The effectiveness of national research funding systems

http://ri-policy-analysis.eu/studies

Expert workshop

Brussels, Belgium, 6 May 2014

Summary

Background

This workshop was meant to validate findings from research in a study for DG Research and Innovation about the effectiveness of national research funding systems. Results from the workshop will be used to finalise a related policy brief.

Attendants

The workshop convened 26 stakeholders active in research funding, in particular from universities, policy, and funding agencies. Attendance was by invitation only. See a list of attendees in the Annex.

Presentations

This summary includes the main points of the presented slides and the discussion. The presentation files can be viewed and downloaded at http://ri-policy-analysis.eu/studies/the-effectiveness-of-national-research-funding-systems/.

Main results

Available **evidence does not allow to draw conclusions** or generalise about the effect of introducing performance-based funding. Hence, current research policy seems not to be evidence based. Future research is needed to clarify whether there is no relation between funding methods and performance or whether current indicators are not capturing "competition" and "performance" sufficiently well.

There are **many influences** that affect decisions, conduct, and performance of individual researchers; the research funding mechanism is just one of them. Other important factors may be promotion mechanisms, the amount of money available for researchers, and prestige. These drivers are probably much more dominant than funding mechanisms.

The most **excellent researchers** are probably not much affected by more competition – they will do as they always do. Probably increased competition will affect those researchers with life-long employment and lower performance, leading to an increase in volume of research output but not necessarily an increase in quality.

Competitive funding should not be developed in isolation from other types of funding. The task should not be finding the best funding mechanism but the right balance between funding mechanisms. In doing so, private research funding – which is also competitive – should also be taken into account. Furthermore, there should be a certain degree of stability in the right mix of funding instruments. Policy makers also should consider that the level and amount of funding plays an important role.

Due to the **large differences** between countries' research funding systems and due to historical aspects (path dependency), one should be careful with "copying" models from other countries.

1   Welcome and introduction

Philippe Martin and Fabienne Gautier, European Commission, DG Research and Innovation

Philip Martin welcomed everybody to the workshop about the effectiveness of national research funding systems (with the explicit focus on research and not R&D). The aim of this workshop was to add value to the results of the study conducted by Dialogic and empirica between February and April 2014 and to discuss the most effective way of stimulating research performance. Or in other words, how do we get the "most bang for the buck"?

Fabienne Gautier underlined the importance of the study, stressing that "more effective national research systems" is one of the five priorities of the European Research Area (ERA). The aim of the ERA is to improve this effectiveness by introducing increased competition. In this case, competition is understood as project-based funding, allocated by means of international peer review. The goal is selecting the best proposals – proposals with a high level of scientific excellence, meaning research with high levels of economic and social impact. A second element of competition is the introduction of institutional assessment, so not only providing bulk funding, but funding on the basis of assessment. Compared to this study the scope of ERA is wider, not only focusing on the funding of HEIs but also other research institutions.

2   Current state of affairs

2.1   Context and rationale of the FundSys study

Presentation Luc Soete, European Research and Innovation Area Board (ERIAB)

Luc Soete presented introductory comments about the effectiveness of national research funding systems. First of all he highlighted the importance of the issue.

There are **huge differences between EU Member States** in funding of higher education institutions (HEIs). At first sight, there is a huge potential for efficiency gains in higher education. The debate is somewhat similar to the one on massive open online courses (MOOCs). The issue is part of the international diffusion of the Anglo-Saxon vision on competitiveness in research and mobility of researchers and convergence in best practice research performance. This is for example illustrated in university rankings. The US system, and in Europe the UK system, are spreading to the rest of the world – particularly to China and the Commonwealth, but also to the rest of Europe. There is an interesting similarity with higher education such as the tuition fee debate: the US leads, the UK followed, but continental Europe remains characterised by major differences.

