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1 Contextual Background

1.1 Historical background

In the past Sweden was a poor country but with its fair share of natural resources. Over time it developed into a small but quite successful industrial and trading nation in northern Europe, and as a consequence considerable economic wealth was accumulated. This financial surplus in society, in combination with a historically strong philanthropic tradition, laid the ground for a rich and diverse foundation population. This accumulated economic wealth initially ended up in private hands – individual as well as corporate – but, in parallel to this increase in private wealth, later on also found its way into the State or governmental public sector. This second wave of wealth accumulation in public sector hands was the result of the long-standing dominance in government during the 20th century by the Social-Democrats, resulting in an expansive public sector and a subsequent high-tax regime. During this period, private wealth was transformed into public economic surplus and also a considerably harsher climate for the previously strong philanthropic tradition (Wijkström 2001). Also, this accumulation of public wealth at different administrative levels during the 20th century later started affecting the development of the foundation sector in Sweden in a number of different ways, for example by the establishment of new foundations, which still defines the size as well as the structure of the Swedish foundation landscape.

These very short and more general historical factors are important for explaining and understanding the growth and development of the Swedish foundation population as a whole. From a focus on education and scholarship in the foundations established in the period before 1800, their development can be described as one ranging over a 50-year period from 1800 to 1850 with a heavier emphasis on foundations in the field of social services. Research foundations seem to have dominated the arena from the second part of the 19th century onwards (Wijkström and Einarsson 2004). To understand this development a couple of other and more specific historical developments must be brought to the fore: the emergence and politics of the welfare state and the strength and dominance of the popular movement tradition (folkrörelsetraditionen) in Swedish civil society (Wijkström 2012). Moreover, it is important to make a distinction between an earlier and historically strong philanthropic tradition or culture in the country – to a large degree abandoned, counteracted or at least downplayed during the expansion of the welfare state in the 1900s – and the continued practice of establishing foundations, which was also carried on by public sector bodies during the welfare state era, but not necessarily in a traditional philanthropic spirit.

The most obvious picture of the position of foundations in the wider field of welfare provision in Sweden during the 20th century and the emergence of a public welfare state system is that of marginal or small complementary providers of either tangible social services or limited direct economic support. This marginal or complementary position of foundations appears to be the function of two different processes. The first process refers to older civil society institutions, and among them foundations, for example established in the mid- or late 19th century, and their development in parallel to the development of a
preferred publicly organised and funded welfare system. From an earlier dominant, or at least strong, position in their field, these institutions subsequently entered into this new and more marginal role as a result of the emergence of the welfare state and its institutions. The second process refers to nonprofit welfare institutions established later on, when the public welfare system had already matured and found its place. In this case, these new civil society players were created or set up in relation or complementary to an already strong dominant public sector system for the delivery of welfare. This new situation was, so to speak, part and parcel of their very birth (Lundström and Wijkström 1997; Wijkström 2013).

Furthermore, for different reasons and already in place in earlier periods (but even more pronounced during the 20th century and the Social-Democratic era), we can observe a hostile or suspicious attitude towards privately established foundations or charity arrangements. This negative sentiment did not relate to foundations alone; it also concerned the wider sphere of private, nonprofit, alternatives in social welfare as well as in education and healthcare (Gür 2013; Wijkström 2001). Also, this suspicion, and sometimes outright hostility, towards alternative arrangements – alternative to the welfare state, that is – must be taken into account when trying to understand the marginal position of foundations in Sweden during the 20th century, especially within the core areas of the welfare state. As is argued elsewhere, this irritation with the foundation format is often the result of the very character of foundations as inflexible pools of capital without easily identified proxies for their owners (Wijkström and Einarsson 2004).

Today we have a situation where most earlier foundation arrangements have either been transformed, or later established foundations have developed into marginal actors in their fields. In a way, it might even be possible to argue that the institutional memory and practice in society of having strong independent foundations in central positions in their respective fields have been lost to a great extent, which might become important when the tide could now be argued to be turning and both the practice of volunteering and philanthropy at a more general level in society seem to have become more and more en vogue during the last couple of decades (Wijkström 2011). In today’s changing situation, when a slightly larger share of the resources for scientific research in Sweden is found in more independent foundations outside of direct State or government control, for example, this lack of institutional memory might result in an ambiguous and confusing situation, since many of the most important actors in this field – such as universities and public sector research agencies – are not used to having or does not seem to be prepared to have a huge number of smaller private funders of research around to deal and interact with. At the same time, and apart from a few significant cases of major private initiative foundations, we can witness does not seem to be prepared of how to establish and run philanthropic institutions in Swedish society (Wijkström 2007; Wijkström and Einarsson 2004).

During the 20th century, the popular movement association emerged as the most dominant civil society tradition in Sweden. This form did in many situations replace other forms as the way in which to organise non-profit or voluntary activities (Wijkström 2011, 2012). The strength of the folkrörelse concept in Sweden has even been described as a ‘popular movement marinade’ in which civil society in Sweden has been embedded for a long time (Amnå 2008; Hvenmark 2008; Hvenmark and Wijkström 2004; Wijkström, Einarsson and Larsson 2004). In this strong popular movement tradition emerging in Sweden during the 20th century, the idea and existence of foundations has not always been easily integrated. Sometimes they
The other major development in the Swedish foundation arena during the 1990s was the dissolution of the wage-earner funds (löntagarfonderna) and the subsequent creation of the so-called wage-earner fund foundations (löntagarfondsstiftelserna), many of which had a focus on research and higher education (MISTRA and the Knowledge Foundation, which are part of the interview sample, are two examples of the so-called wage-earner foundations). These new foundations were set up by the conservative government in power 1991-94, by redeploying the capital from the previously established, and highly debated, wage-earner funds. In total, almost EUR 2 billion was used as an endowment for, in total, eleven new grantmaking foundations supporting, among other things, research and innovation. In 2002 six of these foundations were among the 28 largest foundations in Sweden (each with more than EUR 100 million in assets). In the same year another foundation, the Riksbankens Jubileumsfond (already established in the early 1960s), received a considerable separate donation from capital from the wage-earner funds (Wijkström and Einarsson 2004).

The official reasons behind the creation of these new large foundations, given by the conservative government at the time, were that foundations allowed for a more flexible way of organising and operating, and that the foundation structure was an already well-tested format for managing and distributing resources for research. Later, it was also argued that the independent position of the foundations and the fact that they were so tightly bound by their original missions also ensured stability and long-term prospects in their operations (Sörlin 2005c; Wijkström and Einarsson 2004).

The new foundations were established in several stages. During 1993, it was decided that only two foundations should be set up, that the separate donation mentioned earlier should be granted, and that the ownership of two earlier public sector universities should be transferred into private foundations through the creation of two completely new operating foundations. However, during late 1993 and early 1994, it became clear that the assets from the former wage-earner funds had increased in value and that several hundred million Euros would still remain after the originally planned foundations were created. In March 1994, more than EUR 800 million remained, and so it was decided that another seven smaller foundations should be created to harbour these new and unexpected resources. Five new research foundations and two others were therefore established in 1994, one to promote a more vital cultural life and the other to increase the financial support for innovations (Wijkström and Einarsson 2004).

1.2 The legal and fiscal framework

Swedish Foundation Law states that a foundation exists only when: (1) an asset or property (2) has been set aside from the donor(s) (3) to be administrated separately and permanently (4) with the aim of serving a specific purpose. A fundraising foundation is considered created when: (1) one or more founders state that the funds that are collected will be administrated separately and permanently with the aim of serving a specific purpose and (2) an individual or organisation accepts to administrate the funds in accordance with the purpose of the fundraising foundation. A Swedish foundation cannot have owners or members,
but is instead described as a ‘self-owning entity’ (självägande). A foundation is required to have a board, and the word ‘stiftelse’ must be part of the official name, a word that in legal terms today is reserved for foundations only.

The Swedish Foundation Law acknowledges two methods to administer a foundation as described earlier; either through an autonomous board, or through the care and administration of the board of another organisation or institution. This latter is referred to here as an attached administration (anknuten förvaltning). In the 2012 registers, a total of 8 140 foundations were placed under attached administration, which is more than half of all philanthropic foundations in the database. The combined assets of these many smaller foundations, with their administration attached to the board of another organisation or institution representing some 30% of the total foundation capital.

