

Annual report 2018

“Research is not an off-the-shelf product that you just go and take from somewhere else. You have to do it yourself in order to understand what’s happening.”

BENGT HOLMSTRÖM, NOBEL LAUREATE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

At the Nobel Symposium on Money and Banking 26 – 28 May 2018 organized by the Prize Committee for the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel, in cooperation with the Swedish House of Finance.



About us

The Swedish House of Finance at the Stockholm School of Economics is Sweden's national research center for financial economics. It hosts internationally distinguished researchers, and enables financial research and development of the highest quality.

The center serves as an independent platform where academia and both the private and public financial sectors can exchange knowledge, foster new ideas and gain access to a global network of the most prominent researchers in finance.

The Swedish House of Finance is an equally private and government funded, nonprofit, nonpartisan organization. It hosts approximately 70 researchers, consisting of permanent and affiliated professors as well as PhD students.

Contents

Words from the Director	4
Our Objectives	5
Highlights 2018	6
Facts & Figures	8
RESEARCH	9
RESEARCH INFRASTRUCTURE	10
DATA CENTER	11
PHD PROGRAM	11
OUTREACH	12
Research Fellows	14
Center Financing	16
Governance	17
Strategic Partners	18

Words from the Director

During this year's Nobel Symposium in Economics hosted by the Swedish House of Finance, Professor Carmen Reinhart from Harvard said, "It's hard to be on top of a field without making an investment in research and development." I could not agree more. The Swedish House of Finance is a vital part of the research and development that is necessary to develop Stockholm and Sweden as one of the leading financial centers in Europe. We support the development of a robust, competitive Swedish economy with a high rate of innovation.

In an increasingly complex and international environment, the need for specialists is higher than ever. Universities need outstanding researchers and teachers, firms need highly qualified employees and governments need experts who understand the ever-changing world around us. We provide an important independent platform for discussions of highly relevant industry-wide issues. We thereby also act as an extended arm for research and development in finance that does not naturally occur otherwise.

But just as in the financial industry, we are also finding increased competition for talent. Since the launch of the center in 2011, the world around us has come to appreciate the benefits of creating centers of excellence to gather a critical mass of thinkers. Although we all benefit from this development, it makes it increasingly difficult for us to compete globally. I dare say that financial research in Sweden would not be in its current top position without the resources made available from the public and private sector, but we need to act and adapt to these changes.

Our current funding promises run out in 2020, which means we must work hard to extend funding for a new 10-year period until 2030 in order to ensure that we can continue the high quality of research in our field. I am confident that we shall renew these promises during 2019 as we have proved that we spend our resources wisely and efficiently.

I want to thank our current supporters that include the Swedish Government (through Vinnova), Handelsbanken, Nordea, Swedbank, the Marianne and



Marcus Wallenberg Foundation, Länsförsäkringar, the Annika and Gabriel Urwitz Foundation, as well as the closely related Foundation for Financial Research, the Hans Dalborg Foundation, and the Jakob Palmstierna Foundation. Our partners also contribute with significant funds, and include Nasdaq, the Bertil Danielsson Foundation, the Jan Wallander and Tom Hedelius Foundation, the Tore Browaldh Foundation, Mistra, Riksbankens Jubileumsfond, Nobelstiftelsen, the Torsten Söderberg Foundation, the Johan and Jakob Söderberg Foundation, and early stage contributors AFA, Alecta, AMF, Kommuninvest, and Landshypotek.

Finally, I want to extend my deepest gratitude to all involved in making the center such a great success: researchers, staff, presenters, discussants and visitors. Thank You All!

Stockholm, March 2019

A handwritten signature in blue ink, which appears to read "Anders Anderson". The signature is stylized and fluid.

Anders Anderson
Director
Swedish House of Finance

Our Objectives

Why do we need financial research?

The Swedish House of Finance provides an independent platform for dialogue, open to everyone with an interest in finance. The center generates daily contact between academia, the public and the private financial sectors which in turn leads to new research, new private initiatives, and a basis for better decisions and meaningful regulation of the financial sector. The center is a vital part of the research and development that is necessary to continue to develop Sweden as one of the leading financial centers in Europe, and to support the development of a strong Swedish economy and rate of innovation.

The center has succeeded in attracting world-class researchers, as well as top-tier students. It has built an ecosystem for financial research and development. This provides decision-makers in Sweden with access to the world's collective expertise in finance.

What are the objectives?

Research is part of an overall ecosystem. The ultimate goal of the center is to

- strengthen financial research,
- create impact through achieving a critical mass of world-class researchers, and to
- share positive externalities with the public, private and academic sectors in Sweden.

