



Institute for Monetary and Financial Stability

Annual Report 2018

Institute for Monetary and Financial Stability
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IMFS Annual Report

Highlights 2018		
Institut	te and Staff	9
1.	The Institute	9
II.	The IMFS in Numbers	13
III.	Macroeconomic Model Comparison Initiative (MMCI)	14
IV.	External Research Funding	15
V.	Member of the European Banking Institute	18
VI.	The Researchers	19
VII.	Organization Chart	32
Conver	sations with IMFS Researchers and Alumni	33
Teachi	ng Concept and Activities	38
Publica	tions and Presentations	46
I.	IMFS Working Papers	46
II.	IMFS Interdisciplinary Studies	49
III.	Publications	50
IV.	Speeches and Conference Presentations	55
Events		60
1.	Conferences	61
II.	Working Lunches	72
III.	Distinguished Lectures	76
Resear	ch-Based Policy Advice	78
Public (Outreach and Press	80

Dear friends of the IMFS,

Having obtained financing for another 10-year period in the preceding year, the IMFS made another leap forward in 2018: Roland Broemel and Alexander Meyer-Gohde were appointed as IMFS professors and now contribute their expertise public law and financial regulation and in macroeconomics and financial markets, respectively. In addition, Michael Haliassos from Goethe University joined the IMFS Executive Board and Heike Schweitzer from Humboldt University was appointed as an external Affiliated Professor. We are happy to build on their great knowledge and scholarly expertise in current and future projects.

In 2019, the IMFS will organize the conference "The ECB and Its Watchers" for the twentieth time. For us, this will be an occasion to celebrate and express our delight at the fact that this unique format has established itself as an important platform for mutual exchange and discussion among central bankers and ECB watchers, and has become an integral part of their annual agenda.

Furthermore, the Macroeconomic Model Base (MMB) has made enormous progress, offering now more than 120 models for analyzing monetary and fiscal policy with many new technical and user-friendly features. At the same time, this open platform where scientists can share formulas and code and replicate models, represents the nucleus of key international research initiative: the Macroeconomic Model Comparison Initiative (MMCI), a joint project led by the Hoover Institution at Stanford University and the IMFS. In June 2019, the Macroeconomic Modelling and Model Comparison Network (MMCN), a research network under the auspices of the Centre for Economic Policy Research (CEPR), will organize its third research conference.

In the past year, the IMFS was able to increase public awareness regarding important policy questions and research findings concerning monetary and financial stability with more than 120 media contributions, commentaries and mentions. Additionally, more than 1000 participants registered for our regular lectures and events at the IMFS. We aim to further enhance our activities and investigations of key macroeconomic and financial issues next year, relying on the expertise of the enlarged interdisciplinary group of monetary, financial and legal scholars at the IMFS.

Kind regards,

Volker Wieland and Michael Binder

Highlights 2018

The interdisciplinary economic and legal work of the Institute for Monetary and Financial Stability (IMFS) is dedicated to price stability and financial stability. Several outstanding projects marked the institute's year.

IMFS moves forward with an expanded team

In April, Alexander Meyer-Gohde took on the Professorship of Financial Markets and Macroeconomics at the IMFS. His research focuses on new methods for empirical analyses at the intersection of the macroeconomy and financial markets. In summer, Roland Broemel assumed the Chair of Public Law, Economic and Currency Law, Financial Markets Regulation and Legal Theory. His research interests include currency law, supervision of markets and legal aspects of digital transformation. He also works on Basic Law theory and legal technical methodology.











Roland Broemel

Helmut Siekmann

Michael Haliassos

Heike Schweitzer

In August, Helmut Siekmann was appointed Distinguished Professor at the IMFS, a distinction awarded to him by Goethe University's Executive Board for his research regarding European currency law and financial supervisory law. He held the Endowed Chair of Money, Currency and Central Bank Law until March 2018. By awarding a Distinguished Professorship, Goethe University honors excellent researchers who are not or no longer available for a regular professorship. They are outstanding scholars who have contributed significantly to the development of their field of expertise and have also made an impact internationally. Distinguished Professors are supposed to remain associated with Goethe University long-term and contribute to research projects. Siekmann continues pursuing a major IMFS project: The update and English translation of his Commentary on the European Monetary Union.

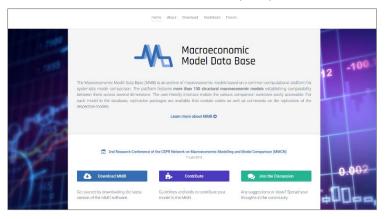
In October, Michael Haliassos, Chair of Macroeconomics and Finance at Goethe University and Founding Director of the CEPR Network on Household Finance, joined the IMFS Executive Board. During the past years, he had already been involved in several events at the IMFS. In 2017, he organized a panel discussion on the Greek crisis, which was part of the IMFS Working Lunch series, and moderated a discussion at the "The ECB and Its Watchers" conference. In 2015, he had already given a talk on the Greek economy at the IMFS.

Furthermore, Heike Schweitzer, Chair for Civil Law, German and European Commercial and Competition Law and Economics at the law faculty of Humboldt University Berlin, became Affiliated Professor and Research Fellow at the IMFS. As a member of the Kronberger Kreis, she has collaborated with Volker Wieland on several publications. She has also presented her research during an IMFS Working Lunch in 2016.

New Developments at the Macroeconomic Model Comparison Initiative (MMCI)

Quantitative macroeconomic models play an important role in informing policymakers about the consequences of monetary, fiscal and macro-prudential policies. The Macroeconomic Modelling and Model Comparison Network (MMCN) is a research network, which aims to make progress in this area by promoting collaboration among interested researchers in academia and policy institutions. The

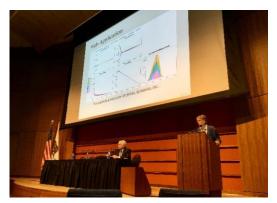
network is under the auspices of the Centre for Economic Policy Research (CEPR) in London, and is a part of the Macroeconomic Model Comparison Initiative (MMCI) undertaken jointly by the Hoover Institution at Stanford University, and the Institute for Monetary and Financial Stability (IMFS) at Goethe University Frankfurt. The MMCI was launched in 2017 and is supported financially by the Alfred P. Sloan Foundation.



As a key project of the MMCI, the coverage of the Macroeconomic Model Data Base (MMB) was expanded substantially. In 2018, a **new website** was created for this open platform. Now researchers can more easily share and replicate models that can be used to analyze monetary and fiscal policy. A new release of the software and database (MMB 2.3) was made available in June 2018. It featured 21 new models and brought the total number of models in the MMB at that time to 114. The release also enhanced MMB system compatibility, running under Windows, Mac and Linux and being compatible with MATLAB on Ubuntu. With MMB 2.3, users may analyze the effects of monetary policy on the basis of an extended menu of monetary policy rules or examine the effects of unconventional monetary policy. The user-friendly interface also helps to study the effects of fiscal policy.

Furthermore, Michael Binder and Volker Wieland together with pre-doctoral researchers Phillip Lieberknecht and Jorge Quintana prepared a chapter for the forthcoming **Oxford Handbook on Central Banking** on model uncertainty in macroeconomics and the implication of financial frictions.

On June 7-8, the MMCN held its **second research conference**, which took take place at the **Hoover Institution**. Researchers from academia, central banks and international institutions presented new structural macroeconomic models that help explain macrofinancial linkages, new solution and estimation methods, and novel analyses of monetary, fiscal and macroprudential policies.



The keynote speech was delivered by Lars Peter Hansen, University of Chicago, who shared his insights on comparative valuation dynamics in models with financing restrictions. Hansen is the David Rockefeller Distinguished Service Professor of economics at the University of Chicago and a 2013 recipient of the Nobel Memorial Prize in Economics. Delivering the dinner speech, John B. Taylor looked back at the financial crisis ten years on, summarizing "What Have We Learned about Models and Policy". The conference included sessions on model estimation and shocks, DSGE models

and financial frictions, financial crisis and recession, model uncertainty and monetary policy, nonlinearity and recession, unconventional monetary policy and money, heterogeneous agents and bounded rationality, macroeconomic models and policy, R-Star, zero bound and monetary policy,

structural and tax policy in macro models, banks, leverage and crises, numerical methods, macro models and climate change, macroeconomic models and estimation. In addition, young researchers presented their work in poster sessions.

High-level interaction between the IMFS and research, policy, and public

On several occasions throughout the year, the IMFS brought together policy-makers, academics and the public for a discussion on current aspects of monetary policy, regulation and supervision as well as their implications and consequences.



The assessment of the economic development in the euro area and its impact on monetary policy were the crucial topic of the nineteenth edition of the conference "The ECB and Its Watchers" organized by Volker Wieland on March 14. In his opening address, European Central Bank (ECB) President Mario Draghi said the ECB would avoid surprising investors with sudden changes to its stimulus plans, stressing that inflation is still too low. ECB President Draghi was followed at the conference by Executive Board member Peter Praet, the ECB's chief economist, who underlined

that it's too soon to declare "mission accomplished" on inflation. Regarding financial stability, the core topic of the second session, **ECB Vice-President Vítor Constâncio** said that the euro area is not immune to global financial-market shifts. Monetary policy, on the other hand, should not respond to financial stability concern.

Yves Mersch, member of the Executive Board of the ECB, also was a guest at the institute. In his IMFS Distinguished Lecture on January 30 he emphasized that there are important limits for a central bank in providing liquidity to banks in resolution.

During an IMFS Working Lunch talk on February 7, Robert Kaplan, President of the Federal Reserve Bank of Dallas, shared his views on technology-enabled disruption, one of the major economic trends, which will shape the future.

On May 29, Tobias Adrian, Director of the Monetary and Capital Markets Department of the International Monetary Fund (IMF) and Research Fellow at the IMFS, highlighted in a Working Lunch the areas where massive risks to global financial stability are building up.



Volker Wieland once again nominated as Member of the German Council of Economic Experts

In 2018, Volker Wieland was nominated by the Federal Cabinet as a member of the German Council of Economic Experts (GCEE) for another five-year term and appointed to the Council by the President of the Federal Republic of Germany, Frank-Walter Steinmeier. Wieland's **second term** will end on February 28, 2023. Besides his work on macroeconomics and monetary and financial developments in Germany and Europe, Wieland will also focus on questions of governance of the euro area and European Union.

In 2018, the GCEE received the **Thought Leader Award 2018**. "We honor the economic experts for their continuous and impulse-giving role for the government. The German Council of Economic Experts is an important voice of the social market economy. It was a unanimous decision to bestow the distinction upon the council," Jürgen Stark, chairman of the jury of the Thought Leader Forum (Vordenker Forum), said at the award ceremony in Frankfurt. The Thought Leader Forum is supported by the financial advisory company Plansecur. It honored



the current Council Members Christoph M. Schmidt, Peter Bofinger, Lars P. Feld, Isabel Schnabel and Volker Wieland, for their work as well as the institution itself, which has played an important role in analyzing and influencing German economic policy making since 1963. Previous recipients of the Thought Leader Award include Frank-Jürgen Weise, Nicola Leibinger-Kammüller, Jean-Claude Juncker, Paul Kirchhof, Wolfgang Huber und Norbert Walter.

IMFS jointly organizes conference with European Banking Institute (EBI)

On February 23-24, the IMFS jointly organized with the European Banking Institute the **EBI Global Annual Conference on Banking Regulation**. The conference dealt with issues on completing the banking union, the implications of Brexit as well as the regulation on non-bank banks. Within the EBI, the IMFS represents Goethe University. The conference served as a platform for bringing together new ideas on banking regulation from the academic side and confronting them with practical problems, as Thomas Gstädtner, president of the Supervisory Board, and Tobias Tröger (IMFS) emphasized in their opening remarks.

Institute and Staff

I. The Institute

The **Institute for Monetary and Financial Stability (IMFS)** is a research center of Goethe University Frankfurt, located in the "House of Finance". The focus of the institute is on the tasks, competences and powers of central banks in monetary policy, financial regulation and financial supervision as well as their impact on the financial system and the real economy.

The IMFS encompasses three core chairs: Monetary Economics; Financial Markets and Macroeconomics; and Public Law, Economic and Currency Law, Financial Markets Regulation and Legal Theory. These chairs are complemented by professors from the university's regular faculty with relevant research interests. Currently, three further professors collaborate closely with the core professors, forming part of the IMFS's Executive Board. Since 2012, Volker Wieland has been heading the institute as Managing Director. A Board of Trustees supervises and guides the activities of the institute.

In 2007, the IMFS was established as part of the "Currency and Financial Stability" project funded by a grant of the *Stiftung Geld und Währung* (Foundation of Monetary and Financial Stability). The Foundation of Monetary and Financial Stability was created by federal law on January 1, 2002. In 2017, the Foundation and Goethe University agreed on the extension of the institute's funding period for another ten years. Until 2027, the IMFS will receive external funding in the amount of five million euros by the Foundation of Monetary and Financial Stability. From the start, the institute's main objective has been to promote public awareness of the benefits of monetary and financial stability. It has been focusing on questions regarding monetary and financial stability from economic, financial and legal perspectives.

