

## 26th Annual Meeting of the German Finance Association (DGF)

### University of Duisburg-Essen September 27 - 28, 2019







Offen im Denken

Ladies and Gentlemen,

It is our pleasure to welcome you to the 26th Annual Meeting of the German Finance Association (DGF) ate the University-Duisburg Essen.

The goal of the conference is to bring together researchers and practitioners to discuss the latest theoretical and empirical research from all areas of finance, banking, and insurance. In addition, there will be a special session on energy finance. We are very pleased that Bob Litterman, Chairman of the Risk Committee and a founding partner at Kepos Capital, will deliver the keynote speech.

This conference would not have been possible without the support and help of various individuals and institutions. In particular, we thank Wissenschaftsförderung der Sparkassen-Finanzgruppe, Deloitte Analytics, EEX Group, FORRS Partners, PricewaterhouseCoopers, Rivacon and Uniper for their generous support. A special applause also goes to our colleague Bernd Rolfes for performing with his band during (and after) the dinner.

We hope you enjoy this exciting conference and your stay in Essen, the Energy Capital of Germany!

Best wishes,

Rüdiger Kiesel Ansgar Belke Heiko Jacobs

Christoph Weber

Florian Ziel

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### Contents

Information	4
General Information	4
Sightseeing in and around Essen	8
Wifi Configuration 1	0
Program Overview 1	2
Abstracts 2	6
Sessions A	6
Sessions B 3	8
Sessions C	0
Keynote Speech 6	
Sessions D 6	4
Sessions E	6
Acknowledgements 8	8
Maps 10	4

This conference is organized by the Chair of Energy Trading and Finance at the University of Duisburg-Essen and supported by the German Finance Association (DGF).

#### Sponsors

Deloitte Analytics, EEX Group, FORRS Partners, PricewaterhouseCoopers, Rivacon, Uniper.

### Information

#### **General Information**

Conf. Venue	University of Duisburg-Essen Campus Essen Buildings S04 & S06 Universitätsstraße 2 45141 Essen
Program	A browsable version of the program can be found at https://www.conftool. com/dgf2019/index.php?page= browseSessions.
Get-together	The get-together at Haus der Technik (Hollestraße 1, 45127 Essen) takes place on September 26, 2019. The event starts at 04:00 pm and lasts until 08:00 pm. Participants can register here already.
Registration	Starting at 7:45 am on Friday, Sept. 27, 2019 in building S04.
Lunch	On Friday in S04. On Saturday in S06.
Guided Tour	Before the conference dinner, there will be an excursion to Zeche Zollverein including a guided tour "About Coal and Miners" ("Über Kohle und Kumpel"). The tour will be offered in English and German. Time: 05:15 pm - 07:15 pm. For DGF members attending the General Meeting the tour times are 06:00 pm - 07:15 pm. Meeting Point: Forum in front of the Kohlenwäsche, A14

**Conference Dinner** The Conference Dinner will take place on September 27, 2019 at Casino Zollverein (Gelsenkirchener Str. 181, 45309 Essen ) at 07:15 pm.

**Bus Transfer** Busses towards Zeche Zollverein will depart from outside S06 at 4:30 pm or 5:15 pm depending on whether or not you attend the general meeting.

- **Internet** eduroam is available. For guests without an eduroam account, there is a guide on how to connect to the wifi on page 8.
- Contact University of Duisburg-Essen Chair for Energy Trading and Finance 45141 Essen, Germany Email: dgf2019 (at) wiwinf.uni-due.de Website: https://www.dgf2019.wiwi. uni-due.de/home/
- **Parking** On Thursday, parking around Haus der Technik will be very limited and costly. We recommend using public transport or walking there.

On Friday, we recommend using the university's central parking lot which is located next to the conference venue and can be accessed from Reckhammerweg or Segerothstraße.

On Saturday, it is advisable to park on or near Universitätsstraße as the central parking lot will be occupied by a flea market. **Public Transport** If you are travelling to Essen by train, it is best to use the public transportation system to get to the conference venue. If you come from Essen main station, we recommend you take the underground lines U11 or U17 since the underground station **Universität Essen** is located right next to the conference venue. At the station, take exit A towards the university and follow the signs.

Alternatively, one may arrive at **Rheinischer Platz** via one of the tram lines 101/106, 103, 105 or 109. Take the exit "Universität" when you reach the upper level and follow the map on the back cover of this booklet.

One may also take one of the bus lines 166 or SB16 to Universität Essen or bus lines 145 or 196 to Rheinischer Platz.

- **Fares** The tariff zone for Essen is A3. Single tickets cost 2,90 EUR. Short distance tickets ("Kurzstrecke") cost 1,70 EUR and are an option if you travel 3 stations or less without changing lines. Valid for bus, tram and underground. Buy this ticket if you take U11 or U17 from Essen main station to Universität Essen with no prior connections.
- **Taxi Essen** Phone number: +49 201 8 66 55.

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### Sightseeing in and around Essen

Zeche Zollverein	The Zollverein Coal Mine Industrial Complex is a large former industrial site which has been inscribed into the UNESCO list of World Heritage Sites since 2001. The coal mine and the coking plant ranked among the largest of their kinds when they were built. Shaft 12, built in the New Objectivity style, was opened in 1932 and is considered an architectural and technical masterpiece, earning it a reputation as the "most beautiful coal mine in the world". In our guided tour at Zeche Zollverein, we will only discover a small part of the site. Many more museums such as the Red Dot Museum or the coking plant are well worth a visit.	
Museum Folkwang	One of the leading museums for modern art in Germany, this free museum displays paintings and sculptures from many world famous artists.	

Villa Hügel	This 19th-century mansion was built by industrialist Alfred Krupp as the main residence of the famous Krupp family in 1870. Innovating modern amenities such as forced-air heating, Villa Hügel remains a marvel of both architecture and engineering.	
Gasometer Oberhausen	Once Europe's largest gasometer, this industrial site has been repurposed as an event location and is known for the view from the top of the building. The current exhibition "The Call of the Mountains" includes hundreds of spectacular panorama photographs and a giant sculpture of the Matterhorn.	
Landschaftspark Duisburg-Nord	This former steel production plant has been redesigned into a park combining nature and industrial culture. An inactive blast furnace can be climbed.	

#### Wifi Configuration

Should you still have internet access, you can browse this website (in German) https://www.uni-due.de/zim/services/wlan/eduroam-konfiguration.php to find out the easiest way to set up wifi on your mobile device. In particular, for non-Android users it is recommended to use this tool provided at https://cat.eduroam.org/?idp=5016 to configure your eduroam for you automatically. For Android users, the manual configuration is quicker than using the tool.

The tool is available for Windows 10, Windows 8, Windows 7, Windows Vista, Android 4.3+ (easier to do manually), Apple Mac OS X 10.7+, Apple iOS Mobile and Linux.

#### **Manual Configuration**

You can configure eduroam manually on all devices without having to install additional software. The generic configuration data are given below:

EAP Method	PEAP or TTLS	
Inner/Phase 2 Authentificiation	MSCHAPv2	
CA Certificate	Use the device's default certificate if available or "T-Telesec Global Root Class 2" which can be installed from https://www.pki. dfn.de/fileadmin/PKI/ zertifikate/T-TeleSec_ GlobalRoot_Class_2.crt. The wifi configuration will work without a certificate, but you should not do so for security reasons.	

(Inner) Identity	wlan103@uni-due.de
<b>Outer/Anonymous Identity</b>	eduroam@uni-due.de
Radius Server	radius1. uni-duisburg-essen.de
Password	essen_dgf19

#### **Known Issues**

#### Android

- In order to load the certificate, the device must have a PIN or unlock code set.
- If you use default certificates, it might happen that the configuration can not be altered anymore. In this case, delete the network configurations and start anew.

#### iPhone

• Download the CAT tool only using the default Safari Browser.

# RIVACON

#### **Program Overview**

Thursday, September 26, 2019

09:00 am – 05:00 pm: Doctoral workshop
Campus Essen, Gästehaus
04:00 pm – 08:00 pm: Get-together, Reception and Registration
Haus der Technik, Hollestraße 1, 45127 Essen

#### Friday, September 27, 2019

07:45 am – 04:00 pm: Registration
Campus Essen, Building S04
08:15 am – 08:30 am: Conference Opening
Campus Essen, Building S04

**08:45 am – 10:15 am: Sessions A** Campus Essen, Building S06

**10:15 am – 10:45 am: Coffee Break** Campus Essen, Building S06

**10:45 am – 12:15 pm: Sessions B** Campus Essen, Building S06

**12:15 pm – 01:15 pm: Lunch and Poster Session** Campus Essen, Building S04

**01:15 pm – 02:45 pm: Sessions C** Campus Essen, Building S06

**02:45 pm – 03:15 pm: Coffee Break** Campus Essen, Building S06

**03:15 am – 04:15 pm: Keynote Speech** Campus Essen, Building S04 For Regular Conference Participants

**04:30 pm – 05:00 pm: Bus Transfer to Zeche Zollverein** Campus Essen, Parking lot outside S06

**05:15 pm – 07:15 pm: Guided Tour** Zeche Zollverein A14, Gelsenkirchener Str. 181, 45309 Essen

For DGF Members

**04:30 pm – 05:15 pm: DGF General Meeting** Campus Essen, Room S06 S00 B29

**05:15 pm – 05:45 pm: Bus Transfer to Zeche Zollverein** Campus Essen, Parking lot outside S06

**06:00 pm – 07:15 pm: Guided Tour** Zeche Zollverein A14, Gelsenkirchener Str. 181, 45309 Essen

For All Participants

**07:15 pm – 12:00 am: Conference Dinner** Casino Zollverein A9, Gelsenkirchener Str. 181, 45309 Essen

Saturday, September 28, 2019

**09:00 am – 10:30 am: Sessions D** Campus Essen, Building S06

**10:30 am – 11:00 am: Coffee Break** Campus Essen, Building S06

**11:00 am – 12:30 pm: Sessions E** Campus Essen, Building S06

**12:30 pm: Takeaway Lunch** Campus Essen, Building S06

A1: Empirical Asset Pricing I	A2: Corporate Finance I	A3: Financial Intermediation
Location: S06 S00 B29	Location: S06 S00 B32	Location: S06 S00 B41
Chair: Rasa Karapandza	Chair: Alexander Schandlbauer	Chair: Deyan Radev

#### 8:45am - 9:15am

#### Home-country media slant and equity prices

#### Benjamin Golez<sup>2</sup>, Rasa Karapandza<sup>1,3</sup>

1: EBS Business School. Germany; 2: University of Notredame: 3: New York University (Abu Dhabi Campus)

#### Discussant: Hannes

Mohrschladt (University of Münster)

#### 9:15am - 9:45am

#### The real-time impact of ECB press conferences on financial markets

#### Maxim Ulrich. Elmar Jakobs. **Richard Tran**

Karlsruhe Institute of Technology, Germany Discussant: Rasa Karapandza (EBS Business School and New York University)

#### 9:45am - 10:15am

#### The impact of recency effects on stock market prices

#### Hannes Mohrschladt

University of Münster, Germany Discussant: Elmar Jakobs (Karlsruhe Institute of Technology)

#### 8:45am - 9:15am

#### If at first you don't succeed... Contagion effects of (serially) defaulting board members in Switzerland

Matteo Garzoli<sup>1,2</sup>, Virginia Gianinazzi<sup>1,2</sup>, Eric Nowak<sup>1,2</sup>, Alberto Plazzi<sup>1,2</sup>

1: Swiss Finance Institute Switzerland: 2: Università della Svizzera italiana

Discussant: Manuel Christian Kathan (University of Hohenheim)

#### 9:15am - 9:45am

#### Are private equity investments bad news for peers?

Manuel Christian Kathan, Tereza Tykvová University of Hohenheim. Germany Discussant: Alexander Schandlbauer (University of Southern Denmark)

#### 9:45am - 10:15am

#### The impact of competition and time-tofinance on corporate cash holdings

Alexander Schandlbauer<sup>1</sup>, Mark Raun Moritzen<sup>2</sup> 1: University of Southern Denmark, Denmark; 2: Bain & Company Discussant: Michael Goedde-Menke (University of Münster)

#### 8:45am - 9:15am

#### Firm-level employment, labour market reforms. and bank distress

#### Moritz Stieglitz<sup>1</sup>, Ralph Setzer<sup>2</sup>

1: Halle Institute for Economic Research, Germany; 2: European Central Bank. Germanv Discussant: Devan Radev

(University of Bonn)

#### 9:15am - 9:45am

#### The employment effect of municipal credit market disruptions: evidence from idiosyncratic bankruptcy filings

Daniel Bias, Lisa Knauer Technical University Munich, Germany

Discussant: Moritz Stieglitz (Halle Institute for Economic Research)

#### 9:45am - 10:15am

#### Bank resolution regimes and systemic risk

Thorsten Beck<sup>2</sup>, Deyan Radev<sup>1</sup>, Isabel Schnabel<sup>1</sup> 1: University of Bonn, Germany; 2: Cass Business School, United Kingdom Discussant: Daniel Bias (Technical University Munich) A4: Behavioral Finance I Location: S06 S02 B06 Chair: Johannes Voget

#### 8:45am - 9:15am

### An alternative behavioral explanation for the MAX effect

Maren Baars, Hannes Mohrschladt University of Münster,

Germany Discussant: Fabian Gamm (University of Mannheim)

#### 9:15am - 9:45am

### Tax effects on the trading behavior of individual investors

Florian Buhlmann<sup>3</sup>, Philipp Doerrenberg<sup>2</sup>, Benjamin Loos<sup>1</sup>, <u>Johannes Voget<sup>2</sup></u>

1: UTS, Australia; 2: University of Mannheim; 3: ZEW *Discussant:* Maren Baars (University of Münster)

#### 9:45am - 10:15am

#### A surprise that keeps you awake: overnight returns after earnings announcements

<u>Fabian Gamm</u> University of Mannheim, Germany Discussant: Johannes Voget (University of Mannheim) A5: Corporate Governance I Location: S06 S01 B38 Chair: Peter Limbach

#### 8:45am - 9:15am

#### Corporate compliance systems - the effect on risk, performance and firm value

Christina Bannier, Anastasia Bauer, <u>Yannik Bofinger,</u> Corinna Ewelt-Knauer

Justus-Liebig University of Giessen, Germany Discussant: Nils-Christian Bobenhausen (RWTH Aachen University)

#### 9:15am - 9:45am

### Trust and shareholder voting

Simon Lesmeister<sup>1,2</sup>, <u>Peter</u> <u>Limbach</u><sup>1,2</sup>, Marc Goergen<sup>3,4</sup> 1: University of Cologne, Germany; 2: Centre for

Financial Research (CFR); 3: IE Business School Madrid; 4: ECGI

Discussant: Yannik Bofinger (Justus-Liebig University of Giessen)

#### 9:45am - 10:15am

#### Share repurchases, undervaluation, and corporate social responsibility

Nils-Christian Bobenhausen, Andreas Knetsch, Astrid Salzmann RWTH Aachen University, Germany Discussant: Peter Limbach (University of Cologne and Centre for Financial Research (CFR)) A6: Derivatives I Location: S06 S01 B35 Chair: Olaf Korn

#### 8:45am - 9:15am

#### A new look at the lowvolatility effect in stock options

### Olaf Korn<sup>1</sup>, <u>Niklas Trappe</u><sup>2</sup>, David Volkmann<sup>3</sup>

1: University of Göttingen, Germany, Centre for Financial Research Cologne (CFR); 2: University of Göttingen, Germany, Macquarie University, Sydney, Australia, Capital Markets Cooperative Research Centre (CMCRC); 3: University of Göttingen *Discussant:* Yannick Dillschneider (Goethe University Frankfurt)

#### 9:15am - 9:45am

#### The fed call: FOMC announcement and stock market uncertainty

Heiner Beckmeyer, Nicole Branger, <u>Thomas Grünthaler</u> University of Münster, Germany *Discussant:* Niklas Trappe (University of Göttingen)