Apart from the Foundation Law (passed in 1996; before this there was no law regulating foundations), Tax Law is also of importance in order to gain an understanding of foundations in Sweden. The current fiscal legislation for foundations dates back to the 1940s, although earlier examples of favourable treatment can be found, such as in 1810. In particular, scholarship funds and some specific charitable foundations (fromma stiftelser) were then granted tax-exemption (Hagstedt 1972; Isoz 1997). In the early 1990s, an overhaul of the tax legislation for foundations and non-profit associations was carried out and subsequent new legislation was proposed in a public government report published in 1995. This revision was met with criticism, and in 2003 the proposal was finally put to rest.

The tax legislation for nonprofit associations and foundations was renewed on 1 January 2014. Besides many linguistic modifications which make it easier to understand the legislative text, there was also a major change regarding the definition of public benefit, which has meant that a greater number of foundations with a wider range of purposes than previously are now exempt from tax.

Swedish Tax Law on the nonprofit sector is structured so that a nonprofit association (ideell förening) or foundation that benefits certain specified public purposes may be exempt from capital income tax, and thus the legal definition of what is considered public benefit becomes highly important. The purposes that were previously considered public benefit purposes were different for associations and foundations. A cultural, sporting or religious purpose, for example, was seen as a public benefit purpose for a nonprofit or voluntary association, but not for a foundation. This meant that operations that would otherwise have been the same were taxed in different ways depending on the legal status of the organization.

With the new tax legislation, associations and foundations now receive a uniform definition of what public benefit is. This represents an extension compared to the previously used and more narrow definition for foundations. The most common public purposes are now: education, scientific research, sports, culture, the environment, care for children and young people, political activities, religious activities, medical care, social work, defense and emergency management in cooperation with the government, or equivalent activities.

The consequence of having two different parallel legal systems (Civil Law and Tax Law) with occasionally overlapping terminology and the use of similar words, does not simplify attempts at classifying or defin-
ing different types of foundation or their activities. For a more in-depth discussion on fiscal legislation see Melz (1998) as well as Gunne and Löfgren (2001).

1.3 The foundation landscape

According to our recently updated database there are today more than 13 100 larger philanthropic foundations in Sweden with combined and reported assets of more than EUR 26 billion in 2012 (book value). The majority of these foundations are endowed grantmaking foundations, but there are also some fundraising foundations and operating foundations (for information on Swedish operating foundations see Olsson, 1996).

As we can see in Table 1 below, the Swedish foundation population can be divided into autonomous foundations – with a board of their own to govern and lead the operations of the foundations – and foundations that are administered by the board of another organisation or institution. Swedish Foundation Law acknowledges two methods to administer a foundation; either through an autonomous board, or through the care and administration of the board of another organisation or institution. The latter is referred to here as an attached administration (anknuten förvaltning).

The three main fields where we can identify attached foundations (in terms of number as well as assets) include education, research and social services. This mirrors the general picture of foundations in Sweden. In our database, approximately 7 000 foundations were found under an attached administration (anknuten förvaltning). In total, they are reported to hold more than EUR 1 billion in assets as of 2012 (Einarsson and Wijkström, forthcoming).

Table 1: The Swedish Foundation Sector 2012 (Einarsson and Wijkström, forthcoming).

<table>
<thead>
<tr>
<th></th>
<th>Autonomous administration</th>
<th>Attachéd administration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Assets (EUR mil.)</td>
</tr>
<tr>
<td>Grantmaking</td>
<td>4 100</td>
<td>16 600</td>
</tr>
<tr>
<td>Fundraising</td>
<td>300</td>
<td>150</td>
</tr>
<tr>
<td>Operating</td>
<td>1 500</td>
<td>8 800</td>
</tr>
<tr>
<td>Total</td>
<td>5 900</td>
<td>25 550</td>
</tr>
</tbody>
</table>

The main bulk of foundations’ wealth in Sweden is to be found in foundations created in the 20th century. Almost 75 % of all existing foundations and more than 90 % of their 2012 assets originate from the last century. Only some 800 foundations pre-date the start of the 20th century. Moreover, most of the foundations existing in 2012 – approximately 10 500 – were actually established during the period 1950-1999. In the table below we present the current situation for Swedish foundations and their assets according to the ICNPO classification system. It is clear that research (followed by social services, development and housing and education) in terms of assets today still dominates the Swedish foundation population.

During the 20th century, supporting research was clearly the most popular reason to create foundations, especially in terms of the wealth donated. As many as one out of five foundations set up during the last
century was a research foundation, and their combined assets of approximately EUR 6-7 billion represented almost 45% of the total philanthropic foundation wealth in 2002. This development has also affected the total capital to be found in this particular field, which is today the largest, followed by education and social services.

Table 2. Swedish foundations presented per ICNPO field in 2012 (Einarsson and Wijkström, forthcoming).

<table>
<thead>
<tr>
<th>Aim</th>
<th>Number</th>
<th>Assets (EUR mil.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture and recreation</td>
<td>1 420</td>
<td>1 400</td>
</tr>
<tr>
<td>Education</td>
<td>2 420</td>
<td>3 800</td>
</tr>
<tr>
<td>Research</td>
<td>2 800</td>
<td>9 600</td>
</tr>
<tr>
<td>Healthcare</td>
<td>670</td>
<td>1 100</td>
</tr>
<tr>
<td>Social services</td>
<td>4 100</td>
<td>4 700</td>
</tr>
<tr>
<td>Environment</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Development and housing</td>
<td>870</td>
<td>4 400</td>
</tr>
<tr>
<td>International activities</td>
<td>320</td>
<td>200</td>
</tr>
<tr>
<td>Religion</td>
<td>670</td>
<td>900</td>
</tr>
<tr>
<td>Unclassified</td>
<td>290</td>
<td>200</td>
</tr>
<tr>
<td>Total</td>
<td>13 860</td>
<td>26 600</td>
</tr>
</tbody>
</table>

The Swedish foundation sector of today is rather fragmented, but there is an umbrella organisation called the Association of Swedish Foundations, which strives for a supportive legal and fiscal environment for foundations. It was founded in 1989 and has just over 200 members. This organisation is part of an emerging philanthropic landscape in Sweden and also one of the actors consulted by the Swedish government on new legislation proposals regarding issues affecting foundations. The Association of Swedish Foundations is further a member of Donors and Foundations Networks in Europe (DAFNE), which is a network with its own governance structure bringing together more than twenty donors and foundation networks from across Europe. With a collective membership of over 6 000 foundations, DAFNE underpins the individual activities of its members by strengthening collaboration between national associations and providing a platform for the exchange of knowledge.

1.4 Research/innovation funding in Sweden

Sweden is one of Europe’s champions when it comes to investing in research and innovation, according to the European Comission. In 2011 the country invested 3.37% of its GDP in research and 0.65% of its GDP in innovation and structural change for a total of 4.02%, which makes Sweden one of the world’s most R&D intensive countries. There exist several important clusters of key technologies within the country, especially within energy and environmental technology, health and medical technology, biotechnology, ICT, materials and new production technology, machine tools, and transport and motor vehicle technology (European_Commission 2013).

There are, however, several important challenges ahead since Swedish R&D investments are heavily dependent on the investment of private multinational companies which are increasingly moving their R&D
facilities as well as investments outside the country. This has indeed led to a significant drop in business R&D intensity, which in turn has halted Sweden’s progress towards the national R&D target of 4 % of its annual GDP. To address these challenges, a new Government bill on research and research-based innovation, as well as a new innovation strategy, were launched in Autumn 2012 (European_Commission 2013).

Foundations have played an important role in the Swedish research system for a long time and they have been especially important funders of expensive equipment and buildings. They have of course also been important funders and initiators of projects. But overall they have mainly been complementing the activities of the State and business sectors, especially since the 1950s when state-funded research started to grow. This could be described as foundations historically having an avant-garde role that has gradually changed instead into a role of complementing the State or public sector in its funding of research (Sörlin 2005b; Wijkström and Einarsson 2004).

Some foundations, and especially the larger ones, have over time developed a distinctive character, and it might be possible to argue that they through this they have brought more pluralism and risk-taking into the research field. It is also interesting to note that the approximately EUR 440 000 that Swedish foundations donate to research each year is equivalent to the cost of the research conducted at Uppsala University or Lund University (Sörlin 2005a). For a more comprehensive picture of the Swedish research field in general see, for example, Sörlin and Törnqvist (2000) and Blückert and Österberg (2006), and for a discussion of the relationship between philanthropy and economic growth see Braunerhielm and Skogh (2004).