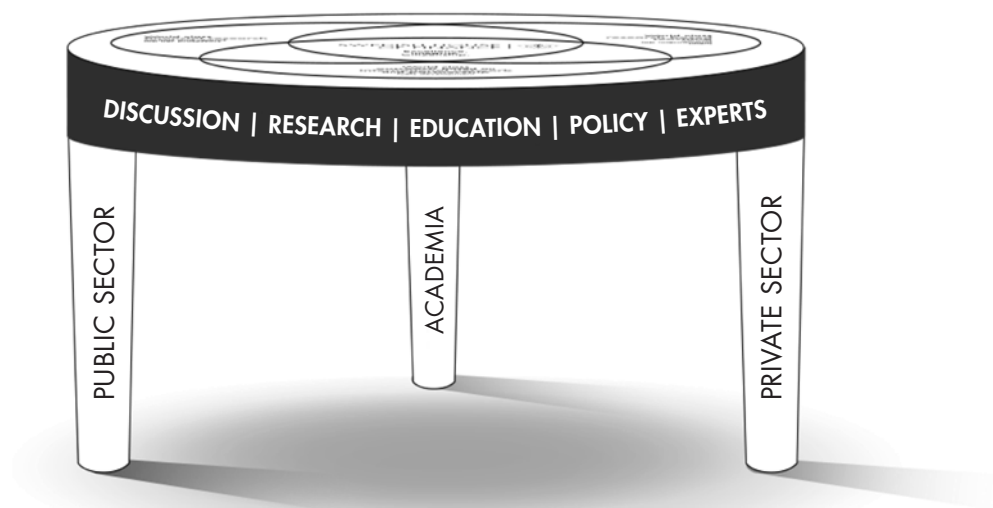
Since the founding of the center in 2011, Sweden has risen through the ranks in the world of international financial research. Swedish House of Finance has put Swedish financial research on the world map.

Who is behind the center?

The Swedish House of Finance is a equally private and government funded, nonprofit, nonpartisan organization.

After the dot-com bubble during the late 90s the private sector initiated a Swedish national center for financial research. After the financial crisis in 2008 the government joined the initiative. A national research center, with the mission to bring academia, private, and public sectors together, was formed in 2011.

The Stockholm School of Economics contributes with resources in the form of researchers and teachers. The infrastructure needed for the research, as well as its dissemination for the benefit of the non-academic sector, is contributed by the government (through Vinnova), and funding is matched with an equal amount from the private financial sector. In addition, a network of researchers in finance at the universities of Gothenburg, Lund, Stockholm, KTH, Umeå, Uppsala, and Örebro are all affiliated with the national center through programs supporting research at the highest international level.



Highlights 2018

Nobel Symposium

"It's hard to be on top of a field without making an investment in research and development."

Carmen Reinhart, Professor, Harvard University



Carmen Reinhart,
Professor, Harvard University



Adair Morse,
Associate Professor,
Haas School of Business
University of California at Berkeley

Sustainable Finance

During our two-day annual conference we brought together leading academics with participants from industry and government. We discussed sustainable investments versus conventional alternatives and incentives that go beyond financial returns.

Finbas completion

The Data Center team has completed the backdating of the financial database, Finbas. It is a complete history of the Swedish stock market, dating all the way back to 1912, and is available to researchers at all Swedish universities.



Data Center team

New Professor

Alexander Ljungqvist, an internationally renowned professor specializing in corporate finance, entrepreneurship, and capital markets research joined the Swedish House of Finance from New York University's Stern School of Business.



Alexander Ljungqvist,
Professor, Stefan Persson Family
Chair in Entrepreneurial Finance,
Department of Finance, SSE



Marianne Bertrand,
Professor, Chicago Booth
School of Business

Women in Finance

Swedish House of Finance and AFFECT jointly organized the third conference on Showcasing Women in Finance. The aim of the conference was to showcase female role models in finance and provide an avenue for more junior researchers to receive feedback on their research and careers.

The merits of active and passive investing?

Professor Lasse Heje Pedersen from the Copenhagen Business School was the receiver of Skandia's 2018 research award on "Long-Term Savings". At a seminar he discussed the relative advantages of active and passive investing for investors, financial markets, and the economy more broadly.



Lasse Heje Pedersen,
Professor, Copenhagen
Business School and
New York University

Facts & Figures

Amounts from the previous year are shown [in brackets].

Total spend including in-kind contributions for 2018 amounted to 79.7 MSEK, well over the budget of 72.6 MSEK. For comparison, the total cost in 2017 was 67.7 MSEK with a budget of 69.4 MSEK. The difference can mainly be attributed to an increased amount of externally funded research activities, and does not affect the funding plan for the center going forward to 2020.

The center relies on funding from different sources: (i) the Swedish government (Vinnova) (ii) annual installments from the financial sector (Industry); (iii) various research grants and rent from the SSE given directly to the center (Grants), and (iv) in-kind contributions from the SSE which amounted to 35.5 MSEK [29.6 MSEK]. The in-kind contributions, in turn, consist of salaries for researchers and costs related to research projects at the Department of Finance, which also contain grants.

Excluding in-kind contributions, costs directly related to the Swedish House of Finance's own activities amounted to 43 MSEK [36.9 MSEK]. These costs were financed by Vinnova (19.4 MSEK) the Industry (11.3 MSEK) and Grants (13.4 MSEK). The last category includes a rent contribution from SSE of 2.7 MSEK, research grants from Vinnova of 2.5 MSEK and a contribution from Riksbanken of 1.2 MSEK in support for a commissioned research program. The amount drawn over and above Vinnova's annual installment of 15 MSEK, was taken from previously built-up reserves (see p. 16).

The detailed buildup of the center's total costs are described below, categorized by the center's five areas of activity, as well as commented and compared with the previous year [in square brackets].

Figure 2 illustrates a historical cost distribution since the inception of the Swedish House of Finance.

