Research Achievements 2017

Faculty of Business, Economics and Statistics
Our faculty strives to provide an environment to conduct research at the highest level of excellence.

This report documents the research output of our Faculty during the calendar year 2017. In the current version, we keep it concise and compact as we plan to shift to a new format of a yearly report pretty soon. Therefore, the current report can be seen as an interim report.

Univ.-Prof. Dr. Nikolaus Hautsch
Dean

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Our Research Themes

Research at our Faculty is diverse and covers a vast ground. Our research is subdivided into five broad themes which we briefly describe below.

**Changing Markets and Institutions (CMI)**

What is the best way to organise economic activity? And, conversely, how are economic outcomes - in markets, in an industry, a country or even in the global economy - shaped by particular governance structures, institutions and policies? For example, how does one design auctions or specific markets to match supply and demand effectively? How can we use the tax system to provide incentives to preserve our environment? How should labour market institutions in a country like Austria be adapted to cope with migration flows or demographic transformation? What is the best way to regulate the banking sector to limit systemic risks and prevent bubbles in financial markets? The fields concerned with these issues are mainly within economics (micro, macro, economic policy, political economy) but encompass also aspects of (corporate) finance and economic sociology.

**Corporate Strategies and Processes (CSP)**

How should a company adapt its organisation to the digital age or react to disruptive innovation in financial services? What are the right incentives to motivate workers in a firm to co-operate amongst themselves and to serve the interests of customers and shareholders? Business management devises corporate structures and processes to effectively adapt to rapidly changing environmental conditions. These responses concern different aspects of management: strategic management, technology and innovations management, accounting and control, personnel management and organisation, supply chain management and operations management. This theme is closely related to Changing Markets and Institutions, but here we address issues of governance and incentive structures from the perspective of a corporation.

**Human Behaviour and the Economy (HBE)**

Modelling human behaviour as if it resulted from conscious optimisation by agents with well-defined goals and motives is convenient and powerful. However, such modelling often turns out to be overly simplistic and too narrow to provide a good understanding of how consumers, workers, or management in fact behave. We use experimental methods to test when the standard model is adequate. And when we find it is not, we develop behavioural theory to account for human error, fear, greed, and judgemental bias. Such an approach benefits research from “behavioural finance” to marketing, personnel, strategy, organisation, and economic sociology.

**Management of Resources (MR)**

Resources are the basic input and thus essential drivers of economic activity. Smart use of natural, human, financial, and informational resources is key for wellbeing, growth and development in an economy, as well as for the success of a firm. But disaster may loom when such resources are not managed efficiently. For example, at what point will non-sustainable use of natural resources backfire and hamper the development of a poor country? How does inequality in access to education shape the potential growth of a country? What kind of financial innovation will spur start-ups and innovative businesses? Various disciplines from management and economics contribute to this theme.

**Statistics and Risk Analysis (SRA)**

“Big Data” has become available in almost all domains of the economy and society. How can we develop statistical methods to extract useful information from this data? The application of scientifically based methods is more important than ever. Risk analysis and management use various processes and methods to control uncertainties and risks. This kind of analytical modelling is critical for financial institutions, corporate finance as well as for logistics and operations management.
Publications

This section reports on our research that has been published (in print) in the calendar year 2017. Most of our research is published in learned journals. In total, 112 articles were published in such journals. Journals are divided in three broad categories according to our Faculty Journal List.

Category 1 comprises the very top journals. Members of our Faculty have published a total of 13 articles in such journals. Category 2 journals are excellent in the sense that they are among the top 25% of their fields or are named as very good in selected field-specific complementary lists. We count 25 publications in such journals. Other journal articles and other publications such as monographs and contributions to collected volumes are listed below. We do not list working papers.

Publications are listed alphabetically by author(s). Tenured faculty members are documented in dark blue, whereas non-tenured faculty members are marked in grey. We report the underlying field(s) of research according to the themes defined on the previous page.

Category 1 Publications


Category 2 Publications


Other Publications

Books and Contributions to Books/Antologies


Conference Proceedings


Folwer, F., Veghis, C., & Wagner, I. (2017). Welcome to the 8th EMAC Regional Conference. in Bridging the Marketing Theory/Practice Gap and the Competitiveness of New Europe Timisosara.

Research Achievements

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Theses Completed

Our PhD education offers training and supervision that allows students to acquire knowledge and skills necessary for a research-oriented career in the core fields of our Faculty. After successful completion of the PhD programme, students should be able to carry out independent research. We congratulate the 17 PhD students who completed their thesis in 2017. Moreover, we proudly announce that one scholar has received the Venia Docendi: Fabien Tricouni in Business Administration.

The Venia is awarded for outstanding scientific qualifications and testifies to the scholar’s ability to hold lectures, teach and supervise students at all levels. The successful candidate has submitted a thesis that has been deemed methodologically sound, provides new scientific insights and demonstrates excellence in mastering the subject.

### Theses Completed

<table>
<thead>
<tr>
<th>Name</th>
<th>First Name</th>
<th>Title</th>
<th>Supervisor</th>
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</thead>
<tbody>
<tr>
<td>Tricouni, Fabien</td>
<td></td>
<td>Trade-offs and priorities in logistics: models and solutions</td>
<td>Business Administration</td>
</tr>
</tbody>
</table>

### Habilitations

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<th>Name</th>
<th>First Name</th>
<th>Title</th>
<th>Field</th>
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</thead>
<tbody>
<tr>
<td>Tricouni, Fabien</td>
<td></td>
<td></td>
<td>Business Administration</td>
</tr>
</tbody>
</table>
Numerous members of our Faculty are engaged in editorial and publishing activities. In particular, many of our Faculty members serve as editors, associate editors, or member of editorial boards of established journals. The list below shows who serves in which role for which journal. We do not list refereeing activities, as members of our Faculty have in total most likely written several hundreds of these, and many of us served as referees for prestigious journals.

**Category 1 Journals**

**Editor-in-Chief, Co-Editor**
- Econometric Theory: Pötscher, Benedikt (since 1995)
- Computational Management Science: Pflug, Georg (since 2000)
- The EMAC Chronicle: Wagner, Udo (since 2011)
- E-Journal Economics: Gehrig, Thomas (since 2013)

**Editorial Board**
- Computers & Operations Research: Vetschera, Rudolf (since 2002); Dörner, Karl (since 2005)
- Flexible Services and Manufacturing Journal: Dörner, Karl (since 2016), Rauner, Marion (since 2012)
- Management Accounting Research: Pfeiffer, Thomas (since 2016)
- Business Research: Diamantopoulos, Adamantios (since 2010); Dörner, Karl (since 2014); Hartl, Richard (since 2007); Wagner, Udo (since 2007)
- Econometrics: Haußch, Nikolaus (since 2012)
- E-Journal Economics: Gehrig, Thomas (since 2013)
- EMAC Newsletter: Wagner, Udo (since 2011)
- Energy Systems: Pflug, Georg (since 2010)
- EURO Journal on Decision Processes: Gutjahr, Walter (since 2012); Vetschera, Rudolf (since 2012)
- EURO Journal on Transportation and Logistics: Hartl, Richard (since 2011)
- European Journal of Marketing: Diamantopoulos, Adamantios (since 2007)
- Financial Mathematics and Applications: Pflug, Georg (since 2016)

**Category 2 Journals**

**Editor-in-Chief, Co-Editor**
- European Journal of Operational Research: Bomze, Immanuel (since 2016)
- Central European Journal of Operations Research: Dörner, Karl (since 2011); Pflug, Georg (since 2000)
- Rauner, Marion (since 2007); Vetschera, Rudolf (since 2004)
- Marketing: ZFP - Journal of Research and Management: Wagner, Udo (since 2009)
- Statistics & Risk Modeling: Pflug, Georg (since 2014)
- The EMAC Chronicle: Wagner, Udo (since 2011)
- Bulletin of Economic Research: Borrmann, Jörg (since 2006)
- Central European Journal of Operations Research: Bomze, Immanuel (since 2016); Gutjahr, Walter (since 2011); Hartl, Richard (since 2009)
- Computational Management Science: Pflug, Georg (since 2000)
- Dynamic Games and Applications: Sorger, Gerhard (since 2013)
- Flexible Services and Manufacturing Journal: Dörner, Karl (since 2016), Rauner, Marion (since 2012)
- Group Decision and Negotiation: Vetschera, Rudolf (since 2015)
- International Game Theory Review: Sorger, Gerhard (since 1999)
- International Marketing Review: Sichtmann, Christina (since 2015)
- Journal of Business Economics: Fabel, Oliver (since 2008)
- Journal of Economics: Söger, Gerhard (since 2005)
- Journal of Experimental Political Science: Kittel, Bernhard (since 2013)
- Journal on Vehicle Routing Algorithms: Dörner, Karl (since 2016)