#### 9:45am - 10:15am

Functional Ross recovery: theoretical results and empirical tests

Yannick Dillschneider, Raimond Maurer Goethe University Frankfurt, Germany Discussant: Thomas Grünthaler (University of Münster)

#### B1: Empirical Asset Pricing II Location: S06 S00 B29 Chair: Christian Schlag

#### 10:45am - 11:15am

#### Elephants and the Cross-Section of Expected Returns

#### Nora Laurinaityte<sup>1</sup>, Christoph Meinerding<sup>2</sup>, <u>Christian Schlag</u><sup>1,3</sup>, Julian Thimme<sup>3</sup>

1: Research Center SAFE; 2: Deutsche Bundesbank; 3: Goethe University Frankfurt, Germany Discussant: **Frederik** 

**Middelhoff** (University of Münster)

#### 11:15am - 11:45am

Overnight returns, daytime reversals, and future stock returns: The risk of investing in a tug of war with noise traders

#### Ferhat Akbas<sup>1</sup>, <u>Ekkehart</u> <u>Boehmer</u><sup>2</sup>, Jiang Chao<sup>3</sup>, Paul Koch<sup>4</sup>

1: University of Illinois at Chicago, College of Business Administration; 2: Singapore Management University, Singapore; 3: University of South Carolina, Darla Moore School of Business; 4: Iowa State University, Ivy College of Business

Discussant: Christian Schlag (Goethe University Frankfurt and Research Center SAFE)

#### 11:45am - 12:15pm

#### The pricing of market and idiosyncratic jump and volatility risks

Frederik Middelhoff University of Münster, Germany Discussant: Ekkehart Boehmer (Singapore Management University) B2: Corporate Finance II Location: S06 S00 B32 Chair: Ralf Elsas

#### 10:45am - 11:15am

#### Institutional investor horizon and firm valuation around the world

<u>Simon Döring</u><sup>1</sup>, Wolfgang Drobetz<sup>1</sup>, Sadok El Ghoul<sup>2</sup>, Omrane Guedhami<sup>3</sup>, Henning Schröder<sup>1</sup>

1: University of Hamburg, Germany; 2: University of Alberta, Edmonton, Canada; 3: University of South Carolina, Columbia, USA *Discussant:* **Tereza Tykvová** (Hohenheim University)

#### 11:15am - 11:45am

#### Single firm / single eventanalyses: robust inference in litigation

Ralf Elsas, Daniela Stephanie Schoch Ludwig Maximilian University Munich, Germany Discussant: Simon Döring (University of Hamburg)

#### 11:45am - 12:15pm

### Connected VCs and strategic alliances

#### Leonhard Brinster, <u>Tereza</u> <u>Tykvová</u>

University of Hohenheim, Germany Discussant: Ralf Elsas (Munich School of Mangememt LMU) B3: Theoretical Asset Pricing Location: S06 S00 B41 Chair: Jochen Lawrenz

#### 10:45am - 11:15am

### The decline of too big to fail

Antie Berndt<sup>1</sup>, Darrell Duffie<sup>2</sup>, Yichao Zhu<sup>1</sup> 1: Australian National University, Australia; 2: Stanford University Discussant: Marcel Fischer (University of Konstanz, Copenhagen Business School)

#### 11:15am - 11:45am

#### Institutional Investors and the Time-Variation in expected Stock Returns

#### Rüdiger Weber

University of Michigan, United States of America *Discussant:* **Jochen Lawrenz** (University of Innsbruck)

#### 11:45am - 12:15pm

### Economic growth and the debt tax shield

<u>Marcel Fischer</u><sup>1,2</sup>, Bjarne Astrup Jensen<sup>2</sup>

1: University of Konstanz, Germany; 2: Copenhagen Business School, Denmark Discussant: **Rüdiger Weber** (WU Vienna)

#### B4: Behavioral Finance II Location: S06 S02 B06 Chair: Alexander Klos

#### 10:45am - 11:15am

### Cultural biases in equity analysis

#### Vesa Pursiainen

Imperial College London and University of Hong Kong, United Kingdom Discussant: **Thuy Duong Dang** (Leibniz University Hannover)

#### 11:15am - 11:45am

#### Streaks in daily returns

#### <u>Alexander Klos</u><sup>1</sup>, Alexandra Koehl<sup>1</sup>, Simon Rottke<sup>2</sup>

1: Kiel University; 2: University of Amsterdam

Discussant: Vesa Pursiainen (Imperial College London and University of Hong Kong)

#### 11:45am - 12:15pm

#### How do bond investors measure performance? Evidence from mutual fund flows

#### <u>Thuy Duong Dang</u><sup>1</sup>, Fabian Hollstein<sup>1</sup>, Marcel Prokopczuk<sup>1,2</sup>

1: Leibniz University Hannover, Germany; 2: University of Reading *Discussant:* Alexander Klos (Kiel University) B5: Corporate Governance II Location: S06 S01 B38 Chair: Jens Martin

#### 10:45am - 11:15am

#### Do cross-border secondary buyouts hurt portfolio firms' operating performance?

#### <u>Jens Martin</u><sup>1</sup>, Nils Härtel Härtel<sup>2</sup>

1: University of Amsterdam, Netherlands, The; 2: HHL Leipzig Graduate School of Management

*Discussant:* **Shuo Xia** (Halle Institute for Economic Research)

#### 11:15am - 11:45am

#### Takeovers, shareholder litigation, and the freeriding problem

#### Mark Broere, Robin Christmann

Leibniz FH School of Business, Germany Discussant: Jens Martin (University of Amsterdam)

#### 11:45am - 12:15pm

#### Selection versus incentives in incentive pay: evidence from a matching model

#### Shuo Xia Halle Institute for Economic Research, Germany Discussant: Mark Peter Broere (Leibniz FH School of Business)

B6: Market Microstructure Location: S06 S01 B35 Chair: Erik Theissen

#### 10:45am - 11:15am

#### **OTC Discount**

Calebe de Roure<sup>1</sup>, Emanuel Moench<sup>2,3,4</sup>, Loriana Pelizzon<sup>3,5,6</sup>, <u>Michael</u> <u>Schneider<sup>2,3</sup></u>

1: Reserve Bank of Australia; 2: Deutsche Bundesbank; 3: Goethe University Frankfurt; 4: CEPR; 5: SAFE; 6: Ca' Foscari University of Venice *Discussant:* **Philipp Schuster** (Karlsruhe Institute of Technology)

#### 11:15am - 11:45am

#### High frequency trading, broker sophistication, and institutional execution costs

#### Satchit Sagade<sup>3,4</sup>, <u>Stefan</u> <u>Scharnowski<sup>2,4</sup>, Christian</u> Westheide<sup>1,4</sup>

1: University of Vienna, Austria; 2: University of Mannheim; 3: Goethe University; 4: Research Center SAFE

*Discussant:* **Michael Schneider** (Deutsche Bundesbank)

#### 11:45am - 12:15pm

A tale of two cities - intermarket latency, market integration, and market quality

Satchit Sagade<sup>3,4</sup>, Stefan Scharnowski<sup>2,4</sup>, Erik Theissen<sup>2</sup>, <u>Christian</u> <u>Westheide<sup>1,4</sup></u>

1: University of Vienna; 2: University of Mannheim; 3: Goethe University; 4: Research Center SAFE Discussant: Matthias Muck (University of Bamberg)

#### C1: Empirical Asset Pricing III Location: S06 S00 B29

Chair: Nicole Branger

#### 1:15pm - 1:45pm

### Forecasting the equity premium: mind the news!

#### <u>Philipp Adämmer</u><sup>1</sup>, Rainer Alexander Schüssler<sup>2</sup>

1: Helmut Schmidt University of Hamburg; 2: University of Rostock

Discussant: Philippe Oster (The Lucerne University of Applied Sciences and Arts)

#### 1:45pm - 2:15pm

#### Jumps and the correlation risk premium: Evidence from equity options

Nicole Branger, <u>René Marian</u> <u>Flacke</u>, Frederik Middelhoff University of Münster, Germany

Discussant: Philipp Adämmer (Helmut Schmidt University)

#### 2:15pm - 2:45pm

#### The bankers' new corset: Impact of Maximum Distributable Amount on AT1 CoCo bond spreads

Axel Kind<sup>1</sup>, <u>Philippe Oster</u><sup>2</sup>, Franziska J. Peter<sup>3</sup>

1: University of Konstanz, Germany; 2: The Lucerne University of Applied Sciences and Arts, Switzerland; 3: Zeppelin University Friedrichshafen, Germany *Discussant:* **René Marian Flacke** (University of Münster) C2: Corporate Finance III Location: S06 S00 B32 Chair: Pia Helbing

#### 1:15pm - 1:45pm

#### Bank competition for wholesale funding: Evidence from corporate deposits

Inaki Aldasoro<sup>2</sup>, Florian Balke<sup>1</sup>, <u>Andreas Barth</u><sup>1</sup>, Egemen Eren<sup>2</sup>

1: Goethe University, Germany; 2: BIS, Basel Discussant: Carsten Bienz (Norwegian School of Economics)

#### 1:45pm - 2:15pm

#### Sell or Die: What happens to firms after they withdraw from the IPO?

Pia Helbing<sup>1</sup>, Brian M. Lucey<sup>2</sup>, Samuel A. Vigne<sup>2</sup> 1: University of Leeds, United Kingdom; 2: Trinity College Dublin

Discussant: Andreas Barth (Goethe University Frankfurt and SAFE)

#### 2:15pm - 2:45pm

#### Skin in the game, wealth and risk-taking: evidence from private equity funds

Carsten Bienz<sup>1</sup>, Karin Thorburn<sup>1</sup>, Uwe Walz<sup>2</sup> 1: Norwegian School of Economics, Norway; 2: Goethe University, Frankfurt *Discussant:* Pia Helbing (University of Leeds) C3: Econophysics Location: S06 S00 B41 Chair: Thomas Guhr

#### 1:15pm - 1:45pm

How market nanostructure and macrostructure shape market microstructure

Damien Challet CentraleSupélec, France

#### 1:45pm - 2:15pm

### Market impact and slippage costs of large trades

<u>Fabrizio Lillo</u> Scuola Normale Superiore, Italy

#### 2:15pm - 2:45pm

### Will a large economy be stable?

<u>José Morán</u> Ecole polytechnique, France

#### C4: Risk Management I Location: S06 S02 B06 Chair: Christoph J Börner

#### 1:15pm - 1:45pm

# Tail models and the statistical limit of accuracy in risk assessment

#### Christoph J Börner, Ingo Hoffmann

Heinrich-Heine-Universitaet Duesseldorf, Germany Discussant: Sascha Offermann (University of Duisburg-Essen)

#### 1:45pm - 2:15pm

#### Validity of interest rate risk measures in stress scenarios - a simulation approach

Catharina Claußen, <u>Daniel</u> <u>Platte</u> University of Münster, Germany

Discussant: Christoph J Börner (Heinrich-Heine-Universitaet Duesseldorf)

#### 2:15pm - 2:45pm

#### Participating life insurance contracts with periodic premium payments

Antje Mahayni, <u>Katharina</u> <u>Stein</u>, Sascha Offermann University of Duisburg-Essen, Germany

Discussant: Daniel Platte (University of Münster)

C5: International Finance Location: S06 S01 B38 Chair: Kartik Anand

#### 1:15pm - 1:45pm

#### Sovereign issuers, incentives and liquidity: an event study of the Danish sovereign bond market

#### <u>Christian Ochs</u><sup>1</sup>, Alexander Eisl<sup>1</sup>, Jonas Staghoj<sup>2</sup>, Marti G. Subrahmanyam<sup>3</sup>

1: WU (Vienna University of Economics and Business), Austria; 2: Danmarks Nationalbank; 3: NYU Stern School of Business *Discussant:* Kartik Anand (Deutsche Bundesbank)

#### 1:45pm - 2:15pm

#### Did China's anticorruption campaign affect the risk premium on stocks of global luxury goods firms?

#### Thomas Nitschka Swiss National Bank, Switzerland Discussant: Christian Ochs (WU (Vienna University of Economics and Business))

#### 2:15pm - 2:45pm

### Sovereign risk and bank fragility

#### <u>Kartik Anand</u><sup>1</sup>, Jochen Mankart<sup>2</sup>

1: Deutsche Bundesbank; 2: Deutsche Bundesbank *Discussant:* Thomas Nitschka (Swiss National Bank)

#### C6: Household Finance Location: S06 S01 B35 Chair: Markku Kaustia

#### 1:15pm - 1:45pm

#### Learning without Trading

#### <u>Markku Kaustia</u><sup>1</sup>, Nic Schaub<sup>2</sup>, Markus Schmid<sup>3</sup>

1: Aalto University School of Business, Finland; 2: WHU – Otto Beisheim School of Management, Germany; 3: University of St. Gallen, Switzerland

Discussant: **Steffen Meyer** (University of Southern Denmark (SDU), Danish Finance Institute)

#### 1:45pm - 2:15pm

#### The consumption effects of the disposition to sell winners and hold on to losers

Benjamin Loss³, <u>Steffen</u> <u>Meyer</u>¹, Michaela Pagel²

1: University of Southern Denmark (SDU), Danish Finance Institute, Denmark; 2: Columbia Business School, NBER, and CEPR; 3: University of Technology Sydney Discussant: Antonia

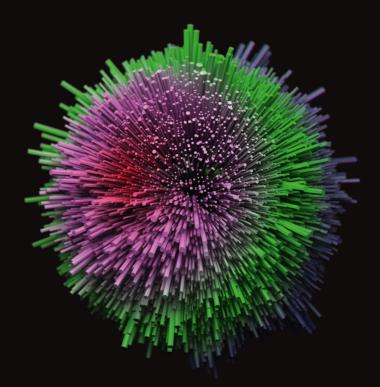
Grohmann (DIW Berlin)

#### 2:15pm - 2:45pm

#### Earn more tomorrow: Overconfident income expectations and consumer indebtedness

Antonia Grohmann<sup>1</sup>, Lukas Menkhoff<sup>1,3</sup>, Christoph Merkle<sup>2</sup>, Renke Schmacker<sup>1</sup> 1: DIW Berlin, Germany; 2: Kühne Logistics University; 3: Humboldt University Berlin Discussant: Markku Kaustia (Aalto University)

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#### **Keynote Presentation**

### Pricing climate risk: Sustainability and the risk of rapid transition

*Bob Litterman, Kepos Capital LP* Friday, September 27, 2019, 03:15 pm, Building S04, Audimax

Bob Litterman is the Chairman of Risk Committee and Advisory Panel. Prior to joining Kepos Capital in 2010, Bob enjoyed a 23-year career at Goldman, Sachs & Co., where he served in research, risk management, investments and thought leadership roles. He oversaw the Quantitative Investment Strategies Group, a portfolio management business formerly known as the Quantitative Equities and Quantitative Strategies groups, and Global Investment Strategies, an institutional investment research group. While at Goldman, Bob also spent six years as one of three external advisors to Singapore's Government Investment Corporation (GIC). Bob was named a partner of Goldman Sachs in 1994 and became head of the firm-wide risk function; prior to that role, he was co-head of the Fixed Income Research and Model Development Group with Fischer Black. During his tenure at Goldman, Bob researched and published a number of groundbreaking papers in asset allocation and risk management. He is the co-developer of the Black-Litterman Global Asset Allocation Model, a key tool in investment management, and has co-authored books including The Practice of Risk Management and Modern Investment Management: An Equilibrium Approach (Wiley & Co.). Bob earned a Ph.D. in Economics from the University of Minnesota and a B.S. in Human Biology from Stanford University. He is also the inaugural recipient of the S. Donald Sussman Fellowship at MIT's Sloan School of Management and serves on a number of boards, including Commonfund, Robert Wood Johnson Foundation, the Sloan Foundation, and World Wildlife Fund.

