Swiss Finance Institute (SFI) gratefully acknowledges the precious support of its founding members—the Swiss banking industry, the Swiss Confederation, and leading Swiss universities. Without their support Swiss Finance Institute would not be able to fulfill its important mandate.

Our Partner Universities:
About Swiss Finance Institute

Growing Knowledge Capital for the Swiss Financial Marketplace

Never before has the Swiss financial center undergone such rapid and fundamental change. Digital disruption and abrupt changes in regulation are challenging established business models. In order to remain competitive, the Swiss banking and finance industry must nurture innovation and its most valuable asset: the expertise of its labor force—its knowledge capital.

Mandated by the Swiss financial sector and the Swiss Confederation, Swiss Finance Institute (SFI) makes an important contribution to each through its close integration of research and practice, its up-to-date continuing education courses for finance professionals, and the access it provides to a unique pool of outstanding Swiss-based academics. This unique combination is based on a systematic exchange of knowledge and expertise, nurtured by the fundamental research conducted at our six partner universities across three language regions in Switzerland. As a result, the Swiss banking and finance industry profits from the expertise created by SFI, embodied both by the thousands of graduates from our continuing education activities and the Banking and Finance programs of our partner universities and by the thousands of readers of our publications and participants at our events and workshops.

Research and development leads to new technologies and innovations, and in turn promotes competitiveness, prosperity, and employment. SFI contributes an important economic added value that will enable future generations to build upon others’ achievements and guarantee that Switzerland’s financial center will continue to thrive.

Find out more about the vast amount of our activities from January to December 2018 in this year’s Activity Report.

The Swiss Finance Institute Activity Report is published once a year by the Institute.

This is an abridged version of the Activity Report. For a full version, please use the QR code or visit www.sfi.ch/AR18.
A Word from the Board

In 2018 the SFI Foundation Board carried out a strategic review and decided to reposition the activities and the offerings of the Institute. Over its first 12 years of existence SFI has successfully built a world-class faculty in partnership with its partner universities. From 2019 onward SFI will capitalize on the expertise of the SFI faculty to build knowledge capital for the Swiss banking and finance marketplace.

Under its new strategy, SFI will keep supporting a faculty of the highest academic caliber at its partner universities. At the same time, SFI will reshape and scale up its knowledge exchange and education activities and anchor them in its faculty. In order to keep abreast of the profound transformations taking place in banking and finance, professionals need quick access to high-level expertise. In response to this need, in 2019 SFI will start offering new, short programs to the employees of SFI’s stakeholders, the SFI Master Classes. SFI Master Classes will be taught by SFI professors and complemented by practitioner input and peer exchange on related market challenges. The topics will be chosen in cooperation with industry experts. The aim of the SFI Master Classes is to foster a deep dive of the participants into banking and finance topics and to combine academic expertise with practical applications. SFI Master Classes will target experienced professionals and will be free of charge for the employees of SFI’s foundation institutions. SFI will gradually withdraw from commercial education offerings, transferring its current highly renowned programs to other suppliers.

The key idea at the heart of the new SFI strategy – bridging the gap between academia and practice – already inspired some of SFI’s activities in 2018. The SFI Knowledge Exchange Seminars brought together professors and top experts from industry on topics of mutual interest – such as active vs. passive asset management, corporate governance, or banking on blockchain. Another example is the information campaign on the Vollgeld initiative conducted by SFI. And our Annual Meeting focused on “Financial Stability: Challenges and Opportunities” and featured three keynote speakers from academia and practice – Prof. Hyun-Song Shin of the Bank of International Settlements; Dr. Fritz Zurbrügg of the Swiss National Bank; and Mr. Tidjane Thiam of Credit Suisse – as well as SFI Head of Research Prof. Jean-Charles Rochet. The latter presented research of SFI professors on the topic of financial stability.

Thanks to first education programs taught and run by SFI professors at our partner universities, SFI plays a key role in the training of 400 banking and finance graduates per year. This year’s activity report highlights this little-known accomplishment.

We thank our academic and industry partners for their contributions to our collective achievements in 2018, and for their efforts in ensuring the success of SFI’s repositioning.
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Swiss Finance Institute Faculty

Swiss Finance Institute has a faculty of over 50 professors who support its research and continuing education activities.

SFI Partner University Faculty (as of December 2018)
The SFI Research Faculty is made up of over 50 exceptional researchers from six SFI partner universities. Their outstanding publications and expertise contribute to the international research community and ensure that Switzerland makes its mark on the international research agenda.

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
</tr>
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<tbody>
<tr>
<td>Hansjörg Albrecher</td>
<td>42</td>
</tr>
<tr>
<td>Philippe Bacchetta*</td>
<td>42</td>
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<tr>
<td>Giovanni Barone-Adesi</td>
<td>43</td>
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<tr>
<td>Stefano Battiston</td>
<td>43</td>
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<tr>
<td>Tony Berrada</td>
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<td>Ines Chieb</td>
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<tr>
<td>Patrick Cheridito</td>
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<tr>
<td>Pierre Collin-Dufresne*</td>
<td>45</td>
</tr>
<tr>
<td>Suzanne de Treville</td>
<td>46</td>
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<tr>
<td>François Degeorge*</td>
<td>46</td>
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<tr>
<td>Theodosios Dimopoulos</td>
<td>47</td>
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<tr>
<td>Paul Embrechts</td>
<td>47</td>
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<tr>
<td>Rüdiger Fahlenbrach*</td>
<td>48</td>
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<tr>
<td>Walter Farkas</td>
<td>48</td>
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<tr>
<td>Damir Filipović*</td>
<td>49</td>
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<tr>
<td>Francesco Franzoni*</td>
<td>49</td>
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<tr>
<td>Laurent Frésard*</td>
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<tr>
<td>Patrick Gagliardini</td>
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<td>Manfred Gilli</td>
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<tr>
<td>Amit Goyal*</td>
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<tr>
<td>Michel Habib</td>
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<tr>
<td>Harald Hau*</td>
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<td>Thorsten Hens</td>
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<td>Martin Hoesli</td>
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<tr>
<td>Julien Hugonnier*</td>
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<tr>
<td>Eric Jondeau</td>
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<td>Pablo Koch-Medina</td>
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<tr>
<td>Philipp Krüger*</td>
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<td>Felix Kübler*</td>
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<tr>
<td>Semyon Malamud*</td>
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<td>Loriano Mancini*</td>
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<tr>
<td>Antonio Mele*</td>
<td>57</td>
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<tr>
<td>Roni Michael*</td>
<td>58</td>
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<tr>
<td>Erwan Morellec*</td>
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<tr>
<td>Cosimo-Andrea Munari</td>
<td>59</td>
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<tr>
<td>Artem Neklyudov</td>
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<tr>
<td>Boris Nikolov</td>
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<tr>
<td>Eric Nowak</td>
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<tr>
<td>Kjell Nyborg*</td>
<td>61</td>
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<tr>
<td>Steven Ongena*</td>
<td>61</td>
</tr>
<tr>
<td>Per Østberg</td>
<td>62</td>
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<tr>
<td>Marc Paolella</td>
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<tr>
<td>Diane Pierrret</td>
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<tr>
<td>Alberto Plazzi</td>
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<tr>
<td>Kerstin Preuschoff</td>
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<tr>
<td>Jean-Charles Rochet*</td>
<td>64</td>
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<tr>
<td>Michael Rockinger</td>
<td>65</td>
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<tr>
<td>Olivier Scaillet*</td>
<td>65</td>
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<tr>
<td>Paul Schneider*</td>
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<tr>
<td>Norman Schürhoff*</td>
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<td>Martin Schweizer</td>
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<td>Halil Mete Soner*</td>
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<tr>
<td>Didier Sonnette</td>
<td>68</td>
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<tr>
<td>Pascal St-Amour</td>
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<tr>
<td>Roberto Steri</td>
<td>69</td>
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<tr>
<td>Josef Teichmann</td>
<td>69</td>
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<tr>
<td>Fabio Trojani*</td>
<td>70</td>
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<tr>
<td>Alexander Wagner*</td>
<td>70</td>
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<tr>
<td>Joël Wagner</td>
<td>71</td>
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</tbody>
</table>

* SFI chair-holder

Continuing Education Adjunct Faculty (as of December 2018)
The title of SFI Adjunct Professor is awarded to selected academics from recognized universities and universities of applied science. Recipients are chosen because of their strategic and/or reputational engagements for SFI, for example within its continuing education programs.

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Teodoro D. Cocca</td>
</tr>
<tr>
<td>Christopher Culp</td>
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<tr>
<td>Rudolf Gruenig</td>
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<tr>
<td>Erwin W. Heri</td>
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<tr>
<td>Roger M. Kunz</td>
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<tr>
<td>François-Serge Lhabitant</td>
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<td>Alfred Mettler</td>
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<td>Conrad Meyer</td>
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<td>Donato Scognamiglio</td>
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<td>Paolo Vanini</td>
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<tr>
<td>Urs Wälchli</td>
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</tbody>
</table>

SFI works with its partner universities to create and establish academic expertise and excellence.
Swiss Finance Institute (SFI) strives for excellence in research in order to build academic expertise with staying power. The SFI Faculty is made up of professors from six partner universities: École Polytechnique Fédérale de Lausanne (EPFL), Eidgenössische Technische Hochschule Zürich (ETHZ), the University of Geneva (UNIGE), the University of Lausanne (UNIL), Università della Svizzera italiana (USI), and the University of Zurich (UZH). Fundamental research by SFI professors plants the seeds for new financial ideas and provides fertile ground for innovation. Since 2006, SFI professors have published more than 100 articles on banking and finance in top academic journals. Academic excellence is guaranteed by the SFI Scientific Council, an independent committee composed of internationally renowned professors of banking and finance from around the world. The Council places extra weight on publications appearing in journals that historically have been the first to promote those ideas that have changed financial practice: the American Economic Review, Econometrica, The Journal of Finance, the Journal of Financial Economics, the Journal of Political Economy, the Quarterly Journal of Economics, the Review of Economic Studies, the Review of Finance (submissions as of June 2018), and The Review of Financial Studies. In 2018 the following eight articles were published by SFI researchers:

**2018**


Other Publications

Research Paper Series
Over 75 papers were published in the 2018 SFI Research Paper Series hosted on the Social Science Research Network (SSRN). A complete list of titles included in the series is available in the digital version of this report.

SFI Research Days
Over 70 academics and PhD students from across Switzerland came together at the 2018 SFI Research Days to present and discuss their current research. The SFI Research Days, held at the Study Center Gerzensee, are structured into academic research sessions, a keynote speech, as well as doctoral workshops and sessions. This year, the keynote speech was given by Prof. Catherine Casamatta (Toulouse School of Economics) and was entitled "The Blockchain Folk Theorem". The winners of the SFI Doctoral Award for the Best Paper and the Best Discussant are also nominated during the SFI Research Days.

Awards, Grants, and Honors for SFI Faculty in 2018

Hansjörg Albrecher
Keynote speaker, 10th World Congress of The Bachelier Finance Society, Ireland

Philippe Bacchetta
Keynote speaker, European Commission Workshop on "Puzzles in non-financial corporations debt, savings and investment", Belgium

Stefano Battiston
Research grant on sustainable finance, Georg and Bertha Schwyzer-Winiker Foundation

Ines Chaieb
Best Paper Award Semifinalist, 2018 FMA European Conference, Norway

Pierre Collin-Dufresne
Board of Directors of the American Finance Association

Suzanne de Treville
Best Teacher Award, MScM Program, UNIL, Switzerland

Rüdiger Fahlenbrach
Board of Directors of the European Finance Association

Francesco Franzoni
Best Referee Award, Review of Finance

Laurent Frésard
SNSF grant, "The term structure of price informativeness"

Patrick Gagliardi
Organizer, Annual Meeting of the Society for Financial Econometrics, Switzerland

Harald Hau
Keynote speaker, 7th China International Finance Expo, China
Thorsten Hens
SNSF grant, Sinergia project, "The foundations of successful financial decision-making"

Julien Hugonnier
Best Teacher Award, Polysphère, EPFL College du Management, Switzerland

Philipp Krüger
ICPM Climate Change Research Award, "The Importance of Climate Risk for Institutional Investors"

Felix Kübler
PASC co-design project 2017–2020

Erwan Morellec
Best Teacher Award, EPFL Financial Engineering Department, Switzerland

Cosimo Munari
Best Paper Award, X Conference in Actuarial Science and Finance, Greece

Eric Nowak
Senior Visiting Professor, Risk Management Institute, National University of Singapore

Kjell Nyborg
Chair, Nominating Committee, European Finance Association

Steven Ongena
Santander Financial Institute Best Paper on Banking, 26th Finance Forum, Spain

Jean-Charles Rochet
Keynote Speaker, 13th Annual Conference, Financial Intermediation Research Society, Spain

Olivier Scaillet
Fondation Banque de France grant, "Backtesting Systemic Risk Measures"

Fabio Trojani
GIWM Project in Wealth Management: "A General Machine Learning Approach to High-Dimensional Asset Pricing"

Alexander Wagner
Best Paper Award (sponsored by the Pacific-Basin Finance Journal), 30th Asian Finance Association Meeting, Japan

Joël Wagner
SNSF Sinergia Project "Development of Personalized Health in Switzerland: Social Sciences Perspectives"

Outstanding Paper Award
The Outstanding Paper Award winners for 2018 were Prof. Shihao Gu (University of Chicago), Prof. Bryan Kelly (Yale University, AQR Capital Management, and NBER), and Prof. Dacheng Xiu (University of Chicago) for their paper entitled "Empirical Asset Pricing via Machine Learning".

The Outstanding Paper Award is given annually in recognition of an unpublished research paper circulated over the previous 12 months that makes an outstanding contribution to the field of finance. The jury that selects the winning paper is composed of all Swiss Finance Institute chaired professors and is headed by Prof. Jean-Charles Rochet, SFI Head of Research.
Best Paper joint winner Hongzhe Shan with SFI Prof. Jean-Charles Rochet (right).
The Swiss Finance Institute PhD Program in Finance promotes the pursuit of academic excellence, providing an intellectual environment and a curriculum comparable with other top PhD programs in Europe and North America. The PhD program operates in collaboration with SFI partner universities École Polytechnique Fédérale de Lausanne (EPFL), the University of Geneva (UNIGE), the University of Lausanne (UNIL), Università della Svizzera italiana (USI), and the University of Zurich (UZH). SFI students benefit from regular contact with outstanding local and international academics. The program seeks to offer the best training possible to both future academics and future practitioners.

As of January 2018, there were 110 active students enrolled: EPFL, 21; UNIGE, 13; UNIL, 19; USI, 24; and UZH, 33. The 2018/2019 academic year had an intake of 18 students, mostly from Europe, but also from farther afield. The first year of the program is dedicated to foundation courses. In subsequent years, students often work as teaching or research assistants in local institutions while writing their theses, following advanced courses, and pursuing their research interests. SFI provides support that enables program participants to travel to international conferences and helps them prepare for the job market.

