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Hallonsten, Olof; Silander, Charlotte

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LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Commissioning the University of Excellence: Swedish research policy and new public research funding programmes

Olof Hallonsten
University of Gothenburg / Lund University

Charlotte Silander
Linnaeus University

Abstract

In many countries, current research policy is dominated by managerialism and excellence, manifesting the aim of making universities into national strategic assets in the globally competitive knowledge economy. This paper discusses these policy trends and their mirror in recent developments in public funding for academic research, with special attention to Sweden. A review of the language in three consecutive Swedish governmental research bills from the past ten years shows a clear policy shift towards the promotion of excellence and strategic priority on the level of higher education institutions. Reforms to the funding system, especially the launch of specific strategic excellence funding programmes, are introduced to put the policy in practice. While the policy shift itself might be discursive, the changes to the funding system clearly show a determination on behalf of the Swedish government to increase strategic profiling and the pursuit of excellence in research on behalf of universities.

Keywords: funding, policy, excellence, managerialism, universities, Sweden, quality, higher education

Introduction

The past few decades have seen profound change in the governance of academic research. Power relations and priorities have been altered, to meet new demands emerging from general tightening of budgets, structural economic change and increased expectations from society. The ambition to strengthen the steering and management of higher education and research has taken firm hold on academic systems (Enders *et al.*, 2009; Amaral *et al.*, 2003; Schimank, 2005) and the excellence ideal has elevated productivity and impact assessment, often by standardised measures (publications and citations), to a central component of science policy and governance (Hellström, 2011; Hicks, 2012).

Public science funding systems are prime arenas for science policymaking and mirror trends in political ambitions in the realm of public science. This article builds on this relationship and connects the recent years' implementation of new governmental funding programmes in Sweden with apparent policy drifts towards managerialism and excellence ideals. On basis of an acknowledgement that this drift is international, the article analyses its manifestation in Sweden as expressed in three consecutive governmental research bills. Special focus lies on the launch in these bills of new governmental funding programmes aimed at promoting excellence in research and strengthening institutional steering and management. The article deals specifically with the research mission of the Swedish university sector and governmental research policy. An inclusive analysis of the effects of excellence programmes on the system as a whole, also accounting for the education side, would certainly be both a

logical, given the strong Humboldtian institutional and professional amalgamation of research and education in the Swedish university system, and desirable contribution of the study to the field of higher education studies. However, the delimitation is motivated by pragmatic choice: the education mission of the Swedish university system is large and complex enough, both as professional activity and as an area of national policy, to warrant separate studies.

Thus focusing on the research side of academia in Sweden, the central argument of this article is that the combination of excellence and managerialism trends in academic governance and science policy has given birth to funding schemes that in essence constitute an attempt on behalf of government to commission excellent and competitive research and research institutions. This argument is based on the review of literature on international developments in science policy and governance and the analysis of recent Swedish governmental policy. The contribution of the article is twofold: it adds to the understanding of major structural changes in the academic sector and the role of novel funding programmes in such change and to take initial steps towards a future effort on researching the implementation of new funding schemes as part of the international study of change in the governance of academic science.

Managerialism and excellence in research policy and public research funding

The renewed debate over the governance of higher education and academic research, emerging in the 1990s, was fuelled both by demands of social and economic relevance and a scholarly wave of reconceptualisation of the science-society relationship (for example, the concepts ‘triple helix’ and ‘systems of innovation’). The new approaches asserted that knowledge production at universities cannot and should not be separated from its social contexts but rather actively steered in the direction of broadened social and economic relevance. The ‘knowledge society’ *leitmotif* for economic development and the soaring costs of knowledge production in both public and private sectors has persuaded policymakers on broad front that (academic) science is all too strategically important ‘to be left to scientific élites to manage’ (Whitley 2007, p. 3).

It is, therefore, consequential that the science policy doctrine of the 1990s and 2000s emphasised resource tightening, competition, accountability and a sharper focus on social relevance and commercialisation. The academic sector, turned into a major component of (national) innovation systems by mid-20th century ‘massification’ (Scott, 1998; Geuna, 1998), was given a key role in securing national competitiveness and innovation capacity (Oliveira, 2000; Jacob, 2001). Academic institutions were given a kind of market niche of organising excellent research environments in order to produce and diffuse relevant (and measurable) pieces of knowledge and thus make tangible contributions to society and the economy. Excellence is then understood as a policy-tailored adaptation of the eternally contested concept of quality, that is, an evaluative concept rather than a generally desirable ideal for scientific research (Hellström, 2011).