#### D1: Empirical Asset Pricing IV

Chair: Matthias Muck

#### 9:00am - 9:30am

#### A macro-finance term structure model for bond and dividend discount rates

Stephan Florig, <u>Maxim</u> <u>Ulrich</u>, Sven Schoemer Karlsruhe Insitute of Technology, Germany *Discussant:* Hannes Mohrschladt (University of Münster)

#### 9:30am - 10:00am

Should investors consider the sentiment of online discussions? An analysis of the link between fundamental information, social media sentiment, and the stock market

Sebastian Klamer, Brigitte Eierle, Matthias Muck University of Bamberg, Germany Discussant: Maxim Ulrich (KIT)

#### 10:00am - 10:30am

The information content of ITM-options for riskneutral skewness and informed trading

Hannes Mohrschladt, Judith C. Schneider University of Münster, Germany Discussant: Sebastian Klamer (University of Bamberg) D2: Central Banking I Location: S06 S00 B32 Chair: Thomas Kick

#### 9:00am - 9:30am

#### Capital regulation, market-making, and liquidity

#### Rainer Haselmann<sup>1</sup>, <u>Thomas</u> <u>Kick</u><sup>2</sup>, Shikhar Singla<sup>3</sup>, Vikrant Vig<sup>4</sup>

1: Goethe University and SAFE; 2: Deutsche Bundesbank; 3: London Business School; 4: London Business School *Discussant:* Christoph Sulewski (WWU Münster)

#### 9:30am - 10:00am

### Safe asset shortage and collateral reuse

Stephan Jank, Emanuel Moench Deutsche Bundesbank, Germany Discussant: Victoria Boehnke (University of Münster)

#### 10:00am - 10:30am

#### Information transmission under increasing political tension - Evidence for the Berlin Produce Exchange 1887-1896

Martin T. Bohl<sup>1</sup>, Alexander Pütz<sup>1</sup>, Pierre L. Siklos<sup>2</sup>, <u>Christoph Sulewski<sup>1</sup></u>

1: University of Münster, Germany; 2: Wilfrid Laurier University, Canada *Discussant:* **Stephan Jank** (Deutsche Bundesbank)

#### D3: Asset Management I Location: S06 S00 B41 Chair: Otto RandI

#### 9:00am - 9:30am

#### Equilibrium policy portfolios when some assets are non-tradable

#### <u>Otto Randl</u><sup>1</sup>, Arne Westerkamp<sup>2</sup>, Josef Zechner<sup>1</sup>

1: WU Vienna University of Economics and Business, Austria; 2: Spängler IQAM Research Center *Discussant:* Friedrich-Carl Franz (Goethe University)

#### 9:30am - 10:00am

### Active factor completion strategies

#### Hubert Dichtl<sup>1,2</sup>, Wolfgang Drobetz<sup>1</sup>, Harald Lohre<sup>3,4</sup>, <u>Carsten Rother<sup>1,3</sup></u>

1: University of Hamburg; 2: dichtl research & consulting; 3: Invesco; 4: EMP, Lancaster University Management School

Discussant: Otto Randl (WU Vienna University of Economics and Business)

#### 10:00am - 10:30am

### The index effect in the corporate bond market

#### Friedrich-Carl Franz

Goethe University, Germany Discussant: Carsten Rother (University of Hamburg & Invesco)

#### D4: Behavioral Finance III Location: S06 S02 B06 Chair: Peter Limbach

#### 9:00am - 9:30am

#### Till death (or divorce) do us part: Early-life family disruption and fund manager behavior

#### André Betzer<sup>1</sup>, <u>Peter</u> <u>Limbach</u><sup>2</sup>, P. Raghavendra Rau<sup>3</sup>, Henrik Schürmann<sup>1</sup>

1: University of Wuppertal, Germany; 2: University of Cologne and Centre for Financial Research (CFR), Germany; 3: University of Cambridge, UK *Discussant:* Henrik Cronqvist (University of Miami Business School)

#### 9:30am - 10:00am

#### Managerial overconfidence and access to funding: Do banks help managers to avoid investment mistakes?

#### Regina Opaleva, Falko Fecht

Frankfurt School of Finance and Management, Germany *Discussant:* **Peter Limbach** (University of Cologne and Centre for Financial Research (CFR))

#### 10:00am - 10:30am

#### Managerial Ambiguity and M&A Performance: less is more

#### **Desiree-Jessica Pely**

Ludwig-Maximilians-Universität München, Germany Discussant: **Regina Opaleva** (Frankfurt School of Finance and Management) D5: Digital Finance Location: S06 S01 B38 Chair: Lars Hornuf

#### 9:00am - 9:30am

#### Alternative facts in peerto-peer loans? Borrower misreporting dynamics and implications

#### Vesa Pursiainen

Imperial College London and University of Hong Kong, United Kingdom *Discussant:* **David Florysiak** (University of Southern Denmark)

#### 9:30am - 10:00am

#### How do banks interact with fintechs? Forms of alliances and their impact on bank value

Lars Hornuf<sup>1</sup>, Milan Frederik Klus<sup>2</sup>, Todor Stefan Lohwasser<sup>2</sup>, Armin Schwienbacher<sup>3</sup>

1: University of Bremen, Germany; 2: University of Münster, Germany; 3: SKEMA Business School, France *Discussant:* **Vesa Pursiainen** (Imperial College London and University of Hong Kong)

#### 10:00am - 10:30am

### The information content of ICO white papers

### David Florysiak<sup>1</sup>, Alexander Schandlbauer<sup>2</sup>

1: University of Southern Denmark, Germany; 2: University of Southern Denmark, Germany *Discussant:* Lars Hornuf (University of Bremen)

#### D6: Energy Finance I Location: S06 S01 B35 Chair: Robert Wichmann

#### 9:00am - 9:30am

### Financing conditions and toxic emissions

#### Martin Götz

Goethe Universität Frankfurt/Main, Germany *Discussant:* **Robert Wichmann** (University of Reading)

#### 9:30am - 10:00am

#### Fuel is pumping premiums: A consumption-based explanation of the value anomaly

### Robert Dittmar<sup>1</sup>, Christian Schlag<sup>2,3</sup>, <u>Julian Thimme</u><sup>2</sup>

1: Ross School of Business, University of Michigan; 2: Goethe University Frankfurt, Germany; 3: Research Center SAFE

Discussant: Martin Götz (Goethe Universität Frankfurt/Main)

#### 10:00am - 10:30am

### The natural gas announcement puzzle

Marcel Prokopczuk<sup>1,2</sup>, Chardin Wese Simen<sup>2</sup>, <u>Robert Wichmann<sup>2</sup></u>

1: School of Economics and Management, Leibniz University Hannover; 2: ICMA Centre, Henley Business School, University of Reading *Discussant:* Julian Thimme (Karlsruhe Institute of Technology) E1: Empirical Asset Pricing V Location: S06 S00 B29 Chair: Martin Hibbeln

#### 11:00am - 11:30am

### Seasonality in catastrophe bonds

#### <u>Markus Steffen Herrmann,</u> Martin Thomas Hibbeln

Universität Duisburg-Essen Discussant: Fabian Hollstein (Leibniz University Hannover)

#### 11:30am - 12:00pm

#### Tail risks and volatilityof-volatility

#### Thomas Grünthaler, Hendrik Hülsbusch University of Münster, Germany Discussant: Markus Steffen Herrmann (Universität Duisburg-Essen)

#### 12:00pm - 12:30pm

#### Anomalies in commodity futures markets: risk or mispricing?

<u>Fabian Hollstein</u><sup>1</sup>, Marcel Prokopczuk<sup>1,2</sup>, Björn Tharann<sup>1</sup>

1: Leibniz University Hannover, Germany; 2: University of Reading, UK Discussant: **Thomas Grünthaler** (University of Münster) E2: Central Banking II Location: S06 S00 B32 Chair: Ansgar Belke

#### 11:00am - 11:30am

Event studies, the random walk hypothesis and risk spreads: What role for central bank sovereign bond purchases in the euro area?

Ansgar Belke<sup>1</sup>, Daniel Gros<sup>2</sup> 1: University of Duisburg-Essen, Germany; 2: Centre of European Policy Studies, Brussels

*Discussant:* **Andrea Modena** (Ca' Foscari University of Venice)

#### 11:30am - 12:00pm

#### Backtesting expected shortfall via multiquantile regression

#### <u>Ophélie Couperier</u><sup>1</sup>, Jérémy Leymarie<sup>2</sup>

1: CREST - ENSAE, France; 2: LEO - University of Orléans, France Discussant: Ansgar Belke (University of Duisburg-Essen)

#### 12:00pm - 12:30pm

### Risk pooling, leverage, and the business cycle

Andrea Modena<sup>1</sup>, Pietro Dindo<sup>1</sup>, Loriana Pelizzon<sup>1,2</sup> 1: Ca' Foscari University of Venice, Italy; 2: SAFE HoF, Goethe University Frankfurt *Discussant:* **Ophélie Couperier** (CREST - ENSAE)

#### E3: Asset Management II Location: S06 S00 B41 Chair: Fabian Brunner

#### 11:00am - 11:30am

#### Board connections and bank trading returns

Markus Baltzer<sup>1</sup>, Erik Fernau<sup>2</sup>, <u>Esad Smajlbegovic<sup>3</sup></u> 1: Deutsche Bundesbank; 2: University of Mannheim; 3: Erasmus University Rotterdam *Discussant:* Fabian Brunner (University of Mannheim)

#### 11:30am - 12:00pm

#### Price, cultural dimensions, and the cross-section of expected stock returns

#### Ulrich Johannes Hammerich

University of Bremen, Germany Discussant: **Esad** 

Smajlbegovic (Erasmus University Rotterdam)

#### 12:00pm - 12:30pm

#### Reference-dependent return chasing: Alpha, gains and fund flows

#### Fabian Brunner

University of Mannheim, Germany

*Discussant:* **Ulrich Johannes Hammerich** (University of Bremen) E4: Risk Management II Location: S06 S02 B06 Chair: Rainer Alexander Schüssler

#### Digging into the black box of portfolio replenishment in securitization: Evidence from the ABS loan-level initiative.

Arved Fenner, <u>Philipp Klein</u>, Carina Mössinger University of Münster, Germany *Discussant:* Rainer Alexander Schüssler (University of Rostock)

# The impact of financial speculation on commodity prices - a meta-granger analysis

Jerome Geyer-Klingeberg, Marie Hütter, Andreas Rathgeber, Florian Schmid, <u>Thomas Wimmer</u> University of Augsburg,

Germany Discussant: Arved Fenner (University of Münster)

### Robust dynamic portfolio choice based on out-of-sample performance

Rainer Alexander Schüssler University of Rostock, Germany Discussant: Thomas Wimmer (University of Augsburg)

#### E5: Derivatives II Location: S06 S01 B38 Chair: Christian Koziol

#### 11:00am - 11:30am

### How does low for long impact credit risk premia?

#### <u>Antje Berndt</u><sup>1</sup>, Jean Helwege<sup>2</sup>

1: Australian National University, Australia; 2: University of California, Riverside

*Discussant:* **Gregor Helmut Schönemann** (University of Hohenheim)

#### 11:30am - 12:00pm

#### Does model complexity improve pricing accuracy? The case of cocos

<u>Christian Koziol</u>, Sebastian Weitz

Eberhard Karls University of Tuebingen, Germany *Discussant:* **Antje Berndt** (Australian National University)

#### 12:00pm - 12:30pm

#### The effect of central clearing on netting efficiency in the market for credit default swaps

Gregor Helmut Schönemann, Monika Gehde-Trapp University of Hohenheim, Germany Discussant: Christian Koziol (Eberhard Karls University of Tuebingen)

#### E6: Energy Finance II Location: S06 S01 B35 Chair: Florentina Paraschiv

#### 11:00am - 11:30am

#### Volatility and dispersion of hourly electricity contracts on the EPEX Spot continuous intraday market

<u>Michael Naumann</u>, Rainer Baule

University of Hagen, Germany Discussant: Julia Kapraun (Goethe University Frankfurt)

#### 11:30am - 12:00pm

#### Recovering distortion functions in power markets under model ambiguity

#### <u>Debora Daniela Escobar</u><sup>1</sup>, Florentina Paraschiv<sup>2</sup>, Michael Schürle<sup>3</sup>

1: Department of Statistics and OR, University of Vienna, Austria; 2: NTNU Business School, Norwegian University of Science and Technology, Norway; 3: Institute for Operations Research and Computational Finance, University of St. Gallen, Switzerland *Discussant:* **Michael Naumann** (University of Hagen)

#### 12:00pm - 12:30pm

#### (In)-credibly green: Which bonds trade at a green bond premium?

#### Julia Kapraun, Christopher Scheins Goethe University Frankfurt, Germany Discussant: Debora Daniela Escobar (University of Vienna)

### Abstracts

#### A1: Empirical Asset Pricing I

#### Home-country media slant and equity prices

Golez, Benjamin<sup>2</sup>; Karapandza, Rasa<sup>1,3</sup>
1: European Business School, Germany; 2: University of Notredame; 3: New York University (Abu Dhabi Campus)

We study the relation between national newspaper reporting and investor beliefs in the context of the automotive industry across the U.S., Germany, and Japan. Using large-scale hand-coded media data, we show that news about companies is systematically more positive in companies' home countries than abroad. Home-country media slant increases substantially during bad times for companies. Abnormally high home-media news tone predicts low monthly stock returns. Daily cross-country difference in news tone predicts price deviations of cross-listed stocks. The effects are strongest when news tends to confirm investor prior beliefs and weakest when investors are likely distracted by sports events.

### The real-time impact of ECB press conferences on financial markets

Ulrich, Maxim; Jakobs, Elmar; Tran, Richard Karlsruhe Institute of Technology, Germany

We present a new method to measure the real-time impact of central bank communication on financial markets using textual analysis tools and captions of the press conference webcasts. We apply it to the European Central Bank (which provides the longest history of videos) and find that the mean-reversion of the pre-ECB announcement drift is largely affected by negative economic news revealed in the introductory statement. On average we find a positive reaction of the stock market to the monetary policy decision which is mainly driven by the announcement of the ECB's non-standard monetary policy measures. These findings are especially pronounced for the banking and insurance sector as well as the GIIPS countries of our sample. Overall, we interpret these findings as reflecting the course of the European sovereign debt crisis and the supporting actions by the ECB.

#### The impact of recency effects on stock market prices

Mohrschladt, Hannes University of Münster, Germany

Experimental evidence shows that recent observations have a stronger impact on the formation of beliefs than distant observations. Thus, if investors judge upon a stock's attractiveness based on historical return data, they presumably overweight the most recent returns. Based on this simple idea, we propose a new empirical measure of recency adjustment that reflects the ordering of previous returns. Based on the conjectured behavioral mechanism, recency adjustment should be systematically related to stock mispricing. A broad set of stock market analyses supports this hypothesis empirically and shows that recency adjustment is a strong predictor for the cross-section of subsequent returns.

#### A2: Corporate Finance I

### If at first you don't succeed... Contagion effects of (serially) defaulting board members in Switzerland

Garzoli, Matteo<sup>1,2</sup>; Gianinazzi, Virginia<sup>1,2</sup>; Nowak, Eric<sup>1,2</sup>; Plazzi, Alberto<sup>1,2</sup>

1: Swiss Finance Institute, Switzerland; 2: Università della Svizzera italiana

Using information from the Commercial Registry covering the universe of firms in Switzerland 2002-2016, we identify board members involved in multiple bankruptcy filings. We find that the number of board members' past defaults is a strong positive out-of-sample predictor of a newly established company's default probability, controlling for time and industry effects as well as the number of boards individuals sit on. Only in sectors that are more prone to innovation, we find a positive relationship between board members' default records and upside growth - as measured by turnover, suggesting this may reflect risk preferences by board members. We also show that individual defaults are contagious, in that having been in the board together with a serial defaulter increases the likelihood that another member files for bankruptcy in the future. This effect is stronger when the initial connection happens in a small board, where personal relations are easier to establish.

