





Knowledge for Growth: Role and Dynamics of Corporate R&D

First European Conference

Seville / Spain, 8 - 9 October 2007

PROGRAMME

Monday, 8 October 2007

9:00 – 9:30 **Registration**

9:30 – 11:15 **Plenary session I**

Room..... Auditorium (-2 floor)

Welcome address

Peter Kind (Joint Research Centre, European Commission)

The perspective of the Lisbon Strategy

Peder Christensen (Directorate-General for Research, European Commission)

Corporate R&D in EU and US

Dominique Foray (Ecole Polytechnique Fédérale de Lausanne, Switzerland)

Corporate R&D in Asia

Max von Zedtwitz (Tsinghua University, China)

11:15 – 11:45 **Break**

11:45 – 13:15 First Round of Parallel Sessions

Parallel session: New perspectives on the measurement, evaluation and impact of corporate R&D Chair..................... Constantin Ciupagea (Institute for World Economy, Romania)

Rapporteur Carlos Montalvo (TNO – The Netherlands Organisation for Applied Scientific Research)

Room.....ICIDE (-1 floor)

 Pursuing a basic principle of measurement performance: The case of a firm level innovation scoreboard

Giuliana Battisti (Aston Business School, UK), Amid Mourani and Paul Stoneman (Warwick Business School, UK)

- Stock price volatility and patent citation dynamics: The case of the pharmaceutical industry Mariana Mazzucato (Open University, UK) and Massimiliano Tancioni (University of Rome, Italy)
- Sectoral and firm-level differences in innovation performance: Evidence from Finnish manufacturing firms

Hanna Kuittinen (Lappeenranta University of Technology / School of Business, Finland)

Parallel session: R&D and the dynamics of firms and sectors (I)

Chair Stephane Lhuillery (Ecole Polytechnique Fédérale de Lausanne, Switzerland)

Rapporteur Georg Licht (ZEW – Centre for European Economic Research, Germany)

Room Montreal 1967 (-1 floor, opposite corner of building, through Central Patio)

- The catalysing role of in-house R&D in fostering the complementarity of innovative inputs
 Alessandra Catozzella (University of Pavia, Italy) and Marco Vivarelli (Joint Research Centre, European Commission)
- The effects of innovation experience on project selection: Better the devil you know
 Tobias Schmidt, Franz Schwiebacher and Wolfgang Sofka (ZEW Centre for European Economic Research, Germany)
- Which innovation? The search for new products and processes in European manufacturing and services

Francesco Crespi (University of "Roma Tre", Italy) and Mario Pianta (University of Urbino, Italy)

Parallel session: Drivers of corporate R&D investments (I)

Chair Nicholas S. Vonortas (George Washington University, US)

Rapporteur Nick von Tunzelmann (University of Sussex, UK)

Room Lisboa 1998 (-1 floor)

• The impact of market size and users' sophistication on innovation: the patterns of demand and the technology life cycle

Marco Guerzoni (Jena Graduate School / Schiller Universität, Germany)

- Credit constraints and the cyclicality of R&D investment: Evidence from France
 Philippe Aghion (Harvard University, US / Paris School of Economics, France), Philippe Askenazy (Paris School of Economics, France / Banque de France), Nicolas Berman (University Paris 1, France / Banque de France), Gilbert Cette (Banque de France / Aix-Marseille II University, France) and Laurent Eymard (Banque de France)
- Who gets the money? The dynamics of direct R&D subsidies in Germany
 Birgit Aschhoff (ZEW Centre for European Economic Research, Germany)

13:15 - 14:15 Lunch

14:15 - 15:45 **Plenary Session II**

Chair.....Jacques Mairesse (University of Maastricht, Netherlands)

Rapporteur......Nick von Tunzelmann (University of Sussex, UK)

Room.....Auditorium (-2 floor)

• Pitfalls in estimating the returns to corporate R&D using accounting data

Bronwyn H. Hall (UC Berkeley, US / University of Maastricht, the Netherlands), Dominique Foray (Ecole Polytechnique Fédérale de Lausanne, Switzerland), Jacques Mairesse (University of Maastricht, the Netherlands)

- Innovation, international R&D spillovers and the sectoral heterogeneity of knowledge flows
 Franco Malerba, Maria Luisa Mancusi (CESPRI, Bocconi University, Italy) and Fabio Montobbio (Insubria
 University / CESPRI, Bocconi University, Italy)
- Measuring the effectiveness of R&D tax credits in the Netherlands
 Boris Lokshin (University of Maastricht / UNU-MERIT, the Netherlands), Pierre Mohnen (University of Maastricht / UNU-MERIT / CIRANO, the Netherlands)