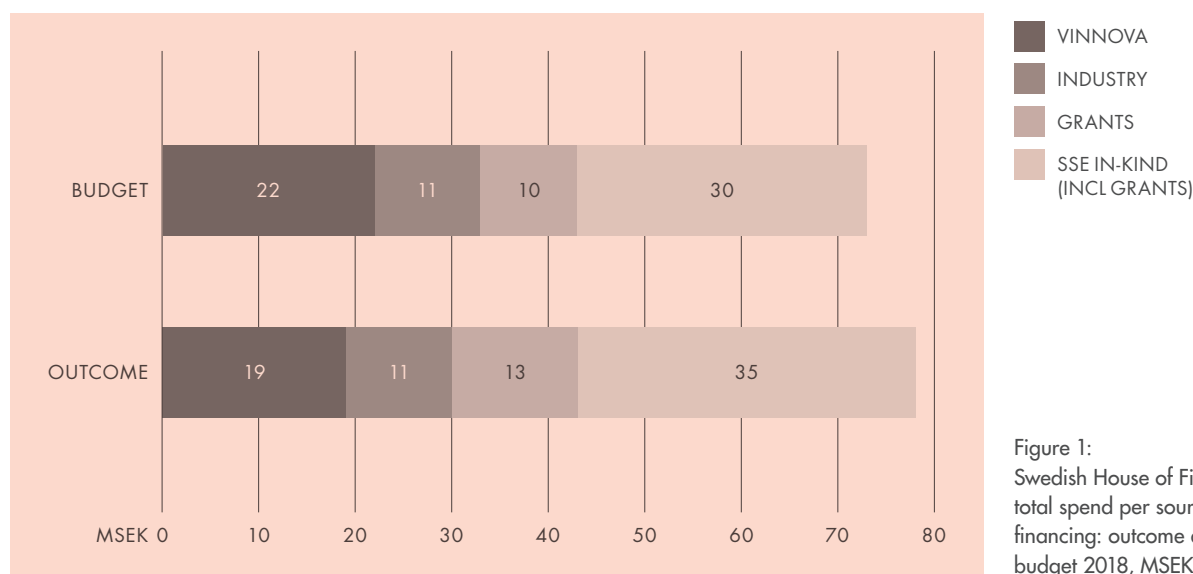


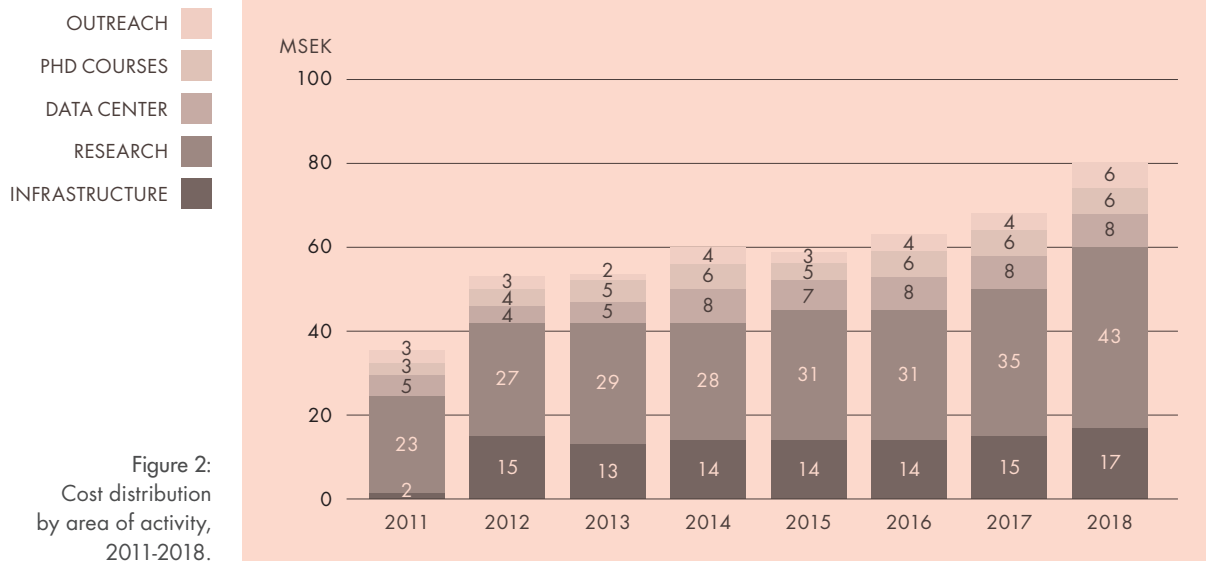
Figure 1:
Swedish House of Finance,
total spend per source of
financing: outcome and
budget 2018, MSEK.

Research

The total costs for 2018 amounted to 42.9 MSEK [34.7 MSEK]. A significant share of these costs represent in-kind contributions from SSE in the form of salaries to researchers, grant-funded research, and other related costs, amounting to 24.7 MSEK [19.2 MSEK], as well as external financing of doctoral students with 4.4 MSEK [4.6 MSEK]. About half of the increased in-kind contributions from the SSE are due to an increase in grant-funded research, and the other half to promotions and employment of two additional faculty members. The remaining costs refer to a research incentive program designed to attract and retain research talent, which is monitored by the Scientific Board. It includes a Fellowship program that gives a salary supplement for hiring outstanding researchers; a Publication incentive program to award top research publications; a Visiting

researchers program to encourage research exchange; and a Travel support program to increase junior researchers' visibility at international conferences. The center's researchers produced 22 [21] publications in international academic journals, of which 8 [7] were in the top three finance journals, labeled A-grade journals.