**PhD Awards & Support:**

**Swiss Finance Institute Doctoral Award for the Best Paper**

The annual SFI Doctoral Award for the Best Paper recognizes a PhD student for an outstanding research paper presented at the SFI Research Days. The winning paper is nominated by a committee formed of external experts participating in the SFI Research Days. In 2018, the award was won jointly by Runjie Geng, SFI@UZH, for his paper entitled “Recursive equilibria in dynamic economies with bounded rationality” and Hongzhe Shan, SFI@UNIGE, for his paper entitled “Techfin in China: Credit market completion and its growth effect”.

**Swiss Finance Institute Doctoral Award for the Best Discussant**

The annual SFI Doctoral Award for the Best Discussant recognizes Swiss doctoral students in Finance for an outstanding discussion of a paper presented at the SFI Research Days. Recipients are nominated by the chairpersons of the respective workshop sessions. In 2018, the award was won jointly by Paula Mirela Sandulescu, SFI@USI, and Sander Willems, SFI@EPFL.

**PhD Study Abroad**

SFI PhD students visit other institutions in the advanced stages of their education in order to gain exposure to top scholars and other internationally renowned institutions, providing them with a well-balanced foundation upon which they can base their move into the job market.

- Andrea Barbon, SFI@USI, is visiting Harvard Business School, Harvard (USA), from September 2018 to May 2019 (faculty sponsor: Prof. Marco Di Maggio).
- Ina Bialova, SFI@UNIL, visited Haas Business School, University of California, Berkeley (USA), from February 2018 to May 2018 (faculty sponsor: Prof. Dmitry Livdan).
- Julien Blatt, SFI@EPFL, visited McCombs School of Business, University of Texas, Austin (USA), from January 2018 to April 2018 (faculty sponsor: Prof. William Fuchs).
- Sylvain Carré, SFI@EPFL, visited the London School of Economics, London (UK), from February 2018 to May 2018 (faculty sponsor: Prof. Martin Oehmke).
- Virginia Gianinazzi, SFI@USI, is visiting NYU Stern School of Business, New York (USA), from September 2018 to August 2019 (faculty sponsor: Prof. Marti G. Subrahmanyam).
- Yushi Peng, SFI@UZH, visited the Department of Finance, Tilburg University (Netherlands), from February 2018 to May 2018 (faculty sponsor: Prof. Nicola Pavanini).
Elisabeth Pröhl, SFI PhD graduate 2018

Paula Mirela Sandulescu, SFI@USI, is visiting the Questrom School of Business, Boston University (USA), from September 2018 to August 2019 (faculty sponsor: Prof. Andrea Vedolin).

Hongzhe Shan, SFI@UNIGE, is visiting London Business School, the University of London (UK), from September 2018 to January 2019 (faculty sponsor: Prof. Vikrant Vig).

Wojciech Zurowski, SFI@USI, visited Fuqua Business School, Duke University (USA), from September 2017 to August 2018 (faculty sponsor: Prof. Anna Cieśliak).

“The SFI PhD program provided me with an excellent basis from which to start my academic career. The course work gave me a thorough overview of the field of finance and equipped me with the necessary tools to start my own research.”

Elisabeth Pröhl, SFI PhD graduate 2018
SFI PhD Graduate Placements

**Academia**

**America**
1. Simon Fraser University
2. UCLA
3. HEC Montreal
4. McGill University
5. University of Toronto
6. Boston College
7. Boston University
8. New York University
9. DePaul University
10. Carnegie Mellon University
11. University of Maryland
12. Johns Hopkins University
13. Duke University
14. Emory University
15. University of Houston

**Europe/Africa**
16. NHH Norwegian School of Economics
17. BI Norwegian School of Management
18. Copenhagen Business School
19. University Magdeburg
20. University of Amsterdam
21. Amsterdam School of Economics
22. Utrecht University School of Economics
23. London School of Economics
24. Queen Mary University of London
25. Lancaster University
26. Goethe University Frankfurt
27. HEC Paris
28. Université Paris-Dauphine
29. ESSEC Business School
30. University of St.Gallen
31. University of Bern
32. University of Lausanne
33. University of Geneva
34. Bocconi University
35. Collegio Carlo Alberto
36. Università Cattolica del Sacro Cuore
37. ESADE Business School
38. Akdeniz University
39. African School of Economics
SFI has one of the world’s largest and most competitive PhD programs in Finance. SFI PhD graduates go on to work in top industry organizations or take up posts at outstanding academic institutions.

**SFI PhD Graduates 2018**
The following students graduated from the SFI PhD Program during 2018:

- **Cecilia Aquila**, SFI@USI, CFO, Cardiocentro Ticino, Switzerland.
- **Zoran Filipovic**, SFI@USI, is on the 2019 job market. Assistant Professor, Université Paris-Dauphine (as of September 2019).
- **Thomas Geelen**, SFI@EPFL, Assistant Professor of Finance, Copenhagen Business School, Denmark.
- **Dominika Kryczka**, SFI@UZH, is on the 2019 job market.
- **Chiara Legnazzi**, SFI@USI, Risk and Performance Data Analyst, Bank J. Safra Sarasin Ltd, Switzerland.
- **Ying Liu**, SFI@UNIL, Assistant Professor of Finance, Shanghai University of Finance and Economics, China.
- **Paola Pederzoli**, SFI@UNIGE, Assistant Professor of Finance, University of Houston, USA.
- **Giuseppe Pratobevera**, SFI@USI, postdoc researcher, University of Vienna, Austria.
- **Elisabeth Pröhl**, SFI@UNIGE, Assistant Professor of Finance, Amsterdam School of Economics, Netherlands.
- **Irina Prostakova**, SFI@UNIL, is on the 2019 job market.
- **Thomas Julian Richter**, SFI@UZH, Quantitative Risk Specialist, UBS, Switzerland.
- **Alessio Ruzza**, SFI@USI, Quantitative Risk Modeler – Counterparty Credit Risk, Credit Suisse, Switzerland.
- **Andras Sali**, SFI@USI, Data Scientist, Alphacruncher, Hungary.
- **Biljana Seistrajkova**, SFI@USI, postdoc researcher and lecturer, Università della Svizzera italiana, Switzerland.
- **Anastasia Sokko**, SFI@UZH, LNG Quantitative Analyst, Koch Supply & Trading, Switzerland.
- **Davide Tedeschini**, SFI@USI, Risk Model Developer, UBS, Switzerland.
- **Raluca Toma**, SFI@UNIL, is on the 2019 job market.
- **Yuan Zhang**, SFI@EPFL, Assistant Professor of Finance, Shanghai University of Finance and Economics, China.

**Industry Placements**

PhD Graduates—Industry Placements:

SFI PhD students have been placed in a broad range of institutions including: Accenture, Allianz, the Bank for International Settlements, Banque Cantonale Vaudoise, Banque Centrale du Luxembourg, Comer Banca SA, Credit Suisse, Deloitte, Deutsche Bank, the European Commission, the Federal Reserve, Goldman Sachs, Keiger, Lombard Odier & Cie, Morgan Stanley, the Norwegian Ministry of Finance, PricewaterhouseCoopers, Pro Credit Bank, Qatar Investment Authority, Swiss Life, the Swiss National Bank, Swissquote, Swiss Re, the Swiss State Secretariat for International Finance Matters, UBS, the US Securities and Exchange Commission, and Zürcher Kantonalbank.
Swiss Finance Institute has analyzed its impact on university first education and graduates specialized in banking and finance in Switzerland as well as consequences for the Swiss financial industry, and in particular for Swiss banks.

Since the launch of SFI, all our partner universities have benefitted from our support and the increasing availability of highly qualified professors, our SFI Faculty members. The engagement of these dedicated individuals has led to a steadily growing number of new banking and finance programs at all our partner universities:

This increase in the number of specialized programs available has resulted in a significant growth in the number of graduates educated in banking and finance. In total, nearly 3,500 graduates have been trained by our faculty since 2006. This growth has by far outpaced the general increase in numbers of business and economics graduates, which means that SFI’s share of first education in the sector has grown from zero to nearly 10 percent.

The high-standing international reputation of the banking and finance first education programs at SFI partner universities attracts candidates from all over the world—only 25 percent of students enrolling originate from Switzerland, and more than 50 percent from the rest of Europe.
Where do SFI banking and finance graduates work?

59% of SFI banking and finance students go to work for the financial industry after graduation, and most of them move into banking:

<table>
<thead>
<tr>
<th>Employer branch</th>
<th>% of SFI graduates</th>
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<tbody>
<tr>
<td>Banking</td>
<td>35%</td>
</tr>
<tr>
<td>Asset / Fund / Investment Mgt.</td>
<td>15%</td>
</tr>
<tr>
<td>Fintech &amp; other financial services</td>
<td>6%</td>
</tr>
<tr>
<td>Insurance</td>
<td>3%</td>
</tr>
<tr>
<td>Consulting, audit &amp; other services</td>
<td>15%</td>
</tr>
<tr>
<td>Foreign authorities</td>
<td>2%</td>
</tr>
<tr>
<td>Swiss authorities</td>
<td>1%</td>
</tr>
<tr>
<td>Other industries</td>
<td>11%</td>
</tr>
<tr>
<td>Further studies</td>
<td>7%</td>
</tr>
<tr>
<td>Academia</td>
<td>5%</td>
</tr>
</tbody>
</table>

Financial industry: 59%

Academia: 12%

Of those graduates go into the financial industry, 79 percent work for an employer here in Switzerland. So, taking into account the foreign origins of the majority of our banking and finance students, SFI contributes significantly to attracting and retaining talent for the Swiss financial industry, and in particular for all types of Swiss banks.

<table>
<thead>
<tr>
<th>SFI Graduates employed by Swiss banks</th>
<th>% of graduates</th>
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<tbody>
<tr>
<td>Big banks</td>
<td>45%</td>
</tr>
<tr>
<td>Private banks</td>
<td>28%</td>
</tr>
<tr>
<td>Foreign banks in Switzerland</td>
<td>16%</td>
</tr>
<tr>
<td>Cantonal, Raiffeisen, regional and other Swiss banks</td>
<td>12%</td>
</tr>
</tbody>
</table>
Overview—
SFI Continuing Education

Facts and Figures 2018
The focus of the SFI Continuing Education offering is to provide insight into key knowledge and trends in the financial industry, both on a strategic and an operational level. The concepts underlying these trends are presented by academics and practitioners selected for their extensive industry involvement and their understanding of the implications of these concepts for the finance industry. Senior executives are invited to give presentations on their institutions' experience of these developments.

A systematic and regular update of the topics and of the course structure ensures that the needs of the market are constantly met. Finally, the carefully selected participants are of the highest caliber, ensuring a critical peer discussion of the ideas presented and offering the benefits of outstanding networking and interaction platforms.

In 2018 SFI Continuing Education offered 22 courses and a further 40 training courses related to certification
• 5 degree offerings (plus a re-certification program for an earlier non-degree program)
• 1 executive offering
• 10 Spotlight Courses
• 3 in-house training courses
• 3 SAQ re-certification training measures
• 40 training courses related to SAQ certification

More than 200 participants took part in one or more of the Institute’s courses in 2018.

2018 Highlights
Swiss Degree
The number of course participants completing one of these programs (DAS in Banking, CAS Asset Management, CAS Corporate Banking, CAS Real Estate Finance) and being awarded a university diploma remained stable in 2018. The SFI flagship program, “DAS in Banking” (its predecessor being the “Executive Program”), was held for the 31st time. Besides degree programs, SFI enlarged its offering, responding to market needs in a modular manner and offering several Spotlight Courses—for example, in Finance, Asset Management, and Financial Market Law.

Personnel
Dr. Silvia Helbling joined the institute as new Head of Continuing Education and Member of the Management Board as of January 2018. She has a proven track record in the field of banking and finance training and a strong familiarity with SFI from an earlier employment with the Institute.

In the light of a planned restructuring of the department, the overall number of employees in the Continuing Education team has been slightly reduced.

Strategy Review
A strategy review initiated by the Foundation Board was conducted during 2018 for SFI Continuing Education. The new strategy is close to finalization and initial concrete results will become apparent in the first half of 2019.

“One of the biggest strengths of SFI is certainly that there is a good balance between its academic, university elements and its practice-oriented continuing education. This ensures that value-oriented exchange takes place in both directions.”

Dr. Romeo Lacher, SFI Foundation Board Vice-Chairman and Chairman of the Board of Directors of SIX Group AG
Certification
In 2018 the Continuing Education team successfully continued to broaden the scale of its offering to incorporate specialist certification training. SFI has been mandated by the Swiss Association for Quality (SAQ) as an examination institute for the certification of client advisors in Wealth Management (ISO 17024). SFI, with significant expertise in wealth management, joined forces with two strong partners—namely, Universität Zürich and the CYP Association. These partners complement SFI’s expertise and education setup ideally, which allows the three bodies to jointly offer certifications not only in Wealth Management but also in other client advisor bank profiles of SAQ. The certification offering comprises a self-assessment test for all candidates and selected e-learning and/or on-site training elements, as well as an examination.

All elements of the certification are offered in four languages—German, French, Italian, and English—and can be customized upon request. In 2018, Swiss Finance Institute was commissioned to execute the certification program (e-learning, webinars, physical training sessions, exams) for several new and existing clients. Quality reviews show that SFI ranks among the top providers in the field of certification courses.

“I teach executives to enjoy change and to trust themselves to innovate.”

Marianne Wildi, SFI Continuing Education lecturer, CEO Hypothekarbank Lenzburg AG
The Swiss Finance Institute Alumni Association (SFIAA) replaced the former Swiss Banking School Alumni Association on April 28, 2006. Graduates of any of the Swiss Finance Institute training programs or continuing education offerings—in particular the Diploma of Advanced Studies (DAS), the Certificate of Advanced Studies (CAS), the Advanced Executive Program (AEP), and the International Bank Management Program (IBMP)—are eligible to join. The SFIAA currently has 1,339 members.

The SFIAA Promotes:

- Networking among its members
- The continuing education of its members by means of seminars and lectures (in collaboration with SFI)
- Contributions to the ongoing development of SFI

In addition to an annual meeting of members, SFIAA and SFI jointly organize the Alumni Luncheons, with prominent guest speakers; after-work aperitifs in Zurich and Basel; luncheons in Bern; and networking dinners in Geneva, as well as the SFIAA Golf Trophy. Furthermore, in 2015, for the first time, social events were organized, starting with a one-day excursion to Mercedes-AMG in Affalterbach.