Although considerable criticism has been targeted towards the very concepts excellence and relevance (Readings, 1996; Hessels *et al.*, 2009) as well as attempts to implement and operationalise them (Lamont, 2009; Abramo *et al.*, 2009; Weingart & Maasen, 2007), they appear favourable for policymakers and managers as a way of legitimizing research expenditure as well as a rough map to guide priorities (Zulu *et al.*, 2004; Blackmur, 2010). Similarly, though strategic management has been attacked for its lack of commensurability with academic values proven both functional and just, as well as for being counterproductive when implemented (Schimank, 2005; Deem *et al.*, 2007; Schneider & Sadowski, 2010), its function as a natural institutional response to relevance pressure appears to continue to feed it with legitimacy. Clear is that the excellence and relevance ideals and the managerialism

approach to governance have affected academia profoundly and signify the arrival of a new research policy régime (Elzinga, 2012).

Research policy and governance first emerged as a public policy area in the aftermath of World War II, at a time when a general optimism towards science and technology characterised industrialised societies. Science and technology were expected to promote the development of welfare as well as economic growth and were cornerstones in the project of modernity. An increased public investment in science was comparably easily justified. Social turmoil and economic crises in the late 1960s and on shifted public opinion and not least policymakers' views on science and technology. Increased regulation, to minimise harmful effects of scientific and technological exploitation of nature (and humanity) and not least to ensure more swift return for investment, started to characterise research policy and governance. In the 1980s and 1990s, when austerity in national science budgets continued and ambitions increased to strategically steer science and technology, the first steps were taken towards a research policy designed to promote economic competitiveness. In a reflection over the long-term development, Elzinga (2012) contended that contemporary research and innovation policy has been mainstreamed and subordinated to the same logic as other policy areas and that this represented a clear break with history, as research policy previously was afforded a special status due to the special character of the relationship between science, technology and society.

Funding systems for public science have developed according to patterns that largely mirror the outlined policy cycles. Throughout the post-war period, there has been a gradual but significant transfer of public funding for academic research from general university funds (henceforth synonymous with institutional block grants and first stream funding), to funding schemes that are competitive or steered towards particular disciplines, sectors or problem areas. While the former are typically allocated to faculties, departments and chairs primarily on basis of historical trajectories, the latter consist mostly of discrete project grants administered by national research councils and distributed on basis of peer review, or larger directed grants administered by governmental agencies with sectoral responsibilities (Geuna, 2001, p. 610; Jongbloed & Vossensteyn, 2001, p. 128). The trends of increased steering and competition reflect the outlined policy developments and are supposed to bring increased quality, relevance and accountability (Clancy & Dill, 2009).

In recent years, new funding models have emerged that depart from tradition in the name of strategic choice and quality enhancement. Four general principles appear to guide the design and implementation of these models:

1. Research areas should be strategically chosen, preferably on basis of the needs of society and hence by actors external to science, or by organised scientific societies (research councils) with guidance from policymakers.
2. There are fairly simple metrics that indicate 'excellence' and by which performance and eligibility for funds can be measured.
3. Institutions, centres and groups that carry out research shall be managed in order to counter the inertia of conservative university structures, sustain appropriate competitiveness and thus claim a leading performer role in the innovation system.
4. Concentration of funding not only improves efficiency (and hence, conceivably, reduces costs) but also generates synergistic effects that dramatically increase output.

The policies can be summarised as a contractual-oriented approach to university funding that mark a departure from both general university funds and competitive funding schemes (although it contains elements of both). Evidently, it seeks to translate the combined ideals of excellence and managerialism in practical policy.