Figure 3 shows the participation in the top three finance ("A-grade") journals since the inception of the Publication incentive program in 2012. We record an upward trend in both the number of top publications and the number of authors from our partner institutions. The researcher who qualifies for our incentive program receives a variable remuneration paid out over two years. The program thus acts as an important recruitment and retention device. The total number of publications has been fairly stable in the past four years. 16 publications in 2018.



FACTS & FIGURES

Our researchers made 110 (113) presentations at international researcher conferences, and acted 43 (32) times as discussants. The center was well represented at all of the three leading finance conferences: American Finance Association in Philadelphia with 6 papers, Western Finance Association in Coronado with 4 papers, and European Finance Association in Warsaw with 4 papers.

Research infrastructure

The main aim of the center is to gather a sufficient critical mass of researchers by providing necessary research infrastructure, which is otherwise difficult to fund through research grants. The core of these operations are costs for the premises and research administration. Total costs in 2018 amounted to 17.3 MSEK [5.3 MSEK] and include costs for offices, administration and materials. After an increase in rent, the costs for premises amounted to 8.3 MSEK [7.4 MSEK] and payroll costs for five permanent employees and compensation for the Scientific Board amounted to 4.7 MSEK [4.6 MSEK]. The total amount includes in-kind contributions from SSE regarding salaries for administrators and services



Administrative team

amounting in total to 2.5 MSEK [1.8 MSEK]. The remaining costs of 1.8 MSEK [1.5 MSEK] include services, IT, subscriptions, and service payments to the SSE of 500k. The center hosted 27 permanent researchers, 30 doctoral students, five database developers, six research analysts, six administrators, two communications officers, one part-time project consultant, and two senior advisors. During the year, a total of 53 [43] guest researchers visited the center.

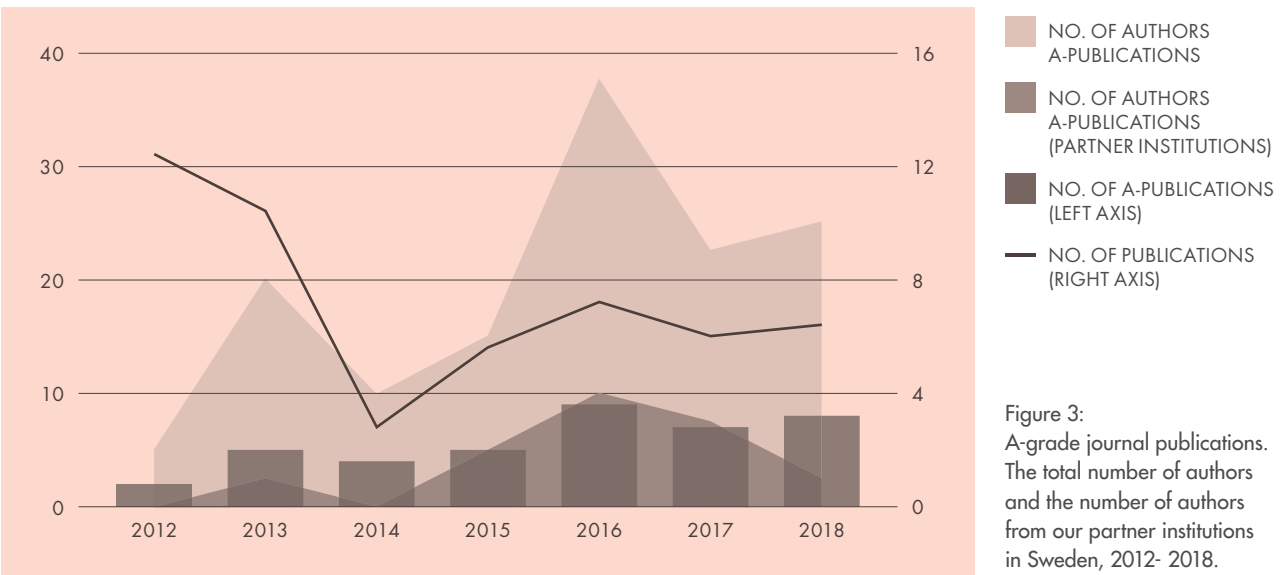


Figure 3:
A-grade journal publications.
The total number of authors
and the number of authors
from our partner institutions
in Sweden, 2012- 2018.

Data Center

The Data Center has two principal tasks: (i) to develop new national databases that are made available to the research community in Sweden through our web-based platform, and (ii) to provide requisite international databases and facilitate the use of computationally efficient infrastructure so that the center's researchers can work and compete at the highest level. The total costs for 2018 amounted to 8 MSEK [7.7 MSEK], where 3.5 MSEK [3 MSEK] were spent on subscription fees to international external databases. The remaining costs refer to the development of new Swedish financial databases, which mainly consist of salaries for four employees.