**Research Achievements**

- Macroeconomic Dynamics: Sorger, Gerhard (since 2015)
- Market Microstructure and Liquidity: Haußch, Nikolaus (since 2014)
- OR Perspectives: Hartl, Richard (since 2013)
- Studies in Nonlinear Dynamics and Econometrics: Söger, Gerhard (since 2003)
- Stochastic Programming E-Print Series: Pflug, Georg (since 2000)

**Other Journals**

- Associate Editor
  - International Journal of Industrial Organization: Schmidt-Dengler, Philipp (since 2014)
  - OR Spectrum: qualitative approaches in management: Gutjahr, Walter (since 2014)

- Associate Editor
  - International Journal of Forecasting: Haußch, Nikolaus (since 2015)
  - Journal of Applied Econometrics: Schmidt-Dengler, Philipp (since 2014); Haußch, Nikolaus (since 2015)
  - Journal of Economic Dynamics and Control: Söger, Gerhard (since 2001)
  - Journal of Money, Credit and Banking: Lornath, Györgyi (since 2016)
  - Journal of Statistical Planning and Inference: Pötscher, Benedikt (since 2012)
  - Management Accounting Research: Pfeiffer, Thomas (since 2016)

- Editorial Board
  - Computers & Operations Research: Vetschera, Rudolf (since 2002); Dörner, Karl (since 2005)
  - Decision Support Systems: Vetschera, Rudolf (since 2014)
  - Energy Journal: Wirt, Franz (since 1993)
  - Health Care Management Science: Rauner, Marion (since 2006)
  - OR Spectrum: qualitative approaches in management: Rauner, Marion (since 2006)
Externally Funded Research Projects

The external funding raised by our Faculty members totals about € 2.29 mio. in 2017, € 2.82 mio. in 2016 and € 2.81 mio in 2015. Our main sources of revenue are the Austrian Science Foundation (FWF), the Austrian National Bank (OeNB) and the European Union, see Table 1 and Figure 2. This funding enables us to investigate a broad range of issues. On the next page we list externally funded research projects that were ongoing in the calendar year 2017. This includes projects that have been started before 2017 as well as projects to be completed after 2017.

Sources of External Funding (in thousand €) - Table 1

<table>
<thead>
<tr>
<th>Source</th>
<th>Funds 2015</th>
<th>Funds 2016</th>
<th>Funds 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>FWF</td>
<td>1,387,40</td>
<td>1,189,90</td>
<td>1,364,70</td>
</tr>
<tr>
<td>OeNB</td>
<td>278,00</td>
<td>267,00</td>
<td>60,90</td>
</tr>
<tr>
<td>EU</td>
<td>51,10</td>
<td>210,90</td>
<td>51,20</td>
</tr>
<tr>
<td>Organisations</td>
<td>75,30</td>
<td>204,30</td>
<td>-</td>
</tr>
<tr>
<td>FFG</td>
<td>152,90</td>
<td>157,10</td>
<td>197,80</td>
</tr>
<tr>
<td>Federal</td>
<td>146,40</td>
<td>128,50</td>
<td>97,00</td>
</tr>
<tr>
<td>WWTF</td>
<td>153,20</td>
<td>65,30</td>
<td>138,70</td>
</tr>
<tr>
<td>DLR</td>
<td>29,80</td>
<td>37,00</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>558,20</td>
<td>164,40</td>
<td>343,40</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,813,40</strong></td>
<td><strong>2,817,40</strong></td>
<td><strong>2,289,30</strong></td>
</tr>
</tbody>
</table>

(Finance & Controlling 2017, University of Vienna)

We sort the research projects below by the annual amount of funding attributed to our Faculty. In case of projects that are joint with other institutions or cooperation partners, we also state the amount of funding of the total project. Note that the list below reflects only a fraction of the entire research undertaken by our experts.

External Funding, 2015 - 2017 – Figure 2

(Finance & Controlling 2017, University of Vienna)
Externally Funded Individual Projects

Efficient Intermodal Transport Operations
Contact Person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: Christian Doppler Forschungsgesellschaft
Funding: 540,362 €
2016 – 2020

The project is embedded in a Christian Doppler Laboratory and has two modules. Module I addresses intermodal transportation problems. The term intermodal transportation refers to the transportation of passengers or freight from an origin to a destination by at least two transportation modes, such that the transfer from one mode to the next takes place in intermodal terminals. The primary aim of this module, is to develop new optimisation solution methods based on operations research techniques to support efficient resource planning and management in intermodal transportation systems. Module II addresses efficient resource management in public transportation. This module mainly focuses on tactical and operational problems of urban public transport systems, including headway optimisation and disruption management. The CD-laboratory for efficient intermodal transport operations will develop and apply optimisation techniques to logistical decision problems with a particular focus on the development of methods in stochastic and mathematical decision problems in transport which take real-world characteristics and realistic constraints into consideration.

Optimization and Analysis of Large-Scale Networks
Contact person: Leitner, Markus
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR)
Funding Source: WWTF (Wiener Wissenschafts-, Forschungs- und Technologiefonds)
Funding: 450,000 €
2015 – 2019

Networks are a ubiquitous tool to model the growing amount of data collected in science and business. In areas such as telecommunications, location theory, or social networks analysis (SNA), the size of the resulting networks and application data is ever increasing and analysis methods for large-scale data are crucial to deal with them in a meaningful way. Typically there are also inherent uncertainties associated with the input data and the implied optimisation problems often face multiple objectives. These three aspects (large-scale data, uncertainty and multiple objectives) limit the applicability of available optimisation algorithms that are capable to deal with at most one (if any) of these aspects. Following our recent “ thinning out” modelling approach, we aim to develop novel mathematical models and algorithmic solutions for solving highly relevant problems from operations management, telecommunications, and SNA at the large scale. We plan to exploit parallelization techniques, sparse mathematical models and general purpose heuristics, to reconsider decomposition approaches, and apply them in the context of high performance computing. The obtained results will enable the consideration of uncertain input data and / or multiple objectives at the large scale. To this end, various robust optimisation concepts and their applicability in multi-objective settings will be analysed. Results will be used to derive high-performance solution methods aiming to solve realistic, large-scale problem instances. These approaches will be based on mixed-integer (non-linear) optimisation, heuristics and parallelisation methods.

Explicit and Implicit Country Stereotypes of Consumers
Contact Person: Diamantopoulos, Adamantios
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 355,688 €
2014 – 2017

Extant country-of-origin (COO) research lacks strong theory, assumes only reflecting thinking on the part of consumers, and relies invariably on explicit (direct) measurement of country stereotypes. The proposed project integrates Fiske et al.’s (2002) stereotype content model (SCM) with Strack and Deutsch’s (2004) reflective-impulsive model (RIM) into a unifying conceptual framework which is subsequently used to study the impact of both explicitly- and implicitly-assessed country stereotypes on consumer emotions and behaviour. Based on a series of complementary studies – both survey- and experimentally-based – it seeks to offer detailed insights into (a) the degree of and reasons for the convergence/divergence of explicitly- and implicitly-measured country stereotypes, (b) the relative influence of such stereotypes on deliberate vs. spontaneous purchase decisions, (c) the mediating effects of (positive and negative) emotions on the stereotype-behaviour relationship, and (e) the relative predictive validity of explicitly- and implicitly-measured country stereotypes with respect to a wide range of behavioural outcomes. The project findings are expected to substantially advance both COO theory and stereotyping theory as well as generate several implications relevant for practice.

Portfolio Risk and Asset Allocation: Utilizing High Frequency Information in High Dimensions
Contact Person: Hauthaus, Nikolaus & Pfług, Georg (joint project with Faculty of Mathematics)
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: WWTF (Wiener Wissenschafts-, Forschungs- und Technologiefonds)
Funding: 350,000 € (attributed to our Faculty; total funding of project 585,000 €)
2015 – 2018

Measuring and predicting risk of financial positions and using risk forecasts for decision making is of high social relevance. The recent financial and economic crisis taught us that misperception and underestimation of risk can have dramatic consequences for both the financial sector and the entire society. New challenges arise due to an increasing emphasis on the analysis of extreme events, the requirement of managing large-scale portfolios and the possibility of exploiting high-frequency market information. To address these issues, the objective of this project is twofold. On the one hand, we aim for a deeper understanding of high-dimensional dependencies of asset returns, reflected by more advanced estimates of covariance structures, tail dependencies and measures reflecting extreme (correlation) risks. On the other hand, we will develop mathematical and statistical tools for optimising large-dimensional portfolio positions and for monitoring and managing their risks under realistic conditions. The innovations of this project are (i) the development of a theoretical and empirical framework to control for transaction costs in high-frequency based portfolio optimisation, (ii) the further development of high-dimensional copula models and measures of tail dependence, and (iii) the construction of forecasts of large-scale asset return covariances exploiting high-frequency data.

