

Evolving public research systems: locating the roles and limits of evaluation

Philippe Larédo

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From peer reviewing ...

- You have discussed ‘peer reviewing’ – as a process to operationalise evaluation
- It has shown the multiple situations in which it is mobilised
 - ‘project selection’ in competitive allocation of public funds
 - recruitment & career progression
 - selection of publications in journals
 - reviewing activities of ‘research collectives’
 - reviewing activities of entire organisations
 - reviewing training curricula ...
- It takes place in very different decision-making processes
- It entails different sets of criteria, highlighting the variety of problems addressed and the corresponding varieties of excellence

... To evaluation systems 1



- Locating evaluation within the research system
- Take Lepori's simple model of funding flows with its 3+1 layers: Government level – funding agencies – performers (organisations and 'research collectives') – individual researchers
- Core funding = Government → performers (organisations)
- Project based funding = Funding agency → performers (individuals in research collectives)
- Drives to 2 layers of issues
 - issues of balance between core & competitive funding
 - issues of allocation within each component

Discussing the balance

- The first layer is a long lasting debate: it is already present in OECD Pigioli report in 1964!
Still we have yet no systematic data to compare countries today:
 - first experiment by PRIME network in 2006-7 (see SPP 2007)
 - experimentation on-going at OECD with unstable figures
- Lepori et al. showed very different levels between countries taken in the experimentation, very different trajectories also
- It also demonstrated (Theves et al) that different notions of 'resource allocation' could be considered in competitive allocation.
- In one word: the 'right balance' remains a purely 'political' not to say 'ideological' issue

The case of France to illustrate the difficulty of thinking of a right balance

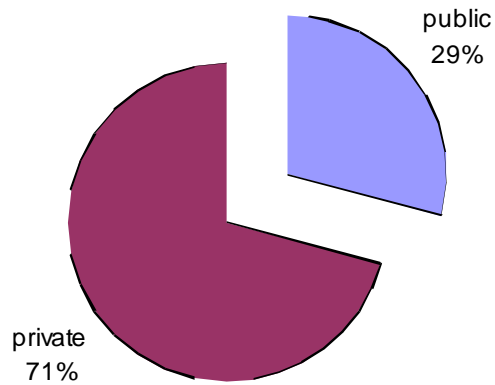
reference year 2002

	Volume total (Millions \$ PPA)
Austria	495
France	3459
Italy	2467
Netherlands	1029
Norway	529
Switzerland	464

The largest
volume, but...

