



DGF

Deutsche Gesellschaft für Finanzwirtschaft
German Finance Association

29th Annual Meeting of the German Finance Association (DGF)

28 September – 30 September 2023



STIFTUNG
KREDITWIRTSCHAFT



UNIVERSITY OF
HOHENHEIM

Conference Schedule 2023

Day 1

Thursday, 28 September 2023

Location

09:00 a.m. – 05:30 p.m.

Doctoral Seminar

Grüner Saal,
Schloss Hohenheim

12:00 p.m. – 05:30 p.m.

Women-in-Finance Event

BW-Bank
Kleiner Schlossplatz 11
70173 Stuttgart

07:00 p.m. – 11:30 p.m.

Get-together

Börse Stuttgart
Börsenstraße 4
70174 Stuttgart

Day 2

Friday, 29 September 2023

Location

07:30 a.m. – 04:00 p.m.

Registration

Mensa

08:30 a.m. – 08:45 a.m.

Welcome address

Euroforum

09:00 a.m. – 10:30 a.m.

Session A

A1 Asset Management	A2 Central Banking and Regulation	A3 Behavioral Finance	A4 Green Finance	A5 Corporate Finance	A6 Asset Pricing
Room HS 7	Room HS 33	Room HS 34	Room HS 35	Room HS 36	Room HS 32

10:30 a.m. – 11:00 p.m.

Coffee Break

Mensa

11:00 a.m. – 12:30 p.m.

Session B

B1 Risk Management	B2 Central Banking and Regulation	B3 Behavioral Finance	B4 Digital Finance	B5 Corporate Management	B6 Asset Pricing
Room HS 7	Room HS 33	Room HS 34	Room HS 35	Room HS 36	Room HS 32

12:30 p.m. – 01:30 p.m.

Lunch Break and Poster Session

Mensa

Day 2 - continued

01:30 p.m. – 03:00 p.m. Session C					
C1 Market Efficiency	C2 Central Banking and Regulation	C3 Environmental, Social, Governance	C4 Cryptocurrencies	C5 Mergers and Acquisitions	C6 Asset Pricing
Room HS 7	Room HS 33	Room HS 34	Room HS 35	Room HS 36	Room HS 32

03:00 p.m. – 03:30 p.m.	Coffee Break	Mensa
03:30 p.m. – 04:45 p.m.	Keynote by Holger Müller „Geography and Firm Boundaries“	Euroforum, Katharinenaal
05:00 p.m. – 06:00 p.m.	DGF Board Meeting	Euroforum, Katharinenaal
05:30 p.m. – 06:30 p.m.	Guided Museum Tour (1 & 2)	Kunstmuseum
06:00 p.m. – 07:00 p.m.	Guided Museum Tour (3 & 4)	Kunstmuseum
07:00 p.m. – 11:30 p.m.	Conference Dinner	Cube Restaurant

Day 3

Saturday, 30 September 2023

Location

09:00 a.m. – 10:30 a.m. Session D					
D1 Household Finance	D2 Insurance	D3 Financial Intermediation	D4 Financial Data Science	D5 Options	D6 Asset Pricing
Room HS 7	Room HS 33	Room HS 34	Room HS 35	Room HS 36	Room HS 32

10:30 a.m. – 11:00 p.m.	Coffee Break	Mensa
-------------------------	---------------------	-------

11:00 a.m. – 12:30 p.m. Session E					
E1 Housing Finance	E2 Central Banking and Regulation	E3 Financial Intermediation	E4 International Finance	E5 Commodities	E6 Asset Pricing
Room HS 7	Room HS 33	Room HS 34	Room HS 35	Room HS 36	Room HS 32

12:30 p.m.	Takeaway lunch	Mensa
------------	-----------------------	-------

Foreword and Welcoming

Dear friends and members of the DGF,

on behalf of the German Finance Association (DGF), it is our pleasure to welcome you to its 29th Annual Meeting at the University of Hohenheim. We are delighted to host the academic finance community for presentation and discussion of the latest research from all areas of finance, banking, and insurance. We extend a very special welcome to Holger M. Müller, the Nomura Professor of Finance at New York University Leonard N. Stern School of Business who will deliver the keynote speech, addressing Geography and Firm Boundaries

The admission process for our program was highly competitive. We take the opportunity to thank all the reviewers for their vital contribution to the conference. We have received a total of 246 submissions from more than 21 countries. Following a meticulous review process, we selected 97 high-quality papers for inclusion in 30 sessions, along with the traditional poster presentations scheduled for Friday during lunch. Following a long-standing tradition, we have invited a selected group of young researchers to present and discuss their work at the doctoral seminar on Thursday. On the same day, the second Women-in-Finance Event at the DGF Annual Meetings will take place at the BW Bank.

We want to stress that this conference's success would not be achievable without the support and assistance of numerous individuals and institutions. In particular, we like to thank Stiftung für die Wissenschaft, Börse Stuttgart, LBBW, Kreissparkasse Böblingen, Kreissparkasse Ludwigsburg and last, but not least, ARGE for their generous support.

You are cordially invited to a first reunion of our conference at the Börse Stuttgart on Thursday evening. Furthermore, we would be delighted if you could join us for the gala dinner on Friday at The Cube, located in the heart of Stuttgart.

We wish you an inspiring conference and hope that you will have a thoroughly enjoyable time in Hohenheim!

Yours sincerely,

Hans-Peter Burghof

Thomas Dimpfl

Robert Jung

Contents

- Conference Schedule 2023 3
- Foreword and Welcoming..... 5
- Information..... 9
 - General Information 9
 - Sightseeing in and around Stuttgart..... 11
 - Maps..... 13
- Sponsors..... 16
- Program 17
 - Doctoral Seminar..... 18
 - Women-in-Finance Event..... 19
 - Poster Session..... 20
 - Session A: Friday, 29 September 2023, 9:00 a.m. – 10:30 a.m..... 23
 - Session B: Friday, 29 September 2023, 11:00 a.m. – 12:30 p.m. 31
 - Session C: Friday, 29 September 2023, 01:30 p.m. – 03:30 p.m 39
 - Session D: Saturday, 30 September 2023, 9:00 a.m. – 10:30 a.m..... 47
 - Session E: Saturday, 30 September 2023, 11:00 a.m. – 12:30 p.m..... 55
- AcknowledgementsFehler! Textmarke nicht definiert.
- List of Reviewers 63
- List of Authors 66
- Imprint..... 68

Information

General Information

Conference Venue	UNIVERSITY OF HOHENHEIM , Stuttgart
Get-together	Börse Stuttgart Börsenstraße 4 70174 Stuttgart
Coffee Breaks, Lunch	Mensa University of Hohenheim Garbenstraße 29 70599 Stuttgart
Gala Dinner	Cube Restaurant Kleiner Schlossplatz 1 70173 Stuttgart
Kunstmuseum	Guided tour through the Kunstmuseum Stuttgart Friday, 29.09.2023, 5.30 pm and 6 pm depending on your group Note that the Cube Restaurant and the Kunstmuseum Stuttgart share a common building at the Schlossplatz.
Parking	At the conference venue, parking facilities are available. There is a parking fee for non-university members, starting with 2 € for the first 2 hours. The daily maximum rate is 6 €. You pay at parking ticket machines in cash or with EC card.
Internet	On campus, eduroam network is available.
Taxi	Taxi Zentrale 0711 19410
Airport	From Stuttgart Airport you can take bus 65 in the direction of Obertürkheim Bahnhof to the station Universität Hohenheim .
Metro	<u>Tickets</u> You can purchase a day ticket in the VVS app for 5.30 € or at a ticket machine for 5.50 €. Zone 1 contains the city center and the conference venue. <u>To the conference venue:</u> If you arrive in Stuttgart by train, we recommend using public transport to get to the conference venue. Metro Line U7 in the direction of Ostfildern Nellingen takes you to the station Ruhbank (Fernsehturm) . There you can take the bus 70 in

the direction of Plieningen Seemühlenweg or **bus 76** in the direction of Echterdingen to the station **Universität Hohenheim**

To the city centre / Cube restaurant

To get to cube restaurant or to the city centre you can take **bus 70** to **Ruhbank (Fernsehturm)**. There you can take the **Metro Line U7** in the direction of Mönchfeld to the station **Schlossplatz**.

Scan the QR Code, to get to the VVS Website



...or download the App



Google Play Store



Apple Store

Sightseeing in and around Stuttgart



Hohenheim Palace



Stuttgart State Theater



Stuttgart State Gallery



Castle Solitude Stuttgart



Ludwigsburg Palace



Stuttgart TV Tower – first modern TV Tower

Stuttgart – City of Cars



Porsche Museum



Mercedes-Benz Museum

To get an extensive impression of Stuttgart, scan the QR code and watch the image film!

... or get a detailed City Map



For further information see:

Tourist Information i-Punkt Stuttgart
Königstraße 1 A
70173 Stuttgart
<https://int.stuttgart-tourist.de/en>

