Allan Tiitta

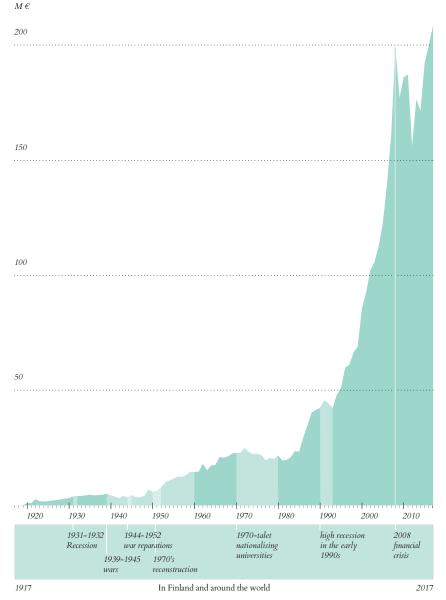
Finnish foundations as developers of research and higher education

< RESEARCH IN A NUTSHELL >

Providing solutions, not problems

rivate foundations fund versatile research that has been crucial for the development of many disciplines in Finland. This is an executive summary for a study that has, for the first time, clarified the significance of domestic foundations supporting research and universities in Finland. In the background, there is a multiannual research project that is unique even internationally, mapping the funding data for foundations during the time period of the independence of Finland 1917–2017.

According to the study, the foundations' support for research and higher education has multiplied by more than 2,500 within hundred years. Thousands of Finns have become supporters of research by donating to foundations, and thereby ensured breakthroughs in research for the common good. For more than a hundred years, the foundations have been able to ensure that solutions are found also in such areas of society that do not belong in quickly changing political priorities.



Foundations as research subjects

The foundation system is one of the Finnish institutions whose role in the society has not been of great interest to the general public. Previously, the grant allocation events for big foundations in particular gained visibility in the media, but nowadays they exceed the news threshold only rarely. Scientific research related to foundations has also been very infrequent in Finland.

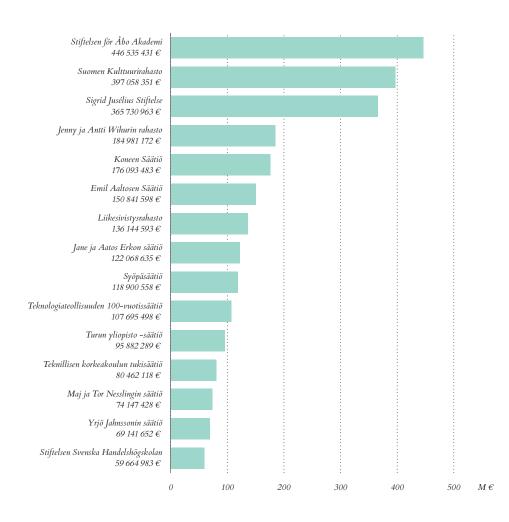
Research has focused on individual foundations and general evaluation of the significance of the foundation system and analysing legislation and accounts related to foundations. On the other hand, research information related to the foundations' operations, achievements and social impact are scarce and fragmented, and their results are based on inadequate research material.

The lack of research is largely due to the scope and diversity of the foundation field. There are about 2,800 registered foundations in Finland, covering nearly the entire spectrum of human life. Most of the foundations are operational foundations that implement their purpose by producing services, e.g. in

the social and health care sector, education sector and sports and youth work. There are about 800 foundations that allocate grants, and they operate mainly in the fields of research and science, education, culture and arts.

The prominent position of foundations and funds in supporting research and higher education has been recognised for a long time, but usually the matter has been stated in a general way without sufficient justification. The aim of this study is to determine the impact of domestic foundations allocating grants on the development of research and higher education in Finland during the period of independence 1917–2017. With extensive new material, this study complements the general history of science, research and higher education in Finland and also clarifies how the funding for the scientific research by private foundations has developed and had an impact during the time of independence.

