

What Shapes Research Policy at the Local Government Level? The Establishment of a Research Fund in a Swedish municipality

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Abstract

Research policy in Sweden—and especially financial support for universities—has customarily been the business of the state, it has thus not figured clearly within the scope of local government. However, Swedish municipalities have increased their focus on research policy and have become more active as funders of research and development during the past two decades. As there are a number of circumstances which indicate that local government research funding activities can encounter challenges that differ from those of national funding organisations, it is important to critically examine the role of municipalities as funders of research and consider how local policy conditions, national institutional frameworks and policies shape this role. In this article I analyse the establishment of a research fund to allocate grants to research projects in the Swedish municipality of Norrköping. Through identifying crucial phases, tensions and problems in the process of establishing the fund, the article shows that the process was solidly anchored in the needs of local policy interests and coalitions, but also that it was shaped by the key actors' interpretations of national legal frameworks and policies in relation to the municipality's scope for action in this area. Furthermore, the study shows that while the state appears to have generally been keen to encourage municipalities to invest more in research, the municipalities may still be somewhat uncertain about their roles in this area.

Introduction

While research policy—i.e. public efforts to support research and disseminate its results throughout society—is regarded in most countries as the responsibility of central government, it also seems to have become important in recent years at the local and regional government level. Production of new knowledge and innovative ideas, along with a general trend toward decentralisation, has strengthened support for cooperation between research bodies, industry and public actors at the subnational level (Etzkowitz & Leydesdorff 2000; Perry & May 2007). Furthermore, universities are increasingly regarded as modern “growth engines” in an ever more knowledge-intensive economy at local and regional levels (Hudson 2006; Perry 2011). A consequence of this development is that in many countries local and regional governments progressively supplement traditional national funding organisations, such as research councils and governmental agencies, with new arrangements to support research.

For example, Swedish municipalities, which are self-governing local authorities that enjoy a relatively strong position in relation to the central government, have become more active as research and development (R&D) funders. Between 2005 and 2013, Swedish municipalities almost tripled their expenditures on commissioned R&D and they appear to be increasing their research funding at universities in particular (SCB 2014). The Swedish state has increased incentives

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for universities to interact with society (Benner & Sörlin 2015) and for municipalities to support their research (Persson & Syssner 2015). In place of the previously centralised research-planning model, the processes of decentralisation in many policy areas have increasingly led the Swedish central government to expect municipalities to take greater responsibility for their own knowledge requirements (Kostela & Tydén 2010). Hence, municipalities are becoming new actors in relation to research policy and important funders of research for many universities, which dominate public research in Sweden.

Several circumstances indicate that research-funding activities by local government can encounter challenges that differ from those of national funding bodies. Firstly, in most industrialised countries, the setting of research policy has not been considered an appropriate task for subnational levels of government. A common argument has been that only a strong and impartial central government, often with reference to a self-governed scientific community, can achieve crucial policy objectives in this area (Perry & May 2007). Consequently, even though the Swedish state has encouraged local governments to take a more active role in research policy, their scope for action remains dependent on what the local elites consider acceptable and legitimate in relation to national research policy (Persson & Syssner 2015). Secondly, in some respects at least, the structural conditions for developing research policy differ at the local and national levels. For example, a local government's research policy may be expected to reflect the locality's relationship with a single university (or several universities in the case of larger cities), whereas the prime focus of national research policy is on the research community as a whole (and on a large number of universities/institutes) (Perry 2011). Due to their lack of resources and experience, local governments endeavouring to mobilise research for local needs risk being exploited by expanding universities, as well as by researchers in need of external financing in a highly competitive funding market (Braun 2003; c.f. Benner & Sörlin 2015).

As the importance of local governments in funding research seems to have increased in Sweden, it is perhaps surprising that little is known about these processes and the types of challenges discussed above. Previous studies on research policy in Sweden have mostly focused on the central government's activities in this area (cf. Benner 2008; Benner & Sandström 2000; Persson 2001). Research at local government level has primarily dealt with the interactions between municipalities and the research community; e.g., in terms of knowledge utilization and collaboration (c.f. Tydén 1995), the role of municipalities in technical development and innovation (cf. Engstrand & Sätre Åhlander 2008; Svensson et al. 2012), and the development of local R&D bodies (cf. Ekermo 2002; Kostela & Tydén 2010). Several studies have also documented the importance of local governments in establishing new universities and colleges, but without analysing municipal motives and strategies in any systematic fashion (Cederborg et al. 2005; Olsson & Wiberg 2003). Knowledge about the organisation of research funding in municipalities is limited, but some studies show that it is often *ad hoc* or connected to cooperative arrangements with universities (Boström 1998; Persson & Syssner 2015). Moreover, few international studies seem to

analyse tensions such as those between relevance and excellence in local and regional research funding in any detail (Perry & May 2007).

Against this background, it is important to critically examine the role of municipalities as research funding bodies and consider how local policy conditions and national institutional frameworks and policies shape this role. This article examines the establishment of a research fund to allocate grants for research projects in the Swedish municipality of Norrköping. The empirical analysis of the establishment of the research fund was guided by the following questions: What motives and rationales have guided the establishment of the research fund? What tensions and related patterns of negotiation among key actors can be observed during this process? To what extent are these motives, rationales and patterns anchored in local policy conditions, and to what extent have national institutional frameworks and policies shaped them? Through identifying central phases, tensions and problems in the process of establishing the fund, and their relationship with the institutional context of local governance and national policy, the aim of the article is to contribute a deeper knowledge about Swedish municipalities as research funding bodies.

The remainder of this article is arranged as follows. Section 2 describes the methodology and data of the empirical study. Section 3 presents a theoretical discussion and framework for the analysis. Section 4 offers some background on the development of local research policies in Sweden and the institutional conditions for their elaboration. Section 5 presents the results of the study, and section 6 provides conclusions.

