



ESOF

EuroScience
Open Forum
Manchester 2016

Value of Research

Luc Soete
Maastricht University and RISE

July 26th 2016
17:10 – 18:25

[Charter 1, Manchester Central Convention Complex](#)

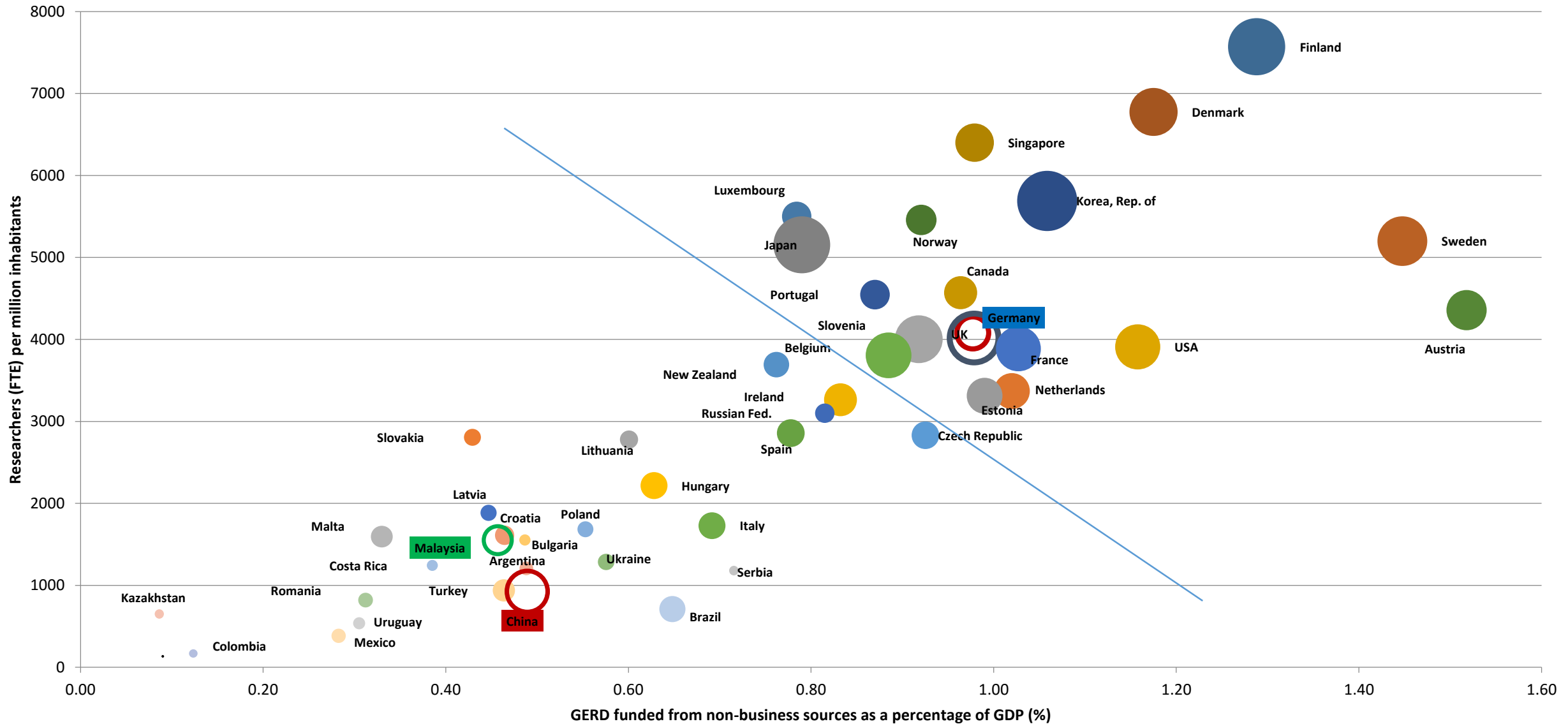
Manchester 2016

Role of “Public” Science and “Private” Research

- Basic science is too risky and “lumpy” for firms, hence a crucial role of science policy and (semi-)public organizations such as universities and public research organisations;
- Next to the economic impact (on GDP) of research, there is a broader impact (societal challenges, agenda-setting, enhancing fundamental understanding) which remains difficult to capture in GDP;
- At the same time “using” knowledge from public science is not a free-riding activity, it requires significant investment and absorptive capacity;
- In economic models, ultimately, the direct economic effect will depend on its interaction with the private sector:
 - Firms/organisations/citizens create “value” based on knowledge generated by public science.
 - Excellent public science attracts private research investment.

Mutually reinforcing effect of strong government investment in R&D and researchers, 2010–2011

The size of the bubbles is proportionate to GERD funded by business as a share of GDP (%)



The additional complexity of a “shared” European research system

- The efficiency of knowledge creation and absorption will depend on how well the local “STI system” is organized;
- As a result of differences between STI systems, the *rate of return to R&D* (public and private) is likely to differ greatly between countries;
- For the EU, consisting of a couple of large and a majority of small countries, knowledge absorption is likely to be as important as creation;
- Furthermore absorption will have a European dimension (ERA) and a non-European dimension requiring *both* active (public) research;
- The “sharing” of research policy responsibility between MS and Europe does neither take into account the distinction between absorption and creation, nor the European versus non-European dimension distinction.

Three major policy challenges

- Within the context of shifting policy priorities (security, immigration, etc), how to counter lack of economic evidence on the “impact” of national public research funding (from “publish or perish” to “impact or be cut”)?
 - Value of research remains difficult to demonstrate because of the long term but also international impact of research. The world spends today both in absolute and relative terms a record amount on research, the number of S&E has increased with more than 20% over the last five years, mobility of PhD students doubled;
- What is the ideal organisational set-up for research in Europe (and world-wide)? In this sense, BREXIT represents an interesting experiment to be closely monitored.
- With long-term interest rates lower than ever and overall (private and public) weakness in investment spending, search for new funding methods for research is on. Successful experiments with research such as RSFF (the basis for EFSI), today need to search for new research FINTECH methods?