15:45 - 16:15 **Break**

16:15 – 18:15 **Second Round of Parallel Sessions**

Parallel session: R&D and the dynamics of firms and sectors (II)

Chair Stephane Lhuillery (Ecole Polytechnique Fédérale de Lausanne, Switzerland)

Rapporteur Georg Licht (ZEW – Centre for European Economic Research, Germany)

Room Montreal 1967 (-1 floor, opposite corner of building, through Central Patio)

- The dynamics of research joint ventures: A panel data approach
 - Tomaso Duso (Humboldt University / WZB Wissenschaftszentrum Berlin, Germany), Enrico Pennings (Erasmus University Rotterdam, the Netherlands) and Jo Seldeslachts (WZB Wissenschaftszentrum Berlin, Germany)
- Productivity dynamics, R&D, and competitive pressure
 Florin Maican (Gothenburg University, Sweden)
- R&D and embodied technological change: The role of firm size and sector belonging
 Andrea Conte (Max Planck Institute of Economics, Germany) and Marco Vivarelli (Joint Research Centre, European Commission)
- R&D activities as a growth factor of foreign owned SMEs in Croatia
 Zoran Aralica (The Institute of Economics, Croatia), Domagoj Račić (The Isle of Knowledge, Croatia) and Denis Redžepagić (The Institute of Economics, Croatia)

Parallel session: Drivers of corporate R&D investments (II)

Chair...... Nicholas S. Vonortas (George Washington University, US)

Rapporteur.......... Nick von Tunzelmann (University of Sussex, UK)

Room...... Chicago 1893 (-1 floor)

• The innovative activities of graduates in European companies
Jean-Jacques Paul (IREDU / Université de Bourgogne / CNRS, France)

 What determines R&D investment in French firms: A two-part hierarchical model with correlated random effects

Myriam Abdelmoula and Jean Michel Etienne (ERMES-CNRS, Université Paris II Panthéon Assas, France)

- The impact of R&D tax incentives on R&D costs and income tax burden
 Christina Elschner, Christof Ernst and Georg Licht (ZEW Centre for European Economic Research, Germany)
- Globalization, trade liberalization and R&D expenditures in candidate countries: Evidence from manufacturing sector in Turkey

Erkan Erdil and Teoman Pamukçu (Science and Technology Policies Research Centre, Middle East Technical University, Turkey)

Parallel session: R&D in the Economy (I)

Chair...... Andries Brandsma (Joint Research Centre, European Commission)

Rapporteur Keith Smith (University of Tasmania, Australia)

Room.....Lisboa 1998 (-1 floor)

- A theoretical model of competition and its impact on R&D, growth & welfare
 Antonia Jennifer Swann (York University, Canada)
- Corporate R&D in the ICT sector
 Sven Lindmark, Geomina Turlea and Martin Ulbrich (Joint Research Centre, European Commission)
- Towards a Euro-Mediterranean innovation space: Ideas for research and policy making
 Paolo Pasimeni (Directorate-General for Regional Policy, European Commission,), Anne-Sophie
 Boisard, Rigas Arvanitis (IRD Institut de Recherche pour le Développement, France) and Rafael
 Rodríguez-Clemente (CSIC Spanish Council for Scientific Research, Spain)
- Modelling the economic effects of R&D spending in Europe from an econometric perspective
 Hector Pollitt (Cambridge Econometrics, UK)

Parallel session: Structure and Strategy for Corporate R&D (I)

Technology, the Netherlands)

Rapporteur..... Franco Malerba (Bocconi University, Italy)

Room......ICIDE (-1 floor)

• The impact of Mergers and Acquisitions on technology sourcing strategies
Elena Cefis (Bergamo University, Italy / Utrecht University, the Netherlands) and Hans Schenk (Utrecht University, the Netherlands)

• Stimulating international cooperation in high technology sectors: A framework based on cooperative distance

Monique Nagle, Tessa van der Valk, Floortje Alkemade and Marko Hekkert (Utrecht University, the Netherlands)

- International R&D cooperation within the EU framework programme: The case of Spanish firms
 Ascensión Barajas and Elena Huergo (CDTI / GRIPICO-Universidad Complutense de Madrid, Spain)
- Global integration and local capability as determinants of multinational subsidiaries' R&D embeddedness: Evidence from emerging economies in Central East Europe
 Bjoern Jindra (Halle Institute of Economic Research, Germany / SPRU, University of Sussex, UK)

20:30 Cocktail Reception

Hotel Alfonso XII

For directions to the cocktail, please refer to the map provided

Tuesday, 9 October 2007

9:30 – 11:00 Plenary Session III: Keynote addresses from industry representatives