<table>
<thead>
<tr>
<th>2018 Alumni Luncheons &amp; Events</th>
<th>June 13, 2018</th>
<th>Women’s Luncheons</th>
</tr>
</thead>
</table>
| January 25, 2018                            | SFIAA Fondue Enjoyment | These events were launched in 2008 to promote networking among female members of the SFIAA.
| March 13, 2018                              | After-work Aperitif, Basel | March 27, 2018 |
| March 14, 2018                              | Networking Dinner, Romandie | Speaker: Mrs. Shira Kaplan, founder, CEO, and owner, Cyverse AG |
| March 22, 2018                              | General Assembly & Luncheon, Zurich. Speaker: Beat Kälin, Chairman of the Board of Directors, Komax International |
| April 11, 2018                              | Networking Luncheon, Bern |
| April 19/20, 2018                           | SFIAA Social Event: Visit to Mercedes AMG, Affalterbach |
| June 12, 2018                               | After-work Aperitif, Basel |
| June 13, 2018                               | Networking Dinner, Romandie |
| June 13, 2018                               | Networking Luncheon, Bern |
| August 21, 2018                             | After-work Aperitif, Basel |
| September 5, 2018                           | Networking Luncheon, Bern |
| September 6, 2018                           | SFIAA BBQ |
| September 14, 2018                          | SFIAA Golf Trophy |
| September 26, 2018                          | SFIAA Luncheon, Zurich. Speaker: Daniel Nussbaumer, Cybercrime Chief, Zurich Cantonal Police |
| November 14, 2018                           | Networking Dinner, Romandie |
| November 20, 2018                           | After-work Aperitif, Basel |
| December 4, 2018                            | Networking Luncheon, Bern |
SFI’s communication activities are primarily aimed at disseminating the extensive expertise of the Institute’s more than 50 renowned professors among finance professionals as well as to the broader public, and at enabling finance practitioners and academics to exchange the knowledge and expertise that will keep Switzerland at the top in banking and finance. Various additional communication activities were conducted for the Institute in 2018, positioning it to meet future challenges and enabling the Swiss banking and finance industry to profit from SFI’s extensive expertise.

SFI Communication—Growing Knowledge Capital

The overall objective of all SFI activities is the creation of intellectual value, or as we call it “knowledge capital”, in the interest of SFI’s founding members—the Swiss financial sector and the Confederation. SFI’s is committed to growing knowledge capital in order to guarantee the long-term prosperity of Switzerland’s financial marketplace and all communication activities are aimed at supporting this goal. The objective for 2018 focused on two key points: increasing both the visibility of SFI as an institution and understanding of the Institute’s mission and actively linking the expertise of SFI Faculty to the Swiss banking industry. The year was accordingly characterized by the active media relations work of SFI Management as well as by a fundamental reorientation of the Institute’s practitioner-oriented publications and events activities. There is now a clearer focus on activities that involve SFI professors and build on their expertise. The SFI Communication and Projects team actively supports the professors involved in such knowledge exchange activities and thus ensures the optimal transformation and accessibility of content.

Events and Conferences—Academia Meets Practice

In 2018, SFI’s events and conference were consolidated according to the new knowledge exchange strategy. Fewer events were held than in previous years and their quality was significantly improved by involving SFI Faculty more closely. A total of five high-quality, publicly available events attracted a combined audience of over 1,400 registered participants—which is on a par with previous years despite those years’ significantly higher number of events. Active knowledge exchange, relevance, and visibility are the focus of all such events as they aim to foster the exchange of knowledge and expertise—among practitioners and academics—that will keep Switzerland at the top in banking and finance. Topical themes addressed in 2018 included private equity, pension fund asset allocation, the real estate bubble, digital transformation, sustainable finance, and financial stability.

One of the many highlights was the successful public discussion event on the “Vollgeld-initiative”, which took place in May 2018. More than 250 participants followed the presentations of SFI Professor Jean-Charles Rochet and SNB Chairman Thomas Jordan on the Initiative and its associated risks. Complementing the SFI Public Discussion Note authored by Professor Rochet, this event presented this complex topic in an easily accessible manner and offered a valuable platform for active exchange between the audience and the speakers, both in the course of the panel discussion and at the subsequent aperitif.

Another highlight was the very insightful evening event with Professor Rajna Gibson Brandon, from the University of Geneva, and Patrick Odier, Managing Partner at Banque Lombard Odier & Cie. Alongside SFI Managing Director and Professor François Degeorge and Yves Mirabaud, President of the Fondation Genève Place Financière, the two keynote speakers discussed the latest research findings in the field of sustainable finance and their importance for wealth management and the financial center of
Geneva. Registration for the event had had to be closed due to high demand, and the over 100 participants experienced a lively dialogue between academia and practice.

**The Media as Partners and Valuable Multipliers**
Systematic exchange and collaboration with the media are an essential part of SFI’s public relations work. SFI underpins its claim to thought leadership with articles and editorial contributions in the relevant financial press and specialized media. This includes regularly placing expert opinions, channeling media inquiries, and communicating on behalf of the Institute, for example in relation to our high-quality continuing education offering. SFI professors as well as members of the SFI management team regularly seek dialogue with the media to share their expertise and to explain the important role and purpose of SFI and of fundamental research, and the added value that each brings to the Swiss financial marketplace.

**Intensified Social Media Work—Digital Knowledge Exchange**
An essential element of the SFI communication strategy is to use social media channels to further foster digital knowledge exchange. During 2018, we continuously grew our social media presence and engagement through targeted activities, resulting in a further rise in Twitter, Facebook, LinkedIn, YouTube, and Google+ post visits and follower audiences.

**SFI Expertise Guide—Extensive Expertise at a Glance**
SFI unites more than 50 professors from six partner universities, spread across three language regions in Switzerland. The Institute’s extensive expertise is impressively illustrated in the SFI Expertise Guide (www.sfi.ch/expertiseguide). Compiled for the first time in 2017 and made available to finance professionals and the media, the publication, which was updated in 2018, continues to enjoy broad popularity. Fast access to specific expertise is essential for an active exchange of knowledge, be it for practitioners seeking scientific advice or journalists commenting on current developments in the financial industry. This valuable reference guide, which presents SFI’s specific finance expertise by subject and activity area at a glance, makes this important task easier for practitioners and journalists alike.

**SFI Practitioner Roundups—A Popular Publication**
In 2018, SFI again attracted significant interest with its industry-oriented publications. Particularly noteworthy is the SFI Practitioner Roundups (www.sfi.ch/roundups) series. This monthly publication summarizes the latest research findings from SFI Professors on a relevant theme and in a concise format. Each issue also provides practical insights from an experienced practitioner and is available in English, French, German, and Italian. We received large amounts of positive feedback and generated a strong interest in the new publication format from both the financial industry and the media. Also worth mentioning in this context is the special issue on financial stability, which was published to coincide with the SFI Annual Meeting 2018 and also met with a very positive response from the industry and the media.

**Survey on Career Prospects—Training and Development Remains a Crucial Success Factor**
The importance of knowledge capital was also acknowledged by bank employees themselves in 2018, as the seventh annual online survey on “Career Prospects in the Financial Industry”—carried out in the spring in collaboration with Finews and Communicators—revealed. In view of the major changes in the financial world, training and development are becoming increasingly important. Accordingly, the bank employees’ interest in continuing education is growing significantly. When choosing a suitable education institution, the reputation of the institute as well as the long-term nature of the topics covered are of particular importance. Both aspects are of utmost importance for SFI and characterize the institution as well as the SFI faculty.
Communication Activities:

SFI–Capco Institute Banking & Finance Forum 2018 at Landesmuseum Zurich.

Panel 1 – Secondary Buyouts—Creating or Destroying Value for Investors?

Presenter Prof. François Degeorge:
Ten years after the most recent global financial crisis, the subject of financial stability is a top concern for all financial market players. The lessons learned from the crisis were discussed by outstanding speakers from the industry and academia at SFI’s 13th Annual Meeting, in 2018.

SFI’s Annual Meeting brings together the financial community and academia to exchange the knowledge and expertise that will keep Switzerland at the top in banking and finance. It is one of the leading events in the Swiss financial community’s calendar and an exclusive discussion platform for key financial market players. This year, thought leaders discussed the lessons learned from the most recent financial crisis in front of a sold-out audience. It seems that the Swiss financial center has done its homework and is now much more robust than prior to the crisis. This thanks to a number of measures that were ultimately supported and implemented by all financial market players. Finance research also made a significant contribution to this change. SFI professors, for example, considerably improved our understanding of the crisis and our thinking about how to handle future risks. The resulting knowledge gain from their research is of the utmost importance for the Swiss Finance center and is recognized and appreciated by SFI’s founding members.

Money and Trust in the Digital Age
Prof. Hyun Song Shin, Economic Adviser and Head of Research at the Bank for International Settlements, addressed in his speech technological as well as psychological aspects of digital token payments. Ultimately, the question of trust between individual players remains one of great importance, especially in a highly technological environment. Against this background, Prof. Shin highlighted the importance of central banks, whose behavior substantially contributes to trust among market participants. He also pointed out that technological advances in the financial industry are undisputed but that the associated advantages over existing payment systems are yet to be demonstrated.

Financial Stability: What Have We Learnt from SFI Contributions?
SFI Prof. Jean-Charles Rochet from the University of Geneva showcased what academic research carried out in the aftermath of the financial crisis can teach us, using—by way of illustration—four examples of research conducted by SFI professors. For example, two SFI professors studied the behavior of hedge and mutual funds during the global financial crisis; another researcher examined and questioned the design of
stress tests and developed a new method called the “V-Lab” stress test. The further research areas that Prof. Rochet presented were the analysis of credit booms and busts cycles as well as bankers’ compensation.

Financial Stability: Old and New Challenges
Dr. Fritz Zurbrügg from the Swiss National Bank reminded us in his speech that a solid financial system is a key prerequisite for the functioning of an economy and the implementation of monetary policy. At the same time, he pointed out, financial stability depends primarily on banking sector resilience and disruptions on real estate and mortgage markets pose large risks to the banking sector.

Keynote Speech by Mr. Tidjane Thiam, Credit Suisse Group AG
The conference concluded with a speech by Mr. Tidjane Thiam from Credit Suisse Group AG, who provided a variety of personal anecdotes and also self-critically addressed the loss of trust with which the financial industry still has to cope. Using Credit Suisse as an example, he also outlined the many strategic and operational challenges a major Swiss bank faces in a global context.

In his closing remarks, SFI’s Foundation Board Chairman Dr. Romeo Cerutti from Credit Suisse Group AG emphasized the important role of SFI as a connector between academia and practice and reaffirmed the added value that results from this close integration of practice and academia. He also described the in-depth and thorough knowledge exchange between the institute and the Swiss financial community, which has grown over the years, as a great asset and a key contributor to the continued prosperity of the Swiss banking sector.
The main governing body of Swiss Finance Institute is the Foundation Board. It includes representatives of its founding members and of its academic regional centers. The Foundation Board has four committees: the Executive Committee, the Fund Management Committee, the Audit and Risk Committee, and the Faculty Appointment and Research Project Committee. The aim of these committees is to discuss financial and faculty issues in detail before each meeting of the Foundation Board in order to bring recommendations to the members of the Board. All Foundation Board members have a secondary role on one of the four committees.

The Foundation Board is advised by the Scientific Council on matters of scientific content and by the Education and Knowledge Advisory Board on matters of continuing education and knowledge exchange with the industry.

**Foundation Board**

Foundation Board members represent the finance and banking community in Switzerland, both locally and internationally. SFI gratefully acknowledges the participation of Prof. Dr. Yves Flückiger, representative of Swiss Finance Institute Léman Center, Prof. Dr. Michael O. Hengartner, representative of Swiss Finance Institute Zurich Center, and, Dr. Christian Poerschke, representative of Raiffeisen Group. All completed their tenure on the Foundation Board during 2018.

**Swiss Finance Institute Foundation Board—December 2018**

**Chairperson**

*Dr. Romeo Cerutti*, Member of the Executive Board of Credit Suisse Group

**Vice-Chairperson**

*Lukas Gähwiler*, Chairman of UBS Switzerland

*Dr. Romeo Lacher*, Chairman SIX Group AG, Zurich

**Members**

*Prof. Boas Erez*, Rector, Università della Svizzera Italiana—as representative of the Swiss Finance Institute Lugano Center

*Christophe Hentsch*, Managing Partner at Lombard Odier—as representative of the Association of Swiss Private Banks

*Prof. Nouria Hernandez*, Rector, University of Lausanne—as representative of the Swiss Finance Institute Léman Center

*Dr. Stephanino Isele*, Head of Institutionals & Multinationals and Member of the Executive Board, Zürcher Kantonalbank

*Pascal Kiener*, CEO, Banque Cantonale Vaudoise

*Claude-Alain Margelisch*, CEO and Delegate of the Board of Directors, Swiss Bankers Association
Adrian V. Nösberger, CEO Schroder & Co. Bank AG—as representative of the Association of Foreign Banks in Switzerland

Gabriele Burn, Member of the Executive Board of Raiffeisen and Head of Branches & Region Department, Raiffeisen Group

Gian A. Rossi, Head Switzerland and Member of the Executive Board, Julius Baer Group Ltd—as representative of the Association of Swiss Asset and Wealth Management Banks

Prof. Christian Schwarzenegger, Vice President of Universität Zürich—as representative of the Swiss Finance Institute Zurich Center

Luca Soncini, Member of the Board of Directors, Banca dello Stato del Cantone Ticino—as representative of the Ticino Bankers Association (ABT)

Scientific Council

The scientific council is an independent committee of internationally renowned professors of Banking and Finance from around the world. It advises the Foundation Board on all matters where scientific criteria should predominate and as such plays a crucial role in the pursuit of the objectives of Swiss Finance Institute. Indeed, in full respect of academic freedom and scientific integrity, the Swiss Finance Institute Foundation Board refuses to take decisions involving research or researchers unless armed with the appropriate recommendation from the Scientific Council. SFI is very fortunate to be able to count on the enthusiastic support of the following internationally renowned experts:

Chairperson

Prof. René Stulz, Fisher College of Business, Ohio State University

Members

Prof. Franklin Allen, Brevan Howard Centre, Imperial College London

Prof. Tim Bollerslev, Department of Economics, Duke University

Prof. Patrick Bolton, Columbia Business School, Columbia University

Prof. Markus Brunnermeier, Department of Economics, Princeton University

Prof. Darrell Duffie, Graduate School of Business, Stanford University

Prof. Andrew Lo, Sloan School of Management, Massachusetts Institute of Technology

Prof. Maureen O’Hara, Johnson Graduate School of Management, Cornell University

Prof. Marco Pagano, Department of Economics and Statistics, University of Naples Federico I
Governing and Advisory Bodies

Education and Knowledge Center Advisory Board
SFI gratefully acknowledges the participation of Lukas Stucky, Bank Julius Baer & Co. Ltd, and Ernst Naf, representative of Raiffeisen Schweiz. Both completed their tenure on the Education and Knowledge Center Advisory Board during 2018.

The members of the Education and Knowledge Advisory Board as of December 2018 are:

Chairperson
Dr. Philipp Halbherr, Head of Retail Banking and Capital Markets, Member of the Executive Board of the Swiss Bankers Association

Members
Hans Baumgartner, Head of Private & Wealth Management Clients Region Zürich Zentrum and Head of Region Zürich, Credit Suisse (Schweiz) AG

Christian Donzé, Head of Professional Training, Banque Cantonale Vaudoise

Christophe Lapaire, SFI Alumni Association Chairperson and SIX Securities Services AG

Markus Tanner, Managing Director, Senior Talent Partner, UBS Switzerland

Dr. Thomas Ulrich, Head of Governmental Affairs, Group Regulatory & Governance, Managing Director, UBS AG

Project Evaluation Committee
The SFI Project Evaluation Committee is an independent committee of professors selected from around the world for their expertise in financial economics. Projects are assessed on the basis of their scientific rigor and their potential impact on financial economics, in particular through successful publication.