In general there are two views on the effects of external funds on the quality of research. The first view is that external funds lead to more resources, which make more research possible. The availability of these external funds also increases competition between individuals and groups of researchers, which overall is understood to have a positive effect on the quality of research. The second view is that since universities are already understood to be underfinanced, external funds are allowed to influence the research agenda unduly, thus undermining the general freedom of research (Sörlin 2005a).

A recent major change in the research field, well-described in the book ‘I absoluta frontlinjen’ edited by Sverker Sörlin (2005c) and mentioned earlier, is the creation of the so-called wage-earner fund foundations, which according to Sörlin can be seen as the starting point of the transformation of the research field into an increased concentration of resources and a differentiation between universities. Here foundations are used as a tool in the transformation of this field from being governed by the academic values of basic research to applied research with strategic (national) importance from more of an economic standpoint (Benner 2005a). At the same time it is, however, important to remember that the foundations created when the wage-earner funds were dissolved represent a fairly small part of the total research budget of the universities, around 5 %, according to Sörlin (2005a). This new initiative also met with some resistance from the actors in the existing system and the change has not been as great as the instigators might have hoped for. To sum up, the wage-earner funds have, according to this research, been important for individual projects and even universities, but they have not had a broad impact on the research field and can be more fairly seen as an incremental agent of change in a quite stable system than as a major game changer (Benner 2005b; Sörlin 2005a).
2 Data Collection

2.1 The identification of foundations supporting R&I

An extensive research database was put together during an earlier project in 2002-2003; this was made possible by the financial support from the Riksbankens Jubileumsfond. As a result of the introduction of the Foundation Law in 1996, which requires most Swedish foundations to register with the County Administrative Board (Länsstyrelsen), and the generous cooperation of the County Administrative Board we have access to unique primary data on, for example, the book value of a foundation’s capital, its purpose statement and the year of its founding for approximately 12 500 Swedish foundations, as of 2002. These primary data were imported into the new research database and further developed.

Some 1 700 of the foundations in our database had assets valued at less than ten basic amounts. Due to their size, these foundations fall into a segment of the Swedish foundation population not required to register. We do not know the total number of foundations in this segment, but the total assets of these smaller foundations from the registers accounted for approximately EUR 17 million, representing less than 0.01% of the total 2001 foundation asset value found in the registers. The exact number and wealth of the smaller foundations in Sweden is still unknown, but it is very unlikely that they have aggregated book value assets of more than EUR 1 billion. Not only do we not know the exact number of these small foundations, we are also ignorant about when they were established and in what areas they operate. Our preliminary estimate, however, is that the sum of all the assets from these smaller foundations is not likely to represent more than, at most, less than 5% of the total foundation wealth in Sweden at the beginning of this century (Wijkström and Einarsson 2004).

This database has since been updated with new data from 2012. As a result we have access to unique primary data for approximately 17 500 Swedish foundations (Einarsson and Wijkström, forthcoming). The data from the CAB register have subsequently been substantially improved. We have further substantially updated and completed the material through the correction of existing register data, or the completion of missing register data. During 2003 and 2004, for example, we have been able to fill in the missing years of establishment for some 800 larger and/or older foundations, as well as missing information on individual foundation assets for another 600 foundations.

In parallel to this increase in the quality and the range of the data in the database, we have also been classifying (coding) every individual public benefit foundation (in total approximately 14 000 foundations) according to a couple of different classification systems. We have studied each individual foundation pur-

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1 Swedish Foundation Law requires the two main categories of foundation to report and register with the County Administrative Board in their county. First of all, this requirement covers larger foundations (with total assets of more than ten basic amounts, geared to the price index – the basic amount being about SEK 35 000 in 2002 when the database was created). Secondly, foundations operating some kind of business are also required to report and register.
pose statement and classified them according to the ICNPO system (International Classification of Non-profit Organisations), where the codes refer to the field of activity in which the individual foundation is engaged (Salamon and Anheier 1996). The majority of foundations found in the registers concentrate their activities within one single ICNPO field, but some foundations have their activities spread over several fields. In these cases we have, as far as possible, collected their annual reports and classified them into several fields according to the distribution of their actual expenditure during the relevant year. The other major coding exercise we have defined as ‘sphere’ coding. In this, we have identified the type of main affiliation for each foundation, for example whether it is primarily a government-related, a corporate or an independent foundation.

For the year 2003 we further collected data for a special sample of nearly 400 individual foundations to calculate a first ever estimate of annual foundation grants in Sweden. The foundations were selected from our database according to size, type, geographical distribution and the relevant ICNPO field. After this stratified sampling, economic data concerning for example annual grants, expenditure and the market value of the foundations’ stock portfolios were gathered through personal on-site visits to the premises of several of the County Administrative Boards in Sweden (CAB), where the annual reports and statements for all the Swedish foundations are kept. Our overall purpose was to create average grant/capital ratios for various groups or categories of foundations, to be able to estimate the total annual grants made by the Swedish foundation sector. For these categories, the separate average ratios were calculated and through our knowledge of the total foundation assets in each of these sub-populations, we were able to produce an estimate of the value of the total annual grants in each of the main categories, for example small foundations (with less than SEK 10 million in assets), found in certain ICNPO fields. The information on all of these sub-categories was then merged to create an estimate of the grants from Swedish foundations (Wijkström and Einarsson 2004).

Using the abovementioned database in conjunction with what was learned in the earlier FOREMAP project (Einarsson 2009) a sample of the 125 largest research foundations and an additional 100 smaller research foundations were selected in order to cover the largest foundations representing the majority of the expenditure in this field, as well its full scope. We are therefore confident that the sample be a good reflection the Swedish research foundation landscape.

2.2 The survey

The foundations in the sample where all sent an invitation to participate in the survey by email, and the invitation was accompanied by a cover letter from the research group, from the Director of Riksbankens Jubileumsfond and from the EFC. For those foundations that had no known email address a postal invitation to participate in the survey was sent out. Two waves of reminders were also sent out to the respondents in the sample.

All in all this amounted to 70 foundations responding to the survey. In order to strengthen the survey the research team also collected information from public databases and annual reports on 21 foundations from the sample that had not filled in the survey. This enabled us to fill in partial data on these foundations and to improve the response rate (at least on certain questions) to 40 %.
2.3 The interviews

In combination with an extensive literature review the survey data were complemented by an interview study targeting seven foundation executives. The interviewees were selected from the largest and most influential Swedish research foundations. When selecting the interviewees we also wanted to cover a variety of founders (private individuals, State, business), forms of foundation (endowed and fundraising), and focus area (medicine, natural science, social science, technology etc.). By selecting a sample of foundations covering these categories we are fairly confident that we are mirroring the larger Swedish research foundations. The interviewees were:

Göran Blomqvist, Managing Director of the Riksbankens Jubileumsfond, a large Swedish foundation with the goal of promoting and supporting research in the humanities and social sciences.

Kjell Blückert, Managing Director of the Ragnar Söderberg Foundation, a large Swedish research foundation. Founded by a private individual in order to strengthen Swedish competitiveness through research.

Hans G. Forsberg, Managing Director of Ångpanneföreningen’s Foundation for Research and Development, founded in 1983. Its assets consist mainly of shares in AB ÅF, which is listed on the Stockholm Stock Exchange. Returns on their assets are used to promote research primarily in its purpose areas: energy, the environment, safety, materials, and forest industrial processes and products.

Lars-Erik Liljelund, Executive Director of MISTRA, a large Swedish research foundation. Founded using State funds (one of the wage-earner foundations) with the explicit purpose to create strong, world-class research environments and to solve key environmental problems. Every year, Mistra invests a sum of around SEK 200 million in various research initiatives to build bridges between academic disciplines, as well as between research, on the one hand, and private companies, public agencies and other stakeholders on the other.

Göran Sandberg, Executive Director of The Knut and Alice Wallenberg Foundation, the largest foundation in Sweden, founded by private individuals. The Foundation grants funding in the following areas; research projects with high scientific potential, infrastructure of national importance and individual support for excellent scientists. The funding goes mainly to research and equipment for the natural sciences, technology and medicine.

Madeleine Sandström, Executive Director of The Knowledge Foundation, a large Swedish research foundation. Founded using State funds (one of the wage-earner foundations) with the task of strengthening Sweden’s competitiveness and ability to create value by funding research at universities.

Gunilla Steinwall, Secretary General of The Swedish Brain Foundation, a fundraising foundation that raises money for research and information about the brain and its diseases, injuries and disabilities.
3 Results

3.1 Types of foundation
The overwhelming majority of the respondents that answered the survey (see Figure 1 below) classified their foundations as pure research foundations. Only a minority of them classified their foundations as active within the field of innovation. We can also see that no foundation in the sample is focused solely on innovation, but that all the foundations have a research component. This agrees with the picture given in the interviews when several respondents stated that there were several other players within the field of research such as State agencies and corporations which do more targeted activities, and that foundations therefore should focus more on basic research.