Chair.....Bronwyn H. Hall (UC Berkeley, US and University of Maastricht, the Netherlands) **Room**.....Auditorium (-2 floor)

- R&D for growth and sustainability: The experience of Abengoa
 José Antonio Moreno Delgado (Engineering Vice President, Abengoa, Spain)
- R&D at Philips: Efficiency in open innovation systems
 John van den Elst (Digital Systems Department Manager, Philips Applied Technologies, the Netherlands)
- SMEs vital to Europe's R&D efforts, in co-operation with industry, universities and regions
 Ullrich Schröder (UEAPME European Association of Craft, Small and Medium-sized Enterprises)

11:00 – 11:30 **Break**

11:30 – 13:00 Third Round of Parallel Sessions

Parallel session: R&D in the Economy (II)

Rapporteur...... Keith Smith (University of Tasmania, Australia)

• Exposure to low-wage competition, activity changes and quality upgrading: An empirical assessment

Claire Lelarge (SESSI-CREST) and Benjamin Nefussi (INSEE-CEPII)

• Regional clusters of economic activity in Europe: Are social and geographical proximity the key determinants?

Laura de Dominicis (Vrije University Amsterdam, the Netherlands), Raymond J.G.M. Florax (Purdue University, US / Vrije Universiteit Amsterdam, the Netherlands) and Henri L.F. de Groot (Vrije Universiteit Amsterdam / Tinbergen Institute Amsterdam, the Netherlands)

 R&D and the multifactor productivity growth: The role of externalities in a small European open economy

Bernadette Biatour and Chantal Kegels (Federal Planning Bureau, Belgium)

• Why is strategic R&D (still) homebound in a globalized industry? The case of leading firms in wireless telecom

Alberto Di Minin (MAIN Laboratory, Scuola Superiore Sant'Anna, Italy) and Christopher Palmberg (ETLA – Research Insitute of the Finnish Economy, Finland)

- Barriers to innovation in SMEs: Can the internationalization of R&D mitigate their effects
 Rajnish Tiwari and Stephan Buse (Institute of Technology and Innovation Management, Hamburg
 University of Technology [TUHH], Germany)
- R&D without patents? Foreign R&D activities of European enterprises in Central and Eastern Europe and Asia: A patent analysis
 Bernhard Dachs and Matthias Weber (ARC – Austrian Research Centres, Austria)

- Exploring the link between local and global knowledge spillovers
 Salvador Barrios (Joint Research Centre, European Commission), Luisito Bertinelli (CREA, Université du Luxembourg), Andreas Heinen (Universidad Carlos III Madrid, Spain) and Eric Strobl (Ecole Polytechnique Paris, France)
- Innovation roadmap: Exploring alternative futures of industrial renewal
 Totti Könnölä (Joint Research Centre, European Commission)
- The impact of ICT on the growth of the service industries
 Koson Sapprasert (TIK Centre for Technology, Innovation and Culture, University of Oslo, Norway)

13:00 – 14:00 Lunch

14:00 - 15:30 Plenary Session IV

• EU-US differences in the size of R&D intensive firms: Do they explain the overall R&D intensity gap?

Raquel Ortega-Argilés and Andries Brandsma (Joint Research Centre, European Commission)

- Does excellence in academic research attract foreign R&D?
 René Belderbos (Katholieke Universiteit Leuven, Belgium / Eindhoven University of Technology, the Netherlands), Bart Leten (Katholieke Universiteit Leuven, Belgium) and Shinya Suzuki (Katholieke Universiteit Leuven, Belgium)
- Uncertainty, networks and real options
 Isabelle Bajeux-Besnainou (Department of Finance, George Washington University, US), Sumit Joshi (Department of Economics, George Washington University, US) and Nicholas Vonortas (Department of Economics, Center for International Science and Technology Policy, George Washington University, US)

15:30 - 16:00 Break

16:00 – 18:00 Plenary Session V: Rapporteurs' discussion

- Taking stock, exploring emerging issues and outlining future avenues of research
 Georg Licht, Franco Malerba, Carlos Montalvo, Keith Smith, Nick von Tunzelmann, Reinhilde Veugelers
- Closing remarks
 Peter Kind (Joint Research Centre, European Commission)

Posters displayed at the Conference

• EU-Co-financed RTD at the University of Rome "Tor Vergata": Framework Programme of RTD of the EU

Danilo Aceto (European Research Office, University of Rome "Tor Vergata", Italy)

• R&D competition with radical and incremental innovation

Maria Rosa Battaggion (University of Bergamo) and Daniela Grieco (Bocconi University, Italy)

R&D-experience and innovation success

Pilar Beneito, María Rochina-Barrachina and Amparo Sanchis-Llopis (University of Valencia, Spain)

University-industry collaborations in the UK

Sandra Bulli (Department for Innovation, Universities and Skills, United Kingdom)

• Innovation and inter-firm relations: Ankara Sincan industrial district

Erkan Erdil and Dilek Çetin (Middle East Technical University, Turkey)

• Do firms involved in R&D public-private partnerships have special characteristics?