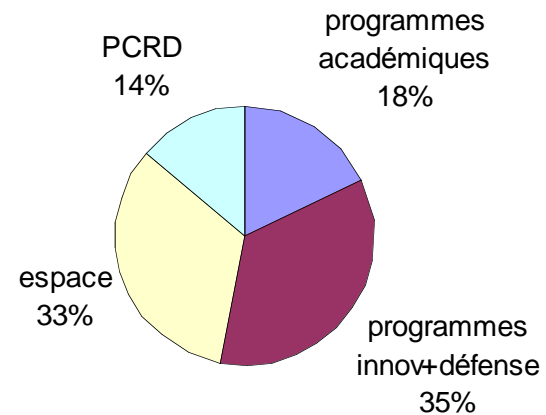
... the lowest
share

Share in total public funding
29
21
24
36
46
32



industry, main beneficiary
of projects (Defence /
Space / Innovation

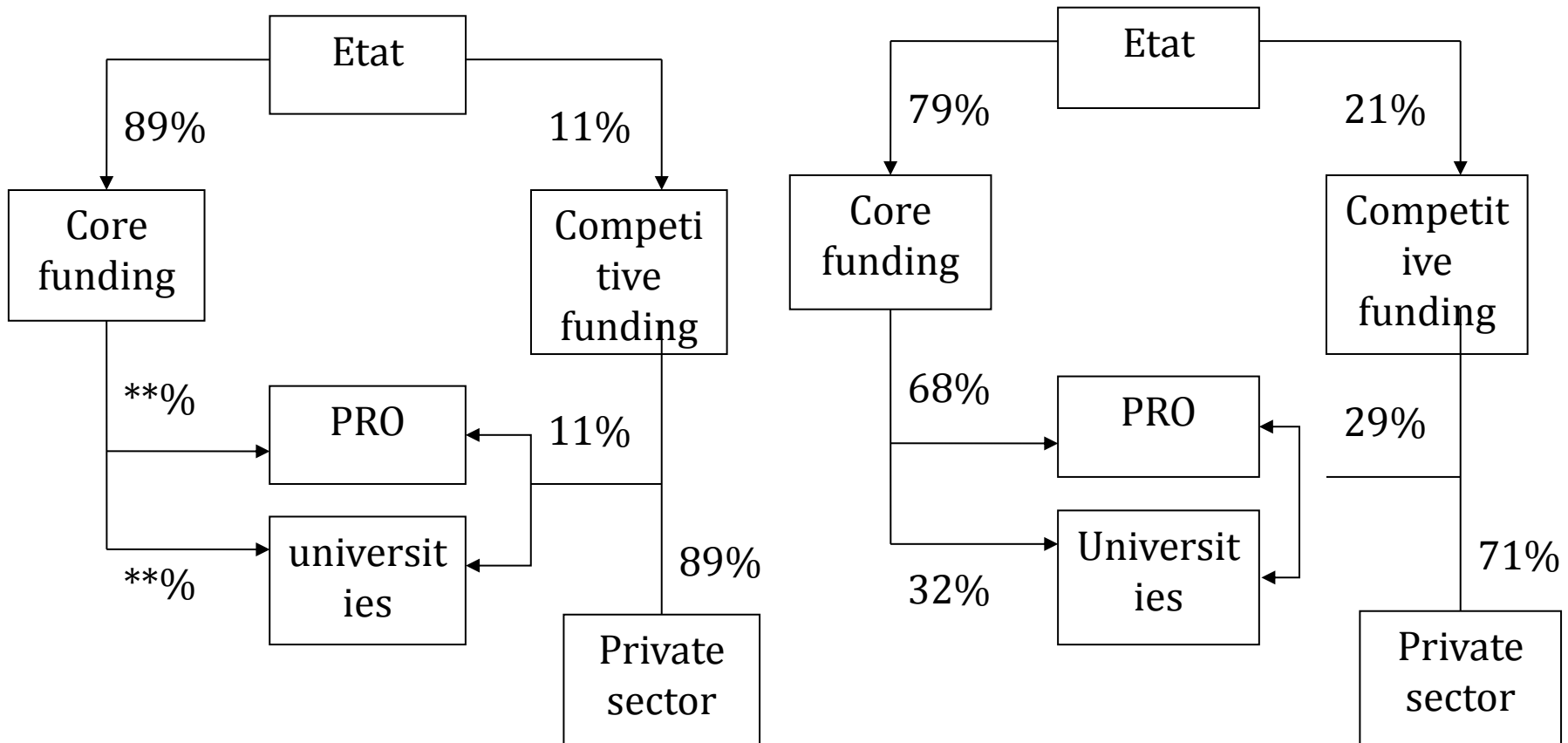
‘academic programmes’
only represent 18% of
project based funding...



Private R&D as main beneficiary...	
FR	71%
IT	55%
AU	42%
CH	20%
NO	7%

Share of academic programmes		Share of FP	
FR	18%	IT	11%
NE	22%	FR	14%
AU	24%	AU	16%
IT	24%	NE	16%
CH	42%	CH	16%

At the same time the growing share of project based funding over time



From 2002 to 2013



- The creation of a powerful funding agency taking over fragmented processes, and becoming the core of French project based funding
- The systematic choice of incentives to nurture behavioural changes
 - new law for voluntary amalgamation of universities to build 'critical size' (PRES, EPCS)
 - numerous 'excellence type' initiatives with the RTRA, the plan campus and the 'programme d'investissements d'avenir' (PAI, 20 billion for university research)
- Thus the present estimates of approximately a 65-35 balance

But are we so sure of the result?