The big picture on the impact of grants on the development of scientific research



In total 118 foundations, funds and scientific and literary societies have been included in this study. In addition to all the foundations and funds that have funded research for the longest and in the most significant way, there are some such foundations whose establishment and operations are related to the political and social situation of a particular period. In addition to these foundations, we also look at foundations that have had a significant impact in certain situations. This has placed emphasis on the foundations' role as a part of a society whose values and goals they have wished to advance. Foundations represented the third sector for decades even before this concept was created.

In addition to foundations, some academic and literary societies and communities with long-standing impact are subjects of the study. They have been included both for practical reasons as well as in accordance with the position adopted by the European Foundation Center that is also internationally accepted: they largely operate based on the same principles as foundations, and funds have often been established in connection with them that allocate grants in the same manner as the foundations. Thus including them in the study helps create a more comprehensive overview of the impact of grants on the development of the scientific research in Finland.

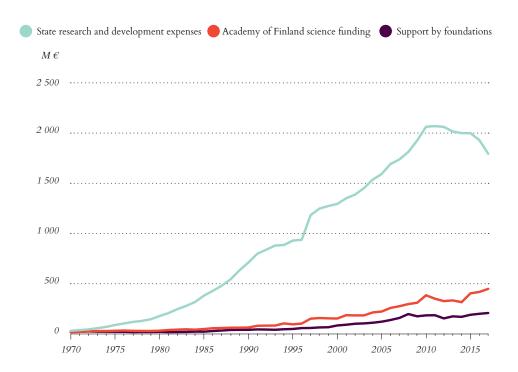
Foundations providing greatest support for research and higher education in the years 1917-2017.

The foundations' role in supporting research and science policy

The study first creates an overview of how the domestic foundations that support scientific research and higher education tie into the general scientific-political development in Finland. The general characteristics, formation of the cooperation between the foundations and change in their societal position are topics of examination. In the unabbreviated Finnish study, each foundation and society that are included in it are briefly described, introducing their manner of establishment, founders, purposes and economic considerations.

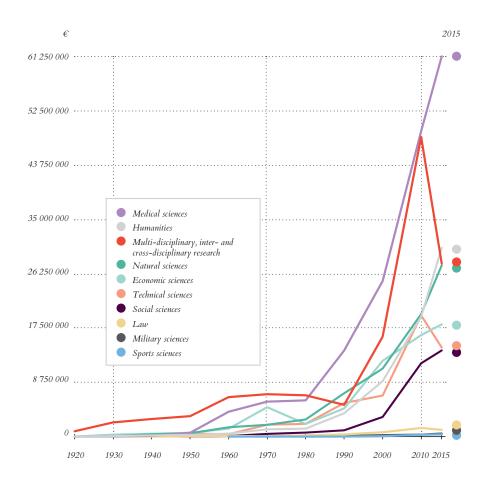
The second part of the study focuses on the foundations' role to support the scientific research and higher education in Finland as well as to complement and finally also challenge public science policy. The attention is directed towards the development of the amount and allocation of the grants as well as the grounds based on which support decisions have been generated. A central theme is finding out how and why the support allocations have varied during the time of independence: how the support has been allocated between higher education institutions, researchers and different disciplines, when they have aimed to support large research tasks, foreign studies and study trips and those writing dissertations. The study also pays attention to how gender can be seen in foundation funding.

The study examines how the development of government research funding has had an impact on how the foundation's support is directed and what the attitude of the national scientific research decision-makers is in terms of the foundation funding. The amount of the foundations' grants is compared with the state research and development expenses and the development of the scientific research funding of state academic committees and the academic funding of the Academy of Finland. In terms of the foundations, only the grants allocated by them have been taken into account, not administrational or other costs that the grant allocation process generates, even though these are also related to supporting the research.



State research and development expenses, funding for the sciences by the Academy of Finland and the support for the sciences and higher education by the foundations and societies included in the study in 1970–2017.

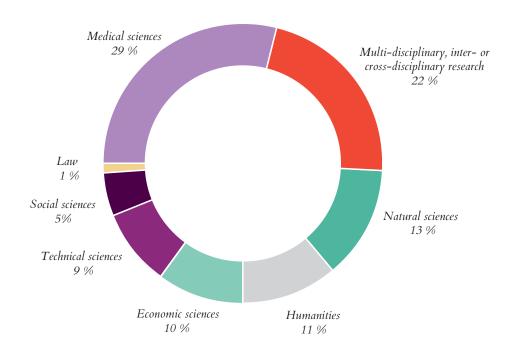
Fragmented source material and erroneous statistic



Distribution of the grants between different disciplines in 1920-2015.