#### Are private equity investments bad news for peers?

Kathan, Manuel Christian; Tykvová, Tereza University of Hohenheim, Germany

Prior literature documents that private equity buyouts tend to increase target companies' value. This paper deals with target peers. We employ an event study and find that peer value decreases by more than 2% on average when a buyout within the industry is announced. We consider two channels through which buyout transactions could affect peer value. First, buyouts may intensify the competitive pressure within the target

industry. Second, they may reveal new information about peer value. Our identification strategy to disentangle the effects coming from either channel relies on the exogenous variation to the competition level and to the level of the information asymmetry, which were generated by two natural experiments. We find that the decline in peer value comes through both, the competition and the information channels.

### The impact of competition and time-to-finance on corporate cash holdings

Schandlbauer, Alexander<sup>1</sup>; Raun Moritzen, Mark<sup>2</sup> 1: University of Southern Denmark, Denmark; 2: Bain & Company

This paper empirically documents how the interaction between competition and time frictions in capital markets impacts firms' cash management decisions. Using the introduction of the U.S. Securities Offering Reform in 2005 as a quasi-natural experiment, we show that a shorter time-to-finance leads to a reduction in corporate cash holdings. This effect is significantly stronger for firms that are exposed to preemption risk. Furthermore, we show that the intensity of competition impacts corporate cash holdings only in high preemption risk industries, and that the effect of a reduction in time-to-finance on cash holdings is strongest for unconstrained firms.

#### A3: Financial Intermediation

#### Firm-level employment, labour market reforms, and bank distress

Stieglitz, Moritz<sup>1</sup>; Setzer, Ralph<sup>2</sup>

1: Halle Institute for Economic Research, Germany; 2: European Central Bank, Germany

We explore the interaction between labour market reforms and financial frictions. Our study combines a new cross-country reform database on labour market reforms with matched firm-bank data for nine euro area countries over the period 1999 to 2013. While we find that labour market reforms are overall effective in increasing employment, restricted access to bank credit can undo up to half of long-term employment gains at the firm-level. Entrepreneurs without sufficient access to credit cannot reap the full benefits of more flexible employment regulation.

#### The employment effect of municipal credit market disruptions: evidence from idiosyncratic bankruptcy filings

Bias, Daniel; Knauer, Lisa Technical University Munich, Germany

We show that credit supply shocks to municipalities have a negative effect on non-tradable employment. For identification, we exploit idiosyncratic bankruptcy filings as a disruption of a state's municipal debt market and ex-ante variation in counties' maturity of long-term debt as exposure to a credit supply shock. The employment effect is not driven by size or leverage-specific development of counties or a direct demand spillover of the bankrupt municipality to other counties. We also find no evidence for propagation of the bankruptcy through banks or firm networks. Consistent with a tightened credit supply to municipalities, we document a decline in operating expenditures of treated counties.

#### Bank resolution regimes and systemic risk

Beck, Thorsten<sup>2</sup>; Radev, Deyan<sup>1</sup>; Schnabel, Isabel<sup>1</sup> 1: University of Bonn, Germany; 2: Cass Business School, UK

Using a novel and comprehensive database on bank resolution regimes in 22 member countries of the Financial Stability Board, we analyze how systemic risk at bank level changes in response to system-wide and bankspecific shocks, depending on the prevailing bank resolution regimes. We find that systemic risk increases more for banks in countries with more comprehensive bank resolution frameworks after negative systemwide shocks, such as Lehman Brothers' default, while it decreases more after positive system-wide shocks, such as Draghi's "Whatever it takes" speech. In contrast, systemic risk increases less in countries with more comprehensive bank resolution regimes in the case of bank-specific negative shocks, such as Deutsche Bank's loss announcement in 2016. These results suggest that bank resolution rules are effective in dealing with bank-specific shocks, while they may exacerbate the effect of system-wide shocks.

#### A4: Behavioral Finance I

#### An alternative behavioral explanation for the MAX effect

Baars, Maren; Mohrschladt, Hannes University of Münster, Germany

Stocks with high maximum daily returns in the previous month (MAX) yield low future returns. We argue that this return anomaly is driven by investor overreaction towards information rather than cumulative prospect theory (CPT) preferences. First, we show empirically that high-MAX stocks are comparably unattractive for investors with CPT-preferences. Second, we find immediate price reversals after high-MAX observations. Hence, the MAX return itself seems to be the source of the overvaluation because we cannot detect any preference-induced buying pressure. Third, the MAX effect is information dependent as it reverses if the MAX return is caused by an earnings announcement.

#### Tax effects on the trading behavior of individual investors

Buhlmann, Florian<sup>3</sup>; Doerrenberg, Philipp<sup>2</sup>; Loos, Benjamin<sup>1</sup>; Voget, Johannes<sup>2</sup>

1: UTS, Australia; 2: University of Mannheim; 3: ZEW

We study the effects of capital-gains taxation on the trading behavior of individual investors. We use confidential portfolio-level panel data which include daily information about individual trading behavior. For causal identification, we exploit a large capital-gains tax reform in Germany. Using bunching techniques and hazard-rate regressions, we show that the realized holding periods and sale probabilities were considerably affected by the tax prior to 2009. In particular, we see a large spike in sales and increased selling probabilities of shares with a gain just after the 365-days threshold. Deductible losses spike just before the 365-days threshold. We do not see any spikes or irregular selling probabilities around the threshold in the post-reform years. We further show that the well-known disposition effect is affected by

capital-gains taxes. This is in line with the rationale that capital-gains taxes induce investors to realize losses and to defer the sale of gains, which counters the disposition effect.

### A surprise that keeps you awake: overnight returns after earnings announcements

Gamm, Fabian University of Mannheim, Germany

I dissect stock returns after earnings announcements into their overnight and intraday components and document strong positive abnormal overnight returns for several weeks after both large positive and negative earnings surprises. This is in line with attention-induced buying pressure. Consistently, overnight returns are higher when retail investor attention towards the surprise is high. Corresponding intraday returns have the opposite sign, which makes this pattern invisible in close-to-close returns. The effect is stronger during high sentiment periods as well as for hard-to-arbitrage firms and weaker if the average investor holds the stock at a gain.

#### A5: Corporate Governance I

### Corporate compliance systems - the effect on risk, performance and firm value

Bannier, Christina; Bauer, Anastasia; Bofinger, Yannik; Ewelt-Knauer, Corinna

Justus-Liebig University of Giessen, Germany

This study examines the reported compliance activities of 112 publicly listed German firms over the years 2014 to 2017 and assesses their effect on firm risk, performance and value. We build a score that accounts for 24 different compliance-related items and find that higher reported compliance activity reduces downside (or tail) risk. Though return on equity is not affected by compliance, there is a positive effect on operating performance and on firm value measured via Tobin's Q. A principal component analysis shows that these beneficial compliance effects are mainly driven by institutionalized compliance components. Management-centric and externally-oriented compliance activities appear rather detrimental for reducing downside risk.

#### Trust and shareholder voting

Lesmeister, Simon<sup>1,2</sup>; Limbach, Peter<sup>1,2</sup>; Goergen, Marc<sup>3,4</sup> 1: University of Cologne, Germany; 2: Centre for Financial Research (CFR); 3: IE Business School Madrid; 4: ECGI

We test the hypothesis whether a specific aspect of culture – trust in others – affects shareholder voting by substituting for costly monitoring. We find consistent evidence that the percentage of votes cast at shareholder meetings is lower in high-trust countries (and U.S. counties) while the percentage of votes in support of management proposals is higher. Shocks to trust and IV regressions confirm these results. We also find that shareholder voting is more valuable in low-trust countries, as reflected by a more positive effect on firm performance, which suggests that managers do not exploit lower levels of monitoring when trust is high.

## Share repurchases, undervaluation, and corporate social responsibility

Bobenhausen, Nils-Christian; Knetsch, Andreas; Salzmann, Astrid RWTH Aachen University University, Germany

Share repurchases experienced growing popularity in recent years. However, a repurchase of an undervalued firm goes along with wealth distribution from selling to ongoing sharehold-ers. The interest of this paper lies in the potentially opportunistic exploitation of selling shareholders through buybacks in times of undervaluation. Our results show that undervalued firms with superior CSR performance are less likely to repurchase shares and thus exploit their undervaluation to the disadvantage of selling shareholders. This result is consistent with managers being aware of exploiting selling shareholders. It also indicates that managers of high CSR-performance firms consider the interests of ongoing and leaving shareholders alike, despite not being legally obliged to pursue the latters' interests.

#### A6: Derivatives I

#### A new look at the low-volatility effect in stock options

Korn, Olaf<sup>1</sup>; Trappe, Niklas<sup>2</sup>; Volkmann, David<sup>3</sup>

1: Georg-August University Göttingen, Germany, Centre for Financial Research Cologne (CFR); 2: Georg-August University Göttingen, Germany, Macquarie University, Sydney, Australia, Capital Markets Cooperative Research Centre (CMCRC); 3: Georg-August University Göttingen

A widespread anomaly in financial markets is the inverse relation between volatility and future returns: the low-volatility effect. We take a new look at this phenomenon in options markets. Our empirical results show that the effect is not a general pattern, but holds only conditional on market makers being net short in options. If they are net long, the effect can even be reversed. The conditional low-volatility effect stresses the importance of market imperfections and the reaction of market makers for an explanation of the anomaly. Moreover, it contains important information for option market investors, because it is three to four times stronger than the unconditional effect.

#### The fed call: FOMC announcement and stock market uncertainty

Beckmeyer, Heiner; Branger, Nicole; Grünthaler, Thomas University of Münster, Germany

We empirically study the behavior of stock market uncertainty around U.S. monetary policy decisions using high-frequency option quotes. We find that FOMC announcements trigger sudden and large movements in uncertainty, with highly significant drops for horizons up to one year. These moves are particularly strong for tail uncertainty, with average changes of more than 15 percentage points for left tail and 21 percentage points for right tail uncertainty. We thereby confirm that the Fed promotes financial stability. Our results are not driven by a risk realization but rather by less fear and greed in the market. We further classify the meetings into rate cuts, surprises, news type, and press

conferences to provide evidence for the many faces of stock market uncertainty around FOMC announcements.

#### Functional Ross recovery: theoretical results and empirical tests

Dillschneider, Yannick; Maurer, Raimond Goethe University Frankfurt, Germany

Recently, Ross (2015) showed that the real-world probability distribution of a discrete Markovian state variable can be recovered from observed option prices. The so-called recovery theorem follows from Perron-Frobenius matrix theory when the pricing kernel is transition independent. In this paper, we generalize the recovery theorem to continuous state spaces using PerronFrobenius operator theory. Building on our theoretical results, we devise a nonparametric approach to empirically estimate the recovered pricing kernel and probability density in closed form. Using S&P 500 index options, we analyze recovered pricing kernels empirically and find evidence that Ross recovery is misspecified.

#### B1: Empirical Asset Pricing II

#### **Elephants and the Cross-Section of Expected Returns**

Laurinaityte, Nora<sup>1</sup>; Meinerding, Christoph<sup>2</sup>; Schlag, Christian<sup>1,3</sup>; Thimme, Julian<sup>3</sup>

1: Research Center SAFE; 2: Deutsche Bundesbank; 3: Goethe University Frankfurt, Germany

Standard GMM cross-sectional asset pricing tests are susceptible to a trade-off: They can generate high explanatory power for factor models by allowing the estimated factor means to substantially deviate from the observed sample averages. In fact, by shifting the weights on the moment conditions, any level of cross-sectional fit can be attained. This property is a feature of the GMM estimation design and applies to weak as well as strong factors, and to all sample sizes and test assets. To quantify the trade-off, we run tests based on simulated and empirical data.

#### Overnight returns, daytime reversals, and future stock returns: The risk of investing in a tug of war with noise traders

Akbas, Ferhat<sup>1</sup>; Boehmer, Ekkehart<sup>2</sup>; Chao, Jiang<sup>3</sup>; Koch, Paul<sup>4</sup> 1: University of Illinois at Chicago, College of Business Administration; 2: Singapore Management University, Singapore; 3: University of South Carolina, Darla Moore School of Business; 4: Iowa State University, Ivy College of Business

A high frequency of positive overnight returns followed by negative trading day reversals during a month suggests a persistent daily tug of war between opposing investor clienteles, who are likely composed of noise traders overnight and other investors during the day. We show that a more persistent tug of war predicts higher future returns, both for individual stocks and the overall market. Our results are stronger in situations where it is riskier to trade against noise traders. Additional tests further support the conclusion that investors demand a premium for trading stocks that are more prone to this "noise trader risk."

#### The pricing of market and idiosyncratic jump and volatility risks

Middelhoff, Frederik University of Münster, Germany

This paper analyzes the basic risk-return relation of different variance components in the cross-section of stocks and stock options. Using option portfolio returns that have a constant exposure to either jump or diffusive risk, I decompose variance risk into four components: market volatility risk, idiosyncratic volatility risk, market jump risk, and idiosyncratic jump risk. The lion's share of stocks' jump and volatility risk premiums is paid for the idiosyncratic components, with Sharp Ratios of -3.44 for idiosyncratic jump risk and 2.15 for idiosyncratic volatility risk. The analysis shows, that the decomposition helps in explaining contemporaneous and future stock returns. While all four components are at play when stocks earn contemporaneously negative returns, idiosyncratic jump and volatility risks are most important to explain the cross-sectional variation in positive returns. In addition, stocks that have higher idiosyncratic jump risk premiums earn higher subsequent returns. This relation is robust to various stock characteristics.

#### **B2:** Corporate Finance II

#### Institutional investor horizon and firm valuation around the world

Döring, Simon<sup>1</sup>; Drobetz, Wolfgang<sup>1</sup>; El Ghoul, Sadok<sup>2</sup>; Guedhami, Omrane<sup>3</sup>; Schröder, Henning<sup>1</sup>

University of Hamburg, Germany; 2: University of Alberta, Edmonton, Canada;
 University of South Carolina, Columbia, USA

Using a comprehensive dataset of firms from 34 countries, we study the effect of institutional investors' investment horizons on firm valuation around the world. Long-term investors invest in firms domiciled in countries with a more investor-friendly institutional environment, while short-term investors tend to be less concerned about the quality of the financial and legal environment. The positive relation between institutional ownership and firm value is driven by short-horizon institutions. This valuation effect of short-horizon institutions is stronger in countries with high market liquidity, in firms with high stock liquidity, and in cash-rich firms that are prone to free cash flow agency problems. Our results are consistent with short-term investors affecting firm value by disciplining managers through a credible threat of exit. Finally, foreign short-term institutions have a stronger effect on firm value, suggesting that they are more independent and are associated with a more credible threat of exit.

#### Single firm / single event-analyses: robust inference in litigation

Elsas, Ralf; Schoch, Daniela Stephanie Ludwig Maximilian University Munich, Germany

Event studies are pivotal in securities fraud litigation. Typical usecases are single firm/single event (SFSE) applications. These differ from standard event studies in that inference on abnormal returns can only be based on the time-series variance of abnormal returns over a calibration period. We analyze robust inference in the SFSE setting using Monte Carlo and resampling experiments. We test size and power of different methods in different regimes of market volatility. We find that White- or Newey/West-correction of standard errors cannot be applied in the SFSE setting. It turns out that even extreme regimes of heteroscedasticity do not bias OLS inference significantly when using daily data in a stationary environment. The one, but crucial, problem of inference using any estimator arises from switching volatility regimes, where calibration and event period occur in different regimes. We show that GARCH estimation using intraday data is suitable to solve this issue.