The members of the SFI Project Evaluation Committee as of December 2018 are:

Chairperson
Prof. Jean-Charles Rochet, University of Geneva and Swiss Finance Institute (Head of Research)

Members
Prof. Suleyman Basak, Institute of Finance and Accounting, London Business School

Prof. Bruno Blais, CRM, University of Toulouse

Prof. Arnoud Boot, Faculty of Economics and Econometrics, University of Amsterdam

Prof. Wayne Ferson, Marshall School of Business, University of Southern California

Prof. Alexander Ljungqvist, Stern School of Business, New York University (on leave)

Prof. Josef Zechner, Institute for Finance, Banking and Insurance, Vienna University of Economics and Business
Members of the SFI Foundation Board during a meeting.
## Balance Sheet as of 31 December 2018

### Assets

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>6'694'745</td>
<td>5'009'133</td>
</tr>
<tr>
<td>Trade receivables</td>
<td>38'231</td>
<td>55'330</td>
</tr>
<tr>
<td>Other current receivables</td>
<td>407'450</td>
<td>193'064</td>
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<tr>
<td>Accrued income and prepaid expenses</td>
<td>240'529</td>
<td>64'263</td>
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<tr>
<td><strong>Total Current Assets</strong></td>
<td>7'380'955</td>
<td>5'321'790</td>
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<tr>
<td><strong>Capital Assets</strong></td>
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<td></td>
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<tr>
<td>Financial assets</td>
<td>27'006'497</td>
<td>35'822'921</td>
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<tr>
<td>Tangible fixed assets</td>
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<tr>
<td><strong>Total Capital Assets</strong></td>
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<td>35'952'593</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td>34'525'480</td>
<td>41'274'382</td>
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</table>

### Liabilities and Founders’ Equity

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short-Term Liabilities</strong></td>
<td></td>
<td></td>
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<tr>
<td>Trade creditors</td>
<td>633'424</td>
<td>637'529</td>
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<td>Other current liabilities</td>
<td>213'875</td>
<td>1'595'374</td>
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<tr>
<td>Deferred income and accrued expenses</td>
<td>1'149'476</td>
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<td><strong>Total Short-Term Liabilities</strong></td>
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<tr>
<td><strong>Long-Term Liabilities</strong></td>
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<td></td>
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<tr>
<td>Other long-term liabilities</td>
<td>4'000'000</td>
<td>4'000'000</td>
</tr>
<tr>
<td><strong>Total Long-Term Liabilities</strong></td>
<td>4'000'000</td>
<td>4'000'000</td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>5'996'775</td>
<td>7'136'505</td>
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</table>

### Founders’ Equity

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation capital</td>
<td>19'000'000</td>
<td>19'000'000</td>
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<tr>
<td>Statutory capital reserves</td>
<td>37'564'785</td>
<td>37'564'785</td>
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<tr>
<td>Statutory retained earnings</td>
<td>-22'426'907</td>
<td>-20'038'571</td>
</tr>
<tr>
<td>Result of the period</td>
<td>-5'609'174</td>
<td>-2'388'336</td>
</tr>
<tr>
<td><strong>Total Founders’ Equity</strong></td>
<td>28'528'704</td>
<td>34'137'878</td>
</tr>
<tr>
<td><strong>Total Liabilities and Founders’ Equity</strong></td>
<td>34'525'480</td>
<td>41'274'382</td>
</tr>
</tbody>
</table>
### Profit and Loss Account for the Period Ending 31 December

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from Continuing Education courses</td>
<td>1'970'301</td>
<td>2'801'152</td>
</tr>
<tr>
<td>Income from Communication &amp; Projects</td>
<td>41'507</td>
<td>38'151</td>
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<tr>
<td>Income from Partner University Faculty</td>
<td>164'421</td>
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<tr>
<td>Income from PhD Program</td>
<td>20'908</td>
<td>8'172</td>
</tr>
<tr>
<td><strong>Income from Activity Areas</strong></td>
<td><strong>2'197'137</strong></td>
<td><strong>2'847'475</strong></td>
</tr>
<tr>
<td>Expenses from Continuing Education courses</td>
<td>–1'039'810</td>
<td>–1'378'144</td>
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<tr>
<td>Expenses from Partner University Faculty</td>
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<tr>
<td>Expenses from PhD Program</td>
<td>–596'847</td>
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<tr>
<td>Expenses from Communication &amp; Projects</td>
<td>–342'971</td>
<td>–400'986</td>
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<tr>
<td><strong>Total Expenses from Activity Areas</strong></td>
<td><strong>–5'836'234</strong></td>
<td><strong>–6'279'209</strong></td>
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<tr>
<td><strong>Net Result before General Expenses</strong></td>
<td><strong>–3'639'096</strong></td>
<td><strong>–3'431'734</strong></td>
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<tr>
<td>Personnel expenses</td>
<td>–2'869'756</td>
<td>–3'815'914</td>
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<tr>
<td>Audit and accounting services</td>
<td>–129'088</td>
<td>–106'731</td>
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<tr>
<td>Other professional services</td>
<td>–106'219</td>
<td>–94'205</td>
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<tr>
<td>IT services</td>
<td>–179'257</td>
<td>–107'249</td>
</tr>
<tr>
<td>Office expenses</td>
<td>–186'709</td>
<td>–219'805</td>
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<tr>
<td>Marketing and other operational expenses</td>
<td>–145'429</td>
<td>–134'211</td>
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<td><strong>Total Other Operational Expenses</strong></td>
<td><strong>–746'702</strong></td>
<td><strong>–662'202</strong></td>
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<td><strong>Earnings before Interest, Depreciation, and Amortization</strong></td>
<td><strong>–7'273'566</strong></td>
<td><strong>–7'936'117</strong></td>
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<tr>
<td>Depreciation of tangible assets</td>
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<td>–26'267</td>
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<td><strong>Earnings before Interest</strong></td>
<td><strong>–7'255'555</strong></td>
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<tr>
<td>Financial income</td>
<td>809</td>
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<tr>
<td>Financial expenses</td>
<td>–9'610</td>
<td>–15'650</td>
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<tr>
<td><strong>Earnings before Non-Operational and Extraordinary Results</strong></td>
<td><strong>–7'282'367</strong></td>
<td><strong>–7'945'467</strong></td>
</tr>
<tr>
<td>Net result on investments</td>
<td>–1'917'275</td>
<td>1'922'255</td>
</tr>
<tr>
<td>Net non-operational income</td>
<td>3'600'000</td>
<td>3'600'000</td>
</tr>
<tr>
<td>Extraordinary, non recurring, or prior-period result</td>
<td>–9'532</td>
<td>34'876</td>
</tr>
<tr>
<td><strong>Net Result of the Period</strong></td>
<td><strong>–5'609'174</strong></td>
<td><strong>–2'388'336</strong></td>
</tr>
</tbody>
</table>
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Hansjörg Albrecher is Professor of Actuarial Science at the University of Lausanne. Professor Albrecher is a regular speaker at leading conferences on insurance. He has published extensively and also serves on the editorial boards of the top academic journals in his areas of research expertise. His research focuses on the quantitative aspects of insurance and on risk management.

**Recent Research**

In a recent study Professor Albrecher and coauthors analyze the most wide-reaching and commonly occurring natural hazard worldwide—floods. To understand better the connections between climate change and flood risks, the researchers use 7'100 years of sediment data from alpine lakes to date and trace the occurrence of floods with surprising accuracy. The data are then used to develop point process models, and it turns out that the increase in flood frequency caused by sudden change points is a much better description than continuous trends in most cases. Similar change point analyses are now also being undertaken for climate indicators such as temperature records from cave speleothems and tree growth records in the Alps, which also go back several thousand years. The increased understanding of the connections between flood occurrences and climate variables is intended to help improve risk management for this type of natural catastrophe in the future.

Philippe Bacchetta is Professor of Economics at the University of Lausanne. Professor Bacchetta has been a visiting scholar at the International Monetary Fund on several occasions and has provided consultancy services to numerous central banks around the world. His research focuses primarily on international finance, financial crises, and monetary economics.

**Recent Research**

One of Professor Bacchetta’s recent coauthored studies reviews the sharp drop in employment and the surge in corporate cash that was observed in the aftermath of the US financial crisis. The researchers explain this puzzling co-movement by liquidity shocks. Such shocks not only make production less attractive and more difficult to finance, they also generate liquidity constraints regarding firms’ payment of wages. US data covering the 1980–2015 period reveal that this negative relationship between employment decisions and corporate cash holdings is systematic both over time and across firms. Such results highlight the fact that corporate liquidity issues impact not only investments but also the labor market—something regulators and policy makers should keep in mind.
Giovanni Barone-Adesi is Professor of Economics at the Università della Svizzera italiana. Professor Barone-Adesi held an SFI Senior Chair from 2006 to 2016. He is President of OpenCapital, an asset management firm based in Lugano, and a member of the Board of Credit Agricole Indosuez – Suisse. His research interests lie in derivative pricing, studies of market volatility, risk management, and the relationship between capital levels and risk-taking in banks.

**Recent Research**

In ongoing research, Professor Barone-Adesi focuses on option-based risk measures, the pricing of securities, and the predictability of stock returns. Regarding the first topic, he contributes to the literature by incorporating information available from option markets when computing forward-looking value at risk and conditional value at risk. Regarding the second topic, he improves overall security pricing tests by presenting strategies that reduce the biases induced by the use of non-simultaneous information sets. Finally, he introduces a novel class of stock return predictors that are more reliable for both positive and negative returns, improving overall accuracy.

Stefano Battiston is SNF Professor at the Department of Banking and Finance of the University of Zurich. Professor Battiston’s main research interests are financial contagion, default cascades, and propagation of financial distress, where he combines insights from the statistical mechanics of networks with an analysis of economic incentives.

**Recent Research**

One of Professor Battiston’s recent coauthored research papers contributes to the literature on shocks’ impact on the economy. The researchers’ key innovation is to account for possible feedback loops between economic sectors and to obtain a full measure of an overall policy effect instead of solely focusing on a specific sector. To empirically test their model they focus on climate policy shocks’ impact on the financial sector and the real economy by including both interlinkages and feedback loops between institutional sectors. Results for the euro area show that the amplification through feedback loops can be substantial. Further, a small positive or negative climate policy shock hitting the banking system could lead to a great amplification in the banks–households chain and to large positive or negative implications for the real economy.
Tony Berrada is Professor of Finance at the University of Geneva. Professor Berrada is a regular speaker at leading finance conferences and workshops worldwide. He teaches executive education courses on portfolio management. His main research interests lie in the pricing of financial assets and the modeling of market volatility dynamics, with a particular emphasis on the role of information.

In a recent paper, Professor Berrada and coauthors contribute to the asset pricing literature by focusing on the general lack of ability that exists when one seeks to predict the dynamic features of asset prices. The researchers innovate by developing a model that includes unobservable growth regimes, beliefs-dependent risk aversion, and macroeconomic information to predict future asset returns. Their model possesses attractive predictive properties and is able to produce a measure of equity volatility that tracks realized volatility and a countercyclical equity premium that spikes during recessions. Empirical results, based on data from 1957 to 2014, show that the macroeconomic metric the researchers develop provides a significant contribution to predicting future asset returns for all time horizons, which is not the case for the usual consumption-wealth and dividend yield metrics, which provide statistically significant results only after three and 11 quarters, respectively.

Ines Chaieb is Associate Professor of Finance at the University of Geneva. Professor Chaieb is a regular speaker at major academic conferences and workshops on finance worldwide. Her main research interests lie in asset pricing, international finance, and emerging markets.

In ongoing research Professor Chaieb and coauthors analyze the impact of liquidity costs and market segmentation on asset pricing. The model developed by the researchers suggests that freely traded securities command premiums for global market and liquidity risks as well as for liquidity levels, whereas the securities that can be held by only a subset of investors command an additional premium for local market and liquidity risks. Empirical results for 24 emerging markets support the model’s predictions and show that the price of global market risk is economically meaningful and that liquidity level costs are the biggest contributors to the overall risk premium. Further research reveals that the global liquidity risk premium increases greatly during market corrections and that local liquidity risk premiums are small overall.
Patrick Cheridito is Professor of Mathematics at ETH Zurich. He became an SFI Faculty Member in 2017. Since June 2016, he has been serving as Co-director of RiskLab Switzerland, an interdisciplinary center in the Department of Mathematics of ETH Zurich devoted to research and education in financial and actuarial mathematics. He is also a member of the steering committee of ETH Zurich’s Master’s program in Data Science and is involved in various industry collaborations.

Recent Research
In a recent paper, Professor Cheridito and his coauthor develop a framework for measuring, allocating, and managing financial systemic risk. Their measure of total systemic risk, SystRisk, incorporates the a priori cost to society related to the fact that governments often do not have a choice but to support failing financial institutions in order to protect the economy. Their approach views financial institutions as parts of the financial system and relates the financial industry to the real economy. As a consequence, a bank that behaves as part of a herd is allocated more systemic risk than a bank that acts more independently, and the costs of externalities grow disproportionally as they become large in comparison to a country’s economy. The researchers provide recommendations regarding how regulation can be improved by setting systemic risk limits and imposing systemic risk charges and a cap and trade system for systemic risk.

Pierre Collin-Dufresne is Professor of Finance at the Ecole Polytechnique Fédérale de Lausanne. Previously, Professor Collin-Dufresne held the Carson Family Chair of business at Columbia University and worked in the Quantitative Strategies Group of Goldman Sachs Asset Management. He currently sits on the academic advisory board of Lombard Odier Asset Management, provides expert advice for Cornerstone Research, is a consultant for the European Central Bank, and serves on the editorial boards of various academic journals. His primary research interest lies in credit and fixed income markets.

Recent Research
One of the recent topics Professor Collin-Dufresne and coauthors have been investigating is how to create an optimal portfolio when returns, volatilities, and trading costs change over time. The researchers show that the best performing portfolio—constructed using a dynamic mean-variance approach that accounts for state persistence, risk, and trading costs—is one that trades toward an aim portfolio at a given trading speed. Trading speed increases in persistent states when volatility is high and trading costs are low. Empirical results, obtained with US common stocks, show that optimal dynamic strategies significantly outperform myopic trading strategies and that the highest gains are obtained when timing changes in volatility and trading costs rather than timing expected returns.
François Degeorge is Professor of Finance at the Università della Svizzera italiana. Professor Degeorge is a former Dean of the Faculty of Economics at the Universitá and a former president of the European Finance Association. He has taught at HEC Paris, where he also served as Associate Dean for Research. He has been a visiting professor at the Tuck School of Business, at Université Paris-Dauphine, and at the Saïd Business School. He has received numerous teaching and research awards. His recent research investigates the influence of analysts on corporate policies, the growing phenomenon of secondary buyouts, and the stock market impact of news dissemination by firms.