Soziale Hintergründe und Auswirkungen von Jugendarbeitslosigkeit in Wien
Contact Person: Kittel, Bernhard
Research Themes: Changing Market and Institutions (CMI), Human Behavior and the Economy (HBE)
Funding Source: Bundesministerium für Arbeit, Soziales, Gesundheit und Konsumentenschutz (BMASK)
Funding: 347,762 €
2014 – 2018

The project explores the conditions and effects of youth unemployment in a two-wave panel survey of unemployed people aged 18-28. A first wave administered in 2014 among new clients of the labour market service was followed by a second wave in 2015 with a reinterview response rate of slightly above 50 per cent. The survey data are matched with registry data. The main focus is on the development of labour values and attitudes, health, wellbeing, and subjective job search experience, conditional on factors such as social status, educational pathways and attainment, and migration background.

Organizational Design for New Organizational Forms
Contact Person: Reitzig, Markus
Research Theme: Corporate Strategies and Processes (CSP), Management of Resources (MR), Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 347,760 €
2014 – 2019

Mathematical models and algorithmic approaches for solving combinatorial optimisation problems from the field of network optimisation are known to be essential in telecommunications and the design of transportation and supply chain networks. More recently, it has been discovered that network optimisation algorithms are also crucial in the context of bio-informatics and system biology. Numerous publications in system biology point out that studying functions, structures and interactions of proteins in combination with networks can provide new insights regarding robust biomarkers and can allow new discoveries regarding protein functions, or testing of new hypothesis regarding their interactions. Network optimisations algorithms have also been applied in the analysis of functional modules in protein-protein interaction networks, the discovery of regulatory subnetworks, in revealing hidden components in biological processes, or in detecting transcription factor modules. Motivated by these recent developments, we aim to study several network optimisation problems that are among the most challenging ones in the fields and that were not sufficiently studied or understood so far. In this project we also aim at developing the first supernetwork-driven approach in combinatorial optimisation that will seamlessly integrate various methodologies from operations research (exact and metaheuristic approaches for network optimisation) and computer science (machine learning) into a single mathematical framework.

Externally Funded Individual Projects

Research Achievements
This project aims to develop novel algorithms in order to gain additional optimisation potential by modeling and optimising interrelated logistics and production processes in an integrative way. The main goals for the application of optimisation networks in this project are:

- integrated storage, transport and schedule optimisation
- strategic planning and design of production and logistics systems
- integration of data-based modeling in the optimisation of production processes

Evaluating of Soft Measures to Promote Student Success

Contact person: Tyran, Jean-Robert
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: Federal Ministry of Science, Research and Economy
Funding: 300,000 €
2016 – 2019

The aim of this research project is to systematically evaluate various “soft” measures implemented by the University of Vienna to promote student success. Measures are called “soft” if they do not entail regulations for students or are based on economic incentives like sanctions or rewards. Therefore, students are not coerced or constrained by soft measures and remain entirely free to choose the pace and sequence of their studies as if the measures were not present. Soft measures are also cheap to implement. Typical examples of such measures are reminders of important deadlines or providing online tools for planning coursework. To evaluate the effectiveness of such measures, the University plans to implement a series of soft measures at different times in different faculties. Not all students will therefore experience the same measures at the same time. The purpose of the evaluation is to determine which measures are particularly effective such that they can be used to the benefit of all students.

Securing Health Care in Emergency Situations (S-HELP)

Contact person: Rauner, Marion
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR), Statistics and Risk Analysis (SRA)
Funding Source: EU 7th-project
Funding: 278,647 € (attributed to our Faculty; total funding of project 3,500,000 €)
2014 – 2017

Large scale disasters – be they natural, deliberate or accidental – are inevitable. They do not respect borders, a large number of people will die and the long term consequences from economic to mental health can for years devastate the affected population. People, not tools, are the most important asset. Healthcare practitioners and services respond to emergency situations but they are sometimes overwhelmed often requiring rapid decision-making. Decisions in the allocation of strained resources, prioritizing casualties, while simultaneously trying to counter the impact of rapid decisions are challenging. Between 70 % and 88 % of disaster losses are secondary to indirect deaths that would not have occurred without the breakdown of social and health services and the information systems. Therefore, preparedness and response capabilities of Health Services will directly impact society’s ability to ‘bounce back’ to become more resilient to such devastating shocks.


Model selection and inference with sparse models when the true model need not be sparse

Contact person: Leeb, Hannes
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 266,742 €
2015 – 2018

Recent results of Leeb (2013) and Steinberger and Leeb (2014) entail that most low-dimensional submodels of a high-dimensional linear model are approximately correct, in an appropriate sense. The proposed research project aims to explore the statistical implications of this finding to sparse modelling and to inference after model selection from a class of sparse models, in various scenarios, and to extend the existing theory. The goal is to develop statistical methods for model selection and inference with sparse working models without relying on sparsity assumptions.

Fairness, Personal Responsibility, and the Welfare State

Contact person: Tyran, Jean-Robert (project collaboration with external partners)
Research Themes: Human Behaviour and the Economy (HBE), Changing Markets and Institutions (CMI)
Funding Source: Norface (EU)
Funding: 250,000 € (attributed to our Faculty; total funding of project 1,500,000 €)
2015 – 2018

The aim of the research project “Fairness, personal responsibility and the welfare state” is to analyse how fairness considerations, in particular with respect to personal responsibility, affect the support and effectiveness of welfare policies. The European welfare states are faced with important challenges, in particular related to financial strains on the welfare system, changing migration flows and increasing inequality. Partly as a response to these challenges, there is an increasing focus on personal responsibility. The proposed research project provides new knowledge about how the welfare states can meet these challenges and how concerns for personal responsibility can be integrated in the design of welfare schemes in a way that is perceived as fair. Four research teams from Norway, the Netherlands and Austria take a cross-disciplinary perspective on fairness and use an innovative combination of methods, including administrative register data, surveys, as well as field and laboratory experiments.

Representative Democracy: Theory and Experiments

Contact person: Tyran, Jean-Robert & Wagner, Alexander K.
Research Themes: Human Behaviour and the Economy (HBE), Changing Markets and Institutions (CMI)
Funding Source: DFG (Deutsche Forschungsgemeinschaft)
Funding: 250,000 €
2014 – 2017

This proposal incorporates insights from psychology into the study of the political processes and outcomes in representative democracy. In terms of academic disciplines, the proposal is located at the crossroads of economics, political science, and in terms of method it is grounded in both theory and experiment. Economic reasoning will be used to investigate how rational and self-interested politicians change their behaviour when voters are forgetful, inattentive and have limited foresight. This approach starts from the well-defined benchmark of rational choice theory and adds psychological realism to how voters are modelled. The theoretical investigation is expected to yield clear and testable predictions. These predictions are tested in a controlled laboratory setting. The general aim is to provide an empirically grounded model of the political process and to inform us when we need to be careful in advancing conclusions from rationalistic models.

Order Book Foundations of Price Risks and Liquidity: An Integrated Equilibrium and Derivatives Markets Perspective

Contact Person: Hautsch, Nikolaus
Research Themes: Changing Markets and Institutions (CMI)
Funding Source: Norface (EU)
Funding: 250,000 € (attributed to our Faculty; total funding of project 1,500,000 €)
2015 – 2018

The aim of the research project “Order Book Foundations of Price Risks and Liquidity: An Integrated Equilibrium and Derivatives Markets Perspective” is to analyse how order book foundations influence liquidity and price risks. The research project is located at the crossroads of economics, political science, and in terms of method it is grounded in both theory and experiment. Economic reasoning will be used to investigate how rational and self-interested politicians change their behaviour when voters are forgetful, inattentive and have limited foresight. This approach starts from the well-defined benchmark of rational choice theory and adds psychological realism to how voters are modelled. The theoretical investigation is expected to yield clear and testable predictions. These predictions are tested in a controlled laboratory setting. The general aim is to provide an empirically grounded model of the political process and to inform us when we need to be careful in advancing conclusions from rationalistic models.
Most financial markets are nowadays organized in the form of electronic limit order book markets. The introduction of electronic trading has substantially changed the trading landscape over the last decade. Many high-speed activities on financial markets are not well understood and are subject of concerns to market operators and regulators. This research will be the first project bringing together the limit order books (LOBs) of a stock market with those of derivatives written on this asset. Using empirical and statistical models the project will investigate the vast amount of information provided by integrated stock and derivative LOBs. This information will be processed to measure and predict risks associated with volatility, liquidity and price jumps. The project addresses two major research questions: First, can we exploit detailed LOB data of stocks and corresponding options to improve the measurement and prediction of volatility? Second, how does LOB information spill over from equity and derivative markets and how can this information be used to better understand the determinants of volatility, liquidity and jump risks on the micro level?

Out-of-sample Prediction Using Shrinkage Estimators

Contact person: Leeb, Hannes
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 192,182 €
2014 – 2018

In regression, performance analyses of shrinkage estimators are mainly focused on parameter estimation and in-sample prediction. Little is known about the performance of shrinkage estimators for out-of-sample prediction, where the goal consists of estimating the regression function at new and un-observed points. Recently, Huber and Leeb (2013) showed that the James-Stein estimator can fail to dominate the maximum-likelihood estimator for out-of-sample prediction. The goal of the proposed research project is to analyse this and related phenomena, to design new shrinkage estimators with good predictive performance out-of-sample, and to develop inference methods like prediction intervals based on these new estimators.