#### **Connected VCs and strategic alliances**

Brinster, Leonhard; Tykvová, Tereza University of Hohenheim, Germany

We study a new channel through which portfolio companies benefit from ties among venture capitalists (VCs). We show that these ties improve companies' access to strategic alliance partners from connected VCs' portfolios. While existing literature demonstrates that alliances are more frequent among companies sharing the same VC, we provide evidence that the "connected-VC-effect" dominates the "same-VC-effect". The "connected-VC-effect" is stronger when transaction and information costs increase, consistent with VCs' ties resolving asymmetric information problems. Strategic alliances between companies from connected VCs' portfolios tend to be well-performing. Our results show that this type of alliances is associated with higher IPO chances. We address alternative explanations and related endogeneity concerns.

#### **B3: Theoretical Asset Pricing**

#### The decline of too big to fail

Berndt, Antje<sup>1</sup>; Duffie, Darrell<sup>2</sup>; Zhu, Yichao<sup>1</sup> 1: Australian National University, Australia; 2: Stanford University

For globally systemically important banks (G-SIBs) with U.S. headquarters, we find large post-Lehman reductions in market-implied probabilities of government bailout, along with big increases in debt financing costs for these banks after controlling for insolvency risk. The data are consistent with significant effectiveness for the official sector's post-Lehman G-SIB failure-resolution intentions, laws, and rules. G-SIB creditors now appear to expect to suffer much larger losses in the event that a G-SIB approaches insolvency. In this sense, we estimate a major decline of "too big to fail."

## Institutional Investors and the Time-Variation in expected Stock Returns

Weber, Rüdiger University of Michigan, USA

I document a new stylized fact: the higher the share of institutional ownership in a stock, the more its price-dividend ratio is driven by discount rate variation rather than by changes in dividend growth expectations. Hence, the dividend-price ratio of stocks with high institutional ownership predicts returns. Conversely, for stocks held mostly by individual investors, returns are not predictable. As a general equilibrium outcome, return predictability crucially depends on the properties of the marginal investor. More strongly time-varying volatility in the marginal utility of institutions acting as marginal investors in the respective stocks provides a natural explanation for the observed pattern. In an equilibrium model, time-varying redemption risks generate the observed predictability patterns among a priori identical stocks. My findings help explain the weak return predictability of small and value stocks, the postwar predictability reversal, and the fact that dividend smoothing cannot explain that reversal.

#### Economic growth and the debt tax shield

Fischer, Marcel<sup>1,2</sup>; Jensen, Bjarne Astrup<sup>2</sup> 1: University of Konstanz, Germany; 2: Copenhagen Business School, Denmark

We study the general equilibrium implications of the corporate debt tax shield in a growth economy that taxes household income and firm profits and redistributes tax revenues in an attempt to harmonize the lifetime consumption opportunities among households that differ in their endowments. Our model predicts that in general equilibrium the tax shield's reduction in the corporate after-tax borrowing rate is counteracted by an increase in the pre-tax rate. In our model the debt tax shield leads to a simultaneous increase in the growth rate of the economy and in the degree of disparity in households' lifetime consumption opportunities.

#### B4: Behavioral Finance II

#### Cultural biases in equity analysis

Pursiainen, Vesa Imperial College London and University of Hong Kong, UK

I study the role of cultural biases in decision-making among equity analysts. I construct a Eurobarometer-based measure of cultural trust bias between European countries and find that a more positive trust bias by the analyst's country of origin toward the firm's headquarter country (and CEO home country) is associated with significantly more positive stock recommendations, controlling for analyst-month and firm-month fixed effects. The cultural bias effect is stronger for eponymous firms whose names mention their home country, suggesting firm names can have a priming effect for cultural biases. The bias effect varies over time, increasing with the aggregate level of pessimism in Europe and decreasing with consumer confidence. In addition, I find evidence of a negative North-South bias emerging during the European debt crisis, a UK-Europe divergence amid Brexit, and a Franco-British bias during the Iraq war. The share price reaction to buy recommendations by more positively biased analysts is weaker.

#### Streaks in daily returns

Klos, Alexander<sup>1</sup>; Koehl, Alexandra<sup>1</sup>; Rottke, Simon<sup>2</sup> 1: Kiel University; 2: University of Amsterdam

A streak of length n occurs when an asset has outperformed or underperformed the market over n consecutive periods. We show that a simple model with extrapolators and fundamental traders suggests that streaks predict future returns. We test this prediction using daily data from international equity markets and find empirical support. A US-based value-weighted trading strategy earns 14.7 bps/day (t-stat=8.422) and an internationally diversified strategy earns 11.6 bps/day (t-stat=10.678). This finding is distinct from known forms of daily return predictability.

## How do bond investors measure performance? Evidence from mutual fund flows

Dang, Thuy Duong<sup>1</sup>; Hollstein, Fabian<sup>1</sup>; Prokopczuk, Marcel<sup>1,2</sup> 1: Leibniz University Hannover, Germany; 2: University of Reading

Which factor model do investors in corporate bonds use? We examine this question by tracking investors' decisions to invest in actively managed corporate bond mutual funds. Our main result is that all bond factor models are dominated by the simple Sharpe ratio. For all corporate bond mutual fund styles, the Sharpe ratio explains fund flows better than alphas from bond factor models. Since the Sharpe ratio can be manipulated, our findings have potentially severe implications for both corporate bond mutual fund managers and investors.

#### **B5:** Corporate Governance II

## Do cross-border secondary buyouts hurt portfolio firms' operating performance?

Martin, Jens<sup>1</sup>; Härtel, Nils Härtel<sup>2</sup>

1: University of Amsterdam, Netherlands, The; 2: HHL Leipzig Graduate School of Management

This paper examines the effects of cross-border secondary buyouts, which account for more than one in ten private equity (PE) buyouts in recent years, on the operating performance of private equity-backed portfolio firms. We conduct our analyses on a comprehensive sample of 299 secondary buyouts in 18 countries with continuously available accounting figures from the year prior to until three years after the buyout as well as verified office locations and office opening dates for all involved PE firms. We find that portfolio firms targeted in cross-border secondary buyouts exhibit lower asset turnover and return on assets for the first three years after the buyout than those targeted in a domestic secondary buyout. Our analyses further show that a PE sponsor's prior experience in the portfolio firm's home country offsets this negative operating performance effect to some degree.

#### Takeovers, shareholder litigation, and the free-riding problem

Broere, Mark; Christmann, Robin Leibniz FH School of Business, Germany

Squeeze-out procedures are designed to overcome the free-riding problem that occurs in takeovers by allowing a buyer to enforce a payout of minority shareholders in the target firm. However, it is argued that shareholder protection laws and litigation restore or intensify the free-riding dilemma. Applying a game theoretic setting, we demonstrate that it is not shareholder litigation that brings back the free-riding dilemma, but rather the strategic gambling of buyers for lower prices and flaws in the design and application of squeeze-out laws. We find, for example, that lawmakers should refrain from setting separate legal thresholds for corporate control and squeeze-outs. We also analyze a favorable change in jurisdiction of the German Federal Court and provide implications for legal policy.

## Selection versus incentives in incentive pay: evidence from a matching model

Xia, Shuo Halle Institute for Economic Research, Germany

Higher incentive pay is associated with better firm performance. I introduce a model of CEO-firm matching to disentangle the two confounding effects that drive this result. On one hand, higher incentive pay directly induces more effort; on the other hand, higher incentive pay indirectly attracts more talented CEOs. I find both effects are essential to explain the result, with the selection effect accounting for 22% of the total effect. The relative importance of the selection effect is the largest in sub-markets with high talent mobility and in more recent years.

#### **B6: Market Microstructure**

#### **OTC Discount**

de Roure, Calebe<sup>1</sup>; Moench, Emanuel<sup>2,3,4</sup>; Pelizzon, Loriana<sup>3,5,6</sup>; Schneider, Michael<sup>2,3</sup>

1: Reserve Bank of Australia; 2: Deutsche Bundesbank; 3: Goethe University Frankfurt; 4: Centre for Economic Policy Research; 5: SAFE; 6: Ca' Foscari University of Venice

We study price dispersion and venue choice in the interdealer segment of the market for German Bunds, where exchange platforms with a central limit order book and over-the-counter (OTC) segments coexist. For the majority of trades the OTC price is favorable with respect to the corresponding quoted price on the exchange, indicating the presence of an OTC discount. The size of the OTC discount depends on liquidity conditions, trading relationships and on whether the trade is negotiated bilaterally or facilitated anonymously through a broker. Trading activity shifts from the exchange to bilateral transactions to broker-facilitation as trade size increases. Dealers are more likely to trade on-exchange when required immediacy is high and central dealers are more likely to trade via brokers. Our findings highlight the complementary roles played by exchange and OTC segments with important implications for the design and regulation of fixed-income trading.

## High frequency trading, broker sophistication, and institutional execution costs

Sagade, Satchit<sup>3,4</sup>; Scharnowski, Stefan<sup>2,4</sup>; Westheide, Christian<sup>1,4</sup> 1: University of Vienna, Austria; 2: University of Mannheim; 3: Goethe University Frankfurt; 4: Research Center SAFE

We study how the sophistication of brokers and their interactions with high-frequency traders (HFTs) affect execution costs. Institutional parent trades executed by brokers that are colocated trade against HFTs later during the trade and achieve a lower implementation shortfall. Whereas trading against aggressive HFT orders is otherwise associated with an increase in execution costs, colocated brokers are able to avoid this worsened execution in addition to generally achieving lower execution costs. Our results suggest that sophisticated brokers are able to execute orders in a manner that avoids adverse outcomes at the hands of the most sophisticated proprietary trading firms.

## A tale of two cities - inter-market latency, market integration, and market quality

Sagade, Satchit<sup>3,4</sup>; Scharnowski, Stefan<sup>2,4</sup>; Theissen, Erik<sup>2</sup>; Westheide, Christian<sup>1,4</sup>

1: University of Vienna; 2: University of Mannheim; 3: Goethe University Frankfurt; 4: Research Center SAFE

We study the introduction of a microwave link between Frankfurt and London and identify its effects on German stocks that trade in both locations using a difference-in-differences setting with French firms that trade only in London as the control group. We find that the link improves the integration between the two markets as evidenced by a reduction in arbitrage opportunities. The effects on market quality outcomes differ across stocks as high-frequency traders strategically utilize the speed advantage resulting from the microwave link to supply or consume liquidity. In London, mid cap stocks benefit from increased liquidity provision whereas order flow for large stocks becomes more toxic. These results suggest that market integration differently affects investors based on their speed advantage, trading venues based on their level of competitiveness, and stocks based on their size.

#### C1: Empirical Asset Pricing III

#### Forecasting the equity premium: mind the news!

Adämmer, Philipp<sup>1</sup>; Schüssler, Rainer Alexander<sup>2</sup> 1: Helmut Schmidt University of Hamburg; 2: University of Rostock

This paper introduces a novel strategy for predicting monthly equity premia based on extracted news from more than 700,000 newspaper articles, published in The New York Times and Washington Post between 1980 and 2018. We propose a flexible data-adaptive switching approach for mapping a large set of different news-topics into forecasts of aggregate stock returns. The information embedded in our extracted news is not captured by established equity premium predictors. Compared to the historical mean model between 1999 and 2018, we find large out-of-sample (OOS) gains with an R-squared OOS of 6:52% and sizeable utility gains for a mean-variance investor. The empirical results indicate that geopolitical rather than economic news are more valuable to forecast the equity premium out of sample.

## Jumps and the correlation risk premium: Evidence from equity options

Branger, Nicole; Flacke, René Marian; Middelhoff, Frederik University of Münster, Germany

This paper breaks the correlation risk premium down into two components: a premium related to the correlation of continuous stock price movements and a premium for bearing the risk of co-jumps. We propose a novel way to identify both premiums based on a dispersion trading strategy that goes long an index option portfolio and short a basket of option portfolios on the constituents. The option portfolios are constructed to only load on either diffusive volatility or jump risk. We document that both risk premiums are economically and statistically significant for the S&P 100 index. In particular, selling insurance against states of high jump correlation generates a sizable annualized Sharpe ratio of 0.85.

#### The bankers' new corset: Impact of Maximum Distributable Amount on AT1 CoCo bond spreads

Kind, Axel<sup>1</sup>; Oster, Philippe<sup>2</sup>; Peter, Franziska J.<sup>3</sup>

1: University of Konstanz, Germany; 2: The Lucerne University of Applied Sciences and Arts, Switzerland; 3: Zeppelin University Friedrichshafen, Germany

This paper examines the impact of the binding Maximum Distributable Amount (MDA) threshold criteria on the pricing of Additional Tier 1 (AT1) Contingent Convertible (CoCo) bonds. By using a unique set of data, we show for the first time that the distance-to-MDA-trigger – a reserve proxy of automatic restrictions on earning distribution – has an economically and statistically significant impact on AT1 spreads. In terms of security design, our results indicate that equity conversion and low-trigger AT1 CoCos trade at significantly lower spreads. Our baseline model explains a substantial portion of AT1 spreads and complies with the predictions of structural credit models.

#### C2: Corporate Finance III

## Bank competition for wholesale funding: Evidence from corporate deposits

Aldasoro, Inaki<sup>2</sup>; Balke, Florian<sup>1</sup>; Barth, Andreas<sup>1</sup>; Eren, Egemen<sup>2</sup> 1: Goethe University Frankfurt, Germany; 2: BIS, Basel

When banks are faced with a funding shortage in money market wholesale funding, they partly substitute by tapping other wholesale funding sources. Using auction-level data on large corporate deposits, we trace these substitution effects and their implications, which go beyond the balance sheets of banks affected by the funding shortage. Banks which are forced to seek alternative funding sources crowd out other initially unaffected banks, which pay substantially more to retain funding. Affected banks achieve funding substitution mostly through an intensive margin adjustment, increasing their share of funding coming from stable funding providers. We document a mechanism to explain this observation, building on the existence of a pecking order of funding in fragmented markets and the matching of banks' and firms' preferences.

## Sell or Die: What happens to firms after they withdraw from the IPO?

Helbing, Pia<sup>1</sup>; Lucey, Brian M.<sup>2</sup>; Vigne, Samuel A.<sup>2</sup> 1: University of Leeds, UK; 2: Trinity College Dublin

What happens to companies that file for an IPO, but withdraw and do not list? This question is investigated by examining a very large sample of common stock IPOs for the main IPO markets in Europe over the 2001-2015 period. We analyse regulatory, economic, and market conditions as well as offer, firm, and corporate governance characteristics at the time of the IPO filing. We find that PE and VC backed companies that withdraw from the IPO are more likely to have a superior alternative such as M&A or a second time IPO listing. Better corporate governance

decreases the probability of a negative post-IPO withdrawal outcome. In a survival analysis we show that the majority of companies experience a positive post-IPO withdrawal outcome (M&A or trading) shortly after an IPO withdrawal.

## Skin in the game, wealth and risk-taking: evidence from private equity funds

Bienz, Carsten<sup>1</sup>; Thorburn, Karin<sup>1</sup>; Walz, Uwe<sup>2</sup>

1: Norwegian School of Economics, Norway; 2: Goethe University Frankfurt, Frankfurt

We investigate the incentive effects of private equity partners' co-investment in the fund. In a simple model, we show that such "skin-in-the-game" will induce managers to invest in less risky portfolio companies, but with greater use of debt in the deal financing. We test these predictions in a sample of private equity investments in Norway, where information about the fund managers' personal wealth is available. Consistent with the model predictions, portfolio company risk decreases and leverage increases with the size of the co-investment relative to the manager's wealth, but they are independent of the co-investment itself. Our results suggest that wealth is of first order importance when designing incentive contracts.

#### C3: Econophysics

## How market nanostructure and macrostructure shape market microstructure

Challet, Damien CentraleSupélec, France

This talks discusses some of the insights that high and low frequency trader-resolved data bring on market microstructure. On the one hand, the high-frequency reactions of traders cause an asymmetry between realized and historical volatility measured at different time scales. On the other hand, portfolio changes of large investment funds over months modifies some tick-by-tick properties of limit orders books.