In this context, the study about the effectiveness of national research funding systems is particularly welcome. There are lots of studies for the US, comparing for example individual US states. However, **little is known for Europe as a whole**. In Europe one needs to recognise, among other issues, the importance of small nations (which are intrinsically more competitive), the role of research beyond smart specialisation but as absorptive capacity, the nature of research carried out in HEI, and the role of academic hospitals.

The **EU is facing four main challenges**: First, should block funding (guaranteed unit of funding, GUF) only be applied at national or regional level or also at EU level? Second, there is programme funding at national, regional, and European level but where is the

quid about the overlap? Third, in many areas a European "mobile circus" of scientists appears to be travelling across Europe as post-doc researchers in search for a "tenured" landing somewhere. (See Luc Soete's Dies lecture on why "young researchers just like members of drug gangs still live with their mom".) Fourth, there is an inside-outsider problem of researchers in Europe with rising and high unemployment amongst young scientists in innovation laggard countries. The issue is whether ERA can help or whether it is rather reinforcing those effects?

2.2 Results from the FundSys study

Presentation Leonique Korlaar, Dialogic

This study was conducted by Dialogic and empirica between February and April 2014 on behalf of the European Commission (DG R&I) and in support of the High Level Group that advises the Commissioner in charge of Research and Innovation. The objective of this study was to provide an overview of the variation in the competition-based allocation of public research funding (performance-based) and to assess the relation between competitive research funding and research performance.

This small scale study took an earlier quantitative study on the efficiency of national RDI systems as a starting point (empirica, University of Applied Sciences North-Western Switzerland & Dialogic, 2013). We have further elaborated the relationship between competition and research performance by a literature study, 8 country studies and a series of in-depth interviews with both research funders, research performers and other experts regarding research funding (n = 13). Within the country studies we had a closer look into the research performance of the country, the research structure, the most important funding flows and the key institutions regarding public research funding.

Within public funding of research one generally makes a distinction between two main funding mechanisms: institutional funding (block funding) and project-based funding. The ratio between institutional block funding and project funding is often used as a proxy for the degree of competition within a national research funding system: institutional funding being perceived as non competitive and project funding as competitive. However there are many subtypes possible. What the proxy essentially tries to capture is the nature of the contractual relationship between the research funder (the principal) and the researcher performer (the agent). Therefore, in this project a distinction between non-programmatic, programmatic and project-based funding is made.

Several countries in the EU (and elsewhere in the world) have introduced reforms in their research funding systems during the last decade in order to make the research system more competitive. Rationales for national governments to introduce more competition in the system are often linked to 'encouraging excellence'. This view is supported by many interview respondents. However, it was also said that competition is never a goal in itself. Some respondents also mention the possible negative effects of too much competition (demotivation of researchers due to low success rates or narrowing of research).

In many cases the underlying assumption of introducing competitive funding is that there is a direct positive effect on research performance. When we look at available data, this relation seems not clear. There are different explanations for this: i) competitive funding is not fully captured by these funding indicators (e.g. also institutional funding can be competitive), ii) scientific performance is not fully captured by these performance indicators (bibliometric indicators might give a too narrow focus on performance) or iii) there is no relationship.

The relation between (competitive) research funding and performance seems far more complex than a lower(ing) ratio of institutional block funding. Therefore this study produced a descriptive model, describing this more complex relation. This model

illustrated first of all that a research system consists of many layers (country, HEIs/PRO, faculty, research group and individual researchers). Competition may occur at all these levels. Second, research funding seems only be one of the variables possibly influencing performance (other factors being political system, language, educational system and the academic climate). Third, strategic behaviour of institutions and or individuals ("conduct") is an important intermediating variable.

Discussion

Funding mechanisms

How can the recently emerging "research excellent initiatives" (see e.g. the OECD study published in 2014 on Promoting Research Excellence) be related to the presented distinction between non-programmatic, programmatic and project-based funding? In the OECD study the REIs are positioned between institutional core funding and project funding. It seems that they could be best positioned as "programmatic funding" in this study.