Xavier de Finance, Denis Huguenin and Marie de Lattre-Gasquet (Agence Nationale de la Recherche, France)

• Business R&D in Europe: Trends in expenditures, researcher numbers and related policies

Alexander Grablowitz (Joint Research Centre, European Commission), Patrice Laget (INSERM, France), Ana Delicado (University of Lisbon, Portugal)

 Transition via R&D: emerging forms and strategies of corporate R&D in the catch up countries (Lithuanian case)

Monika Kriaucioniene and Arminas Ragauskas (Kaunas University of Technology, Lithuania)

• The role of framework conditions for private R&D in the New Member States

Klaus Kubeczko and K. Matthias Weber (Austrian Research Centres: Systems Research, Technology Policy Department, Austria)

• Relation between uncertainty, internal competences and R&D cooperation: An empirical analysis of Luxembourg firms

Thi Thuc Uyen NGUYEN (International Network for Studies in Technology, Environment, Alternatives, Development, CEPS/INSTEAD, Luxembourg)

• R&D investments: Model to measure and manage its influence on performance

Drahomira Pavelkova, Adriana Knapkova and Libor Friedel (Tomas Bata University, Czech Republic)

• Do not promote the corporate R&D, but the market intelligence

Antoni Paz Lostes (LEITAT Technological Center, Spain)

 Corporate and public R&D in the Flemish broadcasting sector: The role of R&D programmes and media policy

Martijn Poel (TNO & Delft University of Technology, the Netherlands), Jan-Frens van Giessel and Geert van der Veen (Technopolis, the Netherlands)

- R&D and Labour Productivity: Testing sector differences with micro data
 Lesley Potters & Raquel Ortega-Arquiles (European Commission, DG-JRC-IPTS, Knowledge for Growth Unit, Industrial Research & Innovation)
- R&D spending, local banks, and knowledge spillovers

 Zeno Rotondi (Capitalia, Ferrara University, University LUISS of Roma, Italy), Kim P. Huynh (Indiana University, USA)
- Drug development in Portugal: Understanding associated risks
 Irina Saur-Amaral & Joaquim José Borges Gouveia (Department of Economics, Management and
 Industrial Engineering, University of Aveiro, Portugal)
- Corporate R&D strategies in a world of open innovation implications for regional innovation policy Björn Sautter, Sabine Hafner-Zimmermann & Günter Clar (Steinbeis-Europa-Zentrum, Germany)
- Two successful cases of corporate R&D from Turkey as a developing country Ahmet Selcuk Akgul (Universitek Education & Consulting, Turkey)
- Exclusive licensing and complementary assets
 Deepak Somaya, YoungJun Kim & Nicholas Vonortas (The George Washington University, USA)
- The efficiency of R&D activities in the European Union: A cross-region study accounting for spatial dependence
 María Rosalía Vicente, Matías Mayor & Pilar Quindós (Applied Economics, University of Oviedo, Spain)
- The ip4inno Project: Intellectual property for innovation Eri Vázquez Muñoz (FUNDITEC, Spain)

Conference scientific committee

- Luke Georghiou (University of Manchester, UK)
- Georg Licht (ZEW Centre for European Economic Research, Germany)
- Franco Malerba (Bocconi University, Italy)
- Pietro Moncada-Paternò-Castello (Joint Research Centre, European Commission)
- Carlos Montalvo (TNO The Netherlands Organisation for Applied Scientific Research)
- Nick von Tunzelmann (University of Sussex, UK)
- Reinhilde Veugelers (Bureau of Economic Policy Advisers, European Commission and Katholieke Universiteit Leuven, Belgium)

Conference organisation committee

- René van Bavel (Joint Research Centre, European Commission)
- Victor Rodríguez (TNO The Netherlands Organisation for Applied Scientific Research)
- Peter Voigt (Joint Research Centre, European Commission)
- Valentina Pierantozzi (Joint Research Centre, European Commission)
- Tennessee Witney (Joint Research Centre, European Commission)
- Jane Blanklin (Joint Research Centre, European Commission)

Conference venue

European Commission - Joint Research Centre Institute for Prospective Technological Studies (IPTS) Edificio Expo C/. Inca Garcilaso, s/n E-41092 Sevilla, Spain Tel + 34 954 48 8318

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