM

Over the past two decades we have been witnessing quite dramatic changes in the governance structures of our higher education and research systems, the conceptualization and implementation of STI policies, and the demand for more elaborate and wide-ranging evaluations. Although there can be no doubt that these changes have resulted in many positive developments, we cannot help but recognize that not all the good intentions have resulted in optimal solutions.

On the contrary, some unintended consequences have already led to huge imbalances, even counterproductive effects which can no longer be ignored when it comes to taking stock and reconfiguring our approaches. In view of the wide array of different actors operating in a European STI environment that is increasingly dependent on multi-level decision making, as well as almost ubiquitious reviews, monitorings, assessments, and evaluations, we may ask to what extent various instruments have fallen victim to their own success.

There is obviously much more to achieving breakthroughs in STI than measurably meets the eye. And it takes a well-developed culture of creativity characterized by high trust modes of funding, quite rigorous ex ante-assessments, and medium-, to long-term commitments, to be ultimately successful.

WILHELM KRULL

is Secretary General of the Volkswagen Foundation, one of the largest private research funders in Europe. Since the mid-1980s he has been involved in research policy-making in many countries throughout the world. His experience in research evaluation ranges from systemic assessments of major research organisations in Germany, France, Ireland, and South Africa all the way up to the monitoring and evaluation of EU Framework Programmes. He is currently chairing a committee to evaluate the performance of the Danish National Research Foundation over the past ten years. As of 2012, Dr. Krull is also serving as a member of the Research, Innovation, and Enterprise Council of the Prime Minister of Singapore.

14 NOVEMBER 2013
09:15 – 10:00
ATRIUM

SECOND KEY NOTE SPEECH

CURRENT CHANGES AND CHALLENGES IN THE FIELD OF STI POLICY-MAKING AND THE EFFECTS THIS MIGHT HAVE ON STI EVALUATION THEORY AND PRACTICE

Using earlier review articles and my 2006 presentation, Best Practice at the Frontiers of Program Evaluation, at the predecessor to this conference as baselines, this presentation offers an overview of new horizons and new challenges in the evaluation of STI policies. The perspective is that of a reflexive practitioner. It is a selective survey of evaluation and STI policy encounters over the past 7 years in several countries of the different and new ways and contexts in which questions relating to the evaluation of STI policies have been framed, the means, old and new, that have been and are being used to answer these questions, and perhaps most importantly, the perennial core questions of policy makers about which the science policy and program evaluation communities do not appear to have made major advances, in part because we seem to be shying away from addressing them.

The topics to be discussed include the following: The shift from paradigm wars to evidence wars; The role of “big data” in program evaluation (and theory construction); The character of the response to the Marburger call for a science of science (and innovation) policy; The assessment of policy/program alternatives; Who listens?; who cares?

IRWIN FELLER

is emeritus professor of economics at The Pennsylvania State University, where he served on the faculty for 39 years, including 24 years as director of the Institute for Policy Research and Evaluation. He has published extensively on the organization and assessment of government research and technology programs, the economics of research and development, the performance of research-intensive universities, and evaluation methodology. His current research interests include the design, governance and evaluation of national science systems, the adoption and impacts of performance measurement systems, and the role of institutions of higher education in technology-based economic development. In the United States, he has chaired and served on numerous review and advisory committees for the National Science Foundation, the U.S. Department of Energy, and the National Academies-National Research Council. He is co-editor of the NRC report, A Strategy for Assessing Science (2007). Internationally, he was a member of the expert panel that reviewed the European Commission's Framework VI program, participated in the OECD's review of Slovenia's national science programs, and as a member of expert review panels in Sweden, France, Canada, and Chile. He also has participated extensively in international conferences in Europe and Asia. He has a BBA in economics from the City University of New York and a PhD in economics from the University of Minnesota.

15 NOVEMBER 2013
09:00 – 10:00
ATRIUM

SPECIAL SESSION

HORIZON 2020 – THE OVERALL EVALUATION APPROACH: CRITICAL REFLECTION AND DISCUSSION

Impulse presentation by Peter FISCH, European Commission

1 January 2014 will be the starting date for Horizon 2020, the new European Framework Programme for Research and Innovation. Horizon 2020 will introduce important changes as compared to the current 7th Framework Programme (FP7), in terms of content and implementation of its activities, but also in terms of its overall evaluation approach.The presentation will give a very short overview on the main new features of Horizon 2020 and will illustrate briefly the current evaluation approach for FP7. The main focus will be on some key aspects to be taken into account when designing an overall evaluation and monitoring approach for Horizon 2020. While it is premature to present a comprehensive and finalized overview, the presentation is intended to highlight some key developments – and to initiate a stimulating debate.

Panelists: Jakob EDLER, University of Manchester - Manchester Institute of Innovation Research, Peter Van den BESSELAAR, VU University Amsterdam Network Institute & Department of Organization Studies, Erik ARNOLD, Technopolis

15 NOVEMBER 2013
18:00 - 18:45
ATRIUM

PETER FISCH

is Head of Unit for Evaluation within the Directorate General for Research and Innovation at the European Commission in Brussels. Peter Fisch, born in Coburg, Germany, studied Economics at the Universities of Würzburg (Germany) and Caen (France) and holds a PhD in Political Sciences. He started his professional career in 1987 at the Bavarian State Ministry of Economic Affairs and Transport in Munich, dealing with issues relating to Regional Technology Policy. In 1992, he joined the European Commission in Brussels. From 1995 until 2006, he was actively involved in the management of the first European programmes to support research in the social sciences and humanities.

His current responsibilities within DG Research and Innovation include notably the "Impact Assessment" (Ex-ante Evaluation) of new Commission initiatives, the Ex-Post Evaluation of the Framework Programme activities, statistics and reporting on projects and the liaison with the ERC Executive Agency.

PANEL 1

NEW RTI INSTRUMENTS – NEW INTELLIGENCE REQUIREMENTS: WHAT HAS TO BE CONSIDERED IN RTI EVALUATIONS?

There is no doubt that research, technology and innovation are linked to economic growth and, in combination with other societal goals and policies, to sustainable and inclusive growth. In general, growth tends to foster differentiation and specialization. New RTI instruments, however, stress an integrated approach, with the right design of a policy mix that particularly emphasizes demand side instruments and tackles grand challenges for society. Therefore, RTI policy actors need to specialize themselves in a wider community. At the same time, they also need to increase their generalist capacities to cope with an increasingly complex policy environment. Evaluators of new instruments and policy portfolios share these challenge, as they are asked to be both precise in methodology and comprehensive in their conclusions. The first panel of this conference starts the debate on new horizons and new challenges to the evaluation community by focusing on the question of intelligence requirements. Two decades after the first edition of the Oslo Manual the information base on RTI has considerably increased. Despite the availability of more information, the translation, interpretation and application of macro- and micro data to relevant policy fields is still an evolving area, calling for new or better forms of intelligence. This holds true both for a traditional understanding of (separate) instruments as well as for a more systemic approach that caters for context specificity and problem orientation. Taking the examples of concrete instruments – which could be new to the world or new to RTI policy – as a point of departure, this panel will collect perspectives and experiences to open the space of discussion of emerging requirements for RTI evaluations.

CHAIR: KATHARINA WARTA

Panelists: Dominique GUELLEC, OECD, Stefan KUHLMANN, University of Twente, Rupert PICHLER, Austrian Federal Ministry of Transport, Innovation and Technology

14 NOVEMBER 2013
10:00 – 10:40
ATRIUM

KATHARINA WARTA

is senior consultant and authorised representative at Technopolis Austria and Chairman of the executive board of the Austrian Platform Research & Technology Policy Evaluation. Her work covers policy and programme evaluations as well as strategy development in research and technology policy. She is economist (university of Vienna) and trained in group dynamics (ÖAGG).

LUNCHBREAK PANEL

ENHANCING THE USE OF RESEARCH INFORMATION SYSTEMS FOR RTI EVALUATION

Research information systems are becoming increasingly important for RTI evaluations. Their scope, quality, accessibility, design, etc. still varies despite several efforts for standardising and mainstreaming. Many agencies operate their own systems which are employed for in-house monitoring and evaluation. In addition, for STI evaluations also other external data sources (e.g. micro-census data; bibliometric data providers etc.) are of importance. In general, research information systems are databases or other information systems containing data/metadata or information about project managers, ongoing and completed projects, research departments, funding organisations, programmes and funding, researchers, research results (publications, patents, products), events, facilities, services and equipment and their timely relationships (semantics) and provide an integrated approach towards managing research information.

Current research information systems aim at assisting the users in their recording, reporting and decision-making concerning

the research process, whether they are developing programmes, allocating funding, assessing projects, executing projects, generating results, assessing results or transferring technology. At institutional level they are a tool for policy making and evaluation of research output.

In this panel, we will discuss how evaluators (can) access secondary data provided by agencies, professional archives (CRIS and others) as well as other sources (e.g. national statistical offices) and which limitations are prevailing.

We also invite the audience to have a say:

- What secondary data do evaluators really need?
- Are right data and information stored? Are they accessible and affordable?
- What about data accessibility and data protection?

Bring your lunch bag!

CHAIR: SYBILLE HINZE

Panelists: Gretchen JORDAN, Innovation LLC, Göran MARKLUND, Vinnova; Sabine MAYER, Austrian Research Promotion Agency; Christina SCHUH, Humboldt Foundation

15 NOVEMBER 2013
12:15 – 13:30
ATRIUM

SYBILLE HINZE

graduated in 'Management of Science' from Humboldt-University and got her PhD form Centre for Science and Technology Studies (CWTS) at Leiden University, the Netherlands. From 1990 to 1997 and 1999 to 2008 she carried out research at the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer ISI). From 1997-1999 she was a postdoctoral fellow at the Research Evaluation and Policy Project, Australian National University, Canberra (REPP). She was seconded to the European Commission, DG Research Unit Programming, Monitoring, and Evaluation in 2005 and 2006. Since August 2008 Sybille Hinze is deputy director of the Institute for Research Information and Quality Assurance (iFQ) in Berlin, Germany. For more than fifteen years she has been engaged in the development and use of science and technology indicators, in particular in the context of programme and institutional evaluation. Furthermore her research interests concern research and technology performance analysis and benchmarking and more generally, the analysis of national and sectoral systems of innovation.

Sybille Hinze is a member of EU RTD Evaluation Network, European editor of the Journal "Science and Public Policy", member of the Board of the European Network of Indicator Designers (ENID) and the steering committee of the European Summer School for Scientometrics (esss).

PANEL 3

STRATEGIES TO SUCCESSFULLY TRANSFER EVALUATION RESULTS INTO POLICY PRACTICES

Programme and policy evaluations are carried out in order to ground policy making in more reliable knowledge of "what works" and thereby enhance the effectiveness of governance in a specific policy domain. For this social learning process to work it is important that evaluation results feed back into policy practice. The related transfer of knowledge presents considerable challenges for both evaluators and research funders. For evaluators the issue is to find effective approaches to translate their results into valid take-home messages that are able to inform future decisions pertinent to the evaluated measure by policy makers. This may require to link up evaluation results with profound knowledge about the particular institutional context in which the measure is embedded and thus demand a constant exchange with the research funders and other users of the evaluation results. For the research funders on the other hand with the presentation of the final recommendations of an evaluation a process of interpretation and prioritisation of its results starts which will eventually lead to changes in

the established policy practices or the development of new ones. However, this is not a smooth process in which new or improved knowledge about the transmission channels and impacts of measures leads to better measures. Indeed, different stakeholders may try to influence it to their own advantage, or the research funders themselves may become disenchanted with the evaluation results. As a consequence, recommendations may get rejected despite their scientific validity, or they may get rightly rejected but for the wrong reasons, etc. The challenge for the research funders is therefore to strike a balance between the accommodation of competing interests in the interpretation and prioritisation of results, and the development and deployment of measures to improve current policy practices and augment governance effectiveness. Failure to do so may eventually lead to government failure. Panel 3 will discuss the criteria for a successful transfer of evaluation results into new policy practices with four experts from applied research institutions and governmental organisations.

15 NOVEMBER 2013
15:00 – 16:00
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CHAIR: ANDREAS REINSTALLER

ANDREAS REINSTALLER

is a senior economist at the Austrian Institute of Economic Research (WIFO) in Vienna, Austria. He holds a masters degree in economics from the Vienna University of Economics (WU Wien) and a PhD from the University of Maastricht, the Netherlands. He joined the Austrian Institute of Economic Research in 2007 and teaches economics and economic policy at the Vienna University of Economics. His main areas of expertise are in the field of industrial economics, industrial policy, as well as science and innovation policy. In these fields he has managed and contributed to projects for the European Commission, the OECD or Austrian ministries and public bodies, and has served as member of international high-level expert groups. He has published in international journals such as Research Policy, Journal of Evolutionary Economics, Structural Change and Economic Dynamics, Industrial and Corporate Change or Applied Economics.

Panelists: Robert KERGER, Ministère de l'Enseignement supérieur et de la Recherche en Luxembourg, Jordi Molas GALLART, CSIC – Spanish National Research Council, Peter STERN, Technopolis Stockholm, Simone MESNER, Austrian Federal Ministry of Science and Research

SESSION 1

NEW APPROACHES FOR EVALUATING STI POLICIES AND INSTRUMENTS

The contributions to this session concentrate on new conceptual and methodological inroads to STI policy evaluation and impact assessment. They address three different types of emerging requirements. First of all, the range and scope of the types of impacts to considered in evaluations are broadening. In addition to immediate innovation-related effects, societal and other types of impact dimensions need to be taken into account; impacts that occur only with the diffusion of the innovative activities addressed and that are often mediated through complex networks of interactions. Secondly, new methodological frontiers are explored, in order to respond to two very different kinds of new demands. On the one hand, experimental approaches to evaluation are explored to improve the scientific quality of the evidence provided on the impacts of policy interventions. On the other hand, the importance of evaluations as joint and continuous learning processes, involving clients, evaluators as well as participants in policy initiatives, is stressed. And finally, the contributions look into the growing importance of ex ante approaches to impact assessment, which look into the longer-term impacts of policy. To this end, explorative methods such a constructive technology assessment and foresight are combined with established impact assessment methodologies.

CHAIR: DOMINIQUE GUELLEC
DISCUSSANT: MATTHIAS WEBER

SESSION 1 PRESENTATIONS

DOMINIQUE GUELLEC

is Head of the STI's Country Studies and Outlook (CSO) Division, which is responsible for conducting the analysis of country-specific information on member and non-member countries on science, technology and innovation matters. This notably includes the OECD Reviews of Innovation Policy, the STI Outlook, the web-based Innovation Policy Platform (IPP) and work relating to innovation for development. Mr. Guellec joined the OECD in 1995 and has worked in the Statistics Directorate and the Directorate for Science, Technology and Industry on statistics and quantitative economic analysis of research and development, innovation and growth. From 2004-2005, Mr. Guellec was Chief Economist of the European Patent Office (Munich). Mr. Guellec has authored several books and many articles on patents, innovation and economic growth. His (co-) publications in English include The Economics of the European Patent System (Oxford University Press, 2007); From R&D to Productivity Growth: the Sources of Knowledge Spillovers and their Interaction (Oxford Review of Economics and Statistics, 2004). Of French nationality, Mr. Guellec is a graduate from the École nationale de la statistique et de l'administration économique (ENSAE, Paris).

MATTHIAS WEBER

is Head of Research, Technology and Innovation (RTI) Policy Unit at Austrian Institute of Technology AIT, Innovation Systems Department. He has been working for almost twenty years on issues of innovation systems, foresight and RTI-policy. Current research interests of his include the impact of foresight on policy-making, transitions to sustainable production systems, policies for the European Research Area, and the governance of R&D collaboration networks. Matthias is President of the European Techno-Economic Policy Support Network ETEPS, member of the European Forum on Forward-Looking Activities EFFLA, and visiting professor at University of Graz.

14 NOVEMBER 2013
11:15 – 13:15
ATRIUM

PRESENTATIONS

ASSESSING MISSION-ORIENTATED R&D PROGRAMS: COMBINING FORESIGHT AND EVALUATION

Matthias WEBER, AIT and
Wolfgang POLT, Joanneum Research

In parallel with the consolidation of the structural properties of national innovation systems since the late 1990ies, R&D - and publicly funded R&D in particular - is increasingly expected to contribute to revolving major societal challenges. This new kind of mission-orientation represents a new rationale for public R&D, but a rationale that is very difficult to underpin, in particular in times of high budgetary constraints and tight legitimation requirements. The expected benefits often lie quite far in the future, and they become meaningful only with the uptake and diffusion of products, services and practices that embody the results of public funded R&D. The impact of R&D policies and programmes thus cannot be assessed independently of sectoral policies that determine the likelihood of diffusion. In such a complex setting, the attribution of impacts to specific policy programmes represents a major difficulty.
We propose a framework for the evaluation of mission-oriented programmes that takes these challenges into account, and use it to position some recent evaluation examples in terms of their potential to effectively assess the impact of R&D programmes on mission-type of goals.

WOLFGANG POLT

finished his studies in Economics at the University of Vienna in 1985. From 1985 to 1992 he worked as a researcher at the Instiute for Socio-Economic Research and technology Assessment of the Austrian Academy of Sciences. From 1992 to 1999 he was at the Department of Technology

Studies of the Austrian Research Centers Seibersdorf. From 1996 to 1998 he held a post as full time consultant to the Directorate for Science, Technology and Industry/ Division for Science and Technology Policy of the Organisation fo Economic Co-operation and Development (OECD) in Paris. From February 2000 to June 2010 Wolfgang Polt has been heading the Viennese Office of the Centre for Economic and Innovation Research of JOANNEUM RESEARCH as well as company officer with statutory authority since 2006. Since July 2011 Wolfgang Polt is Director of POLICIES - Centre for Economic and Innovation Research of JOANNEUM RESEARCH. He won Research Scholarships at the Institut für Angewandte Systemanalyse (IIASA) in Laxenburg/ Vienna and at the Research Institute of the Finnish Economy (ETLA) in Helsinki.

MATTHIAS WEBER

is Head of Research, Technology and Innovation (RTI) Policy Unit at Austrian Institute of Technology AIT, Innovation Systems Department. He has been working for almost twenty years on issues of innovation systems, foresight and RTI-policy. Current research interests of his include the impact of foresight on policy-making, transitions to sustainable production systems, policies for the European Research Area, and the governance of R&D collaboration networks. Matthias is President of the European Techno-Economic Policy Support Network ETEPS, member of the European Forum on Forward-Looking Activities EFFLA, and visiting professor at University of Graz.