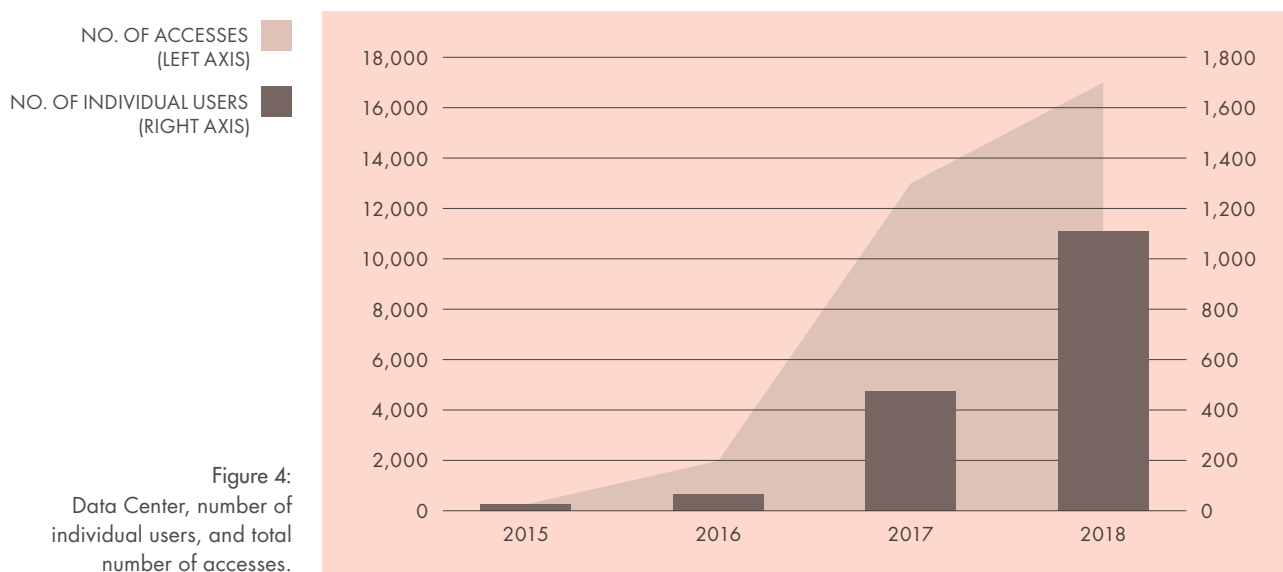
The Data Center provides seven databases for free academic use. The financial database FinBas is the most frequently accessed, and contains a complete history of the Swedish stock prices since 1912. It covers around 4,500 companies in the Nordics (except Iceland) with a focus on Sweden and had 1,873 [1,370] unique sessions¹ in 2018. Other data bases include Serrano with 737 [643]; Historical Annual Report Archive, 983 [394]; Resility (ESG firm data) 680 [370]; Patlink, 537 [315];

Nasdaq High Frequency Data 605 [503]; and the newly developed Fama-French factors for Sweden with 1,143 [204] unique sessions in 2018.

An important measurement to understand the reach of the databases available through our Data Center is, the number of individual users and number of accesses. Made possible by a transition from a manual to an automated data request process, the total number of individual users of all databases grew from only 64 in 2016 to 1108 by the end of 2018. A significant growth!

PhD program

Our PhD program is open to all Swedish universities, providing the opportunity to participate in the highest quality PhD courses in Finance. The total costs amounted to 5.9 MSEK [5.9 MSEK]. A major part of the total costs is attributed to in-kind contributions from the Stockholm School of Economics for the basic course offering amounting to 3.9 MSEK [4 MSEK]. The remaining costs are related to remuneration of teachers and the reimbursement of expenses for course participants from universities other than SSE. The center provides



¹ Unique sessions are unique "access IDs". I.e. unique sessions in an IT sense for each data set. So, if one person downloads the same data from different devices or IP-numbers they might be counted double in a personal sense. For number of users i.e. individual persons, see Figure 4.

FACTS & FIGURES

a national course program for doctoral students in financial economics. The five basic courses are provided by the doctoral program at the Stockholm School of Economics. They are adapted so they may be read by distance. A number of mini-courses are also offered each year within various specific fields. For those, we invite external specialists who hold a one-week intensive course. In 2018, there were six such courses: “Micro to Macro” by Per Krussel and Kurt Mittman (IIES Stockholm University); “Factor models” by Peter Schotman (Maastricht University); “Blockchains, Digital Currency and FinTech” by David Yermack (NYU Stern); “Industrial Organization and Corporate Finance” by Kristine Hankins (University of Kentucky); “Household Finance” by Kaveh Majlesi (Lund University); and “Market Microstructure” by Thierry Focault (HEC Paris) and Albert Menkveld (VU Amsterdam). The two later courses were organized with the help of Lund University and the Stockholm Business School at Stockholm University, respectively.

Outreach

Our outreach activities aim to bridge the gap between finance in academia and practices within the public and private financial sector by disseminating research via various channels amongst others conferences, seminars and talks. Total cost was 5.6 MSEK [4.1 MSEK]. The center arranges both pure academic seminars and conferences, as well as those targeting practitioners to encourage discussion and knowledge exchange in the financial sector. All seminars and conferences are provided free of charge to the respective audience. A total of 88 [73] seminars were held during the year, of which 70 [53] were academic and 18 [20] on themes targeted at practitioners active within the financial sector. These themes included for example, Sustainable Finance, Nobel Symposium on Money and Banking, Brexit, Bubbles, Digital Currencies, Women in Finance, Bank Capital Requirements, Artificial Intelligence in Finance, Asset Pricing, Financial Supervision and many more.