Due to differences within countries it would be very useful to have a look into the institutional level – in addition to the macro-level presented in this study. For example, some institutions will rely more heavily on block funding than others; some institutions will perform much better than others. For example, in the Czech Republic there are huge differences between universities. This is important when it comes to policy recommendations.

A shift towards more competition

It is argued that in many countries the introduction of competition is associated with large reductions of research funding. The shift towards more competition is difficult to separate from this trend. Therefore, it would be interesting to have a closer look at the different countries to see if there are any traces of this. However, it was also argued that these cuts are mainly in the minds of researchers.

The relation between competition and performance

It would be useful to see if it is possible to use more timely data (e.g. STAN, STI Scoreboard 2013). In addition, the use of field normalised data (why is it useful?) and GBOARD (including data of the private sector) is questioned. In addition, it might be interesting to also have a look at different dependent variables, e.g. the visibility of research institutions. One should also be aware that effectiveness could mean something different for each country. It depends on what you are hoping to achieve – what is your goal?

There is also a lot of discussion about the level of competition that is productive. Many workshop participants believed there can be too much competition, resulting in diminishing returns and effects of increasing competition that might be negative in the long run. Researchers can e.g. be demotivated by low success rates or they can avoid risky research etc. However, in the first case one could also ask the question whether or not there are maybe too many researchers, indicating a capacity problem and not a problem of too much competition. This means that the effects of competition are dynamic, while the model presented is more static.

In current policy there is a trend toward evidence-based policy. In this case, the policy seems not-evidence based at all. Currently, there is no clear evidence on the positive effect of introducing performance-based funding. Future research is needed, to clarify whether there is indeed no relation or whether current indicators are not capturing "competition" and "performance" sufficiently well. In France and Germany, for example, a lot of academic research is not done in universities. This is not properly captured in the data. There are also other caveats when using bibliometric indicators, which nowadays seem to be forgotten again.

Structure-conduct-performance

The presented model is useful to discuss the relation between research funding mechanisms and research performance. However, an important element missing is "path dependency", meaning that your previous position is indicative of what you can accomplish; so history matters ("Matthews principle"). This recurrence is e.g. visible in the participation of research institutes in the EU Framework Programme. In this case, it would also be interesting to have a look at the types of institutions (e.g. compliance to ERA seems to be linked with performance).

Conduct is a very useful element in the model (not many studies have a focus on this). However, looking at strategic behaviour is also like opening up 'Pandora's Box'. At the institutional level e.g. academic leadership plays an important role (how to manage the strategic goals of the institution?). In addition, there are many more issues that play a role at the institutional level. Also the strategic behaviour of individuals is interesting. What type of mechanisms are there to affect decisions by individual researchers (not necessarily limited to the funding mechanism)? Other factors mentioned that might be important drivers are: promotion (as illustrated in Denmark where the promotion system changed dramatically twenty years ago with positive consequences), the amount of money available for researchers, and prestige. These drivers are probably much more dominant than funding mechanisms (see also the drivers of performance presented in the Science Europe Roadmap, December 2013).

It could be interesting to do some more case studies in the future to have a more closer look at these other factors. Are there e.g. differences in the number of foreign employees or the number of co-publications).

Policy implications

Be careful with "copying" models from other countries, due to large differences between countries. In the US e.g. revenue streams of universities consist roughly of endowments (1/3), student fees (1/3) and contract research (1/3). This picture is very much different for the EU (massive amount of money in the US are coming from sources that are not even known in the EU). In addition, you also need to take the quality of institutions into account.

One should also not only focus on funding policies but also on policy measures not-related to funding that could be helpful in enhancing research performance.

3 Research funding and research performance: an overview

Performance-based funding: Presentation Gunnar Sivertsen, Nordic Institute for Studies in Innovation, Research and Education

Gunnar Sivertsen's main **conclusions**, presented at the beginning, are the following:

- Research is international, but public block funding (PBF) is (necessarily) represented in a variety of national solutions that have been introduced for a variety of purposes.