Within the scope of central banking, the researchers collaborate in order to pursue the institute's objectives:

- Economic and legal research, partially conducted in an interdisciplinary way
- Raising research funding
- Public outreach
- Doctoral and post-doctoral training
- Economic and legal police advice

Economic and legal research

Economic and legal research is conducted at the three core chairs of the IMFS:

Monetary Economics:

This research area addresses questions pertaining to the importance of stable prices; the analysis of different stability-oriented strategies of monetary policy; the study of business cycles and the role of expectations in money and financial markets; the development and implementation of monetary macroeconomic models; and the analysis of the interactions between monetary, fiscal and macroprudential policy.

Financial Markets and Macroeconomics:

This chair addresses questions regarding microeconomic foundations of financial markets in economy-wide models and pursues interdisciplinary projects in the area of price stability and financial stability.

Public Law, Economic and Currency Law, Financial Markets Regulation and Legal Theory:

This chair focuses on market regulation, in particular as it relates to currency, banking supervision, network regulation and the media. Furthermore, one cross-sectional project examines the legal aspects of digitalization and algorithm-based applications. Further research interests include Basic Law theory and legal technical methodology.

The foundation's support allows for long-term basic research with an interdisciplinary dimension. Particular emphasis is put on promoting the academic and interdisciplinary exchange of views by means of research seminars, lectures and conferences. These events are jointly organized and attended by the IMFS professors and involve researchers from around the world who work on economic, financial or legal aspects of the IMFS research areas.

It is particularly valued if IMFS research achieves high impact in the respective field, for example, by publication in a leading international journal or book series, high citation counts in scientific journals, or frequent mention in legal commentaries.

Doctoral and post-doctoral training

The IMFS also aims to advance knowledge about monetary and financial stability by contributing to doctoral and post-doctoral training. IMFS professors teach advanced Master and Ph.D. level courses, and organize research-oriented seminars at the Master, doctoral and post-doctoral levels. IMFS professors interact and collaborate with doctoral and post-doctoral students and staff members at the IMFS in various further formats, including Master thesis supervision, dissertation supervision, reading groups, brown-bag lunches, workshops, discussions and on some occasions also joint research projects.

Pre-doctoral members of the IMFS research staff working in the areas of monetary economics, financial markets and/or macroeconomics typically are doctoral students in the Ph.D. programs at Goethe University, under the auspices of the Graduate School of Economics, Finance, and Management (GSEFM). GSEFM offers Ph.D. programs that are structured in line with international best practice. The GSEFM offerings in the fields of monetary economics, macroeconomics and econometrics in their current format and depth would not be possible without the involvement of IMFS professors. Various new teaching formats have been introduced at GSEFM by IMFS professors, and the doctoral student demand for supervision by IMFS professors is high.

Each year, GSEFM places a sizable number of graduates in highly sought-after, research-oriented positions in academia, and other public as well as private-sector institutions. Virtually every year, one or more of the members of the IMFS research staff defend their Ph.D. thesis and receive offers for research-oriented positions at central banks, ministries, international organizations, research think tanks and/or universities.

Post-doctoral staff members at IMFS can take part in a variety of training courses offered by the Goethe Graduate Academy (GRADE), including courses on organizational proficiency, communication competencies as well as leadership and teamwork skills. The GRADE training courses also include short courses taught by IMFS professors.

Economic and legal policy advice

An essential task of the IMFS involves transferring research findings into the world of financial institutions, central banks, and political decision makers. Joint interdisciplinary approaches to research-based policy advice are explicitly encouraged. The IMFS aims to further the interaction with policy-makers and transferring research findings into policy by using the following four channels:

- Organizing lectures, seminars and policy-oriented conferences that involve key policy-makers together with academics;
- Producing IMFS Working Papers and studies with practical policy implications and contributing writings to external policy-oriented publications;
- Participating in parliamentary hearings and government advisory bodies and contributing to advisory reports requested by governmental agencies;
- Contributing interviews and commentaries on policy issues to the media.

Indicators of success in this area include the level of the policy-makers who interact with academics at IMFS events, the importance of the policy publications to which IMFS researchers contribute, the relevance of the hearings and government advisory bodies IMFS researchers participate in, and the public visibility and media impact of IMFS contributions on policy issues.

Public outreach

The IMFS aims to raise and promote awareness among the general public regarding the significance of a stable currency. The institute pursues this objective on two levels: Locally, the IMFS reaches out to the financial community in Frankfurt, Germany's financial center, by regularly organizing lectures and seminars with IMFS researchers and distinguished speakers from other institutions that deal with current issues in the area of monetary and financial stability.

In order to communicate with the public on a national and international level, IMFS professors give speeches and presentations and participate in discussions. Furthermore, IMFS researchers regularly contribute to national and international newspapers and magazines, websites, blogs, and TV and radio programs. Indicators of success include the quality of speakers at IMFS events and the number of participants, as well as the public speaking opportunities of IMFS researchers. Additionally, the frequency of commentaries in the media provides an indication of the visibility. Media coverage of research by IMFS researchers on economic and legal questions concerning monetary and financial stability in the media is of particular importance.



Committees

IMFS Executive Board

Members of the Executive Board of Directors are the professorial members of the center as well as professors of Goethe University whose research focuses on IMFS-related topics and whose membership application was approved by the Board of Trustees. Furthermore, two members of the staff of the center are appointed. The chairperson of the Executive Board is the Managing Director of the institute.

Managing Director:

Prof. Volker Wieland, Ph.D.

Endowed Chair of Monetary Economics, IMFS

Deputy Managing Director:

Prof. Michael Binder, Ph.D.

Chair of International Macroeconomics and Macroeconometrics, Goethe University

Members:

- Prof. Dr. Roland Broemel
 Chair of Public Law, Economic and Currency Law, Financial Markets Regulation and Legal
 Theory, IMFS
- Prof. Michael Haliassos, Ph.D.
 Chair of Macroeconomics and Finance, Goethe University
- Prof. Dr. Alexander Meyer-Gohde
 Chair of Financial Markets and Macroeconomics, IMFS
- Prof. Dr. Tobias Tröger, LL.M.
 Chair of Private Law, Trade and Business Law, Jurisprudence, Goethe University
- Dr. Felix Strobel, IMFS, staff representative
- Jakob Liermann, IMFS, staff representative

Board of Trustees

The Board of Trustees is comprised of six members who advise, support and supervise the Executive Board within the scope of its duties.

Chairman:

Gerhard Ziebarth

Chairman of the Executive Board of the Foundation of Monetary and Financial Stability

Members:

- Prof. Dr. Albrecht Cordes, Dean of the Faculty of Law, Goethe University
- Dr. Ralf Debelius, Federal Ministry of Finance
- Prof. Dr. Raimond Maurer, Dean of the Faculty of Economics and Business Administration,
 Goethe University
- Prof. Dr. Thomas M.J. Möllers, Augsburg University, Chairman of the Council of the Foundation of Monetary and Financial Stability
- Prof. Birgitta Wolff, President of Goethe University

II. The IMFS in Numbers

	2018	2017	2016	2015	2014
Number of IMFS Professors*	7	4	4	4	6
External funds expended	697.600€	907.000€	851.000€	967.000€	951.000€
IMFS Working Papers	9	11	10	14	9
IMFS Interdisciplinary Studies in Monetary and Financial Stability	-	1	-	1	-
Articles in scientific journals	4	10	5	13	5
Scientific books	1	1	1	1	2
Contributions to books	6	10	8	9	8
Policy papers	3	7	5	4	3
Google scholar citations	664	388	352	371	793
Completed dissertations total (supervised by all IMFS Professors)	11	4	15	8	9
Financed by the IMFS	1	-	5	3	1
IMFS Post-Docs placements:					
Academia, government agencies, international organizations, and central banks	2	-	3	1	1
Banks, consultancies, law firms, and others	1	-	1	2	1
Keynote and major public speeches	7	7	9	5	3
Speeches and conference presentations	63	29	48	42	58
Policy meetings and hearings	13	10	14	11	10
Media references to IMFS research papers	5	5	4	4	5
Editorials and interviews by IMFS researchers	17	11	25	19	13
Press portraits of IMFS researchers	15	4	-	1	2
Short press commentaries of IMFS researchers	70	59	93	75	55
Radio and TV interviews with IMFS researchers	15	28	29	40	31
Conferences	2	2	2	2	2
+ jointly organized with EBI	1	1			
IMFS Distinguished Lectures	1	2	1	-	2
IMFS Working Lunches and Policy Lectures	4	3	3	9	4
TIVIT 5 VVOINING EARLINGS WHAT Only Ecceutes	4				•
Registered participants at IMFS events	1086	1168	840	1118	663

^{*}Alexander Meyer-Gohde and Roland Broemel since April 2018, Michael Haliassos since October 2018.

III. Macroeconomic Model Comparison Initiative (MMCI)

With the aim of rendering research on structural macroeconomic modeling substantially more reproducible, replicable, comparable and collaborative, Hoover Institution at Stanford University and the IMFS launched and established the new **Macroeconomic Model Comparison Initiative (MMCI)** in 2017. Within the MMCI, **John B. Taylor**, the Mary and Robert Raymond Professor of Economics at Stanford University and the George P. Shultz Senior Fellow in Economics at the Hoover Institution; **Volker Wieland**, Chair of Monetary Economics and Managing Director at the IMFS; and **Michael Binder**, Chair of International Macroeconomics and Macroeconometrics at Goethe University and current Deputy Managing Director at the IMFS, contribute as principal investigators. The Alfred P. Sloan Foundation awarded a three-year grant in the amount of \$591,295 in support of the MMCI.

Currently, the MMCI is the IMFS' major research project. The three-year-project running until December 21, 2019 aims to let model comparison take center stage in macroeconomic modeling research by reaching out systematically to researchers to integrate relevant new models into the public archive, developing the code underlying the Macroeconomic Model Data Base (MMB) to make use only of open-source scientific software, and building an interactive online platform that researchers can use to learn about reproducibility problems for original model-based research and to post replication codes. Another important aim of the project is to create a network of researchers (Macroeconomic Modelling and Model Comparison Network, MMCN) interested in systematically comparing models and contribute to policy applications in cooperation with the Centre for Economic Policy Research (CEPR) in London.

The MMCI Team

The two postdoctoral researchers providing leadership in the core team are Gregor Böhl and Felix Strobel (see section Pre-Docs and Post-Docs, p. 23). While Gregor Böhl has an especially strong background on issues of computation and is coordinating the open source refactoring of the code underlying MMCI, Felix Strobel adds further expertise specifically on nonlinear New Keynesian Dynamic Stochastic General Equilibrium (DSGE) modelling, and will contribute to expanding the coverage of such models within MMB. Research assistants who have contributed to the project in 2018 include Meguy Kuete, Matyas Farkas, Philipp Lieberknecht, Lazar Milivojevic, Alina Tänzer and Balint Tatar, all graduate students in the Ph.D. Program in Economics at the Graduate School of Economics, Finance, and Management at Goethe University. Additionally, Jakob Liermann and Taras Markiv have provided assistance regarding coordination, communication and coding. Ph.D. student Nora Lamersdorf joined the team in November. The core team is drawing on support from several consultants for specialized tasks. These include Professor Maik Wolters (coordination of forecasting competition and associated estimation tools), Andrij Stachurski (website development), and Jan Lohage (coding the open-source platform).

Version 2.3 of the MMB

Version 2.3 of the MMB was launched in June 2018 and added 21 new structural macroeconomic models to the model database. The total number of models rose to **114**, in comparison to 68 models in version 2.1. Among the features of the new models are that they capture financial market aspects such as leverage cycles, cross-border banking and/or inside money, and/or frictions such as sticky information and search in the labor market. The database was extended by some structural models featuring unconventional monetary policy. Therefore, with this new version, users may analyze the effects of monetary policy on the basis of a menu of monetary policy rules. They can also take advantage of the user-friendly interface to study the effects of fiscal policy. The **expansion of the MMB** public archive is among the major goals of this project. As of March 2019, the MMB offers 128 models.

The **website** for MMCI is available at **www.macromodelbase.com.** MMB users are able to directly contribute new models and scenarios on the interactive platform. In the new forum, researchers can discuss model replication and comparison or ask specific questions and receive advice by the community.

Open-source platform

Enhancing the system compatibility of MMB, Version 2.3 may be run on Windows, Mac (including the most recent releases of macOS) and Linux. For instance, MMB 2.3 is compatible with MATLAB on Ubuntu.

Macroeconomic Modelling and Model Comparison Network (MMCN)



The MMCN is a research network of the London-based Centre for Economic Policy Research (CEPR), which forms part of the MMCI. It serves as a platform for promoting collaboration of researchers who are working on issues of model replication and comparison, and increases the visibility of MMCI.

While the first annual conference of MMCN had taken place at Goethe University in Frankfurt in June 2017, the second research conference was held at Stanford University in June 2018. Almost 90 researchers from academia, central banks and international institutions presented new structural macroeconomic models that help explain macrofinancial linkages, new solution and estimation methods, and novel analyses of monetary, fiscal and macroprudential policies. The conference was organized by Michael Binder, John B. Taylor and Volker Wieland. Nobel laureate Lars Peter Hansen of the University of Chicago gave the keynote speech (see Events, p. 65).