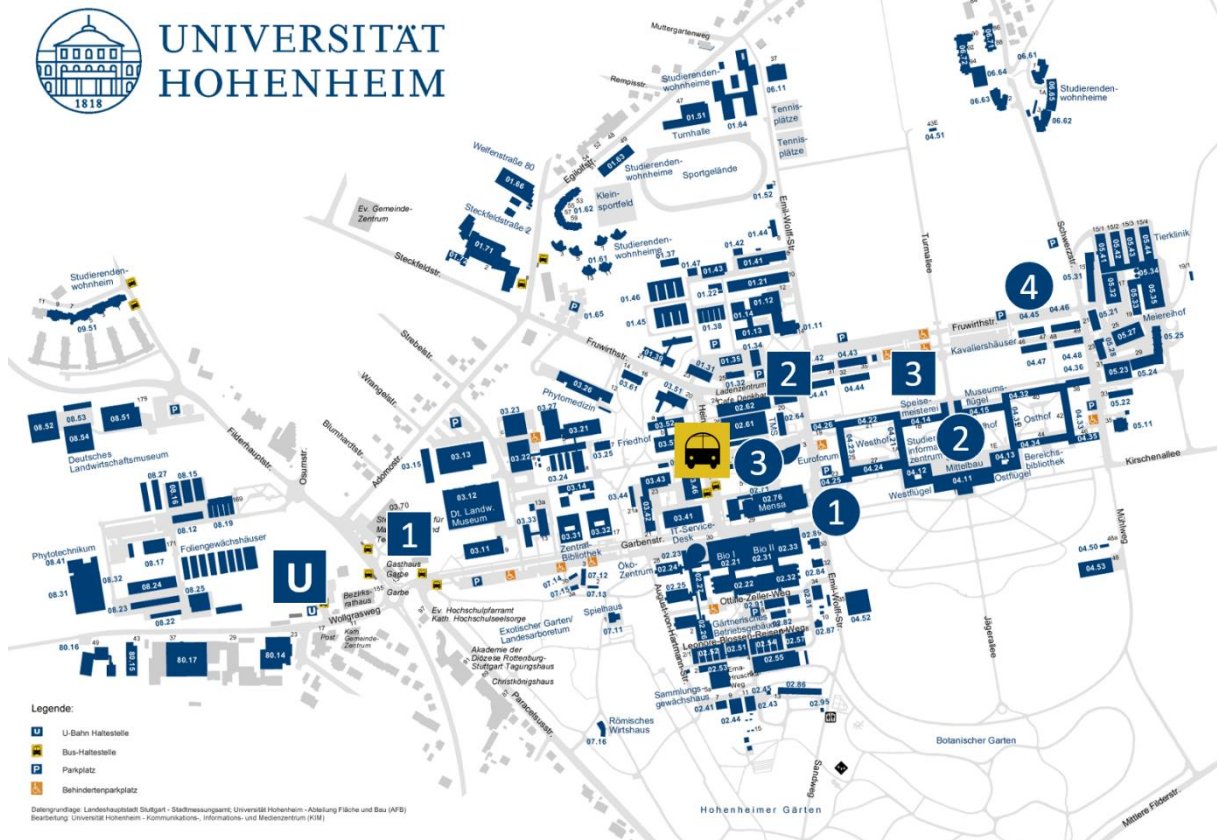


BADEN-
WÜRTTEMBERG



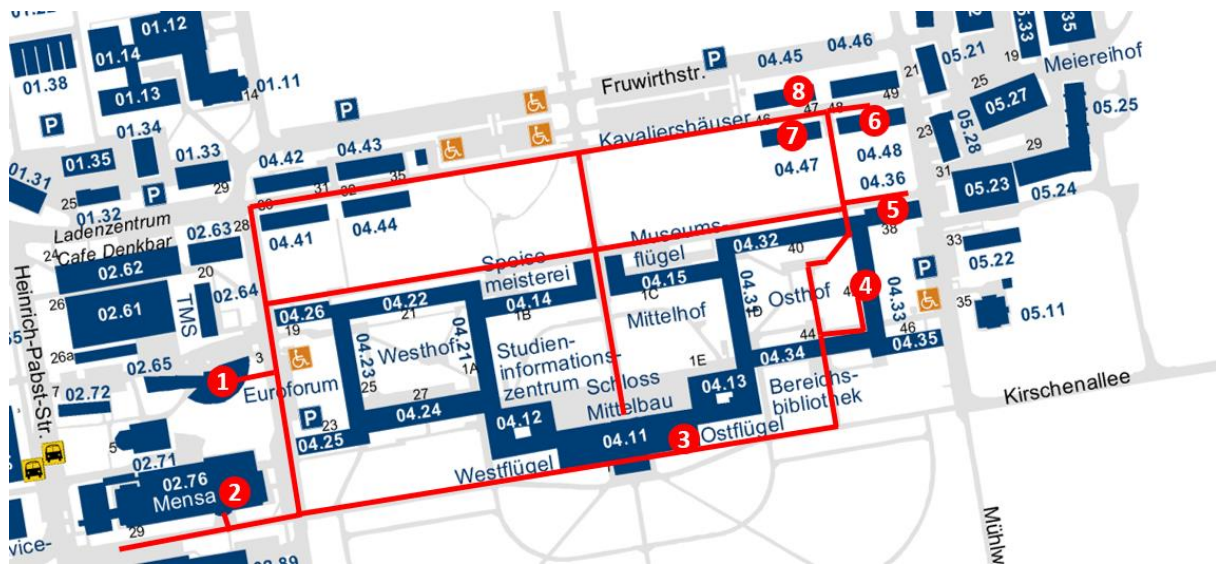
Maps

Conference Venue



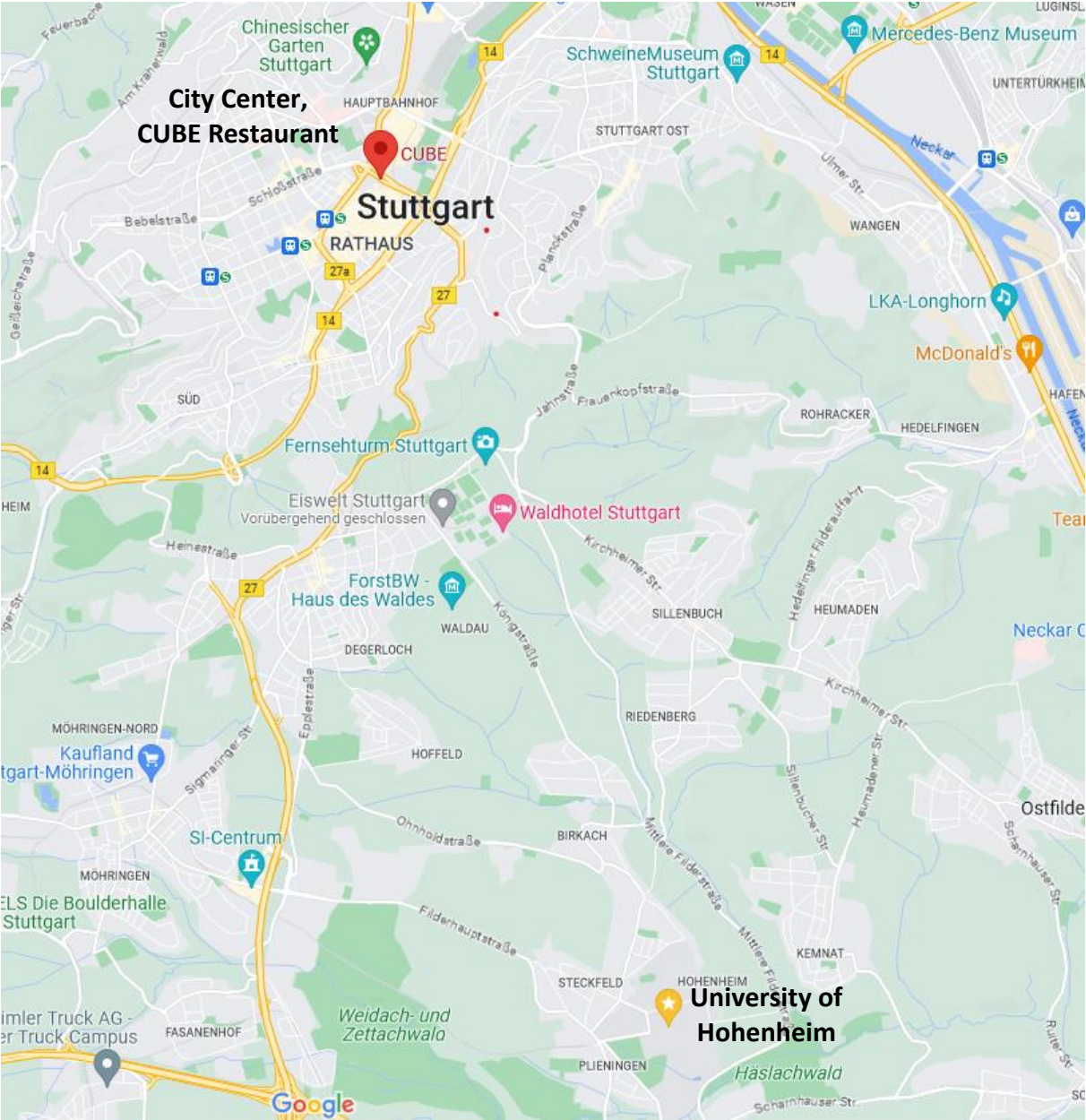
Restaurants & cafeteria	Conference Venues
1 Wirtshaus Garbe Filderhauptstraße 136 €€	1 Mensa Garbenstraße 29
2 denkbar Fruwirthstraße 24 €	2 Schloss Hohenheim
3 Speisemeisterei (evenings only) Schloss Hohenheim 1B €€€€€	3 Euroforum Kirchnerstraße 3
	4 Seminar rooms (see below)

Lecture Halls for the Events



Lecture Hall	Events
1 Katharinen Saal at Euroforum	Opening, Key Note and DGF Board Meeting on Friday
2 Mensa	Lunch, Coffee Break, Registration and Poster Session
3 Green Hall	Doctoral Seminar on Thursday
4 HS 7	Session A1, B1, C1, D1 & E1
5 HS 32, 33	HS 33: Session A2, B2, C2, D2 & E2 HS 32: Session A6, B6, C6, D6 & E6
6 HS 35	Session A4, B4, C4, D4 & E4
7 HS 34	Session A3, B3, C3, D3 & E3
8 HS 36	Session A5, B5, C5, D5 & E5

City map



Sponsors

Boerse Stuttgart Group

Boerse Stuttgart Group is the sixth largest exchange group in Europe with strategic pillars in the capital markets business as well as in the digital & crypto business. In the capital markets business, Boerse Stuttgart Group has a strong market position: It operates 16 of the European exchange groups: With its offerings BISON and Boerse Stuttgart Digital, the Group is the reliable, regulated and transparent gateway to the crypto world for retail and institutional investors in Europe. Boerse Stuttgart Group is strongly growing its team and has 700 employees in hubs in Stuttgart, Berlin, Stockholm, Zurich, and Ljubljana.



LB BW



Kreissparkasse
Ludwigsburg



Arbeitsgemeinschaft
Baden-Württembergischer
Bausparkassen



Stiftung für die Wissenschaft



Finanzgruppe

Program

Keynote

Holger M. Mueller:

“Geography and Firm Boundaries”

Large firms typically operate in multiple regions. In this keynote address, I discuss how, through firms’ internal, multi-region networks, local shocks can propagate from one region to another. In response to a local shock, corporate headquarters moves resources (e.g., capital, knowledge) across firm units, and thus effectively across regions. Through this channel, local demand or productivity shocks can trigger employment losses in far-away regions; conversely, local “knowledge shocks” can improve the productivity of distant firm units, leading to employment gains in distant regions. The “within-firm, across-region propagation channel” has implications for aggregate fluctuations, optimal firm organization, and local industrial policies.

Biography:

Holger M. Mueller is the Nomura Professor of Finance at New York University Leonard N. Stern School of Business. He is also a research associate at NBER, a research fellow at CEPR, and a research associate at ECGi.

Professor Mueller has been with NYU Stern since 2001. He teaches Corporate Finance in the M.B.A., Executive M.B.A., and Ph.D. programs, and received multiple Executive M.B.A. awards for excellence in teaching. His research has been published in many leading journals, including *Quarterly Journal of Economics*, *American Economic Review*, *Journal of Finance*, *Review of Financial Studies*, and *Journal of Financial Economics*.

Professor Mueller received his Bachelor in Business Administration and his Doctorate in Economics from the University of St. Gallen in Switzerland, and his Habilitation in Economics from the University of Mannheim in Germany.



Doctoral Seminar

The German Finance Association will again be holding a workshop for advanced doctoral students alongside its upcoming conference at the University of Hohenheim. This one-day event on Thursday, 28 September 2023 offers doctoral students the opportunity to present their research and to discuss its content and methodology with leading representatives of the field.

The participating faculty members are (subject to change):

- Prof. Dr. Ralf Elsas (Ludwig-Maximilians-Universität München)
- Prof. Dr. Joachim Grammig (Eberhard Karls Universität Tübingen)
- Prof. Dr. Stefan Ruenzi (Universität Mannheim)
- Prof. Dr. Christian Schlag (Goethe-Universität Frankfurt)
- Prof. Dr. Erik Theissen (Universität Mannheim)

The Sparkassen-Finanzgruppe (Stiftung für die Wissenschaft) donates a best doctoral student paper award worth 1,000 €. The prize is awarded for the best presentation during the doctoral workshop. The award will be presented during the main conference for which the participation fee will be waived.

This year's participants are:

Philipp Decke (Leibniz University Hannover)	<i>Taxonomy in Action: Sustainable Finance Regulation and Investor Preferences</i>
Hannes Halder (Goethe University Frankfurt)	<i>Relationships versus Competition in OTC Markets</i>
Frederik Horn (University of Mannheim)	<i>Mortality Beliefs and Saving Decisions: The Role of Personal Experiences</i>
Can Yilanci (University of Mannheim)	<i>To Sell or Not to Sell? Disposition Effect and Investment Style</i>
Martin Waibel (Stockholm School of Economics)	<i>Managing Regulatory Pressure: Bank Regulation and its Impact on Corporate Bond Intermediation</i>
Nadine Weuschek (University of Münster)	<i>Public Funding and Financing Constraints – Evidence from a Quasi-Natural Experiment</i>
Lisa Knauer (Technical University of Munich)	<i>Private Activity Bonds as Investment Subsidy: Evidence from the 1986 Cap on Bond Volumes</i>
Tom Zeissler (Vienna University of Economics and Business)	<i>On the Relevance of Variances and Correlations for Multi-Factor Investors</i>
Emanuele Guidotti (University of Neuchâtel)	<i>A Theory of Price Formation in Financial Markets</i>

Women-in-Finance Event

The German Finance Association is excited to host the 2nd Women-in-Finance Event, building on the immense success of previous year's edition. This half-day gathering offers a valuable platform for female finance researchers to network, collaborate, address shared challenges, and get inspired by accomplished female role models.

The event takes place at the premises of the **BW-Bank, Kleiner Schlossplatz 11, 70173 Stuttgart.**

The keynote will be open for all conference participants.

11:30 Welcome

12:00 "Raise your voice" - Rhetoric and Presentation Training with Katrin Seifarth

14:30 "Gender and the time cost of peer review" - Keynote by Erin Hengel, Ph.D. (Brunel University)

15:30 Panel discussion

amongst others with Erin Hengel, Ph.D. (Brunel University), Prof. Tabea Bucher-Koenen (ZEW), Anke Dembowski (Fondsfrauen), and Prof. Alexandra Niessen-Ruenzi (University of Mannheim)

17:30 Joint Dinner

After the joint dinner, all participants are invited to visit the reception of the main conference.

The organizers of the Women-in-Finance Event are:

- Larissa Ginzinger (University of Mannheim)
- Leah Zimmerer (University of Mannheim)
- Sophia Koch (University of Hohenheim)

The Women-in-Finance Event 2023 is supported by:



Poster Session

Investment timing and market feedback

Stefan Hirth^{1,2} ; Matthias Lassak^{1,2}

¹Aarhus University, Denmark ; ²Danish Finance Institute (DFI)

How does a firm's investment timing depend on whether the firm's equity is privately held or publicly traded? A public firm's manager can use information that arises when investors trade in her firm's stock. The ability to learn from the market generally leads to earlier investment. We predict that widely used measures of market efficiency, such as liquidity and bid-ask spreads, are a key determinant of the investment timing wedge between private and public firms, as well as between public firms that differ on these measures. In addition, we predict a differential effect on the investment timing of the public firm depending on whether it learned good or bad information internally, due to the asymmetry of market feedback.

Index rule changes: implications for stock prices and market quality

Micha Bender

Goethe University Frankfurt, Germany

This paper investigates the impact of index rule changes and the following reconstitutions on stock prices and market quality. With respect to rule changes, our results show that index incumbents experience significant positive excess returns and an increase in trading activity when index providers announce stricter index rules. Analyzing index reconstitutions, we find a deterioration in quoted depth and trading activity but reduced trading costs for index incumbents. In contrast, index joiners experience an increase in liquidity and trading activity after index reconstitutions. Overall, our results suggest that index rule changes and reconstitutions are not information-free events. While the improvement of index rules positively affects the market environment, the effects of reconstitutions differ for index incumbents and joiners.

Expected bond liquidity

Marcel Müller¹ ; Michael Reichenbacher¹ ; Philipp Schuster² ; Marliese Uhrig-Homburg¹

¹Karlsruhe Institute of Technology, Germany ; ²University of Stuttgart, Germany

We derive two forward-looking measures for the liquidity of an individual bond in the month ahead using machine learning: Expected mean liquidity and downside liquidity risk. Expected mean liquidity significantly outperforms the literature's current approach of using today's liquidity in terms of forecasting error. Both of our measures are associated with higher bond yields in a contemporaneous setting. Within an asset pricing framework, using today's liquidity underestimates illiquidity alpha and illiquidity risk premium severely. Including our measures increases alpha and risk premium by a factor between 2 and 3. We confirm that investors in bond mutual funds preemptively sell shares in underperforming funds to secure a first-mover advantage. The effect doubles when including our forward-looking expected mean liquidity measure.

Option Trade Classification

Caroline Grauer² ; Philipp Schuster¹ ; Marliese Uhrig-Homburg²

¹University of Stuttgart, Germany ; ²Karlsruhe Institute of Technology, Germany

We evaluate the performance of common stock trade classification algorithms to infer the trade direction of option trades. Using a large sample of matched intraday transactions and Open/Close data, we show that the algorithms' success to classify option trades is considerably lower than for stocks. The weak performance is due to sophisticated customers who often use limit orders instead of market orders to implement their trading strategies. These traders' behavior varies over time and across exchanges with different pricing models. We introduce new rules that enhance existing algorithms and improve classification accuracy by 9% to 47%. Applying our new rules to construct a long-short trading strategy for stocks based on option order imbalance increases Sharpe ratios from 2.35 to 3.71.

Superficial habits: Influence and predictive value of Seeking Alpha articles

Wolfgang Breuer ; Andreas Knetsch ; Eric Sachsenhausen

RWTH Aachen University, Germany

We show that recommendations issued by Seeking Alpha (SA) authors can affect trading activity substantially. A recommendation's chances to become influential in this sense are larger for more accessible articles and depend on characteristics which are observable without reading the text. SA community members are thus reluctant to spend much effort on reading full articles and instead use superficial criteria for their decision which articles to follow. Article features which are consistent with a detailed, in-depth analysis provide the more valuable long-term investment advice. Such articles are however ignored by investors. We devise an investment strategy which earns a yearly abnormal out-of-sample return of 6.7 %. The currently dominant investment style of SA community members generates a loss of 4.7 % per year.

Fundamental stock price cycles

Maximilian Weiß

University of Bonn, Germany

News shocks about higher future capital returns can explain stock price-booms and subsequent -busts in a two-asset, heterogeneous agent New Keynesian model. The portfolio choice between liquid assets (like stocks) and illiquid capital is key. Upon the news, capital-rich households accept to hold more illiquid capital at a lower premium, in anticipation of higher future returns on it. After the boom, capital-rich households trade capital for liquid assets in order to self-insure against idiosyncratic income shocks, which increases the illiquidity premium, and causes stock prices to fall. Novel evidence from survey data on portfolio choices of capital-wealthy households during stock price boom-bust cycles supports the key mechanism of the model.