- The trend is towards more complex and composite PBF solutions – the countries are learning and adopting methodologies from each other.

- PBF is effective even if introduced as a small share of the total funding. Transparency and the involvement of the institutions may be just as important.

- It is difficult to see a clear relation between PBF and national research performance.

- It is difficult to identify "best practice" or overall positive or negative effects.

As regards the **role of peer review for PBF**, in evaluations and project funding, bibliometrics may inform, but not replace peer review. The question is whether this is also true for performance-based funding of institutions. There are diverging opinions. While some say that "empirical evidence shows that for the natural and formal sciences, the bibliometric methodology is by far preferable to peer-review" (Abramo/D'Angelo 2011), others say that "peer review should be integrated with bibliometric indicators in national assessment exercises" (Franceschet/Costantini 2011).

As regards **PBF and national research performance**, Denmark offers an interesting case. There has been a rise towards high citation impact in Denmark since 1990. There are many possible explanations: Reorientation from strategic research towards academic excellence; balancing external funding with more floor funding; new external funding mechanisms to support excellence; more autonomy, stronger internal management, employed leaders; performance contracts; performance indicators; regeneration: increase in PhDs, increased overall funding; the health (research) system; large private funds; the bioindustry plus biomedical industry; as well as an old and strong tradition for natural sciences and engineering.

Discussion

Assessment of institutions

It would be good to assess institutions on the progress towards their own strategic goals. However, this is not easy. An example of a country in which this is done is Austria. In Austria the government uses the contract with HEIs as a possibility of influencing the focus of HEIs (e.g. on internationalisation). In the contract agreements are made based upon negotiations between the government and HEIs, resulting in a portfolio including performance indicators. After three years the progress is assessed. This might result in excluding existing indicators or adding new indicators etc.

In addition, it would be good to assess institutions as "organisations". What makes them good performing organisations?

Who are you affecting with building in more competitive elements?

Does competition lead to better performance? During the workshop it was argued that the most excellent researchers are probably not much affected by more competition (they will do as they always do). Probably it will affect those researchers with life-long employment and low performance, leading to an increase in volume of research output but not necessarily an increase in quality. The question should therefore be: how do we get better performing institutions?

Evidence-based policy

There seems to be no common learning area on this topic (so evidence-based policy is lacking). Ideas are picked up, but not systematically. However, there is some evidence on the positive effect of ERC-grants on universities; these grants are seen as desirable in reputational terms ('prestigious').

Overall, more evidence-based policy is needed on this topic. Therefore, it would be interesting to also look at possible topics for future research (in addition to other (policy) recommendations that will be made in this report.

4   Policy implications

4.1   Research funding policies: the case of the United Kingdom

Presentation David Sweeney, HEFCE

The Higher Education Funding Council for England (**HEFCE**) is not a government body; it operates on behalf of the universities. It is the largest UK research funder and represents the largest research assessment system in the world. It has a selective system with 36 Disciplinary Panels and looks at research environment as well as four outputs; now also impact. Peer review is the main method HEFCE applies, plus a little metrics. HEFCE can be considered the biggest driver of university behaviour in England.

The **key questions** for enhancing the UK's national funding system are the following: What are the research objectives? How do you understand "excellence"? How is "performance" used in research management decisions? Is it meaningful to talk of "performance-based funding" as a simple measure? Can any simple statistics capture the complexity of research funding decisions?

As regards national research objectives, the UK targets intellectual leadership in the development of new knowledge, implying optimal contribution to society from that new knowledge. **Excellence in research** is a multi-faceted targeted, requiring to codify excellence. Published outputs (of different kinds) are at the heart of quality assessment, and peer judgement is the main tool. A sophisticated quality system is developed on top of that. The assessments of the Research Assessment Exercise (RAE, 2001 to 2008), and Research Excellence Framework (REF, 2009 until 2013) are similar. Both use concepts of significance, originality and rigour, prioritising quality not quantity.