Since this is a matter of more than a hundred-year research period and the amount allocated by foundations, funds and academic and literary societies in grants during this period rises to hundreds of thousands, the study has mainly been prepared as a sample survey. The total amounts granted by foundations have been taken into consideration for each year, whereas accurate data about grants and their allocation have been compiled for each even decade between 1920–2010 and for the year 2015. If any foundation has not allocated funds during the even decades, the nearest comparable year of allocation has been included. Even though the detailed material obtained in this manner only comprises more than ten percent of the grants allocated by foundations in total, it is sufficiently comprehensive for creating a reliable overview. In Finland, 20 of the biggest foundations have always allocated at minimum 60 % of the grants allocated by all foundations in total.

The study was hindered by the fragmented nature and different types of the source material concerning foundations. The research statistics of Statistics Finland do not take into account the support allocated to the scientific research and higher education, except for the part that is directly allocated through the universities' accounting. Since universities are not obligated to record the researchers' personal grants, this significant support for research remains completely outside the official statistics. The conflict between the statistics of Statistics Finland and practical support sums has not been rectified, even though the *Suomen tieteen tila ja taso 2000 (The status and standard of Finnish* Science) report by the Academy of Finland already showed that most of the research funding by private foundations is not recorded correctly. The lacking information has led to the fact that the foundations' significance in terms of funding for research is constantly undermined in public discourse.



Total distribution of the grants between different disciplines in 1920–2015.

Histories have been written about several foundations, and their archives are in excellent order, and the foundations also supplied material both by mail and e-mail. However, some foundations have practically no archives or almost no information about their earliest operations. Also collecting research material from different sources proved challenging. Since the study only focused on grants allocated for scientific research, we often had to individually pick grants from the grant lists of foundations and societies to be included in the study. All foundations and societies did not have uniform grant lists but the data had to be collected from different sources, minutes of meetings and annual reports.

The basic material for the study comprises the official financial statements that the foundations had to hand over to the authorities after the Foundations Act came into force from the beginning of the 1930s. The financial statements were mainly collected from the archives of the Ministry of Justice and the Finnish Patent and Registration Office, the National Archives of Finland and the electronic Virre service of the Finnish Patent and Registration Office.

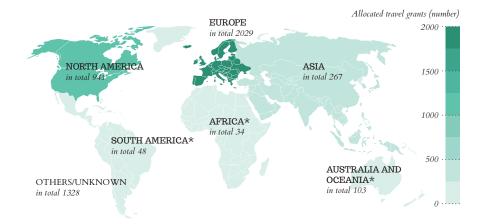
In the study, the sums from different years have been transformed to the value of money for the year 2017 with the consumer price index multiplier in order to facilitate comparability, and in this manner it is possible to compare the purchasing power during different time periods. Even though the consumer price index multiplier does not provide exactly the correct picture of the change in the value of money, using it is practically the only option in order to be able to compare them.

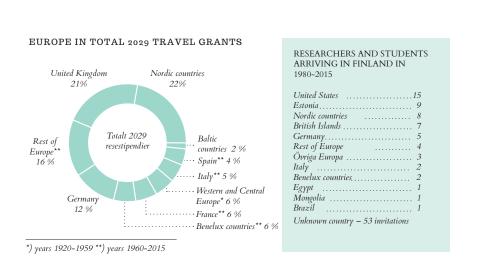


Foundations securing the continuity of scientific research

he study shows that foundations have had a notable impact on the development of scientific research and higher education in Finland. The significance was relatively largest during the first 50 years of independence, when the resources of the administration of the national academy were weak. The foundations maintained many private universities, they served as important funders and internationalising influence of scientific research and participated in training a new generation of researchers as well as developing the scientific life in the country. Many of the projects funded by the foundations gradually moved to the sphere of public funding. During the years of the Cold War, the foundations had an impact with their travel grants on keeping Finland within the sphere of the Western societal and academic system, in addition to having an impact on scientific societies and the whole academic community.