#### Market impact and slippage costs of large trades

Lillo, Fabrizio Scuola Normale Superiore, Italy

Market impact is one of the most important source of trading cost for (large) financial investors. Nonetheless its measurement, modeling, and control are still not fully understood. I will present some recent advances on this topic, considering both empirical aspects, in univariate and portfolio setting, and modeling approaches, considering both reduced form model and approaches describing explicitly the limit order book dynamics. Finally, I will comment on the relevance of these findings for the problem of optimal execution of large trades.

#### Will a large economy be stable?

Morán, José Ecole polytechnique, France

We study networks of firms with Constant Elasticity of Substitution (CES) production functions. Relying on results from Random Matrix Theory, we argue that such networks generically become unstable when their size increases. when the heterogeneity in productivities/connectivities becomes too strong or when substitutability is reduced. At marginal stability and for large heterogeneities, we find that the distribution of firm sizes develops a power-law tail, as observed empirically. Crises can be triggered by small idiosyncratic shocks, which lead to "avalanches" of defaults characterized by a power-law distribution of total output losses. We conjecture that evolutionary and behavioural forces conspire to keep the economy close to marginal stability. This scenario would naturally explain the well-known "small shocks, large business cycles" puzzle, as anticipated long ago by Bak, Chen, Scheinkman and Woodford.

#### C4: Risk Management I

#### Tail models and the statistical limit of accuracy in risk assessment

Börner, Christoph J; Hoffmann, Ingo Heinrich-Heine-Universitaet Düsseldorf, Germany

In risk management, tail risks are of crucial importance. The assessment of risks should be carried out in accordance with the regulatory authority's requirement at high quantiles. In general, the underlying distribution function is unknown, the database is sparse, and therefore special tail models are used. Very often, the generalized Pareto distribution is employed as a basic model, and its parameters are determined with data from the tail area. With the determined tail model, statisticians then calculate the required high quantiles. In this context, we consider the possible accuracy of the calculation of the quantiles and determine the finite sample distribution function of the quantile estimator, depending on the confidence level and the parameters of the tail model, and then calculate the finite sample bias and the finite sample variance of the quantile estimator. Finally, we present an impact analysis on the quantiles of an unknown distribution function.

## Validity of interest rate risk measures in stress scenarios - a simulation approach

Claußen, Catharina; Platte, Daniel University of Münster, Germany

This paper assesses the validity of the Economic Value of Equity (EVE) and the Net Interest Income (NII) as risk measures for a bank's interest rate risk in the banking book. We develop a novel simulation approach and evaluate the measures retrospectively from the time of a generic bank's default due to a stress to market interest rates.

Our results show that both measures significantly indicate inherent interest rate risk, whereby the EVE exposes risk prior to the NII. Further, we derive critical values of quarterly changes in risk measures serving as indicators for substantial risk levels. Our findings validate the EVE and NII and contribute to their thorough understanding.

## Participating life insurance contracts with periodic premium payments

Mahayni, Antje; Stein, Katharina; Offermann, Sascha University of Duisburg-Essen, Germany

We consider participating life insurance products and their benefits to the insured. Our main focus is on the impact of different contribution schemes, i.e. when and how much the insured contributes. This is important since the insured's benefits depend on the performance of the investment strategy conducted by the product provider. In addition, we consider the interactions of the premium contribution scheme, embedded guarantees, and different management rules accounting of a regime switch in the risk profile of the insurance company. We shed light on two effects on the utility of the insured. The combination of contribution scheme, embedded guarantees and management rule has an impact on the investment risk of the insured. A second main effect is a price effect. Assuming that the guarantees are fairly priced, the guarantee costs also depend on all the above mentioned factors.

#### C5: International Finance

## Sovereign issuers, incentives and liquidity: an event study of the Danish sovereign bond market

Ochs, Christian<sup>1</sup>; Eisl, Alexander<sup>1</sup>; Staghoj, Jonas<sup>2</sup>; Subrahmanyam, Marti G.<sup>3</sup>

1: WU (Vienna University of Economics and Business), Austria; 2: Danmarks Nationalbank; 3: NYU Stern School of Business

In a recent innovation, the sovereign debt management office of Denmark has decided to pay a direct compensation to certain financial institutions for providing liquidity in the sovereign bond market. In this paper, we analyze the change in market liquidity of Danish government bonds in response to this structural change in the market design and, in particular, the compensation offered to liquidity providers. Specifically, we assess the change in market conditions and liquidity premia paid on Danish' sovereign bonds in response to the new incentivization model. To this end, we investigate to what extent market liquidity improved for market participants, and also whether the new compensation scheme for market makers is cost efficient for the government of Denmark through lower bond liquidity premia and bond yields. From these findings, we derive policy recommendations for Denmark, as well as other European countries that currently mostly apply an indirect compensation scheme.

## Did China's anti-corruption campaign affect the risk premium on stocks of global luxury goods firms?

Nitschka, Thomas Swiss National Bank, Switzerland

This paper exploits the launch of the recent Chinese anti-corruption campaign to show empirically that national political risk can have global and persistent effects on stock returns of affected firms. Risk-adjusted returns on stock portfolios consisting of luxury goods firms with high exposure to the Chinese stock market, a proxy of exposure to Chinese government policy, shifted persistently downward after the announcement of the anti-corruption campaign. The risk-adjusted returns tend to co-vary with a proxy of the campaign's intensity. These findings neither pertain to luxury goods firms with low exposure to China nor to firms from other industries.

#### Sovereign risk and bank fragility

Anand, Kartik<sup>1</sup>; Mankart, Jochen<sup>2</sup> 1: Deutsche Bundesbank; 2: Deutsche Bundesbank

We develop an equilibrium model of bank risk-taking in the presence of strategic sovereign default risk. Domestic banks can either invest in real projects or purchase government bonds. While an increase in purchases of government bonds crowds out profitable investment, it nevertheless improves the government's incentives to repay and reduces the bond price. However, since banks are price-takers in bond markets, this gives rise to a pecuniary externality. We analyze the welfare consequences of the externality and relate our findings to the debate on the efficacy of recent policy proposals for regulating banks' sovereign debt exposures.

#### C6: Household Finance

#### Learning without Trading

Kaustia, Markku<sup>1</sup>; Schaub, Nic<sup>2</sup>; Schmid, Markus<sup>3</sup> 1: Aalto University School of Business, Finland; 2: WHU – Otto Beisheim School of Management, Germany; 3: University of St. Gallen, Switzerland

To explain a set of puzzling facts about retail investor speculative behavior, rational learning models assume that investors enter the market to experiment and find out about their trading skills. We present empirical evidence from a large online trading simulation that is inconsistent with key assumptions of these models. First, we show that investors learn about their ability without having to invest a penny. This refutes the idea of entering real markets with uninformed priors. Second, we show that traders can learn to improve their skills, inconsistent with exogenous static alpha assumption. We also show that such 'learning without trading' affects investment beliefs.

#### The consumption effects of the disposition to sell winners and hold on to losers

Loss, Benjamin<sup>3</sup>; Meyer, Steffen<sup>1</sup>; Pagel, Michaela<sup>2</sup>

1: University of Southern Denmark (SDU), Danish Finance Institute, Denmark; 2: Columbia Business School, NBER, and Centre for Economic Policy Research;

3: University of Technology Sydney

Using a large sample of transaction-level data on all security trades and holdings as well as all spending and income from an online retail bank, we study the effects of a fictitious sale initiated by the bank that changed the displayed purchase prices of all mutual funds in individuals' portfolios. We find that individuals are more likely to sell fictitious winners, i.e., funds that are displayed as winners under the new purchase price but are losers under the actual purchase price. Beyond affecting individual's disposition to sell winners and hold on to losers, we also document that individual consumption increases in response to realizing fictitious capital gains. To the best of our knowledge, this is the first study documenting a causal link between purchase prices and trades using observational data and finding that the disposition to sell winning investments has real effects in terms of affecting individual consumption.

## Earn more tomorrow: Overconfident income expectations and consumer indebtedness

Grohmann, Antonia<sup>1</sup>; Menkhoff, Lukas<sup>1,3</sup>; Merkle, Christoph<sup>2</sup>; Schmacker, Renke<sup>1</sup>

1: DIW Berlin, Germany; 2: Kühne Logistics University; 3: Humboldt University Berlin

This paper examines whether biased income expectations due to overconfidence lead to higher levels of debt-taking. In a lab experiment, participants can purchase goods by borrowing against their future income. We exogenously manipulate income expectations by letting income depend on relative performance in hard and easy quiz tasks. We successfully generate biased income expectations and show that participants with higher income expectations initially borrow more. Overconfident participants scale back their consumption after feedback. However, at the end of the experiment they remain with higher debt levels, which represent real financial losses. To assess the external validity, we find further evidence for the link between overconfidence and borrowing behavior in a representative survey (GSOEP-IS).

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#### Keynote Speech

#### Pricing climate risk: Sustainability and the risk of rapid transition

Litterman, Bob Kepos Capital LP, USA

Sustainability refers to having a long horizon. Putting more weight on future well-being implies immediately addressing a major risk management failure. Not pricing climate risk is a bug in the global economic system that can, and will, be fixed very soon, an action which will create a phase change in the global economy. More weight on sustainability implies lower discount rate and a higher price for carbon emissions. Imagine a world in which appropriate strong incentives exist to reduce emissions and to remove carbon dioxide from the atmosphere. In such a world the transition to a low-carbon economy will happen much more quickly than is reflected in current valuations. Perceptions are changing very quickly now, and the associated adjustments to valuations are providing opportunities and risks for investors, particularly those exposed to stranded assets in the fossil fuel sector.

#### D1: Empirical Asset Pricing IV

## A macro-finance term structure model for bond and dividend discount rates

Florig, Stephan; Ulrich, Maxim; Schoemer, Sven Karlsruhe Insitute of Technology, Germany

We present an arbitrage-free affine term structure model that jointly prices U.S. Treasury bonds, S&P 500 dividend strips and the S&P 500 equity index as a function of the economy. Our model allows us to extract new insights on how short- and long-duration dividends and their discount rates respond to changes in the economy. Within the affine model, we obtain accurate decompositions of discount rates into risk free rates, interest rate and dividend risk premiums. Our model is able to price bond and equity claims with high precision and predict economic variables and returns in bonds and short-horizon dividends.

## Should investors consider the sentiment of online discussions? An analysis of the link between fundamental information, social media sentiment, and the stock market

Klamer, Sebastian; Eierle, Brigitte; Muck, Matthias University of Bamberg, Germany

Regulators are concerned about the solely reliance on social media sentiment indicators for trading purposes. This paper sheds light on the relations between fundamental information, online discussions and stock returns using a sample of tweets concerning individual companies in the S&P 500 for a period of 12 months. First, we provide evidence that Twitter sentiment is just partly explained by publicly available fundamental information. Second, we show that the ability to predict next day stock returns is driven by sentiment not explained by publicly available fundamental information and related to an increased discussion intensity. Additional analyses show that sentiment has a permanent effect on stock returns, demonstrating that in particular sentiment not explained by fundamental information contains new information useful for investors.

## The information content of ITM-options for risk-neutral skewness and informed trading

Mohrschladt, Hannes; Schneider, Judith C. University of Münster, Germany

While the standard to calculate model-free option-implied skewness (MFIS) relies on out-of-the-money (OTM) options, we examine the empirical implications of using in-the-money (ITM) options. First, we show that discarding ITM-options based on liquidity arguments appears unreasonable for individual stock options. Second, we show that the information content of ITM-options provides new economic insights. The positive short-term return predictability of OTM-based MFIS significantly reverses if ITM-options are used instead. This return pattern allows to unambiguously attribute the return predictability of MFIS to demand-based option pricing effects rather than skewness preferences. Based on these findings, we introduce Delta-MFIS as a new measure of sophisticated option trading.

#### D2: Central Banking I

#### Capital regulation, market-making, and liquidity

Haselmann, Rainer<sup>1</sup>; Kick, Thomas<sup>2</sup>; Singla, Shikhar<sup>3</sup>; Vig, Vikrant<sup>4</sup> 1: Goethe University Frankfurt and SAFE; 2: Deutsche Bundesbank; 3: London Business School; 4: London Business School

We investigate the impact of higher capital requirements on market-making activities of banks in bond markets. Based on a unique security transactions data of German banks, we exploit the 2011 EBA capital exercise as a quasi-natural experiment. Banks forced to increase capital hold lesser inventory, pre-arrange more trades, have smaller average trade size and provide lesser immediacy in corporate bond markets. We further document a reduction in aggregate corporate bond liquidity following the regulatory intervention. Our results suggest that higher capital requirements have undesired side effects in terms of lower secondary market liquidity.

#### Safe asset shortage and collateral reuse

Jank, Stephan; Moench, Emanuel Deutsche Bundesbank, Germany

We document how market participants respond to safe asset shortages by using existing collateral more effectively. Exploiting a unique data set, we quantify dealers' collateral reuse activity at the security level. Scarcity induced by the Eurosystem's asset purchases of German sovereign bonds substantially increases collateral reuse. Market participants can alleviate shortages by raising collateral reuse, in particular if the fraction of reused to received collateral was previously low. While collateral reuse increases collateral availability, it is also associated with higher volatility of repo rates.

#### Information transmission under increasing political tension -Evidence for the Berlin Produce Exchange 1887-1896

Bohl, Martin T.<sup>1</sup>; Pütz, Alexander<sup>1</sup>; Siklos, Pierre L.<sup>2</sup>; Sulewski, Christoph<sup>1</sup>

1: University of Münster, Germany; 2: Wilfrid Laurier University, Canada

This article studies the effects of increasing political uncertainty on the functioning of German futures markets. We utilize a unique natural experiment, namely the discussions around and the final coming into force of the German Exchange Act of 1896. Using static and time-varying vector error correction models, the empirical analysis shows that, although early futures markets exhibit a high degree of operational efficiency, increasing political tensions were related to a declining dominance of the futures market in the price discovery process. In summary, we provide a strong illustration of the negative consequences of misplaced regulatory attempts stemming from strong political interests.

#### D3: Asset Management I

#### Equilibrium policy portfolios when some assets are non-tradable

Randl, Otto<sup>1</sup>; Westerkamp, Arne<sup>2</sup>; Zechner, Josef<sup>1</sup>

1: Vienna University of Economics and Business, Austria; 2: Spängler IQAM Research Center

Asset managers usually define a policy portfolio to provide a long-term benchmark. However, the practical implementation of such a policy portfolio is not straightforward. First, it is non-trivial to determine the market value weights of tradable assets. Second, there are large parts of the asset universe which are difficult to trade, such as non-listed equity. While some investors are endowed with such illiquid assets or are able to pay the (fixed) costs associated with accessing them, other investors are effectively precluded from holding such assets. In this paper we analyze the equilibrium effects of non-tradable assets on optimal policy portfolios. We find that the existence of non-tradable assets implies that investors do not hold the market portfolio. Investors with (without) access to non-tradable assets tilt their portfolios away from (towards) assets to which non-tradable assets exhibit positive betas.

#### Active factor completion strategies

Dichtl, Hubert<sup>1,2</sup>; Drobetz, Wolfgang<sup>1</sup>; Lohre, Harald<sup>3,4</sup>; Rother, Carsten<sup>1,3</sup>

1: University of Hamburg; 2: dichtl research & consulting; 3: Invesco; 4: EMP, Lancaster University Management School

Embracing the concept of factor investing, we design a flexible framework for building out different factor completion strategies for given traditional multi-asset allocations. Our notion of factor completion considers a maximally diversified reference portfolio anchored in a multi-asset multi-factor risk model that acknowledges market factors such as equity, duration and commodity as well as style factors such as carry, value, momentum and quality. Yet, the specific nature of a given factor completion strategy varies with investor preferences and constraints. We tailor a select set of factor completion strategies that include factor-based tail hedging, constrained factor completion and a fully diversified multi-asset multi-factor proposition. The presented framework naturally lends itself to exploiting tactical asset allocation signals while not sacrificing the notion of maximum diversification. To illustrate, we additionally tap the common trend style that permeates many asset classes.