Most of our meetings take place at our premises, but we also arranged seven “Finanspanelen” seminars

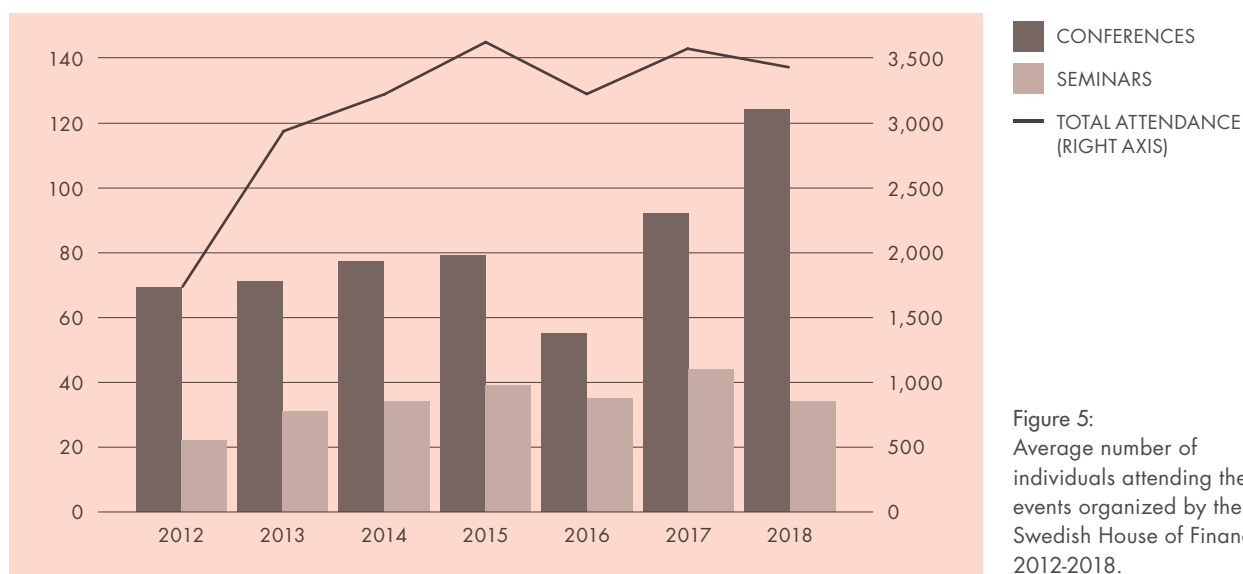


Figure 5:
Average number of individuals attending the events organized by the Swedish House of Finance, 2012-2018.

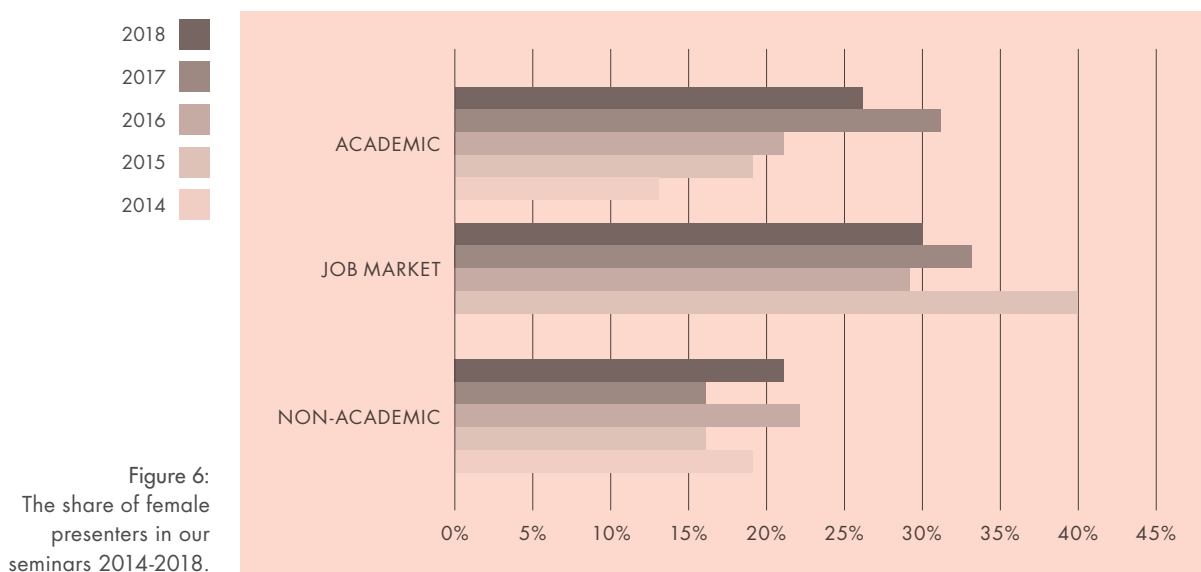
in a long-standing collaboration with the Center for Business Policy Studies (SNS). In addition, the Swedish House of Finance hosted five conferences in 2018. The “Nobel Symposium on Money and Banking” in May was co-organized with the Prize Committee for the Sveriges Riksbank Nobel Prize in Economic Sciences. The symposium was co-funded by Riksbankens Jubileumsfond and Nobelstiftelsen. The BI-SHOF conference on “Asset Pricing and Financial Econometrics” was held in Stockholm in June, and in August we organized our annual conference on “Sustainable Finance.” We also hosted the 2018 “Financial Supervision” workshop about legal and market perspectives on enforcement actions, and finally in December we organized the third “Women in Finance” conference. To these five conferences, we can add our annual national conference for Swedish doctoral students in financial economics, which takes place in November each year.