The target areas of the travel grants allocated by the foundations and scientific societies included in the study worldwide and within Europe in 1920–2015; as well as the researchers and students arriving in Finland with the travel grants allocated by the foundations and scientific societies included in the study.



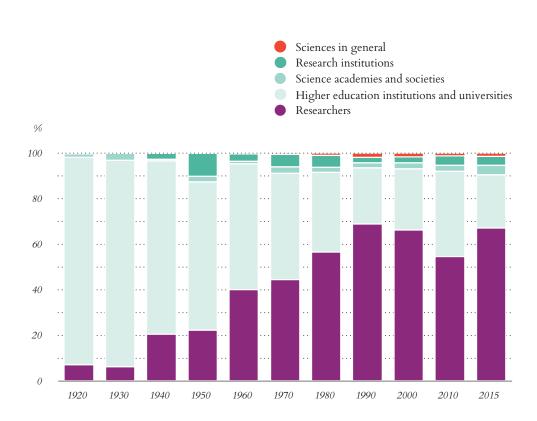


Change of power from researcher elite to political decision-makers in the 1960s and 1970s

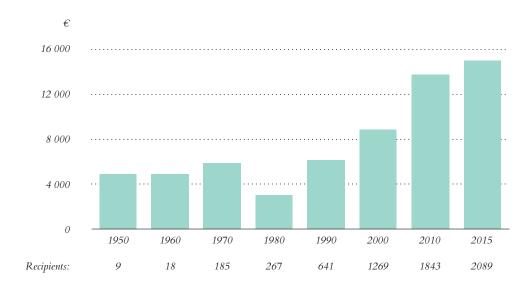
The strong position of the foundations weakened during the 1960s, when the national science and research policy began to strengthen. Research and higher education became a part of politics, and the outlines for its development were determined in the parliament and the government, and the Ministry of Education and the Ministry of Trade and Industry were mainly responsible for its implementation. In addition, the national research and technology council, higher education institutions, different kinds of national expert bodies, offices and institutions, such as the Academy of Finland, Tekes, Sitra and other research facilities as well as representatives of industrial and social life were involved in defining the research, science and technology policy.

The change in power in research that took place within the timespan of about 10 years was significant. The old elite that had been in power until then, consisting of the leading figures of universities, science academies and large foundations, had to step aside to give room to political leaders. Whereas at the end of the 1950s the Finnish Cultural Foundation aimed to show the way for the development of Finnish cultural life and the Finnish Society of Sciences and Letters and the Finnish Academy of Science and Letters appointed the members for the national research and science committees, in the beginning of the 1970s the representatives of research and science were almost completely superseded in decision-making.

Even though the time of the greatest political tumult was over quickly and the academic community got back some of their influence, the time of scientific societies and research supporting foundations as the trendsetters of scientific research was over. Higher education institutions all became state-owned and the state and companies took the main responsibility for the funding of research and development operations, and their share rose to more than 60 percent of the total sum in a few decades.



Distribution of the grants between different groups of recipients in 1920–2010 and in 2015 (based on value of money).



Grants allocated for dissertation work and the average grant amount in 1950-2015.

A similar move towards systematic public science policy took place almost everywhere in the Western world, but in Finland a number of other factors also promoted overriding the significance of the foundations in Finland. Statistics Finland started compiling research statistics in a manner that left most of the grants allocated by foundations outside of the statistics. The Ministry of Education, which had quickly increased in power and represented the new political movement, overrode the foundation system nearly completely and gave its support to forces that aimed to bring the foundations under stronger state controls than before.

The foundations managed well under fire due to their counter-measures and changes in political power relations. Their influence became smaller but at the same time they were released of tasks such as funding the work of professional researchers, which would have proved too expensive for the foundations with time. Now they were able to focus on implementing their purposes and to focus on those forms of funding that they considered to be of most use to the research in Finland.