Research policy and public research funding in Sweden

Sweden is no exception to the global trends outlined but rather a case in point. In the past decades, consecutive Swedish governments, regardless of political orientation, have argued that the profound impact on the Swedish economy and society from economic globalisation is forcing the Swedish public higher education and research system to increase its competitiveness, which in turn necessitates strategic profiling and concentration of resources. Most obviously, the three most recent research bills (since 1977, these are issued roughly every three years) have, albeit with varying perseverance, criticised the existing funding system for lack of focus and long-term perspective in research funding and argued for increased concentration and strategic profiling (Government bill 2000; Government bill 2004; Government bill 2008). Here, it should be mentioned that education and research, despite being institutionally and professionally integrated in the academic system in Sweden, are two rather distinct policy areas on national level. Sweden has never had a Ministry of Science: and while governmental research policy has been mostly the responsibility of the Ministry for Education, other ministries have also been charged with tasks associated with research policy and the area as a whole has also occasionally been under the supervision of the Office of the Prime Minister (Premfors, 1986, p. 12–23; Engwall & Nybom, 2007). The Ministry of Education has, on the other hand, remained throughout the decades and organised the policy of the whole education system, from pre-school to advanced university level. This policy area has, hence, been integrated as such and *de facto* kept separate from the cycles of science policy that have followed other logics, mirroring international developments outlined in the previous section (Elzinga, 1993; Kim, 2001).

Although much of the rhetoric in the governmental research bills merely mirrors international fashions, the claims have been somewhat confirmed by studies that argue that Swedish research policy lacks coordination and mechanisms for prioritisation and mobilisation in specific areas (Benner, 2008, p. 222, 391). Like most European countries, the Swedish public science funding system relies on a dual mix of institutional block grants and competitive funding schemes. However, the performer side of the public research system is almost completely dominated by the universities (Marton, 2009, p. 36). Institutional block grant funding has historically been distributed at parliament level between broad areas of research, based mainly on historical patterns and channelled directly to the corresponding university faculties. This procedure has meant that university boards, vice-chancellors and central management generally have been dissociated from the chief resource allocation process within their own institutions (Premfors, 1986; Benner, 2008).

As in most comparable countries, competitive funding schemes have gradually gained weight at the expense of the institutional block grants (Engwall & Nybom, 2007). In 2011, the governmental budget for research and development (R&D) was 28.9 billion SEK, divided on 14.1 billion to the academic sector and 7.8 billion to the research councils and other R&D-funding governmental agencies (Statistics Sweden, 2012). The average ratio between block grants and external funding for research in Swedish universities and university colleges was 52.5% block grants and 47.5% external (Swedish National Agency for Higher Education, 2012). Given that most competitive funding consists of project grants negotiated at the level of individual researchers, an increased share of external grants in university research budgets rather impedes the ability for institutions to make strategic priorities and mobilise resources at central level.

Hence, in spite of this structural change to the funding system, the research policy system still lacks mechanisms for strategic mobilisation and prioritisation. In the recent decade, however, a cohesive trend in the governmental research policy has been the introduction of policies aiming for increased steering, resource concentration, strategic choice and performance assessment schemes (Marton, 2009; Benner & Sörlin, 2007; Benner, 2008).

Changes to the funding system has been a key component in this policy shift and the introduction of special grants for generous sponsoring of strong environments and excellent individuals has allegedly become a ‘corner stone’ in Swedish research policy (Sandström *et al.* 2010, p. 99). In the analysis presented in the next section, we have therefore chosen to focus on how funding schemes for excellence and strong research environments have been presented and motivated in the three consecutive governmental research bills of the past ten years.

Excellence and strategic mobilisation in Sweden

A first major step towards practical enactment of the contemporaneous excellence policy *leitmotif* in Swedish research policy was taken in the governmental research bill of 2000–01, entitled *Research and Regeneration (Forskning och Förnyelse)*. In the introduction, this bill stated that an important principle for the governmental research policy of the coming years was to be the recognised urgent need to produce better conditions for the mobilisation of strategic research in the Swedish academic system: ‘Sweden needs to become better in making priorities in important research areas’ (Government bill, 2000–01, p. 1, 12).