Excellence has several dimensions: First, originality – prizes for coming first, plaudits for coming second, nothing for coming third. Second, rigour – excellence must be replicable, recorded, thorough, and deep. Third, significance. The framework can be constraining as well as enabling for research excellence. The system appears to work well for the development of new knowledge, while the adaptation for contributions to society is not yet proven but being tested. Fourth, impact – what is the reach, significance, and economic contribution? What is the correlation between traditional assessments of excellence and impact?

David Sweeney has **five key messages**: The UK punches above its weight as a research nation. The UK research base is well-rounded and impactful. The UK is a focal point for collaboration and mobility. The UK exhibits strong cross-sector knowledge exchange. The UK research base shows potential vulnerability. Further reflections on the key messages include the following: Not all performance-based funding systems need to be project-based. The ratio of institutional block funding to project funding is not necessarily a measure of the degree of competition as institutional funding need not be non-competitive. "The most competitive systems should also be the most productive" is not a sensible proposition to test. Other criteria (outside the UK) for allocation of block funding may include proxies for performance – an under-developed point. Some of the data on which the key messages are based is very old.

REF case studies had the following outcomes: Universities and academics are galvanised due to the importance of REF. REF carried out 6975 case studies, many of them focused on the long-term contribution of research to society. They are teasing out the way in which impact arises, and they are offering every discipline the opportunity to make its case in its own terms. There is a stunning opportunity to build multi-disciplinary work into an exercise based around disciplines – although you may be doing that better. An evaluation by Rand Europe is now underway.

Discussion

Assessing (social and economic) impact of research

There is a lot of discussion about the best way of assessing impact. In the UK it is believed that predicting impact is impossible and that you need to assess impact on past performance. During the workshop the question was raised whether it is possible or not to do a retrospective study (with a control group based upon previous impact) based upon the case studies that will be published. And is it possible to relate impact to one piece of research (e.g. in physical science)?

Performance-based assessment will at least raise awareness among HEIs about the importance of high impact research, but the question is if this method is also useful to fund research. Future evaluations have to show this – maybe we come to the conclusion in a few years that we cannot measure it.

It was also questioned whether people accept the outcome of the assessment easily. Are the underlying reasoning and scores e.g. published online, in addition to the case study that will be published? In the UK the level of acceptance is high. Probably the outcomes of the REF will also show high correlations with output-outcome. So only in a few cases there may be some discussion.

In addition, it was asked whether or not this kind of impact assessment (with a focusing on social impact as well) requires other expertise in the panels. It was argued that a mix of academics, research users and business people is needed. You need to have a good dialogue.

Winners and losers?

The question arose whether the assessment used in the UK is leading to big winners and losers or not. It was argued that the REA (now REF) has big reputational effects, but not per se budgetary consequences (the sums of money that shift are not enormous).

4.2   Policy issues derived from the FundSys study

Presentation Pim den Hertog, Dialogic

Pim den Hertog presented six policy issues derived from the FundSys study:

- The choice between institutional ("less competitive") and project-based funding ("more competitive") is too simplistic and might even be false.

- There is no clear-cut direct relationship between type of research funding and research excellence.

- Competition is built-in into the research system itself already, due to the nature of the contractual relationship between research funder and the performer.

- There possibly is an optimal level of competitive funding. Too much competition might result in demotivatingly low success rates, narrowing research focus & risk aversion

- Research performance goes beyond bibliometric indicators and is affected by more factors than research funding alone.

- Pronounced strategic behaviour of both institutions and individual researchers are affecting the performance of the research system.

From these policy issues, Pim den Hertog derived five questions for discussion:

- How effective is competitive funding in supporting research excellence?

- Do we need alternative indicators for assessing competition in research funding?