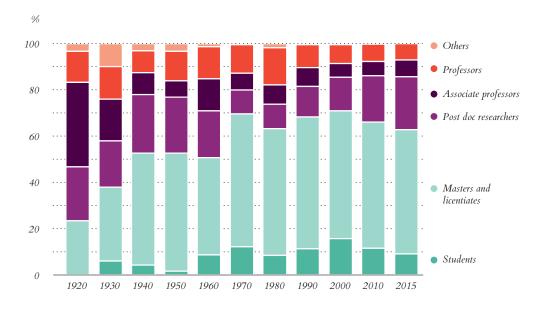
Cooperation and profiling in the 1980s and 2010s

The foundations' support for scientific research grew slowly up to the latter half of the 1980s. They mainly supported researchers who received more than 60 percent of the total funding at the end of the period. Grants were allocated especially for personal research work, dissertation writing, foreign research and study trips as well as supporting studies and publication activities. Nearly a fourth of the grants was still directed to universities and higher education institutions that were supported by both old foundations focusing on university funding as well as new grant foundations.

The foundations' possibilities for supporting scientific research improved significantly at the end of the 1900s, when their funds had increased due to the growth of the Finnish economy and the staggering increase in stock prices. Even though also foundations experienced losses, they survived the consequences of the stock market crisis and recession in the beginning of the 1990s reasonably well. Their success was based on both cautious investment policies and extensive asset base, due to which they did not have to realise their assets during poor rates. Disregarding the drop in 1992–1993 recession, the support foundations allocated to academic research increased continuously up to the turn of 2009 and 2010, when the financial crisis began and started to put the foundations' finances under strain. The foundations survived this ordeal as well, and the fundraising campaigns organised to secure the universities' finances made the foundations again significant funders of universities.

The increase in wealth and drastic cuts in state research and university support in the beginning of 2010 provided the foundations with an opportunity to raise their profile. The foundations responded to the challenge both by using their old forms of support in a versatile manner as well as developing new funding instruments. They supported universities and research institutions, acquired research equipment and funded fixed-term endowed professorships and initiated extensive research projects in cooperation with other foundations, universities and public administration institutions.

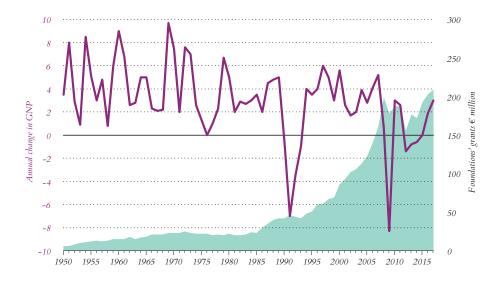
The Ministry of Culture and Education still did not consider foundation funding as significant as the support for research provided by companies and foreign foundations. Cooperation went smoothly in different projects, especially if the foundations were happy with a role as mere funders and let others determine the outlines. Foundations were ready to discuss joint scientific research funding with the Ministry, but only on the terms that their premises were also taken into consideration. The foundations' operations are mainly based on private people who have donated their property or funds for achieving certain research goals.



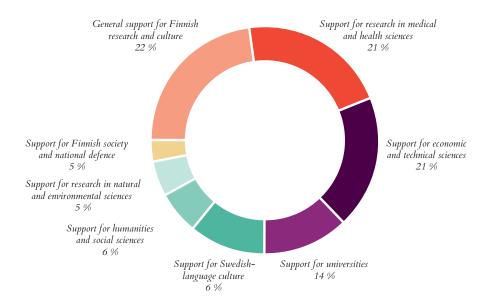
Division of the grants by the academic degree of the grant recipient in 1920–2015.

More than EUR 4.2 billion private funding for scientific research

Foundations are not able to direct their funds according to the changing needs of the state finances, but they must implement the purposes that the donors have recorded in their rules. Three of the most common purposes are general support for scientific research, support for medical and health research and support for economic and technical sciences. When we add to these a fourth purpose, supporting universities, we have four fifths of the foundations' purposes or values. This strengthens the view that foundations are an essential part of the civic society based on their values. They have represented the third sector for decades before this concept was even created.