DESIGNING AND IMPLEMENTING A NEW APPROACH FOR THE EX-POST ASSESSMENT OF IMPACT OF RESEARCH – A RETURN OF EXPERIENCE FROM THE ASIRPA PROJECT

Pierre-Benoit JOLY, Institut Francilien Recherche Innovation Société (IFRIS) and INRA/SenS, Ariane GAUNAND, Grenoble Applied Economics Lab (GAEL), Philippe LAREDO, IFRIS, Mireille MATT, GAEL and Stéphane LEMAIRE, IFRIS

This paper presents a the results of a research project for the French National Institute for Agronomic Research (INRA), which aimed at designing an approach for the assessment of the impacts of this research organization. The core of this approach consists in a methodology of standardized case studies. This standardized approach leads to perform a qualitative/quantitative analysis that pays attention to the key mechanisms generating the impact and which allows to assess the various dimensions of impact. Hence, the case studies allow the organization to learn from past experience to improve the ability to generate impact.

In order to be useful for accountability purpose, it is also necessary to shift from case studies to the level of the organization. In principle, this is possible since the cases are standardized, which allow to perform transversal analysis and some kind of aggregation.

However, up scaling the analysis raises some difficult methodological issues: methods of identification and selection of cases and methods of extrapolation.

PIERRE-BENOÎT JOLY,

economist and sociologist, is Directeur de recherche at the National Institute of Agronomic Research (INRA) in France. He holds a degree in agronomy (1982), a PhD in economics (1987) and the "Habilitation à diriger les recherches" (1995). He is the Director of the IFRIS (French Institute for Studies of Research and Innovation in Society) and of Labex (Laboratory of Excellence) SITES. Since 1996, his research activities are focused on the governance of collective risks, socio-technical controversies, the use of scientific advice in public decision making and the forms of public participation in scientific activities. He was Member of the expert group "Science and Governance" at the European Commission, he is Member of the Council of European Association for the Study of Science and Technology (EASST) and of the French Comité de Prévention et de Précaution and he chairs the Scientific Council of the Programme on GMOs at the French Ministry for Ecology. He has published about one hundred articles (of which more than 50 in refereed journals), three books and he has coordinated five special issues of social sciences journals. He lectures at Ecole des Hautes Etudes en Sciences Sociales (EHESS) and at Sciences Po Paris. He is currently involved in the ASIRPA project by INRA. He co-coordinates the ASIRPA project.

SESSION 1 PRESENTATIONS

EVALUATING THE NOVEL GERMAN "VIP" MEASURE – ADDRESSING THE STAGE OF TRANSLATIONAL RESEARCH BETWEEN BASIC RESEARCH AND VALORISATION

Stephanie DAIMER, Fraunhofer Institute for Systems and Innovation Research

The funding measure "Validation of the Innovation Potential of Scientific Research – VIP", which has been set up in Germany in 2010 and ran as a pilot until 2012, addresses the stage of translational research between basic research and valorisation.

The evaluation of the VIP programme is designed as an accompanying study, running until mid-2014. In this contribution we outline the conceptual framework and our methodological approaches for evaluating this new instrument and discuss some caveats associated to the approach. Conceptually, the evaluation approach comprises "standard" evaluation topics such as the evaluation of the programme design and implementation, or the localization of the measure in the promotional toolkit of German research policy, but also new topics such as a constructive technology assessment. Methodologically, the process is characterized by a multi-perspectival approach which should reflect the assessments of different stakeholders and offer chances for learning.

STEPHANIE DAIMER

studied political science, law and economics at the University of Passau, the Università degli Studi di Verona and the Washington University in St. Louis, her doctoral thesis is about the legislative process in the EU. Since 2008, she is a senior researcher and project manager at the Fraunhofer Institute for Systems and Innovation Research ISI in Karlsruhe. In her work she focuses on studies of EU research and innovation policies and governance as well as the evaluation of (national) funding measures.

AN EXPERIMENTAL APPROACH TO INDUSTRIAL POLICY EVALUATION: THE CASE OF CREATIVE CREDITS

Stephan ROPER, University of Warwick/ Warwick Business School

Experimental methods of policy evaluation are well-established in social policy and development economics but are rare in industrial and innovation policy. In this paper we consider the arguments for applying experimental methods to industrial policy measures, and propose an experimental policy evaluation approach (which we call RCT+). This combines the randomised assignment of firms to treatment and control groups with a longitudinal data collection strategy incorporating quantitative and qualitative data (so-called mixed methods). We test the RCT+ approach in an evaluation of Creative Credits – a UK business-to-business innovation voucher initiative intended to promote new innovation partnerships between SMEs and creative service providers. The results suggest the potential value of experimental approaches to industrial policy evaluation, and the benefits of mixed methods and longitudinal data collection in industrial policy evaluations.

STEPHEN ROPER

is Professor of Enterprise at Warwick Business School and Director of the Enterprise Research Centre. He is an economist with degrees from the University of Durham, Oxford University and LSE. Stephen joined Warwick in 2008 having previously been Professor of Business Innovation at Aston Business School. Stephen's research interests include small business development and policy, mid-market firms, innovation policy and evaluation and regional development. Current projects focus on innovation and exporting, innovation and survival and institutional supports for open innovation.

THE USE OF EXPERIMENTAL AND QUASI-EXPERIMENTAL METHODS IN INNOVATION POLICY EVALUATION

Abdullah GÖK, University of Manchester/
Manchester Institute of Innovation Research

There are three distinctive frameworks for the design of the evaluation of policy interventions: Experimental Designs (ED), Quasi-Experimental Designs (QED) and Non-Experimental Designs (NED). There is a certain stream in evaluation research that argues that EDs and QEDs are the standard evaluation approaches in mainstream policy domains policy and using NED would invalidate the evaluation research. In recent years, a focus to use more EDs in science and innovation policy has emerged, especially in the UK. In this study, we ask if and when the use of EDs is appropriate in the context of innovation policy. First, we try to understand the characteristics of the studies that use ED, QED and NED in innovation policy evaluation. We, then, ask the question if and when the use of these methods influence the usefulness of the findings of such evaluations for policy-making. We explore these questions by using two data sources.

First, we statistically analyse the INNO-Appraisal database which covers the characterisations of 171 national innovation policy evaluations. Second, we review around 200 academic studies that give evidence on the effectiveness of innovation policy. We have established that although in certain limited cases the use of EDs is appropriate to use and adds value to the handling of policy issues, in most of the cases it is not possible or appropriate to use EDs in innovation policy because of a number of reasons.

ABDULLAH GÖK

is a Research Fellow at the Manchester Institute of Innovation Research (MIoIR), where his research is focuses on the concepts, methods and findings of evaluation of science and innovation policies (particularly the concept of behavioural additionality) as well as the use of advanced and innovative methods to address a variety of micro and macro level research questions in innovation studies. Besides his research engagements, he taught Economics at the undergraduate level at Manchester Business School and takes part in the design and delivery of the MIoIR Executive Short Course on Evaluation of Science and Technology Policies. Prior to joining MIoIR in 2006, Abdullah worked at The Scientific and Technological Research Council of Turkey (TUBITAK) between 2003 and 2006. Abdullah holds a BSc in Economics and an MSc in Science and Technology Policy Studies. He completed his PhD titled "An Evolutionary Approach to Innovation Policy Evaluation: Behavioural Additionality and Organisational Routines" in December 2010 at the University of Manchester.

SESSION 2A

ASSESSING THE VARIETY AND LONG-TERM IMPACT OF RESEARCH (ORGANISED BY THE AUSTRIAN SCIENCE FUND)

Research is distinguished by its diversity – as are its impacts. Long-term studies on the effects of research, in particular basic research, are rare and methodically challenging. Especially funding organizations are greatly interested to trace the effects of their activities and create a link between inputs and impacts. Here, providing quantitative and qualitative information is crucial for a better understanding of how research leads to impact; something that is also of great importance for the public understanding of science.

All of this is very difficult for evaluators to assess for a number of reasons – besides the "classic" measurement or attribution problems, they are also often challenged by the fact that "inputs" are not clearly defined – researchers often receive funding for their work from very different sources, creating coherences here can be almost impossible in certain cases. A propos variety: it is also important that the focus of impact measurement is not purely on marketable aspects: merely concentrating on commercial metrics (e.g. successful spin offs) does not adequately reflect the various angles. Recently, requests have been made to include also societal impacts in impact measurement, generating a more holistic approach to it.

Finally it is also important to emphasize two points: (i) where is your starting point for impact measurement? (ii) and what set of methods is available?

The range of methodical approaches that could be applied to face this challenge of "assessing the long term impact of research" is broad, quantitative as well as qualitative. Just to name one: Bibliometrics are of particular importance in basic research. In future, this method will have to be developed further and expanded to so called altmetrics as an alternative to classical personal citation indices.

And where do you start to apply impact measurement – when publishing? At the individual level? At the university level? Or, as discussed during this session, at the funding agency? Different starting points, different challenges.

CHAIR: KLAUS ZINÖCKER
DISCUSSANT: JÜRGEN JANGER

KLAUS ZINÖCKER

is member of the Strategy/ Analysis team at the Austrian Science Fund (FWF). His tasks include programme development, evaluation and strategy as well as research information systems. Until 2012 he was managing director of the Austrian Platform for Research and Technology Policy Evaluation (fteval), then hosted by the Vienna Science and Technology Fund. In this capacity, Klaus has published a compendium on "Evaluation of Austrian Research and Technology Policies – A summary of Austrian Evaluation Studies from 2003 to 2007" among several other publications.Klaus is economist and experienced in programme designing, evaluation methods and evaluation systems, and conducted several RTI evaluations in Austria.

JÜRGEN JANGER

is research staff member at the Austrian Institute of Economic Research (WIFO) since 2010. From 2003 to 2010 he worked for the Division of Economic Analysis at the Austrian National Bank. Janger holds a PhD of the the Vienna University of Economics and Business and a M.Sc. on Political Economy of European Integration from the London School of Economics. He is an applied economist, his research focuses on Innovation and Higher Education Research, Economic Growth: Analysis and Policies, Competition and Regulatory Issues and International and Industrial Economics and Policy.

14 NOVEMBER 2013
11:15 – 13:15
ROOM 2

PRESENTATIONS

HOW TO EVALUATE RESEARCH FUNDING ORGANISATIONS

Erik ARNOLD, Technopolis and University of Twente, and Terttu T. LUUKKONEN, The Research Institute of the Finnish Economy

Research funders are rarely evaluated. This paper exploits a decade of conducting such evaluations across eight organisations, focusing on their systemic roles. We view the funding organisations through five 'lenses' or frameworks

- Role in the governance and coordination of the national research and innovation system
- Principal-agent theory, which is a traditional way to think about the divergence of interests between agents and those who use them
- Boundary work and boundary organisations, which tackle ways in which (in this case) problems and research fields are reconceptualised and redefined and how funders organise to meet new needs
- Contextual analysis, considering the role of the context in defining the needed mission and performance of funding organisations
- Cost-effectiveness

ERIK ARNOLD

is Chairman of the Technopolis Group and Professor in International Innovation Policy at the University of Twente. His work spans over 30 countries, the European Commission and various international organisations. He has done many national evaluations of the EU RTD Framework Programme as well as meta-evaluations of FP5 and FP6 for DG Research and drafted the FP6 evaluation. Research funder evaluations include: the Research Council of Norway (2001, 2011); the Austrian Industrial Research Promotion Fund (FFF); the Austrian Science Fund (FWF); the New Zealand Marsden Fund; National Science Foundation of China; TEKES; and the Academy of Finland. He helped prepare OECD National Innovation System reviews of S Africa, Norway, Colombia and France.

BIBLIOMETRIC STUDY OF FWF AUSTRIAN SCIENCE FUND (2001-2010/11): MAIN RESULTS

Rodrigo COSTAS and Erik Van WIJK, Centre for Science and Technology, University Leiden

In this presentation the main results of a bibliometric study for the FWF Austrian Science Fund will be presented and discussed. These results are based on the scientific output recorder in the FWF Austrian Science Fund publication system. The main focus is on the research publications supported by the FWF that are published in international scientific journals covered by the Web of Science (WoS). Bibliometrics results indicate that FWF funded output is cited well above the international level. FWF has supported research that performs in terms of scientific impact at the level of other scientifically strong countries such as USA, Switzerland, the Netherlands or Denmark. The results of the study show a high performance of FWF supported output in most fields of science and that the funding organization plays a predominant role in the Austrian and international scientific landscape.

DR. RODRIGO COSTAS

is an experienced researcher in the field of information science and bibliometrics. With a PhD in Library and Information Science obtained at the CSIC in Spain, Rodrigo has been working at CWTS (Leiden University, the Netherlands) since 2009. His lines of research cover a broad scope of topics, including the development of new bibliometric tools and indicators as well as tools for the study of research activities based on quantitative data through bibliometric methodologies. Rodrigo has recently started some novel research lines including the study of 'altmetrics' and the possibilities of funding acknowledgments in order to expand the analytical possibilities of scientometrics.

SESSION 2A PRESENTATIONS

BIBLIOMETRIC STUDY OF FWF AUSTRIAN SCIENCE FUND (2001-2010/11): FROM THE FUNDER´S PERSPECTIVE

Ralph REIMANN, Austrian Science Fund

This contribution deals with a bibliometric study of FWF-funded publications (performed by CWTS, Univ. Leiden, NL) and discuss it from the perspective of the funding organisation: Are there topics or even problems specifically for funders? In accordance with this key question the conference presentation avoids to sum up the bibliometric study and starts directly with the secondary analysis of the study results. The following four topics and problems will be highlighted and discussed:

- Project duration
- Funding acknowledgements
- Defining "a FWF-paper"
- Document types

RALF REIMANN

studied Psychology in Bamberg (Germany). 1997-2007 Scientific Assistant at the Universities of Bamberg, Munich and Vienna. 2007-2012 Quality Manager at University of Vienna and at University of Natural Resources and Life Science Vienna. Since 2012 Member of Staff Strategic Analysis at Austrian Science Fund FWF.

CENTRAL FINDINGS AND LESSONS LEARNED FROM AN EVALUATION OF THE SWISS NATIONAL SCIENCE FOUNDATION

Chris L. S. CORYN, Western Michigan University

Internationally, a wide variety of policies and procedures have been used for funding research by national grant-making foundations and similar organizations (Coryn, 2007; Coryn, Hattie, Scriven, & Hartmann, 2007; Coryn & Scriven, 2008; Guena & Martin, 2003; Frankel & Cave, 1997). Simultaneously, demands for improved grant making and accountability have increased substantially (Stufflebeam & Coryn, 2013; Trochim, Marcus, Mâsse, Moser, & Weld, 2008). These demands, driven by a multitude of factors (e.g., increasingly scarce resources, increased competition, pressures to improve performance), have placed a great burden on grant-making foundations not only to continuously improve their overall effectiveness, but also to account for their activities and expenditures (Eckerd & Moulton, 2011; Herman & Renz, 2008; Martz, 2012). In this presentation, some of the central findings, including their interpretation and resultant recommendations, political and cultural challenges encountered, and solutions to those challenges, in evaluating the research funding policies and procedures from a recent evaluation of the Swiss National Science Foundation (SNSF; Coryn, Applegate, Schröter, Martens & McGowin, 2012), will be presented and discussed. In particular, the presentation will emphasize findings related to potential biases in funding of research by the SNSF and efforts to maintain objectivity and independence while simultaneously engaging various actors within the SNSF to increase evaluation utility (Patton, 2008). Methodological challenges associated with the evaluation, and solutions to those challenges, will be discussed in a related presentation (Applegate, 2013).

CHRIS L. S. CORYN

is the Director of the Interdisciplinary Ph.D. in Evaluation (IDPE) program and an Associate Professor in the Evaluation, Measurement, and Research (EMR) program in the College of Education's Department of Educational Learning, Research, and Technology (ELRT) at Western Michigan University (WMU). He received a B.A. in Psychology from Indiana University (IU) in 2002 and a M.A. in Social Psychology in 2004, also from IU.

He earned his Ph.D. in Evaluation in 2007 at WMU. He has published more than 90 scholarly, peer reviewed papers in journals such as the Albanian Journal of Agricultural Sciences, American Journal of Evaluation, Canadian Journal of Program Evaluation, Child & Adolescent Social Work Journal, Chronic Illness, Current Research in Social Psychology, Energy Efficiency, Evaluation & The Health Professions, Evaluation and Program Planning, Evaluation Journal of Australasia, International Criminal Justice Review, Journal of Evaluation in Clinical Practice, Journal of Materials Education, Journal of Psychoeducational Assessment, New Directions for Evaluation, The Journal of Social Psychology, The Qualitative Report, World Medical & Health Policy, and has also authored and/or edited several books, book chapters, and monographs. He is currently the Executive Editor of the Journal of MultiDisciplinary Evaluation. He has been involved in and led numerous research studies and evaluations, funded by the Department of Justice, National Science Foundation, National Institutes for Health, and others, across several substantive domains, including research and evaluation in education, science and technology, health and medicine, community and international development, and social and human services. Since obtaining his first graduate degree in 2004, he has served as the Principal Investigator, Co-Principal Investigator, or Methodologist for numerous research and evaluation grants and contracts totaling nearly $5,000,000.

SESSION 2B

ASSESSING THE VARIETY AND LONG-TERM IMPACT OF RESEARCH

With the advent of accountability regimes and broad scale (national) evaluation exercises being able to provide the conditions for assessment of the impact of research, not simply and only its outcomes has become increasingly important. Assessing the impact of types of research characterised by variety of properties is a measure not only of the quality of research but also about the effectiveness of policy. In other words, un-packing the relationship between science and society, or economy (effects of science and research) is no longer sufficient basis for a systematic assessment; un-packing the relationship between policy and science, in all its aspects is also necessary. This is probably one of the main challenges that research in the science policy field is currently facing. All papers in this session deal with different aspects of impact as part of the assessment of policy, science/research and research organisations. The authors deal with different parts of the complex relationship between policy, its impact on science (including organisations) and the effect that research with particular properties can have for the economy and society. They don't solve the main challenge, mentioned above but at least the authors had a really good go at it.