Figure 1: Types of foundation; research and/or innovation
As a percentage of the total number of foundations (N=87)

If we look at Figure 1, which depicts the type of research the foundations in the sample fund, we can see that the majority of the respondents stated that they either fund applied research or both applied and basic research, and only a minority stated that they only fund basic research. Most of the respondents who stated that their foundation funds both basic and applied research have a mix of around 50/50, and those that lean towards one type of research tend to do so more toward applied research.

Figure 2: Types of foundations according to purpose
As a percentage of the total number of foundations (N=60)
When looking at how the foundations allocate their resources we can see that most R&I foundations also focus on other areas of funding.

More than 90% of the respondents that answered the EUFORI survey classified their foundations as grant-making and less than 10% classified their foundations as operating and/or mixed. This is well in line with what we know about the Swedish foundation sector in general, where the majority of foundations are registered as grantmaking foundations. This is even more pronounced when it comes to the larger foundations active in research (Einarsson and Wijkström, Forthcoming; Wijkström Einarsson 2004).

**Figure 3: Types of foundations: grantmaking versus operating**
As a percentage of the total number of foundations (N=80)

![Pie chart showing 94% Grantmaking, 6% Operating, and 0% Both](image)

One very interesting finding in the survey is the year the foundations were founded. As can be seen in the figure below the majority of the foundations in the sample were founded between 1980 and 2000. Of particular interest is the noticeable dip in the creation of research foundations after 2000. One explanation for this might be due to the sample (the study targeted the largest grant-making foundations in the field of research and innovation) and also which respondents chose to answer the survey. Another explanation is of course that a large number of the research foundations that were created in the 1990s originated from the conversion of wage-earner funds.

**Figure 4: Types of foundation according to year of establishment**
Number of foundations by decade (N=53)

![Bar chart showing the number of foundations by decade](image)
3.2 The origin of funds

3.2.1 Financial founders

The majority of the respondents stated that their foundations were established by private individuals and/or families, closely followed by for-profit corporations or nonprofit organisations. This indicates that the majority of foundations in the sample were established through non-public sector money. It is interesting to note that more than ten of the foundations in the sample stated that they were created by other civil society organisations.

Eight respondents stated that their foundations were created by public sector entities. Since the majority of universities and hospitals in Sweden are public sector bodies we could reasonably add them to the public sector, which would bring the number of foundations created by the public sector to 17, which is about half the number claimed to have been created by private individuals and/or families.

Figure 5: Financial founders
As a percentage of the total number of foundations, multiple answers possible (N=83)

- Individual/family: 40%
- For-profit corporation: 22%
- Non-profit organisation: 14%
- Public sector: 10%
- Other: 8%
- Hospital: 6%
- University: 5%
- Research institute: 1%

Four respondents chose to name several founders. The combinations were: individual/for-profit/nonprofit, for-profit/nonprofit, university/research institute and hospital/nonprofit.

Seven respondents chose to name another type of founder and also left a comment regarding the type of founder. Two of these named individuals were from the royal family, one named a corporation together with the State, one named the Swedish Parliament, one named a savings bank, one named a trade union and one named a corporation together with a popular movement.
3.2.2 Income

If we look at the income of the foundations in the sample we can see that the size of income varies a lot between them. This pattern is also reflected in the wider Swedish foundation sector, where a number of large foundations dominate the field by their size of capital and grants, but where there also exists a large number of smaller foundations.

Figure 6: Total income according to categories in Euros, 2012
As a percentage of the total number of foundations (N=91)

![Graph showing income categories]

<table>
<thead>
<tr>
<th>Statistics on income</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of foundations</td>
<td>67</td>
</tr>
<tr>
<td>Mean income in Euros</td>
<td>14 216 000</td>
</tr>
<tr>
<td>Median income in Euros</td>
<td>729 000</td>
</tr>
<tr>
<td>Total income in Euros</td>
<td>952 443 000</td>
</tr>
</tbody>
</table>

If we continue analysing the sources of the income of the foundations in the sample we notice that the dominating source of income is return on endowed capital. More than 90% of the respondents that chose to answer the question stated that their particular foundation has income from an endowment. All the other sources of income were mentioned by only 5-15% of the respondents. This is probably due to the fact that the historically dominant form of foundation in Sweden is the endowed foundation, even though we have seen an increase in operating foundations over the last twenty years or so.
This pattern is also visible when we analyse the different sources of income as a percentage of the total income of the surveyed, see figure 8. We can see that almost 70% of all the foundations’ income within the population comes from income from an endowment. The second largest source of income is income from fees and sales, which stand for 19% of the total income, followed by donations from individuals, which stands for 9% of the total income. This picture, that the income in the foundation arena is dominated by income from endowments, confirms what we already know. It is, however, also interesting to note that as much as 19% of foundation income is generated through their own activities such as service fees and sales.
In the survey, we also asked the representatives of the foundations if they were able to use the capital of their foundation, or if they were allowed to use only the proceeds from the capital. Around half of the respondents stated that their foundation was created in perpetuity, and thus only could use the proceeds in order to maintain their endowment. About 40% of the respondents stated that they were able to use their capital at the discretion of the board and around 10% of the respondents stated that their foundations were created as spend-down foundations, and thus should use up their capital within a specified time frame.

3.2.3 Assets

If we analyse the distribution of capital within the sample we notice that most of the foundations are of a smaller size, but when we look at where the bulk of the capital in the sample lies, we can see that it resides in the larger foundations. This is also true for the Swedish foundation sector as a whole, where the bulk of the capital is managed by a few very large foundations, while the majority of the foundations are rather small.

<table>
<thead>
<tr>
<th>Sources of income</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from an endowment</td>
<td>418 125 000</td>
</tr>
<tr>
<td>Donations from individuals</td>
<td>55 682 000</td>
</tr>
<tr>
<td>Donations from for-profit corporations</td>
<td>8 655 000</td>
</tr>
<tr>
<td>Donations from other nonprofit organisations</td>
<td>1 173 000</td>
</tr>
<tr>
<td>Income from government</td>
<td>2 315 000</td>
</tr>
<tr>
<td>Service fees, sales etc.</td>
<td>116 730 000</td>
</tr>
<tr>
<td>Other</td>
<td>199 000</td>
</tr>
<tr>
<td>Unknown</td>
<td>349 565 000</td>
</tr>
<tr>
<td>Total income</td>
<td>952 444 000</td>
</tr>
</tbody>
</table>

Figure 8: Sources of income
As a percentage of total (known) income

- Income from an endowment (N=58)
- Donations from individuals (N=9)
- Donations from for-profit corporations (N=3)
- Donations from other nonprofit organisations (N=3)
- Income from government (N=2)
- Service fees, sales etc. (N=4)
- Other (N=1)
When looking at how the assets of the foundations in the sample are placed, we can see that the majority of assets, a little over 90%, is placed in long-term securities. Some assets, around 5%, are held as current assets, probably in order to have liquidity to pay grants, salaries and other costs.

### Total assets according to category, 2012

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Assets (EUR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUR 0-100 000</td>
<td>84 000</td>
</tr>
<tr>
<td>EUR 100 000-1 000 000</td>
<td>5 279 000</td>
</tr>
<tr>
<td>EUR 1 000 000-10 000 000</td>
<td>59 603 000</td>
</tr>
<tr>
<td>EUR 10 000 000-100 000 000</td>
<td>603 656 000</td>
</tr>
<tr>
<td>EUR 100 000 000-1 000 000 000</td>
<td>3 711 687 000</td>
</tr>
<tr>
<td>EUR 1 000 000 000-10 000 000 000</td>
<td>6 537 320 000</td>
</tr>
</tbody>
</table>

### Statistics on assets

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of foundations</td>
<td>63</td>
</tr>
<tr>
<td>Mean in Euros</td>
<td>173 296 000</td>
</tr>
<tr>
<td>Median in Euros</td>
<td>13 040 000</td>
</tr>
<tr>
<td>Total assets in Euros</td>
<td>10 917 631 000</td>
</tr>
</tbody>
</table>
3.3 Expenditure

3.3.1 Total expenditure

The majority of the foundations in the sample, about 62%, have expenditure of under EUR 1 million per year and only around 15% of them have expenditure of over EUR 10 million. On the other hand, if we look at the total amounts we can easily see that it is the larger foundations that represent the bulk of the grants for research and innovation.