Recent Research
In a recent paper, Professor de Treville and coauthors focus on the impact of changes in forecasting uncertainty on decision lead time—the period between the decision to produce and the moment when demand is observed. Whether the change is gradual or occurs in jumps has important implications for the justified cost premium—the financial premium worth paying to reduce the decision lead time. Demand uncertainty related to jumps justifies a higher premium when an average jump increases median demand, and justifies a lower premium when an average jump decreases median demand. The authors use examples of jumps to argue that the use of the correct model has far-reaching implications for investment in responsiveness, including production-location decisions.
Theodosios Dimopoulos is Professor of Finance and Director of the Department of Finance at the University of Lausanne. Professor Dimopoulos has received several grants and awards during his studies. His research interests lie in mergers and acquisitions, corporate finance, and corporate governance.

**Recent Research**
In a recent paper, Professor Dimopoulos and a coauthor seek to better understand the rationale behind the heterogeneity in the level of profit, investment, leverage, and payout across firms. To do so, the researchers develop an empirical framework and test it on data that cover close to 1'000 US manufacturing firms over a 40-year period. Firms exhibit large and persistent differences in their cash flow characteristics. This variation in firm “DNA” explains why firms in the same sector and the same year follow markedly different investment, leverage, and dividend policies. Results reveal that differences across firms in profit shocks and corporate tax rates are the main factors that explain dispersion in leverage rates, whilst differences in capital-adjustment costs and equity-issuance costs are the main factors that explain dispersion in investments rates.

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Paul Embrechts is Emeritus Professor of Mathematics at ETH Zurich. Professor Embrechts held an SFI Senior Chair from 2009 to 2018. His research has been published in top academic journals worldwide and has featured in the international media. He is a regular speaker at leading international conferences on risk management aimed at both academics and industry professionals. He also serves on the editorial boards of several international journals and is a member of numerous international advisory panels. His main areas of research focus on the modeling of extremal events in insurance and finance, and on statistical methods for quantitative risk management.

**Recent Research**
In ongoing research, Professor Embrechts studies the quantitative and qualitative dimensions of risk. On the one hand, quantitative risk management has considerably improved over the decades, and despite the eternal cat-and-mouse game going on between banks and regulators today’s market actors are well aware of the risks at stake. On the other hand, qualitative risk management is still discovering new threats—whether legal, cyber, or employee-related— which leads to new challenges regarding market evolution and risk hedging. One of the most visible current risks in today’s economy relates to the impact of quantitative easing policies on asset prices and interest rates.
Rüdiger Fahlenbrach is Associate Professor of Finance at the Ecole Polytechnique Fédérale de Lausanne. Previously, Professor Fahlenbrach taught at the Ohio State University. His research has been published in the top finance journals worldwide and has featured in the international press, including *The Economist* and *NZZ*. He is a regular speaker at leading academic conferences and also serves on the editorial boards of some of the top academic journals in finance. His research focuses primarily on corporate governance and on understanding the causes and consequences of the recent financial crisis.

**Recent Research**

One of Professor Fahlenbrach’s latest coauthored papers looks at why directors join corporate boards. The literature generally agrees that compensation, reputation, and access to a career enhancing network are the three main reasons to explain such a move. Surprisingly, there is little empirical work on the network dimension of joining corporate boards. The researchers fill this gap by testing whether a director benefits from serving on the board of a firm with a well-connected CEO. Data covering nearly 24,000 firms during a 10-year period show that when a director joins a new board, he or she gets access to the professional and social networks of both the CEO of the firm and the peer directors already sitting on the board, which further helps the new director secure an additional appointment. No evidence of negative market reactions is found regarding the vetting of referred directors, suggesting that social networks are beneficial in helping reduce information asymmetries in the director labor market.

Walter Farkas is Associate Professor of Quantitative Finance at the University of Zurich. Professor Farkas is also an associated Faculty Member at the Department of Mathematics of ETH Zurich and is the program director of the Master of Science in Quantitative Finance, a degree jointly offered by ETH Zurich and the University of Zurich. His research focuses primarily on mathematical finance and quantitative risk management.

**Recent Research**

In a recent study, Professor Farkas and a coauthor contribute to the asset pricing literature by developing a methodology that retrieves the risk-neutral probability measure from observed option prices. The developed option pricing model, specifically calibrated for European options, provides accurate estimates of implied volatility for a wide range of strike prices. Empirical results show that this novel method outperforms several of the classical methods.
Prof. **Damir Filipović**  
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Damir Filipović holds the Swissquote Chair in Quantitative Finance and is Head of the Finance Institute at the Ecole Polytechnique Fédérale de Lausanne. Since 2011, Professor Filipović has been a member of the board of directors of Swiss Life Holding. He is the recipient of numerous research grants and is a regular speaker at leading quantitative finance conferences and workshops worldwide. His research interests lie in quantitative finance and risk management.

**Recent Research**

Professor Filipović is currently studying the benefits of machine learning for portfolio risk management. Risk measurement, valuation, and hedging form the core of portfolio risk management for financial institutions. Portfolio risk arises because the values of assets and liabilities change over time in response to changes in the underlying risk factors. Obtaining dynamic portfolio values of future cash flows over long time horizons—such as retirement schemes—represents a challenge that machine learning can solve. Recent results suggest that machine learning can significantly reduce computational cost compared to industry standard methods for the calculation of risk capital. Although machine learning provides strong computational benefits, one must nonetheless analyze results with a critical economic mindset when such technology is applied to financial data.

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Francesco Franzoni is Professor of Finance at the Università della Svizzera italiana and a research fellow at the Center for Economic Policy Research. Professor Franzoni’s research has been published in the top finance journals and has been featured in the international press. He is a regular speaker at leading academic conferences on finance. His general research interests are in asset pricing, with a focus on institutional investors such as hedge funds, private equity, mutual funds, and ETFs, with an emphasis on the impact of institutional investors on asset prices.

**Recent Research**

In recent research, Professor Franzoni and coauthors tackle the question of whether ETFs increase stock volatility. ETFs, which replicate the performance of an index, provide market participants with low trading costs and liquid investment opportunities. The researchers’ empirical results show that trading shocks in the ETF market propagate to the underlying securities through the activity of arbitrageurs, who keep the prices of the ETF and the underlying basket aligned. Further results reveal that the increase in stock volatility brought about by ETFs is partly non-diversifiable, so that investors require compensation in the form of a risk premium to hold these stocks.
Laurent Frésard is Professor of Finance at the Università della Svizzera italiana. Before, Professor Frésard was a member of the faculty at HEC Paris and the University of Maryland. His papers have been published in leading academic journals and he has received a number of grants and awards. His research interests lie in empirical corporate finance, with a focus on the interactions between product market competition and corporate policies, and in international cross-listings.

Recent Research
A recent paper by Professor Frésard and coauthors provides evidence as to how stock market inefficiencies affect the real economy. Stock prices respond to news-related fundamental shocks and to noise-related non-fundamental shocks. By using a novel approach, which focuses on a given firm’s investment response to the noise-related shocks to its market peers’ stock prices instead of its own stock price, the researchers are able to isolate the faulty information channel that noise in stock prices triggers. Data, covering public US firms from 1996 to 2011, reveal that a firm’s investments are sensitive to noise-related shocks to stock prices, suggesting that managers have limited ability to filter out the noise in stock prices when using them as signals about their own firm’s growth opportunities. Such a finding implies economically large losses in shareholders’ wealth and capital investments, even for firms that are not facing financing constraints or agency problems.

Patrick Gagliardini is Professor of Econometrics at the Università della Svizzera italiana and is currently Dean of the Faculty of Economics. Professor Gagliardini’s papers have been published in the top academic journals in finance, economics, and financial econometrics. His main research interests lie in financial econometrics, with a special focus on large data sets and applications to asset pricing, factor investing, and credit risk models.

Recent Research
In ongoing research Professor Gagliardini and a coauthor tackle the question of wage inequality from a dynamic (career) perspective instead of from a static (job) one. To do so, the researchers develop a model that accounts for wage dynamics over the professional career, the role of past positions, and education. US data, covering 30 years, reveal several findings. First, workers with low education and low wages, whether at the beginning or end of their career, tend to stay stuck in the low-wage trap. Second, workers with high education and low wages, tend to move up the professional ladder and improve their position from one year to the next. Finally, to reduce increases in inequality, policies should focus on the low-wage trap instead of on low wages in general.
Manfred Gilli is Emeritus Professor at the University of Geneva. Professor Gilli has published extensively and has contributed many chapters to books on computational finance. He is a regular speaker at leading finance conferences worldwide. His research interests lie primarily in the implementation and empirical validation of computational methods in finance.

Recent Research
In ongoing research, Professor Gilli studies the role of computationally intensive tools in providing financial decisions—ranging from asset allocation to risk management and from option pricing to model calibration—with an emphasis on simulation and optimization in a heuristic environment. Practitioners in the financial sector can benefit from the practical-in-scope and theoretically rigorous software developed and tested.

Amit Goyal is Professor of Finance at the University of Lausanne. Professor Goyal’s research has been published in the top finance journals worldwide and has featured in the international press. He is a regular speaker at leading academic conferences on finance. His main research interests lie in empirical asset pricing.

Recent Research
In ongoing research, Professor Goyal and a coauthor compare the return predictability of cross-sectional (CS) and time-series (TS) investment strategies. CS strategies are, by construction, zero-net investment strategies, as investors are long in stocks that have returns greater than the cross-sectional average return, and short otherwise. TS strategies are based on each asset’s own past performance, and because generally more stocks earn positive returns than negative returns, TS strategies take bigger long positions than short positions. The researchers contribute to the asset pricing literature by accounting for this fundamental difference between CS and TS portfolios, and by adjusting CS portfolios to make them comparable to TS portfolios. Empirical results show that both adjusted CS and TS strategies perform similarly when one selects assets using individual stock data. Further estimates show that with international asset classes, such as equities, bonds, commodities, and currencies, CS strategies significantly outperform TS strategies, and that CS strategies exhibit a better ability to identify overvalued and undervalued bonds.
Michel Habib is Professor of Finance at the University of Zurich. After graduating from the Wharton School of the University of Pennsylvania he taught at the London Business School. His primary research interests are corporate finance and organization theory.

**Recent Research**

In recent research, Professor Habib and coauthors examine the impact of differences in the cost of capital faced by the public and private sectors. Their results suggest that, even under the assumption that the public and private sectors are equally efficient, the private sector is willing to pay higher prices than the public sector for some assets solely because of these assets’ embedded tax advantages. Conversely, the private sector requires higher returns than the public sector for holding tax-disadvantaged assets. In terms of policy recommendations, governments should include the effect of this tax wedge in their privatization, nationalization, and regulation decisions. Somewhat disturbingly, the pattern of ownership and of transactions that would result from the failure to account for tax-induced distortions largely resembles today’s economic reality.

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Harald Hau is Professor of Finance at the University of Geneva and Director of the Geneva Finance Research Institute. Professor Hau is engaged in several ongoing collaborations with the European Central Bank. His work has been published in top academic journals and has featured in the international press. His research focuses on international finance, financial stability, asset pricing, and asset management.

**Recent Research**

One of Professor Hau’s latest coauthored studies tackles the question of knowing whether contingent convertible bonds (CoCo bonds) provide the same reduction in bank default risk as an identical issuance of common equity. To shed light on this, the researchers use data from large European banks to analyze the premium reduction in credit default swaps around the issuance announcement of CoCo bonds and equity. Results show that the CoCo bonds that convert into full and permanent equity achieve the same reduction in default risk as equity, but that CoCo bonds as an asset class are unable to achieve a similar reduction. This finding casts some doubt on the full efficiency of the Basel III reform, which allows the issuance of CoCo bonds as a means of meeting additional capital requirements.

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Thorsten Hens is Professor of Financial Economics at the University of Zurich. Professor Hens is the founder of the UZH spin-off Behavioral Finance Solutions, which assists financial firms in developing and implementing investor profiling methods by making use of behavioral finance principles. His research focuses on behavioral finance and evolutionary finance.

Recent Research
In his recent research Professor Hens applies evolutionary finance to factor investing. The developed model studies the dynamic interactions of investment factors such as value, size, quality, and momentum. While back tests show that certain investment factors are highly profitable, it is unclear whether their impact will decrease over time due to the investment strategy’s limited capacity. Findings provide a framework for dynamic interactions among investment factors, estimates of the capacity and cross impact of factors, as well as a method of timing investment factors, which had been thought to be impossible.

Martin Hoesli is Professor of Real Estate Investments and Finance at the University of Geneva. Professor Hoesli is the author of numerous publications on real estate investments and serves on the editorial boards of several leading international real estate journals. He is a past president of the International Real Estate Society and of the European Real Estate Society, and is a Fellow of the Royal Institution of Chartered Surveyors and of the Weimer School of Advanced Studies in Real Estate and Land Economics. His research relates mainly to the area of real estate finance and housing.

Recent Research
In one of his recently published papers, Professor Hoesli and coauthors study the impact of financial market regulatory reforms, implemented in the aftermath of the global financial crisis, on the returns of real estate firms. On the one hand, regulation can be perceived positively as it helps prevent systemic events as well as market contagion. On the other hand, regulation can be seen as a burden as it can increase the cost of risk diversification and compliance and reduces the pool of eligible investors. Empirical results reveal large differences across such reforms. The AIFMD, which targets real estate firms directly, was positively received by large real estate firms as it called for an increase in market transparency and better investor protection. Basel III, which called for tighter bank funding, was negatively received by small real estate firms unable to diversify their funding sources. Finally, the derivative targeted EMIR regulation had little impact on real estate firms. Market reactions reveal strong evidence of asymmetric effects with negative news more frequently leading to significant responses.
Julien Hugonnier is Associate Professor of Finance at the Ecole Polytechnique Fédérale de Lausanne and the head of its Master in Financial Engineering program. Professor Hugonnier held positions at Carnegie Mellon University, HEC Montreal, and the University of Lausanne. He is a regular speaker at finance conferences and serves on the editorial boards of various academic journals in the areas of mathematical finance and financial economics. His main research area is theoretical asset pricing.

Recent Research
In recent work, Professor Hugonnier and coauthors generalize the benchmark search-theoretic model of OTC markets. Specifically, they build a model in which customers trade with dealers in a search market and dealers trade among themselves in another search market. This generalization provides substantial benefits whilst inducing no loss of tractability. In particular, the model gives rise to intermediation chains and is able to account for empirical facts such as the relation between a dealer’s type and the typical position he holds in the chains, and the frequency, direction, and prices of his trades. These results provide insights into multiple ongoing issues that surround today’s OTC markets, such as the effect of trading speed on market outcomes, the effects of regulation, and the effects of shocks to dealers’ participation in decentralized markets.

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Eric Jondeau is Professor of Finance at the University of Lausanne. Professor Jondeau’s papers have been published in leading academic journals. His research interests include financial econometrics, asset and risk management, and pension funds.

