Tension between researchers' reputation driven metrics and the R&I policy goals. The role of funding

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The RIO Country Report 2015 is now available

The annual RIO Country Report analyses and assesses the development and performance of the national research and innovation system and related policies. The report also assesses the match between national policy priorities and the structural challenges of the research and innovation system.
Governance of science

Funding (resources) as a lever of governance over individual researchers and research communities

- prioritisation of research topics
- modes of funding allocation
  funding based on output assessments

Case of performance-based funding (funding but with prestige premium)
you will get what you measure

Gaming & Goal displacement
(Jiménez-Contreras et al., 2003)
Tension between certain policy goals and scientific prestige?

- Excellence/Quality
- Broader socio-economic impact
- Open science/open innovation – sharing
- Collaboration with business
- Interdisciplinarity
- Equity
- Gender mainstreaming
Researchers: Reputation

*Pellets of peer recognition: citations*

transmission and enlargement of knowledge. Instrumentally, it tells us of work we may not have known before, some of which may hold further interest for us; symbolically, it registers in the enduring archives the intellectual property of the acknowledged source by providing a pellet of peer recognition of the knowledge claim, accepted or expressly rejected, that was made in that source.

Merton, 1988

Which facet of academic activity to measure?: teaching, policy advice, entrepreneurship, advocacy, community outreach, managerial work and academic duties (incl. peer review, mentoring etc.)
How to measure impact?

Broader socio-economic impact: training high skilled employees (teaching is important); commercialisation; attracting private R&D investment; creating new products and services (public, private, non-profit); standards, wellbeing

Qualitative indicators of research impact, such as influence on policy and practice
Measuring socio-economic impact

- Important, but very difficult
- Peer review of case studies or metrics
- How solid are the case studies – danger of "fairy tales"
- When to measure the impact? Immediate over the important
- Stakeholders will favour / challenge the inclusion depending on their role/interest
Alternative metrics: measuring online impact?

Moving from **authorship to contribution**

peer-reviewer, teacher, micro-contributor, science disseminator (e.g. Wikipedia), open science advocacy, science advocacy (grey literature citation or grey literature authorship)

- teaching is not included (separate tools)
- tracking only online impact (restricted target group)
Alternative metrics: complex reputation-based metrics

IMPACT STORY
Alternative metrics: Multidimensional, immediate and multiform

Does it help the governance?
- Fast
- Open to all disadvantages of social media users sample
  *Academics often talk to academics (also on Twitter)*
- Measuring contributions instead of authorship
- Measuring (some) engagement with the public
- Useful in measuring the locally relevant research?
- Sugimoto (2016) showed empirically that most altmetric measures still do not measure much societal impact if understood broader than outreach
If the indicator is available it doesn't mean it will fit
So often criticised scientific disclosure system in a scientific journal created by the exigency of noble patronage rather than needs of science still has the advantage of stability

(David, 2004)
https://rio.jrc.ec.europa.eu/