We counted a total of 3,461 [3,587] visitors to our seminars and conferences in 2018, almost equally divided between researchers and representatives from the

private and public financial sector. The overall strategy for our events has been to improve on quality rather than frequency, and use digital channels to disseminate the content produced.

Throughout the year we have continued our “Women in Finance” series of events, aiming to increase female representation in the finance profession at all levels. This series is an important tool to promote female role models and to encourage female representation in our activities. The explicit goal is to have the share of female presenters at least equal to the share of females in the profession.

The Academic Female Finance Committee AFFECT² estimates the share of female academics in finance to be around 20% across all career levels, decreasing significantly with seniority. Figure 6 illustrates that we reached this goal during 2018 for our academic, job market and practitioner oriented seminars. We still face challenges in meeting our goals in the practitioner seminars, something we address with diligence going forward.



² The Academic Female Finance Committee (AFFECT) is a committee of the American Finance Association designed to promote the advancement of women academics in the field of finance.

Research Fellows



ANDERS ANDERSON
Director, Swedish House of Finance
Lecturer, Department of Finance, SSE



RAMIN BAGHAI
Associate Professor, Department of Finance, SSE



BO BECKER
Professor, Gösta Olson Chair in Financial
Economics, Department of Finance, SSE



CLAS BERGSTRÖM
Professor Emeritus in Finance and Law,
Department of Finance, SSE



TOMAS BJÖRK
Professor Emeritus, Department of Finance, SSE



MARIEKE BOS
Researcher and Deputy Director,
Swedish House of Finance



MAGNUS DAHLQUIST
Peter Wallenberg Professor of Finance,
Department of Finance, SSE
Head of Department of Finance, SSE



ADRIEN D'AVERNAS
Assistant Professor, Department of Finance, SSE



PETER ENGLUND
Professor Emeritus, Department of Finance, SSE



MARIASSUNTA GIANNETTI
Professor, Department of Finance, SSE



MICHAEL HALLING
Associate Professor, Department of Finance, SSE



JUNGSUK HAN
Associate Professor, Department of Finance, SSE



ALEXANDER LJUNGQVIST

Professor, Stefan Persson Family Chair in Entrepreneurial Finance, Department of Finance, SSE



VINCENT MAURIN

Assistant Professor, Department of Finance, SSE



DANIEL METZGER

Associate Professor, Department of Finance, SSE



OLGA OBIZHAeva

Assistant Professor, Department of Finance, SSE



MARCUS OPP

Associate Professor, Department of Finance, SSE



RICCARDO SABBATUCCI

Assistant Professor, Department of Finance, SSE



FARZAD SAIDI

Assistant Professor, Department of Finance, SSE



PAOLO SODINI

Professor, Department of Finance, SSE
Director National Data Center,
Swedish House of Finance



JAN STARMANS

Assistant Professor, Department of Finance, SSE



PER STRÖMBERG

SSE Centennial Professor of Finance and Private Equity, Department of Finance, SSE



DONG YAN

Assistant Professor, Department of Finance, SSE



IRINA ZVIADADZE

Assistant Professor, Department of Finance, SSE



ADAM ALTMEJD

Postdoctoral Fellow, Swedish House of Finance



NIKLAS AMBERG

Postdoctoral Fellow, Department of Finance, SSE



ANASTASIA GIRSHINA

Postdoctoral Fellow, Swedish House of Finance

Center Financing

The Swedish House of Finance was created from a government initiative in 2011 whereby Vinnova made a funding promise of 150 MSEK for 10 years in support of the creation of a national financial research center, provided that the center in turn raised an equal amount from the private financial sector as well as from academia. This goal has been achieved with a wide margin. The center has raised around 91 MSEK in direct financial support from the private financial sector and 81 MSEK in grants from private research foundations (these exclude an additional 54 MSEK in grants coming from foundations closely related to the government, such as Riksbanken and Vetenskapsrådet).

Current funding commitments end to a large extent in 2020. Our focus in 2018 has therefore been to initiate fundraising activities securing funding for a renewed 10-year period (2021-2030). Figure 7 gives an overview of the historical funding development up until 2018, the 2019 budget, as well as a projection of funding needs going forward.

The center has been able to build up a reserve, as some contributions were given upfront rather than in annual installments. In 2018, we gratefully accepted a 12 MSEK grant from Marianne and Marcus Wallenbergs Stiftelse to continue the development of our databases

over the next four years beginning in 2019. With this in place, we believe that we have sufficient funding for the current level of operations throughout the period 2020 when dedicated financial commitments end.

The aim for our fundraising effort going forward is to raise 400 MSEK for the period 2021-2030. We hope to renew the promises from the government and to increase the participation of the private sector, while keeping the equal share between public and private.

As of March 2019, we are very pleased to report that the four leading banks in Sweden have all agreed to extend their funding promises and even increase the amount going forward. We think, this is a very powerful argument for the government to approve another term.

We believe that the Swedish House of Finance has now established itself as a critical component in the financial eco-system in Sweden by acting as an independent platform for disseminating research and facilitating discussion on a very wide range of topics in finance. Another aim for the next 10-year period is therefore to broaden the base of private sector participation by generating new partners. Given the very positive historical development of the center, we are very optimistic about the outlook for the years ahead.