- Can there be too much competition in a research system?

- Are policies aimed at mobility and openness, human resource policies of HEIs and improving the quality of the research climate more effective to further research excellence and impact?

- Do we need a broader notion of research excellence and impact than bibliometrics alone? (And do we need to allocate research funding accordingly?)

Discussion

Importance of competitive funding in supporting research excellence?

It is important not to isolate competitive funding from other types of funding. It is not so much about finding the best funding mechanism but finding the right balance between funding mechanisms. By doing so it would also be good to take non public funding into account (there is also competitiveness in the distribution of private funds). In addition, it is also important to have a certain degree of stability in the right mix of (funding) instruments. Also realise that there the level and amount of funding plays an important role.

Be careful in using the terms as "competitive funding", "project-based funding" and "performance-based funding". Elements of competition can be built in at all types of funding, so not only project based funding. Similarly, performance-based funding is not only related to project based funding. Performance-based funding just indicated that you use previous results to allocate money for research.

Alternative indicators for assessing competition

First of all, one should realise that competition can occur at different levels (country, HEIs, research groups, individual researchers) and that the level of experienced competition may differ between these levels: e.g. non competitive funding mechanisms may be perceived competitive at the level of departments (due to competition between departments). This cannot be measured by regular indicators and the level of competition at the level of research groups or individual researchers remains hidden.

Scepticisms about the current bibliometric indicators was shared by many respondents: new or better indicators would be helpful. At the moment many indicators are not suitable for cross-country comparison. It would be interesting to think about indicators that are both useful for governments and universities (e.g. for self-governance). Otherwise you are creating burdens. By putting R&I statistics closer to the government administration, statistics could be produced by the institutions themselves (of course the reliability of this self assessment needs to be checked). In addition, it should be check if new indicators are not already emerging (on e.g. Wikis).

Some participants warned at the same time thinking that new indicators will solve the problem. Researchers will respond to these new indicators and adapt their behaviour.

Can there be too much competition?

Too much competition can lead to negative strategic behaviour (strategic behaviour can also be positive), like: changing publication strategies and game playing (see e.g. the study of L. Butler in 2003 about the increase share of ISI publications in Australia, in the OECD study 2010), narrowing of the research focus, demotivation. There are a lot of rumours about negative consequences, but these are not really evidence-based. There is a need for increased awareness of strategic behaviour. In addition, it is good to recognise symptoms of too much competition and "misconduct".

One should also think about the preconditions of making competition effective. Under which conditions does it work? Competition should never be a goal in itself.

Non-funding policies

In general, the participants agreed that non-funding policies are also really important in enhancing research excellence and impact – not per se more effective, but at least equally effective. Policies focusing on enhancing research performance should be a mix of both funding policies as well as other policies (e.g. policies related to HRM-policy, mobility and preventing misbehaviour). It is all about a systemic approach.

Broader notion of research excellence

The question whether we need a broader notion of research excellence and impact than bibliometrics alone suggests that this broader notion does not yet exist. However, almost all countries have a broader notion and many funding institutions do not solely rely on (biblio)metrics in the allocation of funding. However, this is not fully captured in available statistics for cross-country comparison.

5   Conclusions

Wrap-up by Luc Soete

In his concluding remarks, Luc Soete pointed to the following important issues:

- Historical aspects (and path dependency) need to be considered when trying to enhance national research funding systems.

- There are pronounced differences between national research funding systems in Europe, but the reactions from the universities are rather similar.

- European countries need good guidance for evidence-based policy on national research funding systems.

Closing remarks by Philippe Martin

Philippe Martin stressed that there is no one-size-fits-all policy for national research funding systems in Europe. It is however not at all clear how good research funding policies should be designed.