The actual reforms to the funding system were, at this point, limited to a slight increase of the competitive project grants’ share of public R&D funding, which signalled greater emphasis on peer review partly at the expense of the path dependent block grants (Government bill, 2000–01, p. 15). Otherwise, the focus for the mobilisation and profiling policies was on suggesting actions to the funding agencies and the performing actors, the councils and the universities were instructed to take strategic priorities and profiling more seriously. A year earlier, a thorough reorganisation of the public funding system had been implemented by the merger of four research councils (the *Humanities and Social Sciences Research Council*, the *Medical Sciences Research Council*, the *Natural Sciences Research Council* and the *Technical Sciences Research Council*) and the *National Council for Planning and Coordination of Research* into the larger, broad-encompassing Swedish Research Council and the forming of a separate innovation agency, the Swedish Agency for Innovation Systems. The 2000–01 research bill stated clearly that this reorganisation was a tool in the work towards strategic priority and mobilisation, instructing these new-born and reborn research funding agencies ‘to facilitate strategic efforts in important areas’ and ‘identify and initiate new research orientations’ (Government bill 2000–01, p. 45). Apparently, the government expected its reorganisation of the funding system to be enough, at least for the time being, to create the consolidation and profiling it sought. The research council and the innovation agency received substantial funding for separate efforts in a number of specifically pointed-out areas (*educational sciences, art, gender research, materials science and technology, biotechnology and biosciences, information technology, health care sciences, environment and sustainable development* and a number of smaller areas within the humanities) but for the most part, the bill relied on the formulation of ambitions and general instructions: the government ‘expects’ efforts on behalf of the council and the agencies ‘should ... be able to’ commence certain initiatives and ‘should try the possibility’ of supporting centres of excellence across the academic landscape (Government bill 2000–01, p. 45–47).

The next governmental research bill, launched in 2004 and entitled *Research for a Better Life* put ideas into practice by instructing funding agencies to launch specific programmes and earmarking money for the purpose. Declaring the government’s determination to ensure support for Swedish research of high international standard, the bill launched a new type of long-term funding programmes (Government bill 2004–05, p. 88–98). These would be aimed at strengthening a selected number of existing research environments as well as creating mechanisms for mobilisation and prioritisation. The execution of the policy, including

choosing the recipients, distributing the money and eventually evaluating the programme, was delegated to existing funding bodies.

The bill stipulated that a total sum of 300 million SEK was to be allocated to the Swedish Research Council (210 million SEK), the Swedish Research Council for Working Life and Social Research (10 million SEK), The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (20 million SEK) and the Swedish Agency for Innovation Systems (60 million SEK) in the period of 2006–2008 (Government bill 2004–05, p. 88). In addition, almost a billion SEK was made available to the research councils specifically to support prioritised areas within medicine, technical sciences and sustainable development research (Government bill 2004–05, p. 14). The bill was clear in its aims. In order to meet rapidly changing challenges from ‘society and the world’ (Government bill 2004–05, p. 10), Swedish science was to be given the means to compete better internationally (Government bill 2004–05, p. 80). By inspiration from similar funding programmes abroad, Sweden was to identify and support ‘centres of excellence’ that would help in strengthening the international position of the Swedish knowledge economy (Government bill 2004–05, p. 89). Strategic profiling on the level of academic institutions was a key ingredient and a fundamental principle for the scheme the research environments eligible for support would be ‘located at defined universities and not organised as national networks’. Furthermore, they would have to rely on substantial additional support from their host institutions, financially as well as in strategic planning and priorities (Government bill 2004–05, p. 10, 95–96).

The policy was largely based on a 2004 investigation by the vice-chancellor of Linköping University (Bertil Andersson) entitled *Financing of Strong Research Environments – an international outlook*, in which the author concluded that the funding programmes for such strong research environments internationally tend to follow the ‘triple ten rule’: They consume ten per cent of a country’s research council money, each research environment is funded with approximately 10 million SEK yearly and the funding continues for ten years (Swedish Government, 2004, p. 35). Several of the specific funding programmes commenced on instruction from the 2004 governmental research bill followed this rule. They were the so-called ‘Linnaeus Grants’ of 5 to 10 million SEK annually for ten years administered by the Swedish Research Council and the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning; the ‘Vinn Excellence Centers’ of seven million SEK annually for ten years administered by the Swedish Agency for Innovation Systems; the ‘Berzelii Centers’ of ten million SEK annually for ten years administered by the Swedish Agency for Innovation Systems and the Swedish Research Council and the ‘Institute Excellence Centers’ of 6 million SEK annually for six years, administered by the Swedish Agency for Innovation Systems together with two public research foundations. In total, almost a hundred grants of this type were distributed to groups at Swedish universities (Holmberg, 2012, p. 139). The programmes varied in their character, not least with respect to demands of industrial collaboration and disciplinary areas but all shared the features stipulated in the 2004 research bill: they would promote excellence by funding existing strong environments and they would enable and influence the universities to make strategic priorities by requiring their co-funding to the chosen research environments as well as statements of priority within the institutions.