CHAIR: MARIA NEDEVA
DISCUSSANT: GÖRAN MELIN

MARIA NEDEVA

is Professor of Science and Innovation Dynamics and Policy at the University of Manchester. Intellectually, Prof. Nedeva's research is about science dynamics; more specifically it is about 'policy driven' change affecting both the social conditions of science and research (organisations, relationships and rules of exchange; structures etc.), and the properties of knowledge. The notion (theory) of science as a relationship between research fields and research spaces, that Prof. Nedeva is developing provides an intellectual lens for the analysis of the links between the social and the intellectual conditions of science and research; between policy and knowledge with particular epistemic properties. Within this broad intellectual agenda, Prof. Nedeva has contributed in substance to debates along four research lines, namely: Universities, governance and management; Changing research spaces; Studying the effects (impact) of policy and funding instruments on the science system; Work on selection practices used by research (innovation) funding agencies

SESSION 2B PRESENTATIONS

GÖRAN MELIN

Associate Professor in Sociology of Science and Senior Consultant at the Technopolis consultancy company, is specialised towards conditions that shape the scientific practice, including research collaboration, mobility, doctoral education and researchers' careers. Göran has conducted several studies or evaluations that encompass issues related to HEI organisation including mergers and research management. He has published his work in many leading scientific journals. Göran is increasingly occupied with the interplay that occurs within the Knowledge Triangle, i.e. between research, education, and innovation.

14 NOVEMBER 2013
16:15 – 18:00
ROOM 2

PRESENTATIONS

CAN POLICY CONSTRAINTS SUPPORT THE DEVELOPMENT OF CAPABILITIES FOR COLLABORATIVE INNOVATION?

Federica ROSSI, Birkbeck, University of London, Annalisa Caloffi, University of Padova, Margherita RUSSO, University of Modena and Reggio Emilia

While there has been some recent interest in the behavioural effects of policies in support of innovation networks, this research field is still relatively new. In particular, an important but under-researched question for policy design is "what kind of networks" should be supported, if the objective of the policy is not just to fund successful innovation projects, but also to stimulate behavioural changes in the participants, such as increasing their ability to engage in collaborative innovation.

By studying the case of the innovation policy programmes implemented by the regional government of Tuscany, in Italy, between 2002 and 2008, we assess whether the imposition of constraints on the design of innovation networks has enhanced the participants' collaborative innovation capabilities, and we draw some general implications for policy.

Federica Rossi

is lecturer at Birkbeck, University of London, since 2011, having joined the college as a research fellow in 2007. Previously, she held various research fellowships at universities in Italy, working on two large scale European Research Framework projects, as well as on several projects funded by national and regional agencies. She has worked as a consultant for the OECD, the UK's Strategic Advisory Board for Intellectual Property, the EC/Eurostat and regional and local development agencies.

She is a reviewer for several academic journals. Her research interest include innovation activities of firms and networks of firms, the economics and governance of the higher education sector, university-industry linkages and innovation, science and technology policy and the economics and management of intellectual property rights.

MARGHERITA RUSSO

is professor in Economic Policy at the University of Modena and Reggio Emilia, Italy. Her main research topics are in theory and empirical research in two main related fields: dynamics of innovation (innovation as a social process, the role of relationships between firms in fueling innovation processes, policies to support innovation, the effects of innovation on the organization of work and skills); structure and change in local production systems (emergence of networks of competences in local development processes, local

development policies; competitiveness of local production systems, environmental and social sustainability of local development). In the last decade she has been responsible for work packges in several international research projects on innovation (Phoenix Innovation Study, Arizona State University) and EU projects on theory models and analysis of innovative processes (Iscom, Insite, MD)

HOW DOES PUBLIC AGRICULTURAL RESEARCH IMPACT SOCIETY? TOWARDS A CHARACTERIZATION OF VARIOUS PATTERNS

Ariane GAUNAND and Mireille MATT, Grenoble Applied Economics Lab (GAEL), Stéphane LEMARIE and Amandine HOCDE, Institut Francilien Recherche Innovation Société (IFRIS), Elisabeth De TRUCKHEIM, INRA

Due to the shortage of public funds, evaluating the performance of public research organization (PRO) has become a concern for policy makers and the organizations themselves. The purpose of this paper is to provide a qualitative study to understand the different patterns by which the outputs generated by the French National Institute for Agricultural Research (INRA) impact society as a whole. The research activity provides various types of outputs (technological innovations, expertise…) to benefit a wide range of actors (industries, technical centers …). We use a database of 1051 salient research results managed by INRA and codify three non-exclusive qualitative variables: the beneficiaries of the results, the research outputs and the potential impacts (economic, environmental, territorial…). Based on these variables, we partition the database around medoids to build 7 classes standing for specific impact patterns.

ARIANE GAUNAND

is a research fellow at the French National Institute for Agricultural Research, at GAEL (Grenoble Applied Economics Laboratory) since 2011. She graduated in Agronomy from Montpellier SupAgro (France). She is conducting research on the socio-economic impacts of public agricultural research and the way to characterize these impacts in relation with the missions of the institution.

ASSESSING THE IMPACTS OF TRANSDISCIPLINARY RESEARCH IN REDUCING POVERTY: THE CASE OF THE NCCR NORTH-SOUTH

Claudia MICHEL, University of Bern, Centre for Development and Environment CDE, Simon HEARN, Overseas Development Institute ODI, Gabriela WUELSER, Swiss Federal Institute of Technology Zurich, Environmental Philosophy, Thomas BREU, University of Bern/CDE

The impact of science on reducing poverty among people in the global South is gaining increased attention. However, measuring this impact requires an approach that accommodates complexity. Such an approach involves broadening the understanding of impact to include economic returns as well as social and environmental aspects. In this paper, we present experiences of the Swiss National Centre of Competence in Research (NCCR) North-South in assessing the effects of its research activities on societies in the South. To build up a coherent mechanism for self-evaluation, the NCCR North-South adapted the Rapid Outcome Mapping (ROMA) approach to transdisciplinary research. This required a strong engagement between research evaluation specialists and transdisciplinary academics.

SESSION 2B PRESENTATIONS

CLAUDIA MICHEL

Senior Research Scientist, CDE, University of Bern, Switzerland. C. Michel is Coordinator for Knowledge Sharing and Learning at the National Centre of Competence in Research (NCCR) North-South. This involves acting as an agent between researchers, policymakers, and practitioners, in order to transfer the most important research results into practice. At the NCCR North-South, C. Michel developed a monitoring and learning instrument aimed at allowing a better understanding of the effectiveness of the programme's research. As a Senior Research Scientist at the Centre for Development and Environment (CDE) of the University of Bern, she is concerned with the issue of innovation in sustainable development. C. Michel holds a PhD in Geography (Social and Political Geography) and was a member of the Swiss Graduate School in Gender Studies 2002–2005. Her field experience includes two years in Bolivia on a project managed by the Swiss Agency for Development and Cooperation SDC (Watershed Management, Cochabamba, 1994–1997). She is married and has two children.

PUBLIC RESEARCH ORGANIZSATIONS AND THEIR IMPACT ON PUBLIC POLICY FROM OBSERVATIONS TOWARDS THE CHARACTERIZATION OF IMPACT

Laurence COLINET, INRA, Pierre-Benoit JOLY and Philippe LAREDO, Institut Francilien Recherche Innovation Société (IFRIS), Ariane GAUNAND, Grenoble Applied Economics Lab (GAEL)

While Public Research Organisations (PRO) have the mission to enlighten public policies, the research knowledge they generate is rarely the main influence for policy making. Its influence depends on policy priorities, the existing balance between power structures, and windows of opportunity opened by three streams of agendas: problem, policy, and political streams. Knowledge can be used directly to design or implement policies, it can also be used strategically to legitimize existing views, or slowly percolate into an institution and change the terms of the debate. Qualitative approaches such as case studies can illustrate the way knowledge circulates in political spheres, but do not offer easy analysis at cross case or the organization level. In this research, we built a methodology based on five case studies, a five level qualitative scale, and expert judgment to harmonize the analytical framework, and select the most relevant and robust indicators to measure impact in an objective and replicable manner across cases.

LAURENCE COLINET

is presently Secretary General to INRA Scientific Council. She has a 22 year experience in the design, monitoring, implementation and evaluation of research or development projects and was successively employed by the French Ministry of Foreign affairs, the World Bank, and the French Ministry for Environment. Laurence Colinet is graduate of the Institut National Agronomique (INA) and of the University of Oxford. She is interested in the evaluation of research activities in support of public policies in the areas of agriculture, international cooperation and the environment. She is currently co-coordinating the ASIRPA project.

SESSION 3

STI POLICY EVALUATION IN NEW- AND NON-OECD COUNTRIES

The inclusion in the conference of a session dedicated to STI policy evaluation in 'new- and non-OECD' countries, most of which are moderate or modest innovators, suggests expected differences with similar evaluation in countries closer to innovation frontiers. These differences largely relate to variations in economic development and institutional set ups, where it is assumed that many of the resources and capabilities mobilised for evaluation in economically advanced economies are weakly developed or even absent in less-developed settings. These include statistical data, existing policy analysis, and accumulated capabilities for reflexive learning among government and public-related organisations in the innovation system.

Other conditions are also likely to be relevant, for example: STI activities may be some distance from 'frontiers'; levels of STI funding are likely to be relatively low, with some dependence on sources of international funding; corruption and clientelism may be endemic, reducing the scope for beneficial utilisation of evaluation findings; in the absence of public management reforms, awarding authorities may be used to, and have a strong preference for, internal evaluations and may view external evaluation more as a threat rather than a useful tool for policy learning; and, at least in the countries covered by the session's papers, institutional arrangements associated with the pre-transition era continue to more or less influence the workings of STI policy and governance regimes. Moreover, given these conditions, the socio-economic objectives of STI policy might also be expected to differ from those of more advanced OECD economies. For this session, an overarching question concerns the implications of these differences for evaluation practices and the findings they produce. More specifically,

- How might the criteria used in evaluation differ in transition / catch-up settings? For example, should notions of research 'excellence' and 'relevance' be framed and operationalized differently?
- How can data deficiencies be 'managed' in the short-term and data infrastructures further developed in the medium-term?
- What are the barriers to government and public-related organisations accumulating capabilities for reflexive learning and how might these be overcome?
- Evaluation practices have been introduced in many OECD countries as part of a wider mangerialist agenda to improve public management. To what extent do similar reform agendas exist in non-OECD countries? If such agendas are weakly developed, are there others that provide spaces for the wide adoption of evaluation practices?
- To what extent is the enhancement of STI policy evaluation more a matter of developing an overall evaluation culture in the public service than a matter specific to STI policy developments? How do the two interact? In countries with a weak evaluation culture, could STI policy evaluation be a frontrunner?
- What roles could evaluation be reasonably expected to play in ongoing institutional reform processes in STI systems?
- Finally, we should acknowledge that differences between countries at innovation frontiers and those further behind can be over-stated. For example, capabilities for reflexive learning among government and public-related organisations remain weakly developed in many OECD countries. Furthermore, evaluation findings are often under-utilised in policy processes. This suggests opportunities for mutual international learning on the institutionalisation and performance of evaluation practices. But what form could such international mutual learning take beyond what is done already? At the same time, what are the implications for international policy learning of the very real differences highlighted above?

CHAIR: MICHAEL KEENAN
DISCUSSANT: LENA J. TSIPOURI

MICHAEL KEENAN

(BSc. MA PhD) is a Senior Policy Analyst in the OECD's Directorate for Science, Technology and Industry. He has worked in the innovation policy field for more almost two decades, most of which was spent at the Manchester Institute of Innovation Research, where he remains an Honorary Research Fellow. He is on the editorial boards of several international journals, including Technological Forecasting and Social Change, Foresight, and Asian Research Policy. His current research activities centre on national innovation policies and he presently works on the OECD's country reviews of innovation policy. Over the last few years, he has participated in reviews of Korea, Mexico, Hungary, Greece, Russia, Sweden, the Netherlands and SE Asia. He also leads the OECD's work on the development of its Innovation Policy Platform, a flagship project to establish a web-based knowledge management tool in support of innovation policy-making.

SESSION 3 PRESENTATIONS

LENA J. TSIPOURI

is Associate Professor at the University of Athens, Department of Economic Sciences. She studied Economic Sciences at the Universities of Athens and Vienna, completed her PhD (Doctorat d' Etat), at the University of Paris II,receiving the first prize of the year 1988 and subsequently undertook postdoctoral research under a Fulbright Fellowship at MIT, Cambridge, Massachusetts. Prof. Tsipouri teaches Economic Development, European Economic, Integration, Economics of Technological Change and Theory of the Firm. Her scientific research and publications, as well as her presentations at various refereed scientific conferences and policy workshops are about Research & Innovation, Regional Development and Corporate Governance. She is professionally involved in consulting work for EU institutions, the OECD and the UN on the same topics as her scientific research and is a member of several professional associations. She is currently the chairperson for the EU Innovation for Growth (i4g) Group and a member in selected advisory panels and associations. Indicative publications and policy briefs in recent years put emphasis on Topics of general economic interest, Demand side policies, In-depth analysis of R&D and Innovation topics, Labour markets and diversity and Corporate Governance and Corporate Social responsibility

14 NOVEMBER 2013
11:15 – 13:15
ROOM 3

PRESENTATIONS

INNOVATION POLICY IN CROATIA, SLOVENIA AND FINLAND: COMMON FRAMEWORK AND/OR MULTIPLE 'BEST PRACTICES'?

Domagoj RACIC, Knowledge Network,
Zagreb, Croatia / University of Ljubljana

Complexity of policy evaluation often hinders the transferability of its results. It is thus reasonable to analyse innovation policy in a smaller group of relatively similar countries at different levels of innovation performance, economic development and EU integration. The paper tackles innovation policy in three small peripheral EU countries. Croatia and Slovenia have had a largely shared institutional background and Finland is a global innovation leader with a strong culture of innovation policy evaluation.
The complexity of innovation policy increases with the differentiation of the national innovation system. Despite crucial common elements, specific characteristics of an effective innovation policy depend upon the institutional environment, financial system and industrial structure in a country.

DOMAGOJ RACIC

is a researcher and consultant from Zagreb, Croatia. His PhD research conducted at the University of Ljubljana is focused on a comparative analysis of innovation policy in Croatia, Slovenia and Finland. In addition to research and consultancy work, he is also adjunct lecturer at the University of Zagreb. He has worked as a INNO-Policy TrendChart and ERAWATCH correspondent for Croatia and performed analysis of innovation, education and enterprise policies for the European Commission, OECD and the World Bank. His research and professional experience covers competitiveness, entrepreneurship, education, innovation and regional development. He was also a member of the working group that supported negotiations between Croatia and the EU (Chapter 20: Enterprise and industrial policy).

CHALLENGES TO SCIENCE POLICY AND ITS EVALUATION IN SMALL AND CATCHING-UP COUNTRIES: EXPERIENCES FROM THE ESTONIAN SCIENCE SYSTEM

Erkki KARO, Ly LOOGA, Priit LUMI, Piret TONURIST and Kaija VALDMAA, Tallinn University of Technology, Ragnar Nurkse School of Innovation and Governance

In this paper we discuss – based on an ongoing policy-oriented research project – the challenges of science policy evaluation in small research systems. Most discussions and analysis of science policy and its evaluation tend to centre on either large or already established science systems. But, the recent widening of the EU has brought to the European science policy arena countries that tend to be either less developed (catching-up economies), have smaller science systems (either in scale or scope), and/or tend to have emerging or still evolving science policy mixes (balancing between basic and applied research and/or between institutional and competitive funding). This poses challenging questions on the levels of policy-making and policy evaluation, and on the possibilities and limits of policy (and evaluation) learning. We discuss these issues based on the experiences of Estonia and the evolution of its science policy priorities and evaluation systems over the last 15 years.

ERKKI KARO

is a research fellow at the Ragnar Nurkse School of Innovation and Governance, Tallinn University of Technology, Estonia. His research focuses on governance and public management of research and innovation policies. He is a co-organizer of the permanent study group on Public Administration, Technology & Innovation at the European Group for Public Administration (www.ttu.ee/pati). Currently (until 2015) he is a principal researcher in the Research and Innovation Policy Monitoring Programme of the Estonian Ministry of Education and Research (co-financed by the European Social Fund). Previously, he has also worked on policy-related projects both for the local and central government institutions in Estonia on different innovation policy issues (cluster policy, open innovation and innovation policy, innovation policy strategies and governance).

EVALUATION OF STATE POLICY FOR INDUSTRIAL INNOVATION SUPPORT IN RUSSIA: INSTRUMENTS, BENEFICIARIES, AND LIMITATIONS

Yuri SIMACHEV, Mikhail KUZYK and Vera FEYGINA, Interdepartmental Analytical Center

The purpose of the paper is to evaluate the efficacy of Russian STI policy and effects of their instruments, as well as to reveal institutional constraints for "upgrading" this policy. The paper focuses on the combination of institutional analysis of the tools of public support for innovation, including tax incentives, direct financial support, development institutes, with microeconomic analysis of their impact on companies. The empirical data is provided by 2 surveys of more than 600 Russian companies carried out in 2011-2012, as well as in-depth interviews with top-managers and officials. The following issues are considered: What role is played by the public support for companies' innovations? What are advantages and disadvantages of different mechanisms? What are barriers to effectual using STI "toolkit"? What main lessons can be learnt from best and worst practices in Russian STI policy?

YURI SIMACHEV

is Deputy General Director at Interdepartmental Analytical Center (Moscow, Russia). Mr. Simachev specializes in industrial policy, innovations, SME, development institutes, public-private partnership. In 1999-2012 he took a part in research projects on microeconomic analysis of innovations in industry, estimation of fiscal reform effects, demand for law and corporate governance in the private sector; on non-market sector in Russian economy and structural transformation; on main directions and factors of industrial enterprises restructuring, market functioning of holding type of corporate structures in industry; on legal supporting on economical reforms in Russia. Mr. Simachev has focused on practical recommendations for federal authorities on private sector development, advisory work on industrial and

SESSION 3 PRESENTATIONS

innovation policy. He is on the board of Association of Independent Centers of Economic Analysis (ARETT), Association for Studies in Public Economics (ASPE). Mr. Simachev is a graduate of Moscow State University and State University – Higher School of Economics (Moscow). He is a Candidate of Sci.

EVALUATION OF R&D INSTITUTIONS IN UKRAINE – THE NEW APPROACH

Olha KRASOVSKA, State Fund for Fundamental Research, State Agency of Ukraine of Science, Innovation and Information, Vitalii GRYGA and Victor RYBACHUK, STEPS Center, National Academy of Sciences of Ukraine

An evaluation of institutional structure in the context of it coherence and conformity with the objectives of STI and R&D policies is one of the elements of the S&T policy evaluation framework. The main goal of the paper is to identify whether current institutional arrangement of evaluation process support intensive S&T development in Ukraine. It was achieved through analysis of new methodology for R&D institutes evaluation, which was developed under Governmental Decree "On Approval of the Concept of reforming the system of funding and management of scientific and technical activities". New Methodology allows make assessment comparing achievements of the previous period (10 years) and the dynamics of modern (4 years) trends in S&T and innovation activity of Ukrainian research institutions.