Pricing and mispricing of accounting fundamentals: Global evidence

Siegfried Köstlmeier

University of Regensburg, Germany

We extend the fundamentals-based valuation model in Nichols (2017), that links accounting information to share prices, to be applicable in global equity markets. Our extended model explains on average 81% of the cross-sectional share price variation among global firms. Deviations of share prices from the model's estimated value indicates actual mispricing both among firms and, as an aggregated measure, market-wide mispricing over time. Firms identified as undervalued outperform overvalued firms as well as the market return after controlling for common risk-factors, mispricing-factors and transaction costs by 0.30% per month. We directly link our results to factor risk-premia and find that momentum is not priced in the cross-section of stock returns and in the time-series when market-wide mispricing is high.

Econlinguistics

¹Andreas Barth ; ¹[Sasan Mansouri](#) ; ²Fabian Woebbecking ; ¹Severin Zoergiebel

¹Goethe University Frankfurt, Germany ; ²IWH - Leibniz Institute for Economic Research

We extend the fundamentals-based valuation model in Nichols (2017), that links accounting information to share prices, to be applicable in global equity markets. Our extended model explains on average 81% of the cross-sectional share price variation among global firms. Deviations of share prices from the model's estimated value indicates actual mispricing both among firms and, as an aggregated measure, market-wide mispricing over time. Firms identified as undervalued outperform overvalued firms as well as the market return after controlling for common risk-factors, mispricing-factors and transaction costs by 0.30% per month. We directly link our results to factor risk-premia and find that momentum is not priced in the cross-section of stock returns and in the time-series when market-wide mispricing is high.

Session A

Session A: Friday, 29 September 2023, 9:00 a.m. – 10:30 a.m.

To Sell or not to Sell? Disposition Effect and Investment Style

Yilanci, Can

University of Mannheim, Germany

Discussant: Tereza Tykvova (University of St. Gallen and Swiss Finance Institute)

In my sample of active mutual funds, the disposition effect is driven by investment style. I find a strong disposition effect for value funds but I find no disposition effect for growth funds. While value funds need to hold on to "loser" stocks, growth funds need to hold on to "winner" stocks (the opposite of the disposition effect). Focusing on a subsample of managers who manage value and growth funds at the same time, I find that these managers show a disposition effect for their value funds but no disposition effect for their growth funds. I make similar findings when focusing on a sample of passive index funds. These findings call into question the traditional understanding of the disposition effect as a behavioral bias.

Social (non)interaction and trade decisions of mutual fund managers

¹Eroglu, Busra ; ¹Theissen, Erik

¹University of Mannheim, Germany

Discussant: Andreas Blickle (University of Hohenheim)

Our study investigates how social interaction among institutional investors influences their portfolio formation. We specifically focus on the stay-at-home period during the Covid-19 outbreak, which provides a unique opportunity to examine the impact of informal communication among fund managers while controlling for other potential factors that may impact investment decisions. By utilizing geographic proximity as a means of measuring social connectedness, we employ a difference-in-difference methodology to analyze changes in trade decisions. Our findings reveal a significant decline in the similarity of fund holdings which is mainly driven by selling decisions made by fund managers during the month of enforcement of work-from-home mandates across most states. This suggests that information related to investment decisions may be transmitted through social connections.

Retail customer reactions to private equity acquisitions

Pursiainen, Vesa ; Tykvova, Tereza

University of St. Gallen and Swiss Finance Institute, Switzerland

Discussant: Busra Eroglu (University of Mannheim)

Acquisition announcements by private equity funds are associated with significant reductions in customer visits to target firm outlets, measured using aggregated mobile phone data. These reductions occur in primary but not in secondary buyouts. Customer reviews do not become more negative. Following deal completion, the customer losses are reversed. Thus, the initial decrease is unlikely to be the consequence of operational changes. The decrease in visits is smaller in areas with higher economic connectedness, income, stock market participation, and self-employment rates, and larger in altruistic, Republican-voting and individualistic regions. The decrease is also larger for outlets facing more competition.

What are banks' actual capital targets

Couaillier, Cyril¹

¹European Central Bank, Germany

Discussant: Stephan Jank (Deutsche Bundesbank)

How do banks set their target capital ratios? How do they reach them? This paper investigates these questions using capital ratio targets banks announce to their investors. It provides several key lessons. First, targets increase with capital requirements but banks react similarly to strict and usable requirements, contrary to the objective of the Basel III framework. Targets are also procyclical, suggesting banks want to showcase solvency in crisis times. Second, the gap between actual and target capital predicts balance-sheet adjustment. Banks bridge two-thirds of the gap with outstanding capital and the rest by adjusting assets. Third, this adjustment is stronger for banks initially below their target. As such, I show that this gap was an important determinant of banks credit supply during the COVID-19 pandemic.

Foreign exchange swap liquidity

Kloks, Peteris¹; Mattille, Edouard¹; Rinaldo, Angelo^{1,2}

¹University of St. Gallen ; ²Swiss Finance Institute

Discussant: Cyril Couaillier (European Central Bank)

This paper presents the first comprehensive examination of liquidity in the global foreign exchange (FX) swap market. Our analysis employs effective measures that assess both the tightness and depth of the global market. We identify three main findings: First, FX swap liquidity is fragmented across currencies, tenors, and time. Second, liquidity conditions worsen when dealers' balance sheet capacity shrinks, especially at quarter-end reporting dates. However, we observe a simultaneous surge in short-term volumes; we rationalize this through a difference-in-differences analysis suggesting a demand channel for FX swaps during reporting windows. Third, we build a measure of pricing efficiency based on the law of one price and show that illiquidity impairs efficiency even during periods when dealers' regulatory constraints are slack.

Collateral scarcity and market functioning: Insights from the Eurosystem securities lending facilities

Jank, Stephan

Deutsche Bundesbank, Germany

Discussant: Edouard Mattille (University of St. Gallen)

We utilize the Eurosystem securities lending facilities as a laboratory to investigate the impact of collateral scarcity on market functioning. The reduction of securities lending fees, implemented in November 2020, provides a natural experiment for our analyses. This policy change results in a surge in the utilization of securities lending facilities, particularly for bonds with limited supply elasticity in the repo market. We find no evidence of substitution effects; instead, the overall activity in the repo market expands through the collateral multiplier. The improved pricing conditions alleviate collateral scarcity and enhance market quality in both the repo and cash markets.

Does a firm's silence drive media attention away?

Mansouri, Sasan

Goethe University Frankfurt, Germany

Discussant: Thomas Walther (Utrecht University)

This study examines the relationship between firms' willingness to share value-relevant information and media coverage. Results indicate that firms reluctant to provide such information receive less coverage, particularly from professional business media. A poor information environment limits media's ability to generate new information but not dissemination of existing information. These findings challenge the idea that audience demand dictates media coverage, emphasizing supply-side factors and revealing complex dynamics between firms and media in shaping the information environment.

Dirty Money: The impact of negative ESG news on dividend consumption

Laudi, Marten¹; Pauls, Thomas²; Smeets, Paul³

¹Maastricht University, Netherlands; ²Goethe Universität, Germany; ³University of Amsterdam, Netherlands

Discussant: Sasan Mansouri (Goethe University Frankfurt)

Emotion regulation theory posits that people increase consumption after receiving "dirty" income that evokes negative emotions. We test this theory in an important real-world context, financial markets. We analyze a large European bank dataset of individual investor trades and spending. Our results indicate that investors consume twice as much from dividend income after negative ESG news that exposes controversial business practices of the dividend-paying firm, compared to dividends from non-controversial firms. This increased consumption happens already on the dividend payout day. We control for selection effects and rule out alternative mechanisms like attention.

Relative Investor Sentiment

Gao, Xiang¹; Koedijk, Kees²; Walther, Thomas^{2,3}; Wang, Zhan¹

¹Shanghai Business School, Shanghai, China ; ²Utrecht University, The Netherlands ; ³Technische Universität Dresden, Germany

Discussant: Marten Laudi

We propose a new investor sentiment index by estimating the differences between moments from realized stock returns and option-implied moments. We show that our index is unrelated to canonical risk factors such as market risk, firm size, value, or profitability. We show that our index exhibits known patterns of stock market reactions to sentiment shocks, is stronger for hard-to-arbitrage assets, and complementary to alternative sentiment measures on a daily horizon. Using our monthly index, we show that momentum strategies perform significantly better during high sentiment periods. Lastly, we demonstrate how our methodology can be extended to derive stock-specific investor sentiment indices.

Moral licensing through ESG Investment: Causal Evidence on Individual Investors' Preferences and Actions

Kormanyos, Emily^{1,2} ; Jakob, Famulok^{1,2}; Daniel, Worring¹

¹Goethe University Frankfurt, Germany ; ²Leibniz Institute for Financial Research SAFE

Discussant: Christoph Meinerding (Deutsche Bundesbank)

To understand retail investor demand for sustainable assets, I link consumption data for 6,151 investors to product-level carbon intensities. This enables estimating individual carbon footprints and their relation to portfolio sustainability. I provide evidence that compensation motives drive ESG investments, and rule out that sustainability or return preferences explain my findings. A survey with 3,646 participants reveals that these results follow from a conscious choice in that investors who believe they have higher footprints than their peers are more likely to choose sustainable investing as a form of compensation. Finally, I show that portfolio sustainability is positively related to religious beliefs which are historically tied to offsetting and that my results are not driven by income effects or sample selection.

Environmental Tastes: appearance and effects

Bauckloh, Tobias^{1,2}; Beyer, Victor³ ; Klein, Christian³

¹University of Cologne, Germany ; ²Centre For Financial Research Cologne, Germany ; ³University of Kassel, Germany

Discussant: Jakob Famulok (Goethe University Frankfurt)

This study identifies environmental tastes in the US stock market and analyses implications for investors and companies. Environmental tastes are present in industries with high toxic emissions and lead to the shunning of high-polluting firms. A high-minus-low portfolio based on emission quartiles yields an average annual return of 5.75%, which remains significant after controlling for common risk factors. Thus, investors with low environmental tastes, such as hedge funds, have benefited from the environmental tastes of other investors over the past three decades. Implied cost of capital analyses, however, suggest a negligible effect on firms' capital budgeting. Our findings emphasize the need for more granular investigations on the existence and effects of environmental tastes in capital markets.

Who pays the greenium?

Fricke, Daniel ; Jank, Stephan ; Meinerding, Christoph

Deutsche Bundesbank, Germany

Discussant: Tobias Bauckloh (University of Cologne)

Merging a sample of matched green-conventional bond pairs with data on their ownership structure, we document that the greenium (the yield differential between green and conventional bonds) is largely borne by banks, investment funds, pension funds, insurances and their clients. Strikingly, while investment funds and pension funds pay the greenium largely due to their clients' general green preference, banks display no such pattern. Rather, banks overweight certain bonds that display a sizeable greenium, pointing towards an interaction between the greenium and bank-specific financial frictions. Overall, our findings shed light on the question who finances the green transition and who ultimately pays the costs arising from greening investment portfolios.

Present bias, risk management and capital structure

Pape, Jan

University of Hamburg, Germany

Discussant: Fabio Girardi (Goethe University)

Standard credit risk models assume entrepreneurs maximize long-term equity value, notwithstanding substantial evidence that entrepreneurs might overvalue short-term profits and undervalue future long-term returns. We extend a classical credit risk framework and incorporate entrepreneurial myopia. It is a new approach to characterize an entrepreneur's time-inconsistency with a present-biased discount function in a model where the optimal timing for risk-taking and default is analyzed. In general, we find that entrepreneurial myopia leads to delayed risk-taking, earlier bankruptcy and higher leverage. Naivety regarding future behavior leads to highest optimal leverage, while sophistication increases the willingness to take risks. Surprisingly, sophisticated entrepreneurs are not able to persistently outperform the naive, given their time-inconsistent preferences. We show entrepreneurial time-inconsistent behavior increases credit spreads.

Navigating policy uncertainty: politically experienced directors and corporate investment

Tresl, Jiri¹; Brockman, Paul²; Berchtold, Demian³; Bowler, Blake⁴; Li, Zhe⁵

¹University of Mannheim, Germany; ²Lehigh University; ³University of Bern; ⁴Mercer University;

⁵University of Southern Indiana

Discussant: Jan Pape (University of Hamburg)

Previous studies show that economic policy uncertainty has been rising steadily since the 1960s (Baker et al. 2014), and that this secular increase has led to harmful economic outcomes such as reduced investment rates (Gulen and Ion 2016). Other studies find that politically connected directors play a unique role in corporate decision making and firm valuation (Goldman, et al. 2009). We combine these two lines of research to examine the ability of politically experienced directors (PEDs) to mitigate the harmful investment effects of policy uncertainty. Our results show that the presence of at least one PED on a company board reduces the sensitivity of investment decisions to policy uncertainty by 49% relative to firms without PEDs.

The Price of Uncertainty in the Term Structure of Equity and Treasury Yields

Girardi, Fabio

Goethe University, Germany

Discussant: Jiri Tresl (University of Mannheim)

I propose a consumption-based asset pricing model in which the decision maker prices contingent cash flows realized at different future horizons and exposed to multiple shocks. The decision maker ignores the objective probability generating the data, and she evaluates a set of models that is twisted to include specific parametric alternatives. I characterize and measure how the market price of uncertainty (mpu) contributes to the short and long-run payoff valuations. I propose a state-space with macroeconomic and aggregate financial variables that quantifies the (model) uncertainty premium in the term structure of U.S. Treasury yields and equity yields on the aggregate S&P500 index. Including compensation for the mpu allows replicating prominent features of the data

Timing the factor zoo

Reschenhofer, Christoph¹; Neuhierl, Andreas²; Randl, Otto¹; Zechner, Josef¹

¹Vienna University of Economics and Business ; ²Washington University in St. Louis

Discussant: Andreas Löffler (Freie Universität Berlin)

We provide a comprehensive analysis of the timing success for equity risk factors. Our analysis covers over 300 risk factors (factor zoo) and a high dimensional set of predictors. The performance of almost all groups of factors can be improved through timing, with improvements being highest for profitability and value factors. Past factor returns and volatility stand out as the most successful individual predictors of factor returns. However, both are dominated by aggregating many predictors using partial least squares. The median improvement of a timed vs. untimed factor is about 2% p.a. A timed multifactor portfolio leads to a 20% increase in return relative to its untimed counterpart.