Sansero Safe and Secure Routing

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 180,548 €
2015 – 2019

In this project, a new multi-criteria vehicle routing problem is studied in which different locations demand for periodic service. The objective is to determine cost efficient yet heterogeneous tours. The latter is defined such that repeating particular sequences of nodes or edges has to be avoided and that service at specific nodes or edges are serviced at the same time day they have already been served before.

Models for Ecological, Economical, Efficient, Electric Car Sharing (e4-share)

Contact person: Leitner, Markus (project collaboration with external partners)
Research Themes: Corporate Strategies and Processes (CSP), Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)
Funding: 162,865 € (attributed to our Faculty; total funding of project 804,731 €)
2014 - 2017

Due to growing awareness and concerns regarding pollution, sustainability and living quality, cities are confronted with severe challenges and need to manage a transformation process that ultimately shall lead to fewer emissions and less energy consumption while increasing the quality of public space available to citizens. At the same time, however, citizens ask for flexible solutions that allow to efficiently use different modes of transport without increasing their planning overhead. Within others, car-sharing systems and the usage of electric cars are currently increasingly gaining popularity to meet some of these challenges. In the project e4-share, we will lay the foundations for efficient and economically viable electric car-sharing systems by studying and solving the optimisation problems arising in their design and operations. A main goal is to derive generic methods and strategies for optimised planning and operating. In particular concerning flexible variants which best meet preferences of customers but impose non-trivial challenges to operators. We will develop novel, exact and heuristic, numerical methods for finding suitable solutions to the optimisation problems arising at the various planning levels as well as new, innovative approaches considering these levels simultaneously.

Low Emission Electric Freight Fleets (LEEFF)

Contact person: Dörner, Karl (project collaboration with external partners)
Research Theme: Management of Resources (MR)
Funding Source: FFG (Österreichische Forschungsförderungsgesellschaft)
Funding: 122,500 € (attributed to our Faculty; total funding of project 2,879,000 €)
2016 – 2019

As the LEEFF (Low Emissions Electric Freight Fleets) project follows an integrative multiperspective approach to the Call objectives, the key elements of the examined system have to be identified. These key elements contribute to reach the target of a commercially viable overall solution for an electric fleet operation addressed by the Call. To reach the set targets, an advanced e-truck together with an adapted battery and a smart charging station for commercial use at logistic hubs will be developed and an innovative business model for fleet operators together with adapted planning and communication tools realised as a prototype. The target users will be provided with practical guidelines, a show case presentation based on a comprehensive demonstration mode and a strategic implementation.

Consistent Stochastic Inventory Routing Management (COSIRM)

Contact person: Dörner, Karl
Research Theme: Management of Resources (MR)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 118,104 €
2016 – 2019

This project integrates two fundamental logistical aspects that are typically investigated independently or sequentially: inventory management and transportation routing optimisation. We extend the existing knowledge with regard to essential real-world characteristics of such problems and develop new approaches for the integration of these two aspects. Stochastic demands at the retailers are typically non-stationary and correlated, emergency shipments are allowed and service level requirements have to be met. Moreover, we incorporate consistency, i.e. delivery at a certain retailer should always take place within the same time interval. This leads to a two-stage multichannel inventory problem with routing, stochastic lead times and non-equidistant review periods.

Firms' Scope Decisions in High-Technology System Industries

Contact Person: Reitzig, Markus
Research Theme: Corporate Strategies and Processes (CSP)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 107,915 €
2014 – 2018

The goal of this research project is to better understand how extant mechanisms describing firm boundary - notably bargaining considerations related to transaction costs and knowledge-based complementarities - can explain organizations’ scope in systemic industries.

Understanding Combinatorial Clock Auctions

Contact Person: Janssen, Maarten
Research Theme: Changing Market and Institutions (CMI)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 100,000 €
2014 – 2018

Combinatorial Clock Auctions have recently been used to allocate radio frequency licenses. However, the optimal bidding behaviour has only been (partially) analysed in a simple context where bidders only care about the package they themselves win and in what they have to pay for it. In this research project, we want to increase the understanding of the auction design, the potential damaging outcomes and the possible adoptions of the design to accommodate potential weaknesses. In particular, we would like to consider the implications of incentives to raise rivals’ cost, bidding under a budget constraint and valuations depending on auction outcomes.

Consumer Regret in Global versus Local Brand Purchase Decisions

Contact Person: Diamantopoulos, Adamantios
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 98,500 €
2015 – 2017

Consumer Regret in Global versus Local Brand Purchase Decisions. The proposed research project investigates the relationship between perceived brand globalness (i.e. consumers’ perception of a brand’s global availability and reach) and consumer regret (i.e. the feeling rising after the realisation or the anticipation of suboptimal decisions due to the presence of better, non-chosen alternatives) as well as their joint impact on consumer behaviour. Two conceptual frameworks (one for anticipated and one for experienced regret) are proposed for subsequent testing in a series of complementary studies. The project findings are expected to enrich both the global branding and consumer decision making literatures and provide novel theoretical and managerial insights on the competition between local and global brands, the psychological processes underlying global/local brand preferences, and the optimality of consumer decision making.
The Effects of Liquidity Regulation in Basel III on Financial Stability

Contact person: Lorant, Györgyi
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 96,000 €
2016 – 2018

This project was established as a cooperation between the Department of Sociology and the Department of Economic Sociology. In 2015 Austria belonged to a group of EU countries (including Sweden, Hungary and Germany) which received the largest number of refugees in relation to their population size. One urgent concern is the facilitation of these migrants’ economic self-sufficiency by integrating them into the labour market. Successful labour market integration depends largely on formal requirements, most notably recognized qualifications and language proficiency, but also on the extent of integration into other areas of society, including the integration into social networks or the identification with Austrian norms and values. This is the starting point for the present project which investigates the labour market integration of refugees and the interrelation of economic, social, and cultural integration using an online panel study with four waves. This will be combined with a number of expert interviews and problem-centered interviews among newly arrived refugees.

Risk Capital for Flood Catastrophes in Europe

Contact person: Pflug, Georg
Research Theme: Statistics and Risk Analysis (SRA)
Funding Source: OeNB (Österreichische Nationalbank)
Funding: 94,506 €
2014 – 2017

In recent years, we have observed lots of natural catastrophes in Austria, Europe and the whole world. These catastrophes have direct impact on the financial strength of affected countries, often leading to increasing taxes, additional public debts and budget diversion. Of course, these impacts have further consequences on the available budget of private households and/or governments, thus reducing investments and opportunities for the future. The aims of this project are twofold: (i) to set the theoretical background for statistical risk modelling of regional and temporal distributed catastrophic events; (ii) to analyse and design insurance schemes for interregional and international protection against losses from these events.

Labour Market Integration of Refugees in Austria – A Longitudinal Analysis

Contact persons: Kittel, Bernhard & Verwiebe, Roland (joint project with the Faculty of Sociology)
Research Theme: Changing Markets & Institutions (CMI) Funding Source: OeNB (Österreichische Nationalbank) Funding: 52,506 € (attributed to our Faculty; total funding 185,000 €)
2016 – 2018

This research project deals with the scheduling of radiotherapy treatment appointments for critically ill patients at the radiotherapy center MedAustron in Wiener Neustadt. When scheduling these appointments, various constraints must be considered, e.g. some activities can be performed on alternative resources. Furthermore, the daily irradiation starting time should remain stable among the treatment days for the patients. Additionally to the main appointments (irradiation) recurring control appointments need to be scheduled.

Externally Funded Special Research Programmes (SRP)

Contact persons: Kittel, Bernhard
Partner Institutions: Heidelberg University (Germany), University of Mannheim (Germany), Hochschule für Technik und Wirtschaftscht (University of Leipzig), Carl von Ossietzky University Oldenburg (Germany)
Research Themes: Cognitive and Affective Dimensions
Funding: 293,228 € (attributed to our Faculty, total funding 4.995,220 €)
2014 – 2018

The CUPESSE project is dedicated to the comparative analysis of youth unemployment in Europe. By taking issues related both to the demand and supply sides into consideration, the project aims to obtain a comprehensively picture of the causes and consequences of unemployment among young people as well as to formulate policy strategies and recommendations for addressing this ever-growing issue. The project brings together a broad network of researchers and practitioners from the fields of economics, political science, psychology, and sociology.