The development of the total grant sum of the foundations, funds and societies included in the study and the annual change in Finnish gross national product in 1950–2017.



The purposes of the foundations and societies included in the study in 1745–2017.

Commitment to abiding with rules has led to good results. The foundations have funded research and higher education in Finland, based on the value of money in 2017, with more than EUR 4.2 billion, and if the grant sum of 2017 had been used to hire professors, the "foundation university" would be the biggest university in the country by far, with approximately 1,900 professors.

The hundred years of the research supporting foundations reveals both static, frequently repeating as well as slowly changing characteristics. The even pace of establishing foundations to support research shows that their operating model is seen as a good one. People still want to support research, they establish new foundations and also donate their funds to be governed by old foundations. The motives for establishing and donating vary, but there is always the desire to advance issues that they consider important, to help people and the society and to create premises for a better future.

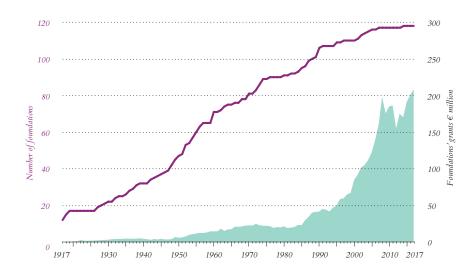
A difficult task to find the best talent

The competition for grants has been intense since the beginning of the time of independence, and therefore the foundations' boards and experts have always had the difficult task of finding the best talent among the large number of applicants. Those allocating the grants have mainly been successful in their mission, and the best proof of this is that there is foundation funding behind every Finnish Nobel Prize winner. Foundations have significantly supported the qualification of professors at universities and research institutions, but they have also paid attention to creating prerequisites for research. The Cancer Society of Finland granted its first grants in 1950 for laboratory mice.

The Finnish foundation system has one unique special characteristic on an international level – the foundations established with the income from civil fundraising. In principle, this has been a question of turning necessity into virtue, as in a country that was low on capital, there were not too many large donors. Big foundations established with civil fundraising funds include Svenska kulturfonden, Turku Finnish University Society (Turun Suomalainen Yliopistoseura), the Foundation for Economic Education, The Cancer Society of Finland and the Finnish Cultural Foundation.

Even though Finland did not have the likes of Rockefellers or Carnegies, we have always had millionaires who have donated their assets to enrich the lives of future generations. Stiftelsen för Åbo Akademin was secured by patrons from Turku, and this line of great donors include also Alfred Kordelin, Fritz Arthur Jusélius, Emil Aaltonen, Heikki Huhtamäki and Amos Anderson, and lastly Hanna Nurminen and Aatos Erkko. These benefactors also include several industrial and banker families, such as the Wihuris, von Frenckells, von Julins and the Ehrnrooths.

The second essential characteristic of the Finnish foundation system is that the foundations are divided into Finnish and Swedish language foundations. Nearly one fourth of the foundations, societies and communities included in



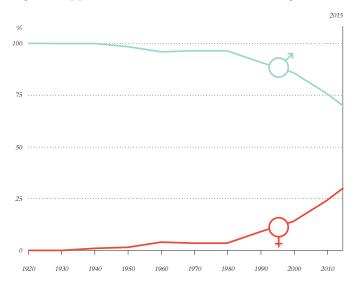
The cumulative development of the number of foundations, funds and societies included in the study and the development of their grant amounts in 1917–2017.

the study are Swedish-speaking, but only 10 foundations have directed a clear majority of their grants to supporting the Swedish higher education and Swedish-speaking researchers. Despite their low number, the share allocated by Swedish language societies of the total grant sum by all foundations and societies granted during the time of independence was notable. It covered approximately half of all support until the 1970s and reduced to under 20 percent only after Åbo Akademi became state-owned in the 1980s. The language division has increased the amount of support received and allocated by the Finnish and Swedish language foundations.