All Days are not created equal: Understanding Momentum by learning to weight Past Returns

Beckmeyer, Heiner ; Wiedemann, Timo

University of Münster, Germany

Discussant: Christoph Reschenhofer (Vienna University of Economics and Business)

We set up a simple machine learning model that optimally extrapolates from the information contained in past realized returns. The resulting trading strategy significantly improves upon the performance of standard momentum-based strategies, with an annualized Sharpe ratio of 2.87 over the 38 year-long out-of-sample test. The strategy is robust to crashes and unlike standard momentum continues to work in recent decades. By decomposing how the strategy weights past returns, we can quantify the prevalence of an under- vs. an overreaction to news in the cross-section of stocks and find that the strategy primarily exploits market participants' underreaction to information. Markets have grown more efficient over time but substantial opportunities to profit from momentum signals persist. Finally, we show that the price reaction around earnings announcements and market-wide news releases are of particular importance.

A stochastic Gordon-Shapiro formula and the equity premium puzzle reconsidered

Kruschwitz, Lutz ; Löffler, Andreas

Freie Universität Berlin, Germany

Discussant: Timo Wiedemann (University of Münster)

The equity premium puzzle describes the enigma between the theoretical model of consumption behavior and its empirical calibration. We believe, this puzzle is based on a logical inconsistency in which deterministic and stochastic quantities are not precisely separated: The empirical literature requires a stochastic dividend-price ratio and the Lucas Model only allows for a deterministic ratio. Nevertheless, a correct distinction between deterministic and stochastic variables requires one to demonstrate that it is possible to develop a theory of stochastic dividend-price ratios. This theory must satisfy both the principles of no arbitrage and transversality and can be integrated into the Lucas Model. We provide such an attempt.

Session B

Session B: Friday, 29 September 2023, 11:00 a.m. – 12:30 p.m.

Intra-day risk-neutral densities and macroeconomic announcements

Bales, Stephan¹; Burghartz, Kaspar²; Hitz, Lukas²

¹Chair of Banking, University of Hohenheim, Germany ; ²Faculty of Business and Economics, Chair of Finance, University of Basel, Switzerland

Discussant: Tim Philippi (Universität Hohenheim)

We examine how macroeconomic announcements affect stock market participants' expectations throughout the day. To this end, we propose a novel step-by-step approach to estimate intra-day risk-neutral densities (RND) based on options trades rather than typically used quotes data. This approach allows for a more accurate mapping of expectations. Based on a comprehensive data set covering every S&P500, Nasdaq 100, and Russell 2000 index option trade over 2004-2021, we model the intra-day announcement effect immediately after the specific release. Panel regression analysis of the higher RND moments indicates that market participants' risk-neutral expectations significantly react in response to important macroeconomic announcements. Specifically, we observe heterogeneous responses and changes in the entire shape of the distribution, depending on the type of announcement.

Liquidity Derivatives

Jappelli, Ruggero; Bagnara, Matteo

Goethe University and SAFE Leibniz

Discussant: Kaspar Burghartz (University of Basel)

It is well established that investors price market liquidity risk. Yet, there exists no financial claim contingent on liquidity. We propose a contract to hedge uncertainty over future transaction costs, detailing potential buyers and sellers. Introducing liquidity derivatives in Brunnermeier and Pedersen (2009) improves financial stability by mitigating liquidity spirals. We simulate liquidity option prices for a panel of NYSE stocks spanning 2000 to 2020 by fitting a stochastic process to their bid-ask spreads. These contracts reduce the exposure to liquidity factors. Their prices provide a novel illiquidity measure reflecting cross-sectional commonalities. Finally, stock returns significantly spread along simulated prices.

Should premium subsidies replace disaster relief payments?

Philippi, Tim ; Schiller, Jörg

Universität Hohenheim, Germany

Discussant: Ruggero Jappelli (Goethe University and SAFE Leibniz)

We analyze the trade-off between premium subsidies and disaster relief payments under the premise that a government guarantees its citizens a subsistence level of wealth. The government minimizes its total amount of transfers and can make ex-post relief payments or introduce ex-ante premium subsidies to uphold the subsistence level. With well-functioning insurance markets, the government does not have an incentive to intervene in the market. When market frictions hinder risk transfer to insurers, the government can decide between two equilibria. It can purely rely on disaster relief payments and abstain from insurance markets. Alternatively, it can implement premium subsidies, which must be high enough to make individuals favor insurance over disaster relief payments.

The Transmission of Monetary Policy to the Cost of Hedging: Evidence from an Option Order Book

Fengler, Matthias ; Koeniger, Winfried ; Minger, Stephan

University of St.Gallen, Switzerland

Discussant: Nuria Suarez (Universidad Autonoma de Madrid)

We analyze the transmission of monetary policy to hedging costs in incomplete, not fully liquid option markets. We show that monetary policy changes hedging costs both by changing fundamentals, i.e., the value of the underlying, its volatility and tail risk, and by changing option market liquidity, i.e., the bid-ask spread and the market depth in option order books. Our estimates, based on intraday data, reveal that during the peak of the pandemic crisis in March 2020, monetary policy decisions initially increased hedging costs by as much as 30%, corresponding to a change of hedging costs of up to e20,000 per e1 million portfolio value. These costs were later decreased by a similar amount because of improvements in fundamentals and option market liquidity.

Climate Stress Tests, Bank Lending, and the Transition to the Carbon-Neutral Economy

Fuchs, Larissa³ ; Nguyen, Huyen² ; Nguyen, Trang¹ ; Schaeck, Klaus¹

¹University of Bristol, United Kingdom ; ²IWH Halle and FSU Jena, Germany ; ³University of Cologne, Germany

Discussant: Matthias Fengler

Does banking supervision affect bank borrowers' transition to the carbon-neutral economy? We use a unique identification strategy that combines the French bank climate pilot exercise with a proxy that measures borrowers' transition risk to present two novel findings. First, climate stress tests actively facilitate borrowers' transition to a low-carbon economy via a lending channel. Stress tested banks increase loan volumes but simultaneously charge higher interest rates for borrowers with high-transition risk. Second, the additional lending is associated with some improvements in environmental performance. While borrowers commit more to carbon emission reduction targets and are more likely to evaluate environmental effects of their projects, they neither reduce direct carbon emissions, nor terminate relationships with environmentally unfriendly suppliers.

Banking supervisory architecture and sovereign risk

Cuadros-Solas, Pedro J.¹ ; Salvador, Carlos² ; Suárez, Nuria³

¹CUNEF Universidad ; ²Universidad de Valencia ; ³Universidad Autónoma de Madrid, Spain

Discussant: Huyen Nguyen (IWH Halle and FSU Jena)

We investigate whether the design of the banking supervisory architecture impacts sovereign risk. Exploiting the Single Supervisory Mechanism (SSM) in Europe as an empirical setting, we find that sovereign risk – measured by sovereign ratings – is lower for countries whose largest and most significant banks are supervised supranationally than for countries where banking supervision is conducted exclusively by the national authorities. We observe that the impact is shaped by the characteristics of the banking sector and country's institutions. We find that banking stability is the channel underlying the relationship between supervision and sovereign risk. The results hold after considering CDS spreads as an alternative measure of sovereign risk and after accounting for changes in prudential policy instruments and conducting additional tests

Reinvesting dividends

Müller-Dethard, Jan¹; Reinhardt, Niklas²; Weber, Martin¹

¹University of Mannheim ; ²Kiel University

Discussant: Carina Fleischer (Goethe University)

We challenge conventional wisdom that retail investors largely consume dividends and rarely reinvest them. Using a German online brokerage dataset, we show that the decision whether to consume or reinvest dividends depends on the structure of an investor's brokerage account. Brokerage cash serves as a buffer that absorbs dividends, keeps them from being spent and, over the long run, is drawn down when dividends are reinvested. Using independent international survey evidence, we show that an account structure including brokerage cash is the rule, not an exception. Therefore, our results generalize to a large share of the retail investor population.

Information processing: the role of expertise within peer effects

Mertes, Lukas ; Weber, Martin

Universität Mannheim, Germany

Discussant: Niklas Reinhardt (Kiel University)

We experimentally examine the mechanisms underlying peer effects in financial markets. We hypothesize that individuals are not too confident about how to process information regarding financial markets and thus look among their peers for someone who is more capable in processing the information - an expert. Our experimental evidence supports this hypothesis: Subjects with lower confidence in their decisions follow their peers more often and peers with higher expertise are followed more often. In our experimental design peers do not possess additional information to ensure that our results are driven by the ability to process common information. We therefore introduce a new channel to the peer effects literature - information processing.

How well do women sell?

¹Fleischer, Carina ; ¹Kraft, Holger ; ¹Weiss, Farina

¹Goethe University, Germany

Discussant: Jan Lukas Mertes (Universität Mannheim)

This paper documents a gender revenue gap arising when individuals sell personal belongings. We study a novel data set that is hand-collected from a popular TV show. The sales occur through an English auction during which sellers can try to influence the outcome and post-auction negotiation is possible. After controlling for a host of covariates, women lose on average about 7.3% compared to men. We document heterogeneity across items: Women perform better if they sell items that are congruent with the female gender role or items where the value is easier to determine. We further show that the relative performance of women depends on both seller characteristics and dealer-team characteristic. Finally, we provide evidence that female teams perform significantly better than single females.

Payment firms, cryptocurrencies, and CBDCs

Berg, Tobias^{1,2}; Keil, Jan³; Martini, Felix¹; Puri, Manju^{4,5}

¹Frankfurt School of Finance & Management, Germany ; ²Goethe University Frankfurt, Germany ;
³Humboldt University Berlin, Germany ; ⁴Duke University, United States ; ⁵National Bureau of
Economic Research (NBER), United States

Discussant: Lars Hornuf (Technische Universität Dresden)

We provide a method to identify and classify payment firms and assess the effect of two innovations – cryptocurrencies and central bank digital currencies (CBDCs) – on the payment industry. We find that payment firms' stock returns are uncorrelated with proxies for the rise and fall of cryptocurrencies, while payment firms' stock returns react significantly and negatively to central bank announcements on the introduction of CBDCs. Our results are consistent with the narrative that cryptocurrencies are a speculative asset class rather than a means of payment. In contrast, the market regards CBDCs as a potential threat to payment firms' business model.

Open banking and customer data sharing: implications for fintech borrowers

Nam, Rachel J.^{1,2}

¹Goethe University Frankfurt ; ²Leibniz Institute for Financial Research SAFE

Discussant: Felix Martini (Frankfurt School of Finance & Management)

With open banking, consumers take greater control over their own financial data and share it at their discretion. Using a rich set of loan application data from the largest German FinTech lender in consumer credit, this paper studies what characterizes borrowers who share data and assesses its impact on loan application outcomes. I show that riskier borrowers share data more readily, which subsequently leads to an increase in the probability of loan approval and a reduction in interest rates. The effects hold across all credit risk profiles but are the most pronounced for borrowers with lower credit scores (a higher increase in loan approval rate) and higher credit scores (a larger reduction in interest rate).

The Financial and Non-Financial Performance of Token-Based Crowdfunding: Certification Arbitrage, Investor Choice, and the Optimal Timing of ICOs

Dombrowski, Niclas¹; Drobetz, Wolfgang¹; Momtaz, Paul²; Hornuf, Lars³

¹Hamburg University, Germany ; ²UCLA Anderson School of Management ; ³Technische Universität Dresden, Germany

Discussant: Rachel J. Nam (Goethe University Frankfurt/Leibniz Institute for Financial Research SAFE)

We investigate the performance of ventures conducting icos with different types of investors at different points in the ventures' life cycle. We find that institutional investor-backed ico ventures exhibit poorer operating performance and fail earlier. However, conditional on their survival, these ventures financially outperform those that do not receive institutional investor support. The diverging effects of investor backing on financial and operating performance are consistent with our theory of certification arbitrage; i.e., institutional investors use their reputation to drive up valuations and quickly exit the venture post-ico. Our findings further indicate that there is an inverted u-shaped relationship for fundraising success of ico ventures over their life cycle. Another inverted u-shaped relationship exists for the short-term financial performance of ico ventures over their life cycle.

It's not what you say, but how you say it – Charismatic rhetoric in earnings conference calls

Breuer, Wolfgang ; Knetsch, Andreas ; Uddin, Sami¹

¹RWTH Aachen University, Germany

Discussant: Andreas Benz (KIT, Germany)

This paper proposes a measure of the extent of charisma in the rhetoric of managers in the question-and-answer (Q&A) part of earnings conference calls. Our empirical results shows that more charismatic communication by managers leads to more favorable stock market reactions, to more positive analyst recommendations, and to higher trading activity. In fact, the effects of charismatic rhetoric are stronger than those of tone measures based on previously established business-specific word lists. Contrary to these business-specific tone measures, charismatic rhetoric does however not truthfully reveal information on the firm's future performance. This indicates that charismatic rhetoric is only a rhetorical means for impression management. Overall, our results demonstrate that market participants are highly susceptible to purely rhetorical means.

Do Emotions Matter? The role of manager emotions on stock returns

Langer, Luisa¹; Ranasinghe, Dinithi²; Mather, Paul³; Gamage, Gihan³; Da Silva, Daswin³

¹University of Mannheim, Germany ; ²University of Otago, New Zealand ; ³La Trobe University, Australia

Discussant: Andreas Knetsch (RWTH Aachen University)

We examine the role of manager emotions during earnings conference calls. We use a textual analysis and a validated psychology dictionary, the Plutchik's wheel of emotions, to extract eight primary human emotions (joy, anticipation, trust, surprise, anger, sad, fear, disgust) for managers attending the earnings call. We identify emotions using novel natural language processing (NLP) techniques that include intensifiers and inhibitors for granular and accurate measurement of emotion intensity. We find that managers exhibit more positive emotions such as 'joy' and 'trust' than negative emotions such as 'anger' and 'disgust' during the Q&A section of the earnings call. A firm's stock price is positively (negatively) affected following a conference call in which the managers exhibit more positive (negative) emotions. Overall, this study enhances our understanding of the impact of emotions in corporate earnings disclosure practices.

Picking Winners: Managerial ability and capital allocation

Benz, Andreas¹; Demerjian, Peter²; Hoang, Daniel¹; Ruckes, Martin¹

¹KIT, Germany ; ²Georgia State University, USA

Discussant: Luisa Langer (University of Mannheim)

We examine how division managers' human capital affects internal capital allocation. Based on a novel measure of division-manager ability, we show that more able division managers receive substantially larger capital allocations than do their less able peers. This effect is robust to controlling for the possibility of assortative matching and more pronounced for firms with better governance. Firms not only allocate more capital to higher-ability managers, but also appoint them to relatively larger divisions, suggesting that firms entrust them with larger allocations, both in relative and absolute terms. Finally, we find that the allocation of extra capital to higher-ability managers creates value at the firm level. Taken together, these results correspond to efficient fund transfers to high-productivity managers.