#### The index effect in the corporate bond market

Franz, Friedrich-Carl Goethe University Frankfurt, Germany

I find large and statistically significant abnormal returns of USD-denominated corporate bonds, which got up- or downgraded to or from the Bloomberg Barclays Investment Grade and High Yield Index from 2012 to 2018. Downgrades face a strong negative pre-announcement drift with a subsequent reversal. For upgrades, the drift is smaller in magnitude and the reversal non-existent. In contrast to the pre-announcement drift, the reversal seems to be driven by index-related trading. This hypothesis is supported by an analysis of actual ETF trades with respect to rating changes.

#### D4: Behavioral Finance III

## Till death (or divorce) do us part: Early-life family disruption and fund manager behavior

Betzer, André<sup>1</sup>; Limbach, Peter<sup>2</sup>; Rau, P. Raghavendra<sup>3</sup>; Schürmann, Henrik<sup>1</sup>

1: University of Wuppertal, Germany; 2: University of Cologne and Centre for Financial Research (CFR), Germany; 3: University of Cambridge, UK

We show that early-life family disruption (death or divorce of a parent) causes fund managers to be more risk averse when they manage their own funds. Treated managers take lower idiosyncratic, systematic, and downside risk than untreated managers. This effect is most pronounced for managers who experienced family disruption during their formative years and in cases of parental deaths when the bereaved parent either had no new partner or had little social support. Treated managers also invest less in lottery-like stocks, make smaller tracking errors, and bet less on factors during recessions, but do not perform worse than their untreated cohorts. Our evidence indicates that familial background affects economic decisions later in life even for finance professionals.

## Managerial overconfidence and access to funding: Do banks help managers to avoid investment mistakes?

Opaleva, Regina; Fecht, Falko Frankfurt School of Finance & Management, Germany

Using unique data on German small and medium-sized enterprises (SMEs), we show that banks' lending decisions help their corporate clients to correct investment distortions associated with managerial overconfidence. We find a strong positive relation between CEO overconfidence measure inferred directly from the SME managers' sales forecasts and the probability of failure in loan negotiations with a bank. We show that SMEs with overconfident managers performed better when their loan applications were rejected than comparable firms

with overconfident managers who were granted a loan. We conclude that banks' lending decisions provide valuable guidance to their corporate borrowers and complement studies examining the merits of banks as financial consultants.

### Managerial Ambiguity and M&A Performance: less is more

Pely, Desiree-Jessica

Ludwig-Maximilians-Universität München, Germany

This study examines takeover motives stated by CEOs in press releases and general media. I find that the more motives are claimed by the manager for pursuing M&As, the poorer the transaction. Specifically, managers use special merger rhetoric to whitewash a deal which leads to inferior short- and long-term performance. For example, if a long-short portfolio strategy is applied on single vs. multi-motive bidders, excess returns of approx. 13% can be achieved after five years. Claiming many M&A synergies is linked to a bullshitting behavior and managerial overconfidence to which an average shareholder overreacts. However, institutional investors see the manager's impression management through and correctly incorporate the single- vs. multi-M&A information into prices already at deal announcement. If complexities with regard claimed synergies are reduced, the average shareholders' behavioral bias of overreaction is decreased. When computational linguistics are applied to objectively quantify M&A synergies, the results are even more significant.

### D5: Digital Finance

### Alternative facts in peer-to-peer loans? Borrower misreporting dynamics and implications

Pursiainen, Vesa Imperial College London and University of Hong Kong, UK

I study the implications and determinants of borrower misreporting in peer-to-peer (P2P) loans for credit card debt repayment and consolidation. I identify potential misreporting based on three behavior-based indicators: consistency of loan amount with outstanding credit balance, roundness of reported income, and roundness of chosen loan amount. A Misreporting Index constructed from these indicators has significant predictive power over the likelihood of default, and the additional default risk does not get compensated in the form of higher interest. I find evidence consistent with both intentional as well as innocent misreporting. Supporting the former, misreporting is more prevalent in areas with lower social capital, implying weaker social norms, and among borrowers whose professions are considered less honest, while borrowers with higher genuine income uncertainty are also more prone to misreport. Misreporting increases notably from Q2 2017 onwards, and the increase is larger among low-income and low-credit-grade borrowers.

### How do banks interact with fintechs? Forms of alliances and their impact on bank value

Hornuf, Lars<sup>1</sup>; Klus, Milan Frederik<sup>2</sup>; Lohwasser, Todor Stefan<sup>2</sup>; Schwienbacher, Armin<sup>3</sup>

1: University of Bremen, Germany; 2: University of Münster, Germany; 3: SKEMA Business School, France

Banks tackle the challenges of digitalization by cooperating with financial technology firms (fintechs) in various forms. In this paper, we investigate the factors that drive banks to form alliances with fintechs.

Using hand-collected data covering the largest banks from Canada, France, Germany, and the UK, we provide detailed evidence on the different forms of alliances occurring in practice. We show that banks are significantly more likely to form alliances with fintechs when they pursue a well-defined digital strategy and/or employ a Chief Digital Officer. Moreover, in line with incomplete contract theory, we find banks to more frequently invest in small fintechs, while they often build product-related collaborations with larger fintechs. Finally, we evidence that financial markets react more strongly if digital banks rather than traditional banks announce a bank-fintech alliance.

#### The information content of ICO white papers

Florysiak, David<sup>1</sup>; Schandlbauer, Alexander<sup>2</sup>

1: University of Southern Denmark, Germany; 2: University of Southern Denmark, Germany

White papers are likely the most important source of information provided to potential ICO investors in platform-based ventures issuing utility tokens. We use textual analysis to measure the information content of white paper documents as a proxy for information asymmetry between ICO issuers and investors. Our comprehensive empirical evidence suggests that good type ICO issuers signal through the provision of excess or new textual information not contained in recent and peer white papers. Signaling is impaired during the ICO process as investors include potentially biased expert ratings in their investment decision-making. This results in good and bad type ICO issuers successfully raising funds and exchange-listing their tokens. Once tokens trade in the secondary market, the informative white paper content signal helps to separate good and bad ICO issuers but the expert rating does not.

### D6: Energy Finance I

#### Financing conditions and toxic emissions

Götz, Martin Goethe University Frankfurt Frankfurt/Main, Germany

Exploiting heterogeneity in U.S. firms' exposure to an unconventional monetary policy shock that reduced debt financing costs, I identify the impact of financing conditions on firms' toxic emissions. I find robust evidence that lower financing costs reduce toxic emissions and boost investments in emission reduction activities, especially capitalintensive pollution control activities. The effect is stronger for firms in noncompliance with environmental regulation. Examining the ability of regaining regulatory compliance by implementing pollution control activities I find that only capital-intensive activities help firms regaining compliance. These findings underscore the impact of firms' financing conditions for toxic emissions and the environment.

### Fuel is pumping premiums: A consumption-based explanation of the value anomaly

Dittmar, Robert<sup>1</sup>; Schlag, Christian<sup>2,3</sup>; Thimme, Julian<sup>2</sup> 1: University of Michigan Ross School of Business; 2: Goethe University Frankfurt, Germany; 3: Research Center SAFE

The standard approach in empirical consumption-based asset pricing to use nondurables and services as a proxy for consumption appears inappropriate. We estimate substitution elasticities between different consumption bundles and show that households cannot substitute energy consumption by consumption of other nondurable goods or services. As a consequence, energy consumption shows up as a separate factor in the pricing kernel. Cross-sectional variation in energy consumption betas explains a large part of the value premium. Value stocks are typically more energy-intensive than growth stocks and thus riskier, since they suffer more from the oil supply shocks that also affect households.

### The natural gas announcement puzzle

Prokopczuk, Marcel<sup>1,2</sup>; Wese Simen, Chardin<sup>2</sup>; Wichmann, Robert<sup>2</sup> 1: School of Economics and Management, Leibniz University Hannover; 2: ICMA Centre, Henley Business School, University of Reading

This paper studies the effect of inventory announcement news on natural gas returns. We document that returns on inventory announcement days account for 60% of the annual risk premium. The significant difference between returns on announcement days and non-announcement days cannot be explained by the announcement surprise. Demand and supply measures, spillover effects from other markets, commodity return predictors or coinciding macroeconomic announcements also fail to fully explain the return difference. The return divides equally into a pre- and post-announcement part with a pre-announcement drift only for positive inventory surprises. This result is puzzling as it cannot be explained by informed trading or information leakage.

### E1: Empirical Asset Pricing V

#### Seasonality in catastrophe bonds

Herrmann, Markus Steffen; Hibbeln, Martin Thomas University of Duisburg-Essen

Catastrophe bonds are securities that transfer catastrophe risk from (re-)insurers or developing countries to capital markets. Based on secondary market data from 378 seasonality-affected cat bonds, we employ econometric panel data regression models to explain seasonality in cat bond spreads. First, we show that the impact of seasonality on spreads depends on fluctuating arrival frequencies, the magnitude of the expected loss and the maturity of the cat bond. Second, we use explicit distributions of arrival frequencies of qualifying events to construct a measure of cat bond seasonality that captures these three effects. Up to 57% of all secondary market fluctuation in seasonality-affected bonds can be explained through this seasonality measure. Third, we establish a method to deduct the implicit distributions of arrival frequencies from secondary market spreads.

### Tail risks and volatility-of-volatility

Grünthaler, Thomas; Hülsbusch, Hendrik University of Münster, Germany

This paper analyzes the interconnections between tail risks, volatility, and volatility-of-volatility in the market. Using the tail risk measures from Bollerslev, Todorov, and Xu (2015), we find that a change in expected volatility-of-volatility is the main driver for innovations in expected tail risks. Innovations in expected volatility do not matter. An increase in volatility-of-volatility is associated with greater downside risk (left tail) and less upside potential (right tail). Our findings pose a challenge for many option pricing models that couple jump intensities to volatility levels.

#### Anomalies in commodity futures markets: risk or mispricing?

Hollstein, Fabian<sup>1</sup>; Prokopczuk, Marcel<sup>1,2</sup>; Tharann, Björn<sup>1</sup> 1: Leibniz University Hannover, Germany; 2: University of Reading, UK

Are anomalies a reflection of behavioral biases or due to systematic risk? Using commodity futures markets, we empirically assess the likelihood of different theoretical explanations for various stock return anomalies. Commodity markets provide a suitable ground for such research due to (i) a large fraction of institutional traders acting in these markets and (ii) low limits to arbitrage. Our results lend support to behavioral theories for downside beta, idiosyncratic volatility, and MAX, while jump risk, momentum, and volatility-of-volatility likely have a risk-based origin.

### E2: Central Banking II

### Event studies, the random walk hypothesis and risk spreads: What role for central bank sovereign bond purchases in the euro area?

Belke, Ansgar<sup>1</sup>; Gros, Daniel<sup>2</sup>

1: University of Duisburg-Essen, Germany; 2: Centre of European Policy Studies, Brussels

The euro area asset purchase programme constitutes an interesting special case of QE because the ECB's PSPP involved the purchase of peripheral euro area government bonds which were not riskless. Moreover, these purchases were undertaken by national central banks at their own risk. A simple model confirms that, ceteris paribus, purchases by a national central bank of the bonds of their own sovereign should increase the risk for the remaining private bond holders. But one observed that risk spreads on peripheral bonds fell when QE was announced. However, the initial fall in risk premiums may have been due to expectations of the bond purchases proving effective in lowering risk-free rates. When these were disappointed, risk premiums returned to their initial level. Formal statistical tests confirm that risk premiums on peripheral bonds did not follow a random walk. Nor did the announcements of bond buying change the stochastics of these premiums.

#### Backtesting expected shortfall via multi-quantile regression

Couperier, Ophélie<sup>1</sup>; Leymarie, Jérémy<sup>2</sup> 1: CREST - ENSAE, France; 2: LEO - University of Orléans, France

In this article, we propose a new approach to backtest Expected Shortfall (ES) exploiting the definition of ES as a function of Value-at-Risk (VaR). Our methodology examines jointly the validity of the VaR forecasts along the tail distribution of the risk model, and encompasses the Basel Committee recommendation of verifying quantiles at risk levels 97.5%, and 99%. We introduce four easy-to-use

backtests in which we regress the ex-post losses on the VaR forecasts in a multi-quantile regression model, and test the resulting parameter estimates. Monte-Carlo simulations show that our tests are powerful to detect various model misspecifications. We apply our backtests on S&P500 returns over the period 2007-2012. Our tests clearly identify misleading ES forecasts in this period of financial turmoil.

#### Risk pooling, leverage, and the business cycle

Modena, Andrea<sup>1</sup>; Dindo, Pietro<sup>1</sup>; Pelizzon, Loriana<sup>1,2</sup> 1: Ca' Foscari University of Venice, Italy; 2: SAFE HoF, Goethe University Frankfurt

This paper investigates the interdependence between financial riskpooling and the dynamics of general equilibrium model of a productive economy. Dü to market segmentation, heterogeneous entrepreneurs are willing to mitigate their risk through a financial sector. The financial sector pools firms issued risky claims firms within its assets, faces an associated intermediation cost and, via leverage, provides a riskfree asset to entrepreneurs. Exogenous systematic shocks change the relative size of the financial sector, and so the equilibrium amount of pooled risk, making its leverage state-dependent and counter-cyclical. First, we study how this mechanism channels amplification/mitigation of exogenous systematic shocks over real macro-variables. Then, we investigate how it relates to Sharpe ratios and risk-free interest rates. Last, we focus on the relationship between the size of the financial sector and welfare. We find that the entrepreneurs benefit the most when the financial sector is neither too small nor too big.

### E3: Asset Management II

### Board connections and bank trading returns

Baltzer, Markus<sup>1</sup>; Fernau, Erik<sup>2</sup>; Smajlbegovic, Esad<sup>3</sup> 1: Deutsche Bundesbank; 2: University of Mannheim; 3: Erasmus University Rotterdam

Using security-by-security level data of bank holdings, we study how management-board ties relate to their trading activity and returns. Accounting for unobservable time-varying stock and bank characteristics, we find five times higher trading activity and an abnormal return of 3.35% per year in stocks of connected companies. This informed trading is driven by net sales, stems from private information about future firm-specific news and is not explained by other observable company links. The effect is particularly pronounced among stocks with an uncertain information environment and companies in distress. Results on breaks of board connections that are likely exogenous to the bank corroborate our findings. Overall, evidence suggests that management board networks pose an important information source for banks' proprietary trading.

### Price, cultural dimensions, and the cross-section of expected stock returns

Hammerich, Ulrich Johannes University of Bremen, Germany

We document a nominal stock price effect that is (like momentum) associated with (national) culture. Using the full spectrum of cultural dimensions proposed by Hofstede et al. and the cross-section of stock returns of 41 countries, we not only show a robust predictive and explanatory power of price in conjunction with several cultural dimensions, but of cultural differences in general. Although momentum and price are related investment strategies, we find a broad (escalating) European high-price effect, but a material low-price effect in Asia as well as the most significant and robust low-price effect for the US.

Most consistent around the world, high-priced stocks show lower return volatility and market betas than low-priced stocks and lower values for skewness of returns.

### Reference-dependent return chasing: Alpha, gains and fund flows

Brunner, Fabian University of Mannheim, Germany

How mutual fund investors chase alpha (abnormal performance) with their money is strongly mediated by the nominal price gain or loss that they hold the fund at. For high alpha funds, the investment response to alpha is reduced by as much as 37% if the fund is held at a loss as opposed to a gain considering the average dollar invested. This interaction of alpha and losses is distinct from existing effects, attenuates the performance-flow relation and eliminates convexity for high alpha but loss funds. The empirical evidence supports ambiguity aversion and the social transmission of investment opportunities as mechanisms.