For 2019, it is envisioned to further increase the number of papers involving comparative model analysis. Such comparative analysis can include the comparison of the in- and out-of-sample fit of macroeconomic models with financial sector, as well as the comparative analysis of the effects of macroprudential policies. Part of this comparison shall also entail a model forecasting competition, making use of real-time data vintages to produce and evaluate forecasts on the basis of data that was available before, throughout and after the global financial crisis and recession.

IV. External Research Funding

The acquisition of funds is part of the objectives of the IMFS and thus anchored in its statutes. External funding in the amount of **five million euro by the Foundation of Monetary and Financial Stability** forms the basis of the **ten-year funding period of the IMFS** that started in 2017.

Within the framework of the Macroeconomic Model Comparison Initiative (MMCI), currently the major research project at the IMFS, the IMFS expended about US\$ 190,000 in 2018. This joint research initiative by the Hoover Institution at Stanford University and the IMFS is supported financially by the Alfred P. Sloan Foundation with a total of US\$ 591,000 during a three-year period.

In addition, the IMFS received external funding for the organization of several other events in 2018. The Foundation of Monetary and Financial Stability supported the conference "The ECB and Its Watchers XIX" with 25.000 € and the Second Research Conference of the CEPR network MMCN with 30.000 €.

Project	Time Period	External Funds Received TOTAL	External Funds Expended 2013-2018
Project Currency and Financial Stability, RF S 126/10003/04		10.115.000,00€	3.848.633,35 €
urrency and Financial Stability, RF S 126/10133/16	Sep. 2017 – Aug. 2027	5.000.000,00€	458.277,30€
IMFS Project W3 Interim Professorship, RF S 126/10153/18		45.000,00€	29.341,29€
t Commentary on the EMU RF S126/10169/18	Nov. 2018 – Oct. 2019	70.000€	11.523,76€
IMFS Project 5 th Conference 2011 Oct. 2011 – June 2013 onference RF S 126/10087/11		50.000,00€	45.443,56€
IMFS		51.645,00€	43.687,47 €
Project IMFS/CFS Conference "The ECB and Its Watchers XV", 2014, RF S 126/10107/14 March 2014 – Oct. 2014		19.000,00€	19.028,13€
man Turkish Law Colloquium RF S 126/10043/07	Aug. 2014 – Dec. 2014	20.354,00€	20.354,00€
ct IMFS Conference 2015, RF S 126/10114/15	Feb. 2015 – Sep. 2015	59.000,00€	52.276,10€
ct IMFS Conference 2016, RF S 126/10127/16 Project 380 2010010	April 2016 – Sep. 2016	49.000,00€	49.000,00€
: IMFS Conference 04/2017, RF S 126/10137/17 Project 380 2010011	April 2017 – Sep. 2017	30.000,00€	30.000,00€
oject IMFS Conference, 19./20.06.2017, RF S 126/10143/17 Project 380 2010013	June 2017 – Dec. 2017	20.000,00€	20.003,00€
oject IMFS Conference, 3 Watchers, 14.03.2018, RF S 126/10155/2018 Project 380 2010015	Apr. 2018 – Dec. 2018	25.000,00€	25.000,00€
oject IMFS Conference, IMCN, 07./08.06.2018, RF S 126/10157/2018 Project 380 2010015	June 2018 – Dec. 2018	30.000,00€	30.000,00€
DFG GZ:WI 2260/1-1	July 2011 – Sep. 2014	182.571,52 €	122.296,98€
EU Project MACFINROBODS	May 2014 – Apr. 2017	290.000,00€	242.797,97 €
Festschrift Baums	2016	12.000,00€	12.000,00€
orizon 2020: EURHISFIRM	2017	52.000,00€	
MMCI Sloan Foundation	Dec. 2016 – Dec. 2019	591.295,00\$	223.252,00€
k project "Stability of the tary, Currency and Financial em" (managed externally)	Nov. 2017 – Nov. 2018	9.402,34 €	
Slo k pr	MMCI pan Foundation oject "Stability of the Currency and Financial	MMCI Dec. 2016 – Dec. 2019 Oject "Stability of the Currency and Financial Nov. 2017 – Nov. 2018	MMCI pan Foundation Oject "Stability of the Currency and Financial Dec. 2016 – Dec. 2019 591.295,00 \$ 9.402,34 €

Project	External Funds Expended 2018	External Funds Expended 2017	External Funds Expended 2016	External Funds Expended 2015	External Funds Expended 2014	External Funds Expended 2013
Project Currency and Financial Stability, RF S 126/10003/04	79.625,76€	612.709,62€	717.819,27€	837.393,03€	842.728,12 €	758.357,55€
Project Currency and Financial Stability, RF S 126/10133/16	356.003,68€	102.273,62€				
Project W3 Interim Professorship, RF S 126/10153/18	29.341,29€					
Project Commentary on the EMU	11.523,76€					
Project Conf. 2011 RF S 126/10087/11	closed	closed	closed	closed	closed	45.443,56€
Project IMFS Conf. 2013, RF S 126/10103/13	closed	closed	closed	closed	closed	43.687,47€
Project IMFS/CFS Conf. ECB Watchers 2014, RF S 126/10107/14	closed	closed	closed	closed	19.028,13€	
12 th German Turkish Law Colloquium, RF S 126/10043/07	closed	closed	closed	closed	20.354,00€	
Project IMFS Conf. 2015, RF S 126/10114/15	closed	closed	closed	52.276,10€		
Project IMFS Conf. 2016, RF S 126/10127/16	closed	closed	49.000,00€			
Project IMFS Conf. 04/2017 RF S 126/10137/17	closed	30.000,00€				
Project IMFS Conf. 6/2017 RF S 126/10143/17	closed	20.003,00€				
Project IMFS Conf., ECB Watchers 2018, RF S 126/10155/2018	25.000,00€					
Project IMFS Conf., MMCN 06/2018, RF S 126/10157/2018	30.000,00€					
DFG GZ:WI 2260/1-1	closed	closed	closed	closed	62.666,79€	59.630,19€
MACFINROBODS	closed	85.224,31€	72.884,38€	78.134,59€	6.554,69€	
Festschrift Baums	closed	closed	12.000,00€			
EU-Horizon 2020: EURHISFIRM						
Sloan Foundation	166.115,00€	57.137,00€				
Book project "Stability of the Monetary, Currency and Financial System"						
TOTAL	697.609,49€	907.347,55€	851.703,65€	967.803,73€	951.331,73€	907.118,77 €

V. Member of the European Banking Institute

The European Banking Institute (EBI) serves as an international center for banking studies and banking regulation. At its start in 2016, Goethe University joined the academic members of the EBI with the IMFS as representative of Goethe University. Currently, IMFS Executive Board member Tobias Tröger is the EBI's treasurer after having served as Managing Director.

By the end of the year 2018, the EBI had 28 academic members, which included universities from 18 countries of the euro



area that decided to share and coordinate their commitments and structure their research activities in the field of banking regulation, banking supervision, and banking resolution in Europe.

The EBI fosters the dialogue between scholars, regulators, supervisors, industry representatives and advisors with regard to issues concerning the regulation and supervision of financial institutions and financial markets from a legal, economic, and any other related viewpoint. It aims at producing interdisciplinary banking research, making recommendations, and devising new strategies on banking in Europe. Detailed information is available at www.ebi-europa.eu.

In 2018, the EBI organized eleven events, such as a workshops and seminars on fintechs, blockchain, or managing banking crises. On February 23-24, the IMFS jointly organized the **EBI Global Annual Conference on Banking Regulation** at Campus Westend in Frankfurt. The EBI's first research conference dealt with issues relating to completing the banking union, the implications of Brexit as well as the regulation on non-bank banks. It served as a platform for bringing together new ideas on banking regulation from the academic side and confronting them with practical problems as Thomas Gstädtner, president of the Supervisory Board, and Tobias Tröger emphasized in their opening remarks.

VI. The Researchers

IMFS Professors

In the course of 2018, the IMFS expanded its team of researchers substantially and was able to bring on board more scholars for cooperation. Professor Volker Wieland serves as the institute's Managing Director. Professor Michael Binder from Goethe University's Department of Money and Macroeconomics is Deputy Managing Director. Professor Roland Broemel succeeded Professor Helmut Siekmann who had held the Endowed Chair of Money, Currency and Central Bank Law. At the same time, Alexander Meyer-Gohde joined the IMFS as Chair of Financial Markets and Macroeconomics. Professor Tobias Tröger and Professor Michael Haliassos of Goethe University also form part of the Executive Board. All IMFS professors come together on a regular basis for the Executive Board meetings to discuss joint research projects as well as organizational aspects and future events. In 2018, the Executive Board held meetings on May 8, October 2, and November 22.

IMFS Endowed Chair of Monetary Economics Volker Wieland



Professor Volker Wieland, Ph.D., has held the Endowed Chair of Monetary Economics since March 1, 2012. As one of the three founding professors, he was involved in the successful application for the "Currency and Financial Stability" project and has been affiliated with the IMFS from its beginning. In 2017, he was re-elected Managing Director after having filled this position since 2012. An expert in monetary theory and policy, Wieland has been a member of the German Council of Economic Experts since 2013. Advising German policy-makers on questions of economic policy, the Council compiles and publishes a report, which is released annually in November. He is also a member of the Scientific Council of the Market Economy Foundation, the Scientific Council of the Federal Ministry of Finance and CEPR Research Fellow.

In his research, Wieland concentrates on monetary and fiscal policy, business cycles and macroeconomic models, inflation and deflation, learning behavior and economic dynamics as well as numerical methods in macroeconomics. Wieland and his team have developed the Macroeconomic Model Data Base with more than 120 models. His research has been published in leading scientific journals such as the *American Economic Review*, the *European Economic Review* and the *Journal of Monetary Economics*, and in 2018 was cited on about 280 occasions, according to Google Scholar. Altogether, his research received more than 5700 citations up to now. Wieland has consistently been the highest placed Goethe University professor in the ranking of Germany's most influential economists by research and media impact published by the German daily *Frankfurter Allgemeine Zeitung*. As of September 2018, the international research ranking of bibliographic database IDEAS-REPEC lists Wieland among the top two percent of economists worldwide, among the top one percent in Europe and in 21st place of almost 4000 economists in Germany.

Volker Wieland completed his Ph.D. at Stanford in 1995 and worked at the Federal Reserve in Washington for the next five years. In November 2000, he joined the Goethe University faculty. He has been a consultant to many institutions including the ECB and the European Commission. In 2008, Wieland was awarded the Duisenberg Fellowship by the ECB. In 2017, he received the "Public Service Fellowship" by the foundation of Alfons and Gertrud Kassel. Together with his fellow members of the German Council Economic Experts, he received the German Economic Policy Prize 2015 of the Small and Medium-Sized Business Association of the CDU/CSU and the Thought Leader Award 2018 of the Thought Leader Forum supported by Plansecur Financial Group

IMFS Chair of Public Law, Economic and Currency Law, Financial Markets Regulation and Legal Theory Roland Broemel

Professor Dr. Roland Broemel, Maîtrise en Droit, holds the Chair of Public Law, Economic and Currency Law, Financial Markets Regulation and Legal Theory since July 2018 after having supported the IMFS as Interim Professor since April. Before that, he was a Junior Professor of Public Law and Economic Law at Hamburg University's law department. Broemel's research focuses on market regulation, in particular as it relates to currency, banking supervision, network regulation and the media. Furthermore, one cross-sectional project examines the legal aspects of digitalization and algorithm-based applications. Further research interests include Basic Law theory and legal technical methodology.

Roland Broemel studied at the universities of Bayreuth (commercial lawyer), Bordeaux (Maîtrise en Droit), and Hamburg (First State Examination) and completed his legal clerkship at the Higher Regional Court of Hamburg. He received his doctorate and habilitation at Hamburg University's law department. During this time, Professor Broemel was supported by a grant of the Studienstiftung des deutschen Volkes and received the Doctorate Award 1st Class from the university's law department as well as the Hamburg Teaching Award 2010 from Hamburg's Department for Science and Research (*Behörde für Wissenschaft und Forschung*).

IMFS Chair of Financial Markets and Macroeconomics Alexander Meyer-Gohde



Professor Dr. Alexander Meyer-Gohde has held the Chair of Financial Markets and Macroeconomics since April 2018. He obtained his bachelor's from Colorado State University in his home state before moving to Germany. His master's followed at the Humboldt-Universität zu Berlin and he obtained his doctorate from the Technische Universität Berlin. Before coming to Frankfurt, he held various positions in Hamburg, Berlin, and Potsdam.

Meyer-Gohde's research concentrates on the methodological (numerical, theoretical, and empirical) foundations of macroeconomics and its interaction with financial markets through nonlinearities in risk and uncertainty, as well as through market frictions.

Research Professor Michael Binder



Michael Binder is Professor of Economics at Goethe University Frankfurt, holding the Chair for International Macroeconomics and Macroeconometrics since 2003. He is also Founding Dean of the Graduate School of Economics, Finance, and Management (GSEFM) at Goethe University, Johannes Gutenberg University Mainz and Technische Universität Darmstadt, that offers Ph.D. Programs in economics, finance and marketing. He has been affiliated with the IMFS for a number of years, and in May 2018 was elected as Deputy Managing Director of the IMFS.