Research Achievements
individual and collective recognition of a distributive solution increases with the level of transparency of decision processes. In analogy, the expertise hypothesis states that the objectification of decisions to recognize needs by reference to expertise increases the acceptance of a distributive solution. Each of eight interdisciplinary projects focuses on one of the four hypotheses. Project B1 “Distributive Preferences and Needs-based Justice in Networks” uses a theory-driven experimental approach to study the recognition of needs as legitimate claims in the context of network structures and the consequences thereof on the outcome of bilateral distributional negotiations. Building on sociological network exchange theory, we analyse the effect of network structures, the transparency of structures for the actors involved, the number of possible bilateral agreements, and social preferences of position holders on the observance of needs in distributional agreements. Assuming self-interested, utility-maximizing behaviour, equality in distributional outcomes tends to be generated by balanced power relations and information on the network structure. Unbalanced power networks, however, promote highly skewed distributions in favour of high-power positions. While this general pattern has been supported by repeated experiments, other network experiments, however, reveal systematic deviations from these expectations. In particular, holders of structural power positions tend to act more procedurally under certain context conditions. The main research question is whether, in contrast to other justice principles, needs-based justice is recognized as a distributive principle in network structures otherwise hostile to redistribution. This result would suggest that needs-based justice principles have a higher potential to legitimize distributions than other principles.

External Funded Graduate Schools

Vienna Graduate School of Economics

Contact Persons: Cunat, Alejandro; Janssen, Maarten; Schmidt-Dengler, Philipp; Müller, Wieland; Schlag, Karl; Merz, Monika; Pichler, Paul; Garcia, Daniel & Sorger, Loranth, Gyöngyi
Partner Institutions: Vienna University of Economics and Business (WU) & Institute for Advanced Studies (ISH) Research Themes: Changing Markets and Institutions (CMI), Corporate Strategies and Processes (CSP), Human Behaviour and the Economy (HBE), Statistics and Risk Analysis (SRA)
Funding Source: FWF (Wissenschaftsfonds)
Funding: 398,949 € (attributed to our Faculty; total funding of project 2,350,000 €)
2014 – 2017

The VGSF is a joint graduate school of the University of Vienna, WU, and the Institute for Advanced Studies. The VGSF offers a well-structured, top-notch PhD program in Vienna. The Faculty members are part of an international network and leading scholars are invited to teach courses or present in seminars. The program is entirely run in English. VGSF has an excellent track record from VGSE develop into independent researchers of the highest academic standards. The programme also allows to study the relations between different areas of optimization. In long term the collaboration between the members and their respective institutions will be fostered in order to make Vienna a place of excellence in Computational Optimization.

Other Fundings

Working Group “Financial Crises”

Contact Person: Gehrig, Thomas
Research Theme: Changing Markets and Institutions (CMI)
Funding Source: ÖFG (Österreichische Forschungsgemeinschaft)
Funding: Max. 15,000 € per year
2013 – 2017

The working group “Financial Crises” is a forum for scientific analysis and of the European economic crises of the new millennium. It focusses on creating public information as a basis for public discussion to cope with those crises and prevent even more challenging ones. Therefore, the working group contributes to providing facts and raising awareness for public debates on financial crises and crises in general. It addresses the fundamental question whether, and in case how, liberal social systems can be organised in a resilient manner.

Economic Coordination under Time Pressure: Evidence from Experiments

Contact person: Soinetag, Axel
Research Theme: Human Behaviour and the Economy (HBE)
Funding Source: Graf Hardegg’sche Stiftung
Funding: 7,500 €
2016 – 2017

Many if not most important economic situations involve some kind of time pressure, either in the form of explicit and fixed deadlines or because time is money. In this project we consider the role of time pressure for interactive situations that involve an essential element of coordination. We are interested in the following questions: Will increased time pressure affect the likelihood that a coordinated agreement will be reached, and what kind of agreement, if any, is reached? The first of these questions is related to the efficiency implications of increased time pressure; the second concerns the nature of the division of the surplus. One possibility that we are especially interested in investigating is whether people may become more likely to reach a coordinated outcome the less time they have available. This could happen because higher time pressure affects the kind of reasoning decision makers engage in. For example, a tight deadline might make decision makers more likely to select a fair outcome that gives equal money earnings (see Rand, Greene & Nowak, 2012 for a public goods game setting), rather than end up in a dispute over outcomes that offer unequal money payments and are preferred by different players. Since it is very hard to vary deadlines in real situations, or to get natural data from cases where the deadline was varied, we will pursue an experimental approach. This has the advantage that we can collect data from a controlled environment, where we can vary the kind of time pressure faced by the decision makers and study its impact on behaviour.

Business Partnership

Contact Person: Sopp, Karina
Research Theme: Corporate Strategies and Processes (CSP)
Funding Source: EY Wirtschaftsprüfungsgesellschaft mbH Wien
Funding: 2,990 €
2015 – 2016

Realisation of a so called “business partnership” in the lecture “Financial Statement Analysis and Business Evaluation” to promote the practical relevance.

Sponsoring of Research Activities

Public Lecture Paola Sapienza: Trust, Rules and Systemic Risk

Contact Person: Gehrig, Thomas
Research Theme: Changing Market and Institutions (CMI)
Funding Source: ÖFG (Österreichische Forschungsgesellschaft)
Funding: 3,000 €
June 22, 2017
Dissemination of Research

This section lists our activities in disseminating, discussing and debating research. We first list invited talks of our Faculty at the University of Vienna by speaker in chronological order. Subsequently, we mention research visits and collaborations realised by our Faculty. We then state workshops that have been (co-) organised by members of our Faculty, as well as presentations in one of our seminar series. We close this section with indicating awards and fellowships our Faculty members received in 2017.

Invited talks

The complexity of simple models - a study of worst and typical hard cases for the Standard Quadratic Problem (SQP)
Bomze, Immanuel (Invited speaker)
Mathematical Optimization in the Decision Support Systems for Efficient and Robust Energy Networks, Modena/Italy March 31, 2017

Trust your data or not - Standard remains Standard (QP)
Bomze, Immanuel (Invited speaker)
Università Commerciale Luigi Bocconi, Milano/Italy April 19, 2017

Semi-Lagrangian relaxations of CDT problems - a copositive view
Bomze, Immanuel (Invited speaker)
Conference of the International Federation of Operational Research Societies, Quebec/Canada July 20, 2017

On gaps and dots - duality and attainability in conic optimization
Bomze, Immanuel (Keynote speaker)
Optimization 2017, Lisboa/Portugal September 7, 2017

Having Fun with Reviewers: Some Dos and many Don’ts
Diamantopoulos, Adamantios (Keynote speaker)
2nd EMAC Junior Faculty & Doctoral Student Research Camp, Vienna/Austria September 1, 2017

Diamantopoulos, Adamantios (Keynote speaker)
8th European Marketing Academy Regional Conference, Timisoara/Romania September 21, 2017

Did the Basel Process of Capital Regulation Enhance the Resiliency of European Banks?
Gehrig, Thomas (Invited speaker)
AWG/MPAG/NBB Workshop 2017, Brussels/Belgium January 17, 2017

Dark Pools and Price Discovery
Gehrig, T. (Invited speaker)
Newcastle University, Tyne/UK March 1, 2017

Comment on Anton Tsoy: Distorted Advice in the Mortgage Market: Theory and Structural Estimation
Gehrig, Thomas (Invited speaker)

Crossing Networks, Proprietary Trading, and Price Discovery
Gehrig, Thomas (Invited speaker)

Did the Basel Process of Capital Regulation Enhance the Resilience of European Banks?
Gehrig, Thomas (Invited speaker)
London School of Economics and Political Science, London/UK March 21, 2017

Credit Supply Shocks, Network Effects, and the Real Economy - Comment on Laura Alfaro
Gehrig, Thomas (Invited speaker)
Finance and Development 2017, Berlin/Germany May 4 – 5, 2017

Did the Basel Process of Capital Regulation Enhance the Resilience of European Banks?
Gehrig, Thomas (Invited speaker)
2nd Chapman Conference on Money and Finance, Orange/CA, USA May 12, 2017

Did the Basel Process of Capital Regulation Enhance the Resilience of European Banks?
Gehrig, Thomas (Invited speaker)
Bank of Finland Conference on Banking and Institutions, Helsinki/Finland May 15, 2017

Did the Basel Process of Capital Regulation Enhance the Resilience of European Banks?
Gehrig, Thomas (Invited speaker)
Österreichische Nationalbank, Austria/Vienna May 18, 2017
Research Achievements

Did the Basel Process of Capital Regulation Enhance the Resiliency of European Banks?
Gehrig, Thomas (Invited speaker)
Annual Meeting of the European Economic Association 2017, Lisbon/Portugal
August 23 – 26, 2017

Did the Basel Process of Capital Regulation Enhance the Resiliency of European Banks?
Gehrig, Thomas (Invited speaker)
European Finance Association 2017, Mannheim/Germany
August 23 – 26, 2017

Panel: Big Data - Evolution oder Revolution?
Gehrig, Thomas (Invited speaker)
Sommerakademie der Studienstiftung des Deutschen Volkes in St. Johann/Italy
August 30, 2017

Macht Bankenregulierung unsere Welt sicherer?
Gehrig, Thomas (Invited speaker)
Sommerakademie der Studienstiftung des Deutschen Volkes in St. Johann/Italy
August 31, 2017