Recent Research
In one of his latest papers, Professor Jondeau and a coauthor develop a new method to measure the capital shortfall of banks during market downturns. Their measure—called stressed expected loss (SEL), which is equal to the difference between the market value of the assets and the book value of the deposits and short-term debt of banks—offers multiple advantages over usual risk measures. First, it relies on publicly available balance sheet information and not on stock market capitalization data. This makes the SEL more versatile than other traditional risk measures. Second, it can be used to investigate specific scenarios of a market downturn, such as a drop in the value of government bonds or real estate. With this, the SEL can provide finer recommendations regarding where the risk lies than can a simple and single scenario in which the stock market drops. Data covering the 31 largest US commercial banks during 20 years reveal that the average probability of default was close to 10 percent during the dot.com crisis and close to 25 percent during the subprime crisis. Since 2016, this probability has hovered around the 5 percent mark.

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Philipp Krüger is Associate Professor of Responsible Finance at the University of Geneva. Professor Krüger is a regular speaker at leading finance conferences worldwide and his research has been published in top academic journals. His primary research interests are sustainable and responsible finance, corporate finance, corporate governance, and behavioral finance.

**Recent Research**

One of Professor Krüger’s latest coauthored papers focuses on how institutional investors consider climate risks in their investment decisions. Survey data show that institutional investors believe that climate risks, especially regulation-related ones, have already materialized. The spectrum of motives that explains why institutional investors include climate risk in their investment process is broad and includes moral and legal considerations, reputation protection aspects, and well as the belief that climate risks affect returns. Further analysis reveals that many investors fail to use the appropriate tools to identify and manage climate risks, but that long-term and large investors appear better prepared for the transition toward a low-carbon economy.

Pablo Koch-Medina is Associate Professor of Finance and Insurance at the University of Zurich. Professor Koch-Medina was responsible for launching the Center for Finance and Insurance at the University in 2013. The Center bridges the gap between the areas of finance and insurance and helps advance research and foster education in the application of finance theory and mathematical finance to insurance-related topics. Prior to his academic appointment he worked for more than 20 years in the finance and insurance industry. His research interests lie in asset pricing, insurance, risk measurement, corporate finance, and risk governance.

**Recent Research**

In recent research, Professor Koch-Medina and coauthors study the optimal capital and investment policies of an insurance firm. They contribute to the literature by addressing the questions of when an insurance firm should pay out dividends and raise costly capital and when it should take liquid investment risk. Results show that investing in risky assets can have two conflicting effects on firm value. On the one hand, it can increase firm value by boosting the value of the option to default and by helping the firm reach capital levels where added value is higher. On the other hand, it can reduce firm value by increasing the need for costly recapitalization or by eliminating future economic rents by forcing the firm to liquidate. As shown by examples, the particular resolution of this trade-off is case specific.

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Recent Research

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Recent Research

In recent research, Professor Koch-Medina and coauthors study the optimal capital and investment policies of an insurance firm. They contribute to the literature by addressing the questions of when an insurance firm should pay out dividends and raise costly capital and when it should take liquid investment risk. Results show that investing in risky assets can have two conflicting effects on firm value. On the one hand, it can increase firm value by boosting the value of the option to default and by helping the firm reach capital levels where added value is higher. On the other hand, it can reduce firm value by increasing the need for costly recapitalization or by eliminating future economic rents by forcing the firm to liquidate. As shown by examples, the particular resolution of this trade-off is case specific.
Felix Kübler is Professor of Finance at the University of Zurich. Before joining the faculty in Zurich, Professor Kübler held professorships at Stanford University, the University of Pennsylvania, and the University of Mannheim. He also serves on the editorial boards of several economic and financial journals. His research interests lie in theoretical financial economics and computational methods.

Recent Research
In a recent research paper Professor Kübler and coauthors focus on how technology can benefit society by proposing a massively parallelized and optimized computer framework to solve high-dimensional dynamic stochastic economic models. To achieve this goal the researchers introduce a novel approach to adaptive sparse grid index compression alongside a surplus matrix reordering that significantly reduces memory usage, and develop a hybrid-cluster-oriented work-preempting scheduler that evenly distributes the time iteration workload across the computer’s capacity. Numerical experiments, conducted at the Swiss National Supercomputer Centre, show that the developed framework provides a significant overall acceleration in solving time. Finally, unprecedented performance is obtained when computing global solutions to a public finance model with 16 discrete stochastic states.

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Semyon Malamud is Associate Professor of Finance at the Ecole Polytechnique Fédérale de Lausanne. Professor Malamud is a regular speaker at leading academic conferences worldwide and his papers have been published in the top journals in finance and economics. His main research interest lies in the intersection of asset pricing, corporate finance, and macroeconomics.

Recent Research
In recent research, Professor Malamud and a coauthor study the questions of why the dollar is the dominant currency of choice for debt contracts and what its macroeconomic implications are. They develop an international general equilibrium model where firms optimally choose the currency composition of their debt and show that there exists a dominant currency debt equilibrium, in which all firms borrow in the currency of the country that effectively pursues expansionary monetary policy during global downturns and thus lower their real debt burden. The researchers show that the dollar empirically fits this description, despite its short-term safe haven properties, and provide broad modern and historical support across time and currencies. Finally, they use their model to study the optimal monetary policy of the dominant currency central bank and its reactions to global economic conditions.

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Loriano Mancini is Associate Professor of Finance and holds an SFI Junior Chair at the Università della Svizzera italiana. Prior to joining the Università, Professor Mancini held positions at Princeton University and at the Ecole Polytechnique Fédérale de Lausanne. He has published papers in the top academic journals in finance and is a regular speaker at leading conferences and workshops worldwide. His primary research interests are volatility modeling and asset pricing.

Recent Research
In recent research, Professor Mancini and a coauthor contribute to the literature surrounding the G20 decision of 2009 to migrate all OTC trading to centrally cleared platforms. To do so, they provide a model of short-term funding and study the conditions influencing rollover risk. Their results show that, on the one hand, OTC—non-anonymous—markets support an efficient allocation of resources but are prone to runs. On the other hand, centralized—anonymous—markets provide insurance against liquidity shocks but allocate resources inefficiently. Enforcing an all-round centralized market would allow lower quality borrowers to pool with higher quality borrowers, leading to socially suboptimal outcomes. Yet despite this drawback, further results reveal that if borrowers are required to post collateral, then lower quality borrowers generally undertake socially optimal actions. Policy makers need to be aware that a central clearing platform can provide resilience against runs but comes at a welfare cost.

Antonio Mele is Professor of Finance at the Università della Svizzera italiana after a decade spent as a professor at the London School of Economics. Professor Mele is the co-inventor of the CBOE Interest Rate Swap Volatility Index and the CBOE Treasury Volatility Index, the first standardized volatility measures in the interest rate swap and treasury markets. He is a regular speaker at leading finance conferences worldwide. His research interests relate to capital markets.

Recent Research
Professor Mele’s recent research studies the relationship between sovereign debt accumulation and deficit cycles. In the model he develops, governments display preferences for deficits and face trade-offs between preferring more primary deficits to less, while satisfying default constraints; additionally, governments run deficits when owning debt and increasing it is inexpensive. After a period of debt accumulation, the probability of default increases, and therefore so does the cost of owning debt. Over time, debt reaches a critical level relative to the size of the economy—a fiscal tipping point—after which debt accumulation stops and governments begin a cycle of deficits and surpluses, until perhaps default occurs. The key results are that fiscal tipping points typically occur at about 85–95 percent from default, that the probability of default increases with governments’ myopia, and that fiscal austerity may arrive too late.
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Roni Michaely is Professor of Finance at the University of Geneva. Before, Professor Michaely held a professorship at Cornell University. His current research focuses on conflict of interest in capital markets, corporation payout policies, and the pricing and optimal trading mechanisms of IPOs.

**Recent Research**

In a recent paper, Professor Michaely and coauthors look at the inner workings of trading in the face of short-lived private information and seek to empirically test the well-known "buy the rumor and sell the news" adage. Using a proprietary data set that covers 10 years of NYSE exchanges, the researchers empirically show that early informed traders do, as anticipated, "buy the rumor". But they observe a striking difference in profit-taking practices among early informed traders. Proprietary traders "sell the news" by massively reversing their initial stake as soon as analysts update their forecasts, whilst agency traders defer their profit trading. Ironically, uninformed institutions emerge as liquidity providers to better-informed institutions.

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Erwan Morellec is Professor of Finance at the Ecole Polytechnique Fédérale de Lausanne. Before joining the school, Professor Morellec taught at the University of Rochester and the University of Lausanne. He is a regular speaker at leading finance conferences worldwide and his research papers have been published in the top academic journals in finance. He has received several research and teaching awards. His main research interest lies in capital structure decisions, real options, risk management, liquidity management, and credit risk.

**Recent Research**

In recent work, Professor Morellec and a coauthor focus on the impact of product market competition on option prices and contribute to bridging the gap between the fields of corporate finance and option pricing. The researchers find that as firms interact and compete in the product market they change their cash flows and that this change further influences the financial market by influencing stock and option prices. Using a large sample of US equity options, the researches provide empirical results showing that product market competition leads to an inverse relationship between equity returns and volatility, which further generates negative volatility skew in option prices. Overall, financial analysts would benefit from using information from firm-level option prices when trying to understand the relation between competition and equity risk and value.
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Cosimo-Andrea Munari is Assistant Professor of Finance and Insurance at the University of Zurich. In 2016 Professor Munari was awarded the Walter Saxer Insurance Prize and in 2017 he received the ACRI Research Prize. His research interests lie in finance and insurance, in particular in the application of mathematical and theoretical finance models to a variety of insurance related risk management problems.

Recent Research
In a recently published paper, Professor Munari and coauthors contribute to the risk and portfolio management literature by introducing a new quantile-based risk measure called Loss Value at Risk (LVaR). LVaR allows the tail distribution of a risky position to be controlled by prescribing, for each loss level, a maximal acceptable probability of occurrence according to the principle that higher losses are tolerated with lower probabilities. By construction, LVaR generalizes the standard value at risk (VaR) and provides a different perspective on tail risk with respect to expected shortfall (ES). Results and examples reveal that LVaR can be employed in conjunction with VaR and ES allowing financial institutions to monitor their risk exposure in a more comprehensive way.

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Artem Neklyudov is Assistant Professor of Finance at the University of Lausanne. Professor Neklyudov’s research has been published in leading finance journals. His main research interests lie in securitization trading and market microstructure.

Recent Research
In recent research, Professor Neklyudov and a coauthor focus on trades within the US corporate bond market between 2005 and 2017. The data reveal that a large group of bonds—(in) frequently traded bonds—experience substantial and long-lasting swings in trading activity. These (in) frequently traded bonds show similar characteristics to other—non-(in) frequently traded—bonds in terms of size, maturity, and credit rating. The differences between these two groups of plain-vanilla bonds, with seemingly identical characteristics, lay in their trade flows and institutional ownership structures. These differences infer that (in) frequently traded bonds are traded in higher volumes over a smaller number of trades, are more likely to be held by mutual funds, and display abnormal returns that relate to the swings in trading activity.
Boris Nikolov is Professor of Finance at the University of Lausanne. He is a regular speaker at major conferences and his research has been published in leading finance journals. His main research areas are dynamic corporate finance, empirical corporate finance, and corporate governance.

Recent Research
In recent research, Professor Nikolov and coauthors examine the determinants of dynamic corporate liquidity and their effects on firms’ value. In particular, they focus on optimal liquidity management in a dynamic setting where investment opportunities and cash shortfalls generate unexpected liquidity needs. Their contribution is to focus on how firms face the trade-off between uncontingent liquidity using cash and contingent liquidity using credit lines subject to collateral constraints. The model they develop provides a successful empirical framework that explains corporate investment, financing, and liquidity policies, as well as the joint existence of cash, debt, and credit lines in the presence of capital market imperfections.

Eric Nowak is Professor of Finance at the Università della Svizzera italiana. Throughout his career, Professor Nowak has held visiting appointments at leading universities worldwide, including Stanford University, the University of Chicago, and the National University of Singapore. He is also the founder and director of the Master of Science in FinTech at the Università della Svizzera italiana, the first MSc program in Fintech targeting Computer Science students in Europe. His research areas include corporate governance, family firms, and private equity.

Recent Research
In a recent paper, Professor Nowak and coauthors look for contagion effects in Swiss bankruptcy filings between 2002 and 2016. The researchers contribute to the corporate governance literature by focusing on the track record of board members. Empirical results show that having a serial defaulter—a board member with a history of bankruptcy filings—sit on the board of a newly established company strongly increases the probability of seeing this new company default in the near future. Further results reveal that individual defaults are also contagious among board members and that serving on the board with a serial defaulter increases the likelihood that oneself becomes a serial defaulter.
Kjell Nyborg is Professor of Finance at the University of Zurich. Professor Nyborg has published extensively in his areas of expertise and has spent research periods at the European Central Bank, the Deutsche Bundesbank, the Bank of Norway, and Stanford University. He has been on the executive committee of the European Finance Association since 2013 and served as its president in 2017. His research interests include the role of money in financial markets, central banking and banking, liquidity, collateral, valuation, and corporate finance.

**Recent Research**

In a recent study, Professor Nyborg and his coauthor raise the question as to what valuation techniques are used in practice. To answer this question, the researchers survey nearly 300 finance professionals, including consultants, investments bankers, and private equity and asset managers. Data reveal that, while there are many commonalities, valuation approaches vary significantly across professions. Curiously, one’s educational achievement and years of experience have less of an impact than the professional subgroup one belongs to. The purpose behind the valuation is also of lesser importance. These findings call for a sociological hypothesis—the choice of valuation technique is defined by the culture of the professional subgroup one belongs to. The relative unimportance of education also raises questions about the role, benefit, and optimal mode of higher-level finance education.

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Steven Ongena is Professor of Banking at the University of Zurich. Professor Ongena’s papers have been published in leading academic journals in finance and economics. He has received numerous awards for his research and serves as a research consultant for several European central banks. His research interests lie in the areas of empirical financial intermediation and applied financial econometrics.

**Recent Research**

A recent paper by Professor Ongena and coauthors studies the impact of pro-cyclical capital requirements, such as those included in the Basel III accords. Such capital buffers, which increase during booms and decrease during crashes, not only help protect against negative externalities during credit crashes, but also cool credit-led booms, as additional credit comes with a higher cost. Spanish data, covering the years 1998 to 2013 and representing a full credit cycle with an unexpected crisis shock in the middle, show that dynamic capital provisioning helped mitigate credit supply cycles during periods of both economic expansion and recession. Further analysis reveals that firm-level credit, employment, and firm survival during times of crisis also benefited from dynamic capital provisioning.

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Per Östberg is Associate Professor of Finance at the University of Zurich. Professor Östberg is a regular speaker at finance conferences and seminars worldwide and has served on the program committees of several conferences. His research interests include financial markets, household finance, and corporate finance.

