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Directorate L - Science, economy and society

The Effects of the Financial Crisis on European Research Policy

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Scene setter

The global financial crisis has had a great effect on Europe's financial system. This has direct impact on the economy, growth and unemployment. What will be the consequences of the financial crisis on private and public research (R&D spending)? What are the effects of the financial crisis on European research policy? Will the financial crises stimulate or slow down the measures to push for a knowledge based society and a low carbon economy? Will R&D suffer from the recession period? Is research and innovation a central policy for overcoming the present crisis and for laying the foundation for sustainable growth, future competitiveness and societal well-being?

To discuss these issues, on 17 November 2008 in Brussels, Commissioner Janez Potočnik organised a Seminar with Dr. Erkki Ormala (Vice President, Technology and Trade Policy, Nokia), Dr. Volker Meyer-Guckel (Deputy Secretary-General, Donors' Association for the Promotion of Sciences and Humanities in Germany) and five renown economists affiliated to the Centre for Economic Policy Research (CEPR in London): Professor Mathias Dewatripont (Université Libre de Bruxelles), Prof. Jean Pisani-Ferry (Université de Paris Dauphine and BRUEGEL), Prof. Richard Portes (London Business School), Prof. Dominique Foray (Ecole Polytechnique Fédérale de Lausanne) and Prof. Reinhilde Veugelers (Katholieke Universiteit Leuven).

The debate was moderated by the journalist Richard Hudson. It was divided into three main categories although these three are very much linked:

1. Macro-economic effect of the crisis (and recession), R&D and innovation;
2. Micro responses for industries, regions and sectors;
3. Expert's recommendations on what needs to be done.

1) Macro-economic effect of the crisis, R&D and innovation

- Financial markets have been severely shocked and they will take time to recover.
- The roots of the crisis are the global imbalances: excessive deficit in the USA and excessive savings in East Asia.
- The specificity of this recession is that credit conditions and liquidity constraints are drivers of this crisis.
- New regulations are needed for the banking sector and at the world-level (the G20 meeting on 15 November 2008 went in the right direction).
- The good news in Europe is that governments are acting together, recapitalising first and combating recession and stimulating the economy.
- The European Stability and Growth Pact is flexible. The deficits can go beyond 3% in exceptional circumstances.
- There are two crises at the same time: the financial crisis that concerns the short term and the energy and climate change challenge that concerns the long term. One should not try solving one or the other. Both are linked.
- In a Schumpeterian view, the crisis could be positive as it stimulates innovation.
- The evidence of the past crises demonstrates that R&D is almost always suffering from recession periods (even if there are arguments for the counter-cyclical effects and for the opportunity cost). The crisis could imply a standstill or even a reduction of R&D spending.
- Even with the Lisbon agenda, the expenditure of R&D in Europe did not increase enough, contrary to what happened in Asia. The EU country which is quoted as an example is Finland that maintained and later even increased R&D spending in the crisis at the beginning of the nineties.
- The EU has a triple deficit in terms of:
 - R&D spending;
 - Higher education;
 - Difficult access to funding for young firms.
- Private research will not pay for the research that is needed in the field of free movement of capital. Central banks and regulators are interested parties so they will not finance research in these areas either. More competition, more pluralism, and more independent assessment is needed in the research area.

- With the financial and the economic crises, a social crisis is also emerging. Research linked to economics, employment (cf. green employment) and to better links between academics and policy-makers will be needed.

2) Micro responses for industries, regions and sectors

- The economic prospects are very bad (worst recession since the World War II) but nobody knows for how long.
- The speed of change is fast and global. The crisis affects all sectors and all countries.
- These last years, R&D spending of large companies shifted to private-public partnership (PPP) to share risks. Large companies will continue to invest in R&D.
- Due to the crisis, private R&D could be reduced in the short term but not randomly. The spending will be more focused on core business. The best locations with the best programmes and the best researchers will not suffer.
- Venture capital sector is downsizing (difference from the dotcom bubble where there was an excess of financing for the innovation). The biggest losers are small and young companies.
- Young innovative companies with high risk and without reputation will suffer the most.
- Japan took long time to react to its banking crisis and resulted in an extended stagnation for 15-20 years.
- Europe has a good environment to attract researchers but loses its competitive advantages (exchange rates).
- Public expenditure should increase in sectors like education, health care and climate change which correspond to societal challenges. These do not affect the private sector negatively.
- The short term impact of the crisis will be deeper. Partly due to the structural changes of the last 20 years, R&D becomes more vulnerable to financial shocks. In the past, public R&D was more important and large companies were responsible for the bulk of R&D. Today, 70% of R&D is done by the private sector and highly specialized small firms play an increasing role.
- The crisis will not radically change the R&D location trends: Asia and USA have many advantages. The EU blue card project could help to attract students, researchers and talents.

- Public R&D offers long term "security" (meaning spanning several years as to avoid cyclical dependency). At the EU level, FP7 is a stable contribution but will not solve all the EU research problems as it only accounts for 5% of European research public spending.

3) Experts recommendations

- For "open innovation":
 - simplicity, clear rules;
 - encourage user innovation.
- Increase cooperation between business R&D and the public sector and universities.
- Improve education spending.
- Benefit from the single market and keeping the EU level-playing field (avoid distortion).
- Make it attractive and easier for researchers to come to EU (better education and research policies) – Freedom of knowledge within the EU (the fifth freedom).
- Fund more academic research, including in economics and in employment-related issues.
- Coordinate countercyclical stimulus for R&D.
- Support and focus on young innovative companies (start-up) that are the most affected by crisis.
- Stimulate demand on innovation through public procurements.
- Improve communication between researchers and policymakers.
- Focus on climate change, green and other socially important R&D subjects.
- Assist regional smart specialisation, not heavy industrial policy.
- Create incentives for national governments to invest in R&D.