The methodology is at the approbation stage now, but about eighty R&D Ukrainian institutes have been already evaluated. The results of evaluation are discussed in more details in the paper.

OLHA KRASOVSKA

is Head of Department of the State Fund for Fundamental Research under State Agency of Ukraine of Science, Innovation, and Information since 2013 and Senior researcher (since 2012) and Research manager (2003-2012) at the Dobrov Center for Scientific and Technological Potential and Science History Studies (STEPS Center), National Academy of Sciences of Ukraine. She received a PhD in Economics of the STEPS Center in 2004, her fields of activity include venture financing, S&T indicators, R&D management and regional innovation policy.

VITALII GRYGA

is Senior Researcher at the Department of state investment policy and innovation development, Ministry of Economy and Trade of Ukraine since 2010 and at the Department of S&T potential studies, Dobrov Center for Scientific and Technological Potential and Science History Studies (STEPS Center) since 2011, Researcher at the STEPS Center (2004-2011). He has a PhD in Economics of the STEPS Center in 2007. His professional interests include Economic and S&T development, Innovation and R&D policy.

S&T POLICY PEER REVIEW FOR KAZAKHSTAN – A CASE STUDY

Manfred HORVAT, Vienna University of Technology

The peer review exercise was carried out in the frame of the FP7 Coordination and Support Action INCONET EECA (S&T International Cooperation Network for Eastern European and Central Asian Countries). The exercise addressed the following aspects of the Kazakhstan STI system:

- The organisational and legal set-up of the STI policy system,
- The funding of STI in Kazakhstan,
- The main STI structures and actors in Kazakhstan,
- The human resources for STI, and
- International STI cooperation activities of Kazakhstan

According to the Terms of Reference, the peer review was supposed providing a view on the national STI system from the outside and followed the approach taken by the policy mix peer reviews performed in the frame of the CREST Open Method of Coordination (OMC) and Mutual Learning initiatives. In the paper, the main steps of the peer review process will be presented and discussed.

Manfred Horvat

works as independent expert for international research and technology policies and programmes and is honorary professor at Vienna University of Technology (TU Wien). As first director for European and International Research and Technology Cooperation of BIT and in the FFG, Austria, Manfred Horvat was responsible for the operational implementation of the EU RTD Framework Programmes in Austria from 1993 to 2006. Since the beginning of 1990s, he served as member and chairman of many monitoring and five-year assessment panels as well as expert groups appointed by the European Commission for the evaluation and impact assessment of EU programmes and instruments.

In addition, Manfred Horvat was involved also in evaluation and review exercises of STI policies, strategies, programmes and institutions in different countries in Europe and beyond.

SESSION 4A

CHALLENGES IN ASSESSING NEW EUROPEAN RESEARCH AREA POLICES, PROGRAMMES AND INSTRUMENTS

With the advent of Horizon 2020 and further development of the European research Area and the instruments developed in this vein in the past decade, it has become more important than ever to be able to depict effects and impacts of these instruments.

The target group of funding activities has broadened to include programme funders themselves who are induced to develop joint funding and learning activities with subsequent benefits for researcher and firms. This has paved the way for further bottom up joint approaches of research funding organisations that are not supported through the Commission. Evaluation needs to understand the two level effects on funders and on research performers, and it needs to assess the challenges of implementation and the benefits – and shortcomings – of the variable geometry vis-à-vis the traditional supranational approaches. More complication is added through joint programming addressing defined challenges, where ex ante evaluation needs to make a strong point for co-funding of variable geometry and ex post-evaluation needs to establish the contribution programmes made to the challenges addressed.

As most of ERA policies, programmes and instruments focus on collaboration, naturally the attention of analysis does as well. Analysis presented in this session range from novel ways of depicting patterns of collaboration to the processes by which they are brought about and can be monitored. Also, the extent and rationale of private companies involvement in these collaborations is naturally a central pillar of both policy and policy evaluation. Recent evaluations have both shown some limits of what one can expect from collaborative R&D in terms of innovation output as well as they have hinted towards some limitiations in evaluation approaches and methodologies to fully capture the effects of these types of programmes and projects.

Hence, this session addresses two of the key ERA dimensions, presenting novel data to depict, monitor and assess those variable and flexible instruments and their multiple effects.

CHAIR: WOLFGANG POLT
DISCUSSANT: JAKOB EDLER

WOLFGANG POLT

finished his studies in Economics at the University of Vienna in 1985. From 1985 to 1992 he worked as a researcher at the Instiute for Socio-Economic Research and technology Assessment of the Austrian Academy of Sciences. From 1992 to 1999 he was at the Department of Technology Studies of the Austrian Research

SESSION 4A PRESENTATIONS

Centers Seibersdorf. From 1996 to 1998 he held a post as full time consultant to the Directorate for Science, Technology and Industry/ Division for Science and Technology Policy of the Organisation fo Economic Co-operation and Development (OECD) in Paris. From February 2000 to June 2010 Wolfgang Polt has been heading the Viennese Office of the Centre for Economic and Innovation Research of JOANNEUM RESEARCH as well as company officer with statutory authority since 2006. Since July 2011 Wolfgang Polt is Director of POLICIES - Centre for Economic and Innovation Research of JOANNEUM RESEARCH.
He won Research Scholarships at the Institut für Angewandte Systemanalyse (IIASA) in Laxenburg/ Vienna and at the Research Institute of the Finnish Economy (ETLA) in Helsinki.

Jakob Edler

is Professor of Innovation Policy and Strategy and Executive Director at the Manchester Institute of Innovation Research (MIoIR https://research.mbs.ac.uk/), Manchester Business School, University of Manchester. Jakob works and publishes on public policy and governance for science and innovation, with a focus on evaluation, and on strategic innovation management of companies. Recently, Jakob has been leading the NESTA/ MIOIR COMPENDIUM on the impact of innovation policy, providing 20 reports on policy instruments: (http://innovation-policy.org.uk/).
A further focus in recent years has been the analysis of the role of demand and public procurement for innovation (https://underpinn.portals.mbs.ac.uk) and related policies as well as the internationalisation of science and innovation policy. Jakob leads the evaluation course in the MIoIR Executive Education Programme of three courses on evaluation, foresight and STI policy (https://research.mbs.ac.uk/innovation/Executivecourses.aspx). Before joining MIoIR Jakob was Head of the Department Innovation Systems and Policy at the Fraunhofer Institute for Systems and Innovation Research (ISI), Germany. Jakob is member of the executive committee of EU-SPRI (www.euspri-forum.eu/).

14 NOVEMBER 2013
14:15 – 15:45
ATRIUM

PRESENTATIONS

ASSESSING THE IMPACT OF JOINT AND OPEN RESEARCH PROGRAMMES: A PROCESS-CENTRED APPROACH

Emanuela REALE, CERIS CNR Institute for research on firm and growth, Maria NEDEVA and Thomas DUNCAN, University of Manchester/ Manchester Institute of Innovation Research, Emilia PRIMERI, CERIS CNR

The paper aims at presenting and discussing the methodological challenges coming from a process-centred approach used for assessing the impact of joint and open research programme developed in eleven European counties.
The starting point is that, in strict sense, impact is the difference made by a specific policy instrument that is clearly and causally attributable to said instrument (at least in part). Nevertheless, the impact of a research programme is achieved through complex social processes involving different actors -the main groups being the funders and the funding beneficiaries, and embodying different kinds of opportunities.

EMANUELA REALE

political scientist, is senior Researcher at CERIS - CNR. She was scientific responsible in many international projects on science and technology policy. From 2004 to 2009, she was Team Leader of CNR CERIS in Network of Excellence PRIME - VI EC Framework Programme, and Member of the Executive Committee of the Network. From 1998 to 2009 she acted as expert of Research Evaluation for the National Committee for the Evaluation of Research CIVR. Presently she is Principal investigator in research projects on higher education (Projects TRUE ESF-EUROCORE, PREST-ENCE ANR, France, POCARIM,

VII EUFP), research evaluation (PRIN 2008) and indicators (Coordinator of JOREP Project, EC VII EUFP). She cooperates as an Expert with the ANVUR-Italian Agency for the evaluation of university and research, the International Advisory Board of European Projects, and as expert in the ESF MO Forum on Indicators for the Evaluation of the Internationalisation of the Public research organisations. She was Vice President of the Italian Evaluation Association-AIV in 2009-2013; actually she is Member of the AIV Scientific Editorial Committee, Vice President of the European Forum for Studies on Policies for Research and Innovation-EU-SPRI, and Member of the executive board of the ENID European STI Indicators Conference Series. She published and served as referee in several international journals and books.

MONITORING AND EVALUATION IN JOINT CALLS OF "HORIZONTAL – INCO" ERA-NET AND ERA-NET PLUS ACTIONS

Martin-Felix GAJDUSEK, ZSI – Centre for Social Innovation and Nikos SIDIROPOULOS, University of Athens, Centre of Financial Studies

ERA NET and ERA NET PLUS horizontal actions have set up joint calls, the ultimate goal of this type of action supported in FP 6 and FP7. Following EU policy priorities these actions focus on single non-EU countries (Korea, India) or a targeted region.

Depending on objectives of calls beside networking activities funding for high quality research was provided. This corresponds only partly to the establishment of critical mass funding like in thematic ERA NETs. For understanding the effects of the joint funding activities a number of processes are relevant. We benchmarked the joint calls of horizontal INCO ERA NET calls concerning the objectives, priority setting, project selection and the monitoring framework including the systematic assessment of the results of joint research.

A number of horizontal ERA NETs were approached with a survey to identify practices of monitoring and evaluation processes after the calls. A control group consisted of joint calls of thematic ERA-NETs. The pertinent question is if clear program objectives and logic associated with RTDI indicators would allow better evaluation processes at termination or at a later point of time.

MARTIN FELIX GAJDUSEK,

born in 1971, holds a MSc from the University of Natural Resources and Life Sciences, Vienna. Since 2010 he has coordinated the FP7 funded SEE-ERA.NET PLUS involving all Western Balkan countries and several EU MS, he is involved in other CSAs in EE and Central Asia. He has been working 2002-2010 in Bulgaria heading the Austrian Science and Research Liaison Office in Sofia facilitating bilateral S&T cooperation Austria-Bulgaria and with the WBCs. He coordinates since 2011 the SEE-TCP co-funded project Fostering Evaluation competencies in Research, Technology and Innovation in the SEE Region (EVAL-INNO). He has been employed by the Centre for Social Innovation as a researcher and project coordinator since 2004.

NIKOS SIDIROPOULOS,

born in 1964, PhD (Geochemistry), works as a Research Associate at the Centre of Financial Studies, National and Kapodistrian University of Athens dealing with S&T policies, RTDI evaluations, S&T management, economic development, regional development, corporate governance (Prof. L. Tsipouri). He also holds a permanent position at the Ministry of Infrastructures, Transportations and Networks. He worked as Senior Project Manager at GSRT, Hellenic Ministry of Development (2005-2009). He had been responsible for S&T cooperation with Germany, USA and was involved in SEE-ERA.NET (and PLUS), WBC-INCO.NET, evaluated the BS-ERA.NET processes and was alternate national representative at the programme committees of INCO and Euroatom's Fusion of the FP7. He had been responsible for Greek programmes for research-industry cooperation PAVE (1998-2005), HERON (2000-2005). Since 2011, he is involved in the EVAL-INNO project, fostering evaluation competencies in research, technology and innovation in the SEE region, funded by the SEE-TCP.

SESSION 4A PRESENTATIONS

VISUALIZING PROGRAMME PARTICIPATIONS WITH INTERACTIVE MAPS

Martin MAREK and Erich PREM, eutema Technology Management GmbH & Co KG

We present results from an EC study on opportunities to improve the effectiveness and impact of European industry-driven public-private collaboration research and innovation initiatives in the field of electronic components and systems (ARTEMIS, ENIAC and EPOSS). This included the development of maps of the different stakeholders by country highlighting the budget commitment from Member States, their evolution over time, the industrials participating in the JTIs and the number of projects they participate in, along with the related financial involvement. We present dynamic and interactive visualization techniques realized with the Google Visualization API and realized in JavaScript that support easy understanding and analysis of the programme participation data.

ERICH PREM

received the graduate engineering and the Ph.D. degrees in computer science from the Technical University of Vienna, Wien, Austria, and the Diplomierter Wirtschaftstechniker (DWT) graduate degree in managerial economics and the MBA degree in general management from Donau University, Krems, Austria. He is currently the CEO of eutema Technology Management, Vienna, Austria. He is also a Lecturer at the University of Vienna. He was a Researcher at the Austrian Research Institute for Artificial Intelligence, and a Guest Researcher at the Massachusetts Institute of Technology. He has a scientific background in artificial intelligence and epistemology.

For the last 10 years, he has been involved in research management and policy with a focus on information and communications technology (ICT) research strategy. He is the author or coauthor of more than 45 scientific articles. Dr. Prem is the CEO of eutema GmbH.

BRIDGING THE INNOVATION GAP: PRIVATE SECTOR INVOLVEMENT IN PUBLIC-TO-PUBLIC R&D FUNDING CO-OPERATION

Karel HAEGEMAN and Mathieu DOUSSINEAU, Institute for Prospective Technological Studies, Joint Research Centre, European Commission

The EU has had a strong track record in scientific output of publicly funded R&D in the past decades compared to other world regions, but has not succeeded very well in translating this into innovations serving economy and society. Evidence of this innovation paradox has been collected by various authors.

The lack of links between publicly funded research and business may hamper optimal commercialisation of research results and sustain this paradox. In this context, our objective is to better understand the importance of involving business in public-to-public transnational research programming (and related barriers to do so), and of practical ways to do so. The findings may play an important role in translating research findings into innovative solutions by involving business from an early stage, in order to optimise the potential to reconcile solutions addressing societal challenges with increased competitiveness.

It may also contribute to establishing more links between different research and innovation coordination instruments, such as KICs and JPIs, as well as to the reform and simplification of instruments as foreseen in the Partnering Communication.

KAREL HAEGEMAN

is a scientific officer at the European Commission's Joint Research Centre (JRC-IPTS). He has masters in business economics and in marketing, and has previously worked in innovation policy, general economic policy, project management and market research. His activities focus on the development of strategic and thematic anticipation activities, and policy analysis in support of the European Research Area. His work focuses specifically on innovation addressing grand challenges, policy analysis in support of transnational research programming and analysis on implementation of the triple helix mode. Methodologically his work focuses on new ways for combining qualitative and quantitative FTA (Future-Oriented Technology Analysis methods), the use of web 2.0 tools in anticipation and advancing the development and use of FTA in general. He is a member of the advisory board of several FP7 projects (EST-FRAME, FLAGSHIP, JPI's to Co-Work) and is involved in a set of other

FP7 projects (VERA, ERANET-RUS,…). He has also been part of the scientific committee of several scientific conferences on anticipation and has published widely on anticipation and on transnational research cooperation.

SESSION 4B

CHALLENGES IN ASSESSING NEW EUROPEAN RESEARCH AREA POLICES, PROGRAMMES AND INSTRUMENTS

Background: In the year 2000, the European Commission published the Communication "Towards a European Research Area" and started a broad discussion with the aim of creating a "single European market" for research. Communications in 2007 or 2012 called for new perspectives and reinforced ERA partnerships. ERA policies are 'moving targets', and even more so the programmes and instruments which are implemented in the different dimensions and Member States1. In 2013, an overview on the political context, steps taken and first achievements at both national and European level was presented which provides a baseline preparing an in-depth assessment of progress on ERA in 20142.
Taking the ambitions seriously meant and still means a major challenge for policy designs, implementation and finally evaluation – conceptually, empirically and in political terms:

- Experiences with the emergence, the development, the achievements and related evaluation concepts and practices of the European Frameworks Programmes show that evaluation concepts, practices, actors and institutions (have to) co-evolve with such a major historical political project. Which evaluation challenges and opportunities can we anticipate for ERA?
- ERA follows by definition a multi-level, multi-actor, and multi-instrument approach. How would evaluation concepts cope with this multi-dimensional reasoning – conceptually and methodologically?
- As a major political project, ERA continues to be subject of political debate, contestation and negotiation. Also, the global map of science and technology investments and policies is changing rapidly, with consequences for the relative role of ERA ambitions. At the same time, partly overlapping, partly competing political projects have to be handled, such as research and innovation policies to cope with the 'Grand Challenges'. As a consequence, ERA political targets are moving – how can evaluation concepts cope with the 'volatile' nature of ERA policies?3 New monitoring and evaluation strategies will be set up for a new generation of programmes in 2014 (most importantly Horizon 2020) and instruments implementing ERA, with a need for coherence, common methodologies, improved data archives, key indicators and close cooperation with member states.

CHAIR: STEFAN KUHLMANN
DISCUSSANT: ELKE DALL

1 for more details see the "Era fabric Map", 2012 , of the VERA project which also puts the ERA dimensions in the Europe 2020 policy context; ERA Progress report

2 http://ec.europa.eu/research/era/pdf/era_progress_report2013/era_progress_report2013.pdf

3 http://ec.europa.eu/research/evaluations/pdf/conferences/30-09-11/presentations/_10._fisch_peter.pdf

SESSION 4B PRESENTATIONS

STEFAN KUHLMANN

is Chair of the Department of Science, Technology, and Policy Studies (STĐPS), a member of the programme council of university's 'Institute for Innovation and Governance Studies' (IGS), and leader of the Twente Graduate School programme "Governance of Knowledge and Innovation". He is a political scientist and studied also history (University of Marburg, Germany; graduation 1978); 1986 he received the degree of PhD in political science (Dr.rer.pol.), at University of Kassel, Germany; 1998 he got a 'habilitation' (2nd doctorate) in political science at this university. Since 1979 Stefan Kuhlmann has been involved in studies of research and technological innovation as social and political processes – with changing entrance points and perspectives. During the last two decades he has analysed science, research and innovation systems and public policies, focusing on the dynamics of governance. Until summer 2006 he was managing director of the Fraunhofer Institute for Systems Innovation Research (ISI), Germany, and Professor of Innovation Policy Analysis at the Copernicus Institute, University of Utrecht, The Netherlands.