Figure 11: Total expenditure according to category in Euros, 2012
As a percentage of the total number of foundations (N=66)
For the distribution of total expenditure we can notice that the absolute majority of expenditure, around 90%, is directed towards research and only around 10% is used for other purposes. This is probably used for the administration of the foundation and its grant program. It is interesting to note is that nothing goes towards innovation.

Figure 12: Distribution of total expenditure; research, innovation and/or other purposes
As a percentage of the total known expenditure (N=57)

In the table above one can notice that the majority of the foundations’ expenditure is used for funding research, and only a very small portion goes into what could be labeled as innovation activities.
3.3.2 Research expenditure

The expenditure of the surveyed foundations is divided between direct research and research-related activities, but we can see that around 90% of the expenditure is used to fund direct research and only about 10% is dedicated for research-related activities.

Expenditure on research

<table>
<thead>
<tr>
<th>Expenditure on research</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct research</td>
<td>245 692 000</td>
</tr>
<tr>
<td>Research related</td>
<td>24 270 000</td>
</tr>
<tr>
<td>Unknown</td>
<td>165 857 000</td>
</tr>
<tr>
<td><strong>Total expenditure on research</strong></td>
<td>435 819 000</td>
</tr>
</tbody>
</table>

The distribution between expenditure on basic versus applied research is fairly balanced with a slight predominance of basic research over applied research.

*Figure 13: Distribution of expenditure on research; basic versus applied*  
As a percentage of the total number of foundations (N=40)

![Basic research vs Applied research](chart.png)
### 3.3.4 Changes in expenditure

About half of the respondents stated that their foundation’s expenditure had been unchanged since 2011, 30% claimed that it had increased and 24% stated that it had decreased. The main reason given by the respondents for increasing expenditure was the positive and strong development of the stock market and an increased return of capital. In one of the foundations, the respondents also mentioned that they had saved funds in order to be able to finance a larger project the following year. One of the respondents also pointed out that it was the development of the stock market that made it possible to grant a large amount of funds and that the many good applications made it important to do so. One of the foundations expecting a decrease in grants explained that this was due to lower returns on capital the previous year because of the financial situation.

**Figure 14: Changes in expenditure on research and innovation compared to the previous year**  
As a percentage of the total number of foundations (N=71)

![Circle chart showing percentage changes in expenditure](chart14.png)

If we look to the future about 60% of the respondents said that they did not expect their foundation’s expenditure to change for 2013, whereas 25% believed that it would increase and 12% believed it would decrease. On the whole, this would indicate, based on the sample of this study, that there will be no dramatic changes in the funding of foundations in research and innovation in Sweden in the coming years.

**Figure 15: Changes in expenditure on research and innovation; expectations for the following year**  
As a percentage of the total number of foundations (N=51)

![Circle chart showing percentage changes in expenditure](chart15.png)
3.4 Focus of support

3.4.1 Beneficiaries

If we analyse the group of recipients of grants for research and innovation from the foundations in the sample we can notice that the majority of the grants go to universities and individual researchers (who probably are attached to universities but receive economic support in the form of scholarships). It is interesting to note that a large portion of the grants are directed towards research institutes, but it is difficult to know which of them are connected to universities and which are independent. It is also interesting to note that 14% goes to actors in the public or government sector, 12% goes to the nonprofit sector and 7% goes to the business sector. But overall it seems that the majority of the grants goes to organisations or individuals in the (primarily public) university system.

Figure 16: Beneficiaries
As a percentage of the total number of foundations, multiple answers possible (N=43)

- Private HEIs: 63%
- Individuals: 44%
- Research institutes: 35%
- Government sector: 14%
- Nonprofit Sector: 12%
- Public HEIs: 12%
- Business sector: 7%

3.4.2 Research areas

What areas of research do the foundations in our sample support? If we look at the figure below it is clear that the most important field is medical science, which more than half (57%) of the foundations in the sample claim to support. The field of medical science is followed by three other fields that around 30% of the foundations claim to support: engineering, social science and natural science. These are followed by agricultural science with 25% and the humanities with about 20%.
Even if we switch perspective from the number of foundations that support the various fields to the distribution of grants between the different fields, we can see that the majority of the money, a little over 50 %, is also directed towards medical research. This area is followed by money for the social sciences with 26 %, and engineering and technology with about 10 %. The humanities and natural science together receive around 5 % of the grants.

**Figure 17: Research areas**
As a percentage of the total number of foundations, multiple answers possible (N=69)

- Medical sciences: 57%
- Engineering: 30%
- Social sciences: 29%
- Natural sciences: 29%
- Agricultural sciences: 25%
- Humanities: 20%
- Other: 7%

**Figure 18: Research areas**
As a percentage of the total known expenditure on research

<table>
<thead>
<tr>
<th>Expenditure on</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural sciences</td>
<td>3 478 000</td>
</tr>
<tr>
<td>Engineering and technology</td>
<td>16 686 000</td>
</tr>
<tr>
<td>Medical sciences</td>
<td>83 429 000</td>
</tr>
<tr>
<td>Agricultural sciences</td>
<td>8 158 000</td>
</tr>
<tr>
<td>Social and behavioural sciences</td>
<td>42 116 000</td>
</tr>
<tr>
<td>The humanities</td>
<td>6 138 000</td>
</tr>
<tr>
<td>Other</td>
<td>945 000</td>
</tr>
<tr>
<td>Unknown</td>
<td>274 869 000</td>
</tr>
<tr>
<td>Total expenditure on research</td>
<td>435 819 000</td>
</tr>
</tbody>
</table>
3.4.3 Research-related activities

If we proceed and look at what types of research-related activities the foundations in the sample support, we can easily see in the figure below that the most important area is support for the dissemination of research, which around 69% of the foundations claim to support. Other important areas of support are researcher mobility, technology transfer and infrastructure for research. Only a minority of the respondents stated that their foundation supports science communication or civic advocacy.

**Figure 19: Research-related activities**
As a percentage of the total number of foundations, multiple answers possible (N=32)

- Dissemination of Research: 69%
- Researcher mobility and career development: 38%
- Infrastructure and equipment: 34%
- Technology transfer: 28%
- Civic mobilization/advocacy: 19%
- Science communication/education: 19%
- Other: 3%

The pattern changes markedly when we look at how the amount of capital is divided between the different research areas. Researcher mobility becomes the most important area with over 60% of the expenditure, and infrastructure and equipment come in at number two with 19% of the expenditure. The dissemination of research only receives around 5% of the total expenditure.
3.5 Geographical dimension of activities

3.5.1 Geographical focus

The majority of the respondents stated that their foundations focus their support inside Sweden; only 4% stated that they have activities outside of Sweden. This confirms previous research which showed that the Swedish foundation sector is predominantly focused on national issues (Einarsson 2009; Wijkström and Einarsson 2004). We can also see from our results that there is an even division between foundations that predominantly focus on local and regional initiatives and those that focus on national initiatives.
The role of the European Union

When asked about which role they believe that the European Union should play in relation to foundations, the majority of respondents argued that the EU should provide infrastructure that supports the work of foundations such as databases and other structures for collaboration. Other areas that they deemed important are contributing to raising awareness about foundations and collaborating with them in projects. Interestingly enough, given the focus on legal and fiscal obstacles on a political level in the European Union, very few of the foundations in the sample stated that they believed an important role for the EU should be to create better legal frameworks and fiscal facilities, thus easing the work of foundations.

Interestingly enough, given the large focus on a EU political level on obstacles against cross-border donations, only one respondent mentioned that there are problems when funding research abroad, and that respondent mentioned legal and fiscal problems.

![Figure 21: Geographical focus of support](image)

As a percentage of the total (known) expenditure on research and/or innovation (N=49)

<table>
<thead>
<tr>
<th>Geographical level</th>
<th>Euros</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/regional level</td>
<td>61 183 000</td>
</tr>
<tr>
<td>National level</td>
<td>207 172 000</td>
</tr>
<tr>
<td>European level</td>
<td>8 872 000</td>
</tr>
<tr>
<td>International level</td>
<td>10 211 000</td>
</tr>
<tr>
<td>Total expenditure on R&amp;I</td>
<td>287 438 000</td>
</tr>
</tbody>
</table>

### 3.5.2 The role of the European Union

When asked about which role they believe that the European Union should play in relation to foundations, the majority of respondents argued that the EU should provide infrastructure that supports the work of foundations such as databases and other structures for collaboration. Other areas that they deemed important are contributing to raising awareness about foundations and collaborating with them in projects. Interestingly enough, given the focus on legal and fiscal obstacles on a political level in the European Union, very few of the foundations in the sample stated that they believed an important role for the EU should be to create better legal frameworks and fiscal facilities, thus easing the work of foundations.
3.5.3 Contribution to European integration

When asked if their activities contribute to European integration, a large number of the foundation respondents answered that they did not know. This is not really surprising since the vast majority of foundations in the sample have a Swedish focus in terms of their activities, as discussed earlier. The majority of the respondents stating that they contribute to European integration also stated that they do so through the funding of various research activities. Other ways in which respondents in the sample believed that they contribute to European integration is through educational or cultural efforts.

