2023 Research report summary

Competition and Control in Government Research Funding

Roger Svensson

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Summary

In this report, two issues linked to government research funding are analyzed. Firstly, the advantages and disadvantages of allocating the government research budget as unconditional block grants to the higher education institutions (HEIs) or different forms of competitive funding are examined. The latter can either take the form of third-party funding (TPF) via research councils/authorities or direct appropriations that are conditional on performance, i.e., performance-based research funding systems (PRFS). Secondly, the advantages and disadvantages of allocating TPF via research councils as open or targeted calls are discussed. In open calls, applicant researchers themselves propose research projects to be carried out within the scope of the financier's activities, while the financier specifies specific conditions that must be met in order for funding to be awarded in targeted calls.

The starting point for analyzing these questions has been the theoretical and empirical research literature in economics on the characteristics of technology/knowledge and the role of universities in society. Based on this theory, it is market failures (spillovers and incomplete capital markets), positive external effects in the form of increased absorptive capacity of spillovers from others and synergy effects between research and higher education that motivate government funding of research and development (R&D). Politicians should keep such market failures and spillover effects in mind when the research policy goals are formulated. This has rarely been the case in the research bills. The theoretical arguments are then applied in the report to the actual development of the Swedish government R&D budget.

There are three different types of providers of government R&D

funding: universities, public research institutes and companies in the business sector. In Sweden, during the last 80 years, governments have chosen to create strong universities that carry out public research. The universities are considerably more autonomous than public research institutes; the former produce knowledge that is disseminated freely in mainly international journals, while the latter are commissioned by the government to carry out R&D, where the government can decide what to research and how the results are disseminated. Special focus in the report has been on the role of universities, as these receive approximately 75 percent of the government's research funds either directly or indirectly. The universities create two main positive external effects for society: they produce research results that are freely disseminated, and they train students and researchers who can work in all sectors of society.

How large a proportion of the state's R&D budget should be allocated as block grants to HEIs and TPFs through research councils is an open question, but the allocation seems fairly balanced in the Swedish case in comparison to other OECD countries. Sweden is also in the middle tier internationally when it comes to how much of the universities' R&D budget is made up of block grants.

There are advantages and disadvantages to both unconditional block grants and TPF via councils/authorities. Block grants favor long-term research projects, provide lower costs for both researchers (applications) and for the government (calls and evaluations) and create less uncertainty for the universities about funding. TPF creates more cost-effective research groups, provides incentives to perform high-quality research at individual and group level, and gives the government a measure of what the research groups produce. A disadvantage is that continuous evaluations provide incentives for the division of research results into many publications, so-called 'salami production'. The report concludes that a decisive argument for competitive financing is that it provides greater flexibility in the system as a whole. It is easier to redistribute resources between projects than between universities.

Funding via councils and authorities, however, provides limited incentives for making entire HEIs and faculties more efficient. Sweden should therefore resume PRFSs with an indicator-based model, where the allocation of block grants is based on publications, citations, and

the ability to attract external funds. Such a model can be implemented at low costs and avoids the problems of subjectivity and high costs that Peer Review models suffer from. PRFSs provide incentives for the HEIs to introduce their own productivity models for faculties and departments when the block grants must be allocated internally. Seeing as PRFSs are rarely applied since 2016, an important policy instrument for providing incentives for the HEIs to introduce productivity models has been removed. Sweden differs from most other countries in the OECD on this point. Finally, it is important that the responsibility for a model of PRFSs should lie with an authority that is not responsible for other research funding. This is because various forms of conflicts of interest should be avoided.

An important observation is that the research councils have received an increasing share of the government R&D budget in the last 20 years. Statistics also show that an increasing proportion of TPF via research councils is allocated through targeted calls. This has been carried out despite the fact that the research bills did not investigate the advantages and disadvantages of targeted and open calls. The report points to important disadvantages of targeted calls: they limit competition, are more costly than open calls, and can jeopardize the creativity of research and the autonomy of HEIs from the government.

One reason why targeted calls are increasing is probably political. After the 'Autonomy reform' was introduced in 2011, the government could no longer influence the distribution of the block grants between different faculties at the respective university. By introducing various strategic and national research programs that are allocated via the research councils, the government can compensate for this and increase the governance of the universities' research. In particular, the social democratic governments (2014–2022) have allocated more funds to strategic and national research programs, which are awarded through targeted calls. This also explains why funds are increasingly allocated as TPF via the councils. The research bills contain extensive text about strategic research areas, but basically nothing about that TPF increases the flexibility of the whole funding system.

More funding distributed via targeted calls may also depend on how the research bill is developed. The research councils are tasked by the government with preparing the basis for the research bill and proposing guidelines for future research policy. Theoretically, these councils

have incentives to propose strategical research programs distributed via targeted calls in order to maximize allocation of funding to themselves. An empirical investigation of the councils' reports indicates that this is also the case.

One of the current report's recommendations is that authorities that are research financiers should not be tasked with proposing the future direction of research policy, in order to avoid conflicts of interest arising. Such analysis should instead be carried out by agents who are not recipients of funding from the research budget in the first or second tier, for example authorities who are not research financiers, former Swedish researchers, or active foreign researchers with knowledge of research policy.

Increased control of research is also an inconsistent strategy considering that for 80 years Sweden has chosen to focus on publicly performed R&D at autonomous universities instead of at public research institutes, which are easier to monitor.

About the author

Roger Svensson, associate professor and senior research fellow of economics at the Research Institute of Industrial Economics (IFN).