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ELKE DALL

Elke Dall is Head of Unit "Research Policy and Development" and board member at the Centre for Social Innovation. She studied Sociology at the University of Vienna and has a background in research on networked organisations, quantitative and qualitative evaluation and in the field of S&T and innovation policy analysis. The Centre for Social Innovation is deeply involved in projects funded by the European Commission related to international cooperation. The projects deal with analytical aspects for cooperation between the European Union / European Research Area and regions such as South East Asia, Latin America, Western Balkan countries and countries such as Korea, Russia, Ukraine, India, etc. In several of these projects, which are designed to support policy making, different foresight methodologies have been used to prepare recommendations how to develop the future of cooperation. Among other activities, Ms. Dall also teaches several post-graduate and graduate courses and is actively involved in strategy development and policy dialogue with a particular focus on South East Europe.

PRESENTATIONS

THE POTENTIAL OF PROXIMITY INDICATORS FOR EVALUATING INTERNATIONAL RESEARCH NETWORKS: A CASE STUDY OF THE WATER SECTOR

Pieter HERINGA and Laurens HESSELS, Rathenau Institute, Marielle van der ZOUWEN, KWR Watercycle Research Institute

This paper explores the potential of proximity indicators for evaluating the dynamics of international research networks by a case study of European research collaborations in the water sector. We will use joint project participation in European Framework Programmes (FP1-7) as an indicator of research collaborations. The main question of this paper is what dimensions of proximity most strongly influence international research collaborations in the water sector. By conducting our analyses also on subsets funded by different funding instruments within FP we will compare the collaboration dynamics of the different funding instruments. Our paper will close with a reflection on the usability of our indicators of proximity for research evaluation and of the possibilities to analyse research collaboration based on FP participation data.

LAURENS HESSELS

works with the Rathenau Instituut since September 2010. He contributes to research projects on coordination in science, European research policies and innovation networks in the water sector. Laurens has published widely on scientific collaboration, coordination, and the practical applications of scientific research. Laurens studied Environmental Chemistry and Philosophy of Science at the University of Amsterdam. From 2006 until 2010 he worked on a PhD-project in the Innovation Studies Group at Utrecht University.

THE FP7-4-SD.EU MONITORING SYSTEM – HOW DOES THE 7TH EU FRAMEWORK PROGRAMME CONTRIBUTE TO SUSTAINABLE DEVELOPMENT?

André MARTINUZZI and Markus HAMETNER, Vienna University of Economics and Business, Research Institute for Managing Sustainability (RIMAS)

When it comes to assessing the contributions of R&D programmes to sustainable development, the broad variety of definitions, the fuzziness of interrelated objectives, and the complexity of diffusion mechanisms have to be considered. Monitoring the 7th EU Framework Programme poses an additional challenge: with a total budget of more than 50 billion Euro, a broad variety of themes, and several thousands of research topics and projects, the programme is just huge. Therefore, monitoring each research project or new technology would not be feasible. In order to deal with these challenges we developed and implemented a monitoring system that links policy objectives with research activities, combines a scientific screening by a group of experienced researchers with an external expert validation and includes an interactive database (www.FP7-4-SD.eu). In our presentation we will discuss the challenges of setting up such a monitoring system, describe its key features, and present selected results.

ANDRÉ MARTINUZZI

is head of the Institute for Managing Sustainability and Associate Professor at the Vienna University of Economics and Business (www.sustainability.eu). During the last years, he has co-ordinated projects funded by the EU Framework Programmes, tendered research projects on behalf of six different EU Directorates General, Eurostat, the UN Development Programme and for several national ministries. His main areas of research are corporate sustainability, sustainable development policies, evaluation research, and knowledge brokerage. He designed and implemented an internet-based monitoring system for the EU Framework Programme (www.FP7-4-SD.eu), developed tools for the sustainable consumption hub (www.SCP-KNOWLEDGE.eu), currently leads a work package in a project dealing with impact measurement of Corporate Social Responsibility (www.CSR-IMPACT.eu) and co-ordinates a EU-project on sustainable consumption and growth (www.SCP-RESPONDER.eu).

HOW FUNDING OF "EXCELLENT" YOUNG RESEARCHERS MAY CONTRIBUTE TO THE EUROPEAN RESEARCH AREA – REFLECTIONS ON EMPIRICAL RESULTS OBTAINED FROM EVALUATING THE "STARTING GRANTS" PROGRAM

Nathalie HUBER and Antje WEGNER, Institute for Research Information and Quality Assurance

In order to enhance the European Research Area's attractiveness for promising young researchers, the European Research Council (ERC) launched the "Starting Grants" (StG) funding program for postdocs from all over the world. Our MERCI project ("Monitoring European Research Council's Implementation of Excellence"), an accompanying evaluation study for the ERC, focuses on the program's implementation and operation assessment as well as its performance and effectiveness. In the conference presentation, we will deliver insights into the evaluation challenges of this new funding instrument by presenting our methodological framework and research design. Furthermore, we will discuss selected empirical results focusing on the StG recipient's implementation process at their host institution. Our results show that although the ERC grant provides the researchers with financial resources, the responsibility to create "excellent" working conditions resides with the grantee and its institution. We will reflect about the hypothesis that (1) both the grant holders and the StG host institutions increasingly act as strategic players and (2) "learning effects" take place on both sides.

NATHALIE HUBER

studied Communication Science, Jurisprudence and Psychology (M.A.) at the University of Mainz and at the University of Munich. Additionally, she received a diploma at the Institut FranÇais de Presse in Paris (Research Area: Media Economics). From 2004 to 2010 she worked as a Scientific

SESSION 4B PRESENTATIONS

Assistant at the University of Munich, where she gathered research, teaching and consulting experience. In 2009, Nathalie Huber received her PhD. Within the framework of her PhD thesis, she studied academic careers, Sociology of Scientific Knowledge and Sociology of Work as well as Science Studies. At the iFQ, Nathalie Huber's research activities focus on the analysis of young researchers, in particular she is dealing with postdoctoral career trajectories by international standards.

RESEARCH-MOBILITY OR JOB-STABILITY? CHALLENGES TO THE ERA

Ana FERNANDES-ZUBIETA, Institute for Advanced Social Studies -Spanish National Research Council (IESA-CSIC), Elisabetta MARINELLI and Susana Elena PEREZ, Institute for Prospective Technological Studies, Joint Research Centre, European Commission

This article analyzes the effect of international job-mobility on career success measured by obtaining an open-ended contract or tenure-track position. We use an original database that covers experienced researchers in ten European countries – Belgium, France, Germany, Italy, the Netherlands, Poland, Spain, Sweden, Switzerland and the UK. We develop a taxonomy of research-mobility and analyze its impact on the probability of holding a permanent position, controlling for individual and job characteristics as well as national effects.

Our analysis confirms that international mobility impacts on career consolidation. In particular, those who move several times, unless they are more productive than their peers, are the least likely to consolidate their career. The study is set against the background of the consolidation of the European Research Area, of which research mobility is a key element. The results of the paper show that mobility, albeit critical to research performance, may bare significant costs on the individual researcher. The paper, therefore, points out that the current policy support to mobility needs to be reassessed to take into account its inherent tensions.

SUSANA ELENA PEREZ

is a Scientific Fellow in the Knowledge for Growth Unit at the Institute for Prospective and Technological Studies (IPTS), a Joint Research Centre of the European Commission, since 2008. She also works as part-time Associate Professor at the Loyola University in the Business Administration Degree. She has been an Associate Professor, in the Department of Business Management (2003-2007), at the Pablo de Olavide University in Seville (Spain). She was a member of the PRIME Network of Excellence and has been involved in various competitive European and national research projects.

She holds a PhD (European award) in Economics and Management of Innovation and Technology Policy from the Autonomous University of Madrid (focus on how to improve universities' internal management and governance using intellectual capital approaches) and was a visiting PhD student at SPRU (Science and Technology Policy Unit), Sussex University (UK). Her main research interests are higher education institutions, mobility, researchers, management and governance of public organisations and science and technology policy.

POSTER PRESENTATION

IMPACT ORIENTED MONITORING (IOM): A NEW METHODOLOGY FOR MONITORING AND EVALUATION (M&E) OF INTERNATIONAL PUBLIC HEALTH RESEARCH PROJECTS FUNDED BY THE FRAMEWORK PROGRAMME OF THE EUROPEAN COMMISSION (EC)

Guinea G, Sela E, Gómez AJ, García-Franco M, INNOVATEC; Jaramillo H, Gallego JM,Patiño A, Colegio Mayor Nuestra Señorea del Rosario ; Mangwende T, Ambali, A, Nyirenda-Jere T, Seke L, Ngum N, African Union, The New Partnership for Africa's Development (NEPAD); Srivanichakorn S, Thepthien B, Putthasri W, ASEAN Institute for Health development, Mahidol University

EVAL-HEALTH (www.eval-health.eu) is a collaborative research project, funded by the EU 7th Framework programme, which has as main goal to contribute to strengthen monitoring and evaluation (M&E)of European Union funded interventions in developing countries in the specific area of international public health. The 48 month project is carried out by a consortium of 9 partners coming from Europe and from international partner countries. One of the goals of the project is to develop and test a methodology that can be used by the EC and partner countries to identify research results and evaluate the different impacts that international public health research projects are achieving. Here we present the preliminary results of the project and a first overview of the developed methodology which has been named as Impact Oriented Monitoring (IOM) methodology. The methodology is based on the Payback model (Buxton M. and Hanney S. 1996), and provides a way to better indentify and assess project impacts, as a means to improve future programming and inform STI policies.

JOAQUIN GUINEA

is an Engineer (Univ. Politecnica Madrid) with MSc (Tokyo Suisan Daigaku) and PhD. (Univ. Politecnica Madrid). At present he is Honorary Professor of Alcala University (Madrid), Lecturer of "R&D Management" at the Complutense University (Madrid) and Expert Evaluator for EU R&D in the area of International Collaboration (INCO), Regional Development and Technology Transfer Projects since 1995. He has been also working as Evaluator of R&D EUREKA Projects for Center of Technology Development (CDTI, Ministry of Science & Innovation of Spain) and as Director of the Technology Transfer Unit of the University of Alcalá (Madrid, Spain). In previous positions he has also been involved in several international biomedical R&D projects and other academic positions.

ERIKA SELA

has a degree in biological science from the Universidad Complutense de Madrid. She has developed most of her career in R&D management in different positions and organizations, and has been working for Innovatec since its establishment. She has expertise in Regional, National and European R&D funding programmes, management of EU FP7 projects and coordination of research teams. She has also worked as Technical and Economical Evaluator of R&D Projects for the Center of Technology and Industrial Development (CDTI), Business Development officer at an important Bio-Pharmaceutical company and technician at the Technology Transfer Office of Alcala University.

SESSION 5

EVALUATING FOR SELECTION – CHALLENGES AND OPPORTUNITIES

This session deals with evaluation activities conducted before a policy or some of its elements are implemented. The most common role (although not the only one) for this kind of evaluation is to inform or make decisions on resource allocation. Obviously, this is and has always been a difficult task. There is a long strand of literature addressing problems like the possible systematic bias in the decisions of expert committees and peer reviewers, and offering possible solutions including the use of formal analytical tools to support expert decision or even to displace "subjective" experts with the results of "objective" data analysis. Despite these efforts, the problems we are facing today are, if anything, increasingly challenging. First the accelerating pace and changing nature of scientific and technological discovery and, more broadly, of innovation itself, are generating more uncertainty and risks. Second, the investments required by many scientific and technological ventures are often very substantial. Growing costs are finally compounded by the financial difficulties currently faced by the public sectors of many European countries.

How to deal with these challenges? The papers in this section address both the evaluation processes and the use of large sets of quantitative data, as well as warning us about the effects, often unintended, that selection processes can have on the type of research that will be proposed and eventually carried out. They reconsider the evaluation processes and, in particular, the ways in which evaluation agencies should organise their work, perhaps including broader stakeholder communities and they add to a body of literature that interprets the outcomes of peer review decisions under the light of quantitative data analysis.

In the end, both issues are related: evaluation processes will be contingent on the way in which data is used within such processes. Data can "inform" or "drive" the evaluation process, but debates on the use of data and the details of organisation should not divert us from a main objective in any evaluation activity: evaluation needs to build on an understanding of the ultimate objectives of the policy under evaluation and has to provide an avenue for debate on and understanding of the criteria on which the achievement of such objectives will be assessed.

CHAIR: JORDI MOLAS GALLART
DISCUSSANT: LEONHARD JÖRG

JORDI MOLAS-GALLART

is an economist with more than twenty years' experience as an analyst of science, technology and innovation policies. He is Research Professor and Deputy Director at INGENIO, a research institute of the Spanish Council for Scientific Research (CSIC) and the Polytechnic University of Valencia. Before joining INGENIO, Jordi worked for 13 years at SPRU, University of Sussex as Research Fellow and Senior Research Fellow. His research interests include science and technology policy evaluation and impact assessment, and university-industry relations. He has led and contributed to many evaluation studies for a variety of clients, including the UK Economic and Social Research Council, the European Commission, INSERM, CSIC, Queen Mary College, the Russell Group of Universities, and several Spanish regional governments among others. He has been a member of the European Commission "Lisbon Expert Group" for the follow-up of the research aspects of the revised Lisbon strategy. He is the author of one book, and of more than 80 articles, book chapters, monographs and reports. He is co-editor of Research Evaluation.

LEONHARD JÖRG,

born in 1967, is an economist, trained at the University of Vienna and Bonn and holds a Master degree in Technology and Innovation Management from SPRU – Science and Technology Policy Research, University of Sussex, UK. He joined the Austrian Research Promotion Agency (FFG) in 2008. He is member of the strategy team of FFG and focuses on the internal review and design of funding programs. In 2012 he was leading a major internal project on standardization of funding instruments. In the course of the project a new funding toolbox as well as an overarching thematic monitoring system has been implemented successfully. Prior to joining FFG, Leonhard worked as senior consultant at Technopolis in Vienna. During 8 years at Technopolis he was involved in numerous evaluation studies at national and international level. He worked on projects for regional and national authorities in Austria, the EU Commission and foreign funding agencies in Germany and Finland. Besides evaluation studies Leonhard conducted a number of benchmarking studies looking into the functioning and performance of national and regional innovation systems. Based on this experience he frequently represents FFG in evaluation committees established to support the procurement of research services in the area of science and technology policy.

PRESENTATIONS

IS THE TAIL WAGGING THE DOG? AN ANALYSIS OF POSSIBLE ISOMORPHISM EFFECTS IN INNOVATION PROJECT APPLICATIONS

Ina DREJER and Poul-H. ANDERSEN,
Aalborg University

Strained public budgets have intensified the focus on getting value for money from public spending. The focus is on clear, measurable goals for evaluating the effects of policy efforts and on how to document the effects of public spending on research, science, technology and innovation policies through ex post evaluations and impact assessments. This paper analyses whether the increasing focus on being able to document and quantify the impacts of public policy investments is reflected in the design, aims and content of innovation project applications; and whether applications over time become more similar adhering to emerging norms for explicating linearity in accordance with a mimetic isomorphism hypothesis. The empirical basis is a sample of Danish applications to the European Regional Development Fund ("Innovation and Knowledge Sharing" theme) during the period 2007-2010.

INA DREJER
is policy researcher at the Department of Business and Management at Aalborg University. She is member of a working group under the Danish Ministry of Economy on "Improving visibility and documentation of knowledge institutions' contribution to innovation" and has participated in a joint project between Danish regional authorities and the Danish Business Agency on developing methods for measuring impacts of business development projects. Ina Drejer is head of a project on assessing the regional impact of Aalborg University.

SELECTING INNOVATION: PROJECT SELECTION PROCEDURES IN RESEARCH FUNDING AGENCIES

Peter BIEGELBAUER and Thomas PALFINGER,
AIT – Austrian Institute of Technology

In the last years criteria have been debated upon which project selection procedures of research funding agencies are based. An extensive body of literature has been built on singular processes, especially on peer review.
Yet comparatively little research is available on the procedures themselves, i.e. the ways in which research funding agencies select research projects. We want to make a contribution in order to close this gap and ask the following research questions:
Which methods and practices of project selection can be found in different applied research funding agencies?
How have they changed over the last years?
Is there a recognised best practice standard?
What are the reasons for the differences between the project selection procedures of research funding organisations?
These questions have been empirically researched in nine European case studies.

PETER BIEGELBAUER
is Senior Scientist at the Department Innovation Systems of the AIT Austrian Institute of Technology in Vienna. Previously he was at the Institute for Advanced Studies and the Interdisciplinary Centre for Comparative Research in the Social Sciences in Vienna. He holds a Habilitation, a Doctorate and a Master in political science from the University of Vienna, Austria, and a Master from MIT, USA. His research work focuses on the fields of research, technology, industry and innovation policy, where he has coordinated several national and international research projects. He is interested in all phases of the policy life-cycle, from problem definition to policy evaluation and reformulation. For several years he has concentrated on policy evaluation and the possibilities of learning from experience. He is regularly working as an evaluator for a number of national and international social science journals and as a referee for several international and national science funding bodies such as the European Research Council and the European Commission's DG Research. He teaches at the Universities of Vienna and Innsbruck on social learning and public policy making, comparative politics

SESSION 5 PRESENTATIONS

and social science methods and has also held courses at the Charles University in Prague, at the Institute for Advanced Studies and the Austrian Institute of Technology in Vienna. Since 2010 he has been editor of the Austrian Political Science Journal. In 2013 he has published the book "Wie lernt die Politik - Lernen aus Erfahrung in Politik und Verwaltung" on learning from experience in politics and administration with VS Springer.

THOMAS PALFINGER

works at the Department Innovation Systems of the AIT Austrian Institute of Technology in Vienna. He studies political science at the University of Vienna and socioeconomics at the University of Economics in Vienna, with a concentration on the historical development towards the Knowledge Society.

NEW MODES OF STAKEHOLDER INVOLVEMENT IN EX ANTE IMPACT ASSESSMENTS

Susanne BÜHRER, Fraunhofer Institute for Systems and Innovation Research

The presentation intends to show benefits as well as risks when using a radical new approach in ex ante impact assessments. The example given is the assessment of the FP7 Science-in-Society programme (SiS) conducted on behalf of DG RTDI between 2011 and 2012 where a survey-based public consultation process using basic elements of a Delphi approach was used. The main methodological innovation used in the course of the ex-ante impact assessment was the element of a public consultation process organised in form of a Delphi-like European-wide online survey based on the snowball sampling technique.