Figure 23: Contribution to European integration
As a percentage of the total number of foundations, multiple answers possible (N=51)

Yes, on research issues 39 %
No 31 %
I don't know 24 %
Yes on educational issues 16 %
Yes on cultural issues 14 %
Yes on social issues 2 %

3.6 Foundations’ operations and practices

3.6.1 The management of foundations

When asked about who defines the strategy the vast majority of the respondent’s stated that it is the board of the foundation that defines its strategy. Five of the respondents stated that the strategy is defined by the founder of the foundation and five respondents stated that it is another party that defines the strategy. Two respondents chose to name a combination of parties that define the strategy, and both commented that it was the founder in tandem with the board of the foundation.
If we look at the number of board members in the foundations in the sample we can see that the average number of board members is 7.4 and the median number is 7. The spread is, however, rather large; there is for instance a foundation in the sample that claimed to have 21 board members.

**Figure 24: Number of board members**

If we look at the number of employees in the foundations in the sample, we can see that the majority of foundations have between 0.1 and 2 employees if they are measured as full-time equivalents (FTE). The average number is 5.3 FTE and the median is 1.5 FTE, which shows the large spread of the number of employees.

**Figure 25: Number of employees**

### 3.6.2 How do grantmaking foundations support research?

Most of the respondents in the survey stated that their foundation mainly gives support on a long-term basis. Looking at the interviews, it seems that this is not mainly a choice to commit to a certain researcher or project, but more of a question of good projects and researchers being able to secure repeated grants more often, although there never is any guarantee. Some of the interviewees said that what the Swedish
research funding system lacks is mainly opportunities for stable long term funding, and this is a niche that foundations should try to fill. This is also evident from the fact that very few foundations have a policy of supporting an organisation only once.

**Figure 26: Daily practices of grantmaking foundations**

As a percentage of the total number of foundations

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never/rarely</th>
<th>Sometimes</th>
<th>Often/always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support on a long-time basis</td>
<td>17%</td>
<td>37%</td>
<td>51%</td>
</tr>
<tr>
<td>Support organisation only once</td>
<td></td>
<td>78%</td>
<td>10% 10%</td>
</tr>
<tr>
<td>Involved in implementation of projects</td>
<td></td>
<td>81%</td>
<td>12% 10%</td>
</tr>
<tr>
<td>Conduct evaluations</td>
<td>33%</td>
<td>16%</td>
<td>47%</td>
</tr>
<tr>
<td>Demand evidence of how grants have been spent</td>
<td>7%</td>
<td>2%</td>
<td>95%</td>
</tr>
<tr>
<td>Prefer small grants to multiple organisation</td>
<td>42%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Pro-active/competitive call for proposals</td>
<td>53%</td>
<td>10%</td>
<td>43%</td>
</tr>
<tr>
<td>Wait for applications/no active call for proposals</td>
<td>60%</td>
<td>12%</td>
<td>23%</td>
</tr>
</tbody>
</table>

The majority of the respondents in the survey (81%) stated that they are not involved in the implementation of the projects that they fund.

About half of the respondents stated that they conduct evaluations of the projects that they fund and 95% of the respondents stated that they demand evidence of how the grants have been spent. In the interviews several respondents made a strict division between evaluating research output and evaluating the financial management of the projects. Whereas the former is seen as something that is more up to the researcher, the latter is seen as very important for the foundation.

If we look at whether foundations prefer to give many small grants or a few larger grants, there seems to be an even distribution between these strategies. One explanation which came up in the interviews is that this might depend on the size of the foundation, where the smaller ones seem to focus on a more diverse portfolio of grants and the larger ones can afford to give larger and longer kinds of support.

There is also an even distribution between those foundations that are more pro-active and those that are more reactive when it comes to calls for proposals.
3.6.3 Engagement in partnerships

According to the figure below the majority of foundations in the sample do not work as part of partnerships and alliances with other organisations. Those that do, however, tend to have multiple partnerships and also to work quite actively with their partners. The most common type of partner seems to be universities, followed by other foundations.

Universities are the largest partnership group, and according to the interviews these partnerships can either be established directly with individual researchers and research groups, or with universities. The types of partnership with other foundations that were mentioned in the interviews were partnerships in terms of funding, where the foundations pooled their resources or sent applications to each other if they felt the application would be more appropriate for the other foundation, including the sharing of knowledge and best practice, and also sharing people such as evaluators.

Figure 27: Partnerships
As a percentage of foundations, multiple answers possible

<table>
<thead>
<tr>
<th>Partnership Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No partnership</td>
<td>68 %</td>
</tr>
<tr>
<td>Yes, with universities</td>
<td>71 %</td>
</tr>
<tr>
<td>Yes, with foundations</td>
<td>57 %</td>
</tr>
<tr>
<td>Yes, with companies</td>
<td>43 %</td>
</tr>
<tr>
<td>Yes, with government</td>
<td>43 %</td>
</tr>
<tr>
<td>Yes, with research institutes</td>
<td>36 %</td>
</tr>
<tr>
<td>Yes, with other non-profits</td>
<td>21 %</td>
</tr>
<tr>
<td>Yes, with other</td>
<td>14 %</td>
</tr>
<tr>
<td>Yes, with hospitals</td>
<td>14 %</td>
</tr>
</tbody>
</table>

In the table below, we can see that all the respondents answering this particular question stated that one motivation for going into partnership with others is increasing impact. It seems that the main results of this impact are the expansion of activities, the pooling of resources and avoiding the duplication of efforts. Interestingly enough, not one single respondent felt that collaboration with other organisations might increase their legitimacy.
3.7 Roles and motivations

3.7.1 Roles

When asked which role they believed their foundation plays in the field of research, the majority of respondents in the sample stated that they believed they play a complementary role towards other players in the field of research and innovation, which is once again consistent with our earlier findings (Wijkström and Einarsson 2004). Other prominent roles mentioned by the respondents in the sample were substitutes for public funding or initiators of research. This is in accordance with previous research on the Swedish foundation sector, where several respondents mentioned these roles as being important for foundations (Anheier and Daly 2007; Wijkström 2007; Wijkström and Einarsson 2004).

In the figure below we can see that the majority of respondents stated that they see their foundation’s role in research and innovation as complementary to other players such as business and the government. There were also some respondents that saw themselves as substituting other players, and judging from the interviews this is mainly seen as negative, where some foundation representatives stated that they have to fund activities that were previously funded by a now retreating or withdrawing State.

Figure 28: Motivations for partnership
As a percentage of foundations, multiple answers possible

- Increasing impact: 100%
- Expanding activities: 38%
- Pooling money for lack of necessary funds: 23%
- Avoiding duplication of efforts: 23%
- Creating economies of scale: 15%
- Pooling expertise and/or sharing infrastructure: 15%
- Other: 8%
- Increasing legitimacy: 0%
Several of the respondents pointed out to us in the interviews that the reason for foundations supporting research was that the founder(s) had put it in the foundation’s charter. Swedish foundations and their boards are bound to act in accordance with the charter. In order to change the charter you need to prove that it is no longer possible (or worthwhile) to achieve the foundation’s goals through a lengthy and difficult legal process. According to their point of view it would be more correct to ask why the founder chose to set up a foundation that supports research.

When asked why they thought that research is the most common field of activity for Swedish foundations, several of the respondents said that they believed that the favourable tax treatment of research foundations in combination with research being a prestigious activity was key for the decisions of most of the founders. At the same time, some of the experts commented that there is an irrational fixation with the tax-exempt status in the discussions regarding the creation of foundations. According to this view, other, non-tax related issues, are more important for the founder and the tax-exempt status is just an added incentive. Some of the respondents stated that the personal experiences of the founder often play a vital role in the decision to donate money. A very common reason for creating a foundation that supports medical research is through personal experience from a particular disease; other examples include donations to educational facilities, hospitals and cultural institutions with which the founder has a personal relationship. Another common reason for creating foundations, according to our respondents, is that the founder has no heirs and thus wants their money to be put to a use of their choice.