Comment on Simon Martin and Karl Schlag: Final Volkes in St. Johann/Italy
August 31, 2017

Did the Basel Process of Capital Regulation Enhance the Resiliency of European Banks?
Hautsch, Nikolaus (Invited speaker)
Finance Lounge, Finance Alumni Club, Vienna/Austria
January 19, 2017

High Speed on Financial Markets - Blessing or Curse?
Hautsch, Nikolaus (Invited speaker)
Technische Universität Dresden/Germany
January 31, 2017

Volatility, Information Feedback and Market Microstructure Noise: A Tale of Two Regimes
Hautsch, Nikolaus (Invited speaker)
Wirtschaftsuniversität Wien/Austria
May 12, 2017

Large Scale Portfolio Allocation Under Transaction Costs and Model Uncertainty: Adaptive Mixing of High and Low Frequency Information
Hautsch, Nikolaus (Invited speaker)
Conference on “Big Data in Predictive Dynamic Econometric Modeling”, Philadelphia/USA
May 18, 2017

High Frequency Trading: Costs and Benefits
Hautsch, Nikolaus (Invited speaker)
44th Economics Conference ÖNB, Vienna/Austria
May 29, 2017

Large Scale Portfolio Allocation Under Transaction Costs and Model Uncertainty: Adaptive Mixing of High and Low Frequency Information
Hautsch, Nikolaus (Invited speaker)
Conference on “Stochastic Dynamical Models in Mathematical Finance, Econometrics, and Actuarial Sciences”, Lausanne/Suisse
June 1, 2017

“Nach der globalen Finanzkrise – Ein neues ökonomisches Denken?”
Hautsch, Nikolaus (Invited speaker)
Club Research Panel Discussion, Vienna/Austria
July 4, 2017

Large Scale Portfolio Allocation Under Transaction Costs and Model Uncertainty
Hautsch, Nikolaus (Invited speaker)
Jahrestagung des Vereins für Socialpolitik “Alternative Geld- und Finanzarchitekturen”, Vienna/Austria
September 4, 2017

Volatility, Information Feedback and Market Microstructure Noise: A Tale of Two Regimes
Hautsch, Nikolaus (Invited speaker)
Financial Econometrics Conference, Heidelberg/Germany
September 5, 2017

Large Scale Portfolio Allocation Under Transaction Costs and Model Uncertainty
Hautsch, Nikolaus (Invited speaker)
Royal Holloway, University of London/UK
November 30, 2017

Large Scale Portfolio Allocation Under Transaction Costs and Model Uncertainty
Hautsch, Nikolaus (Invited speaker)
Universität zu Köln/Germany
December 5, 2017

To Be or Not to Be Welcome: The Acceptance of Refugees in a Small Austrian Community
Kittel, Bernhard (Invited speaker)
Österreichische Akademie der Wissenschaften (ÖAW), Vienna/Austria
February 14, 2017

Das Verhältnis von Wirtschaftssozialologie und Verhaltensökonomie: Eine interdisziplinäre Brücke? Schütz, Bernhard (Invited speaker)
Universität Zürich (UZH)/Suisse
February 21, 2017

Offers Beyond the Negotiating Dyad. Including the Excluded in a Network Exchange Experiment
Kittel, Bernhard (Keynote speaker)
6th International ACCER Workshop on „Cross-Cultural Experiments in the Social Sciences, Economics and Management, Duisburg/Germany
March 7, 2017

A fundamental theorem of asset pricing for large financial markets under restricted information (lp case)
Klein, Irene (Invited speaker)
Oberwolfach Workshop - Mathematics of Quantitative Finance, Oberwolfach/Germany
March 3, 2017

Multistage stochastic programs
Pflug, Georg (Invited speaker)
EURO Winter School, Padova/Italy
January 19, 2017

Ambiguity in Portfolio selection
Pflug, Georg (Invited speaker)
Ecole polytechnique fédérale de Lausanne/Schweiz
February 13, 2017

Distributionally robust stochastic optimization
Pflug, Georg (Invited speaker)
Fraunhofer Institute, Kaiserslautern/Germany
March 9, 2017

On ambiguity models
Pflug, Georg (Invited speaker)
Technische Universität Chemnitz/Germany
April 25, 2017

Sensitivity and distributional robustness in financial optimization: the contributions of Marilda Bertocchi and beyond
Pflug, Georg (Invited speaker)
Université degli Studi di Bergamo/Italy
May 29, 2017

Model uncertainty in energy optimization
Pflug, Georg (Invited speaker)
SESIO 2017 International Thematic Week: Smart Energy and Stochastic Optimization, Paris/France
June 1, 2017

Scenario tree generation (probability quantification) for multistage stochastic programs
Pflug, Georg (Invited speaker)
Erwin Schrödinger Institut, Vienna/Austria
September 25, 2017

Incorporating Model Error in the Management of Financial and Electricity Portfolios
Pflug, Georg (Invited speaker)
PIGMO Days 2017, Paris-Saclay/France
November 14, 2017

Model Uncertainty and Distributional Robustness in Stochastic Optimization
Pflug, Georg (Invited speaker)
AOCR Louvain/Brussels
December 5, 2017

Controlling the Size of Autocorrelation Robust Tests
Pötscher, Benedikt (Invited speaker)
Johannes Kepler Universität, Linz/Austria
March 16, 2017

Controlling the Size of Autocorrelation Robust Tests
Pötscher, Benedikt (Invited speaker)
NBER-NSF Time Series Conference, Evanston/USA
September 8, 2017

Controlling the Size of Autocorrelation Robust Tests
Pötscher, Benedikt (Invited speaker)
Technische Universität Wien, Vienna/Austria
November 22, 2017

Delegating climate policy to a supranational authority: a theoretical assessment
Sorg, Gerhard (Invited speaker)
Real and financial interdependencies: New approaches with dynamic general equilibrium models, Paris/France
July 6, 2017

People are not perfectly rational or self-interested. What does this mean for key issues in Public Choice?

Research Achievements
**Research Visits & Collaborations (min. 5 days)**

University of Oxford
Kasberger, Bernhard
January 1 – March 1, 2017

University of California San Diego
Bredendiek, Maximilian
January 9 – March 15, 2017

Universidad de La Laguna
Wolfinger, David
January 14 – April 8, 2017

Rheinisch-Westfälische Technische Hochschule Aachen (RWTH)
Fabel, Oliver
May 1-15, 2017

Freie Universität Bozen
Pflug, Georg
May 21-27, 2017

Rheinisch-Westfälische Technische Hochschule Aachen (RWTH)
Fabel, Oliver
May 28 – June 3, 2017

Rheinisch-Westfälische Technische Hochschule Aachen (RWTH)
Fabel, Oliver
June 25 – July 6, 2017

Dongguk University
Fabel, Oliver
July 21-30, 2017

Studienstiftung des deutschen Volkes e.V.
Gehrig, Thomas
August 20 – September 2, 2017

Université Paris
Tyran, Jean-Robert
October 25 – November 1, 2017

Mathematisches Forschungsinstitut Oberwolfach
Bomze, Immanuel
October 29 – November 4, 2017

Université Paris XI - Paris Sud
Bomze, Immanuel
November 15-19, 2017

**Workshop and Conferences**

**Workshop der GOR-Arbeitsgruppe „Entscheidungstheorie und –praxis“**
February 27-28, 2017
Number of participants: 25
Lead Organisation: Gesellschaft für Operations Research (GOR) e.V.
(Con)-Organisers of our Faculty: Vetschera, Rudolf

**Vienna-Copenhagen Conference on Financial Econometrics**
March 9-11, 2017
Number of participants: 130
Lead Organisation: University of Vienna, Department of Statistics & Operations Research
(Con)-Organisers of our Faculty: Haushofer, Nikolaus
Con-Organisers of other Institutions: Rahbek, Anders (University of Copenhagen)
Keynote Speakers: Elliott, Graham (University of California, San Diego), Werker, Bas (Tilburg University), Zaffaroni, Paolo (Imperial College London)

5th French-Austrian-German Workshop on Consumer Behavior
March 29-31, 2017
Number of participants: 30
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Wagner, Udo & Pauser, Sandra
Con-Organisers of other Institutions: Multibacher, Hans (International University of Monaco)

The Vienna Conference on Strategy, Organizational Design, and Innovation 2017
May 23-25, 2017
Number of participants: 30
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Tyran, Jean-Robert
Con-Organisers of other Institutions: Gersbach, Hans (ETH Zürich), Zulehner, Christine (Goethe Universität Frankfurt)

(Con)-Organisers of our Faculty: Leibfried, Markus
Keynote Speakers: Levendis, Daniel (University of Pennsylvania), Sorensen, Olav (Yale University)