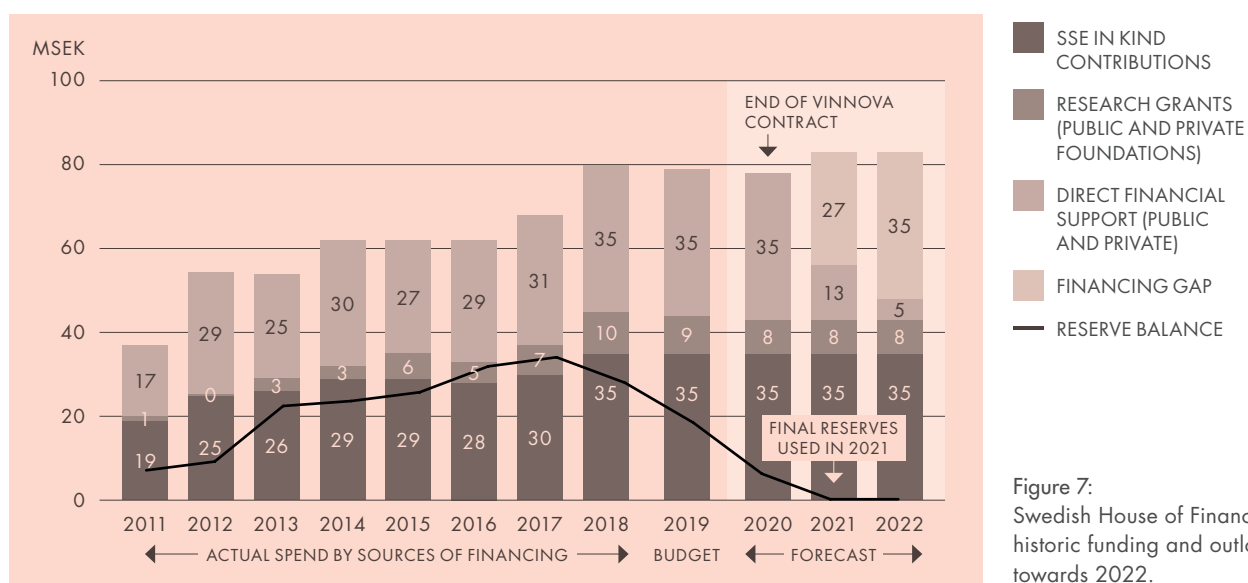


Figure 7:
Swedish House of Finance,
historic funding and outlook
towards 2022.

Governance

BOARD OF DIRECTORS

The Board of Directors consists of representatives from the Swedish financial industry and Stockholm School of Economics.

GABRIEL URWITZ
(Chair)
Chairman of the Board,
Segulah Advisor AB

MARTIN BLÅVARG
Head of Group Financial Control,
Handelsbanken

ANNA BREMAN
Chief Economist,
Swedbank

MAGNUS CARLSSON
Deputy President & CEO,
SEB

HANS DALBORG
Ekon Dr

YVONNE GUSTAFSSON
Chairman of the Board,
Riksgälden, Swedish National
Debt Office

LAURI ROSENDAHL
President,
Nasdaq

LARS STRANNEGÅRD
President,
Stockholm School
of Economics

CAROLINE AF UGGLAS
Deputy General Director,
Svenskt Näringsliv

LARS ÅGREN
Senior Executive Vice President,
Stockholm School of Economics

MANAGEMENT COMMITTEE

The Management Committee plans, directs, and coordinates the activities at the Swedish House of Finance.

ANDERS ANDERSON
Director

MARIEKE BOS
Deputy Director

MAGNUS DAHLQUIST
Head of Department
of Finance, SSE

URSULA ROBERTSON
Head of Outreach

PAOLO SODINI
Head of Data Center

SCIENTIFIC ADVISORY BOARD

The Scientific Advisory Board assists the management and the board with evaluating the academic activities of the Swedish House of Finance.

INGRID WERNER
(Chair)
Ohio State University

HARRISON HONG
Columbia University

DAVID ROBINSON
Duke University

Strategic partners

ACADEMIC PARTNERS



Stockholm
University



UNIVERSITY OF
GOTHENBURG



LUND
UNIVERSITY



KTH Royal Institute of Technology



UMEÅ
UNIVERSITY



UPPSALA
UNIVERSITET



INSTITUTIONAL PARTNERS

Corporate



afa
FÖRSÄKRING

alecta

Handelsbanken



KOMMUNINVEST



Landshypotek Bank



Länsförsäkringar

Nordea



Swedbank och
Sparbankerna



Foundations

Annika and Gabriel Urwitz Foundation, Bertil Danielsson Foundation, Hans Dalborg Foundation, Jacob Palmstierna Foundation, Jan Wallander and Tom Hedelius Foundation, Johan and Jakob Söderberg Foundation, Marianne and Marcus Wallenberg Foundation, Nasdaq Nordic Insamlingsstiftelse, Nobelstiftelsen, Tore Browaldh Foundation, Torsten Söderberg Foundation, Stiftelsen för Finansforskning, Mistra.

Public



VINNOVA
Sveriges innovationsmyndighet

SWEDISH HOUSE OF FINANCE



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