Research design, method and empirical material

The study is designed as an in-depth case study to investigate the establishment of a research-funding body in a Swedish municipality. The municipality of Norrköping featured in this article is quite typical of the Swedish municipalities that seem particularly active in this area. With 140,000 inhabitants, it is relatively large (one of the ten largest in Sweden). It has a relatively new university campus (belonging to a larger university in a twin city) and seeks to transform itself from a city in industrial decline to one with a modern and knowledge-oriented economy. This type of context (large municipality, with relatively new university college or campus, and focused on economic transformation) may, according to previous studies, be assumed to encourage the mobilisation of universities for local needs, and to foster strong interdependency between the municipality and the university (and to incur the related risks discussed above) (cf. Boström 1998; Persson & Syssner 2015). Thus, the case provides an opportunity to analyse how such policy conditions, related to particular outcomes, influence the establishment of research-funding structures. This gives it the characteristics of a “most likely” case (George & Bennet 2004: 252). By analysing the case within a framework of theories and previous research on research-funding organisations and local governance, the primary aim of the paper is not to draw general conclusions about the establishment of local government research funds, but

to strengthen the understanding of important mechanisms in these processes and to demonstrate the need for further theoretical development in an underdeveloped field (c.f. George & Bennet 2004: 75). Furthermore, across Sweden we find several similar settings as the Municipality of Norrköping. The chosen case thus has several national reference contexts and the experience of this municipality may interest and contribute to other local governments with regard to similar policy initiatives.

The establishment of the research fund in Norrköping is described and explained by an empirical and qualitative case study using different datasets. Firstly, I studied different kinds of written documents relating to the fund; e.g., public records about the decision to establish it, its remit, applications and funding decisions as well as reports and secondary sources to obtain information about the decision-making process and the historical background of the initiative. Secondly, I interviewed actors involved in the initiation, design and management of the research fund. A total of nine key actors (three politicians, three civil servants, one university representative, one industry representative, and one union representative) were identified through the available public documents about the fund and discussions with key actors in the process. The interviews were semi-structured and were intended to both obtain detailed information about the process and ascertain the views and positions of the actors. To enhance reliability, it was important to cross-check data by comparing it with data from different sources.

This material has been analysed from a historical and contextual perspective that was influenced by a process-tracing method. This approach focuses on unfolding events over time, creating a timeline, identifying relevant phases and putting them into relationships with each other (Kay & Baker 2015). The focus has been to reconstruct the process inductively in a detailed way, and then analyse it based on the broad theoretical framework discussed in the next section. The analytical approach can be characterized as a reflexive critical analysis interpreting the roles of stakeholders and partners, but also revealing overall structural patterns (cf. Flyvbjerg 2001). This means that the data were critically analysed to document the positions of actors and the structural conditions in the process of developing the research fund.

Municipalities as research-funding organisations: A theoretical framework

How can we understand the processes shaping municipalities into research-funding organizations in Sweden? Much research has focused on the development of national bodies for research funding, such as research councils and various mission-oriented agencies. These studies, inspired by principal-agent theory, have often emphasized that the processes of constructing public research-funding bodies entail certain dilemmas concerning managing or balancing the sometimes competing interests of the state (or the society) and the scientific community (such as researchers and universities). For example, political actors designing

research-funding bodies can be assumed to focus on different political or economic benefits of research, while scientists want to ensure autonomy and stability in funding. These bargaining processes have, according to this perspective, often been driven by the strong position of the scientists in this relationship as a result of information asymmetries. In the terminology of the principal-agent literature, such asymmetries can be expressed as marked problems of adverse selection and moral hazard. The adverse selection problem means that the politicians usually lack the knowledge to pick the most competent agent, the moral hazard problem that the politicians usually have problems evaluating the results of the work of the scientists (thus a monitoring problem). (c.f. Gulbrandsen 2005). From this perspective, the construction of a research-funding body largely concerns the management of these inherent dilemmas. Historically common solutions to such dilemmas have been to delegate the organisation of research funding to the scientific community (e.g., through research councils), basing the relationship between policy-makers and science on trust, or integrating scientists into the pursuit of public objectives. These later measures increase public control, but also increase the risk of tensions in the relationship (Braun 2003).

Although this perspective considers important circumstances in the relationship between politics and research, which relate to the conditions of research-funding bodies, it neglects the importance of the structural context and institutional setting of funding policies (Benner & Sandström 2000). For example, local research policy negotiations between municipalities and research organisations (primarily universities) are embedded in a structural setting different from that at the central level. For instance, in most cases we can expect the research policy of a local government to reflect the locality's relationship with a single university (or several universities in the case of larger cities); whereas the prime focus of national research policy is on the research community as a whole (and on large numbers of universities/institutes). In the words of Fritz Scharpf (1997), the configuration of actors is different, which influences their strategies. The relationship is similar to that between municipalities and industry, with such factors as the number and size of universities, resource dependency between municipality and university, and the institutionalization of the relationships between them being important (c.f. Pierre 1995: 55).

Overall, we need to understand the *modus operandi* of the local policy coalitions grounded in political and structural conditions under which local research policy develops. According to theories of urban governance, policy-making at the local level largely (and even more so today than before) tends to be the result of co-operation between public and private actors. The focus of many studies has been on growth coalitions comprised of leading politicians, business actors and other local elites (Pierre 2014). While the focus of national research policies is often related to objectives such as national competitiveness, welfare policy objectives or upholding scientific excellence, local policies tend to focus on capturing more direct economic or social gains (Lanahan & Feldman 2015; Perry & May 2007). Studies of the relationship between municipalities and universities show that their interdependency varies depending on the characteristics of local

regimes (Engstrand & Sätre Åhlander 2008), and research-funding activities in municipalities have been closely linked to the establishment of new universities, colleges and campuses (Boström 1998). According to previous studies, the type of context in focus in this article (a large municipality, with relatively new university college or campus, and focused on economic transformation) may be assumed to encourage the mobilisation of universities for local needs, and to foster strong interdependency between the municipality and the university (cf. Boström 1998; Persson & Syssner 2015).