Global Fashion Management Conference
July 6-9, 2017
Number of participants: 250
Lead Organisation: Global Alliance of Marketing & Management Associations
(Con)-Organisers of our Faculty: Wagner, Udo
Con-Organisers of other Institutions: Ko, Eunjoo (Yonsei University)
Keynote Speakers: Rust, Roland T. (University of Maryland)

Workshop Model selection, Regularization, and Inference
July 12-14, 2017
Number of participants: 100
Lead Organisation: University of Vienna, Department of Statistics & Operations Research
(Con)-Organisers of our Faculty: Leeb, Hannes & Pflüchter, Benedikt
Keynote Speakers: Belloni, Alexandre (Fuqua School of Business, Duke University), Benjamini, Yoav (Tel Aviv University), Beran, Rudy (UC Davis), Brown, Larry (University of Pennsylvania), El Karoui, Noureddine (UC Berkeley), Janson, Lucas (Harvard University), Javanmard, Adel (University of Southern California), Leeb, Hannes (University of Vienna), McKeague, Ian (Columbia University), Preinerstorfer, David (Université libre de Bruxelles), Steinerberger, Lukas (University of Vienna), Tibshirani, Ryan (Carnegie Mellon University)

2nd EMAC Junior Faculty & Doctoral Student Research Camp
August 31 – September 1, 2017
Number of participants: 25
Lead Organisation: University of Vienna, Department of Business Administration & European Marketing Academy (EMAC)
(Con)-Organisers of our Faculty: Diamantopoulos, Adamantios & Wagner, Udo
Con-Organisers of other Institutions: van Bruggen, Gerrit (University of Freiburg), Taylor, Jon (Stanford University), Tibshirani, Ryan (Carnegie Mellon University)

CD Labor Evaluierung 2017
September 5, 2017
Panel: Unintended Consequences of Financial Regulation
Number of participants: 30
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Soennichsen, Matthias (University of Economics and Business), Schmid, Marc, Schmitt, Universität des Saarlandes, Alexander, Wolchonik, Stephan (FernUniversität in Hagen)

CD Labor Evaluierung 2017
September 11-12, 2017
Number of participants: 40
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Sopp, Karina
Keynote Speakers: Haerdli, Thomas (The University of Munich), Altenburger, Martin (University of Vienna), Baumjoh, Josef (Österreichisches Zentrum für Wirtschaftsforschung), Manding, Angelika, Osten, Martin (University of Vienna), Schild, Marc, Schmitt, Universität des Saarlandes, Alexander, Wolchonik, Stephan (FernUniversität in Hagen)

Workshop Behavioral Public Economics
September 21-22, 2017
Number of participants: 30
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Sopp, Karina
Keynote Speakers: Haerdli, Thomas (The University of Munich), Altenburger, Martin (University of Vienna), Baumjoh, Josef (Österreichisches Zentrum für Wirtschaftsforschung), Manding, Angelika, Osten, Martin (University of Vienna), Schild, Marc, Schmitt, Universität des Saarlandes, Alexander, Wolchonik, Stephan (FernUniversität in Hagen)

9. Greifswalder universitäts- und fachübergreifendes Doktoranden-, Habilitanden- und Forschungsseminar
September 11-12, 2017
Number of participants: 40
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Hahne, Joseph, Thomas (University of Vienna), Schmid, Marc, Schmitt, Universität des Saarlandes, Alexander, Wolchonik, Stephan (FernUniversität in Hagen)

**Workshop Simulation und Optimierung komplexer Systeme**
October 4, 2017
Number of participants: 30
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Dörner, Karl
Keynote Speakers: Ambuehl, Sandro (University of Technology, Braunschweig), Battaglini, Marco (Carnegie Mellon University), Cappel, Alexander (Yale University), Drouvalis, Michel (University of Technology, Braunschweig), Janson, Lucas (University of Vienna), Leeb, Hannes (University of Vienna), Schmid, Marc, Schmitt, Universität des Saarlandes, Alexander, Wolchonik, Stephan (FernUniversität in Hagen)

**Workshop Simulation und Optimierung komplexer Systeme**
October 13, 2017
Number of participants: 30
Lead Organisation: University of Vienna, Department of Business Administration
(Con)-Organisers of our Faculty: Dörner, Karl
Keynote Speakers: Ambuehl, Sandro (University of Technology, Braunschweig), Battaglini, Marco (Carnegie Mellon University), Cappel, Alexander (Yale University), Drouvalis, Michel (University of Technology, Braunschweig), Janson, Lucas (University of Vienna), Leeb, Hannes (University of Vienna), Schmid, Marc, Schmitt, Universität des Saarlandes, Alexander, Wolchonik, Stephan (FernUniversität in Hagen)
Leading Organisations: University of Vienna, Department of Business Administration (Co-) Organisers of our Faculty: Dörner, Karl & Harth, Richard
Keynote Speakers: Zalkovets, Johannes (Knigge GmbH), Feichtinger, Gustav (Technische Universität Wien), Günther, Markus (Universität Bielefeld), Haurand, Michaelle (Universität Bielefeld)

7. Bankenworkshop Banken und Finanzmärkte
October 26-27, 2017
Number of participants: 30
Leading Organisation: Deutsche Bundesbank (Co-) Organisers of our Faculty: Gehrig, Thomas (Co-) Organisers of other Institutions: Pausch, Thilo (Deutsche Bundesbank), Welzel, Peter (Universität Augsburg)
Keynote Speakers: Schiephake, Eva (Universität Bonn)

Workshop 1744b “Copositivity and Complete Positivity”
January 9, 2017
Espin-Sanchez, Jose-Antonio (Yale University)

Seminar Series
Our seminar series are platforms to discuss recent and ongoing research. The exchange of ideas takes place in a more or less informal atmosphere, depending on the format of the seminar. A brown-bag seminar is often more informal and ideal to discuss new ideas and work in progress while senior researchers tend to present polished papers in a departmental seminar. Our seminar series are organized and funded by our departments and centers.

Vienna Joint Economic Seminar
The Old Men in the Census: Inequality and Mobility in 18th Century Murcia
Espín-Sanchez, Jose-Antonio (Yale University)
January 9, 2017

Asset Price Bubbles and Monetary Policy in a New Keynesian Model with Overlapping Generations
Gali, Jordi (CREI Barcelona)

Electoral Competition with Rationally Inattentive Voters
Mateja, Filip (Charles University Prague)
January 12, 2017

Browsing versus Studying Offers
Kisseg, Botond (Central European University Budapest)
January 26, 2017

Suspicously Timed Trade Disputes
Kirchsteiger, Georg (Free University Bruxelles)
January 26, 2017

Design of optimal corrective taxes in the alcohol market
Griffith, Rachel (University of Manchester)
March 9, 2017

A model of focusing in political choice
Nunnari, Salvatore (University of Bocconi)
March 23, 2017

Unemployment fluctuations, match quality, and the wage cyclicality of new hires
Trigari, Antonella (University of Bocconi)
March 30, 2017

Communication among shareholders
Antic, Nemanja (Northwestern University, Kellogg School)
April 6, 2017

Reputation management and assessment in the lab
Visser, Bäueke (Erasmus University Rotterdam)
May 4, 2017

Adverse selection, efficiency and the structure of information with application to labour market
Bar-Isaac, Heski (University of Toronto)
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Self-employment, paid employment and unemployment over the business cycle
Vischers, Ludo (University of Edinburgh)
May 18, 2017

Land Mines and Spatial Development
Papaioannou, Elias (London Business School)
June 1, 2017

Marketing Agencies and Collusive Bidding in Online Ad Auctions
Decarolis, Francesco (Einaudi Institute Rome)
June 8, 2017

Optimal Dynamic Matching
Yeat, Looat (Caltech University)
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The Margins of Global Sourcing: Theory and Evidence from U.S. Firms
Antras, Pet (Harvard University)
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Financial markets with hedging complements
Chateauneuf, Alain (Université Paris 1)
October 5, 2017

Overpersistence bias in individual income expectations and its aggregate implications
Rozsypal, Filip (Danmarks Nationalbank)
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Ambiguous policy announcements
Michelacci, Claudio (Einaudi Institute for Economics and Finance)
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Fiscal policy with an informal sector
Dellas, Harris (University of Bern)
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Structural Estimation of a Model of School Choices: the Boston Mechanism vs. its Alternatives
Calsamiglia, Caterina (Institute of Political Economy and Governance Barcelona)
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Harsh or Humane? Detention Conditions and Recidivism
Terlizzese, Daniele (Einaudi Institute for Economics and Finance)
November 23, 2017

Strategic sample selection
Sörensen, Peter (University of Copenhagen)
November 30, 2017

On strategic complementarities in discontinuous games
(5 Vienna Joint Economics Seminar)
Prokopovych, Pablo (Kyiv School of Economics)
December 7, 2017

Expertise vs. unanimity, anonymity vs. linearity: News from probabilistic opinion pooling
Herzberg, Frederik S. (University of Bielefeld)
December 14, 2017

ISOR Colloquium
Facility location with Bernoulli demands: optimization models and solution procedures
da Gama, Francisco (University of Lisbon)
October 2, 2017