**Recent Research**
One of Professor Östberg’s latest coauthored research projects focuses on the recent European sovereign debt crisis. Using high-frequency data, the authors document that episodes of market turmoil in the European sovereign bond market are usually associated with large decreases in trading volume. The response, in trading volume, to market stress is related to transaction costs. Low transaction cost turmoil episodes are associated with volume increases, when investors rebalance their portfolios, while high transaction cost turmoil periods are associated with abnormally low volume, during which the market freezes. Results show that investors tended to rebalance their portfolios in the pre-crisis period, while during the crisis reductions in the risk-bearing capacity of financial intermediaries resulted in increased transaction costs and market freezes. Overall, the results suggest that the recent sovereign debt crisis was not associated with large scale investor rebalancing.

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Marc Paolella is Professor of Empirical Finance at the University of Zurich. Professor Paolella is the author of several books on graduate level probability, statistics, and time series analysis. His research papers have been published in the top academic journals in his areas of expertise. His primary research interest lies in the development of statistical methods for finance.

**Recent Research**
Professor Paolella and coauthors recently contributed to the market risk and asset allocation literature by developing a mean-variance heterogeneous tails mixture distribution for modeling financial asset returns. The model captures, along with the obligatory leptokurtosis, different tail behavior among the assets. Its construction is explicitly designed to be applicable in high dimensions. A useful and unique feature of the model is that the tail behavior of the individual assets is driven by asset-specific news effects. An empirical application using a portfolio of highly tail-heterogeneous cryptocurrencies and realistic transaction costs shows superior out-of-sample portfolio performance compared to numerous competing models.
Recently, Professor Plazzi and coauthors seek to determine, from both a domestic and a foreign perspective, the effect of monetary policies on market co-movements. Empirical results based on data covering all Fed meetings and announcements between 2006 and 2015 reveal that monetary policy decisions affect, and typically increase, market co-movements in the equity and sovereign CDS markets of developed and emerging markets. This effect is particularly evident during periods of unconventional monetary policies. The Fed’s recent decision to unwind its unconventional monetary interventions had a strong impact both between and within developed and emerging markets, and in particular in the sovereign CDS market. In contrast, the ECB’s unconventional policies were not perceived as a global factor. These findings call for more coordination at the global level in order to deal with the impact of Fed policy decisions on the price of sovereign risk in both developed and emerging markets.
Kerstin Preuschoff is Associate Professor in Neurofinance and Neuroeconomics at the University of Geneva. Prior to joining the University of Geneva, Professor Preuschoff was a researcher and lecturer at the Institute for Empirical Research in Economics at the University of Zurich and at the Brain Mind Institute at the Ecole Polytechnique Fédérale de Lausanne. Her teaching interests include neurofinance, interdisciplinary tools in finance, and leadership and team management, as well as science communication.

Recent Research
In one of her latest papers, Professor Preuschoff and coauthors focus on the impact of unexpected surprises on learning. In life, our decisions are usually based on past experiences and lessons, and since data is obtained in a noisy environment we naturally tend to average out such information. However when an unexpected—not an unlikely—change occurs the most recent experiences and lessons are the most informative ones and more importance should be given to them than to older ones. Research results show that surprising events increase the speed of learning and that surprises can be used as a trigger to balance new information against old. Financial actors should be particularly careful with regard to what information they base their decisions on in today’s investment environment, where unexpected changes events—such as currency peg introductions and removals—occur more and more often.

Jean-Charles Rochet is Professor of Banking at the University of Geneva. Before joining the faculty in Geneva, Professor Rochet held a chair at the Toulouse School of Economics and at the University of Zurich. His research interests lie in banking crises and regulation.

Recent Research
Professor Rochet and coauthors have recently revisited the question of bonus pay in banks but from a risk sharing perspective instead of an incentives perspective. Using payroll data for 1.26 million employees in Austrian, German, and Swiss banks the researchers reveal several novel results. First, bonus pay is widespread, including for positions without any direct impact on financial performance. Second, bonus pay is sensitive to earnings shocks beyond one’s sole control. For example, the financial crisis triggered a considerable reduction in bonus pay even for new recruits hired after the crisis. Based on these facts, the researchers find that bonus pay helps reduce operating leverage, limits the need to raise costly capital when in distress, and improves risk sharing between employees and shareholders. From a regulatory perspective, a restrictive policy on bonus pay may jeopardize such risk sharing and impose higher operating leverage on banks.
Michael Rockinger is Professor of Finance at the University of Lausanne. Professor Rockinger is an active member of the Center for Risk Management, Lausanne—a group that focuses on diffusing independent and transparent decision-making tools for banks, insurance companies, and industrial firms. He is also a research fellow of the Society for Financial Econometrics and is a regular speaker at leading conferences in his areas of expertise. His main research interest lies in financial econometrics and computational methods for finance.

**Recent Research**

In one of his latest papers, Professor Rockinger and coauthors tackle the question of which actuarial table—periodic or generational—should be used to update the amount of financial reserves that life insurance institutions should set aside to guarantee future payments. This question is of paramount importance in view of the increase in life expectancy that has occurred over recent decades and the current low interest rate environment. Using Swiss actuarial tables, the researchers demonstrate that generational tables, in contrast to periodic tables, are more sensitive to the choice of the mortality forecasting model and provide more volatile estimates of the value of financial reserves. The reason behind this finding is narrowed down to the fact that the valuation of the financial reserve based on generational reserves relies on death rates forecasted into the far future, whilst periodic tables forecast mortality on a much shorter timescale. The choice of which actuarial table to use needs to be made based on the institution’s objectives.

Olivier Scaillet is Professor of Probability and Statistics at the University of Geneva. Professor Scaillet is a regular speaker at leading conferences on finance. His papers have been published in the top academic journals in finance and econometrics. His research interests lie in the application of statistical methods to finance topics and are related, among other matters, to the use of high-frequency trading data.

**Recent Research**

In recent research, Professor Scaillet and coauthors focus on the ability funds have to create value rather than on the value that funds pass on to investors. To do so, the researchers employ a novel non-parametric approach to measure fund skill, which imposes no constraints regarding the way skill distributions are shaped and simultaneously accommodates the several existing skill dimensions. Empirical data from actively managed US equity between 1979 and 2015 show that funds are able to detect profitable trades that are both widespread and economically valuable, but that only a handful of funds are able to override capacity constraints. Further analysis shows that smaller funds are more able to detect profitable trades but also face larger capacity constraints. Overall, funds earn substantial profits from exploiting their skills, and skill distributions reveal substantial heterogeneity across funds.
Paul Schneider is Professor of Quantitative Methods in the Institute of Finance at the Università della Svizzera italiana. Professor Schneider is a regular speaker at leading academic conferences on finance and his papers have been published in top finance journals. His main research areas are asset pricing and empirical finance.

Recent Research
In recent research, Professor Schneider investigates how preferences with regard to known and unknown unknowns influence trading strategies. His current research interest also evolves around methods to reduce complicated asset markets to a few representative scenarios. The small number of scenarios comes with as little information loss as possible and conforms with realistic decision behavior.

Norman Schürhoff is Professor of Finance at the University of Lausanne. Professor Schürhoff’s work has been published in the top academic journals in finance and he has won several prestigious publication awards. He is a six-time winner of the CFA Institute Research Challenge in Switzerland and was World Champion for 2018. His main research interests lie in financial intermediation, corporation finance, corporate governance, market microstructure, and asset pricing.

Recent Research
In ongoing research, Professor Schürhoff and coauthors study the municipal bond market—the largest and most important capital market for state and municipal finance in the US. In existence for 200 years, the municipal bond market is dominated by retail investors and characterized by old-fashioned OTC trading. The municipal bond market is likely to evolve in the near future in light of capital market regulation. Additional changes will be related to the widespread adoption of electronic trading, which will help improve price discovery. With “green” bonds issued at a premium due to strong investor demands, the municipal bond market has led the development of responsible investing.
Martin Schweizer is Professor of Mathematics at ETH Zurich. Professor Schweizer has published extensively in the top academic journals in his areas of expertise. He is a regular speaker at leading conferences worldwide. His primary research interest lies in mathematical finance, more specifically in the areas of arbitrage theory, hedging, valuation, risk management, and optimal portfolio choice for incomplete financial markets.

Recent Research
In ongoing research, Professor Schweizer has focused on mathematical models that center on optimal portfolio creation and portfolio mean-variance hedging techniques, as well as financial arbitrage. With respect to portfolios, his results can, for instance, be applied to situations where one holds a long or short position on an asset for which no liquid market exists, such as certain petrochemical products, and therefore needs to trade the derivatives of a near-product, such as crude oil futures and options, to hedge price risk. With respect to arbitrage, his recent results show that whether or not arbitrage exists depends heavily on the precise conditions one imposes on the strategies allowed for trading. Given that absence of arbitrage is one of the pillars of all trading and hedging decisions, the insight here is that one should examine critically the models used in practice to avoid running into trouble.

Halil Mete Soner is Professor of Mathematics at ETH Zurich. He has held an SFI Senior Chair at ETH Zurich since 2010. Professor Soner has published extensively in his areas of expertise and is a regular speaker at leading academic conferences worldwide.

Recent Research
In recent research, Professor Soner and his coauthors put themselves in the shoes of a large investor facing price impacts when trading large quantities of assets. They contribute to the existing literature by focusing on linear price impact in a setting that allows for arbitrary preferences, as well as for general Markovian dynamics of market prices and impact parameters. From this general setting, the researchers are able to obtain explicit formulas for the optimal policy and welfare, asymptotically for small price impacts, and highlight deep connections to other market frictions.
Pascal St-Amour is Professor of Economics at the University of Lausanne. Professor St-Amour’s papers have been published in the leading academic journals in economics. His primary research areas are financial economics, health economics, and economic history.

Recent Research

Ongoing research by Professor St-Amour and coauthors focuses on optimal health and wealth dynamics through the life cycle and in particular on the way health declines and mortality risk increases rapidly near the end of life. Curative care expenses stagnate, while long-term care spending increases, accelerating the fall in wealth. Standard explanations emphasize inevitable health declines associated with aging. The researchers propose a “closing down the shop” alternative, where agents’ decisions affect their health and the timing of their deaths. Despite strictly preferring to live, agents optimally deplete their health and wealth statuses toward levels associated with high risk of death and an indifference between life and death. A structural estimation of the closed form decisions identifies and tests conditions for these strategies to be optimal, and confirms their economic relevance near the end of life.
Roberto Steri is Assistant Professor of Finance at the University of Lausanne. Professor Steri’s research lies at the interface between corporate finance and asset pricing. Some of his latest research revisits the relationship between equity returns and financial leverage and carries implications for real-world industry practices. His research attempts to improve the understanding of the implications of corporate decisions for investment and security prices.

Recent Research
In recent research, Professor Steri and a coauthor investigate the sources and size of financing constraints across firms. To do so, they build, solve, and estimate a range of corporate investment and financing models with a specific focus on limited enforcement, moral hazard, and trade-off models. Data covering more than 50 years and both public and private US firms reveal that not all firms face the same frictions. Empirical tests favor trade-off models for large firms, limited commitment models for small firms, and moral hazard models for private firms. Finally, financial frictions reduce firm value in the range of between 20 and 30 percent.

Josef Teichmann is Professor of Mathematics at ETH Zurich. Professor Teichmann is a regular speaker at international conferences on finance and mathematics. He has published extensively in his areas of research expertise. His main research interests lie in mathematical finance, stochastic analysis, and quantitative risk management.

Recent Research
In recent work Professor Teichmann and coauthors develop machine learning tools for the financial industry. Deep hedging, for instance, is a project conducted jointly with investment bankers, where generic hedging tasks are solved by cutting-edge machine learning technology in a fully realistic market environment—that is, in the presence of market frictions and trading constraints. Further projects include deep calibration, deep simulation, and deep prediction. Theoretical foundations from approximation theory and stochastic analysis accompany successful concrete implementations to make such approaches eligible for industry applications.
Alexander Wagner is Associate Professor of Finance at the University of Zurich. Professor Wagner’s research has been published in leading academic journals and professional reviews. He is an independent counsel for PwC and has experience as the chairman of a proxy advisor. His talk on “What really motivates people to be honest in business” was featured on TED.com. His research interests are in the fields of corporate finance, corporate governance, and behavioral economics and finance.

Recent Research
In recent coauthored research, Professor Wagner contributes to the growing literature in the field of personal finance, focusing on the risks and advantages related to the financial investment and portfolio choices of households over the life cycle. In terms of policy considerations, the researchers’ results reveal that the inclusion of life-cycle investment strategies as default options—such as those that may be included in the European Commissions’ upcoming Pan-European Personal Pension Product—is desirable for savers as they can increase pension wealth at a comparatively very low risk over long investment horizons. Such investment strategies enable young savers to better diversify their pension savings toward equity when their financial wealth tends to be low and their human capital is high. Life-cycle strategies also support improved household participation in the stock market, which helps to generate a more efficient matching between retirement saving capital and risky investment opportunities in financial markets.

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Fabio Trojani is Professor of Statistics and Finance at the University of Geneva. Previously, Professor Trojani taught at the University of St. Gallen and the Università della Svizzera italiana. He is a regular speaker at leading academic conferences on finance and econometrics. His research interests are in asset pricing and in the application of econometric and data science methods to finance.

Recent Research
In ongoing research, Professor Trojani and coauthors contribute to the growing literature in the field of personal finance, focusing on the risks and advantages related to the financial investment and portfolio choices of households over the life cycle. In terms of policy considerations, the researchers’ results reveal that the inclusion of life-cycle investment strategies as default options—such as those that may be included in the European Commissions’ upcoming Pan-European Personal Pension Product—is desirable for savers as they can increase pension wealth at a comparatively very low risk over long investment horizons. Such investment strategies enable young savers to better diversify their pension savings toward equity when their financial wealth tends to be low and their human capital is high. Life-cycle strategies also support improved household participation in the stock market, which helps to generate a more efficient matching between retirement saving capital and risky investment opportunities in financial markets.

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Alexander Wagner is Associate Professor of Finance at the University of Zurich. Professor Wagner’s research has been published in leading academic journals and professional reviews. He is an independent counsel for PwC and has experience as the chairman of a proxy advisor. His talk on "What really motivates people to be honest in business" was featured on TED.com. His research interests are in the fields of corporate finance, corporate governance, and behavioral economics and finance.