However, studies of research policy have pointed out how the evolution of research funding structures is also strongly embedded in national institutional settings and policies (Lepori et al. 2007). Some national institutional frameworks are relevant to both national and local policies, such as the role and regulation of universities and the co-ordination of research policies. This study of local research policies especially considered the importance of how constitutional and state arrangements offer varying levels of autonomy and policy capacity to local governments in relation to the state and the wider society (Haus 2014; Pierre 2014). State policies are also often important in providing resources and institutional capabilities for various efforts (Pierre 1995). As Lauren Lanahan and Maryann Feldman (2015: 1387) point out, new research and innovation policies are “adopted in a pre-existing context and institutional framework that have been shaped by successive policy changes”. Therefore, local research policies can be assumed to develop in the context of this pre-existing field, acting to varying degrees independently from the national level. Lanahan and Feldman (2015) distinguish between policies firmly grounded in local needs and coalitions, and policies developing through close interaction with the national level, or diffused between subnational governments in an experimental process. Consistent with this reasoning, Mats Ekermo (2002) has shown how the establishment of local R&D units in Sweden was a process where local needs interacted with active state policies and funding, and the organisational concept diffused through learning and imitation among subnational actors.

In summary, further analysis starts with the assumption that while the local policy conditions in our case indicate that local needs would strongly shape the process of establishing a research fund, previous research also notes that new initiatives are often also shaped by national policies and institutional frameworks. Therefore, the positions and strategies of actors and the bargaining processes should be analysed considering the interplay and interdependencies between levels and institutional settings. Now, let us look more closely at the national institutional and policy context of Swedish municipalities in the research policy area.

Research policy and local government in Sweden

The Swedish national research policy system has two characteristics of specific importance to the role of municipalities as research-funding organisations. Firstly, it is strongly university dominated in that universities should not just perform

their traditional roles (to teach and conduct basic research), they should also serve as “research institutes for society”, by conducting mission-oriented and applied research in competition. A number of research institutes exist, but the share of public research funding they receive is smaller than in most other industrialized countries (Solberg et al 2012). Secondly, universities have been highly dependent on external competitive funding (in contrast to institutional funding) from research agencies and councils (Vetenskapsrådet 2008: 15). Generally, research policy in Sweden has largely been decentralised to universities and to research-funding agencies, including research councils mainly controlled and steered by representatives of the scientific community, and mission-oriented agencies more clearly driven by public policy objectives and usually governed by representatives of various stakeholders (Benner 2009; Persson 2001). Hence, the system is characterized by relatively weak central co-ordination.

Research policy in Sweden, especially linked to financial support for universities, traditionally has been mainly the business of the state; therefore, it has not fallen clearly within the scope of local self-government. However, local and regional governments have had a greater focus on research policy during the past two decades. Historically, R&D expenditure by Swedish municipalities has been relatively low, but has increased over the past 10 years. Expenditure on in-house R&D has risen from approximately 80 million SEK per year in 2005 to 171 million in 2013, and expenditure on commissioned R&D has increased from 61 million to 141 million over the same period. These amounts are still relatively small compared with central government expenditure. Nevertheless, this trend shows that municipalities have increased their ambitions in this area quite markedly (Persson & Syssner 2015).

A number of factors may have encouraged this change at the local level; these factors provide an important background to this case study. Firstly, there is a general decentralisation of welfare policies. The responsibilities and formal autonomy of Swedish municipalities became more pronounced in the 1980s and 1990s. In addition to their duties of providing local services, the municipalities now shoulder a number of tasks in policy areas previously dominated by the national government, not least in social welfare and education (Lidström 2011). This has made it more important for municipalities to develop strategies for knowledge development. An illustration of this was the establishment of a large number of local and regional R&D units in the social welfare sector at the initiative of local and regional authorities, often in co-operation with universities (Ekermo 2002; Kostela & Tydén 2010). Secondly, competition among municipalities has increased, which motivates them to establish alliances with universities. The latter are often seen as regional engines of growth or as resources for meeting the needs of municipalities and regions (Engstrand & Sätre Åhlander 2008).

Thirdly, while until the 1980s, national research policy was to integrate the needs of municipalities in central policy initiatives (through mission-oriented agencies), the expectations of and support for municipalities to take greater responsibility for knowledge production and development has since increased

(Ekermo 2002). Consistent with this trend, industrial technology policy-making since the late 1990s was inspired by policy ideas to encourage support at the subnational level; e.g., through support for regional innovation systems by the VINNOVA innovation agency (Persson 2012). As in most countries, the Swedish state has pressured universities to increase their interactions with the rest of society—especially with municipalities and regional bodies. In particular, the new university colleges founded in the 1990s were supposed to fulfil this role (Benner & Sörlin 2015). Furthermore, since the 1990s, the Swedish Association of Local Authorities and Regions (SALAR)—the organisation representing local and regional governments in Sweden—has been active in developing a research strategy for municipalities and regions, and provided an arena for discussion and diffusion of ideas about organising research policy issues at the local level (c.f. Ekermo 2002).

Finally, these general changes in the role of municipalities in research policy have been partly codified through a recent change in the formal prerogative of municipalities to support research at universities. The general principle has been that R&D activities supported by municipalities, if adopted, ought to be clearly connected to the core functions of the municipality in question. In 2008, the Swedish parliament revised the Local Government Act, making it clearer that municipalities have the right to support research at universities. However, the government bill containing the new law stated that municipalities would have to clarify how their inhabitants would be served by granting such funding in any particular instance. Thus, according to state policy-makers, local governments ought to remain restrictive in the financial support they provide to universities and colleges (Persson & Syssner 2015). Therefore, although research policy remains primarily the responsibility of central government, activities at the local level in this area have increased considerably in recent decades. This trend can be characterized as a kind of “spontaneous decentralisation”, whereby the scope for local government activity has expanded.