Figure 29: Roles of foundations
As a percentage of the total number of foundations according to role
4 Innovative Examples

During the interviews, several interesting innovative practices in Swedish research foundations were uncovered. Below, three examples of these will briefly be discussed.

**Cooperation with other parties**

Several of the interviewees stated that their foundation cooperates with other parties such as industry, academia and nonprofit organisations. One example of this cooperation is the MISTRA Future Forests Project, which is conducted in cooperation with the Swedish University of Agricultural Sciences and the forest industry. The foundation and a consortium of companies from the forest industry co-fund the research project, which is conducted by researchers from (mainly) the Swedish University of Agricultural Sciences. In this way the foundation is able to pool more resources, but also to shorten the time it takes for research breakthroughs to be implemented in practice. The project management consists of representatives from the foundation, the university and the industry consortium, but also with representatives from nonprofit organisations active in environmental advocacy and outdoor recreation. By integrating different stakeholder groups, the foundation is able early on in the process to gather and assess a wider variety of viewpoints on the project and also to improve the degree and speed of implementation. MISTRA has here a clear policy to engage as many relevant stakeholders as possible in their research projects, something which can also be seen in the highly successful project Steel Cycle (Stålkretsloppet).

The Steel Cycle consists of eleven projects which map the way steel is first of all extracted from iron ore in a mine, all the way through to where it finally ends up on the scrap heap, including new steel types and development methods and techniques for making steel production more sustainable. This may comprise aspects such as a higher yield of metals at melting point and lower temperatures during rolling. The project has saved money for the steel industry and reduced carbon emissions, thus helping protect or improve the environment. All this and more have been developed within the research program. The project has resulted in substantial savings in the steel industry. One example is a project for vanadium recovery, which has been shown to provide direct benefits equivalent to EUR 100 million a year just by recycling the vanadium in the slag from Swedish iron ore during the steelmaking process. The project has also resulted in several important patents where the Swedish steel industry gains several EUR 100 million per year. Another effect is that an awareness of environmental values has reached a higher level in companies where the leaders now understand how the steel lifecycle works and have learned to speak the environmental language.

Most of the respondents described their partnership with other organisations in a positive light, even though there seem to be some obstacles. One such obstacle might be that their partners, for instance a research foundation or a corporation, could have different reasons for engaging in their activities. One solution mentioned in the interviews is to be thorough when writing the cooperation agreements, which
is especially important in innovative projects where there might be valuable intellectual property rights to be considered. This complexity is of course compounded further if the funding organisations come from different countries; the trend at the moment seems to be an increase in the numbers of partners on both sides, which makes partnerships more complex but also more fruitful. Innovative research projects are often high-risk projects, which requires a high degree of trust between the partner organisations. One cornerstone in the building of inter-organisational trust is continuity in relations, something that the respondents claimed to be able to do according to our interviews and previous studies (Einarsson 2009; Wijkström and Einarsson 2004).

**Increasing the exchange between academia and business**

Riksbankens Jubileumsfond has just started a new program called Flexit, which aims to build bridges between research in the humanities and social science on the one hand, and corporations and other organisations outside the academic world on the other. They also aim to facilitate the exchange of knowledge and make contacts so that more organisations outside the university world can see and utilise the skills of PhD graduates in the humanities and social science, thus creating new career paths for academics with PhDs. In this program, this is done by funding positions such as in-house researchers in different organisations, where the positions are a maximum of three years and consists of 75% research and 25% employment in the company or organisation. The first two years of employment are linked to the company or organisation and the third year to an academic institution. RJ pays the salaries and other costs associated with the research, while the company or organisation assumes the responsibility for the salaries for the rest of their employment. This project has been running since 2012 and has so far received good internal evaluations.

**Creating research profiles**

Among the Swedish research foundations, one of the practices that stands out most is the work of the Knowledge Foundation, which has been working with funding for what they define as ‘research profiles’ at different universities in Sweden. These research profiles are fairly large and concentrated activities, and they can have a budget of up to approximately EUR 4 million. The aim of this foundation is to help establish successful research environments and strategic profiles at universities that are developed together with the local business community. The profile should fit into the long-term strategy of the university, and it should be able to survive on other sources of funding after the profile grant has ceased. In order to help research groups and universities to qualify to apply for such large-scale funding the foundation also has smaller programs aimed at developing the skills of individual researchers and strengthening research groups. To help the planning of the researchers and universities the foundation strives to communicate all their grants and targeted initiatives three years in advance.

Another example is The Vårdal Foundation for Healthcare Science and Allergy Research, which has been instrumental in establishing healthcare science in parallel with classical medical research. The foundation is used to changing perspectives and structures, something it seems well-suited for. This is also the way that the Riksbankens Jubileumsfond works (but on a smaller scale) with what they have termed ‘områdesgrupper,’ where they identify a new area worthy of research and that has previously been underfinanced.
(or understudied). The foundation then appoints a group of scholars and other members of society responsible for developing the identified area of research. One group normally works for five to six years, and there are usually around three such groups active at the same time.
5 Conclusions

Main conclusions

The Swedish foundation population has developed through several more or less distinct phases. From a focus on education and scholarships promoted by the foundations established during the period before 1800, to a heavier emphasis on foundations in the field of social services during the 50-year period from 1800 to 1850, to the second part of the 19th century and onwards, when research foundations dominated the arena, as identified in our earlier work (Wijkström and Einarsson 2004). In order to understand the historical development of the foundation sector, a couple of other and more specific historical developments must be brought to the fore: namely the emergence and politics of the Swedish welfare state and the strength and dominance of the popular movement tradition in Swedish civil society (Wijkström 2012).

Moreover, it is important to make a distinction between an earlier and historically strong philanthropic tradition or culture in the country – to a large degree abandoned, counteracted or at least downplayed in the welfare-state era of the 1900s – and the continued practice of establishing foundations, carried on also by public sector bodies in the previous century, but not necessarily in a philanthropic spirit (for a more thorough historical description of the Swedish foundation sector, see Wijkström and Einarsson 2004).

Foundations have played a number of important roles in the Swedish system of research and higher education for a long time, and they have been especially important funders of expensive equipment and buildings. They have of course also been important funders and initiators of individual research projects and programs. But overall they have primarily filled the role of complementing the activities of the State and of corporations; according to our respondents this has especially been the case since the 1950s, when State-funded research started to expand. This could be described as a historical avant-garde role, gradually changing into a role of complementing the State or public sector (Wijkström Einarsson 2004; Sörlin 2005d). Several of the respondents interviewed in the project stated that foundations should function as complements to traditional research funding (from the State or business), but they claimed that more recent developments in the field of research have unfortunately forced foundations into a substitutive role. One interesting reflection is that since (Swedish) foundations are so tightly bound by their original charters, they have no option but to fill a substitutive role in their given field if the other players in that field choose to withdraw (see also Wijkström and Einarsson 2004; Wijkström 2007; Einarsson 2009, for a similar analysis).

One recent major change in the research field, described well in the book ‘I absoluta frontlinjen,’ edited by Sverker Sörlin (2005a), is the creation of the wage-earner fund foundations, which, according to Sörlin, can be seen as the starting point of the transformation of the research field into an increased concentration of resources and a differentiation between universities. Here, foundations are used as a tool in the transformation of the field from being governed by the academic values of basic research into more applied research with strategic importance from an economic standpoint (Benner 2005a). But at the same
time it is important to remember that the wage-earner fund foundations represent a very small part of the total research budget of universities; around 5% (Sörlin 2005c). This development has also met with resistance from the existing system and the change has not been as great as its instigators might have hoped for. To sum up, the wage-earner funds have been important for individual projects, individual researchers and universities, but they have not yet had a major impact on the research field and can be more fairly seen as an incremental small-scale agent of change in a fairly stable system (Benner 2005b; Sörlin 2005b).

Swedish research foundations have historically played an important role in the Swedish research field, and they most probably still have an important role to fill, even though they are not by any means the main funders of Swedish research. It is rather through their special organisational and institutional character that they are able to increase the pluralism of the models and methods within the wider system of research and education. This is especially true for some of the larger foundations which over time have developed a more distinctive character through which they have been able to bring more pluralism and possibly also a different form of risk-taking to the field (Sörlin 2005a).