### E4: Risk Management II

### Digging into the black box of portfolio replenishment in securitization: Evidence from the ABS loan-level initiative.

Fenner, Arved; Klein, Philipp; Mössinger, Carina University of Münster, Germany

Taking advantage of extensive data on 59 ABS backed by more than 1.9 million SME loans from the central repository under the ECB loan-level initiative, we ascertain that securitized loan pools are not static over time. We explore empirically whether originators exploit existing leeway regarding portfolio replenishment in securitization. Our results reveal that poor-performing loans are more likely to be transferred to ABS transactions after their issuance, and well-performing loans are more likely to be removed prior to pool and loan maturity. Turning to the bank perspective, we find that originators being undercapitalized or exhibiting high NPL ratios make particularly use of portfolio replenishment. The opposite holds when originators specify loan eligibility criteria in their ABS prospectuses.

### The impact of financial speculation on commodity prices - a metagranger analysis

Geyer-Klingeberg, Jerome; Hütter, Marie; Rathgeber, Andreas; Schmid, Florian; Wimmer, Thomas University of Augsburg, Germany

We analyze 3,183 estimates from Granger causality tests on the impact of financial speculation on commodity markets obtained from 67 prior studies. Our results reveal that there is no aggregated price effect of speculation across the literature as a whole. However, when breaking down the effect by certain aspects of data and study design, speculation might have a price distorting effect. Moreover, our meta-regression shows that the heterogeneity in the speculation effect can be largely explained by the commodity type under examination, the source of speculation data, the measurement of speculation, the publication status of a paper, as well as the affiliation of the authors. These findings help to disentangle the previous contradictions in empirical results and provide an aggregated picture of the literature.

### Robust dynamic portfolio choice based on out-of-sample performance

Schüssler, Rainer Alexander University of Rostock, Germany

We introduce a new approach to solve dynamic portfolio choice problems with a focus on robust out-of-sample performance. We therefore devise a strategy that rigorously tackles the problem of estimation error. The method involves de<U+0085>ning a discrete set of single-period portfolio allocation policies (candidate portfolio strategies) and choosing among them at portfolio revision dates, relying on bootstrapped pseudo out-of-sample portfolio returns. We apply the method to dynamic investment problems in futures trading, strategic asset allocation and a cross-sectional momentum strategy in equity markets.

### E5: Derivatives II

#### How does low for long impact credit risk premia?

Berndt, Antje<sup>1</sup>; Helwege, Jean<sup>2</sup> 1: Australian National University, Australia; 2: University of California, Riverside

The Federal Reserve's experiments in monetary policy related to the Global Financial Crisis lasted longer than any previous easing cycle, giving rise to the question of how does a long-term, low-interest-rate environment affect the pricing of credit risk. We decompose credit default swap (CDS) rates into expected losses and credit risk premia, and show that the level of and firms' exposure to systematic default risk, controls for mis-measuring expected losses and proxies for CDS market liquidity explain more than 80% of the variation in risk premia across firms and over time. We show that in the zero lower bound period, residual risk premia are lower for high-yield debt compared to investment-grade debt—consistent with a reaching for yield interpretation. Our findings are also consistent with investors demanding compensation for ambiguity aversion related to the end of the low-rate environment, and a decrease in the supply of risk capital.

### Does model complexity improve pricing accuracy? The case of cocos

Koziol, Christian; Weitz, Sebastian Eberhard Karls University of Tübingen, Germany

In this study, we analyze whether model complexity improves accuracy of CoCo pricing models. We compare the out-of-sample pricing ability of four models using a broad dataset that contains all CoCos which were issued between January 1, 2013 and May 31, 2016 in euros. The regarded models include the standard model from De Spiegeleer and Schoutens (2012), a modified version enriched by credit risk, an extended model that accounts for the effective lifetime of the CoCo, and a trading model, solely based on historic market prices but no pricing theory at all. For a normal market environment, the simple trading model provides a higher pricing accuracy than the theory-based models. Under distress, however, a theory-based model with a sufficiently high complexity is required.

### The effect of central clearing on netting efficiency in the market for credit default swaps

Schönemann, Gregor Helmut; Gehde-Trapp, Monika University of Hohenheim, Germany

We study the effect of central clearing on netting efficiency in the CDS market. We examine the development of position data and netting efficiency using aggregate data from the Depository Trust and Clearing Corporation (DTCC). Our main finding is that gross outstanding positions in cleared contracts increase, whereas net outstanding positions increase only at a marginally significant level. Hence, central clearing decreases netting efficiency to a considerable extent. Furthermore, we analyze different quintile portfolios of CDS contracts according to pre-clearing netting efficiency. We find that only those contracts that were most efficiently netted bilaterally, decrease in netting efficiency after the introduction of central clearing. Finally, we find evidence that central clearing may allow CDS market participants to free up capital.

### E6: Energy Finance II

### Volatility and dispersion of hourly electricity contracts on the EPEX Spot continuous intraday market

Naumann, Michael; Baule, Rainer University of Hagen, Germany

In the past few years, the trading volume of the continuous intraday market of EPEX Spot has steadily increased. This is to a significant extent due to renewable energies, whereby the market is particularly well suited for the rebalancing of such energies. We analyze the volatility of individual hourly contracts. According to the market particularities, the standard volatility measure from financial time series cannot be applied. We analyze five measures for the volatility of intraday prices for a single contract. The different volatility measures are similarly suitable for electricity contracts. We then identify fundamental drivers of volatility. The share of wind energy, the traded volume, the absolute difference between the day-ahead auction price and the volume-weighted intraday price increase volatility.

### Recovering distortion functions in power markets under model ambiguity

Escobar, Debora Daniela<sup>1</sup>; Paraschiv, Florentina<sup>2</sup>; Schürle, Michael<sup>3</sup> 1: Department of Statistics and OR, University of Vienna, Austria; 2: NTNU Business School, Norwegian University of Science and Technology, Norway; 3: Institute for Operations Research and Computational Finance, University of St. Gallen, Switzerland

This paper addresses the relationship between spot and futures prices. Among all the studies that explain this relationship, our paper proposes the valuation of futures in terms of distortion functions, which expresses risk preferences of consumers and producers behind the prices. In addition, we propose a regime-switching model for the spot prices. Since our goal is to identify a pricing rule for futures from spot prices, the model is estimated with the information known from the spot market. It has been established that futures contain more information than the one provided by the spot market, therefore we include a shifting parameter to quantify it. On the top of that, our estimations are made under model ambiguity using the Wasserstein distance.

### (In)-credibly green: Which bonds trade at a green bond premium?

Kapraun, Julia; Scheins, Christopher Goethe University Frankfurt, Germany

This paper provides an in-depth analysis of the pricing of green bonds, using both, primary and secondary market data. We consider a large global sample of green bonds and estimate the differences in yields of green and comparable conventional bonds. Our results reveal a significantly negative premium of 20-30 bps for green bonds, implying that at issuance, green bonds are trading at higher prices than their conventional counterparts. However, credibility plays an important role as in particular bonds issued by more credible entities or bonds denominated in major currencies are issued at lower yields. Further, we find bonds listed on exchanges with a dedicated green bond segment trading at up to 30 bps lower yields, pointing out the importance of transparency and clear standards for the growth of the green bonds market. Finally, we reveal a non-linear relationship between the overall sustainability reputation of the issuer and the green premium.

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#### List of authors

Adämmer, Philipp, 50 Akbas, Ferhat, 38 Aldasoro, Inaki, 52 Anand, Kartik, 59 Börner, Christoph J, 56 Baars, Maren, 32 Balke, Florian, 52 Baltzer, Markus, 80 Bannier, Christina, 34 Barth, Andreas, 52 Bauer, Anastasia, 34 Baule, Rainer, 86 Beck, Thorsten, 31 Beckmeyer, Heiner, 36 Belke, Ansgar, 78 Berndt, Antje, 42, 84 Betzer, André, 70 Bias, Daniel, 30 Bienz, Carsten, 53 Bobenhausen, Nils-Christian, 35 Boehmer, Ekkehart, 38 Bofinger, Yannik, 34 Bohl, Martin T., 67 Branger, Nicole, 36, 50 Brinster, Leonhard, 41 Broere, Mark, 46 Brunner, Fabian, 81 Buhlmann, Florian, 32

Challet, Damien, 54 Chao, Jiang, 38 Christmann, Robin, 46 Claußen, Catharina, 56 Couperier, Ophélie, 78 Döring, Simon, 40 Dang, Thuy Duong, 45 de Roure, Calebe, 48 Dichtl, Hubert, 68 Dillschneider, Yannick, 37 Dindo, Pietro, 79 Dittmar, Robert, 74 Doerrenberg, Philipp, 32 Drobetz, Wolfgang, 40, 68 Duffie, Darrell, 42 Eierle, Brigitte, 64 Eisl, Alexander, 58 El Ghoul, Sadok, 40 Elsas, Ralf, 40 Eren, Egemen, 52 Escobar, Debora Daniela, 86 Ewelt-Knauer, Corinna, 34 Fecht, Falko, 70 Fenner, Arved, 82 Fernau, Erik, 80 Fischer, Marcel, 43 Flacke, René Marian, 50

Florig, Stephan, 64 Florysiak, David, 73 Franz, Friedrich-Carl, 69

Götz, Martin, 74 Gamm, Fabian, 33 Garzoli, Matteo, 28 Gehde-Trapp, Monika, 85 Gever-Klingeberg, Jerome, 82 Gianinazzi, Virginia, 28 Goergen, Marc, 34 Golez, Benjamin, 26 Grünthaler, Thomas, 36, 76 Grohmann, Antonia, 61 Gros, Daniel, 78 Guedhami, Omrane, 40 Härtel, Nils Härtel, 46 Hülsbusch, Hendrik, 76 Hütter, Marie, 82 Hammerich, Ulrich Johannes, 80 Haselmann, Rainer, 66 Helbing, Pia, 52 Helwege, Jean, 84 Herrmann, Markus Steffen, 76 Hibbeln, Martin Thomas, 76 Hoffmann, Ingo, 56 Hollstein, Fabian, 45, 77

Jakobs, Elmar, 26 Jank, Stephan, 66 Jensen, Bjarne Astrup, 43

Kapraun, Julia, 87

Hornuf, Lars, 72

Karapandza, Rasa, 26 Kathan, Manuel Christian, 28 Kaustia, Markku, 60 Kick, Thomas, 66 Kind, Axel, 51 Klamer, Sebastian, 64 Klein, Philipp, 82 Klos, Alexander, 44 Klus, Milan Frederik, 72 Knauer, Lisa, 30 Knetsch, Andreas, 35 Koch, Paul, 38 Koehl, Alexandra, 44 Korn, Olaf, 36 Koziol, Christian, 84 Laurinaityte, Nora, 38 Lesmeister, Simon, 34 Leymarie, Jérémy, 78 Lillo, Fabrizio, 54 Limbach, Peter, 34, 70 Litterman, Bob, 63 Lohre, Harald, 68 Lohwasser, Todor Stefan, 72 Loos, Benjamin, 32 Loss, Benjamin, 60 Lucey, Brian M., 52

Mössinger, Carina, 82 Mahayni, Antje, 57 Mankart, Jochen, 59 Martin, Jens, 46 Maurer, Raimond, 37 Meinerding, Christoph, 38 Menkhoff, Lukas, 61

#### LIST OF AUTHORS

Merkle, Christoph, 61 Meyer, Steffen, 60 Middelhoff, Frederik, 39, 50 Modena, Andrea, 79 Moench, Emanuel, 48, 66 Mohrschladt, Hannes, 27, 32, 65 Morán, José, 55 Muck, Matthias, 64 Naumann, Michael, 86 Nitschka, Thomas, 58 Nowak, Eric, 28 Ochs, Christian, 58 Offermann, Sascha, 57 Opaleva, Regina, 70 Oster, Philippe, 51 Pütz, Alexander, 67 Pagel, Michaela, 60 Paraschiv, Florentina, 86 Pelizzon, Loriana, 48, 79 Pely, Desiree-Jessica, 71 Peter, Franziska J., 51 Platte, Daniel, 56 Plazzi, Alberto, 28 Prokopczuk, Marcel, 45, 75, 77 Pursiainen, Vesa, 44, 72 Radev, Deyan, 31 Randl, Otto, 68 Rathgeber, Andreas, 82 Rau, P. Raghavendra, 70 Raun Moritzen, Mark, 29 Rother, Carsten, 68

Rottke, Simon, 44 Sagade, Satchit, 48, 49 Salzmann, Astrid, 35 Schönemann, Gregor Helmut, 85 Schürle, Michael, 86 Schürmann, Henrik, 70 Schüssler, Rainer Alexander, 50.83 Schandlbauer, Alexander, 29, 73 Scharnowski, Stefan, 48, 49 Schaub, Nic, 60 Scheins, Christopher, 87 Schlag, Christian, 38, 74 Schmacker, Renke, 61 Schmid, Florian, 82 Schmid, Markus, 60 Schnabel, Isabel, 31 Schneider, Judith C., 65 Schneider, Michael, 48 Schoch, Daniela Stephanie, 40 Schoemer, Sven, 64 Schröder, Henning, 40 Schwienbacher, Armin, 72 Setzer, Ralph, 30 Siklos, Pierre L., 67 Singla, Shikhar, 66 Smajlbegovic, Esad, 80 Staghoj, Jonas, 58 Stein, Katharina, 57 Stieglitz, Moritz, 30 Subrahmanyam, Marti G., 58 Sulewski, Christoph, 67

Tharann, Björn, 77 Theissen, Erik, 49 Thimme, Julian, 38, 74 Thorburn, Karin, 53 Tran, Richard, 26 Trappe, Niklas, 36 Tykvová, Tereza, 28, 41 Ulrich, Maxim, 26, 64 Vig, Vikrant, 66

Vigne, Samuel A., 52 Voget, Johannes, 32 Volkmann, David, 36 Walz, Uwe, 53 Weber, Rüdiger, 42 Weitz, Sebastian, 84 Wese Simen, Chardin, 75 Westerkamp, Arne, 68 Westheide, Christian, 48, 49 Wichmann, Robert, 75 Wimmer, Thomas, 82

Xia, Shuo, 47

Zechner, Josef, 68 Zhu, Yichao, 42





### 27th Annual Meeting of the German Finance Association (DGF)

University of Innsbruck October 01–03, 2020

We cordially invite researchers and practitioners to participate in the 27th Annual Meeting of the German Finance Association (DGF) to be held at the Faculty of Business and Management of the University of Innsbruck, Austria on October 2nd and 3rd, 2020. A doctoral workshop will take place on October 1st, 2020.

The conference aims to bring together reserachers and practitioners to discuss the latest theoretical and empirical research from all areas of finance, banking, and insurance.

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We invite submission of recent research papers. Guidlines for the submission are:

- Submissions are only accepted through the online submission system (ConfTool)
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For all necessary information (including location, accomodation, etc.) please visit the conference website: www.uibk.ac.at/congress/dgf2020

We are looking forward to an interesting conference and to weloming you in Innsbruck!

Best regards

Jochen Lawrenz

Matthias Bank

Michael Kirchler

Klaus Schredelseker



Jüraen Huber

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#### 19<sup>th</sup> cologne colloquium on rinancial markets

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march 30<sup>th</sup>, 2020, cologne

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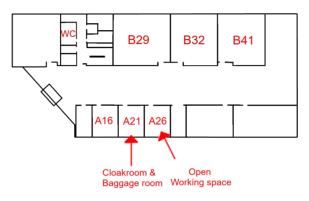
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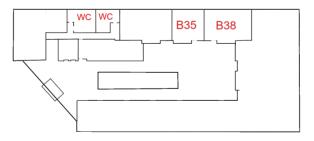
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