Annex

Annex 1: List of participants

No.	Title	Name	Organisation	Position
1	Dr.	Borrell-Damian, Lidia	European University Association (EUA)	Head of Unit, Research Partnerships
2	Prof.	Bourguignon, Jean-Pierre	European Research Council	President
3		Burgelman, Jean-Claude	DG Research and Innovation	Head of Unit Science Policy Foresight
4		Razzanelli, Matteo	Science Europe	Senior Policy Officer
5		den Hertog, Pim	Dialogic	Senior Researcher
6		Deybe, Daniel	DG Research and Innovation	
7		Garcia, Clara	State Secretariat R&D	
8		Gautier, Fabienne	DG Research and Innovation	Head of Unit ERA Policy
9	Dr.	Heijs, Francien	Permanent Representation of the Netherlands at the EU	Counsellor
10	Dr.	Jongbloed, Ben	Center for Higher Education Policy Studies (CHEPS) at University of Twente	Senior Research Associate
11	Dr.	Kaderobkova, Anna	Prague University, UNECE	Scientific Director
12		Kergroach, Sandrine	OECD	Analyst
13		Korlaar, Leonique	Dialogic	Researcher / Consultant
14	Dr.	Lilischkis, Stefan	empirica	Senior Consultant
15	Prof.	Martin, Ben	University of Sussex	Technology Policy Studies
16		Martin, Philippe	DG Research and Innovation	Senior Policy Analyst
17	Dr.	Mourad, Daniel S.J.	Ministry of Education, Culture and Science, the Netherlands	Policy Officer
18	Prof.	Mouritzen, Poul Erik	University of Southern Denmark	Institute of Political Science
19	Dr.	Novak, Rudolf	FWF Austrian Science Fund	Head of Department, Development and Strategy -

				national programs
20	Prof.	Nowotny, Helga	ERA Council Forum	Chair, President
21		Rauch, Matthias	DG Research and Innovation	Policy Officer, Seconded National Expert
22	Dr.	Sanz-Menendez, Luis	Spanish National Research Council (CSIC) / OECD Committee for Scientific and Technological Policy	Research Professor and Director of the Institute of public goods and policies
23	Prof.	Sivertsen, Gunnar	Nordic Institute for Studies in Innovation, Research and Education (NIFU)	Research Professor
24	Prof. Dr.	Soete, Luc	European Research and Innovation Area Board (ERIAB) / Maastricht University	Chair / Rector
25	Dr.	Sweeney, David	Higher Education Funding Council for England (HEFCE)	Director of Research, Innovation and Skills
26		Zacharewicz, Thomas	Joint Research Centre	

Annex 2: Programme

Time	Sessions
10.00 – 10.30	**Welcome and introduction** Welcome & tour de table • Philippe Martin, DG Research and Innovation, European Commission • Fabienne Gautier, Head of Unit (acting) "ERA policy and reform", DG Research and Innovation, European Commission
10.30 – 11.45	**Current state of affairs** ***Context and rationale of the FundSys study*** • Prof. Dr. Luc Soete, Chairman, European Research and Innovation Area Board (ERIAB) ***Results from the FundSys study*** • Leonique Korlaar, Dialogic (Netherlands) Discussion
11.45 – 12.00	*Coffee and tea break*
12.00 – 12.45	**Research funding and research performance: an overview** ***Performance-based funding*** • Gunnar Sivertsen, Nordic Institute for Studies in Innovation, Research and Education (NIFU) (Norway) Discussion
12.45 – 13.45	*Lunch break*
13.45 – 15.30	**Policy implications** ***Research funding policies: the case of the United Kingdom*** • David Sweeney, Higher Education Funding Council for England (HEFCE) (United Kingdom) ***Policy issues derived from the FundSys study*** • Pim den Hertog, Dialogic (Netherlands) Discussion
15.30 – 16.00	**Conclusions** ***Wrap-up*** • Prof. Dr. Luc Soete, Chairman of ERIAB ***Closure*** • Philippe Martin, European Commission, DG Research and Innovation
Moderation: Stefan Lilischkis, empirica, Bonn	