From the results of the survey, we notice that the overwhelming majority of the respondents classified their foundations as pure research foundations and only a minority would agree that their foundations also engage in innovation. More than 90% of the respondents classified their foundations as grantmaking, and less than 10% as operating and/or mixed foundations. This result is well in line with what we know about the Swedish foundation sector in general, where the vast majority of foundations are registered as grantmaking foundations. This is even more pronounced when it comes to the larger foundations active in the field of research (Einarsson and Wijkström, Forthcoming; Wijkström and Einarsson 2004).

The majority of the foundation representatives in the sample (consisting of the 125 largest research foundations and an additional 100 smaller research foundations) stated that their particular foundation had been established by private individuals or families, closely followed by being established by for-profit corporations or nonprofit organisations. This indicates that the majority of foundations in the sample were established through non-public money. If we look at the creation of research foundations we can see a steadily increasing trend in the number of foundations established up to the year 2000, when there is a large dip to a lower level that still seems to remain to this day.

The size of capital and the size of income of the foundations in the sample varies a lot, a pattern that is also reflected in the wider Swedish foundation sector, where a number of very large players dominate the field in terms of the size of their capital and grants, but where there also exists a very large number of smaller foundations providing a wealth of alternative models and different approaches in various niches in the field. The dominating source of income is a return on endowed capital where almost 70% of the representatives in the sample stated that the foundations they represent earn income from an endowment. This pattern also holds true when we analyse the sources of income as a percentage of the total income of the surveyed foundations. About 69% of all the foundations’ income in the studied population comes from income from an endowment. The second largest source of income is income from fees and sales, which stand for 19% of the total income, followed by donation from individuals, which stands for 9% of
the income. This picture, that research foundations’ income is dominated by income from endowments, confirms what we already know about Swedish foundations being dominated by endowed foundations. It is, however, also interesting to note that as much as 19% of the income is generated through activities run by the foundations such as service fees and sales.

Around half of the respondents stated in our interviews that their foundations were created in perpetuity, and that they could therefore only use the proceeds in order to maintain their endowment, whereas about 40% of the respondents stated that they were able to use their capital at the discretion of the board, and around 10% of the respondents stated that the foundations were created as spend-down foundations. The main area of support by foundations in the sample is medical science, which almost 60% of the foundations in the sample support, according to our respondents. The field of medical science is followed by three other fields, which together are supported by around 30% of the foundations: engineering, social science and natural science. These are followed by agricultural science with 25% and the humanities with about 20%. If we instead study the distribution of grants between the different fields we can see that the majority of the money, a little over 50%, still goes to medical research. This area is followed by social science with 26% and engineering and technology with about 10%. The humanities and natural science then together receive around 5% of the grants. Independently of how we look at the numbers, the number of foundations or the total volume of grants, medical science is the by far the largest area of support.

If we look at what types of research-related activity the foundations in the sample engage in, we notice that the most important area is support for the dissemination of research findings, which around 69% of our respondents claimed that their foundation supports. Other important areas of support are researcher mobility, technology transfer and the creation and support of an infrastructure for research. This pattern changes markedly when we look at how the amount of capital is divided between the different research areas. In that case, researcher mobility becomes the most important area, with more than 60% of the expenditure; infrastructure and equipment is the second most important area with 19% of the total expenditure. The dissemination of research only receives around 5% of the total expenditure of foundations. The majority of foundation representatives in the sample stated that their support primarily goes inside Sweden, and only 4% claimed that their foundation takes part in any activities outside Sweden. This confirms previous research which showed that the Swedish foundation sector is predominantly focused on national issues (Einarsson 2009; Wijkström and Einarsson 2004).

About half of respondents stated that their foundation’s expenditure has remained the same since 2011; 30% stated that it has increased and 24% stated that their expenditure has decreased. The main reasons given for increasing expenditure are the positive developments in the stock market and the increased return of capital. The representative of one foundation also mentioned that they had saved funds in order to be able to finance a larger project the following year. Another one pointed out that it was the development of the stock market that made it possible to grant large amounts of funds and that the many good applications made it important to do so. For one of the foundations expecting a decrease in grants, the respondents explained that this was due to lower returns on capital the previous year due to the financial situation. When looking to the future, about 60% of the respondents said that they did not expect their expenditure to change in 2013, whereas 25% believed that it would increase and 12% believed it would
decrease. On the whole, this would indicate, based on the samples in this study, that there will be no dramatic changes in foundations’ funding of research and innovation in Sweden in the coming years.

The strengths and weakness of the R&I foundation sector in Sweden

The Swedish foundation sector contains a large number of important research foundations which act as important funders of expensive equipment and buildings but which are also prominent as funders and initiators of individual research projects. Through their distinct legal status, research foundations are, according to our respondents, able to identify important areas for research, to quickly allocate resources to these areas and at the same time to act as enduring funding partners. This stability and endurance, coupled with an ability to increase pluralism in the field of research funding, is one of the main organisational and institutional strengths of foundations as funders. This could be the added value that makes foundations suited, for example, for the task of identifying and establishing new research areas. Their endurance and stability may also allow foundations to develop their own identities and their own roles in the research field over time. This is one of the characteristics of foundations which, on this level, could enable them to create pluralism in, for instance, the field of research and higher education. But to be able to actually achieve this places high demands on foundations and their boards and management to develop their own distinctive character and strategy and not get caught in what is seen as fashionable research at the time. The particular possible role of foundations in the research system might thus partly be described as being innovative through being conservative; in other cases they are just adding more resources to already existing fields of research.

One interesting reflection is that since (Swedish) foundations are so tightly bound by their original charters they have no option but to fill a substitutive role in their given field if the other players in the field, for example in the public or state sector or the corporate world, choose to withdraw or change their orientation. This characteristic, which above was seen as a strength, can of course also be seen as a weakness whereby a foundation might be forced to assume responsibilities that earlier were seen to be those of other players. To be able to carry out this this type of analysis we need to assume a fairly long-term perspective and also to analyse the field as a whole rather than individual cases.

If we study the creation of research foundations we notice an steadily increasing trend in the number of research foundations established up until the year 2000, after which there is a substantial dip to a lower level which seems to remain to this day. If we look at the foundation sector as a whole, and not only research foundations, we cannot find a corresponding dip for this period. This decrease in the creation of research foundations might indicate a future problem for the sector since an influx of new foundations with new purposes and strategies might be seen as one of the prerequisites for the foundation sector to fulfill the identified role of bringing pluralism, innovative methods and dynamics to the field of research and higher education.

At the same time it seems that the already created research foundations are financially sound and fairly stable. Almost 70 % of the foundation respondents stated that their main source of income is return on endowed capital, and the majority of those respondents also stated that their foundations were set up
and created in perpetuity. In combination with the fact that the majority of the respondents seemed confident that their expenditure on research will not change or increase, this seems to indicate a situation in which there will be no dramatic change in the foundation funding of research and innovation in Sweden in the coming years.

**Recommendations**

According to the current survey the majority of research foundations in the sample do not work in partnership or alliances with other organisations. However, those that do tend to have multiple partnerships and also to work quite actively with their partners. The most common partner seems to be universities followed by other foundations. The main motivation for these partnerships, according to the survey, is increasing impact. The main ways for increasing that impact are the expansion of activities, help with the pooling of resources and avoiding the duplication of efforts. It therefore seems there is room for increasing the impact of foundations in the field of research through increasing cooperation and partnerships between foundations, and also between foundations and other organisations.

Our empirical material indicates that foundations are able to independently identify important areas for research, to quickly allocate resources towards these areas and at the same time to act as an enduring funding partner. One example of this type of ‘added value’ could be a foundation that moves into a specific type of research which it has identified as being underfunded, for example research on a special medical diagnosis, and thus by focusing its efforts can have a large impact. This flexibility coupled with endurance is one of the distinctive organisational and institutional characteristics of foundations enabling them to increase pluralism in research. We can also see that foundations are able to innovate and experiment with different tools and methods for supporting research, something which further strengthens their function as innovators in this field. Examples of this can be innovative ways of identifying new research areas, new ways of funding research or new ways of creating collaborations and partnerships.

There might be a considerable risk, from the perspective of the particular role as an alternative model or practice identified in this report, that foundations by imitating the heavier and more influential public sector research councils might become players behaving just like any of the others in the field, therefore failing to add pluralism to the system. There might of course be a lot to learn from how the public sector research councils work (or from the R&D departments of large corporations), but foundations should, in our view, at the same time act as a complement to the regular structure of the research field and also try to leverage the strengths of the organisational and institutional distinctiveness of their organisational form.
6 References