Binder received a Ph.D. in economics from the University of Pennsylvania in 1995. He has held appointments and visiting appointments inter alia at the University of Cambridge, the University of Maryland, the University of

Munich (CESifo), the University of Southern California, Xiamen University, the Bank of Spain, the European Central Bank, the International Monetary Fund, and the World Bank. Binder was a Fulbright scholar, a Marie Curie research fellow, a scholar of the German National Scholarship Foundation, has directed the node of an FP7 research project, and has been the recipient of numerous teaching and advising awards. He has published on a variety of topics in macroeconomics and econometrics in journals such as *Econometric Theory*, the *International Economic Review*, and the *Journal of Economic Dynamics and Control*, and has held editorial board positions at *Journal of Applied Econometrics*, the *Journal of Economic Dynamics and Control*, and *Empirical Economics*.

Part of Binder's recent research centers around the research project "Macroeconomic Model Comparison Initiative" that was granted by the Alfred P. Sloan Foundation to the Hoover Institution at Stanford University and to the IMFS. More broadly, Binder's current research examines the implications of financial market structures for business cycle dynamics, output growth, and macroeconomic policy design. His research also involves the development of new econometric methods for panel data sets. As part of his commitment to further opportunities for young researchers in economics and finance, Binder also continues to serve as chairman of the jury of the Young Innovators Award, an award that he co-initiated in 2014 as part of his involvement with *Vordenker Forum*.

Research Professor Michael Haliassos



Professor Michael Haliassos, Ph.D., has been holding the Chair of Macroeconomics and Finance at Goethe University Frankfurt since 2004. He is a Research Fellow at the CEPR, Founding Director of the CEPR Network on Household Finance and International Research Fellow of the Dutch Network for Studies on Pensions, Aging and Retirement (Netspar). As an expert for Household Finance, consumer and investment behavior and Financial Literacy, he is also advisor to the European Central Bank on the Eurozone Survey of Household Finances and Consumption since its inception in 2006. He has also published many influential papers in these fields, among them leading international scientific journals such as the *Review of Financial Studies, Review of Economics and Statistics, International Economic Review* or *Economic Journal*. Haliassos received a B.A. from Cambridge University and a

Ph.D. from Yale University in 1987 under the supervision of Nobel Laureate James Tobin.

Research Professor Tobias Tröger



Professor Dr. Tobias Tröger, LL.M., holds the Chair of Private Law, Trade, and Business Law, Jurisprudence at Goethe University. In his research, Tröger investigates internal governance structure of banking union institutions, the reinstallation of market discipline through bank reorganization and resolution (bail-in, living wills), capital market union, the regulation of nonbank credit intermediation (shadow banking), the development of securities regulation and social change, the law of shareholder meetings and resolutions as well as German and European sales law. Currently, Tobias Tröger is Treasurer of the European Banking Institute (EBI), an international center for banking studies. From 2016 to 2018, he had been the EBI's Managing Director. Among the EBI's 28 academic members, the IMFS is the representative of Goethe University.

Distinguished Professor Helmut Siekmann



Professor Dr. Dr. h.c. Helmut Siekmann held the IMFS Endowed Chair of Money, Currency, and Central Bank Law from 2006 until March 2018. He is the founding director of the IMFS and was the institute's Managing Director from 2006 to 2010 as well as from September 2011 to May 2012. Siekmann received his doctor juris and his post-doctoral degree ("Habilitation") from the University of Cologne. He also earned a degree in economics (Diplom-Volkswirt) from the University of Bonn and was awarded an honorary doctor's degree by the University Paris-Dauphine. In August 2018, Siekmann was awarded a Distinguished Professorship by Goethe University's Executive Board (see p. 5). Siekmann's main field of work is the stability of financial markets, financial institutions, and public finances. His research is focused on all aspects of government finances, the institutional framework of the

European System of Central Banks, the European provisions to secure stable government finances, the stabilization mechanisms in time of crisis, and the supervision and control of financial markets. In addition to his academic work, Siekmann contributed to numerous legislative projects on the national and supranational level. He worked as counsel to constitutional bodies and represented them in constitutional courts. He contributed significant parts to a new edition of the standard-setting work on the "Grundgesetz", the German basic law, particularly concentrating on the section about central banks.

Affiliated Professor Heike Schweitzer



Professor Dr. Heike Schweitzer, LL.M. (Yale) has held the Chair for Civil Law, German and European Commercial and Competition Law and Economics at the law faculty of Humboldt University Berlin since April 2018.

She is a renowned expert in those fields and a special advisor to EU commissioner Margrethe Vestager for digitalization and competition policy. Besides competition law, the European law on the economic system, state aid law, the law on digital markets as well as the financial market law are among her main research areas. From 2006 to 2018, she taught at the universities of Florence and Mannheim and at Freie Universität Berlin. Heike Schweitzer is a member of the Kronberger Kreis.

Pre-Docs and Post-Docs

All chairs at the IMFS contribute to the training of doctoral students within the structured Ph.D. and doctoral programs. Doctoral and post-doctoral training at the IMFS also focuses on providing a productive research environment for post-docs who were either hired as research assistants or received external funding to work temporarily at the IMFS. Many doctoral candidates work as research assistants in IMFS research projects.

Gregor Böhl has been holding a Post-Doc position at the IMFS since June 2017. His research focuses on financial fragility, monetary theory and inequality with emphasis on heterogeneity and nonlinearities. In 2017, he completed his Ph.D. thesis at the University of Amsterdam and Bielefeld University, supervised jointly by Cars Hommes and Herbert Dawid. During that time, he was financed by a scholarship from the Bielefeld Graduate School in Economics and Management. Previously, he held a scholarship from the German Research Foundation. Gregor obtained his MSc in economics from the University of Granada (top of class) and studied economics at Humboldt University Berlin at undergraduate level. He has worked as a professional guitar player, and as an IT consultant for several start-up companies. From November 2018 until February 2019, he was a Visiting Scholar at Stanford University.





Mátyás Farkas is a Ph.D. candidate in Finance at the GSEFM at Goethe University. In September 2018, Mátyás joined the ECB's graduate program, where he is working in the Monetary Policy Research division. From December 2014 until his start at the ECB, Mátyás was an integral member of the Macro Model Base Team. He became the back-end developer of the Macroeconomic Model Data Base, contributing to the platform's newly introduced compatibility under multiple operating systems and to its transmission into a web-based, platform-independent comparison tool and database. His research focuses on incorporating heterogeneous expectations into DSGEs, on practical questions of DSGE solution techniques and advanced time series methods, with a special focus on Bayesian Econometrics. His job market paper explores unconventional monetary policy identification and the

impact of large-scale asset purchases in presence of macro prudential policy. Despite his departure from the IMFS, Mátyás remains committed to the success of the MMCN and MMCI. He is currently developing the real-time DSGE forecast comparison platform for the MMCN's forecast competition round. The Hungarian-born researcher acquired his M.Sc. degree in Money and Finance from Goethe University in 2013. He pursued his undergraduate studies at Corvinus University Budapest and holds two Bachelor's diplomas, one in Finance and Accounting and one in International Relations.



Nora Lamersdorf joined the Chair of Monetary Economics at the IMFS in November 2018 and is contributing to the Macroeconomic Model Comparison Initiative by integrating new models into the Macroeconomic Model Database. She is currently a third-year Ph.D. student at the Graduate School of Economics, Finance, and Management (GSEFM) at Goethe University. She holds a B.Sc. in Business Informatics and a M.Sc. in Economics, both from TU Dresden. Her research interests are in the fields of monetary policy and macro-financial modelling. In addition to her work at the IMFS, she works as a research assistant at the Research Centre of Deutsche Bundesbank.

Philipp Lieberknecht joined the Chair of Monetary Economics at the IMFS in April 2016. He is currently pursuing his Ph.D. at the Graduate School of Economics, Finance and Management at Goethe University. He completed his undergraduate studies in economics in Muenster and holds a M.Sc. in economics from the University of Cologne. He also worked as a research intern at Deutsche Bundesbank, the German Ministry of Finance, Deutsche Bank and IW Köln. His research interests are in the area of monetary, macroprudential and fiscal policy, with a special focus on the effect of financial frictions in structural models. Together with Michael Binder, Jorge Quintana and Volker Wieland, he contributed a chapter entitled "Model Uncertainty in Macroeconomics: On the Implications of Financial Frictions" to the Oxford Handbook on Central Banking (forthcoming in 2019). In 2018,



he worked as a research intern at the ECB and wrote a paper about inequality and saving rates. He also visited the IMF as summer intern and contributed to a project on a fiscal Taylor rule.



Lazar Milivojević joined the IMFS in April 2017. As a member of the Macroeconomic Model Data Base (MMB) team, he has been involved in further integrating new macroeconomic models into this platform. Additionally, he assisted in the Ph.D. course on "Monetary and Fiscal Policy Theory and Practice" in 2017 and the bachelor course "Business Cycles: Theory and Policy" in 2018. During the summer 2018, Lazar worked as a research intern at the World Bank. He is currently a fourth-year Ph.D. student at the Graduate School of Economics, Finance and Management (GSEFM) at Goethe University. Lazar comes from Serbia, where he completed his undergraduate studies in economics and master studies in econometrics at the University of Belgrade. His research interests are in the area of DSGE modeling and macroeconomic modeling and economic policy.

Maie Mörsch joined the Chair of Prof. Broemel, maîtrise en droit, at the IMFS in November 2018. She is currently pursuing her Ph.D. in Public Law and Financial Law. She completed her law studies with the first state examination in Frankfurt am Main. During her studies she completed stays abroad in Switzerland and Scotland. She worked as a research assistant in several major international law firms. Her research interest lies in the fields of public finance in connection with inequality, with a special focus on the effects of public debt on the realization of human rights.



Ioanna Pigkou joined the Chair of Financial Markets and Macroeconomics in September 2018. She is currently pursuing her Ph.D. at the Graduate School of Economics, Finance and Management at Goethe University. Her research interests lie in the fields of monetary and fiscal economics as well as in computational methods. Together with Alexander Meyer-Gohde, she is working on nonlinear perturbations aiming to develop techniques to provide accurate depictions on the interaction of macroeconomy and financial markets. Ioanna completed her undergraduate studies in mathematics at National and Kapodistrian University of Athens. She is also working as teaching assistant in macroeconomics and as research assistant in DSGE modelling at Deutsche Bundesbank.

Sandra Plicht, research assistant at the Chair of Money, Currency and Central Bank Law and Ph.D. student, joined the institute in July 2018. She followed Prof. Broemel from Hamburg to Frankfurt and is supporting his academic research. Sandra Plicht studied law at the universities of Greifswald (basic study), Copenhagen (semester abroad) and Hamburg (First State Examination). Her main research interests lie in the field of market regulation, in particular competition law and procurement law. At the moment, she is focused on the health care system but further research interests include telecommunications, media and energy. In her doctoral thesis, she is investigating the regulatory structure of rebate contracts for pharmaceuticals. Furthermore, she is interested in public security law and the legal aspects of digitalization. Sandra Plicht also has a teaching position



at the University of Applied Police Sciences in Hamburg. Recently, she taught police law and European law and international law.

Johanna Saecker started working as a research assistant at the Chair of Financial Markets and Macroeconomics in October 2018. She is currently mostly involved in assisting the chair's teaching. Besides, she is a second-year Ph.D. student at the Graduate School of Economics, Finance and Management (GSEFM) at Goethe University. She holds a M.Sc. in Economics and Financial Economics from the University of Nottingham, a M.Sc. in International Political Economy from the London School of Economics and Political Science (LSE) and a B.A. in International Relations from TU Dresden. Also, she completed traineeships at the ECB's Directorate General International and European Relations (International Policy Analysis) and the European Commission's Directorate General for Internal Market, Industry, Entrepreneurship and SMEs (GROW). Her research interest broadly lies in macroeconomics and financial markets.

Catharina Schmidt is working on her doctoral dissertation in which she compares the different legal regimes imposing a separation between commercial banking and investment banking and graduated in law from Goethe University (first state examination in law) in 2013. She initially joined the IMFS as a student assistant in November 2011 and was a research assistant until March 2018. Besides her research on banking supervision, Catharina is interested in banking and capital markets law. In 2016, Catharina started her post-graduate legal traineeship with stations, amongst others, at the German Federal Financial Supervisory Authority in Frankfurt and the Library of Congress in Washington, D.C. in spring 2018.





Felix Strobel, Ph.D., joined the institute in September 2017 as a postdoctoral researcher. He is supporting the extension of the Macroeconomic Model Data Base (MMB). His main research interests are in the fields of monetary and fiscal policy with a focus on the role of banking and financial markets for business cycles. From May to July 2018, he was a Visiting Scholar at the Hoover Institution at Stanford University. Prior to joining the IMFS, Felix acquired his Ph.D. degree in Economics at Humboldt University Berlin in 2017. His doctoral thesis investigates on the effects of sovereign risk on the size of the government spending multiplier. As a doctoral student he participated in the Berlin Doctoral Program of Economics and Management Sciences (BDPEMS). He obtained his Master's in Economics at Humboldt

University Berlin and his Bachelor's of Philosophy & Economics at the University of Bayreuth.