Hedge funds and financial intermediary risk

Dahlquist, Magnus¹; Rottke, Simon²; Sokolovski, Valeri³; Sverdrup, Erik⁴

¹Stockholm School of Economics ; ²University of Amsterdam ; ³HEC Montreal ; ⁴Stanford

Discussant: Alex Weissensteiner (Free University of Bozen-Bolzano)

We find that systematic financial-intermediary risk is an important determinant in the cross-section of hedge-fund returns. However, the average hedge-fund's exposure to systematic intermediary risk is above of what is implied by their holdings. The incremental risk exposure is asymmetrical, manifesting almost exclusively during adverse systematic intermediary shocks. Mutual-funds do not exhibit such effects. The evidence is in line with shock-amplification via the prime-brokerage channel as hedge-funds and financial intermediaries are connected through their prime-brokerage relationship. There is little evidence that idiosyncratic financial-intermediary risk matters. We evaluate if large adverse shocks to individual prime-brokers propagate to their clients, finding a significant impact only in the Lehman-case. This impact was mitigated for funds with multiple prime-brokers, suggesting that even extreme individual prime-broker shocks are diversifiable.

Swimming against the current: Contrarian retail trading

Cannon, Brad¹; Mohrschladt, Hannes²

¹Binghamton University ; ²University of Münster

Discussant: Simon Rottke (University of Amsterdam)

On average, retail investors tend to sell stocks after high recent returns. While research suggests that such contrarian behavior is a silver lining of retail trading, we show that it only applies to positions with unrealized capital gains and reverses for loser stocks. The salience of portfolio positions as well as take-gain and stop-loss trading can explain this systematic variation in contrarian selling. We examine the effects of this trading behavior on asset prices and provide evidence that conditional contrarian selling impacts short-term return reversals and stock return volatility. Using stock splits as a natural experiment, we provide evidence in support of a causal interpretation of our findings.

Conservative holdings, aggressive trades: Ambiguity, learning, and equilibrium flows

Dangl, Thomas³; Garlappi, Lorenzo²; Weissensteiner, Alex¹

¹Free University of Bozen-Bolzano, Italy ; ²Sauder School of Business at the University of British Columbia ; ³Vienna University of Technology

Discussant: Hannes Mohrschladt (University of Münster)

We study equilibrium asset prices and portfolio flows in an overlapping generation economy where heterogeneous cohorts of agents learn about economic fundamentals and differ in their confidence in parameter estimates. Because ambiguity-averse, low-confidence, agents are conservative in their risky asset holdings, they require less compensation than ambiguity-neutral agents for holding additional risk. Hence, when uncertainty rises, ambiguity-averse agents buy risky assets from ambiguity-neutral. The model delivers subjective risk premia that increase with uncertainty and objective risk premia that are skewed: amplified by bad news and dampened by good news. These findings are consistent with institutional investors selling to price-inelastic retail investors during high-uncertainty periods.

Session C

Session C: Friday, 29 September 2023, 01:30 p.m. – 03:30 p.m

Payment for order flow and market quality: A field experiment

Elsas, Ralf¹; Johanning, Lutz²; Theissen, Erik³

¹LMU Munich School of Management, Germany ; ²WHU – Otto Beisheim School of Management;
³University of Mannheim

Discussant: Gyuri Venter (Warwick Business School)

This study presents results of a field experiment conducted in cooperation with a large German neo-broker. On treatment days, large amounts of retail orders from randomly selected stocks were routed to the main market, Xetra, instead of being executed at a trading venue with payment for order flow. We observe various standard measures of liquidity and informational efficiency before, during and after the treatment, both for the treatment and a control group of similar stocks. Our difference-in-differences analyses allow for clean identification of the causal effect of payment for order flow on stock market quality. The analysis does not lend support to the claim that payment for order flow negatively affects market quality in the main market.

Can you keep a secret? Stock market bubbles and the cost of whispers in the shadows of true and untrue rumors

Herzing, Tobias ; Muck, Matthias

¹University of Bamberg, Germany

Discussant: Ralf Elsas (LMU Munich School of Management)

This research addresses the impact of _incorrect information_ on the evolution of bubbles in stock prices. For this purpose, we use a _predatory trading_ setup, where the underlying rumor about the distressed player can be both true and false. We find that the veracity has a massive impact on the overall expected bubble as well as on the predators trading profits. Further, we examine the impact of the spread of rumors. Widespread dissemination as -for example in the case of social media- can lead to massive price distortions but also to positive effects, depending on the truth of the underlying information.

Short-sale constraints and real investments

Venter, Gyuri

Warwick Business School, University of Warwick

Discussant: Tobias Herzing (University of Bamberg)

I study how short-sale constraints affect the informational efficiency of market prices and the link between prices and real economic activity. I show that under short-sale constraints security prices contain less information. However, short-sale constraints can increase price informativeness to agents who learn from market prices and have additional private information. In a setting with investment complementarities, this leads to the revival of self-fulfilling beliefs about beliefs and actions of others, and creates multiple equilibria with higher allocative efficiency. The decrease in average price informativeness due to short-sale constraints can be more than compensated by increased informativeness to some agents

Scenarios of systemic risk

Aigner, Philipp^{1,2} ; Schlütter, Sebastian¹

¹Mainz University of Applied Sciences, Germany; ²Johannes Gutenberg University Mainz, Germany

Discussant: Alexander Nitschke (University of Münster)

The so-called “systemic expected shortfall” (SES), introduced by Acharya et al. (2017), measures a financial institution's contribution to systemic risk. Acharya et al. propose an SES-based tax to internalize social costs. The SES leans on marginal capital requirements, as known from the corporate risk management literature. Following the corporate risk management literature, our paper shows that the SES-based tax is restricted to a snapshot of the strategies currently chosen by financial institutions and therefore does not necessarily induce a welfare optimum. We propose a corridor—defined based on deterministic scenarios—which indicates whether the SES remains meaningful or has to be recalibrated. Our empirical investigation identifies groups of firms, such as Asian banks, with an increased potential to make a recalibration of SES necessary.

Tuning White Box model with Black Box models: Transparency in credit risk modeling

¹Gürtler, Marc ; Zöllner, Marvin

¹University of Braunschweig - Institute of Technology, Germany

Discussant: Sebastian Schlütter (Mainz University of Applied Sciences)

In credit risk modeling, machine learning models often show higher predictive accuracy than linear regression. Nevertheless, linear regression remains popular in the credit risk industry, mainly because the lack of interpretability of machine learning models is incompatible with the regulatory requirements. In this study, we propose the use of linear regression with automated variable selection optimized using machine learning. This approach allows us to capture the correct linear and nonlinear effects that can arise in credit data while preserving the intrinsic interpretability of linear regression. Based on Monte Carlo experiment and an empirical analysis, we show that optimized linear regression can predict credit risk significantly more accurately than regressions that use standard variable selection techniques and is competitively comparable with the best machine learning methods.

Credit Securitization as sustainable Finance Channel? - Evidence from synthetic Capital Relief Trades

¹Klein, Philipp ; ¹Nitschke, Alexander ; Pfingsten, Andreas

¹University of Münster, Germany

Discussant: Marvin Zöllner (University of Braunschweig – Institute of Technology)

Securitization can serve different purposes. We employ a novel data set of synthetic transactions aiming at releasing capital, so-called synthetic capital relief trades (SCRTs). Our study examines bank characteristics driving SCRT issuances as well as the impact of these transactions for banks and the loan supply in the economy. Ex ante, we find higher total capital ratios not to incentivize banks' SCRT issuances, while non-performing loans ratios have a negative effect. Ex post, we observe that SCRT issuances lead to a significant increase in the supply of syndicated green loans, while the overall supply of syndicated loans is not expanded. These green loans are riskier than the existing loan portfolio finally raising banks' non-performing loans ratios. The total capital ratios are

not affected by SCRTs, evidencing that capital arbitrage as known from before the Global Financial Crisis seems no longer to be possible. Our results have important policy implications. Banks use SCRTs to eventually increase green lending, which can be seen as one potential remedy to overcome the green finance gap, while adverse effects of SCRTs seem to be prevented.

Measuring business social irresponsibility: the case of sin stocks

Schwarz, Patrick¹; Boustanifar, Hamid²

¹University of Duisburg-Essen, Germany ; ²EDHEC Business School

Discussant: Oliver Rehbein (Vienna University of Economics and Business)

Negative screening is the most common strategy used by socially responsible investors. There is no consensus in the literature whether these exclusions result in higher cost of capital (higher expected returns) for targeted firms. The existing literature identifies sin companies using industry classification codes (IC). We propose an alternative measure of firms' exposure to sin activities (sinfulness) based on textual analysis (TA) of their annual reports. Sinfulness captures both cross-sectional and time-series variation in firms' exposure to sin activities. The correlation between the IC and TA sin indicators is only 0.69. A sin-weighted portfolio of sin stocks earns an annualized Fama-French 6-factor alpha of 4%. Overall, our study resurrects the sin premium, that is, more sinful stocks have higher expected returns.

Frontier culture and stakeholder-related misconduct

Hasan, Iftekhar¹ ; Köchling, Gerrit² ; Neukirchen, Daniel²

¹Fordham University, Gabelli School of Business ; ²TU Dortmund University, Germany

Discussant: Patrick Schwarz (University of Duisburg-Essen)

Prior research has shown that US counties that were exposed to the rough frontier conditions during the phase of westward expansion (1790-1890) are still associated with a culture of "rugged individualism". In this paper, we build on institutional theory and conjecture that firms headquartered in "frontier counties" put less emphasis on stakeholder relationships and are thus associated with more stakeholder-related misconduct. The results from our empirical tests, which strongly address endogeneity concerns, confirm this. In additional tests, we also find (i) that the effect is stronger for long-established firms, and (ii) that managers can counteract the effect by enforcing values of integrity and respect in their organizations. Overall, these results are consistent with institutional and upper echelons theory.

Market-Based Green Firms

Reiner, Matthias¹ ; Rehbein, Oliver¹ ; Adler, Konrad² ; Zeng, Jing²

¹Fordham University, Gabelli School of Business ; ²TU Dortmund University, Germany

Discussant: Daniel Neukirchen (TU Dortmund)

This paper proposes a simple but effective tool to evaluate the greenness of firms: the market. We first develop a model that demonstrates that abnormal returns on a firm's stock around significant climate news events measures a firm's exposure to climate risk ("greenness"). We then calculate equity market reactions of S&P 500 firms around significant climate change-related news events and score firms' greenness according to their abnormal returns. As opposed to other measures, this market-based greenness measure credibly incorporates future emissions and reflects information from all market participants. It produces intuitively plausible results and correlates reasonably with other existing measures such as CO2 emission intensities and text-based measures, but does not correlate with self-reported measures subject to cheap talk.

Yield farming for Liquidity Provision

Lorenzo Schoenleber¹; Tom Li²; Andrew Papanicolaou³; Siddharth Naik⁴

¹Collegio Carlo Alberto; ²NYU Courant Institute of Mathematical Science; ³North Carolina State University; ⁴Equalto

Discussant: Erik Theissen (University of Graz, University of Mannheim)

This article is about yield farming, which refers to a decentralized finance strategy of providing liquidity and seeking associated rewards in the form of transpired-transaction fees. We explain and demystify yield farming and quantify transaction costs, returns, and risks using on-chain data from major decentralized exchanges. We provide a mathematical framework that resembles a representative agent's yield farming process and features stochastic returns, impermanent loss as a source of risk, and transaction costs. Calibrated to historical market data, the model's output opens a discussion on the economic insights that underlie yield farming and reveals the trade-off between future benefits and the associated transaction costs.

Stablecoins: adoption and fragility

Bertsch, Christoph

Sveriges Riksbank, Sweden

Discussant: Lorenzo Schoenleber (Collegio Carlo Alberto)

I propose a framework for analyzing the factors influencing stablecoin adoption and fragility, which provides insights for risk assessment and appropriate regulation, as well as new testable implications. Wider adoption of stablecoins is associated with a destabilizing composition effect. Positive network effects mitigate the destabilizing composition effect, but they may also undermine the role of bank deposits as a means of payment. Both effects are not internalized by the marginal adopter. Consequently, adoption is likely to be excessive. Factors that increase the issuer's revenue from fees and seigniorage promote stability, as do congestion effects. A stablecoin lending market promotes both stability and adoption, as long as it is not undermined by speculation. The introduction of a moral hazard problem provides additional insights into reserve management and disclosure.

The crypto world trades at tea time. Intraday evidence from centralized exchanges across the globe

Brauneis, Alexander¹; Mestel, Roland²; Theissen, Erik^{2,3}

¹Nottingham Trent University, UK; ²University of Graz, Austria; ³University of Mannheim, Germany

Discussant: Christoph Bertsch

We study intraday patterns of returns, trading activity, volatility and illiquidity in cryptocurrency markets. We analyze intraday data from 1,940 trading pairs traded on 38 centralized exchanges around the globe and show that there are pronounced intraday patterns. These patterns are similar across the variables under consideration, across trading venues, and across currency pairs. Characteristics of the trading venues (such as their location) and the traded currency pairs explain some, but not all of the commonality in intraday patterns.

Stock-financed takeovers are opportunistically motivated

Lohmeier, Nils ; Schneider, Christoph

University of Münster

Discussant: Philipp Decke (Leibniz University Hannover)

This paper argues that a familiarity bias of target shareholders enables bidders to choose the payment method in M&As opportunistically. We employ the Stambaugh, Yu and Yuan (2015) mispricing score to identify overvalued bidders, reconfirming that overvaluation is one of the main drivers of the payment choice in M&As. Using an instrumental variable approach based on exogenous price pressure, we provide novel evidence that bidder mispricing causally affects the percentage of stock payment. Further analyses unveil that target shareholders more familiar with the bidder are more likely to accept overvalued equity despite adverse market reactions. Finally, we show that targets of opportunistic bidders are not compensated through higher offer premiums and that shares of overvalued bidders underperform in the long-run. Our results suggest that behavioral biases of shareholders contribute to the transmission of stock market inefficiencies to the market for corporate control.