The Linnaeus Grants, the Vinn Excellence Centers, the Berzelii Centers and the Institute Excellence Centers were all issued in open competition; the government had issued no other instructions than the quality criterion and the importance of strategic profiling within universities. In the 2008–09 research bill, entitled *Enhancing Research and Innovation*, prioritisation and concentration of resources was taken yet one step further by the direct involvement of the government in deciding areas of priority for the Swedish research system as a whole, that would receive new strategic funding. The bill referred to an ‘on-going discussion in the science world’ about limited resources and need for governance and

strategic focus: ‘In many countries strategic research investments are discussed where certain areas are identified and to which money should be allocated’ (Government bill 2008–09, p. 20).

Following the trajectory of the previous two research bills, the 2008–09 bill directed serious criticism towards the Swedish public science funding system for lack of a long-term perspective in funding, lack of coordination and strategy, weaknesses in interdisciplinary research and commercialisation activities and the allegation that large shares of funding for research were distributed on basis of other criteria than quality (Government bill 2008–09, p. 19). The government pointed at the institutional block grants as part of the problem; these were said to inhibit risk taking and prevented long-term strategy, causing a lack of priorities and inability to make strategic decisions within the universities (Government bill 2008–09, p. 68). A vision of a more internationally competitive Swedish research and development system was spelled out in the bill and the realisation of this vision was said to demand a new effort to create focus and specialisation in areas judged to be strategically important to society and not least the economy (Government bill 2008–09, p. 24). Again, a need for universities to profile themselves and prioritise internally was highlighted as a key component in the competitiveness renewal of the research and development system. The new funding scheme launched as a component solution to the situation was the *Strategic Research Areas*: funding to a handful of research environments across the country shown to conduct especially high-quality research in a number of predefined areas. In addition, the government launched a renewed system for the allocation of block-grant research funding to the universities and university colleges, based on the ‘quality measures’ publications, citations and ability to attract external funding. The goal of the new system was, as explained in the bill, to ‘signal clearly to the universities that they should work more actively with quality of research and develop more successful research environments.’ The resource allocation system would ‘stimulate universities to identify research environments through which they can achieve a competitive advantage’, which means strategic profiling on the level of the institutions: it would also make a larger share of the block-grant funding available for internal priorities by central authority at the universities (Government bill 2008–09, p. 23).

The *Strategic Research Areas* chosen to receive special support been selected in a careful bottom-up process involving all universities and university colleges, several governmental agencies (including the research councils and the innovation systems agency), as well as business organisations and large industrial companies (Government bill 2008–09, p. 25). Twenty areas were chosen (see table 1). The eventual call was issued in early 2009 as a joint effort by the Swedish Research Council, the Swedish Research Council for Working Life and Social Research, the Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning, the Swedish Agency for Innovation Systems and the Swedish Energy Agency. The dual purpose of providing especially strong research environments with substantial funding and create an impetus for strategic profiling and resource mobilisation in the research system and especially within the universities was made clear and translated into a direct ‘mission’ to the universities that eventually would be hosting the Strategic Research Area grants:

The increase in funds received by a HEI is coupled with a mission that the institution will develop research in the strategic research area that is of the highest international standard. The mission should be clearly profiled and able to be developed from work that is already in progress. It should be possible for the strategic research area to become one of the most important profiles of the HEI. (Swedish Research Council 2009, p. 2).

Not only does this clearly mean that the funding comes with demands on universities of funding *quid pro quo*, it also elevates the role of central university management and vice-chancellors in long-term planning of research efforts. This had been a component of the Linnaeus Grants and their sibling programmes of 2005–2008 but was now taken one step further, making the contractual relation between government and university vice-chancellor increasingly important in the planning of research activities, partly at the expense of the traditional nexus of peer review and skills and ambitions of individual researchers.

In the end, 112 applications from 20 Swedish universities and university colleges were submitted. 43 research environments at eleven universities (see table 2) were chosen to become the ‘recommendation’ to the government, which took the formal decisions to commence funding to these research environments. In total, the Strategic Research Areas programme allocated 5.27 billion SEK to the twenty areas in a period of five years. Yearly funding per research environment averaged on 24.5 million SEK and ranged from 7.6 to 101.5 million SEK. The average amount spent on each area was 263.5 million SEK over five years.