The case study: Norrköping municipality’s establishment of a research fund

This section presents the empirical results of the study. First, I discuss the context of the initiative, and then I describe the process of initiating, designing and managing the fund. These phases have been identified as pointing to aspects relevant to the research questions. Finally, I discuss the results in relation to the research questions and the theoretical discussion.

Norrköping municipality as a research policy actor: A review of the background
Norrköping is a medium-sized urban municipality in the east of Sweden that was a major industrial city in the late 19th century and the first half of the 20th, with textiles as its dominant industry. During the 1960s and 1970s, global competition led to a sharp decline in the city’s industries. Economic crises and high unemployment followed. Norrköping’s role as the economic centre of eastern Sweden

was in many respects taken over by its neighbour Linköping, a city of similar size, where a new university was established in the 1970s.

The development of various research policy initiatives in Norrköping is closely linked to the establishment of a new campus of Linköping University in the city. In the mid-1990s, Norrköping was wrestling with high unemployment and its population had a low level of education. At the time, the policy pursued by the national government in the area of higher education was focused on the establishment of new university colleges in medium-sized cities. This opened a window of opportunity for a new campus of Linköping University to be established in Norrköping. The initiative was a collaborative effort, with strong support from key actors in the region. Support came from local industry, from various government agencies, from the leadership of Linköping University, and of course from the municipal government of Norrköping itself. The establishment of the new campus in 1995 was in many respects a success for the old industrial city. Among other benefits, it led to a boom in the municipal centre, primarily through the successful integration of the new university campus (Cederborg et al. 2005).

During the following 15 years, the municipality took several initiatives to support research at the campus. It financed research projects, PhD students, research infrastructure, and the like (interview with R&D co-ordinator). The alliance between the municipality and the university was also strengthened by an agreement to collaborate between the two organisations. A steering group with representatives from the municipality and the university was set up to manage this collaboration, and a so-called Campus Council, consisting of representatives of the university together with various stakeholders, was organised to facilitate the exchange of ideas and experiences between key actors in the municipality (Norrköping Municipality 2016). A science park sponsored by the municipality was also set up and run by the university and representatives from local industry (Svensson et al. 2012). The municipality also took measures to strengthen its capacity to handle R&D issues. It hired an R&D co-ordinator to manage collaboration with the university and to engage with national and regional networks in the R&D field. When these initiatives were taken, the national R&D network organized by SALAR played a very important role in the exchange of ideas and the connection with national research policy (interview with R&D co-ordinator).

It is quite clear that the motives behind the R&D activities of the municipality largely reflect the importance to the municipality of a strong university campus and becoming an attractive urban centre. Interestingly, both the R&D manager and the Chairman of the Municipal Executive Board stressed in their interviews that larger municipalities can play a role in supporting new research that is “underfinanced by the state”, especially since SALAR abolished its research-funding body in the mid-2000s. According to their reasoning, Norrköping municipality and other major municipalities should support research that is relevant to the municipal sector (interviews with the Chairman of the Executive Board and the R&D co-ordinator).

The establishment of an R&D fund

The initiative to establish an R&D fund was largely the result of a new policy in Norrköping for growth and employment. Despite the development of the new university campus, the municipality had continued to face problems of high unemployment and a low level of education among its citizens. As part of an effort to increase growth and employment in Norrköping, a Job Commission was established in 2011. The purpose of the commission was to work for increased employment in areas where the central actors (e.g., political parties, businesses and unions) were “in agreement” on policy problems and solutions (Norrköping Municipality website 2016a). All of the actors on the commission clearly agreed that the university campus was important for the development of the city, as were research and higher education more generally. Consequently, the commission encouraged the municipality to take the initiative to arrange support for research at the Norrköping campus (Norrköping Municipality 2012a; interview with the Secretary of the Job Commission). All interviewees agreed that the Chairman of the Municipal Executive Board—a Social Democrat and leader of the political majority—drove this process.

The immediate reason for the initiative was that the municipality had a budget surplus in 2012. The Social Democrats in particular argued that establishing some kind of research support for the university would be an appropriate way of spending this surplus. However, the Liberals were sceptical, arguing that other needs—e.g., establishing new teaching positions at primary schools—were more pressing (Norrköping Municipality 2012b). The Liberals cautioned that it was unclear whether R&D support for universities fell within the remit of local government in Sweden (interview with Liberal Party representative). One of the union representatives in the Job Commission also stated that there was much scepticism towards this proposal at the beginning of the process; the central issue was whether such matters really formed part of the core mission of the municipality (interview with a union representative). However, through an alliance with the Conservatives, the Social Democrats obtained majority support for an initiative to use the surplus to support R&D of relevance to the municipality (Norrköping Municipality 2012b). Over time, the opposition to the fund has largely disappeared, and later decisions by the council to allocate money to the fund have been taken by consensus (Norrköping Municipality 2015).

An investigator connected with the Job Commission prepared the proposal for the new fund. According to the proposal, the fund was to be seen as a “long-term investment”: it might take years for the research to have an impact on the municipality. However, the purpose of the fund was to contribute over time to the fulfilment of important municipal objectives. The first objective for the municipal leadership was to “contribute to a higher level of education in the municipality” (Norrköping Municipality 2012a). According to the Chairman of the Municipal Board and the Opposition leader, this was the primary objective. More funding for research at the Norrköping campus would lead to more teachers, researchers and students in the long run. It seems to have been a central objective to connect the initiative to a core mission (education) and to confront a

major challenge for the municipality—that of raising educational levels of the city’s population (which were among the lowest among comparable municipalities in the country) (interview with the Chairman of the Executive Board, interview with the Opposition Leader). The second objective was to “enhance various municipal activities” (for example in the welfare sector), by improving the competence of employees and the factual basis for welfare and other programs, an objective which primarily concerned the policy-supporting function of the municipality (Norrköping Municipality 2012a).