SUSANNE BÜHRER

studied politics, sociology and history at the University of Stuttgart. After obtaining her Master of Arts degree, she worked at the Mannheim Centre for European Social Research (MZES) on a research project dealing with the issue of "Migration Potentials".
In 1997, she finished her dissertation (Dr. phil.) at the University of Mannheim. She has been employed since 1996 at Fraunhofer ISI, since 2009 as Head of the Business Unit Policy and Evaluation. Her main work and research focuses are: programme evaluations, monitoring evaluations of institutional promotional measures, analysis of communication and cooperation structures, studies on university medicine, gender and innovation as well as mobility behaviour.

CAN BIBLIOMETRIC INDICATORS BE USED TO SUPPORT THE EUROPEAN RESEARCH COUNCIL IDENTIFY FRONTIER RESEARCH – AND IF SO HOW?

Kathy WHITELEGG, AIT – Austrian Institute of Technology and Boris KRAGELJ, European Research Executive Council

The aim of this abstract is to present the main conclusions and to discuss the policy implications that resulted from the project "Development and Verification of a Bibliometric model for the Identification of Frontier Research (DBF)". The project aimed to design indicators for frontier research that could test whether the proposals selected by the ERC were addressing frontier research. During the project five bibliometric and scientometric indicators for frontier research were designed and developed based on five key characteristics of frontier research defined by ERC. The aim was to see whether the proposals selected by the ERC peer review panels addressed frontier research. The presentation aims to reflect on the attempt to use bibliometric indicators to support proposal evaluation and selection. The use of bibliometric indicators in funding decisions to select proposals is a contested issue and is often treated with skepticism by both funders of research and researchers.

KATY WHITELEGG

works in the innovation systems department at the Austrian Institute of Technology on science, technology and innovation policy issues. Although she works on a wide range of STI-policy issues, she has recently become especially interested in ways of defining and measuring the impact of STI-policy. She focuses on methods that help to assess the broader and long-term impact of STI-policy instruments and of ways of linking such impacts to specific initiatives. These can then be used to help define specific impact-indicators. Recent projects have included looking at the environmental impacts of mission-orientated research programmes or ways of defining frontier research for European Research Council.

SESSION 6

EVALUATION PRACTICES SCRUTINISED

Evaluation is a practical field and most of the benefit of evaluation lies in its usefulness for policy decision support. The usefulness of evaluations for policy-making has been an issue investigated in the evaluation research of mainstream policy domains as well as science and innovation policy. However, as a multi-faceted and complex issue, usefulness has not been still adequately understood.
What kind of evaluation approaches, timings, questions and methods are more useful for decision support? What is the critical role of the evaluator and policy-maker in the evaluation process, so that the usefulness is increased? What are the external factors that influence the usefulness of evaluations? How does an evaluation influence policy discourse and policy itself? What is the role of evaluation in policy learning? While these and many other similar questions are yet to be answered, there is a growing interest in evaluation research for these crucial issues. This session represents a fruitful way of approaching these questions is scrutinising the evaluation practices in different contexts.

CHAIR: MICHAEL STAMPFER
DISCUSSANT: ABDULLAH GÖK

MICHAEL STAMPFER

is managing director of the Vienna Science and Technology Fund (WWTF), a private non-profit fund for scientific research in Vienna. WWTF funds larger projects and endowed chairs in Vienna in fields like Life Sciences or Applied Mathematics. Michael Stampfer holds a doctoral degree of the faculty of law of the University of Vienna and has long time experience in the field of Austrian and international research and technology policy. After working for the Federal Ministry of Science and Research, he was responsible for the Kplus Competence Centres, a large funding programme linking science and industry (now named COMET). He has been member of different EU working groups and involved in a number of international projects. His authorship of numerous publications includes a recent book on the history of research policy in Austria.

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SESSION 6 PRESENTATIONS

ABDULLAH GÖK

is a Research Fellow at the Manchester Institute of Innovation Research (MIoIR), where his research is focuses on the concepts, methods and findings of evaluation of science and innovation policies (particularly the concept of behavioural additionality) as well as the use of advanced and innovative methods to address a variety of micro and macro level research questions in innovation studies. Besides his research engagements, he taught Economics at the undergraduate level at Manchester Business School and takes part in the design and delivery of the MIoIR Executive Short Course on Evaluation of Science and Technology Policies. Prior to joining MIoIR in 2006, Abdullah worked at The Scientific and Technological Research Council of Turkey (TUBITAK) between 2003 and 2006.

Abdullah holds a BSc in Economics and an MSc in Science and Technology Policy Studies. He completed his PhD titled "An Evolutionary Approach to Innovation Policy Evaluation: Behavioural Additionality and Organisational Routines" in December 2010 at the University of Manchester.

PRESENTATIONS

EVALUATION AS THE CONSTRUCTION OF POLICY NARRATIVES

Erich PREM, eutema Technology Management GmbH & Co KG

Evaluation is often defined as the objective assessment of a project or programme. In this view, it aims to determine the relevance and fulfilment of objectives and the efficiency, effectiveness, impact and sustainability of the programme under evaluation. In contrast do this objectivist picture of evaluation, we argue that the process of evaluation assigns value to a program's efforts by addressing three inter-related domains: merit (or quality), worth (or value) and significance (or importance). STI evaluation often carries an element of value creation and constitutes the creation or co-creation of policy narratives.

Delivering a programme logic or simply anecdotal evidence will almost automatically generate options for renewed versions of the policy narrative supporting an intervention. In principle, programme evaluators cannot avoid their participation in policy creation and should actively embrace the role as a creator of policy narratives by making it explicit.

ERICH PREM

received the graduate engineering and the Ph.D. degrees in computer science from the Technical University of Vienna, Wien, Austria, and the Diplomierter Wirtschaftstechniker (DWT) graduate degree in managerial economics and the MBA degree in general management from Donau University, Krems, Austria. He is currently the CEO of eutema Technology Management, Vienna, Austria. He is also a Lecturer at the University of Vienna. He was a Researcher at the Austrian Research Institute for Artificial Intelligence, and a Guest Researcher at the Massachusetts Institute of Technology. He has a scientific background in artificial intelligence and epistemology. For the last 10 years, he has been involved in research management and policy with a focus on information and communications technology (ICT) research strategy. He is the author or coauthor of more than 45 scientific articles. Dr. Prem is the CEO of eutema GmbH.

THE INFLUENCE OF EVALUATIONS ON STI POLICY MAKING

Jürgen STREICHER, Vienna University of Economics and Business

While the frequency and quality of evaluations in the field of science, technology and innovation (STI) has increased, concerns have been raised about their effectiveness to fuel change in STI policy making. This paper shifts attention from the evaluation itself to the experiences of policy actors with evaluations under conditions of existing institutions, that is, formal and informal rules and norms. Special emphasis is laid on those factors and mechanisms through which evaluation processes and results may exert influence and affect changes. It thus provides insight into effects of evaluations that may be of practical interest to evaluators, delineates interfaces between research and policy, and discusses influence pathways in STI policy making.

JÜRGEN STREICHER

is Ph.D. candidate in the "Innovation Economics Vienna" Programme of WU Vienna Universtity of Economics and Business and the Austrian Institute of Technology (AIT). His research interest lies in exploring the linkages between research and policy-making, particularly the up-take and influence of performance assessments and related feedback in the field of research, technology and innovation (RTI) policy. In his studies he builds on his experience as a researcher and evaluator in the RTI area, where he has been involved in several national and international studies of innovation, R&D and technology, industry analyses, and evaluations of programmes and institutions. He holds a master´s degree in business administration from WU.

SUPPORTING POLICY LEARNING BY MEANS OF AN EVALUATION SYNTHESIS: FINDINGS FROM A STUDY ON SWISS INNOVATION POLICIES

Franz BARJAK, University of Applied Sciences and Arts Northwestern Switzerland FHNW

The evaluation synthesis described in this paper was commissioned by the Swiss Federal Office of Professional Education and Technology (OPET).[4] Its main objectives were given by OPET as 1) assessing the effects of Swiss innovation policy, and 2) shedding light on the potentials and limitations of evaluations of innovation policy. OPET provided 14, partially unpublished, evaluations of Swiss innovation policies as an input into the study.
Two further evaluations were retrieved in literature searches. In total 16 evaluations conducted between 1997 and 2012 were included in the evaluation synthesis.

FRANZ BARJAK

(born 1966, German citizen) is professor for Empirical Social and Economic Research at the School of Business of the University of Applied Sciences and Arts Northwestern Switzerland (Fachhochschule Nordwestschweiz FHNW). Before this he was Research Fellow at the Institute for Economic Research in Halle, Germany. He obtained his degrees in Geography from the Technical University of Munich (Diploma, 1993) and the Ruhr University Bochum (PhD, 2010). Franz has worked on and led numerous research projects in the fields of innovation research, technology transfer, science and technology studies, scientometrics, Internet studies and regional economics. For different Directorate Generals of the European Commission he has analysed the S/W and policies in innovation systems (Research and Innovation Systems study, ongoing, DG R&I), business model innovations (BMI study, ongoing, DG R&I), success factors of knowledge and technology transfer from the public sector to private companies (Knowledge Transfer Study 2010-12, DG R&I), the roles of PhD students and post-docs in academic research teams (NetReAct study, 2004-06, and RESCAR study, 2005-07, both DG JRC), the development of virtual communities facilitated by e-infrastructure (AVROSS, 2005-07, and eResearch2020, 2008-09, both DG InfSoc & Media). Several of these EC-funded studies implemented large scale surveys and interviews among scientists and business people world-wide. In addition to his research, he has conducted a variety of consultancy and applied research projects for Swiss and German public authorities and companies. Besides, he teaches research methods in Bachelor and Master's programmes at FHNW and taught as guest lecturer at Qingdao Technological University in Qingdao, China, in June 2008 and June 2009.

4 Since January 1, 2013, State Secretariat for Education, Research and Innovation (SERI).

SESSION 6 PRESENTATIONS

HOW TO EVALUATE LARGE-SCALE 'TRANSFORMATIVE' STI FUNDING PROGRAMMES

Wolfgang POLT, Joanneum Research, Kaisa LÄJTEEMÄKI-SMITH and Kimmo HALME, Ramboll Management Consulting

The paper discusses some of the challenges for evaluation approaches and frameworks for STI policy instruments which aim for transformation of STI systems on a larger scale, often combined with societally relevant challenges and new mission-oriented approaches. In doing so, the authors rely on recent evaluations they were involved in and compare them internationally.

On the basis of these practical experiences they propose criteria which could be used for collaborative and commitment-based approaches by funding bodies to evaluate, assess and indeed better understand collaborative research on grand societal challenges: e.g. what kind of criteria and frameworks are able to capture the commitment and network engagement of various stakeholders and how are the various forms of value added for the stakeholders included in the assessment? How is the societal relevance paid heed to, without letting the 'political' or the 'policy driven' part of the agenda become overly dominant in determining the criteria for such an evaluative framework?

WOLFGANG POLT

finished his studies in Economics at the University of Vienna in 1985. From 1985 to 1992 he worked as a researcher at the Instiute for Socio-Economic Research and technology Assessment of the Austrian Academy of Sciences. From 1992 to 1999 he was at the Department of Technology Studies of the Austrian Research Centers Seibersdorf. From 1996 to 1998 he held a post as full time consultant to the Directorate for Science, Technology and Industry/ Division for Science and Technology Policy of the Organisation fo Economic Co-operation and Development (OECD) in Paris. From February 2000 to June 2010 Wolfgang Polt has been heading the Viennese Office of the Centre for Economic and Innovation Research of JOANNEUM RESEARCH as well as company officer with statutory authority since 2006. Since July 2011 Wolfgang Polt is Director of POLICIES - Centre for Economic and Innovation Research of JOANNEUM RESEARCH. He won Research Scholarships at the Institut für Angewandte Systemanalyse (IIASA) in Laxenburg/ Vienna and at the Research Institute of the Finnish Economy (ETLA) in Helsinki.

SESSION 7

EVALUATION OF STI POLICY PORTFOLIOS AND POLICY MIXES

In the past, evaluations have been – with some exemptions – focussed on individual policy measures, i.e programme or project evaluations. However, more and more policy makers seem to become interested in assessing impacts going beyond those of individual policy actions, but covering a whole bundle, system or portfolio of measures. Starting point for the definition of a policy portfolio thereby might be themes or sectors or even a set of different STI instruments addressing a specific policy area. This kind of interventions or support systems often represent historically developed (local, regional or national) structures, which implies an increasing demand for the evaluation of whole policy portfolios and policy mixes.

It is the aim of session 7: "Evaluation of STI policy portfolios and policy mixes" to exchange the experiences made so far with this kind of evaluations and to discuss the specific requirements (for clients, evaluators etc.) with respect to the design and implementation of portfolio evaluations. This also includes the question, whether portfolio evaluations require new or adapted methodological tools as compared to the evaluation of individual policy interventions.

And finally it seems important to ask the question, whether portfolio evaluations can be the answer to the changing approaches within STI policy, that can be observed in many European countries.

CHAIR: BENEDETTO LEPOR
DISCUSSANT: SONJA SHEIKH

BENEDETTO LEPORI

is head of the unit on Performance and Management of Research and Higher Education Institutions at the Faculty of Economics of the University of Lugano. He is a recognized scholar in the field of research and higher education policy and of S&T indicators, with a specialization on general methodological issues (Lepori, Barré & Filliatreau 2008), on funding indicators (Lepori et al 2008; Lepori 2011) and on higher education indicators (Bonaccorsi et al. 2007). He is secretary of the European Network of Indicators Producers (ENID; www.enid-europe.org) and member of the scientific committee of the annual conference series on S&T indicators. He extensively published on the major journals in the field of S&T indicators (Journal of Informetrics, Research Evaluation), research policy (Research Policy, Science and Public Policy), Evaluation (Evaluation, Research Evaluation), as well as higher education studies (Higher Education, Studies in Higher Education).

SONJA SHEIKH

is deputy director of the Austrian Institute for SME Research and holds a PhD degree in economics. She is responsible for the business areas "innovation and technology" and "evaluation" within the institute and is specialised in innovation and technology research. Sonja Sheikh has conducted several research and evaluation studies in the field of research, technological development and innovation (RTDI) policy for various awarding authorities at national as well as international level and has well established experience in the co-ordination of national and international research networks. Sonja Sheikh is board member of the Platform for Research and Technology Evaluation (fteval) as well as of the German Evaluation society (DeGEval) and regularly acts as a juror in several support programmes in the field of RTDI policy

15 NOVEMBER 2013
10:00 – 12:15
ATRIUM

SESSION 7 PRESENTATIONS

PRESENTATIONS

EVALUATION AT THE RESEARCH SYSTEMS LEVEL: FUNDING ECOLOGIES AS POLICY PORTFOLIO

Peter Van den BESSELAAR, VU University Amsterdam Network Institute & Department of Organization Studies, Ulf SANDSTRÖM, Royal Institute of Technology – KTH

Research funding has become increasingly complex in most countries. The fast proliferation of agencies and instruments reflects the increasing variety of goals of science policies: each new goal seems to lead a new funding instrument. Do additional funding instruments result in improving the quality of research, in the study of new – scholarly and societally – relevant topics, and in addressing new audiences? What are the effective funding instruments? And, especially, what the optimal mix is of funding instruments? Can a relation between the funding ecology (in terms of a portfolio of instruments) and performance be detected?

PETER VAN DEN BESSELAAR

is professor of organization sciences at the VU University Amsterdam, Department of Organization Sciences and the Network Institute. Previously, he was among others research director and head of the Science System Assessment department (2005-2010), professor of communication studies, University of Amsterdam (2004-2009), director of the Netherlands Social Science Data Archive (2002-2005, and associate professor of social informatics at the University of Amsterdam (1995-2001). He is also active in consulting and has been member of several advisory committees. His current research focuses on the organization and dynamics of science, technology and innovation, on science and innovation policy, and on e-social science. Van den Besselaar published about 180 articles, book chapters, books and policy reports about his research. A recent book is Scharnhorst, Börner & Van den Besselaar (eds), Models of science dynamics. Berlin: Springer 2012. He holds a doctorate from the University of Amsterdam, a MA in philosophy (cum laude) also from the University of Amsterdam, and a BSc in mathematics from Utrecht University.

PORTFOLIO EVALUATIONS: EVALUATING POLICY PORTFOLIOS AND EVALUATION IN A PORTFOLIO

Christiane KERLEN, Dr Kerlen Evaluation, Christian Von DRACHENFELS, Leo WANGLER and Jan WESSELS, Institut für Innovation und Technik, Volker WIEDMER, Hochschule Magdeburg-Stendal

The increasing complexity and interconnectedness of programmes and instruments on one side leads to increasingly complex evaluation designs, for example in form of policy portfolio evaluations. At the same time a parallel development can be seen that affects evaluations of single measures as well as portfolio evaluations: The demands on the evaluation itself, its function, its results, its methods, its clients, etc. become more interconnected and complex by the demand of fulfilling different requirements at the same time. The presentation will use a case study of an evaluation currently carried out to illustrate the different requirements. This case study is the impact analysis and formative evaluation of the start-up and entrepreneurial development contest "Gründerwettbewerb – IKT Innovativ".

CHRISTIANE KERLEN

With over ten years of experience, Dr Christiane Kerlen has evaluated numerous economic and technology-based programmes in the public sector. Her recent focus lies in developing evaluation concepts for research, innovation and technology programmes. She has worked in different high technology industries including information and communication technology, aviation, maritime technology as well as automotive. In the private sector, she has conducted evaluations in numerous companies – ranging from evaluating projects aimed at restructuring the whole company to solving individual problems in single departments. Dr Kerlen carries out ex ante evaluations, formative evaluations, ex post evaluations and impact assessments. Dr Christiane Kerlen studied business

engineering at TU Berlin, focusing on electrical engineering (communication technology). From 1995-1997, she carried out projects in business and organisation development for a management consultancy in Saarbrücken. She then worked at the Social Science Research Centre Berlin, in order to complete a PhD dissertation: Defining the problem as starting point for organisational learning. She received her doctorate in 2002 from TU Berlin's sociology department. Between 2001 and 2011, she worked at VDI/VDE-IT focussing on economic and societal topics. She was spokeswoman for the evaluation department of the Institute for Innovation and Technology, an organisational unit within VDI/VDE-IT. Since 2011, Dr Kerlen has worked as an independent evaluator in Edinburgh. Dr Christiane Kerlen is a board member of DeGEval, the German and Austrian Evaluation Society, having been a member of the society since 2002. She represents DeGEval in NESE – Network of Evaluation Societies in Europe. She is also a member of UKES and ees.