- Are we sure that the only form of resource allocation to performers at the bottom is money?
- What about a model whereby, there are two modes of competitive allocation of resources to performers
 - money through agencies: DfG in Germany, ANR now in France
 - Human resources through 'new types of PRO': Helmholtz in Germany (see KIT), CNRS in France with 'joint research units' in universities?

But are we so sure of the result - 2



- The selection and life cycle of such units is done in competition on the basis of an evaluation process that corresponds to all criteria of 'project based funding'
- We decided to do a careful exercise (Theve 2007) testing the effects of such an hypothesis
- The results are instructive: the level of competitive funding moves to 31%, equivalent to Switzerland or Austria
- Similarly public research becomes the first beneficiary (with 53%) – Austria 42%, Italy 55%

Discussing evaluation system



- Following the Lepori model, focus on allocation mechanisms
- Three classical complementary processes to consider
 - for the allocation of core funding to performing organisations
 - for the selection of projects
 - for the recruitment and career of researchers
- And a fourth one for those countries with 'mixt' or 'joint' research collectives linked to their selection and life cycle
- For each, specific institutional arrangements based upon:
 - delegation / subsidiarity / autonomy : who operates what?
 - systematisation and periodicity: evaluation vs reporting
 - mode : which balance between ranking (eg publications & their citations) and role (eg position in the research field & research directions)
 - focus: academic excellence or 'research compass card' eg importance of industry-university relations, role in innovation in public goods, involvement in public debates

Evaluation system – Governance in practice



- Focus on the example of France (reshaped in 2006)
- Evaluation of researchers is delegated to employing institutions (well established in PRO, less clear yet for universities)
- Evaluation of ‘research collectives’ and ‘teaching curricula’ as well as evaluation of organisations (PRO & universities) are delegated to one independent agency, AERES
- The 3 types are coordinated to be available for the negotiation every 5 years of the ‘multiannual contract’ signed between the Government and each organisation

Governance in practice 2



- AERES process
 - 3 different structures for curricula, labs and organisations
 - similar process: self evaluation report and project by evaluated body / expert panel and site visit / report finalised by AERES / answer by evaluated body / publication of both on the website of the agency
 - for labs: 5 dimensions considered (each with 5 potential grades) and up to recently an overall grade.
- No delegation – though the law offered the possibility of accrediting organisations (and their evaluation system)
 - eg CNRS lost its role in evaluating research collectives
- One fifth of the system evaluated each year...

Learning from experience



- Building an agency has been powerful: AERES has been able to deliver ... (including driving the Government to move from 4 year to 5 year contracts in order for the process to be manageable)
- AERES inherited from 2 different evaluation structures: for universities (CNE) and for research operators (CNER)
- The former was based on a very standardised process, while the latter took into consideration the very specific nature of each PRO
- Merging them has driven to a systematisation of one process, with a heavily discussed choice made by AERES: no delegation, thus no accreditation of organisations to conduct their own process (when organised for that)
- Is this the cause of the heated discussions on ANR during the recent 'assises de la recherche'?

Some further consideration



- Debates are not only institutional, they also/mainly focus on some aspects – too often taken for granted
- Evaluation is an issue of positioning and measuring
 - 2 approaches to positioning: ranking vs professional recognition
 - The choice of what is measured: the reasons to select patents as an indicator might be very different
 - how it is measured is critical: eg publications: what is better to map scientific use (numbers, impact factor, H Index or citations)
- EU has discussed subsidiarity at length, the university debate highlights the importance for universities of having capacities to be strategic ... however most evaluation systems ignore universities and only focus on sub-units ('so called 'assessment units'): would you ever consider this when looking at firms?