The third objective can be interpreted as being strategic: “to strengthen education and research at the Norrköping campus” (Norrköping Municipality 2012a). The purpose was to strengthen the role of the Norrköping campus in the future plans of Linköping University. The municipality leaders interviewed mentioned an important study of the organisation of Linköping University that was commissioned by its vice-chancellor in 2012. An important starting point for this study identified strategies to strengthen the profile of the Norrköping campus (Linköping University 2013). For leading decision-makers in the municipality, the new fund appears to have been a way to put pressure on the university (and on the central government as well) to focus on the Norrköping campus. For example, the Chairman of the Executive Board argued that “the establishment of the fund has prompted the university [through the investigation] to state that they want to continue to develop their activities in Norrköping” (interview with the Chairman of the Executive Board). Finally, the municipality hoped that the new fund would stimulate industrial and economic life in the city generally, with applied research generating spin-off companies (and the like) (Norrköping Municipality 2012a). This last aim can be interpreted as reflecting the institutional context from which the proposal emerged: it was important for policy-makers to relate the initiative to the overarching goals of increasing the number of jobs and strengthening local business and industry.

Interestingly enough, central actors interviewed saw the initiative as peripheral to the proper responsibilities of a local government in Sweden. One central actor even said she was “unsure that the initiative would be deemed legal if it was tested by a court” (interview with R&D co-ordinator). The Chairman of the Municipality Board argued that it was important that the funding was taken from a surplus, rather than part of the ordinary budget, and stressed that it was important that “the money spent on this will have an impact” (interview with the Chairman of the Executive Board).

Designing an R&D fund

Decision-making about the design of the new fund concerned central trade-offs in the design of research-funding bodies. The degree of autonomy that the fund would have was a central issue in this process. On the one hand, decision-makers wanted a project-selection process based on scientific criteria; on the other hand, they considered it important that the process be under the control of the Municipal Executive Board. The main concern of the university representative involved in the design of the fund was that the application procedure would not be “too

complicated” (interview with a university representative). According to key actors interviewed, the municipality was clear that it should not establish a foundation to distribute the research support. This was partly a matter of formal requirements; the funding was based on a surplus in the municipal budget, which made it important (even necessary) to ensure that the municipal board could retain relatively strong control over the deposits. In addition, previous negative experiences of the use of a foundation for research support seem to have been an important motive (interview with Municipal Chief Executive; interview with R&D co-ordinator).

Alternative ways of organizing the allocation of funding (other than through a research fund) were also discussed. One possibility was to let the funding be managed by the steering group for the co-operative agreement between Norrköping municipality and Linköping University (see above). However, according to the R&D co-ordinator, it was considered important to have politicians involved in the process, but the steering group of the agreement did not include any politicians (only representatives from the university faculties and the municipal administration) (interview with R&D co-ordinator). The Chairman of the Municipality Board said that it was important that the fund be understood as an initiative by Norrköping municipality to create jobs, in accordance with the objectives of the Job Commission (interview with the Chairman of the Executive Board). A second alternative could have been to channel the resources through a regional body, such as the Centre for Municipality Studies, a unit connected to Linköping University and financed in part by a collection of municipalities in eastern Sweden. However, that would have made the funding harder to control and less focused on supporting the Norrköping campus. Nor would it have involved as much symbolic value for the municipality (many interviewees spoke of the intrinsic value of a “Municipal Research Council”).

The eventual design of the fund reflected the somewhat contradictory objectives behind it. The detailed procedures to be applied by the evaluation committee were mainly designed by the municipality’s R&D co-ordinator. She based her proposal on discussions with representatives of national research-funding organizations and with various actors at the university (interview with R&D co-ordinator). The central role of the municipal leadership was mainly expressed in the demand that research projects awarded funding be relevant for the municipality, and that the fund be managed in co-operation with the municipality. Apart from this, the allocation procedure was supposed to work in a “bottom-up” way, in the sense that initiatives for specific research projects were to be undertaken in a process whereby researchers would submit applications following a general call (Norrköping Municipality 2012c). This indicated that key decision-makers preferred a funding arrangement with a broad scope to make the initiative relevant for many research groups in Norrköping (interview with the Chairman of the Executive Board). Despite this, the guidelines for the fund stated that the executive municipal board should have the right to “direct resources to specific areas” without taking the application procedure into consideration (Norrköping Municipality 2012a). Furthermore, it was stressed that the applications should

apply to at least one of the objectives of the fund (see above) and that the applicants should clearly show whether the project was co-funded because it was stressed that this was important to strengthen the already strong areas of the campus in Norrköping (Norrköping Municipality 2012a). The criterion of co-funding was further stressed in the updated guidelines of 2015 (Norrköping Municipality 2016).

An evaluation committee would judge research projects, while the formal decision to award funding would be taken by the Municipal Executive Board (Norrköping 2012c). This can be interpreted as an attempt to ensure a strong political direction for the process; however, according to the leading actors in the municipality, the final decision on the municipal board was mostly a formality. Until now, the board has followed the recommendation of the evaluation committee (interview with the Municipal Chief Executive; interview with the Chairman of the Executive Board). In large part, the composition of the evaluation committee reflects a corporatist logic (through representation by central stakeholders): aside from the two politicians from the Municipal Board (the chairman and the vice-chairman), there are the chief executive of the municipality, two representatives from the university, one from the business community and one union representative (Norrköping Municipality 2012b). One point of interest is that the fund is described in official documents as both an independent research-funding body run by the municipality and a partnership between the municipality and the university (Norrköping Municipality webpage 2016b).

Managing local research policy

So far, the research fund has allocated approximately 33 million SEK to 34 different research projects. This funding has been awarded through seven separate decisions (Norrköping Municipality website 2016b). The projects funded represent most research fields with activities at the Norrköping campus. According to the evaluation committee, the decisions have been based on a combination of scientific criteria (such as the originality of the projects) and relevance criteria (such as the relation to the objectives of the fund and the degree of co-operation with societal actors), as well as “who the researchers are and which research environment they belong to” (Norrköping Municipality 2013).