Identifying M&A targets from textual disclosures: A transformer neural network approach

Lohmeier, Nils ; Stitz, Lennart

University of Münster, Germany

Discussant: Tapas Tanmaya Mohapatra (University of Hohenheim)

Can textual information from firm disclosures help to identify M&A targets? We employ the transformer neural network RoBERTa based on 130,000 annual financial reports of publicly listed US firms to estimate takeover likelihoods. We show that incorporating publicly available, highly standardized textual information from the Business Description and the Management Discussion and Analysis sections of Form 10-K filings can improve the predictability of corporate takeovers significantly in out-of-sample tests. This information is not fully incorporated in market prices. Our analyses using explainable artificial intelligence methods indicate that the model is able to identify firm-specific capabilities sought by acquirers as well as governance issues that lead to a change of corporate control. We are able to improve the identification of fundamentally motivated, non-speculative acquisition

Investment, uncertainty, and U-shaped return volatilities

Schneider, Kevin

University of Cambridge, United Kingdom

Discussant: Patrick Weiss (Vienna University of Economics and Business)

I develop a real options model to explain means and variances of stock returns of portfolios sorted on book-to-market ratios. While average returns increase monotonically across portfolios, return volatilities are U-shaped. My model combines business cycle variations with countercyclical economic uncertainty. Operating leverage and procyclical growth options make both value stocks and growth stocks risky, generating U-shaped return volatilities. Growth stocks additionally load on the negative variance risk premium which reduces their expected return. Using structural estimation, my model jointly fits average returns and return volatilities, thereby solving a long-standing problem in investment-based asset pricing. Further reduced-form evidence supports the model channels.

Risk aversion and real economic activity: A macro-finance perspective

Fausch, Jürg

Hochschule Luzern, Switzerland

Discussant: Kevin Schneider (University of Cambridge)

The novel finding of this paper is that time-varying risk aversion implied by an external habit macro-finance model predicts macroeconomic dynamics both in-sample and out-of-sample across different forecasting horizons. An increase (decrease) in risk aversion forecasts a decrease (increase) in real economic activity. The results are robust after controlling for standard predictors of macroeconomic fluctuations and stable over time.

Non-standard errors in portfolio sorts

Walter, Dominik³; Weber, Rüdiger^{1,3}; Weiss, Patrick^{1,2}

¹Vienna University of Economics and Business ; ²Reykjavik University ; ³Vienna Graduate School of Finance

Discussant: Jürg Fausch (Hochschule Luzern)

We systematically study the variation in returns induced by varying 14 methodological decisions in portfolio sorts. These non-standard errors range between 0.14 and 0.39 percent per month and are larger than standard errors. However, for most sorting variables, mean return differentials and alphas are pervasively positive, statistically significant, and increase monotonically. Decisions such as excluding firms with negative earnings or the information time lag have an impact comparable to size-related ones. Non-standard errors are countercyclical, raising concerns about non-classical measurement error in predictive regressions. Using our publicly available code to report distributions of estimated premia provides an easy remedy.

Session D

Session D: Saturday, 30 September 2023, 9:00 a.m. – 10:30 a.m.

Mortality Beliefs and Saving Decisions: the Role of personal Experiences

Horn, Frederik

University of Mannheim, Germany

Discussant: Marlene Koch

This paper is the first to establish a causal relationship between households' mortality beliefs and subsequent saving and consumption decisions. Motivated by prior literature on the effect of personal experiences on individuals' expectation formation, I exploit the death of a close friend as an exogenous shock to the salience of mortality of a household. Using data from a large household panel, I find that the death of a close friend induces a significant reduction in saving rate of 1.1 percentage points that subsequently grows to 1.7 percentage points. The saving response to the shock strongly depends on households' age, emotional involvement, risk aversion, and decays over time. Overall, this paper provides novel insights into whether and how mortality beliefs are incorporated into households' financial planning.

Real estate security token offerings and the secondary market: driven by crypto hype or fundamentals?

Kreppmeier, Julia C.¹; [Laschinger, Ralf](#)¹; Steininger, Bertram I.²; Dorfleitner, Gregor¹

¹University of Regensburg, Germany ; ²KTH Royal Institute of Technology Stockholm, Sweden

Discussant: Frederik Horn

Tokens, the digital form of assets, are an innovation that has the potential to disrupt how to transfer and own financial instruments. We hand-collected data on 173 real estate tokens in the USA between 2019 and 2021 and trace back 238,433 blockchain transactions. We find that tokens provide broad real estate ownership to many small investors through digital fractional ownership and low entry barriers, while investors do not yet hold well-diversified real estate token portfolios. We analyze the determinants of security token offerings (STOs), secondary market trading, and daily aggregated capital flows. In addition to some property-specific determinants for the STO, we find that crypto-market specific determinants, such as transaction costs and the related sentiment, are relevant both to the STO and capital flows.

Fractional homeownership and its impact on life cycle portfolio choice

Koch, Marlene

University of Konstanz, Germany

Discussant: Ralf Laschinger (University of Regensburg)

Using a quantitative life cycle model, we study the impact of access to fractional homeownership on individuals' optimal consumption, savings, and housing decisions. Fractional homeownership means that two parties - an individual and an institutional investor - share full ownership of a property. The individual lives in the property full-time and makes periodic rent payments to the institutional investor who sees the property solely as an investment vehicle. The amount of the rent payments depends on the value of the home and the fractional ownership structure that can be time-varying. We find that access to fractional homeownership is most attractive to particularly young and old individuals. Further, it leads to earlier housing market entry, later housing market

exit, decreases individuals' loan-to-value ratios and reduces their moving activity at old age; all in comparison to a setting in which the individuals' rent-versus-own decisions are binary.

Cyber insurance supply

Ning, Dingchen ; Eling, Martin ; Kartasheva, Anastasia

University of St. Gallen, Switzerland

Discussant: Julia Holzapfel (LMU Munich)

Cyber insurance has been introduced for more than two decades, yet the insurance market for cyber risk is tiny amounting to \$2.7 billion or 1% of insurance premiums in the US market as of 2020. We analyze what constrains the insurance industry from providing larger capacity. We argue that cyber risk is special in that it is both information-intensive and heavy-tailed. It leads to tension between the need to raise external capital and the unwillingness of external investors to provide capital due to information frictions. Using an exogenous shock on the tax treatment, DID estimations support the causal inference that insurers rely on the internal capital market to supply cyber insurance, which limits the potential insurance carriers to large insurance groups with internal capital markets.

The interplay of quality and proprietary data in insurance markets

Niklas Haeusle

Universität St. Gallen, Germany

Discussant: Dingchen Ning (University of St. Gallen)

Fueled by digital innovation, companies in the insurance industry are competing by improving service quality and acquiring proprietary data. The latter can lead to decreased costs through more efficient underwriting. But it also creates a negative externality for competitors as the remaining risk pool will contain on average higher-risk consumers. If the difference in quality between companies is minor, there is no equilibrium in pure strategies. If one company has a significant advantage in quality, it will make positive profits while the other will not. However, if the informed company has only a limited disadvantage in quality, both companies can sustain positive profits. Proprietary data can partly compensate for quality disadvantages, but its effectiveness is limited.

Classification risk in health insurance: The interaction of genetics, prevention, and insurance

Holzapfel, Julia

LMU Munich, Germany

Discussant: Niklas Haeusle (Universität St. Gallen)

We study regulatory regimes for the use of genetic and behavioral information in health insurance pricing. Individuals can engage in prevention to reduce their risk of health losses and their prevention technology depends on their genetic disposition. Thus, moral hazard and adverse selection affect the insurance market. Our results show that using only behavioral information in pricing can encourage insured individuals to efficiently reduce long-term health costs if prevention is similarly productive for everyone. As a consequence, the use of behavioral information not only eliminates moral hazard but also mitigates adverse selection. If the productivity of prevention depends on individuals' genetic disposition, however, regulators face an equity-efficiency trade-off and a social planner would have to intervene to resolve the trade-off.

Global business similarity networks

Christian Breitung ; Sebastian Müller

Technische Universität München, Germany

Discussant: Oliver Rehbein (Vienna University of Economics and Business)

Applying large language models like GPT-3 to business descriptions of 80,000 firms, we construct a business similarity network (*BSN*) to identify similar firms across the globe. We run multiple evaluation tasks to test the accuracy of the identified *BSNs*. We also demonstrate that our global *BSN* can be used to exploit lead-lag effects across the globe. By going long (short) in the stocks whose sufficiently similar stocks performed best (worst) in the previous month, we obtain a highly significant monthly seven-factor alpha of 197 bps in the US and 248 bps internationally.

Local Returns and Beliefs about the Stock Market

Hanspal, Tobin^{1,2}; Wagner, Clemens^{1,2}

¹WU Vienna University of Economics and Business ; ²Vienna Graduate School of Finance (VGSF)

Discussant: Christian Breitung (Technische Universität München)

This study documents how investors extrapolate from recent stock returns of locally headquartered firms when forming beliefs about aggregate stock market outcomes. Consistent with studies on the equity home bias, we find that the responsiveness to local information is a function of proximity. While it may be optimal to overweight local information, we do not find evidence that these effects are sensitive to the informativeness of past local returns to predict outcomes on the aggregate stock market. Our findings suggest that beliefs about information contained in public signals vary systematically with geography, which has been suggested as an important driver of the local bias in equity markets.

Take it to the Bank! Local Discourse and Deposits

Rehbein, Oliver

Vienna University of Economics and Business, Austria

Discussant: Tobin Hanspal (WU Vienna)

Using a hand-collected data set on almost one million local television news stories in the U.S., this paper shows that depositors respond to changes in the intensity of reporting about the COVID-19 pandemic by holding more demand deposits. Counties, where pandemic news stories are 10 percentage points more frequent relative to all news stories hold 1.3% more demand deposits after the onset of the pandemic. This effect holds when controlling for the intensity of the pandemic and several other alternative explanations. Further evidence shows that local news reflects the intensity of local discourse, which in turn causes a spike in deposits, especially in counties with a weaker social structure.

Less is more? Biases and overfitting in cross-sectional machine learning return predictions

Howard, Clint^{1,2}

¹Robeco Quantitative Investments ; ²The University of Technology Sydney

Discussant: Philipp Klein (University of Münster)

I critically examine the application of machine learning in asset pricing and highlight potential pitfalls arising from biases and overfitting. I first demonstrate how size-specific machine learning models appear to deliver superior out-of-sample performance compared to models trained using a broader cross-section of stocks. This result is then validated on simulated factors with group-specific interactions. However, I find that the superior performance of size-specific models is due to a lack of proper regularization of the target stock returns. My findings serve as a cautionary reminder that the use of machine learning requires careful guidance to avoid incorrectly attributing potential model improvements to economic priors.

Machine-learning evidence on the value relevance of financial statement information: The role of granularity across macro-economic conditions

Goedde-Menke, Michael ; Stitz, Lennart

University of Münster, Germany

Discussant: Clint Sean Howard (Robeco)

We use machine learning to explore how the granularity of financial statement information affects its value relevance across macro-economic conditions. Based on artificial neural networks, random forests, and lasso regressions, we identify optimal granularity levels for balance sheet, income statement, and cash flow statement information that best explain a firm's market value of equity during stock market crashes and non-crash periods. We find that the optimal combination strongly depends on macro-economic conditions – resulting in lower granularity levels during market crashes – and the applied machine-learning algorithm. Even though the overall value relevance is high, items from the balance sheet tend to carry lower permutation importances. Value relevance of financial statement information is reduced during crash periods and for loss firms.

Textual disclosure in prospectuses and investors' security pricing

Debener, Jörn¹ ; Fenner, Arved¹ ; Klein, Philipp^{1,2} ; Ongena, Steven^{2,3,4,5,6}

¹University of Münster, Germany ; ²University of Zürich, Switzerland ; ³Swiss Finance Institute ; ⁴KU Leuven ; ⁵Norwegian University of Science and Technology NTNU Business School ; ⁶CEPR

Discussant: Goedde-Menke, Michael (University of Münster)

We investigate the textual disclosure in over 1,000 issuance prospectuses from all asset-backed security (ABS) deals reported under the ECB loan-level reporting initiative. The quality and the quantity of textual disclosure, measured as the share of boilerplate language, the linguistic complexity, and the disclosure length, substantially affect investors' pricing at security issuance beyond all observable risk factors. Moreover, investors' risk assessment is weakened because the resulting prices are less predictive for future security performance. Recent EU regulations aiming at addressing these problems have homogenized the quality and quantity of textual disclosure in ABS prospectuses. Our results have important implications for market participants and regulators alike, placing the quality and quantity of textual disclosure in prospectuses high on their agenda.

Retail Traders love ODTE Options...but should they?

Beckmeyer, Heiner ; Branger, Nicole ; Gayda, Leander

University of Münster

Discussant: Hauke Ball (University of Goettingen)

This study is the first to investigate the implications of trading in options that expire on the same day – so-called “ODTE” options. We use recent exchange-related developments to identify option trades that originate from retail investors, and find that more than 75% of their trades in S&P 500 options today are in ODTE contracts. While retail investors benefit from price improvements in the form of lower effective spreads, they experience large losses on average: Since the introduction of a daily expiration calendar in May of 2022, retail investors lost \$358,000 per day. We find that their losses are primarily driven by the substantial spreads they are asked to pay. Our study is a cautionary tale against unrestricted access to highly complex trading vehicles.

Option liquidity and gamma imbalances

Harren, Jan ; Gruenthaler, Thomas ; Gayda, Leander

University of Muenster, Germany

Discussant: Olaf Korn (University of Goettingen)

We study the relationship between the market makers' inventory and liquidity for S&P 500 options. Option spreads are higher when the aggregate gamma inventory is negative, i.e., when market makers act as momentum traders to keep their portfolio delta neutral. Aggregate gamma inventory can explain up to 1/3 of the daily variation in spreads. We show that market makers have balanced gamma inventory whenever markets are illiquid, volatile, and financial intermediaries are constraint. Our results indicate that market makers actively adjust option expensiveness to balance their inventory in the desired direction. Standard option valuation models and market microstructure theories contradict our findings.

Model-free Option Greeks

Ball, Hauke ; Dörries, Julian ; Korn, Olaf

University of Goettingen, Germany

Discussant: Leander Gayda (University of Muenster)

This paper develops an alternative approach to determine option greeks. Based on transformations of the underlying stock's risk-neutral price distribution that reflect changes in stock price, volatility, and interest rates, it derives simple expressions for delta, vega, and rho. These greeks do not depend on specific pricing models and deliver internally consistent sensitivities for all strike prices. Model-free deltas and rhos closely resemble theoretical ones under different model environments. For options written on the S&P 500, they are close to Black-Scholes greeks implemented with implied volatilities. However, a hedging study shows that model-free deltas lead to a significant improvement of hedging effectiveness.