Alina Tänzer joined the IMFS in April 2017, supporting the Macroeconomic Model Comparison Initiative team and working as a research assistant. She is currently pursuing her Ph.D. at the Graduate School of Economics, Finance and Management at Goethe University. In 2015, she completed her undergraduate studies in economics and business administration at Goethe University. Before focusing on economic research, Alina terminated her airline pilot training with Deutsche Lufthansa, where she also worked as an intern. In her research, she deals with different aspects of monetary and fiscal policy as well as their interaction with a special focus on the European Monetary Union. A comparison of different models featuring unconventional monetary policy, the effects on the implementation of fiscal policy measures and possible central bank normalization strategies for monetary policy are



analyzed. Alina holds a scholarship by the German National Academic Foundation (*Studienstiftung des Deutschen Volkes*). In October 2018, Alina started her career as First Officer, flying for Lufthansa. Moreover, she continues her research projects for her Ph.D.



Balint Tatar has joined the Chair of Monetary Economics at the IMFS in May 2017. He completed his M.Sc. in economics at the University of Bonn and is presently working on his dissertation. He also holds a B.Sc. degree in mathematics from the University of Bonn and a diploma in business administration from the University of Cologne. Before joining the IMFS, he worked as a teaching assistant in the Department of Money and Macroeconomics of Goethe University and was involved in teaching undergraduate students in macroeconomics. Prior to joining the Graduate School of Economics, Finance and Management, he was employed by the Directorate General of Economic and Financial Affairs (DG ECFIN) of the European Commission. In parallel with his studies, Balint also worked as a part-time employee at HSBC Global Asset Management in Düsseldorf, the

asset management division of HSBC Group. His research interests are in the field of applied macroeconometrics and DSGE models, and his research is broadly related to crises and monetary policy.

After completing her post-graduate legal traineeship at the district court of Mainz, Ass. iur. **Caren Lee Wachowiak** returned to the Endowed Chair of Money, Currency and Central Bank Law of the institute from April 2014 until September 2018 to work on her doctoral dissertation. Her doctoral thesis mainly focuses on legal tender in general as well as the obligation to accept legal tender. As a German-American, Caren has a special interest in financial law in Europe and the United States. She will continue to be involved in Professor Siekmann's project of updating and translating the monetary union commentary into English.



Fellows

By appointing IMFS Fellows, the Board of Directors aims to affiliate selected academics, researchers and practitioners from the areas of monetary policy finance and financial law with the IMFS. The appointment is for a period of three years.

IMFS Distinguished Fellows are exceptional individuals with great experience in policymaking institutions and in the financial sector, who have either already made outstanding contributions to the IMFS and its activities in research and policy advice, or aim to get actively involved in the future. There can be up to six IMFS Distinguished Fellows at a time. They are nominated by the IMFS Managing Director and appointed by its Board of Directors.

IMFS Research Fellows are excellent scholars from other universities and institutions who collaborate closely with one of the IMFS endowed chairs. The IMFS offers its research fellows opportunities to get involved in IMFS research, policy advice, and events. Each of the IMFS endowed chairs can appoint up to six research fellows.

IMFS Distinguished Fellows

Prof. Dr. Dres. h.c. Theodor Baums



Prof. Dr. Dres. h.c. Theodor Baums has the Endowed Chair for Civil and Business Law at the Institute for Law and Finance (ILF) at Goethe University, which he founded and where he now serves as a member of the management board. He was the chairman of the Government Commission on Corporate Governance, a member of the Advisory Board of the Federal Financial Supervisory Authority (BaFin), counsel to the EC Commission on company law, and ethics advisor to the management board of the Deutsche Bundesbank. Currently, he is a member of the German government commission on the Corporate Governance Code. Prof. Baums is co-editor of several scientific journals and publication series. He has

published more than 150 books and articles on corporations, civil and antitrust law. Prof. Baums has frequently advised the German Federal Government and Federal Parliament on questions concerning company and securities market regulation and was also an advisor for international organizations like the World Bank and the OECD. In 2006, he was awarded the Order of Merit 1st class of the Federal Republic of Germany. Prof. Baums studied law and Catholic theology in Bonn. After receiving his doctor juris he was a professor in Münster and Osnabrück before he came to Frankfurt in 2000. He is a Professeur associé of the University of Luxembourg as well as Dr. rer. pol. h.c. and Dr. iur. h.c. He has been a Founding Professor of the IMFS.

Dr. Willy Friedmann



Dr. Willy Friedmann served in different capacities in the areas of monetary policy, financial markets and trade at Deutsche Bundesbank from 1978 to 2009, and most recently as head of the economics department. Before his service with Deutsche Bundesbank, he was in charge of monetary policy and financial markets at the German Council of Economic Experts. From 2009 until 2015, he was Chairman of the Foundation for Monetary and Financial Stability and a member of the IMFS Board of Trustees. During this time, Willy Friedmann was associated with Goethe University as member of the foundation's Board of Trustees.

Prof. Dr. Hermann Remsperger



Prof. Dr. Hermann Remsperger was member of the Executive Board of the Deutsche Bundesbank from 1998 to 2009 where he was in charge of the department for economics and statistics as well as the research center. In 2006 he became responsible for all matters relating to the bank's international relations. In this capacity he represented the Deutsche Bundesbank in the economics and finance committee of the EU, at the G7 and G20 meetings as well as the Financial Stability Forum. Previously, he was chief economist at BHF Bank. He was a lecturer and honorary professor at Goethe University Frankfurt from 1979 to 2014. As Chairman of the Council of the Foundation for Monetary and Financial Stability

(Stiftung Geld und Währung), Hermann Remsperger also served as Chairman of the IMFS Board of Trustees since its establishment. He retired from these roles in 2015 but remains associated with the IMFS. In 2016, Hermann Remsperger was awarded the Federal Cross of Merit 1st class in honor of his role in the foundation and numerous other scientific institutions but also his volunteer work in church committees as well as his social commitment.

Prof. Dr. Dr. h.c. Reinhard H. Schmidt



Prof. Dr. h.c. Reinhard H. Schmidt is Seniorprofessor at the House of Finance of Goethe University, focusing on financial systems in industrial and developing countries, especially comparing financial systems in Europe, international firms and their strategy and structure, finance theory, international economic relationships and regulation as well as development financing. He is a member of the European Shadow Financial Regulatory Committee. He is author and editor of 25 books and 70 contributions to compilations and has published more than 60 scientific articles in national and international magazines. From 1991 to 2014, Schmidt held the Endowed Chair of Finance and Accounting at Goethe University,

before that he was a professor in Trier and Göttingen. As a Visiting Professor, he taught at various universities like Stanford, Georgetown University, Wharton School as well as in Paris and Milan. He had also been an Affiliated Professor at the IMFS.

Prof. Dr. Daniel Zimmer, LL.M.



Daniel Zimmer is the Director of the Institute of Commercial and Economic Law and of the Center for Advanced Studies in Law and Economics (CASTLE) at the University of Bonn. He was a member of the German Monopolies Commission and Chairman of the Commission from 2008 until 2016. Prior to this, he had been the Chairman of the Expert Council for the Development of Exit-Strategies regarding the Federal Republic's Investment in the Financial Sector (2010-2011), member of the Forum on Auditor Liability of the EU Commission (2005-2008), and also member of the special Commission "International Company Law" of the German Council for Private International Law (preparing a legislative proposal concerning

International Company Law for the German Ministry of Justice) (2004-2006). Zimmer studied law in Mainz, Lausanne, Göttingen and at the University of California at Los Angeles (UCLA). He received his doctor juris and his postdoctoral degree ("Habilitation") from the University of Göttingen.

IMFS Research Fellows

Tobias Adrian, Ph.D.



In 2017, Tobias Adrian took over as Financial Counsellor and Director of the Monetary and Capital Markets Department of the IMF in Washington. Previously, he had been a Vice President of the Federal Reserve Bank of New York and head of the Capital Markets Function of the Research and Statistics Group. In this capacity, he contributed to the New York Fed's financial stability policy and monetary policy briefings. His research covers asset pricing, financial intermediation, and macroeconomics, with a focus on the aggregate implications of capital market developments. Adrian holds a Ph.D. in Economics from Massachusetts Institute of Technology (MIT) and a M.Sc. from the London School

of Economics. He also holds M.A.s in Economics from Goethe University Frankfurt and Dauphine University in Paris. He has taught at MIT and Princeton University.

Prof. Dr. Günter W. Beck



Günter W. Beck is Professor for European Macroeconomics at the University of Siegen and Research Fellow at the Center for Financial Studies. His research focuses on macroeconomics, monetary economics, and international economics. Before his appointment in Siegen, Beck was Professor at the University of Mainz. After gaining a Ph.D. from Goethe University in 2004, he worked as an Assistant Professor in Frankfurt. From 2015 until 2017, he organized the conference "The ECB and Its Watchers".

Prof. Dr. Emanuel Mönch



Emanuel Mönch is Head of Research at Deutsche Bundesbank and Co-Optation Professor for Monetary Policy and Financial Markets at Goethe University. He studied statistics at the École Nationale de la Statistique et de l'Administration Économique (ENSAE) in Paris and economics at Humboldt University in Berlin, where he later gained his doctorate. From 2007 to 2015, Mönch had been working at the research group of the Federal Reserve Bank in New York. He also taught as a visiting professor at the prestigious Columbia University in New York. The Research Centre of the Deutsche Bundesbank has over 50 members of staff, who carry out research on general economic topics and issues in the areas of banking

supervision, financial stability and risk modelling. Mönch has published articles in numerous renowned academic journals and has very close connections in academic circles.

Prof. Athanasios Orphanides, Ph.D.



Athanasios Orphanides is a Professor of the Practice of Global Economics and Management at the MIT Sloan School of Management, Cambridge, MA. He holds undergraduate degrees in mathematics and economics as well as a Ph.D. in economics from the Massachusetts Institute of Technology. Orphanides served as Governor of the Central Bank of Cyprus from May 2007 to May 2012 and was a member of the Governing Council of the European Central Bank between January 2008 and May 2012. Prior to that, Orphanides was a Senior Adviser to the Board of Governors of the US Federal Reserve System. While at the Federal Reserve, he taught undergraduate and graduate courses in macroeconomics and monetary

economics at Georgetown University and John Hopkins University.

Prof. Dr. Julia Redenius-Hövermann



Prof. Dr. Julia Redenius-Hövermann is Associate Professor of Civil and Company Law at the Frankfurt School of Finance and Management. From December 2006 to July 2012, Redenius has held the position of postdoctoral research associate and lecturer at the Chair of Professor Theodor Baums at the Institute for Law and Finance, Goethe University. Before returning to her hometown Frankfurt, Julia Redenius worked as a research associate and lecturer at the Universities of Paris Il-Assas and Paris XII-Saint Maur as well as an attorney at law in Paris. Redenius holds Master degrees in French, German, European and International Corporate Law from the University of Paris II-Assas and Munich as well as a Ph.D. (summa

cum laude, Supervision: Professor Michel Germain) from the University of Paris II-Assas. She was admitted to the Paris Bar Exam.

Prof. Dr. Peter Tillmann



Peter Tillmann is Professor of Monetary Economics at the Justus-Liebig-University Giessen. He has been a Research Fellow at the IMFS since 2009. His research focuses on monetary policy, empirical macroeconomics, and financial markets. Before coming to Giessen in 2009, Tillmann was a senior economist at the Swiss National Bank. He started his academic career at the Universities of Bonn and Edinburgh. In 2003, he gained a Ph.D. from the University of Cologne.

Prof. Dr. Heike Schweitzer, LLM. (Yale)



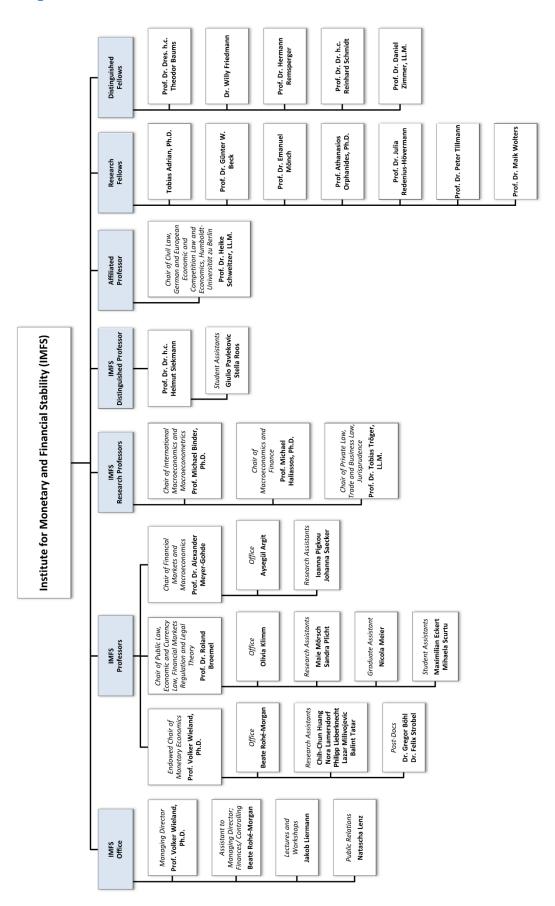
Professor.