HOW STI POLICY INSTRUMENTS AFFECT SCIENCE AND BUSINESS COOPERATION IN THE ESTONIAN ICT SECTOR?

Ly LOOGA, Tallinn University of Technology, Ragnar Nurkse School of Innovation and Governance

In this paper we analyze how institutional set-up and policy instruments are affecting the interaction patterns in Estonian ICT sector. Theoretically the study brings together the main policy responses from the literature on science and business relations in Europe, CEE and ICT sector developments. ICT sector in Estonia is one of the most rapidly growing sectors, but the structure of the ICT sector is rather fragmented with limited capacities and lack of cooperation. The Estonian policy mix of instruments is largely representative, but the influence from European policies ('one-size-fits-all' approach) is leading to criticism that these instruments disregard local needs. Empirically we complement the existing studies with our original analysis and case studies of active research groups. As the policy instruments' framework is fragmented, therefore it has become impossible to assess the impact of single policy measures; we try to conduct a systemic evaluation of the policy arena.

LY LOOGA

is currently doing her PhD studies in the Ragnar Nurkse School of Innovation and Governance in Tallinn University of Technology (Estonia). She is specialized in technology governance studies, her PhD research is focused on evolution of innovation policy governances in the Central and Eastern Europe aiming to understand the interplay and contradictions between economic rationale, historical legacies, external pressures and state capacities.

TERRITORIAL STRATEGY EVALUATION: BEYOND EVALUATING POLICY-MIX

Edurne MAGRO and James R. WILSOM, Basque Institute of Competitiveness and Deusto Business School, University of Deusto

In Europe a strong debate around territorial strategy at regional level has emerged over the last few years centred on the concept of 'smart specialisation'. As theoretical evolution and policy practice come together in the processes of regions developing their 'smart specialisation strategies', there are important unresolved issues around the concept such as the role of evaluation. This paper aims to bridge the gap between the acknowledgement that evaluation should play an important role in territorial strategy, and the practice that policy evaluations tend to remain isolated and not well-linked to the strategy process at territorial level.

Building on existing but separate literature in the innovation policy evaluation and territorial strategy fields, we propose a framework that makes a clear distinction between different levels of objectives and generates insight into how they should be linked in practice to move beyond the evaluation of innovation policy mix for effective territorial strategy.

SESSION 8 PRESENTATIONS

EDURNE MAGRO

is a Researcher at Orkestra-Basque Institute of Competitiveness (Spain). Edurne has PhD. in Business Competitiveness and Economic Development with a thesis entitled as "Evaluation in a Systemic World: The Role of Regional STI policy", and a BSc in Business Administration from the University of Deusto. Prior to joining Orkestra, she has eleven years of experience in working on European, national and regional projects related to innovation and competitiveness at Tecnalia Research & Innovation, one of the main European Technology Platforms. Edurne´s primary research interests are in innovation systems and regional innovation policy, the evaluation of public policies and policy learning processes, themes in which she has coordinated research projects and written several academic articles and publications.

SESSION 8

DATA, MONITORING SYSTEMS AND INDICATORS

In this session special attention is on the usability of research information systems and data sources for monitoring and evaluation. Emphasis will be on in-house monitoring systems built and operated by programme funders, as well as accessibility and usability of other scientific information infrastructures such as publication databases against payment, open access repositories and micro-census data as well as on the combination/triangulation of appraisals based on different data and information sources.

The dialogue between evaluators and programme funders on good or bad, coherent or incoherent data sets and information systems for use in monitoring and evaluation is stimulated by papers and presentations of practical and/or technical nature.

The presentations highlight experiences from case studies and the problems encountered during evaluations as regards stakeholder engagement, management and aggregation of disparate data sources, availability of monitoring systems with different quality levels and necessary compromises in indicator building and usage. Examples stem – amongst other - from the evaluation of the Swiss National Science Foundation and the German Excellence Initiative. All participants are encouraged to establish cross-linkages to aspects raised in the other sessions of this conference (e.g. new information requirements stipulated by mission-oriented STI policies, analysis of long-term impacts of public R&D interventions, data for appraisal of European and international dimensions etc.).

CHAIR: SYBILLE HINZE
DISCUSSANT: MICHAEL STRASSNIG

SYBILLE HINZE

graduated in 'Management of Science' from Humboldt-University and got her PhD form Centre for Science and Technology Studies (CWTS) at Leiden University, the Netherlands. From 1990 to 1997 and 1999 to 2008 she carried out research at the Fraunhofer Institute for Systems and Innovation Research (Fraunhofer ISI). From 1997-1999 she was a postdoctoral fellow at the Research Evaluation and Policy Project, Australian National University, Canberra (REPP). She was seconded to the European Commission, DG Research Unit Programming, Monitoring, and Evaluation in 2005 and 2006. Since August 2008 Sybille Hinze is deputy director of the Institute for Research Information and Quality Assurance (iFQ) in Berlin, Germany. For more than fifteen years she has been engaged in the development and use of science and technology indicators, in particular in the context of programme and institutional evaluation. Furthermore her research interests concern research and technology performance analysis and benchmarking and more generally, the analysis of national and sectoral systems of innovation. Sybille Hinze is a member of EU RTD Evaluation Network, European editor of the Journal "Science and Public Policy", member of the Board of the European Network of Indicator Designers (ENID) and the steering committee of the European Summer School for Scientometrics (esss).

MICHAEL STRASSNIG

is programme manager at the Vienna Science and Technology Fund WWTF. He is concerned with the social sciences and humanities programme, the university infrastructure programme, and is involved in evaluations and conducting studies of WWTF. Before joining WWTF, Michael was postdoctoral researcher at University of Vienna and the University of Lucerne in the field of Science and Technology Studies.

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13:30 – 15:00
ROOM 2

PRESENTATIONS

MANAGEMENT AND AGGREGATION OF DISPARATE DATA FROM DISPARATE SOURCES: ILLUSTRATIONS FROM AN EVALUATION OF THE SWISS NATIONAL SCIENCE FOUNDATION

E. Brooks APPLEGATE, Western Michigan University

In many social science and evaluative settings investigators are faced with a need to integrate data from many sources in order to facilitate understanding or correctly interpret results. Consequently the investigator must develop an aggregated composite of all the data to address the research or evaluative question(s). Moreover, if the intent of the investigator's conclusions lies beyond simple description, they must strive to understand all of the sources of influence imbedded in each data source and data point.
Specifically, each different data source presents itself with idiosyncratic structure and error that must be understood. To arrive at a valid aggregate, the investigator must reconcile opposing purposes which created the data; manage and combine data from multiple instruments collected from possibly different sampling units or sampled in a probability or nonprobability manner at different or varying points in time that may (or may not) have undergone pre-processing steps.

E. BROOKS APPLEGATE

received his Ph.D. from Texas A&M University in 1986 in Educational Psychology with a concentration in Research, Measurement and Applied Statistics. Dr. Applegate is the program coordinator for the graduate programs in Evaluation, Measurement and Research at Western Michigan University. He has authored and coauthored over 85 peer-reviewed journal articles and over 70 peer-reviewed presentations. He is a member of the American Educational Research Association, American Evaluation Association, American Statistical Association and the National Council on Measurement in Education. Dr. Applegate has extensive experience in research design, measurement, and applied statistics, and has participated in over 30 funded projects. Dr. Applegate's experience includes designing and programming relational databases for cross-sectional and longitudinal studies and teaches graduate courses in psychometrics, structural equation modeling, and research methodology.

SESSION 8 PRESENTATIONS

MEASURES AND MEANS TO POSITION COMPETENCE CENTRES VIA MONITORING DATA: EVIDENCE FROM THE AUSTRIAN COMPETENCE CENTRE PROGRAMMES KPLUS AND K_IND/K_NET

Michael DINGES, AIT – Austrian Institute of Technology, Jakob EDLER, University of Manchester - Manchester Institute of Innovation Research and Matthias WEBER, AIT

Building upon long term monitoring data, insights from interim evaluations, and case study work, a framework will be presented – that can be applied to support the assessment of long running science policy programmes which foster the creation of novel, co-operative organisational structures (competence centres). At its heart is the development of a typology of funded centres which allows positioning the different types of centres in their innovation system and in doing so to make sense of the complexity and variety of centres and different performance patterns and pathways. While focusing on the example of the Austrian Competence Centre Programmes, we present a more general approach to facilitate the evaluation of programmes that support heterogeneous, complex cooperation structures. The usefulness of the framework will be critically discussed and requirements concerning data needs in monitoring systems specified.

MICHAEL DINGES

is an evaluation expert working in the field of research and innovation policies and programmes. He graduated in economics from the University of Vienna in 2003. Since September 2013 Michael provides his expertise at the Austrian Institute of Technology -Innovation Systems Department in Vienna, after ten years of working at Joanneum Research. Making use of a qualitative and quantitative approaches and methods, Michael has led and contributed to a number of evaluation and impact assessment studies at European and national level. Among other projects, he assisted the European Commission in setting up a performance monitoring system for FP7-ICT, supported the definition of evaluation requirements for JTIs, and provided an international benchmarking exercise for the evaluation of the Strategic Centres for Science, Technology and Innovation in Finland.

DATA AVAILABILITY FOR STI POLICY PORTFOLIO EVALUATIONS: A PROCESS-RELATED CHALLENGE REQUIRING NEW MODELS FOR STAKEHOLDER ENGAGEMENT

Matteo RAZZANELLI, Science Europe

This paper is presented from the point of view of a research policy practitioner with a background in ex-post evaluation. Rather than presenting research, the aim of the paper is to use the fteval platform to spark discussions on the extent to which data availability for STI policy is also constrained by a process-related issue. The paper argues that, in science policy and when it comes to concept definition for indicators, stakeholders have a greater role to play than in innovation policy. Are policy stakeholders sufficiently involved in the process of indicator design for science policy? What is the role of stakeholders in defining policy-relevant concepts for indicators? Are there examples of stakeholder involvement in indicator design that can be used to draw lessons? (Note: The views expressed in the presentation and paper are personal and do not represent in any way the views either of Science Europe's Member Organisations individually or of the organisation as a whole.)

MATTEO RAZZANELLI

works as Senior Policy Officer in the Policy Affairs Team of Science Europe, an association of 53 European public research funding and performing organisations. At Science Europe, Matteo is responsible for monitoring and evaluation, and supports the forthcoming Member Organisations Working Group on ex-post evaluation of publicly funded research. Matteo holds and MSc in European Political Economy from the London School of Economics (LSE) and an MA in International Relations from the University of Bologna. Early in his career, Matteo gained policy and policy analysis experience by working at the European Parliament, the Italian Permanent Representation to the EU, as well as for the Knowledge Economy team of a London-

based think tank. He then specialised in publicly funded research by joining the office that manages the intergovernmental instrument called COST - European Cooperation in Science and Technology. At COST, Matteo worked as science officer, before being asked to build impact analysis capabilities for the office. As impact analyst, Matteo produced portfolio analyses, worked on the creation of a logic model for the COST intervention, as well as on revising business processes and IT tools in light of analytical requirements (for example by conceiving a new user profile to gather data on and analyse COST networks, and the guidelines for a pilot project selection procedure integrating impact analysis requirements).

A BIBLIOMETRIC EVALUATION OF THE GERMAN EXCELLENCE INITIATIVE BASED ON THREE DATA SELECTION METHODS

Torger MÖLLER, Marion SCHMIDT and Daniel SIRTES, iFQ – Institute for Research Information and Quality Assurance

The evaluation of the German Excellence Initiative is a very challenging task. Its goals are very diverse and the extent of their achievement is difficult to operationalize. The presentation focuses on the main objectives of the German Excellence Initiative: promoting outstanding research, enhancing the international visibility and the competition of German universities. Three different bibliometric data bases and three questions are addressed. The micro-level: Do Clusters of Excellence produce high quality publications? The system-level: Does the Excellence Initiative have a measurable positive effect on the whole German university system? And the methodological level: Are funding acknowledgements a feasible data source for evaluations? By combining funding information with publications lists the Clusters' impact shall be gauged, while the overall system effects are analyzed by comparing the German output in the pre-funding and funding period to an appropriate benchmark.

TORGER MÖLLER

studied sociology and computer science at the Universities of Marburg and Hamburg. He received his doctoral degree in social sciences at the University of Bielefeld, Institute of Science and Technology Studies. During almost 15 years he has been operating in the fields of science studies, science policy studies and strategic research. He has worked at the Berlin-Brandenburg Academy of Sciences and Humanities, the Federal Institute for Risk Assessment and the Free University Berlin. Since 2011 he has been responsible for an evaluation project of the German Excellence Initiative at the Institute for Research Information and Quality Assurance (iFQ – Institut für Forschungsinformation und Qualitätssicherung). The project estimates both the intended and unintended effects of the Excellence Initiative on the basis of qualitative (documents, interviews) and quantitative (surveys, bibliometric) data.

MARION SCHMIDT

studied Library and Information Science and German Literature at Humboldt-Universität and Freie Universität Berlin. She wrote her Magister thesis as part of a project investigating the diversity of research fields using bibliometric methods. After graduating, she worked as head of library at the Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig. She notably expanded the electronic services of the library, but also collaborated on bibliometric analyses for the research evaluation of the Institute. She joined the bibliometrics team at iFQ in June 2011. At iFQ, she carried out a project involving the utilization of bibliometric indicators for university benchmarking. Currently, she works in a project aimed at the error calculus of bibliometric data and is especially concerned with matching algorithms for both citations and external data with database items.

DANIEL SIRTES

studied philosophy and biology in Zurich, Konstanz, Tel-Aviv and Berlin. After his diploma in neurobiology he was both a research assistant at the Center for Philosophy and Ethics of Science at the University of Hannover and a member of the graduate school "Entering the Knowledge Society" at

SESSION 9 PRESENTATIONS

the Institute for Science and Technology Studies at the University of Bielefeld. In 2002-3 he was a visiting scholar at the University of Texas at Austin and at the University of Pittsburgh. 2005-2010 he was a research associate in the project "Quality Assessment, Expertise and Decision-Making in Scientific Research: Criteria, Procedures, and Social Organization" at the Programme for Science Studies at the University of Basel in Switzerland. Since 2011 Daniel Sirtes works at iFQ on projects involving standardization and error calculus of bibliometric data as well as the newly added funding acknowledgements in the Web of Science database.

SESSION 9

NEW DEVELOPMENTS IN INNOVATION POLICY EVALUATION

Evaluating the effects of innovation policies is classically focused on three sets of issues: does the policy target the right actors, are the targeted actors mobilised, and what are the effects on the actors supported (in particular are there long term effects beyond the direct activity targeted by the support). Fiscal policies are good examples of such evaluation preoccupations (see the recent OECD or the MIOIR-NESTA reviews). This session both deepens and broadens these issues. It introduces first an interesting question about the role of framework conditions, asking whether it can shift the propensity of firms to innovate: the focus will be there on the role of a widespread policy instrument, clusters.

A second presentation will consider how we can better characterise effects in practice for high tech sectors (using technology readiness levels) and how effects relate with innovative capacity (seen at firm level as an articulation of human, structural and relational capital).

The session will then focus on the most widely used type of public action, direct support to SME, and ask itself whether and how lasting effects are related to the level of support granted. Finally the last presentation will reflect on how the different types of effect are related to one another, mobilising the additionality framework (and considering input, output and behavioural additionality).

CHAIR: PHILIPPE LAREDO
DISCUSSANT: DJURO KUTLACA

PHILIPPE LARÉDO

is Directeur de Recherche at Université de Paris-Est (Ecole des Ponts, IFRIS) and professor at the University of Manchester (MBS, Manchester Institute of Innovation Research). He is also a board member of the new French institute on research and innovation in society (IFRIS), which has been awarded a 10-year grant as a 'laboratory of excellence'. His research interests are on new emerging sciences and breakthrough innovation and on research and innovation policies. On the former, recent work looks at the worldwide dynamics of nano science and technology, and more broadly at the creation of new epistemic communities in emerging sciences & technologies. On the latter, his focus is on institutional change (especially within public research) and on the development of new evaluation approaches for assessing the 'effects' of public research. He has also coordinated the European Network of Excellence, PRIME, and is a co-funder of the international association that follows the Prime network: EU SPRI Forum for studies of policies for research and innovation. He was the first president of ENID, the international association of indicator designers, and will coordinate the new distributed infrastructure on 'positioning indicators' supported by the EC (RISIS, 2014-2017).

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DJURO KUTLACA

was born in Zagreb, December 16th, 1956. Received B.Sc. degree (5 years studies) in 1980 and M.Sc. in 1986 at the Electrical Engineering Faculty, University of Belgrade. Completed Ph.D. dissertation in 1998 at the Faculty of Organizational Sciences, University of Belgrade. Since 1981 has been a research associate at Mihajlo Pupin Institute, Belgrade, Serbia. Present position: head of S&T Policy Research Center, Scientific Counsellor. Professor at University Metropolitan, Belgrade, teaching Project and Innovation Management. Visiting researcher at FhG Institut für Systemtechnik und Innovationsforschung, Karlsruhe, Germany (1987; 1991-1992) and at Science Policy Research Unit, University of Sussex, Brighton, UK (1996; 1997; July 2001-October 2002). Former member of NESTI (National Experts for S&T Indicators) group at OECD (1988-1992). During 32 years of research experience, he was a member of research teams in 43 large R&D projects, has published 30 scientific papers, and presented 125 papers at international and national scientific conferences, author of 2 and co-author of 23 books. Specific research subjects of his interest are: (a) S&T and industry development and policy, (b) metrics in S&T and innovation, and (3) Innovation theory and practice.

PRESENTATIONS

UNFOLDING THE ADDITIONALITY OF INNOVATION POLICY

Abdullah GÖK, University of Manchester - Manchester Institute of Innovation Research, Cornelia LAWSON, University of Turin/ BRICK - Bureau of Research in Innovation, Complexity and Knowledge

Evaluation of innovation policy has gained more and more importance as the evidence based policy-making has become modus-operandi at least in the policy discourse. Many evaluations especially for direct measures that give grants to firms mainly focused on the issues of input (IA), output (OA) and more recently behavioural additionality (BA). These three evaluation concepts have been considered as the core of different policy rationales.