Informative Value, Profitability, and investment Factors

Ammann, Manuel¹; Hemauer, Tobias¹; Straumann, Simon²

¹University of St.Gallen, Switzerland ; ²WHU - Otto Beisheim School of Management, Germany

Discussant: Dennis Umlandt (University of Innsbruck)

Book-to-market, profitability, and investment—the characteristics underlying the Fama-French value, profitability, and investment factors—are imperfect indicators of expected returns. This study narrows down the characteristics' information about expected returns and uses their informative parts to construct enhanced factors. These informative factors exhibit around 50% higher Sharpe ratios than their standard counterparts. They strongly outperform the standard Fama-French factors regarding the maximum Sharpe ratio criterion and in pricing characteristics-sorted portfolios. Importantly, unlike the standard factors, the informative factors exhibit positive risk prices, making them valid risk factor candidates. Moreover, our procedure to enhance the factors outperforms other enhancement procedures.

A new option momentum: compensation for risk

Beckmeyer, Heiner¹; Filippou, Ilias²; Zhou, Guofu²

¹University of Muenster, Germany ; ²Olin Business School, Washington University in St. Louis

Discussant: Tobias Hemauer (University of St. Gallen)

We propose a cross-sectional option momentum strategy that is based on the risk component of delta-hedged option returns. The risk-based option momentum strategy is highly profitable for different formation and holding periods, and it is more profitable than the recently discovered option momentum strategy of Heston et al. (2022). We show that risk-based option momentum is unrelated to their return-based option momentum and fully subsumes its performance. The strategy is not subject to crash risk, it is not followed by long-term reversals, and survives the consideration of realistic levels of transaction costs. We investigate possible explanations for the strategy's success.

Moment conditions and time-varying risk premia

Umlandt, Dennis

University of Innsbruck, Austria

Discussant: Heiner Beckmeyer (University of Muenster)

This paper proposes a novel approach for estimating linear factor pricing models with dynamic risk premia based on a generalized method of moments framework. Time-varying risk prices and exposures follow an updating scheme that aims for the steepest descent of the conditional moment-criterion function at time t . The most informative moment for inferring risk premium dynamics comes from the cross-sectional pricing equation estimated in the second stage of the popular Fama-MacBeth regression approach. Monte Carlo results show that the new approach is able to adequately filter various types of risk premium dynamics. An application to the Fama-French 3-factor model shows that the GMM-based procedure can significantly reduce pricing errors compared to other dynamic and static approaches. The results show that risk premia dynamics vary across factors, and while they are generally countercyclical, they exhibit significant declines at the beginning of crisis periods. These declines are not predicted by regression-based approaches.

Session E

Session E: Saturday, 30 September 2023, 11:00 a.m. – 12:30 p.m.

When should retirees tap their home equity?

Hambel, Christoph¹; Kraft, Holger²; Meyer-Wehmann, Andre²

¹Tilburg University, Department of Econometrics and OR ; ²Goethe University Frankfurt, Faculty of Economics and Business Administration

Discussant: Alex Sclip (University of Verona)

This paper analyzes a household's optimal demand for a reverse mortgage. We study a rich life-cycle model that can explain the low demand for reverse mortgages as observed in US data. We find that the demand for reverse mortgages is particularly pronounced for cash-poor, house-rich retirees, and households with a strong bequest motive and low pension income. We analyze the optimal response of a household that is confronted with a health shock or financial disaster. If an agent suffers from an unexpected health shock, she reduces the risky portfolio share and is more likely to enter a reverse mortgage. If there is a large drop in the stock market, she keeps the risky portfolio share almost constant by buying additional shares of stock.

Present bias and mortgage refinancing decisions

Golder, Sebastian

Universität Hamburg, Germany

Discussant: Christop Hambel (Tilburg University)

This paper studies the optimal mortgage refinancing problem of a behavioral household who is present-biased and inattentive to mortgage rates. In solving the problem, I derive the first closed-form optimal refinancing rule of a behavioral household, enabling the estimation of the model. I estimate the model based on Danish administrative data, showing that it can endogenously explain delays in mortgage refinancing. I find substantial evidence of present bias of households, with the average household having a short-run discount factor of $\beta=0.39$. Older, less-educated, financially wealthier, and higher-income households exhibit stronger present bias, whereas higher housing wealth and financial literacy reduce this behavioral bias. Implications for the refinancing channel of monetary policy transmission are discussed.

Does lending discrimination lingers geographically?

Sclip, Alex¹; Sapriza, Horacio²; Marques, David³

¹University of Verona, Italy ; ²Richmond Fed ; ³European Central Ban

Discussant: Sebastian Golder (University of Hamburg)

Do historical biases attached to geography continue to shape discrimination in the mortgage market today? We rely on long-ago-repealed historical boundaries— largely created to prevent access to housing credit to black households— and compare mortgage conditions for applicants on both sides of the former border for applicants in about 150 cities across the United States. We find that black and Latino applicants experience harder conditions in their access to credit, mostly in the form of higher fees for the same product, which become even harder on the side on the historically racially-targeted areas. These effects are stronger for more segregated cities, and for lenders from the “shadow” banking syste

Quantitative Easing, the Repo Market, and the Term Structure of Interest Rates

Ruggero Jappelli¹; Lorian Pelizzon^{1,2}; Marti G. Subrahmanyam³

¹Goethe University and SAFE Leibniz ; ²Ca' Foscari and CEPR ; ³Stern and NYU Shanghai

Discussant: Natalija Kostic (Vienna University of Economics and Business)

We develop a general quantity-driven equilibrium model that integrates the term structure of interest rates and the repo market to shed light on the effects of bond scarcity on the yield curve. In our model, investors with habitat preferences for special bonds exert price pressure in the secondary market. Arbitrageurs take the opposite side, but finance their positions by rolling over repo contracts, thus increasing the demand for the targeted securities in the repo market and lowering the rates to borrow against these bonds. Our calibrated model can quantitatively match US Treasury data and the coexistence and dynamic interactions of general and special bonds in the yield curve.

Optimal timing of policy intervention in troubled banks

Koenig, Philipp¹; Pothier, David²; Mayer, Paul³

¹Deutsche Bundesbank, Germany ; ²University of Vienna ; ³VGFS

Discussant: Ruggero Jappelli (Goethe University and SAFE)

We analyze when a policy authority (PA) optimally resolves a troubled bank whose solvency is uncertain. Delaying resolution increases the chance that information about the bank's solvency arrives. However, delaying resolution allows uninsured creditors to withdraw funds, raising the PA's cost of bailing out insured depositors. The optimal resolution date trades off these costs with the option value of making an efficient decision following information arrival. Providing the bank with liquidity buys time to obtain information, but increases the PA's loss if the bank is insolvent. Contrary to conventional wisdom, we show that the PA may optimally delay liquidity support in order to minimize its losses.

Accounting changes and enforcement of bank capital requirements in a crisis

Kostic, Natalija ; Laux, Christian ; Muthsam, Viktoria

Vienna University of Economics and Business, Austria

Discussant: Paul Mayer (Vienna University of Economics and Business)

A common response by regulators in the case of systemic shocks is to reduce the impact of losses on banks' regulatory capital by changing the accounting rules that determine regulatory capital. We show that these changes can increase banks' incentive to raise capital. Banks trade off the cost of raising equity and the cost of violating regulatory capital requirements. A systemic crisis weakens the enforcement of capital requirements, which reduces banks' incentives to recapitalize. Shielding banks' regulatory capital from specific losses lowers the required capital, which can make it worthwhile for banks to avoid regulatory intervention. We discuss ex ante implications of relaxing accounting rules and differences to relaxing capital requirements.

Firm subsidies, financial intermediation, and bank stability

Kazakov, Aleksandr ; Koetter, Michael ; Titze, Mirko ; Tonzer, Lena

Halle Institute for Economic Research

Discussant: Peter Raupach (Deutsche Bundesbank)

We use project-level information for the largest regional economic development program in German history to study whether government subsidies to firms affect the quantity and the quality of bank lending. We match local banks to firms that are subsidized under the Improvement of Regional Economic Structures program (GRW), which is designed at the EU level, to identify lending and risk outcomes during 1998-2019. Banks with relationships to more subsidized firms exhibit higher lending volumes without any significant differences in bank stability. Subsidized firms, in turn, borrow more indicating that banks facilitate regional economic development policies.

Managing regulatory Pressure: Bank Regulation and its Impact on Corporate Bond Intermediation

Waibel, Martin¹; Rapp, Andreas²

¹Stockholm School of Economics, Sweden ; ²Federal Reserve Board of Governors

Discussant: Aleksandr Kazakov (Halle Institute for Economic Research)

We study the cross-sectional effects of Basel regulations on dealer intermediation in the U.S. corporate bond market. Using intra-quarter variation in the intensity of Basel regulatory requirements, we document pronounced inventory contractions when regulatory pressure rises near quarter-ends. In contrast to their behavior in short-term money markets, U.S. bank dealers do not absorb regulatory selling pressure in corporate bonds. Instead, bank dealers direct their selling primarily to nonbank financial intermediaries. In doing so, they fall back on their investor networks to offload investment grade bonds and their nonbank dealer networks to dispose of high-yield bonds. In the aggregate, leverage regulations impair liquidity conditions in the corporate bond market, specifically in balance sheet intensive trades where regulatory shadow costs amount up to 20%. Our findings have implications for the design of future regulation of bank and non-bank financial intermediaries.

Banks' credit losses and lending dynamics

Raupach, Peter ; Memmel, Christoph

Deutsche Bundesbank

Discussant: Martin Waibel (Stockholm School of Economics)

To study bank behavior, we use tail events in the history of a bank's credit losses as a new type of shock to capital. When defined appropriately, such events are virtually unpredictable for bank managers and spread evenly over time and banks. We estimate from data of all German banks that the heaviest losses induce banks to reduce their corporate lending by 1.79 euro for each euro lost. This sensitivity is in line with the (rather heterogeneous) results of previous studies, but significantly lower than the sensitivity under constant leverage. To control for credit demand, we construct a synthetic competitor of each bank that replicates its portfolio composition. This new method combines the advantages of bank-level estimation with demand clustering at the level of granular subportfolios.

Growing like Germany: local public debt, local banks, low private investment

¹Stewen, Iryna S. ; ²Hoffmann, Mathias ; ³Stiefel, Michael

¹Johannes Gutenberg University Mainz, Germany ; ²University of Zurich ; ³University of Zurich

Discussant: Valeriya Dinger (Universität Osnabrück)

Over 2010-2016, municipal debt in Germany crowded out private investment worth 1 percent of GDP. Forced to lend to municipalities by their statutes, local public banks compensated for declining municipal-debt yields by charging higher rates to firms in Germany's locally segmented credit markets. The ensuing crowding-out was made worse by increased municipal borrowing when expensive fiscal commitments were shifted from federal and state to the municipal levels following the introduction of the debt brake. Our results identify new channels through which low interest rates adversely affect real outcomes and locally segmented credit markets can amplify contractionary effects from fiscal austerity.

Invest in friends or foreigners? Social connectedness and foreign direct investment

Dornseifer, Felix¹ ; Rehbein, Oliver²

¹TU Dortmund ; ²Vienna University of Economics and Business

Discussant: Iryna S. Stewen (Johannes Gutenberg University Mainz)

Using Facebook friendship links as a proxy for social ties for a large set of country pairs across the world, this paper shows that cross-country social connectedness is an important determinant of foreign direct investment (FDI). We find that social connections can account for a significant share of more traditional cross-country determinants such as distance. Importantly, we show that social connections can help to overcome three different types of investment hurdles: information asymmetries, bad institutions, and global (macroeconomic) uncertainty. To strengthen identification, we exploit migration and genetic distance as instruments.

Trade conflicts and credit supply spillovers: evidence from the Nobel Peace Prize trade shock

Jin Cao¹ ; Valeriya Dinger² ; Ragnar Juelsrud³ ; Karolis Liaudinskas⁴

¹Norges Bank ; ²Universität Osnabrück, Germany ; ³Norges Bank ; ⁴Norges Bank

Discussant: Oliver Rehbein (Vienna University of Economics and Business)

In this paper, we examine how a trade conflict's impact on the real economy can be amplified by financial intermediaries. After the Norwegian Nobel Peace Prize Committee awarded the 2010 Nobel Peace Prize to Chinese dissident Liu Xiaobo, China in practice banned imports of Norwegian salmon. The ban was an unexpected trade shock to the Norwegian salmon industry. Using bank balance sheet and credit register data, we trace how this trade shock affected the lending behavior of banks highly exposed to the salmon industry when the shock occurred. We find that, in the years following the trade shock, highly exposed banks cut back lending to non-salmon firms and households by 3-6 percent more than other bank

Common Drivers of Commodity Futures - Evidence from mixed-frequency Granger Causality

Dudda, Tom Lukas¹ ; Klein, Tony^{2,3} ; Nguyen, Duc Khuong^{4,5} ; Walther, Thomas^{1,6}

¹Technische Universität Dresden, Germany ; ²Queen's University Belfast, UK ; ³University of Barcelona, Spain ; ⁴IPAG Business School Paris, France ; ⁵Vietnam National University Hanoi, Vietnam ; ⁶Utrecht University, Netherlands

Discussant: Tobias Kargus (Karlsruhe Institute of Technology (KIT))

We study potential drivers for the cross-section of commodity futures returns using mixed-frequency Granger causality tests. We find that slowing real economic activity and growing macro uncertainty precede negative monthly returns. Stock markets predict returns at daily frequency but not at longer-term horizons. Linkages vary over time for various stages of the financialization. We find less sensitivity of commodity returns to financial variables and real activity measures in recent years. As our results differ from traditional low-frequency Granger causality tests involving temporal aggregation, we show the economic value of accessing information at a higher frequency in an out-of-sample trading study. Our findings emphasize the importance of using mixed-frequency techniques to uncover relationships between monthly published macroeconomic variables and commodity prices.