Heike Schweitzer has held the Chair for Civil Law, German and European Commercial and Competition Law and Economics at the law faculty of Humboldt University Berlin since April 2018. She is a recognized expert in those fields and a special advisor to EU commissioner Margrethe Vestager for digitalization and competition policy. Besides competition law, the European law on the economic system, state aid law, the law on digital markets as well as the financial market law are among her main research areas. From 2006 to 2018, she taught at the universities of Florence and Mannheim and at Freie Universität Berlin. Heike Schweitzer is a member of the Kronberger Kreis and also an IMFS Affiliated

Prof. Dr. Maik Wolters



Maik Wolters is Professor of Macroeconomics at Friedrich Schiller University Jena since April 2017. From 2012 until 2017, he was a Junior Professor of Macroeconomics at Kiel University. His research interests are macroeconomics, monetary economics and international economics. In 2010 Wolters graduated from Goethe University's Ph.D. program where he had also gained a M.Sc. in quantitative economics previously. He is currently involved in the MMCI and coordinates the model forecasting competition that is under way. Wolters is also a Research Fellow at the Kiel Institute for the World Economy (IfW).



Conversations with IMFS Researchers and Alumni



IMFS Professor Roland Broemel "Establishing an appropriate legal framework requires a sound economic analysis."

Professor Roland Broemel assumed the Chair of Public Law, Economic and Currency Law, Financial Markets Regulation and Legal Theory in July. His research focuses on currency law, market supervision and the legal aspects of digital transformation.

Which questions are you currently working on?

My current research projects concern, among other topics, the legal framework of the European System of Central Banks, for instance the consequences of the economic uncertainty for the judicial review of monetary measures or institutional and procedural aspects of the European regime of monetary policy and banking supervision. Moreover, my research focuses on the legal consequences of big data and artificial intelligence in financial services, e.g. questions of legal accountability for algorithm-based decisions, the appropriate governance design to detect biases in algorithmic assessments and recommendations, or the necessary legal adaptions to cope with new forms of systemic risks. Some supervisory authorities follow a flexible approach offering regulatory sandboxes under certain circumstances. Those innovative, pragmatic ways of dealing with regulatory uncertainty brings up a series of legal questions on both the national and the European level.

What does the IMFS's interdisciplinary approach of legal and economic research mean for your work?

Establishing an appropriate legal framework for the supervision of financial markets requires a sound economic analysis of what is going on. The legal assessment of monetary measures of the ECB essentially depends on an economic explanation of monetary transmission mechanisms — their functioning, the different effects of monetary measures, and, last but not least, the level of model uncertainty. Furthermore, the need for regulation and supervision arising from algorithmic decision-making relies on an economic description of their effects on market structures and the corresponding new systemic risks.

In your research, you also focus on financial regulation. How do you assess the current state of financial supervision in the EU?

In terms of ensuring financial stability and macroprudential supervision, a lot has been achieved within the last years to establish a more coherent and effective regime within the European Union. However, the discussion on the first judgement of the European General Court concerning certain aspects of the SSM shows that a lot of questions remain up to debate. Besides, when it comes to the consequences of the digitalization, authorities of the financial sector like Bundesbank and BaFin undertake conceptual research that competition authorities like the Bundeskartellamt already initiated two years ago.

In your courses you address the legal aspects of big data in and digitalization, especially in financial regulation. What are the major challenges in your opinion?

A series of business models in the financial world is currently undergoing profound technological and structural changes. As in other branches, the use of artificial intelligence and big data applications may lead to significant competitive advantages. Some innovative applications increase the effectiveness and efficiency of financial services. Other applications render financial services more comfortable and are basically offered to acquire more data on payment transactions which can be used in other contexts.

One of the major challenges might be to characterize the data-driven business models and the evolving market structures in order to better get aware of new systemic risks and of biases in algorithmic decision-making processes. On that basis, legal instruments could be conceptualized to ensure an appropriate level of accountability as well as an effective supervision that creates a level playing field for both traditional financial institutes and fintechs. Finally, such a regulatory regime is to address new issues of consumer protection.



IMFS Professor Alexander Meyer-Gohde "I hope to instill students with a way of thinking rather than a collection of facts."

In April, Professor Alexander Meyer-Gohde assumed the newly formed Chair of Financial Markets and Macroeconomics at the IMFS. His research focuses on the technical methodology and empirical investigation of the intersection of the macroeconomy and financial markets, encompassing the pricing of macroeconomic risk, the modelling of risk and uncertainty, and the solution and estimation of nonlinear macro-finance models.

At the chair of Financial Markets and Macroeconomics, you examine the microeconomic foundations of financial markets in economy-wide models. Which questions are you currently working on?

My current projects include the development and application of nonlinear methods to model the joint interaction of financial markets and the macroeconomy. Methodologically I am working on tractable methods that capture the risk that originates in the macroeconomy and is priced in asset prices, enabling Bayesian estimation through risk sensitive linear approximation and by improving the accuracy of existing local (perturbation) approximation methods.

In an application, I am investigating the impact of alternate monetary policy instruments on bond risk premia (term premia) which should help assess the impact of monetary policies such as forward guidance and maturity swapping in central bank portfolios to target longer term interest rates. Additionally, I am extending the model uncertainty framework of Lars Peter Hansen and Thomas Sargent to allow for a comparability with risk sensitive preferences for understanding the microfoundations of the pricing of risk. Finally, I am working on improving the forecasting power of structural macroeconomic (DSGE) models by relaxing standard restrictions on the serial correlation of exogenous process and jointly estimating ARMA orders with the models structural parameters.

The empirical approach is very important for your research. What are the particular challenges related to this?

Many asset pricing phenomena, such as the risk premia on equity and bonds, are inherently nonlinear yet the standard macroeconomic approach for estimating models relies on linearity in models when engaging in likelihood-based estimation. While the underlying macroeconomic models can generally be expressed in a nonlinear form commensurate with the potential to match these asset pricing phenomena, the estimation of these nonlinear models presents considerable computational challenges. Improving the numerical accuracy of tractable nonlinear methods and developing alternative approximations that capture the salient interaction between macroeconomic risks and financial markets' pricing thereof provide two fruitful directions to help ameliorate these challenges.

Which issues do you address in your teaching?

A solid foundation in the assumptions, mechanics, and consequences of the macroeconomic models we use to analyze the economy is important at all levels of instruction from introductory macroeconomic courses at the bachelor's level to specialized PhD courses. With this foundation, students are able to ask and address relevant questions, both positively and normatively, independently. I hope to instill students with a way of thinking rather than a collection of facts, such that they can address the issues that are of interest to them themselves. Along the way in developing this way of thinking, students should understand the importance of economic growth, the benefits and pitfalls of independent and coordinated action by fiscal and monetary authorities, understand the pivotal role of expectations in issues ranging from the pricing of assets, to the response of the macroeconomy to policy actions, to the valuation of employment, and to the setting of prices by individual firms.

What does the IMFS's interdisciplinary approach of legal and economic research mean for your work?

The interdisciplinary approach provides a singular opportunity to confront theoretical recommendations from economics with the legal framework that defines the subset of possibilities available in our society. Likewise, the opportunity goes both ways, putting me in a position with my colleagues from law to inform the construction and interpretation of this framework with economic theory.

As the role of expectations I spoke of before alludes to, there can be a divergence between the intentions of policy and the actual consequences thereof as people and institutions respond to the incentives laid out before them. Both many incentives directly and the mechanisms for their transmission are codified in our laws — any practical application of economic theory requires an understanding of the legal framework within which this application will take place and fruitful legal analyses would take economic theory into account when assessing likely outcomes. The focus of the IMFS on combining expertise in monetary and financial economics with expertise in central bank and currency law is located at a particularly important nexus of legal and economic interaction.



Meguy Kuete, Deutsche Bundesbank "Working at the IMFS enabled me to keep up with advances of the scientific discussion"

Meguy Kuété Ngougning worked at the IMFS from 2014 to 2018. Born in Cameroon, he came to Germany to study mathematics in Darmstadt, and after that, joined the Ph.D. program at Goethe University. As a member of the Macro Model Base team, Meguy was involved in the integration of further macroeconomic models in the computational platform. He also contributed to the chapter on new methods for macro-financial model comparison for the Handbook of Macroeconomics edited by John B. Taylor and Harald Uhlig. In April 2018, Meguy took up a position as methodology expert at the

Directorate of General Markets of Deutsche Bundesbank.

How would you describe your job to other people?

I work as a methodology expert at the Directorate of General Markets. I am member of the Common Eurosystem Pricing Hub (CEPH), which is a platform aiming at valuating collaterals eligible for the credit and reserves operations. In the team, my task is to explore new methods for the valuation of fixed income securities, and to develop quantitative frameworks for pricing such assets. Through this process, we obtain theoretical prices, which are then compared with prices observed in the markets.

What are your main tasks at Deutsche Bundesbank?

My main task is the evaluation and extension of pricing models as well as their implementation. All models start out as theoretical and technical, and end up cross validated with real data. An important aspect of my task is to share new findings and methods within the Eurosystem. I draft notes and generate test data, which are then distributed to all national central banks and the ECB. To give a specific example, one of my first projects at the bank was to derive models for pricing inflation indexed bonds.

What do you like most about your job?

The job at the Bundesbank delights me. First of all, I enjoy comparing theoretical predictions to what is actually observed in the markets. In addition, market data of high quality are available at arm's length and the position gives me the possibility to observe the effect of monetary policy decisions beyond macroeconomic aggregates. Finally, the Bundesbank is an exceptional working place. Not only the professional integrity of its personal is exemplary, but its reputation, openness and strength of cooperation with other major policy institutions as well. I am very thankful for the opportunity of working for such an outstanding institution.

What was the main focus of your research at the IMFS?

At the IMFS, my research was related to macroeconomic modelling and model-based economic previsions. I joined the IMFS when Prof. Wieland and the then-MMB team were upgrading the Macro Model Base (MMB) with new model comparison features and integrating models with financial frictions in MMB. This project led to our Handbook chapter. Later we extended the project toward real-time estimation and forecasting with structural models. In parallel, I also worked on my single-authored paper "Liquidity premium and quantitative effects of central bank balance sheet policies."

How is your job at the Bundesbank related to your work at the IMFS?

At the IMFS, I worked on model comparison and forecasting with structural models and learned about complex computational and quantitative methodologies. The diversity is best displayed by the MMB, most models I worked on featured completely different modeling techniques and sometimes represented different modelling-paradigms. In finance and in economics alike, methods and model evaluations have experienced considerable changes since the financial crisis. In this innovative environment, consensuses are still building and very fragile. Working at the IMFS enabled me to keep up with advances of the scientific discussion. The comparison approaches I learned at the IMFS have increased my effectiveness in drawing sound inferences from different points the view.

What did you enjoy most regarding your time as doctorate at the IMFS?

The IMFS is unique as it offers doctoral students the opportunity to be exposed to the most relevant and leading economic research while requiring them to conduct research at the highest standards. In that respect, I have enjoyed every presentation of the IMFS Distinguished Lectures series and I would like to thank former colleagues and the rest of the IMFS staff for the always positive and inspiring environment.

Teaching Concept and Activities

In 2008, the Faculty of Economics and Business Administration was established, in cooperation with the Johannes Gutenberg University of Mainz, the Graduate School of Economics, Finance and Management (GSEFM). IMFS research Professor Michael Binder serves as director. In this framework, Goethe University offers several structured Ph.D. programs that follow the same format as Ph.D. programs at leading U.S. research universities with two years of course work prior to the start of dissertation research and rather demanding comprehensive exams after the first year of study. IMFS pre-doctoral students take part in these programs.

IMFS professors and researchers regularly teach courses and seminars in the Frankfurt Ph.D. programs. Based on the underlying economic and legal principles, they impart detailed knowledge on current issues in monetary economics and questions referring to constitutional and central bank law. In 2018, Michael Binder received the teaching prize of the Faculty of Economics and Business Administration for large-scale undergraduate courses, based on the highest score in the evaluation of these courses by students.

Regarding its legal expertise, Goethe University's faculty of law ranked 37 in the 2019 Times Higher Education World University Ranking published in October 2018, putting it in first place among all German law faculties.

Prof. Volker Wieland, Ph.D.

1. Monetary and Fiscal Policy: Theory and Practice

2nd Year Ph.D. and MSQE Course (Macroeconomics, 4CP)

(Winter Semester 2017/18, 12.12.17-07.02.18, Winter Semester 2018/19, 10.12.18 – 11.02.19) The objective of this course is to provide an introduction to the analysis of monetary and fiscal macro-prudential policymaking with practical applications to current policy challenges. Examples from the European Union, the United States and Japan are discussed. Students develop theoretical models of monetary and fiscal policy and learn how different policy recommendations can be evaluated using these models. Students also conduct practical simulation exercises and make use of MATLAB-based software tools for model analysis.