The last criterion reflects a willingness to consider the needs of the university at Norrköping Campus, so projects have not been chosen through a classical peer-review procedure. The municipality uses neither anonymous referees nor peer-review groups from the scientific community to evaluate the various projects (interview with R&D co-ordinator). Instead, the interviewees noted that a variety of considerations played a role in each case. For example, the opposition leader mentioned that “sometimes the important thing is scientific quality; sometimes if there is a research area that would need more attention” (interview with the Opposition Leader). According to several of the interviewees, the two university representatives have been helpful in providing the other actors with the relevant expertise. According to one of the university representatives, their role has not mainly been about evaluating scientific quality, but providing infor-

mation on whether the applicants have other funding and “what will happen to them if they don’t get funding from Norrköping” (interview with university representative 2015). The R&D co-ordinator has often mediated between different interests, helped to find solutions and encouraged new applications (interview with the Opposition Leader). According to the industry representative, who had no previous experience of R&D work, the members have often initially given the applications different scores, but after discussion, they have always been able to agree on a decision (interview with industry representative).

Nevertheless, tensions between different objectives and principles have plainly manifested in the evaluation process. For example, the municipality was criticized following the fund’s first decision to award funding. One of the winning projects had received 2.9 million SEK, which was a large proportion of the fund’s total budget. This project was focused on technical research, which led to some controversy in the media because such research did not figure among the primary tasks of the municipality (Norrköpings Tidningar 2013). Furthermore, the department where this project was based received over 50 % of the funding in the first round, and the head of this department was one of the university representatives on the review committee (Norrköping Municipality 2013). The university representative believed that his position was problematic, because many of the applicants were from his own department, but that the committee had good procedures to address such conflicts of interest (interview with a university representative). Over time, the awarding of finance had evened out between technical research areas and areas connected to social welfare (Norrköping Municipality 2014). Interviewees also confirmed that a certain distributive fairness was important in the process.

In the interviews with the members of the Evaluation Committee, two aspects were mentioned as problematic in connection with the municipality’s relationship with the research community. First, several noticed that it seemed difficult for many researchers to obtain co-financing from other funding sources for their projects. This highlighted the risk of “narrow” research projects focused too closely on the problems of Norrköping (interview with R&D co-ordinator). Second, they were worried about how project leaders who were denied funding would view the municipality. For example, the Chairman of the Municipal Executive Board expressed concern that the research fund give rise to dissatisfaction with the municipality, thus counteracting a central purpose of the fund (to strengthen ties with researchers and with the university) (interview with the Chairman of the Executive Municipality Board). Notwithstanding these issues, the municipal executive board seems to regard the research fund as a success, and it has decided to support the fund with a further 5 million SEK in 2016 (Norrköping Municipality webpage 2016b).

Discussion

In this section, I analyse the empirical results based on the research questions raised in the Introduction. First, what motives and rationales have guided the establishment of the research fund? It is quite clear that the main motives behind

this research policy initiative were strategic in nature: to support the development of the Norrköping campus, and to strengthen the alliance between the municipality and the university. Thus, although the initiating process embodied multiple objectives, in reality it was mainly driven by the desire of the municipality to promote economic growth, raising educational levels of the city's population, and put pressure on the leadership of Linköping University. Motives that are more symbolic can also be discerned behind the initiative; e.g., to show the world that Norrköping is a modern and attractive city. The municipality did also stress that the fund would be useful for the development of welfare services and other municipal activities.

What tensions and related patterns of negotiation among key actors can be observed during this process? As pointed out in theories about research-funding bodies, the process of establishing these kinds of arrangements entails a number of tensions and problems connected to the structure between the society and the scientific community. Examples of central questions raised in this case were whether the municipality should support research at all, how the support structure should be organized and how the selection procedures should be arranged. Overall, the questions concern tensions and trade-offs between the different objectives, similar to those in national policy (e.g., whether to support high quality or practical research), but also objectives more specifically related to the local context, such as whether the objective is to support the university per se (the growth of the campus) or to support the "best" research. The Chairman of the Municipal Executive Board played a crucial role in building coalitions and pushing through the decision. Overall, the process was characterized by consensus policy-making; political opposition to the initiative was limited and the decision-making process was anchored in a local policy coalition focused on the importance of economic development.

To what extent are these motives, rationales and patterns anchored in local policy conditions, and to what extent have national institutional frameworks and policies shaped them? The process of initiating the fund was shaped by the specific structural and institutional conditions prevailing in Norrköping municipality. For instance, the nature of the initiative and the design of the fund to a substantial extent reflected the subordinate role of the university campus in Norrköping (in relation to the main campus in Linköping). The relatively strong political control of the fund can be seen in this light. Overall, while the actors involved in establishing the fund were eager to ensure that the funding arrangement was in line with constitutional provisions, they were more worried about the attitudes of citizens, and that research was supported by local policy coalitions involving industry and the university, than about problems of legality. Although the actors relate mainly to the local situation, there are several references to a national context, indicating that the process was anchored in a pre-existing multilevel policy field. First, the arrangements were inspired by previous initiatives in other municipalities and by SALAR. Second, the actors seem to have assumed that the initiatives should be based on or co-funded by national funding bodies. Two of the central actors even see the initiative as a way to

compensate for the lack of mission-oriented research relevant to the municipalities of Sweden.

Conclusions

Research policy in Sweden, especially financial support for universities, has customarily been mainly the business of the state, so it has not figured clearly within the scope of local self-government. However, local and regional governments have increased their focus on research policy during the past two decades. Because municipalities have been identified as increasingly important new actors in relation to research policy, it is vital to examine their initiatives critically. In this article, I have analysed the establishment of a research fund to allocate grants to research projects in the Swedish municipality of Norrköping. By identifying central phases, tensions and problems in the process of establishing the fund, and how they are related to the local policy conditions and national institutional frameworks and policies, the article has contributed deeper knowledge about Swedish municipalities as research-funding organisations.