And a final consideration

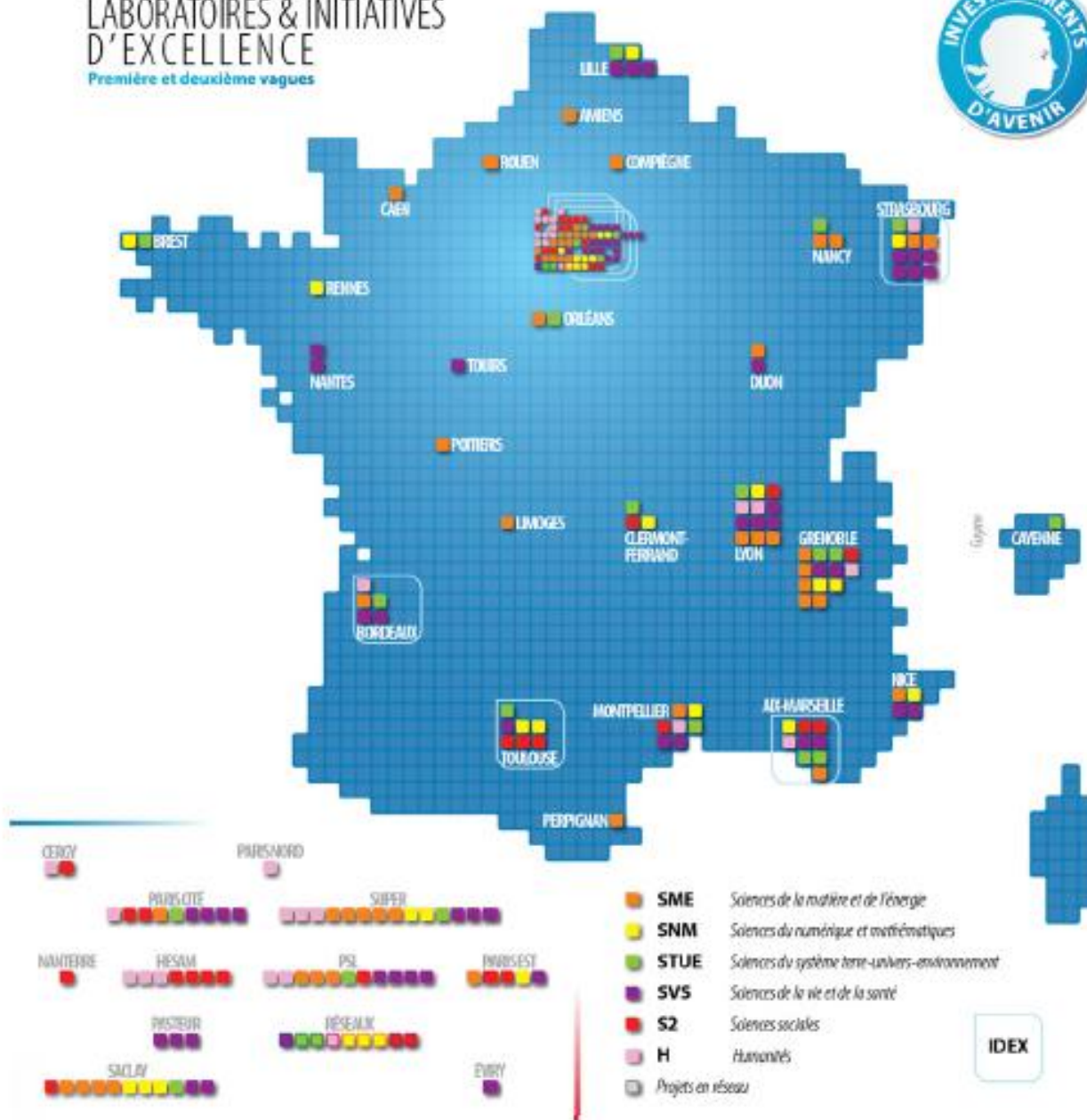


- The background document explicitly discusses overconcentration linked to excellence initiatives
- The issue depends on the ways in which ‘excellence’ is considered and how a balance is established between:
 - organisations as a whole
 - and ‘basic units of production in research’, what I call ‘research collectives’
- See the results of the recent French PAI
 - all allocation in competition based upon selection by international juries only
 - 7 billion to 8 universities of excellence
 - 2 billion to 180 ‘labs of excellence’

ILLUSTRATION 28 : CARTE DES LABORATOIRES D'EXCELLENCE

LABORATOIRES & INITIATIVES D'EXCELLENCE

Première et deuxième vagues



IDEX

A last note:

a reference from the Manchester institute of innovation research

A compendium of what we know (from evaluations worldwide) on research and innovation policy instruments and mixes

www.innovation-policy.net