- Introduction
- Monetary models and monetary policy rules
- Optimal Control and New Keynesian modelling: Inflation targeting and the ECB
- Quantitative easing and the zero bound on nominal interest rates
- Government budget constraints and monetary-fiscal policy linkages
- Fiscal stimulus and multiplier effects
- Government debt dynamics and fiscal consolidation
- Financial accelerator, housing markets and macro-prudential regulation

2. Macro-Financial Modelling: Economic Frictions, Monetary and Fiscal Policy

Ph.D. Program Seminar (6 CP)

(Summer Semester 2018)

The purpose of this seminar is to give advanced doctoral students a hands-on introduction to frontier research in empirical macroeconomics and the development and application of structural macroeconomic models. The seminar consists of a combination of lectures, supervision of modeling projects, student presentations and group discussions with extensive feedback. Each

project, which ideally should be pursued by a team of two students, involves studying an existing macroeconomic model from the literature. Students are guided in the development of a software implementation of the model using DYNARE and MMB together with a policy application. At the end of seminar, students should be able to start working on a dissertation project that involves structural macroeconomic modelling.

3. Die Entwicklung des Geldes – Vom Aureus zu Bitcoins (The Development of Money – From Aureus to Bitcoin)

Block seminar with Prof. Helmut Siekmann (6CP) (Summer Semester 2018, Winter Semester 2018/19) Topics:

- Die historische Entstehung von Geld (jur./ökon.)
- Der Begriff des Geldes im Wandel der Zeit (jur./ökon.)
- Währung und Währungsordnung (jur.)
- Die Rolle des Staates bei der Schaffung von Geld (jur./ökon.)
- Nennwert und Metallwert der Münzen Staatsfinanzierung durch Verschlechterung des Münzfußes und Münzverrufung (jur./ökon.)
- Die Entstehung von Papiergeld Aufstieg der Notenbanken (jur./ökon.)
- Geld und Geldschuld im Rechtssinne (jur.)
- Geld im ökonomischen Sinne (ökon.)
- Die Rolle von Bargeld in Geldtheorie und der Geldpolitik (ökon.)
- Vor- und Nachteile von Metallgeld und durch Metall gedeckten Banknoten –
 Goldstandard und das System von Bretton Woods (ökon.)
- Gesetzliche Zahlungsmittel und Annahmezwang (jur.)
- Zulässigkeit der Einschränkung der Verwendung von Bargeld durch Hoheitsakt und vertragliche Absprachen (jur.)
- Bargeld als "geprägte" Freiheit Fakt oder Fiktion nach geltendem Recht? (jur.)
- Die Blockchain-Technologie als Grundlage für "Digitalwährungen" (ökon.)
- Digitalwährungen (cybercurrencies, cryptocurrencies) Einordnung und Bewertung (jur./ökon.)
- Initial Coin Offering (ICO) Rechtliche Einordnung nach geltendem Recht (jur.)
- Digitalwährungen als gesetzliche Zahlungsmittel? (jur./ökon.)

Prof. Michael Binder, Ph.D.

1. Macroeconomics 1

(Winter Semester 2017/18, Winter Semester 2018/19, 12CP)

This is a large-scale course in the Bachelor program of the Faculty of Economics and Business Administration. The primary purpose of this course is to enable participants to develop a first thorough understanding of macroeconomic measurement and macroeconomic theory. In particular, the course discusses the macroeconomic accounts and develops a contemporary modelling framework to analyze macroeconomic outcomes in the short, medium and long run. This modelling framework in turn provides the basis for this course to discuss some of the macroeconomic issues that are the subject of the current public debate.

One of the distinguishing features of this course are its innovative Excel-based workbooks that make the quantitative analysis of dynamic, partially nonlinear business cycle and growth models accessible to second-year undergraduate students. For example, students with the help of these workbooks can quantitatively analyze the effects of changes in monetary and/or fiscal policy on

macroeconomic aggregates. The distribution of these workbooks occurs under the Creative Commons licensing standard, and thus encourages students to share with each other their work on the course and beyond.

2. Introduction to Macroeconometric Forecasting

(Summer Semester 2018, 6CP)

This course, a course for third-year students in the Bachelor program of the Faculty of Economics and Business Administration, provides (i) a thorough yet accessible presentation of some of the key reduced-form and structural models and methods that macroeconometrics currently has to offer to analyze macroeconomic data, and (ii) the application of these models and methods to the analysis and forecasting of macroeconomic variables. Many of the course's classes involve empirical illustration of the econometric and macroeconomic methods discussed in STATA, enabling course participants to do independent, macroeconomic-theory based empirical work using time series data as arising in many areas of macroeconomics.

To reflect the hands-on empirical portions of the course, its examination is pioneering within the Bachelor program of the Faculty of Economics and Business Administration the mixed use of a traditional closed-book, paper-based examination format with the hands-on use of *STATA* during the examination, to carry out actual empirical work as part of the examination also.

In 2018, Michael Binder also taught this course in the Bachelor program in Finance and Accounting at the Vietnamese-German University (VGU) in Ho Chi Minh City. VGU is cosupervised by the Hessen State Ministry for Higher Education, Research and the Arts, and the Bachelor program in Finance and Accounting at VGU is co-organized by the Faculty of Economics and Business Administration at Goethe University.

3. Advanced Econometrics

(Summer Semester 2018, 4CP)

This course is part of the first-year core course sequence of the Ph.D. programs at GSEFM. In the part of this course taught by Michael Binder, the course studies vector autoregressions, vector error correction models and autoregressive distributed lag models, both in time-series and panel data settings. The specific focus of the course is on understanding (i) how these models allow to address issues of regressor endogeneity, and (ii) how one may learn through these models about dynamic adjustment processes even when the number of time series observations may be small. To support students in their quest to carry out substantive empirical research, the course features hands-on applications involving empirical use of various of the models and methods discussed. Beyond covering programming syntax, the applications will provide student with the opportunity to give in-depth thought to issues of model formulation in empirical analysis, as well as to the adequate interpretation of empirical results.

4. Solution, Identification and Estimation of DSGE models

(Winter Semester 2018/19, 4CP)

This course is part of the field course offerings in macroeconomics and econometrics of the Ph.D. programs at GSEFM. It encompasses (i) an in-depth discussion of issues in the econometrics analysis of Dynamic Stochastic General Equilibrium (DSGE) models: model solution, model identification and model estimation, and (ii) student-contributed presentations on bringing new models within the DSGE class to the Macroeconomic Model Database (MMB), and using these for purposes of policy analysis.

A special focus of the course is on the issue of the possible multiplicity and time-variation of model solutions, issues that various software packages cannot address. The course thus engages its participants in building up a library of routines that allow to go beyond such limitations in the empirical analysis of structural macroeconomic models.

To reflect the courses's use of a variety of software packages and programming environments as part of implementing the model solution, identification and estimation methods discussed, its examination is pioneering within the Ph.D. programs of GSEFM the mixed use of a traditional

closed-book, paper-based examination format with the hands-on use of MATLAB and STATA during the examination, to carry out numerical work on the solution, identification and estimation of DSGE models as part of the examination also.

5. Organization of Pre-Semester Courses in Mathematics, Statistics and Econometrics for First-Year Students of GSEFM

(Winter Semester 2017/18, Winter Semester 2018/19)

These courses help students with mastering the transition from Bachelor and Master programs to the analytical and quantitative rigor of GSEFM Ph.D. program courses. The course contents are developed in collaboration with upper-year Ph.D. program students (who also serve as course instructors), and include coverage of elements of real analysis, linear algebra, optimization, statistics and linear regression, accompanied by programming components in MATLAB and STATA.

6. Orientation Sessions for First-, Second- and Third-Year Students in the Ph.D. Programs of GSEFM

(Winter Semester 2017/18, Winter Semester 2018/19)

7. Advanced Paper Writing: Special Focus on Economics and Finance

with Prof. Nicola Fuchs-Schündeln

(Summer Semester 2018)

This short course is designed to help students in the dissertation writing phase of the Ph.D. programs at GSEFM with the writing of research papers (by working though common features of successful papers), the process of submission of papers to journals and their subsequent revision, the selection of conferences to attend, and the preparation of the research-oriented job market for economists.

8. Supervision of Theses at the Bachelor, Master and Ph.D. Levels

(Winter Semester 2017/18, Summer Semester 2018, Winter Semester 2018/19)

Prof. Dr. Roland Broemel

1. Financial Market Regulation

(Summer Semester 2018)

This colloquium gave an introduction to the basic structures of financial market regulation under public law. There was a focus on microprudential supervision of individual credit institutions as well as the macroprudential supervision in order to ensure financial stability. A second major focus was the regulatory framework for activities of so-called non-banks and fintech companies.

2. Reform of EU Financial Supervision: Perspectives of a Capital Markets Union

(Summer Semester 2018, block seminar)

Topics:

- Konvergenz der Aufsicht als Herausforderung der Verbundverwaltung
- Die Europäische Wertpapier- und Marktaufsichtsbehörde als Transaktionsdatenplattform
- Institutionelle Aspekte der Finanzmarktaufsicht: Optionen zur Ausgestaltung der Führungsstruktur und die Meroni-Rechtsprechung des EuGH
- Ein Europäischer Währungsfonds? Konzeptioneller Ansatz und rechtliche Grundlagen
- Perspektiven und Voraussetzungen der harmonisierten Einlagensicherung
- One size fits all? Einheitlichkeit oder Verhältnismäßigkeit der regulatorischen Anforderungen an Eigenkapital

- Eigenkapitalanforderungen in der Bankenregulierung: Entwicklung, Ansatz und Bewertungsspielräume
- Regulierung systemisch relevanter "non-bank financial institutions"
- Förderung nachhaltiger Investitionen durch Finanzmarktregulierung?
- Crowdfunding: Formen, Regulierungsbedarfe und Regulierungsansätze
- Einsatz algorithmenbasierter Anwendungen zu Zwecken der Regulierung und des Monitorings (RegTech)
- Rechtliche Rahmenbedingungen automatisierter, datenbasierter Anlageempfehlungen (Robo-Advice)
- Innovative Zahlungsmodelle nach der zweiten Zahlungsdiensterichtlinie
- Bedrohungen der Cybersicherheit als finanzmarktrelevante Risiken
- Blockchain-Technologie als Grundlage für finanzmarktbezogene Dienstleistungen
- Rechtliche Rahmenbedingungen virtueller Währungen
- Bankenrechtliche Regulierung von Schattenbanken
- Stresstests als Instrument der Bankenregulierung

3. Algorithms, Big Data and the Law

(Winter Semester 2018/19, 2CP)

Algorithms and the automatic evaluation of big data are changing business models as well as social practices in many areas of life. This comprises social networks and search engines in the internet but also the restructuring of the development, production and the sale of products (industry 4.0) or the implementation of algorithms in crime control (predictive policing), fraud detection and the practical application of research results in the areas of medicine or the insurance or financial markets sector with so-called fintechs or regtechs. The colloquium analyzed the challenges in the legal regulation of those business areas.

4. Digitalization as a Challenge for Financial Market Regulation

(Winter Semester 2018/19, 2CP)

Topics:

- Systemische Risiken und Finanzmarktstabilität konzeptioneller Anpassungsbedarf durch algorithmenbasierte Geschäftsmodelle?
- Regulatory Sandboxes als Strategie zur Regulierung von FinTechs?
- Algorithmen als Black Box Aufsichtsrechtliche Anforderungen an die Erklärbarkeit von Algorithmen
- Monopolisierungstendenzen in FinTech-Geschäftsmodellen
- Standards f
 ür Algorithmen als aufsichtsrechtlicher Baustein
- Mindestanforderungen an Daten? Datenqualität als bankenaufsichtsrechtliches Problem
- Unternehmensinterne Einbettung algorithmenbasierter Anwendungen (Al-Governance)
- Hochfrequenzhandel Einordnung und aufsichtsrechtlicher Rahmen
- Technische Sicherheitsmaßnahmen aus dem Handel als übergreifendes Modell für die Bankenaufsicht?
- Datenschutz als Element des Bankenaufsichtsrechts?
- Datensouveränität als Faktor algorithmenbasierter Geschäftsmodelle
- Aufsichtsrechtliche Anforderungen an die Cyber- und Informationssicherheit
- Algorithmen in der Geldwäsche- und Betrugsprävention
- Rechtliche Rahmenbedingungen automatisierter, datenbasierter Anlageempfehlungen (Robo-Advice)
- Algorithmenbasierte Individualisierung von Versicherungsprodukten

- Normative Grenzen algorithmenbasierter Massenindividualisierung
- Bedarf zur Gewährleistung des Zugangs zu Finanzdienstleistungen?
- Diskriminierungen in algorithmenbasierten Geschäftsmodellen

5. Strategies for Exam Preparation

(Winter Semester 2018/19)

Prof. Michael Haliassos, Ph.D.