The article highlights that local research policy initiatives, under the policy conditions prevailing in the municipality of Norrköping, which has strong incentives to develop close relations with a university, are often strongly anchored in the needs of local policy interest and coalitions. The results indicate that funding structures here will underline the need to support the university as an organisation to a larger extent than at the national level, where funding bodies usually focus only on individual projects or research groups. In this case, this is illustrated both in the objectives of the research fund and in its design and management. Based on this case study, we hypothesize that decision-making procedures for research funding at this level tend to be characterized by more consensus-oriented institutional arrangements, focusing on joint decision making and negotiations between representatives of the municipality, the university, and a variety of stake-holders (such as in industry), rather than arrangements where funding decisions are delegated to communities of professional experts (as in a research council). However, as indicated in this study and previous research, because of their knowledge about research and the conditions of the researchers' university representatives can be assumed to have strong positions in these kinds of structures.

The case also illustrates that these types of initiatives at the local level of government are shaped by the institutional conditions created by national policy. In Sweden, it has been somewhat unclear whether research policy falls under what has traditionally been seen as the due remit of local government. In this case, this made it important for the key actors in this process to present the initiative in an acceptable and attractive way (in terms of its objectives and rationales). The focus was accordingly on the importance of achieving economic growth and raising educational levels in the municipality. However, as in other similar areas, such as industrial policy, the municipalities' scope for action in this area is quite broad, and the state appears to have been generally anxious to

encourage more R&D investment by municipalities (i.e., universities have also been encouraged to co-operate with local and regional actors). In fact, this case can be seen as reflection of the retreat of the state in some mission-oriented research areas, in which such initiatives seem to fulfil a role, not least as alternative funding for researchers in a highly competitive funding market. Furthermore, this and other case studies show that mechanisms of imitation and learning between the municipalities play a role in developing research policy initiatives.

Finally, the study raises questions about the future role of municipalities in research policy and the need for further research in this area. One question concerns how the initiatives such as the one studied here, interact with and complement national research policy. For example, while in this case there seem to have been ambitions to take co-funding at the national level into consideration in the selection of projects, in practice, this does not seem to have been very important in many of the projects funded. Overall, we know little about how national research policy initiatives by various primarily mission-oriented agencies relate to different initiatives by the municipalities. Do the activities of the municipalities supplement these activities or do they develop separately? Furthermore, we know little about the capacity of the municipalities to develop independent strategies for research and manage organisational support structures. The results in this case and in previous research (c.f. Persson & Syssner 2015) show how municipalities can be arenas for policy experiments (e.g., including processes of imitation and learning in relation to other municipalities' activities), but that the close local relationship between the municipality and the university can lead to risks, either that the research is steered too strongly or that the municipalities are exploited by expanding universities. Municipalities, as well as universities, may still be somewhat uncertain about their roles in this area. Is perhaps the regional level a more suitable arena for research funding schemes like the one described in this article? There is a need for further research in this area to understand the role that municipalities play as funders of research under a multi-level system of science policy and contribute to the development of efficient and legitimate local research policies.

References

- Benner, Mats (2008) *Kunskapsnation i kris? Politik, pengar och makt i svensk forskning*, Nya Doxa, Nora.
- Benner, Mats & Ulf Sandström (2000) Institutionalizing the Triple Helix: research funding and norms in the academic system, *Research Policy*, 29 (2): 291-301.
- Benner, Mats & Sverker Sörlin (2015) *Samverkansuppgiften i ett historiskt och institutionellt perspektiv*, VINNOVA, Stockholm.
- Boström, Mathias (1998) *Hjälp som självhjälp: regionala aktörers stöd till åtta högskolors utveckling*, Dalarnas forskningsråd, Falun.
- Braun, Dietmar (2003) Lasting tensions in research policy-making — a delegation problem, *Science and Public Policy*, 30(5): 309-321.

- Cederborg, Ann-Christin, Björn-Ola Linnér & Roger Qvarsell (2005) *Campus Norrköping. En studie i universitetspolitik*, Centrum för kommunstrategiska studier, Linköpings universitet, Linköping.
- Ekermo, Mats (2002) *Den mångtydiga FoU-idén – lokala FoU-enheters mening och betydelse*, Örebro universitet, Örebro.
- Engstrand, Åsa-Karin & Ann-Mari Sätre Åhlander (2008) *Collaboration for Local Economic Development: Business Networks, Politics and Universities in Two Swedish Cities*, *European Planning Studies*, 16 (4): 487-505.
- Etzkowitz, Henry & Loet Leydesdorff (2000) *The dynamics of Innovation: from National Systems and "Mode 2" to a Triple Helix of University-industry-government relations*, *Research Policy*, 29 (2): 109-123.
- Flyvbjerg, Bent (2001) *Making Social Science Matter. Why social inquiry fails and how it can succeed again*, Cambridge University Press, Cambridge.
- George, Alexander and Andrew Bennett (2004) *Case studies and Theory Development in the Social Sciences*, MIT Press, Cambridge.
- Gulbrandsen, Magnus (2005) *Tensions in the research council – research community relationship*, *Science and Public Policy*, 32 (3): 199-209.
- Haus, Michael (2014) *Mirror of the state or independent image? – Conceptual perspectives on the question of a legitimacy shift to the output dimension in local democracy*, *Urban Research & Practice*, 7 (2): 123–136.
- Hudson, Christine (2006) *Regional Development Partnerships in Sweden: A Way for Higher Education Institutions to Develop their Role in the Process of regional Governance?*, *Higher Education*, 51 (3): 387-410.
- Kay, Adrian & Phillip Baker (2015) *What Can Causal Process Tracing Offer to Policy Studies? A Review of the Literature*, *Policy Studies Journal*, 43 (1): 1-21.
- Kostela, Johan & Thomas Tydén (2010) *FoU i kommuner, landsting och regioner: Delrapport tre från IKA-projektet*, Sveriges kommuner och landsting, Stockholm.
- Lanahan, Lauren & Maryann Feldman (2015) *Multilevel innovation policy mix: A closer look at state policies that augment the federal SBIR program*, *Research Policy*, 44 (7): 1387-1402.
- Lepori, Benedetto, Peter van den Besselaar, Michael Dinges, Bianca Poti, Emanuela Reale, Stig Slipersæter, Jean Thèves and Barend van der Meulen (2007) *Comparing the evolution of national research policies: what patterns of change?*, *Science and Public Policy*, 34(6): 372–388.
- Lidström, Anders (2011) *'Sweden: Party-dominated Subnational Democracy under Challenge'* in John Loughlin, Frank Hendriks & Anders Lidström (eds), *The Oxford Handbook of Local and Regional Democracy in Europe*, Oxford University Press, Oxford.
- Linköping University (2013) *Slutrapport: Utredning om LiU:s framtida utbildnings- och forskningsutbud och dess förläggning (FUF-utredningen)*, Linköping University, Linköping.