Quality Preserving Databases: Statistically Sound and Efficient Use of Public Databases for an Infinite Sequence of Tests
Rosset, Saharan (Tel Aviv University)
October 9, 2017

Asymptotic theory of M-estimators for multiple linear regression in time series
Nielsen, Bent (University of Oxford)
October 16, 2017

The max-cut-polytope and its set-completely-positive representations
Jarre, Florian (University of Düsseldorf)
October 23, 2017

Optimal hedging with the cointegrated vector autoregressive model allowing for heteroscedastic errors
Kock, Anders Bredahl (Aarhus University)
October 30, 2017

Strategic Bidding for a Price-Maker Hydroelectric Producer
Rebenack, Steffen (Colorado School of Mines)
November 13, 2017

Probabilistic Constraints in infinite dimensions
Henrion, René (Vienna Business Administration)
November 16, 2017

Unit Commitment under Market Equilibrium Constraints
Fortz, Bernard (Université Libre de Bruxelles)
November 20, 2017

Numerical methods for Mathematical Programs with Complementarity Constraint
Haddou, Mourin (Institut National des Sciences Appliquées de Rennes)
November 27, 2017

Extracting conditionally heteroscedastic components using ICA
Nordhausen, Klaus (Technische Universität Wien)
December 4, 2017

The Max-Cut problem: exact methods and heuristics based on quantum techniques
Rinaldi, Giovannna (Istituto di Analisi dei Sistemi e Informatica)
December 11, 2017

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December 11, 2017

Finance Research Seminar (VGSF)
Levered Returns and Capital Structure Imbalances
Ippolito, Filippo (Pompeu Fabra University)
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Zhang, Quan (Erasmus University Rotterdam)
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Mutual Funds in Equilibrium
Berk, Jonathan (Stanford University, Graduate School of Business)
March 10, 2017
Reach for Yield in Investment Funds
Mönch, Emanuel (Deutsche Bundesbank)
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Conventional-light Contracts and Creditor Coordination
Becker, Bo (Stockholm School of Economics)
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An Information-Theoretic Asset Pricing Model
Julliard, Christian (London School of Economics)
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Leverage Dynamics without Commitment
He, Zhigus (Chicago Booth)
April 28, 2017

Relative Pay for Non-Relative Performance Keeping up with the Joneses with Optimal Contracts
Kaniel, Ron (University of Rochester)
May 5, 2017

Voluntary Disclosure in Bilateral Transactions
Glode, Vincent (Wharton Business School)
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A Welfare Analysis of Segmented Liquidity Markets
Gümkel, Alexander (Toulouse School of Economics)
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Brexit and the Contraction of Syndicated Lending
Berg, Tobias (Frankfurt School of Finance and Management)
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Changes in the Cost of Bank Equity and the Supply of Bank Credit
Ongena, Steven (University of Zurich)
June 1, 2017

The End of the "Modern Corporation": Deregulation and Corporate Stomper, Alexander (Berlin's Humboldt University)
June 9, 2017

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Rampini, Adriano (Duke University)
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Equity Issuance Activity, and Corporate Capital Inflows
Calomiris, Charles (Columbia Business School)
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Portfolio Liquidity and Diversification: Theory and Evidence
Taylor, Luke (Wharton Business School)
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Generalized Recovery
Lando, David (Copenhagen Business School)
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Intermediation Variety
Thakor, Anjan (Olin Business School)
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Optimal Margins and Equilibrium Prices
Heider, Florian (European Central Bank)
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Credit, Labor, and Political Unrest: Evidence from 1930s China
Manconi, Alberto (Bocconi University)
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Systemic Risk and the Dynamics of Temporary Financial Networks
Zigrand, Jean-Pierre (London School of Economics)
December 15, 2017

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Leadership Effectiveness: Communication, Transparency, and Skin-in-the-Game
Boulu-Roshfouh, Bilatrice (University of Paris 1)
January 13, 2017

Responding to (Un)Reasonable Requests
Zizzo, Daniel John (Newcastle University)
January 13, 2017

Preordered Service in Contract Enforcement
Fonseca, Miguel (University of Exeter)
March 17, 2017

Strategic Uncertainty Aversion in Bargaining
Greiner, Ben (Wirtschaftsuniversität Wien)
March 17, 2017

Implementing Fair Procedures?
Trautmann, Stefan (University of Heidelberg & Tilburg University)
March 31, 2017

Multi-Dimensional Reasoning in Resource Allocation Games: Evidence from Intra-Team Communication
Arad, Ayala (Tel Aviv University)
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Culture, Compliance, and Confidentiality: Taxpayer Behavior in the United States and Italy
Alm, James (Tulane University)
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Measuring Multivariate Risk Preferences
van de Kuilen, Gijs (Tilburg University)
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Gender Differences in Tournament Choices: Risk Preferences, Overconfidence, or Competitiveness?
vandenhuizen, Roel (WZB Berlin)
June 5, 2017

The Attraction and Compromise Effects in Bargaining: Experimental Evidence
Poulsen, Anders (University of East Anglia)
June 9, 2017

Leveraging wage subsidies to facilitate fair wages and increase social welfare
Zultan, Ro’i (Ben-Gurion University Negev)
October 20, 2017

Social norms and preferences for redistribution
Vostroknutov, Alexander (University of Trento)
October 20, 2017

What motivates experts to contribute to public information goods? A field experiment on Wikipedia
Chen, Yan (University of Michigan)
November 6, 2017

Equilibrium Selection in Continuous-Time Games with Coupled Populations
Normann, Hans-Theo (University of Düsseldorf)
November 24, 2017

Estimating Time Preferences from Budget Set Choices
Imai, Taisuke (California Institute of Technology)
November 24, 2017

Fight or Flight?
van de Ven, Jeroen (University of Amsterdam)
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Negotiating Cooperation under Uncertainty: Communication in Noisy, Indefinitely Repeated Interactions
Dvorah, Fabian (University of Konstanz)
December 15, 2017

Corporate Profitability and Fairness
Ofir, Chezy (Hebrew University of Jerusalem)
November 30, 2017

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Competitive Strategy and Organization of RHI
Steiner, Reinhold (RHI AG)
January 13, 2017

Von Milch zu Whisky – Die Strategie zum Erfolg
Haidler-Stadler, Jasmin (Waldviertler WHISKY J.H.)
January 13, 2017

Privatissimum Marketing & Internationales Marketing

Influencers of e-WOM in Native Advertising: Focusing on Narrative Engagement
Choi, Yung Hyun (Dongguk University Seoul)
May 16, 2017

Linking internal marketing to customer satisfaction: Evidence from matured and maturing European markets
Kadić-Maglajlić, Selma (University of Sarajevo)
May 30, 2017

How Does Radical Design Innovation Emerge in the Periphery: The Co-Shaping of the Bauhaus
Flodoyarnnak, Emmanuela (Leeds University) (Business School)
June 1, 2017

The Einfluss des Alters auf das Konsumentenverhalten
Zniva, Robert (Wirtschaftsuniversität Wien)
June 26, 2017

Leverage for Technology for Academic Data Collection - Dynamic Network Analysis
Francu, Elena (Maastricht University)
October 23, 2017

Cluster-Strategy – Mechatronik Cluster OÖ
March 31, 2017

Competitive Advantage through Crowdfunding
Resch, Josef (Resch & Frisch)
January 20, 2017

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Research Achievements
Citation-Based Ranking

Table 2 provides a citation analysis for our tenured faculty (n = 48) based on Thompson Reuters Web of Science (WoS). This database was used in the annual report of 2016 (and therefore eases comparisons) and is also used by the quality assurance of the university.

Citations-based measures of research impact (Web of Science) — Table 2

<table>
<thead>
<tr>
<th>Total number of citations</th>
<th>Hirsch Index h</th>
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</thead>
<tbody>
<tr>
<td>Number of citations</td>
<td>Percentage of Faculty members</td>
</tr>
<tr>
<td>0-50</td>
<td>17%</td>
</tr>
<tr>
<td>51-100</td>
<td>10%</td>
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<tr>
<td>101-300</td>
<td>27%</td>
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<tr>
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<td>501-1,000</td>
<td>23%</td>
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<td>&gt; 1,000</td>
<td>13%</td>
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</tbody>
</table>

Distribution of citations

<table>
<thead>
<tr>
<th>Number of citations</th>
<th>Percentage of Faculty members</th>
<th>A-index</th>
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</thead>
<tbody>
<tr>
<td>0-50</td>
<td>17%</td>
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<tr>
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<td>&gt; 1,000</td>
<td>13%</td>
<td>&gt; 20</td>
</tr>
</tbody>
</table>

Table 2: The upper panel of the table shows the total number of citations and Hirsch indexes according to Web of Science as of April 2018. The lower panel of the table gives the names of the Faculty members who rank first according these metrics. In case of Faculty members achieving the same scores, we rank those with lower age higher.