Recent Research
In recent coauthored research, Professor Wagner contributes to the growing literature in the field of intangible assets—a key component of firm value. The researchers develop a novel word list of intangibles, including innovation, processes, customers, expertise, and services. Analyzing 15 years of data on corporate takeover deals, they find that the amount managers talk about intangible aspects shows little correlation with the actual intangibles of a given target or acquirer. Strikingly, intangibles talk is found to be positively related to deal completion speed and probability, but negatively related to announcement returns and the performance of the deal. Further analysis suggests that intangibles talk reflects managerial overoptimism. Overall, these results suggest that investors can gain by studying the phraseology of takeover announcements.
Recent Research

In one of his recent papers, Professor Wagner and coauthors investigate the potential value of data-rich environments for insurers and their customers. Big data analysis reveals that repeated purchases are a key motivator for firms to manage their relationships with their existing customers and that over the last few decades companies have established the practice of customer relationship management (CRM) to contribute to their growth and profitability. The researchers present an approach that insurers can apply to use enriched CRM data to identify customers who could switch their current policy to another carrier, and that provides opportunities for cross-selling an additional product. Empirical results, obtained using Swiss data, show that enriched data produces accurate forecasts of future purchases and outperforms baseline models based on traditional customer data. These findings can help practitioners detect customers who are currently shopping for coverage and protect their customer base against competitors’ offers.
Teodoro D. Cocca is full Professor for Wealth and Asset Management at the Johannes Kepler University of Linz in Austria and has been an SFI Adjunct Professor since 2010. Previously he worked for Citibank in investment and private banking and was a research fellow at the Stern School of Business in New York and a senior researcher at the Swiss Banking Institute in Zurich.

Professor Cocca frequently addresses academics and investment professionals and is a consultant to a number of financial institutions on issues relating to strategic bank management. He has published numerous articles in academic journals and is a member of the board of directors at VP Bank AG (Liechtenstein).

Christopher Culp is a research fellow at the Johns Hopkins Institute for Applied Economics, has been a Swiss Finance Institute Adjunct Professor since 2015, and is an Adjunct Professor in the Institut für Finanzmanagement at the University of Bern. From 1998 to 2013 he was an Adjunct Professor of Finance at The University of Chicago’s Booth School of Business, from which he also received his PhD in Finance. His research specializations include (re-)insurance, risk management, derivatives, and structured finance, and he has written four books, co-edited two books (one with Merton Miller and the other with William Niskanen), and authored numerous articles on these topics. As a Senior Advisor with Compass Lexecon (Chicago) and Managing Director of Financial Economics Consulting, Inc. (Chicago), he also regularly provides advisory consulting services and testimonial expertise in these same subject areas.
Rudolf Grünig is Professor for Business Administration at the University of Fribourg and lectures in Strategic Management in various executive programs. He has been an SFI Adjunct Professor since 2010.


Erwin W. Heri is Professor of Financial Theory at the University of Basel and has been an SFI Adjunct Professor since 2010. He has held various posts as an executive board member of renowned international financial service providers, including as Chief Financial Officer at Winterthur Insurance Group and CFO and Chief Investment Officer at Credit Suisse Financial Services. For approximately 10 years he was chairman of the board of a Swiss private banking group listed on the Swiss stock exchange (Valartis Group). For many years he was also the chairman of the Investment Committee of Publica, the pension fund of State Government employees in Switzerland. Professor Heri also holds mandates on several advisory boards and boards of directors and is the author of numerous books and articles on financial and investment matters.

He recently launched an Internet-based financial literacy platform named fintool with the goal of improving the financial education levels of the broader public in Germany, Switzerland, and Austria through the delivery of a free, video-based Internet offering.
Roger M. Kunz is Head of Investment Research at the Pension Fund SBB (Swiss Federal Railways), professor at the University of Basel, and an Adjunct Professor of Swiss Finance Institute since 2010.

He holds a PhD from the University of Basel and was a visiting researcher at Georgetown University in Washington (DC). He worked for several years at Credit Suisse, in roles including Head of Financial Market Research, Head of Investment Strategy, and member of the Investment Committee of the private bank Clariden Leu. Following that he was responsible for investment research in asset management at the SBB (Swiss Federal Railways) pension fund. He has published numerous articles and given speeches in the fields of corporate finance, financial markets, investments, and taxes.

François-Serge Lhabitant is the Chief Executive Officer and the Chief Investment Officer of Kedge Capital, where he manages more than $5 billion of capital invested in hedge funds and risk-controlled strategies. Professor Lhabitant was previously a senior management member at Union Bancaire Privée (Geneva) and a Director at UBS Global Asset Management, in charge of quantitative modeling and risk management. On the academic side, he is a Professor of Finance at the EDHEC Business School (France) and a Visiting Professor of Finance at the Hong Kong University of Science and Technology (Hong Kong). He is a Swiss Finance Institute Adjunct Professor since 2010, and was formerly a professor of Finance at the HEC University of Lausanne (Switzerland). Professor Lhabitant received a PhD in finance, an MSc in banking and finance and a BSc in economics from the University of Lausanne, as well as a computer engineering degree from one of the two Swiss Federal Institutes of Technology. He also holds an LLM in Tax Law from the University of Geneva.
Alfred Mettler is Professor of Finance at the University of Miami (USA) and has been a Swiss Finance Institute Adjunct Professor since 2010. He grew up in Switzerland and was a faculty member of the Swiss Banking Institute at the University of Zurich before moving to the US in 1998. His principal academic interests are in international banking and finance, risk management of financial institutions, FinTech, and financial education. He plays leading roles in various executive education programs in Europe and the US and has consulted for various companies and organizations. In a broader context, Professor Mettler often comments on financial, economic, political, and societal developments in the US, Switzerland, and Europe. He regularly gives public speeches and presentations and is a frequent media (print, radio, and TV) contributor.

Conrad Meyer is Professor in Business Administration at the universities of Zurich and Lucerne and has been an SFI Adjunct Professor since 2010. His specialized areas in research and teaching are management accounting and selected problems of banking business management, including management accounting, controlling, and asset and liability management.

Professor Meyer serves on the boards of directors of several private companies. He is a member of national and international scientific societies, and the author of numerous publications and contributions to specialist journals. He plays an important role in teaching and as a consultant to both banking and industrial enterprises.
Donato Scognamiglio is CEO and co-owner of the company Informations- und Ausbildungszentrum für Immobilien AG (IAZI AG), Zurich. He is Honorary Professor for Real Estate at the University of Bern, from which he received his PhD, at the William E. Simon Graduate School in Rochester (NY), and at ETH Zurich. He is an expert in the field of real estate and finance and in parallel to his activities at SFI lectures on quantitative methods and financial analysis at the Swiss Training Centre for Investment Professionals (AZEK). Professor Scognamiglio has been elected by the Swiss Federal Council to the board of the Pfandbriefbank schweizerischer Hypo-thekarinstitute AG. He coauthored Land Leverage and House Prices (Bourassa, Steven C.; Hoestli, Martin; Scognamiglio, Donato Flavio; and Zhang, Sumei; November 17, 2010, Swiss Finance Institute Research Paper No. 10–48) and various articles published in important national newspapers. Professor Scognamiglio is currently undertaking ongoing research into hedonic valuation models and real estate indices, together with other, national and international, academics.

Paolo Vanini is Swiss Finance Institute Adjunct Professor and Adjunct Professor of Banking at the University of Basel. He is Head of Big Data Finance Technologies at swissQuant Group AG. Professor Vanini’s research focus is on investment, risk management, and banking topics. He has conducted extensive research into operational risk and credit risk and is the author of numerous articles published in international finance and financial economics journals. He holds a PhD in Mathematics from ETH.
Urs Wälchli was an Assistant Professor of Finance at the University of Bern from 2008 until 2014. Since then, he has been the Associate Academic Director of Rochester–Bern Executive Programs and a visiting professor of Finance at the University of Rochester (NY) and Purdue University (IN). He earned his PhD at the University of Bern and is an expert on corporate lifecycles, corporate governance, mergers and acquisitions, valuation, and empirical corporate finance. He provides advisory services on issues such as succession transactions in SMEs and direct investments in entrepreneurial firms.

Overview of Courses Offered in 2018 at Swiss Finance Institute

Swiss Offerings
March 2018–April 2019
Diploma of Advanced Studies in Banking
This bank management program is held in German and runs for six weeks spread over a period of 16 months. It is aimed at management and technical experts within the banking industry who have experience of leading a demanding client portfolio and who wish to broaden their roles. It is conducted in collaboration with the Rochester–Bern Executive Programs.

September 2018–March 2019
Certificate of Advanced Studies in Real Estate Finance
This certificate program is held in German and targets real estate specialists from finance and the real estate industry. It comprises 12 days of classroom study. It is conducted in collaboration with the Rochester–Bern Executive Programs.

February 2018–November 2018
Advanced Executive Program
This bank management program for senior executives synthesizes the latest insights into banking and finance issues in theory and current practice. The program, held predominantly in German, consists of 25 days spread over roughly one year.

International Offerings
June 2018–November 2018
Certificate of Advanced Studies in Asset Management
This CAS provides asset management executives with an integrated and systematic view of the industry. The 12-day program is held in English and is conducted in collaboration with the Rochester–Bern Executive Programs. The program can also be completed without its university degree element, as an executive program.

Managing International Asset Management
This program provides asset management executives with an integrated and systematic view of the asset management industry. The 12-day program is held in English and can also be attended as a Certificate of Advanced Studies (CAS) in Asset Management, which includes academic exams.

Swiss Banking School Certification
In collaboration with Universität Zürich and the CYP Association, Swiss Finance Institute launched an inclusive offering—available in German, English, French, and Italian—at the end of 2016 to prepare individuals for certification as client advisors by the Swiss Association for Quality (SAQ) under the ISO standard 17024.

Specialist Offerings and In-house Training
Several in-house and specialist training courses were offered in 2018, among them the Cross-Border Wealth Management Certification.
Overview of Events Organized in 2018 by Swiss Finance Institute

**SFI–Capco Institute Banking & Finance Forum**
Zurich, Conference, March 20, 2018
Prof. Dr. François Degeorge, SFI Managing Director and Professor of Finance at the Università della Svizzera italiana
Prof. Dr. Eric Jondeau, SFI Professor of Finance at the University of Lausanne
Prof. Dr. Alberto Plazzi, SFI Associate Professor of Finance at the Università della Svizzera italiana
Andreas Baumann, Partner, Head of Private Equity Integrated Investments, Partners Group
Rudi Bogni, Former CEO, UBS Private Bank
Rolf Friedli, Managing Partner, Capvis Equity Partners AG
Luciano Gabriel, Chairman, PSP Swiss Property
Alexandre Gaillard, CEO & founder, InvestGlass
Jürgen Gerke, CEO, Allianz Capital Partners GmbH
Roger Hennig, Head of Real Estate, Schroder Investment Management (Switzerland) AG
Raphael Joos, Chief Risk Officer, Pensionskasse der Credit Suisse Group (Schweiz)
Dr. Michael Loretan, Member of the Executive Board and Head of the Asset Management Division of the Swiss Financial Market Supervisory Authority (FINMA)
Dr. Andreas Merbecks, Partner, Capco Switzerland
Stephan Meschenmoser, MD and Investment Strategist, BlackRock Asset Management Schweiz AG
Markus Reich, Managing Partner, Cross Equity Partners AG
Jean-Luc Seidenberg, Head of Europe, UBS Asset Management
Zoltan Szelyes, Head of Global Market Research—Real Estate, Credit Suisse Asset Management (Schweiz) AG

**7th Swiss Asset Management Day**
Facing Digital Challenges
Pfäffikon SZ, Conference, July 4, 2018

**Focus Topics**
- Climate change facts and related opportunities and risks for the asset management business.
- Technology empowers the gamma business model—Will concrete, goal-based investment replace abstract, asset-only offerings?
- Compliance and performance: Why asset managers should mind “governance correctness”.
- Can digitization lead to a revival of alpha?
- Young firms highlight what digital efficiency, connectivity, and effectiveness mean for the asset management industry.

**Keynote Speakers**
Felix Haldner, Partner, Partners Group, and President, Swiss Funds & Asset Management Association (SFAMA)
Prof. Dr. Thomas Stocker, Head, Department of Climate and Environmental Physics, University of Bern

**Speakers**
Andreas Barraud, governing councillor and Chairman of the Department for Economic Affairs, Canton Schwyz
Prof. Dr. Pierre Collin-Dufresne, SFI Senior Chair and Professor of Finance at the Ecole Polytechnique Fédérale de Lausanne
Prof. Dr. François Degeorge, SFI Managing Director and Professor of Finance at the Università della Svizzera italiana
Guido Fürer, Group Chief Investment Officer and Member of the Executive Committee, Swiss Re
Krzysztof Gogol, founder and CEO, WealthArc
Prof. Amit Goyal, SFI Senior Chair and Professor of Finance at the University of Lausanne
Roger Hilty, Partner and Co-Head of the Trading team, LGT Capital Partners
Frédéric Hooogveld, Head of Investment Specialists—Index and Smart Beta, Amundi
Dr. Anja Hochberg, Chief Investment Officer Schweiz and Head of Global Investment Services, Credit Suisse
Ralf Huber, co-founder, Apiax

**Informationsveranstaltung "Vollgeld-Initiative"**
Zurich, Public Discussion Seminar, May 16, 2018
Prof. Dr. Thomas J. Jordan, Chairman of the Governing Board, Swiss National Bank
Prof. Dr. Jean-Charles Rochet, SFI Senior Chair and Professor of Finance at the University of Geneva, SFI Head of Research
Prof. François-Serge Lhabitant, Chief Executive Officer and Chief Investment Officer, Kedge Capital, and Swiss Finance Institute Adjunct Professor Stefan Mühlmann, founder & CEO, Loanboox
Dr. Graham Robertson, Partner and Head of Client Portfolio Management, Man AHL
David Strebel, Member of the Executive Board and Head of Market Services, Thurgauer Kantonalbank
René Weber, Member of the Management Board and Head of the Policy Coordination Division, State Secretariat for International Finance
Matthias Wyss, Head of the PBT Product Development Practice and Principal, swissQuant Group

Moderation
Clifford Padevit, Deputy Editor-In-Chief, Finanz und Wirtschaft

Événement partenaire FGP, GFRI et SFI
Finance durable: essor et impact sur la gestion de patrimoine
Geneva, Evening Seminar, September 27, 2018
Prof. Dr. Rajna Gibson Brandon, Professor of Finance, University of Geneva
Patrick Odier, Managing Partner, Banque Lombard Odier & Cie SA

13th Annual Meeting
Financial Stability: Challenges and Opportunities
Zurich, Conference, November 7, 2018

Keynote Speakers
Prof. Dr. Jean-Charles Rochet, SFI Senior Chair and Professor of Finance at the University of Geneva, SFI Head of Research
Prof. Dr. Hyun Song Shin, Economic Adviser and Head of Research, Bank for International Settlements
Mr. Tidjane Thiam, CEO, Credit Suisse Group AG
Dr. Fritz Zurbrügg, Member of the Governing Board and Head of Department III, Swiss National Bank

Welcome Address and Closing Remarks
Dr. Romeo Cerutti, Chairman of the SFI Foundation Board and General Counsel and Member of the Executive Board at Credit Suisse Group AG
Prof. Dr. François Degeorge, SFI Managing Director and Professor of Finance at the Università della Svizzera italiana
Swiss Finance Institute
Swiss Finance Institute (SFI) is the national center for fundamental research, doctoral training, knowledge exchange, and continuing education in the fields of banking and finance. SFI’s mission is to grow knowledge capital for the Swiss financial marketplace. Created in 2006 as a public–private partnership, SFI is a common initiative of the Swiss finance industry, leading Swiss universities, and the Swiss Confederation.