Most of the foundation money goes to medicine, but foundations are a lifeline for researchers in the humanities

The foundations' support has always been very focused. During the long initial period, the biggest foundations allocated nearly 90 percent of all grants, and in 2017 the number was approximately 60 percent. Old, big foundations established prior to the Second World War have retained their position, as four of them, Stiftelsen för Åbo Akademi, Sigrid Jusélius Stiftelse, Emil Aaltonen Foundation and the Finnish Cultural Foundation are still among the 10 foundations allocating most of the grants. It is also possible to rise among the big ones slowly or quickly. Kone Foundation took nearly 50 years but Jane and Aatos Erkko Foundation only 10 years.

The field that has gained most support by the foundations is medical research, which has obtained more than 30 percent of the total support. However, the foundations' significance has been relatively the biggest in terms of the humanities and basic research, which receive significantly less external funding than applied natural sciences and technological sciences.



The percentage of men and women among the allocators of grants of the foundations and societies included in the study in 1920–2015.

After the inflation in the 1920s and the losses during the war, foundations have learned to take good care of their finances. The foundations' financial management has been branded by caution, which saved them from falling for risky investments during the years of the turn of the millennium, when many others trying to get big winnings got into trouble. The years of recession forced the foundations to manage their investments more efficiently, but at the same time many foundations still resorted to old guaranteed fundraising methods, of which frequently organised campaigns have proved significant. Establishing universities and capitalising them as well as funding different kinds of construction work have increased the funding received by foundations, as well as fundraising to reach different goals and to celebrate anniversaries.

The foundations have retained their popularity among researchers, even though foundation work is mostly bee work by nature, despite small remunerations. The popularity can be largely explained by how especially the board seats of large foundations offer researchers the possibility to monitor the development of scientific research in Finland and also have an impact on it. In addition, being accepted into the board of a foundation is also a demonstration of that a researcher enjoys the trust of their colleagues. The same also applies to those receiving the grants.

Foundations are a part of a civil society also in the sense that women's position and significance in their operations has strengthened only at the turn of the 2000s. During the first five decades of the time of independence, the board position of a woman was usually based on a family relationship with the founder of the foundation or other central person. In the 1980s, the number of women in the boards of directors started to increase, and in the 2010s they constituted nearly a third, which was approximately the same as the number of women in the boards of Finnish stock companies and professorships. There started to be more women among grant recipients only in the 1980s. In 1990, women received more than a third of the foundations' grants and ten years later nearly half.

The foundations are much more significant as funders of research than is known

Heraclitus's idea that "you cannot step twice into the same stream" emphasises the view according to which you cannot learn anything from history, as events, things and situations never repeat in the same way. This is surely the case in the world of foundations in terms of individual grant applications, but in terms of the basic problematic, i.e. the outlines for allocating grants, history may be helpful. It just so happens that past actors had to solve the same issues as the current decision-makers as well.

The range of options and possibilities has changed, but the basic questions have remained the same: how to find those among the large number of grant applicants to whom you should allocate the support, which form of support

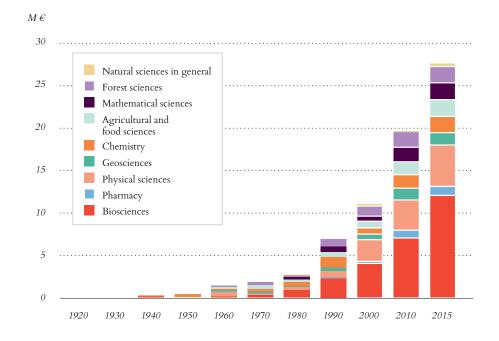
 $M \in$ Humanities in general Arts research Psychology 25 Philosophy Cultural studies Literature studies Philology and linguistics Educational science History 10 1930 1950 1920 1940 1960 1970 1980 1990 2000 2010

Distribution of the grants between different disciplines within humanities in 1920–2015.

would most be in need of money at the moment, and what kind of new solutions would currently best advance Finnish scientific research.

Transition periods signify a struggle especially to higher education institutions and universities, who must ensure that skills and research correspond with the needs in the changing world. The study shows that the impact of the grant giving foundations is greatest in that they secure and advance the continuity of research at societal turning points.

Luckily, research supporting foundations have a long tradition to draw from. Even if the means aren't always there, at least there is faith in conquering obstacles.



Distribution of the grants between different natural sciences in 1920–2015.