- Norrköping Municipality (2012a) Riktlinjer, fond för forskning och utveckling, 2012-08-27, The Norrköping Municipality Archive.
- Norrköping Municipality (2012b) Minutes of the Municipality Council, 23rd of April, 2012, The Norrköping Municipality Archive.
- Norrköping Municipality (2012c) Rutin för Ansökan om medel ur Fonden för forskning och utveckling, 2012-09-04, The Norrköping Municipality Archive.
- Norrköping Municipality (2013) Förslag tilldelning av medel från Norrköpings "fond" för forskning och utveckling, The Municipality Executive Board, 2013-02-04, The Norrköping Municipality Archive.
- Norrköping Municipality (2014) Kort information avseende ansökningar till de fyra utlysningarna för Norrköpings fond för Forskning och Utveckling, 2014-06-27, The Norrköping Municipality Archive.
- Norrköping Municipality (2015) Minutes of the Municipality Council 2nd of December, 2015, The Norrköping Municipality Archive.
- Norrköping Municipality (2016) Riktlinje Fond för forskning och utveckling, The municipality executive board, 2016-02-10, Norrköping Municipality Archive.
- Norrköping Municipality website (2016a) Jobbkommissionen: <http://www.norrkoping.se/organisation/samverkan/jobbkommissionen>, accessed 15 August 2016.
- Norrköping Municipality website (2016b) Norrköpings fond för forskning och utveckling: <http://www.norrkoping.se/organisation/ekonomi/nffou/>, accessed 15 August 2015.
- Norrköpings tidningar (2013) Forskningsfond får kritik för jävsituation, 2013-02-04.
- Olsson, Björn & Ulf Wiberg (2003) Universitetet och den regionala utmaningen, Nya Doxa, Nora.
- Perry, Beth (2011) Universities and Cities: Governance, Institutions and Mediation, *Built Environment*, 37 (3): 245-259.
- Perry, Beth & Tim May (2007) Governance, Science Policy and Regions: An Introduction, *Regional Studies*, 41 (8): 1039-1050.
- Persson, Bo (2001) Motsträviga myndigheter. Sektorsforskning och politisk styrning under 1980-talet, SISTER, Stockholm.
- Persson, Bo (2012) 'Constructing an innovation policy agency: The case of the Swedish Governmental Agency for Innovation Systems' in Annika Rickne, Staffan Laestadius & Henry Etzkowitz (eds.), *Innovation Governance in an Open Economy: Shaping Regional Nodes in a Globalized World*, Routledge, London.
- Persson, Bo & Josefina Syssner (2015) Lokal forskningspolitik – ett nytt kommunalt politikområde?, Centrum för kommunstrategiska studier (CKS), Linköping University, Linköping.

- Pierre, Jon (1995) 'When the Going Gets Tough: Changing Local Development Strategies' in Sweden' in Norman Walzer (ed.) *Local Economic Development: Incentives and International Trends*, Westview Press, Boulder.
- Pierre, Jon (2014) *Can Urban Regimes Travel in Time and Space? Urban Regime Theory, Urban Governance Theory, and Comparative Urban Politics*, *Urban Affairs Review*, 50 (6): 864-889.
- SCB (2014), *Forskning och utveckling inom offentlig sektor 2013*, SCB, Stockholm.
- Scharpf, Fritz (1997) *Games Real Actors Play: Actor-Centered Institutionalism in Policy Research*, Westview press, Boulder.
- Solberg, Espen, Katarina Larsen, Ole Wiig, Kaare Aagaard & Gunnar Sivertsen (2012) *Markets for Applied Research: A comparative analysis of R&D-systems in five countries*, Nordisk institutt for studier av innovasjon, forskning og utdanning, Oslo.
- Svensson, Peter, Magnus Klofsten & Henry Etzkowitz (2012) *An Entrepreneurial University Strategy for Renewing a Declining Industrial City: The Norrköping Way*, *European Planning Studies*, 20 (4): 505-525.
- Tydén, Thomas (1995) *Kommunerna möter forskningen: en kunskapsöversikt med förslag till åtgärder*, Dalarnas forskningsråd, Falun.
- Vetenskapsrådet (2008) *Finansiering av forskning inom den svenska högskolan, Rapport 1: 2008*, Stockholm.

Interviews

- Industry representative, Norrköping Fund for Research and Development (NFRD), Norrköping, 9 June 2015.
- Union representative (SACO/SSR), NFRD, Norrköping, 9 June 2015.
- Municipal Chief Executive, Norrköping Municipality, Norrköping, 13 June 2014.
- Secretary of the Job commission, Norrköping Municipality, Norrköping, 20 June 2014.
- R&D coordinator, Norrköping Municipality, Norrköping, 19 May 2014.
- Opposition leader, Norrköping Municipality, Norrköping, 20 May 2014.
- Chairman of the Executive Board, Norrköping Municipality, Norrköping 13 June 2014.
- Linköping University representative, NFRD, Norrköping, 30 October 2014.
- Liberal party representative, ex-member of the executive board, Norrköping Municipality, Linköping, 7 November 2014.