Although the three questions of additionality have long been studied in the analysis of innovation policy, they are in most cases analysed in isolation. There are various reasons for this including data unavailability, lack of clear understanding of the relationship between the three questions and finally the perception that these questions (especially IA and OA versus BA) are rivals and substitutes to each other. This paper aims to understand the relationship between IA, OA and BA. This includes analysing the conditions under which the three types of additionality reinforce each other or work in opposite directions. Also, we aim to understand the conditioning firm characteristics for how the three types of additionality work together. We explore these questions by using a survey of 431 R&D projects completed between 2002 and 2004 and supported by the Turkish TIDEB Programme that provided non-collaborative R&D grants to firms.

ABDULLAH GÖK

is a Research Fellow at the Manchester Institute of Innovation Research (MIoIR), where his research is focuses on the concepts, methods and findings of evaluation of science and innovation policies (particularly the concept of behavioural additionality) as well as the use of advanced and innovative methods to address a variety of micro and macro level research questions in innovation studies. Besides his research engagements, he taught Economics at the undergraduate level at Manchester Business School and takes part in the design and delivery of the MIoIR Executive Short Course on Evaluation of Science and Technology Policies. Prior to joining MIoIR in 2006, Abdullah worked at The Scientific and Technological Research Council of Turkey (TUBITAK) between 2003 and 2006. Abdullah holds a BSc in Economics and an MSc in Science and Technology Policy Studies. He completed his PhD titled "An Evolutionary Approach to Innovation Policy Evaluation: Behavioural Additionality and Organisational Routines" in December 2010 at the University of Manchester.

SESSION 9 PRESENTATIONS

EVALUATING THE EFFECTS OF SUBSIDY INTENSITY ON FUTURE R&D INVESTMENT USING THE GENERALIZED PROPENSITY SCORE. EVIDENCEFROM AN ITALIAN SMALL-BUSINESS PROGRAM

Marco MARIANI and Chiara BOCCI, IRPET – Tuscany's Regional Institute for Economic Planning

A recent development in the program evaluation literature has focused on the identification of causal effects in the presence of continuous treatments. The idea is to extend propensity-score-based methodologies in order to adjust for differences in pre-treatment variables and to evaluate the effects of a continuous treatment using a dose-response function. This approach can be useful to address a relevant but largely overlooked issue in the R&D-policy literature: what is the shape of the relationship between subsidy amount and private R&D investment? Focusing on a small-business R&D program implemented in Italy, we evaluate the marginal effect of variations in subsidy intensity.

Both parametric and semi-parametric specifications of the dose-response function are considered and compared. We find a roughly inverse U-shaped function where the estimated effects on future R&D investment first increase – although at a marginally decreasing pace – and then decrease in the amount of the aid.

MARCO MARIANI

has earned his PhD from the University of Florence (Italy) and is currently working as Researcher at IRPET (Regional Institute for the Economic Planning of Tuscany). His main research interests lie in the area of applied industrial and business economics and include: R&D and innovation; small- and medium-sized enterprises and clusters; firm demography. In parallel, he is strongly concerned with enterprise and innovation policies and interested in quantitative programme evaluation methodologies. Lately, his interest in policy analysis and evaluation has expanded to include active labour market and human capital programmes. Marco is member of the Italian Regional Science Association (AISRe), the Italian Statistical Society (SIS), the American Economic Association and the European Association for Research in Industrial Economics (EARIE). Marco's works have been presented in several conferences worldwide and published in peer-reviewed journals, books and other national and international outlets.

MEASURING PRODUCT INNOVATION AND INNOVATIVE CAPACITY: NEW INDICATORS TO EVALUATE RESEARCH PROGRAMMES

Christiane KERLEN, Dr Kerlen Evaluation, Ernst A. HARTMANN, Institut für Innovation und Technik

Measuring innovation is one of the main tasks in evaluating research, technology and innovation programmes. Quite a few indicators have been developed to accomplish this task and to allow for an internationally comparative perspective. Nonetheless the overall puzzle of measuring innovation is far from being solved. A widely accepted typology of innovation categorises four different types: product, process, organisational and marketing innovation. The presentation will mainly address the first and the third type of innovation with a twofold approach. Firstly, it will focus on measuring steps of product innovation during research and development to bridge the time span between basic research, research and development and market-ready products. Secondly, it will focus on measuring innovative capacity which relates to companies' ability to produce innovation. One core aspect of innovative capacity is the innovation-conduciveness of organisational structures within the companies, thus shedding also light on relations between organisational and product innovations.

CHRISTIANE KERLEN

With over ten years of experience, Dr Christiane Kerlen has evaluated numerous economic and technology-based programmes in the public sector. Her recent focus lies in developing evaluation concepts for research, innovation and technology programmes. She has worked in

different high technology industries including information and communication technology, aviation, maritime technology as well as automotive. In the private sector, she has conducted evaluations in numerous companies – ranging from evaluating projects aimed at restructuring the whole company to solving individual problems in single departments. Dr Kerlen carries out ex ante evaluations, formative evaluations, ex post evaluations and impact assessments. Dr Christiane Kerlen studied business engineering at TU Berlin, focusing on electrical engineering (communication technology). From 1995-1997, she carried

THE CLUSTER IMPACT ANALYSIS: A PRACTICE-ORIENTED EVALUATION APPROACH TO MEASURE THE IMPACTS ACHIEVED BY COMPANIES THAT ARE COMMITTED MEMBERS OF CLUSTER AND NETWORK INITIATIVES

Sonja KIND, iit - Insitute for Innovation + Technology

The evaluation system that shall be presented was developed by iit – Institute for Innovation and Technology (VDI/VDE-IT) in close cooperation with cluster policy makers, programme owners and cluster managers. It provides a practical approach applicable to different types of cluster programmes, clusters and networks throughout Europe. The presentation will briefly introduce this holistic cluster and evaluation concept which addresses the three evaluation levels: cluster policy, cluster management and cluster participants. The second and main thematic priority of the presentation will be the introduction of a methodological element of this approach – the Cluster Impact Analysis. The Cluster Impact Analysis is a practice-oriented approach to measure outcomes that have been achieved by companies within clusters and network initiatives.

SONJA KIND

has been working with VDI/VDE-IT, where she heads the competence center "Evaluation" since 2005. Sonja is mainly involved in consulting, supporting and accompanying innovation and technology policy processes for public commissioners on a regional, national and international level. She has been conducting various evaluations of R&D programmes, R&D projects as well as organizations. Most recently she has led the evaluation of the the SME oriented German funding programme Industrial Community Research ("Industrielle Gemeinschaftsforschung" – IGF). Within the evaluation context Sonja's work is particularly focused on the development of new approaches for cluster and network evaluation. To support trend and implication analysis she developed and applied the (visual) roadmap technique to identify socio-economic factors by using a special visualisation technique.

SESSION 10

EVALUATION OF INTERNATIONAL RTI PROGRAMMES

International collaboration in research, technology and innovation has been increasing and yet there has not been much assessment of how to ensure these collaborations are effective or how to evaluate the outcomes of these complex joint projects and programmes. A 2002 Rand study on "Linking Effectively[5]" concluded that distributed research is different from other research because it uses the global infrastructure, is team oriented, task sharing, cross organizational, and often cross disciplinary. Objectives for participating in these international collaborations are numerous.

In addition to the generation of knowledge for either knowledge sake or to address a specific problem, collaboration allows for shared costs, access to resources, enhanced creativity that often comes with diverse teams, and political gain.

Initial organization of these collaborations is far from simple and successful management likely requires different skill sets than less complex, more straightforward research programmes. For example, one success factor in the cases Rand studied was that the organizers worked to clearly articulate a scientific and political benefit to participation in the programmes.

The complexity is reflected in evaluation of these initiatives. In addition to the usual challenges of measuring the outcomes of research there are the challenges of pursuing evidence that multiple objectives have been achieved, and collecting data from distributed participants with diverse language and culture. Movement toward standardization of some data collection will help with the latter. Another relevant challenge that evaluators are beginning to address is the need for better theory and data for social network analysis as it is applied to analyzing research collaborations. The pictorial views of changing collaboration patterns are useful but knowing just what is being exchanged between the various collaborators is essential if we are to know how to improve the collaboration or how to link outcomes with changes in collaboration.

CHAIR: GRETCHEN JORDAN
DISCUSSANT: KATHARINA WARTA

15 NOVEMBER 2013
13:30 – 15:00
ROOM3

GRETCHEN JORDAN

is an independent consultant specializing in a systems view of innovation and program and evaluation design that considers the full range of research, development, and market adoption initiatives and the logical connections among them. Until December 2011 she was a Principal Member of Technical Staff with Sandia National Laboratories working with the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy and Office of Science on evaluation and performance measurement. She is Co- Editor of Research Evaluation and a Fellow of the American Association for the Advancement of Science. She has a Ph.D. in Economics.

KATHARINA WARTA

is senior consultant and authorised representative at Technopolis Austria and Chairman of the executive board of the Austrian Platform Research & Technology Policy Evaluation. Her work covers policy and programme evaluations as well as strategy development in research and technology policy. She is economist (university of Vienna) and trained in group dynamics (ÖAGG).

5 Linking Effectively: Learning Lessons from Successful Collaboration. www.rand.org/pubs/documented_briefings/2005/DB345.pdf

PRESENTATIONS

EVALUATING OF THE INTERNATIONAL COLLABORATION IN SCIENCE AND TECHNOLOGY PROPOSAL: HOW TO ALIGN THE "CURIOSITY–DRIVEN RESEARCH" WITH THE "MISSION-ORIENTED GOAL"

Patthraporn SUNTHARASAJ, National Science and Technology Development Agency of Thailand (NSTDA), Dundar F. KOCAOGLU, Engineering and Technology Management Department, Portland State Unviersity, Oregon

To participate in International Collaboration in Science and Technology research, the success of collaborative projects depends on various factors. Governments use the Top-down approach, or the mission-oriented goal, in policymaker needs a clear rationale for government sponsorship and participation in the collaboration based on better priority-setting. This research presents a five-level strategic policy model that provides the linkage between national policymakers and researchers by evaluating the "Curiosity-driven" International Collaboration in S&T proposals to serve the country's goal and objectives.

PATTHARAPORN SUNTHARASAJ

is senior researcher at the National Science and Technology Development Agency (NSTDA) and the Maseeh College of Engineering and Computer Science, Portland State University. She received a PhD. in 2013 in Technology Management. Her research areas include international collaboration in science and technology, global partnership & networking, national talent management and science, technology and innovation (STI) policy.

EVALUATION OF THE AUSTRIAN BILATERAL INTERGOVERNMENTAL PROGRAMME FOR SCIENCE AND TECHNOLOGY COOPERATION

Isabella E. WAGNER and Stefanie SMOLINER, ZSI – Centre for Social Innovation

We evaluated the international Scientific and Technological Cooperation (Wissenschaftlich-Technische Zusammenarbeit – "WTZ") Programme of Austria, which is based on bilateral agreements with partner countries in the fields of science and technology. Focus was on the assessment of relevance of the WTZ projects for intensifying international scientific cooperation and their effectivity in terms scientific output.

A mix of methods was applied, triangulating a quantitative online survey and a bibliometric study with qualitative interviews, which enabled us to validate the collected data not only in the phase of analysis but also to mutually enhance the design of the tools at planning stage. Main results were the highly rated relevance for the internationalisation of science in addition to other funding schemes in Austria, though WTZ projects are mainly used to intensify and deepen already existing international relations rather than building up new contacts. An increased productivity in the context of – but not solely attributable to – the WTZ projects is observable.

STEFANIE SMOLINER

studied sociology and political sciences at the University of Vienna (Austria) and the University of Ottawa (Canada). Since 2009 she is project leader of various international and national research projects in the field of migration, integration and labour market research as well as evaluation and social impact assessment.

ISABELLA E. WAGNER

joined the Centre for Social Innovation with her background in Media Management, International Development and Social Studies of Science and Technology. As a researcher she combines qualitative and quantitative methods in bibliometrics, scientometrics, social network analysis and foresight activities. As a project manager she is engaged in scientific networking projects with regional focus on Sub-Saharan Africa and Canada.

EXPECTATIONS ON THE LONG-TERM IMPACT OF INTERNATIONAL RESEARCH FELLOWSHIPS FROM A POLITICAL AND AN EVALUATION PERSPECTIVE: CHALLENGES AND LIMITS TO MEASURE SIDE-EFFECTS

Christina SCHUH, Humboldt Foundation

How is the impact of fellowships defined from the perspective of policy makers, the Humboldt Foundation and evaluators? Are there differences and how can they be overcome?

These questions will be discussed by presenting the design, used methods and the results of two already completed evaluation studies.

By sponsoring international research collaborations the Humboldt Research Fellowship Program aims to gain the "best minds" for Germany as a location for research and to build and develop an enduring, world-spanning network of elites.

Beyond indicators looking for the career development of the alumni the challenge to capture careers outside academia is discussed. Additionally, research projects realized by the Georg Forster Fellowships must address issues of significant relevance to the further development of the developing and threshold countries of origin of the applicants. Methodological limits to measure this "side effect" are focused.attributable to – the WTZ projects is observable.

CHRISTINA SCHUH

is head of the evaluation unit of the Humboldt Foundation, which she fostered to implement. She is responsible for contracting external evaluators and for the collaboration with the Academic Council, steering the evaluation of the Foundation's sponsorship programmes. Furthermore, she coordinates the evaluation projects inside the Foundation. Before joining the Humboldt Foundation in 2006 she worked on health economical impact studies on psychotherapeutic interventions at the ZI in Mannheim. Christina holds a Diploma in Psychology and a PhD from the University Greifswald, Germany, with a final thesis on decision making and cultural differences. Recently she has begun a training as a person-centered coach.

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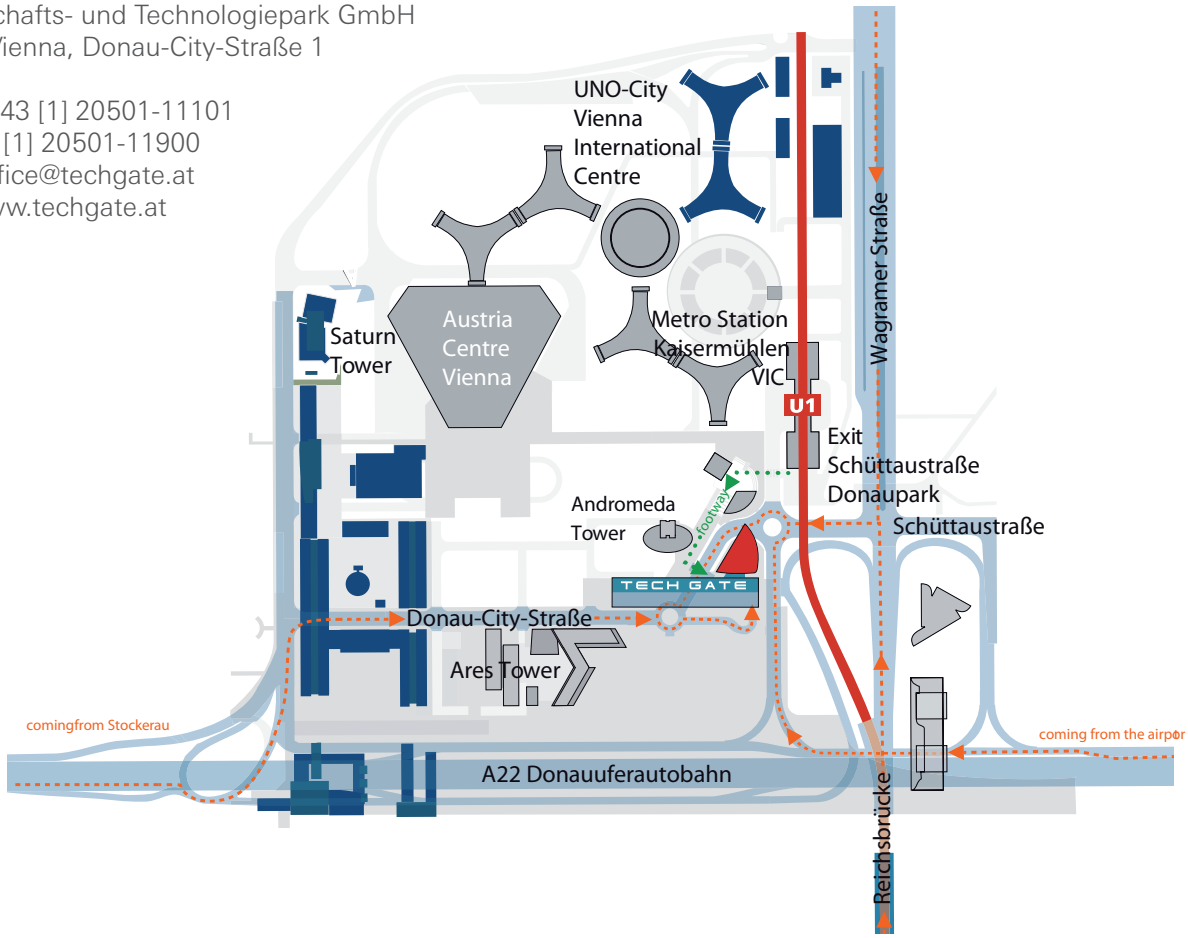

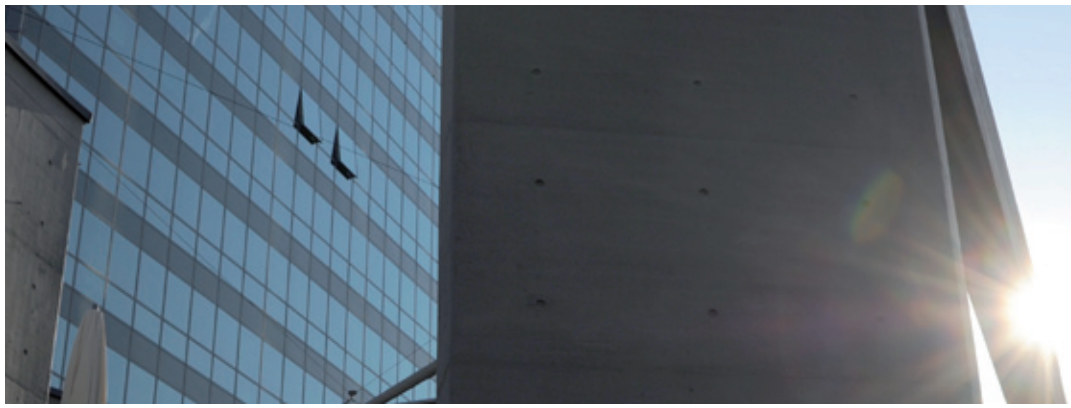

{NEW HORIZONS\NEW CHALLENGES}

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