Table 1: Strategic research areas identified in Government bill 2008–09, and earmarked funding for these

Area	funding (million SEK)
cancer	135
materials science, including functional materials	125
care sciences	115
climate models	60
molecular biosciences	370
diabetes	135
nanoscience and nanotechnology	155
effects on natural resources, ecosystem services and biodiversity	110
neurosciences, including diseases of the brain and nervous system	135
energy	310
politically important geographic regions	65
epidemiology	55
security and emergency management	40
eScience	135
stem cells and regenerative medicine	125
IT and mobile communication	180
sustainable use of natural resources	100
manufacturing engineering	110
transport research	155
marine environment	45
total	2660

Source: Government bill 2008–09, p. 73–113

Table 2: Strategic Research Areas grants as finally distributed among Swedish universities

University	Number of grants	Total funding (million SEK)
Lund University	9	714,8
Uppsala University	7	502,7
Karolinska Institute	6	630,8
Chalmers University of Technology	5	701,1
Royal Institute of Technology	5	578,7
Stockholm University	3	358,9
Linköping university	3	252,5
Umeå University	2	225,7
University of Gothenburg	1	179,7
Luleå University of Technology	1	168,8
Swedish University of Agricultural Sciences	1	143

Source: Statistics Sweden 2012.

Conclusions

In three consecutive research bills from 2000, it has been the habit of the Swedish government to criticise the structure of the existing research funding system and launch policies to correct its faults, all for the sake of meeting the challenges of globalisation and hardened international competition in knowledge production and innovation. The practical results are nothing unique in international comparison. Increases and/or redistribution of funding within existing systems and specific programmes aimed at promoting excellence, strategic profiling, priorities and greater powers in the hands of central university management are common abroad. Sweden and its public research system has been the empirical focus of this study but the trends unveiled and discussed are doubtlessly visible elsewhere.

The point of the exercise has been to show that while policy formulation in governmental research bills largely imitate international trends and may well be merely discursive, the introduction of new funding programmes that embody policy shifts indeed puts the government's money where their mouth is. Common to the policies as such and the stated purposes of the funding programmes studied are two things. The calls address university central management rather than individual researchers or research groups, in order to incentivise university-wide profiling and prioritisation by central leadership. The programmes aim at funding research environments with already-proven high quality in their activities with long-term and generous funding. Both mark clear breaks with Swedish tradition; the first perhaps most, as both block grants and competitive project grant funding historically have bypassed vice-chancellors and central university management, but the second feature is also rather novel to Sweden. The new policies clearly manifest a belief in managerialism as well as excellence and the language in the three consecutive governmental research bills grows gradually more explicit in their critique towards the diluted and ineffective funding system and the need for mobilisation to correct these faults. This escalation is also clearly reflected in the measures taken and most clearly so in the design of the funding programmes.

On basis of this, it can be argued that there is a new feature of public research funding in Sweden, built on policies recently popularised and marking a clear break with tradition. The focus on central management at universities, and their ability to strategically choose profile areas and develop excellence, signals a new type of research policy and governance ambition. The principal actors in the system are the universities. On the basis of new funding programmes, these are to deliver quality and relevance of research. In an attempt to renew the utility of the capable and expensive knowledge producing institutions to meet the challenges and demands of the new century and the new world, society seeks to commission the university of excellence.

Suggestions for future research

With these claims substantiated, it can be concluded that there is a significant lack of knowledge in this area and, hence, that there is great need for further studies on several adjacent topics. A deeper analysis of the motivations of the governmental policies, preferably including international comparisons, may yield clues to the reasons behind the outlined development. Detailed studies of the funding programmes only briefly mentioned here could be of value in order to unveil the long-term impact of governmental policies on a multifaceted funding system as a whole: the degree of correlation and causation between governmental funding programmes and excellence initiatives of other funding agencies might yield interesting insights about governance and steering of the system, path dependency and division of labour between different actors. Regarding the overall development and its long-term effects on the academic research system, the academic profession and academic careers, power relationships within academia and the eternal debate over the role of the university in society and the economy, much work remains and has to be postponed several years to be

able to account for results and measurable impact of the policies. Studies with wider scope, including not least analyses of the effects of changing national funding patterns in general (and specifically, excellence funding programmes) on the education mission of the academic system in Sweden and elsewhere, are clearly also warranted.

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