Common Ownership and the Market for Technology

Hutschenreiter, Dennis Christoph

Halle Institute for Economic Research (IWH) - Member of the Leibniz Association, Germany

Discussant: Tom Lukas Dudda (Technische Universität Dresden)

Using information on U.S. patent reassignments, this paper establishes economically and statistically significant effects of common institutional ownership on the reallocation of technological knowledge between publicly traded companies. The effect is strongest for technologies associated with recent innovations. Higher common ownership with providers leads to more innovations and higher market capitalization growth by adopters. A new identification strategy based on pure-indexer ownership establishes causality. The observed effects are consistent with a matching model in which common owners mitigate moral hazard linked to know-how transmission, increasing transfer quality. The results shed light on the impact of common ownership on managerial decision-making

An electricity price modeling framework for renewable-dominant markets

Hain, Martin ; Kargus, Tobias ; Uhrig-Homburg, Marliese ; Fichtner, Wolf

Karlsruhe Institute of Technology (KIT), Germany

Discussant: Dennis Christoph Hutschenreiter (Halle Institute for Economic Research (IWH) – Member of the Leibniz Association)

Renewables introduce new weather-induced patterns and risks for market participants active in the energy commodity sector. We present a flexible framework for power spot prices that is capable of incorporating a weather model for the joint distribution of local weather conditions. This not only allows us to make use of a long history of local weather data in the calibration procedure but also makes it possible to assess how changes in the renewable generation portfolio impact the characteristics of future wholesale spot prices. Empirical tests demonstrate the model's capability

to reproduce salient features of market variables. We furthermore show why our model offers unique benefits for market players compared to existing approaches.

Overnight Reversal and the Asymmetric Reaction to News

Salbrechter, Stefan ; Dengl, Thomas

Vienna University of Technology, Austria

Discussant: Leopold Sögner (Institute for Advanced Studies)

"News released overnight has a significant directional impact on individual shares' opening prices, i.e., the market tends to open higher (lower) when news with positive (negative) sentiment is published. However, the market opening is not fully efficient due to over- or underreactions of market participants to the news, resulting in a predictable pattern of returns on the following trading day. In particular, we find that large daytime returns followed by overnight news with strong sentiment lead to a predictable return reversal during the subsequent trading day. This predictable reversal is present independent of the polarity of the news sentiment. Without overnight news, large previous-day returns only have marginal predictive power."

A sceptical appraisal of Industry-Specific Return Predictability

Lawrenz, Jochen ; Praxmarer, Mauricio ; Richtmann, Nicolas

Universität Innsbruck, Austria

Discussant: Stefan Salbrechter (Vienna University of Technology)

The predictability of returns at the aggregate level is determined by the interplay of idiosyncratic volatility and correlations, which exhibit an S-shaped relationship when analyzed using industry portfolios. Our investigation reveals that industry-level predictability is concentrated in small ranges of highly significant SIC codes, and is contingent on how these codes are classified into industries. We further employ VAR to decompose industry returns into changes in discount rates and cash-flow expectations. Sector portfolios with a lower proportion of cash-flow news are found to exhibit greater predictability.

Extending the demand system approach to asset pricing

Sögner, Leopold¹; Gehrig, Thomas²; Westerkamp, Arne³

¹Institute for Advanced Studies, Austria ; ²University of Vienna ; ³ IQAM, Research Center, Vienna

Discussant: Moritz Dauber (Universität Innsbruck)

We extend the demand systems approach of Kojien and Yogo (2019) to more general classes of preferences. Specifically we analyse constant absolute and constant relative risk aversion, provide conditions for the existence of equilibrium, and evaluate equilibrium prices at US-data. We find that constant absolute risk aversion works particularly well at moderate levels of risk aversion. In the case of relative risk aversion, optimal interior portfolio solutions may not even exist. In order to improve out-of-sample performance we augment the optimal strategies by a shrinkage device. In empirical data the shrinkage approach outperforms the parametric approach and the naive 1/N-strategy over quite a wide range of levels of absolute and relative risk aversion

List of Reviewers

Adam-Müller, Axel F.A.	Universität Trier
Aktas, Nihat	WHU Otto Beisheim School of Management
Aretz, Kevin	Alliance Manchester Business School
Aussenegg, Wolfgang	Vienna University of Technology
Baule, Rainer	FernUniversität in Hagen
Berg, Tobias	Goethe University
Bertsch, Christoph	Sveriges Riksbank
Bienz, Carsten	Norwegian School of Economics
Bleher, Johannes	University of Hohenheim
Nagler, Florian	Bocconi University
Branger, Nicole	University of Muenster
Braun, Alexander	University of St. Gallen
Breuer, Wolfgang	RWTH Aachen
Bruche, Max	Humboldt-Universität zu Berlin
Colonnello, Stefano	Ca' Foscari University of Venice
Dangl, Thomas	Technische Universität Wien
Derrien, Francois	HEC Paris
Dierkes, Maik	Leibniz University Hannover
Dimpfl, Thomas	University of Hohenheim
Dinger, Valeriya	Universität Osnabrück
Dittmann, Ingolf	Erasmus School of Economics
Düllmann, Klaus	European Central Bank
Efing, Matthias	HEC Paris
Eling, Martin	University of St.Gallen, Switzerland
Entrop, Oliver	University of Passau
Fischer	Copenhagen Business School and University of Konstanz
Flor, Christian Riis	University of Southern Denmark
Franke, Guenter	University of Konstanz
Friewald, Nils	NHH Norwegian School of Economics
Gehrig, Thomas	University of Vienna
Goedde-Menke, Michael	University of Münster
Goyal, Amit	University of Lausanne
Grundke, Peter	Osnabrueck University
Gründl, Helmut	Goethe-Universität Frankfurt
Guettler, Andre	Ulm University
Hackethal, Andreas	Goethe University
Hakenes, Hendrik	University Bonn
Hillert, Alexander	Goethe University Frankfurt & Leibniz Institute for Financial Research SAFE
Hoang, Daniel	Karlsruhe Institute of Technology
Hollstein, Fabian	Saarland University
Holzmeister, Felix	Universität Innsbruck
Homölle, Susanne	Universität Rostock
Huggenberger, Markus	University of St. Gallen

Jackwerth, Jens	Uni Konstanz
Jank, Stephan	Deutsche Bundesbank
Jankowitsch,	WU (Vienna University of Economics and Business)
Jung, Robert	Universität Hohenheim
Keiber, Karl Ludwig	European University Viadrina
Kempf, Alexander	University of Cologne
Kick, Thomas	Deutsche Bundesbank
Kiesel, Rüdiger	University Duisburg-Essen
Kind, Axel	University of Konstanz
Klein, Christian	Universität Kassel
Klos, Alexander	Kiel University
Koenig, Philipp	Deutsche Bundesbank
Korn, Olaf	University of Goettingen
Koziol, Christian	University of Tübingen
Kraft, Holger	Goethe University
Kuehn, Lars-Alexander	Carnegie Mellon University
Langer, Thomas	University of Münster
Laux, Christian	Vienna University of Economics and Business
Lawrenz, Jochen	University of Innsbruck
Löffler, Gunter	Ulm University
Maug, Ernst	University of Mannheim
Meinerding, Christoph	Deutsche Bundesbank
Memmel, Christoph	Deutsche Bundesbank
Menkhoff, Lukas	DIW Berlin, HU Berlin
Muck, Matthias	University of Bamberg
Norden, Lars	Getulio Vargas Foundation
Noth, Felix	Halle Institute for Economic Research (IWH)
Nöth, Markus	University of Hamburg
Nyborg, Kjell	Department of Banking & Finance University of Zurich
Park, Andreas	University of Toronto
Pena Vaquero, Javier	University of Hohenheim
Pfingsten, Andreas	University of Münster
Prokopczuk, Marcel	Leibniz University Hannover
Puke, Marius	University of Hohenheim
Pütz, Alexander	University of Cologne
Randl, Otto	WU Vienna University of Economics and Business
Röder, Klaus	Uni Regensburg
Rösch, Daniel	Universität Regensburg
Ruckes, Martin	KIT
Ruenzi, Stefan	University of Mannheim
Sautner, Zacharias	Frankfurt School of Finance & Management
Schäfer, Klaus	University of Bayreuth
Schäfer, Larissa	Frankfurt School of Finance & Management
Schlag, Christian	Goethe University Frankfurt and Leibniz Institute SAFE

Schlütter, Sebastian	Mainz University of Applied Sciences
Schmid, Markus	University of St. Gallen and Swiss Finance Institute (SFI)
Schneemeier, Jan	Indiana University
Schneider, Christoph	University of Münster
Scholz, Hendrik	FAU Erlangen-Nürnberg
Siegel, Stephan	University of Washington
Smajlbegovic, Esad	Erasmus University Rotterdam
Sommervoll, Dag Einar	Nowegian University of Life Sciences
Sönksen, Jantje	Uni Tübingen
Steininger, Bertram I.	KTH Royal Institute of Technology
Thaler, Simon	FH Kufstein
Theissen, Erik	University of Mannheim
Tonzer, Lena	University of Magdeburh & IWH Halle
Uhrig-Homburg, Marliese	KIT
Wagner, Alexander	University of Zurich
Wagner, Niklas	University of Passau
Wagner, Christian	WU Vienna
Walter, Andreas	JLU Gießen
Weber, Rüdiger	WU Vienna
Weigert, Florian	University of Neuchâtel
Weissensteiner, Alex	Free University of Bozen-Bolzano
Wilkens, Marco	Universität Augsburg
Winterholer, Günter	University of Hohenheim

List of Authors

Adler, Konrad
Aigner, Philipp
Ammann, Manuel
Bagnara, Matteo
Bales, Stephan
Ball, Hauke
Barth, Andreas
Bauckloh, Tobias
Beckmeyer, Heiner
Bender, Micha
Benz, Andreas
Berchtold, Demian
Berg, Tobias
Bertsch, Christoph
Beyer, Victor
Boustanifar, Hamid
Bowler, Blake
Branger, Nicole
Brauneis, Alexander
Breitung, Christian
Breuer, Wolfgang
Brockman, Paul
Burghartz, Kaspar
Cannon, Brad
Cao, Jin
Couaillier, Cyril
Cuadros-Solas, Pedro J.
Dahlquist, Magnus
Dangl, Thomas
Debener, Jörn
Demerjian, Peter
Dinger, Valeriya
Dombrowski, Niclas
Dorfleitner, Gregor
Dornseifer, Felix
Dörries, Julian
Drobetz, Wolfgang
Dudda, Tom Lukas
Eling, Martin
Elsas, Ralf
Eroglu, Busra
Meyer-Wehmann, Andre
Fausch, Jürg
Fengler, Matthias
Fenner, Arved
Fichtner, Wolf
Filippou, Ilias
Fleischer, Carina
Fricke, Daniel
Fuchs, Larissa
Gamage, Gihan
Gao, Xiang
Garlappi, Lorenzo
Gayda, Leander
Gehrig, Thomas
Girardi, Fabio
Goedde-Menke, Michael
Golder, Sebastian
Grauer, Caroline
Gruenthaler, Thomas
Gürtler, Marc
Haeusle, Niklas
Hain, Martin
Hambel, Christoph
Hanspal, Tobin
Harren, Jan
Hasan, Iftekhar
Hemauer, Tobias
Herzing, Tobias
Hirth, Stefan
Hitz, Lukas
Hoang, Daniel
Hoffmann, Mathias
Holzapfel, Julia
Horn, Frederik
Hornuf, Lars
Howard, Clint
Hutschenreiter, Dennis Christoph
Jank, Stephan
Jappelli, Ruggero
Johanning, Lutz
Juelsrud, Ragnar
Kargus, Tobias
Salvador, Carlos
Kartasheva, Anastasia
Kazakov, Aleksandr
Keil, Jan
Klein, Christian
Klein, Philipp
Klein, Tony
Kloks, Peteris
Knetsch, Andreas
Koch, Marlene
Köchling, Gerrit
Koedijk, Kees
Koenig, Philipp
Koeniger, Winfried
Koetter, Michael
Kormanyos, Emily
Korn, Olaf
Kostic, Natalija
Köstlmeier, Siegfried
Kraft, Holger
Kreppmeier, Julia C.
Kruschwitz, Lutz
Langer, Luisa
Laschinger, Ralf
Lassak, Matthias
Laudi, Marten
Laux, Christian
Lawrenz, Jochen
Li, Tom
Liaudinskas, Karolis
Löffler, Andreas
Lohmeier, Nils
Mansouri, Sasan
Marques, David
Martini, Felix
Mather, Paul
Mattille, Edouard
Mayer, Paul
Meinerding, Christoph
Mommel, Christoph
Mertes, Lukas
Mestel, Roland
Westerkamp, Arne

Minger, Stephan	Sapriza, Horacio	Wiedemann, Timo
Mohrschladt, Hannes	Schaeck, Klaus	Woebbeking, Fabian
Momtaz, Paul	Schiller, Jörg	Worrying, Daniel
Muck, Matthias	Schlütter, Sebastian	Yilanci, Can
Müller, Marcel	Schneider, Christoph	Zechner, Josef
Müller, Sebastian	Schneider, Kevin	Zeng, Jing
Müller-Dethard, Jan	Schoenleber, Lorenzo	Zhou, Guofu
Muthsam, Viktoria	Schuster, Philipp	Zoergiebel, Severin
Naik, Siddharth	Schwarz, Patrick	Zöllner, Marvin
Nam, Rachel J.	Sclip, Alex	
Neuhierl, Andreas	Smeets, Paul	
Neukirchen, Daniel	Sögner, Leopold	
Nguyen, Duc Khuong	Sokolovski, Valeri	
Nguyen, Huyen	Stefan, Greppmair	
Nguyen, Trang	Steininger, Bertram I.	
Ning, Dingchen	Stewen, Iryna S.	
Nitschke, Alexander	Stiefel, Michael	
Ongena, Steven	Stitz, Lennart	
Papanicolaou, Andrew	Straumann, Simon	
Pape, Jan	Suárez, Nuria	
Pauls, Thomas	Subrahmanyam, Marti G.	
Pelizzon, Loriana	Sverdrup, Erik	
Pfingsten, Andreas	Theissen, Erik	
Philippi, Tim	Titze, Mirko	
Pothier, David	Tonzer, Lena	
Praxmarer, Mauricio	Tresl, Jiri	
Puri, Manju	Tykvova, Tereza	
Pursiainen, Vesa	Uddin, Sami	
Ranaldo, Angelo	Uhrig-Homburg, Marliese	
Ranasinghe, Dinithi	Umlandt, Dennis	
Randl, Otto	Venter, Gyuri	
Rapp, Andreas	Wagner, Clemens	
Raupach, Peter	Waibel, Martin	
Rehbein, Oliver	Walter, Dominik	
Reichenbacher, Michael	Walther, Thomas	
Reiner, Matthias	Wang, Zhan	
Reinhardt, Niklas	Weber, Martin	
Reschenhofer, Christoph	Weber, Rüdiger	
Richtmann, Nicolas	Weiss, Farina	
Rottke, Simon	Weiß, Maximilian	
Ruckes, Martin	Weiss, Patrick	
Sachsenhausen, Eric	Weissensteiner, Alex	

Imprint

University of Hohenheim

Chair of Banking and Financial Services
Prof. Dr. Hans-Peter Burghof
Schwerzstraße 38
70599 Stuttgart
Germany – Deutschland

