

"Science, Technology and Social Change"

### Workshop 5

# What is the potential of new financing schemes for fostering science and technological innovation? ...Balancing private and public, national and global incentives.

### 12-13 November 2007

Venue: Portuguese Communications Foundation, Museu das Comunicações, Lisbon

By and large the financing of science and innovation occurs along rather traditional lines. Governments directly undertake R&D or subsidize (directly or indirectly, through tax measures) R&D performance and technological innovation. Governments raise – or forego –revenue to pay for this support. Yet, the history of science is rich with varied means of financing science and technological innovation. More importantly, developments in the size, integration, and technologies available in global capital markets present the opportunity to think about new financing possibilities. These involve both the channelling of resources from the global liquidity pools to science and technology, as well as enhanced risk management tools that are as important aspects of "financing" as channelling money.

Recent developments in the international cooperation domain are starting to show some of the the possibilities. For example, under the leadership of the UK government, a financial facility was created to raise funds in international capital markets - by selling bonds securitizing commitments from donor governments - to frontload expenditure on immunization in developing countries. This is expected not only to increase funding available for vaccines, but to encourage innovation to address the problems of developing countries. The Italian government led another innovative initiative, the establishment of an advanced purchase commitment to encourage private investment in the development of a vaccine for developing countries. These and other initiatives address market failures in the field of health but also of science and technology in an innovative manner. Can these different and innovative sets of incentives and funding mechanisms be expanded and adapted to foster scientific progress and technological innovation in developed countries and economies? Can these mechanisms also be used for attracting more people to higher education? What have we learnt about experiences with loan systems, venture capital, risk capital and tax incentives? How can we develop new schemes for funding public-private partnerships? How do national competitive funding schemes fit into the global trends and international strategies including collaborative programmes?

In addition, the debate could be enlightened by looking at how is global industrial restructuring, including cross-border mergers and acquisitions (M&As) and international strategic alliances, affecting R&D funding? Do we need to rethink national research councils and funding agencies in the context of growing challenges of global competition? Is the peer review system compatible with the different funding schemes?

## Monday, November 12, 2007

Registration: 14:00

Session 1 (14:30-16:30)- Expanding incentives for investments in science and innovation: new and underused instruments

<u>Chair and Introduction:</u> Manuel Heitor, SECTES, PT <u>Invited Speakers:</u>

- Pedro Conceição, UNDP, USA
- Frans van den Boom, Vice-President for European Programmes, IAVI, NL
- Initial Discussion by:
- Rui Baptista, IST, PT
- Mário Amendola, University of Rome,IT

### Coffee Break: 16:30-17:00

Session 2 (17:00-18:30)- Innovative ways of financing science and innovation: tapping capital markets and other sources

• <u>Chair</u>: Rui Baptista, IST, PT

Invited Speakers:

- Dirk Pilat, OECD, FR
- Antonio Baldaque da Silva, Lehman Brothers, USA Initial Discussion by:
- William Masters, University Purdue, USA
- Jean-Pierre Contzen, MCTES, PT

19:00 - Reception and Visit to the Portuguese Communications Foundation

#### Tuesday, November 13, 2007

Session 3 (9:30-11:00)- What risks should the government hold? Enhanced risk management to support investments in human capital, science and innovation

Chair: Jean-Pierre Contzen, MCTES, PT

- Invited Speakers
- José Barros, SPGM, PT
- Luisa Ferreira, EIB
- Wouter Spek, EuroBioFund
- Initial Discussion by:
- Filipe Cartaxo, BPI, PT
- José João Guilherme, BCP, PT
- António Gomes Mota, ISCTE, PT

### Coffee Break: 11:00-11:30

Session 4 (11:30-13:00)- New financing schemes for fostering science and innovation in the context of science and technology policy

Chair: Pedro Conceição, UNDP, USA

Invited Speakers

- Mário Amendola, University of Rome, IT
- William Masters, University Purdue, USA Initial Discussion by:
- Sebastião Beltrão, Banco Santander Totta, PT
- Jean Pierre Contzen, MCTES, PT

Closing: Manuel Heitor, SECTES, PT

Lunch: 13:00