1. Household Finance

(Winter Semester 2018/19, 6CP)

This course presents topics on the new area of Household Finance, on the interface between Macroeconomics and Finance. This is not only an active area of frontier academic research, but also interesting and useful to people working in the financial sector, including central banks. The broad overall theme of the topics presented is household wealth management, namely analysis of household demand for assets and for loans. The course should appeal to a wide range of students, from those interested in understanding household preferences for financial products useful for financial sector jobs, to those who are more academically oriented and who want to study intertemporal portfolio selection in the face of labor income risk for which one cannot buy insurance.

2. Research Seminar

(Winter Semester 2018/19, 6CP)

This seminar is designed to provide useful feedback to MMF students writing their Master thesis. This takes the form of suggestions from the instructor and the participants on possible directions to take, as well as the possibility to compare one's own work to that of the other participants. In this spirit, attendance of all sessions is mandatory for all students. Thesis advisors or their assistants are invited to participate in the seminar and several do so. As a result, the seminar can also serve as a way for advisors to provide feedback to their own supervisees. Students give two presentations related to their MMF Master Thesis. The first presentation serves as a thesis proposal. The second presentation discusses the main results of the thesis, show how they relate to the research question and to findings in closely related literature, and what use can be made of them.

3. Research Topics in Household Finance

(Winter Semester 2018/19, block seminar, 6CP)

This seminar encourages students to study frontier papers in household finance in depth, understand their strengths and weaknesses, and formulate a proposal for pushing household finance research forward through an own future project. Students are expected to (1) present a recent research paper on household finance, (2) discuss the presentation of another paper, and (3) write a five-page proposal for a future paper of their own, either in one of the areas (1) and (2), or in some other area of household finance. The seminar does not attempt to be encyclopedic. It focuses on some promising areas of recent research in the relatively new but very active field of Household Finance. The field is attracting particular attention by academics, policy makers, regulators, and practitioners in view of major developments, such as the demographic transition, financial innovation, and the recent financial crisis.

Topics:

- Extensions to the standard life-cycle model of consumption-saving-portfolio choice
- Mortgage choice, refinancing, and default
- Behavioral factors in household finance
- International differences in household portfolios
- Hereditary and peer influences on household behavior
- The distribution of wealth and household financial behavior
- Financial literacy
- Financial advice
- Financial regulation
- The digital prospect and household financial behavior

Prof. Dr. Alexander Meyer-Gohde

1. Monetary Theory and Policy

(Summer Semester 2018, 6CP)

This course introduces students to the dynamic stochastic general equilibrium (DSGE) models used in modern monetary macroeconomics called New Keynesian models. The basic model equations including nominal frictions such as price stickiness are derived carefully, and model solution techniques are discussed. Numerical solutions of the models are obtained and the models are simulated and analyzed using Dynare in MATLAB. Possible extensions to the core model that may be treated in class include an analysis of optimal monetary policy. After completing the course, students should understand the dynamic mechanisms of nominal rigidities and the policy tradeoffs facing monetary policy. Mechanically, students will be able to derive, solve and simulate simple DSGE models and should be able to read and understand more elaborate models found in the literature.

2. Numerical Methods in Macroeconomics: Estimation and Solution of DSGE Models

(Summer Semester 2018, 4CP)

The course is based on techniques and applications and explores the example of frictional labor markets in macroeconomics using a variety of methodological tools. It is designed to develop and sharpen students' prior knowledge dynamic macroeconomics and econometrics with a mixture of lectures on state-of-the-art solution and estimation techniques for macroeconomic models and application of the techniques to search theory with standard software packages and models from the literature.

3. Business Cycles: Theory and Practice

(Winter Semester 2018/19, 5CP)

The course introduces students to two modern theories of business cycles: Real Business Cycle theory and New Keynesian theory. A standard Real Business Cycle model will be formally stated and solved. Afterwards, a standard New Keynesian model will be formally stated and solved. Finally, we are going to use these two models for policy analysis. Students are supposed to learn how to state and solve modern business cycle models.

4. Macroeconomics 2

(Winter Semester 2018/19, 6CP)

The course provides an introduction to Advanced Macroeconomics at the undergraduate level, serving as a bridge between Intermediate Macroeconomics at the undergraduate level and graduate-Macroeconomics. The first part of course is about economic growth. The second part of

the course is about business cycles. Knowledge of functions, derivatives, and constrained optimization, along with basic statistics is assumed.

Prof. Dr. Dr. h.c. Helmut Siekmann

1. Die Ankaufprogramme der Notenbanken

(The Purchase Programs of Central Banks)

(Winter Semester 2017/18 (12./13.01.2018, 6CP)

The interdisciplinary seminar analyzes the purchase programs of important central banks of the Eurosystem, the UK, Switzerland, Japan and the U.S. It elucidates the role of the purchase program in monetary policy, the conditions and the size as well as their impact. From a legal point of view, students compare the underlying central bank law.

2. Die Entwicklung des Geldes – Vom Aureus zu Bitcoins

(The Development of Money – From Aureus to Bitcoin)

Block seminar with Prof. Volker Wieland (6CP) (Summer Semester 2018, Winter Semester 2018/19) (Topics see p. 39)

3. Introduction to German Constitutional Law

Summer Academy, Goethe University and Thammasat University Bangkok, Thailand

4. International Monetary and Financial Law

Frankfurt Summer School, Legal Studies

Prof. Dr. Tobias Tröger, LLM

1. Contemporary Discourse on Corporate Governance

(Summer Semester 2018, 2CP)
Reading group on Corporate Governance

2. Law on European Banking Supervision

(Summer Semester 2018)

3. Capital Markets Law

(Summer Semester 2018)

4. Civil Law

(Summer Semester 2018)

5. Contemporary Issues in Corporate Law

(Winter Semester 2018/19)

6. Contemporary Issues in Corporate Governance

(Winter Semester 2018/19)

7. Trade Law

(Winter Semester 2018/19)

8. Rhetoric class for Legal Experts

(Winter Semester 2018/19)

Publications and Presentations

I. IMFS Working Papers

The *IMFS Working Paper series* helps disseminate the findings of IMFS researchers among the general public before they are published, for example in scientific journals.







- No 129 Olga Goldfayn-Frank, Johannes Wohlfart
 How Do Consumers Adapt to a New Environment in their Economic Forecasting?
 Evidence from the German Reunification
- No 128 Christopher Roth, Johannes Wohlfart
 How Do Expectations About the Macroeconomy Affect Personal Expectations and
 Behavior?
- **No 127** Michael Haliassos, Thomas Jansson, Yigitcan Karabulut: Financial Literacy Externatilities
- No. 126 Felix Strobel:

 The Government Spending Multiplier, Fiscal Stress and the Zero Lower Bound
- No. 125 Alexander Meyer-Gohde, Daniel Neuhoff:
 Generalized Exogenous Processes in DSGE: A Bayesian Approach
- No. 124 Athanasios Orphanides:
 The Boundaries of Central Bank Independence: Lessons from Unconventional Times
- No. 123 Karl-Heinz Tödter, Gerhard Ziebarth:
 Zinsen, Effektivpreise und Lebenskosten Ein Beitrag zur Konstruktion eines intertemporalen Preisindex
- No. 122 Helmut Siekmann:
 Legal Tender in the Euro Area
- No. 121 Maik Wolters:

 How the Baby Boomers' Retirement Wave Distorts Model-Based Output Gap
 Estimates

No. 129 Olga Goldfayn-Frank, Johannes Wohlfart

How Do Consumers Adapt to a New Environment in their Economic Forecasting? Evidence from the German Reunification

Households' ability to form accurate macroeconomic expectations has major implications for the effectiveness of fiscal and monetary policy. Based on evidence from the German Reunification, the authors examine how consumers adapt to a new environment in their macroeconomic forecasting.

No. 128 Christopher Roth, Johannes Wohlfart

How Do Expectations About the Macroeconomy Affect Personal Expectations and Behavior?

Policymakers attach an important role to the macroeconomic outlook of households. Using a representative online panel form the U.S., the authors examine how individuals' macroeconomic expectations causally affect their personal economic prospects and their behavior and provide them with different professional forecasts about the likelihood of a recession.

No. 127 Michael Haliassos, Thomas Jansson, Yigitcan Karabulut Financial Literacy Externalities

The authors use unique administrative data and a quasi-field experiment of exogenous allocation in Sweden to estimate medium- and longer-run effects on financial behavior from exposure to financially literate neighbors.

No. 126 Felix Strobel

The Government Spending Multiplier, Fiscal Stress and the Zero Lower Bound

The sovereign debt crisis in the euro area was characterized by a monetary policy, which has been constrained by the zero lower bound (ZLB) on nominal interest rates, and several countries, which faced high risk spreads on their sovereign bonds. The author develops a DSGE model that captures the ZLB and fiscal stress and analyzes the effects of government spending shocks.

No. 125 Alexander Meyer-Gohde, Daniel Neuhoff Generalized Exogenous Processes in DSGE: A Bayesian Approach

The authors relax the standard assumption in the dynamic stochastic general equilibrium (DSGE) literature that exogenous processes are governed by AR(1) processes and estimate ARMA (p,q) orders and parameters of exogenous processes. Methodologically, they contribute to the Bayesian DSGE literature by using Reversible Jump Markov Chain Monte Carlo (RJMCMC), casting considerable doubt on the standard AR(1) assumption in favor of higher order processes.

No. 124 Athanasios Orphanides

The Boundaries of Central Bank Independence: Lessons from Unconventional Times

What institutional arrangements for an independent central bank with a price stability mandate promote good policy outcomes when unconventional policies become necessary? The author draws lessons from the experience of the Bank of Japan (BoJ) since the late 1990s and comes to the conclusion that a lack of clarity on the precise definition of price stability hinders policy.

No. 123 Karl-Heinz Tödter, Gerhard Ziebarth

Zinsen, Effektivpreise und Lebenskosten – Ein Beitrag zur Konstruktion eines intertemporalen Preisindex

For the purposes of private consumption, present and future goods are constantly evaluated and traded. The authors develop an intertemporal cost of life index based on the concept of effective prices and presents empirical time series and cohort-specific scenario results for Germany.

No. 122 Helmut Siekmann

Legal Tender in the Euro Area

With the increasing pressure to abolish cash and the moves to restrict its use, the regulation of legal tender in the primary law of the EU has gained enhanced attention. Therefore, the author analyzes the terms currency, money, cash, and legal tender from a legal point of view.

No. 121 Maik Wolters

How the Baby Boomers' Retirement Wave Distorts Model-Based Output Gap Estimates

The paper illustrates the importance of consistency between the empirical measurement and the concept of variables in estimated macroeconomic models. Since standard New Keynesian models do not account for demographic trends and sectoral shifts, the author proposes adjusting hours worked per capita used to estimate such models accordingly to enhance the consistency between the data and the model. Without this adjustment, low frequency shifts in hours lead to unreasonable trends in the output gap, caused by the close link between hours and the output gap in such models.

II. IMFS Interdisciplinary Studies in Monetary and Financial Stability

The *IMFS Interdisciplinary Studies in Monetary and Financial Stability* series presents the results of the interdisciplinary research at the institute or results of IMFS conferences. They focus either on the research or on the policy advice side.



Volume 1/2017

Quantitative Easing in the Euro Area: Its Record and Future Prospects

Over the past years, the ECB's expansionary monetary policy has reached an unprecedented scale. The aim of the study is to shed some light on the risks and a possible exit strategy. It contains contributions by Peter Praet (ECB), Julian Callow (Element Capital), David Folkerts-Landau and Stefan Schneider (Deutsche Bank), Alex Cukierman (formerly Tel Aviv University) as well as Günter Beck and Volker Wieland.



Volume 1/2015

The ECB's Outright Monetary Transactions in the Courts

In this study the Outright Monetary Transaction (OMT) program of the ECB and the court case at the German Federal Constitutional Court are analyzed by the authors Christoph Degenhart (Constitutional Court of the Free State of Saxony and Leipzig University), Antonio Luca Riso (ECB), Harald Uhlig (University of Chicago) as well as Helmut Siekmann and Volker Wieland. The study was published on the occasion of the European Court of Justice's Advocate General summing up the OMT case.



Volume 2/2013

Central Banking: Where are we headed?

This study contains articles based on speeches at the symposium held in February 2013 in honor of Stefan Gerlach's contributions to the IMFS by the following authors: Michael Burda, Benoît Coeuré, Stefan Gerlach, Patrick Honohan, Sabine Lautenschläger, Athanasios Orphanides, and Volker Wieland.



Volume 1/2013

The ECB and Its Watchers 2012

This study contains articles based on speeches at the 14th CFS-IMFS Conference "The ECB and Its Watchers" on June 15, 2012, by Mario Draghi, John Vickers, Peter Praet, Lucrezia Reichlin, Vítor Gaspar, Lucio Pench and Stefan Gerlach and a post-conference outlook by Helmut Siekmann and Volker Wieland.



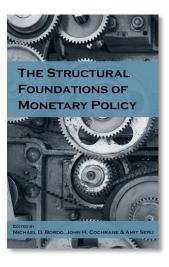
Volume 1/2012

The ESRB at 1

This volume contains articles based on speeches and presentations at the 5th IMFS Conference on Monetary and Financial Stability organized jointly with Société Universitaire Européenne de Recherches Financières (SUERF) on several aspects, such as macroprudential supervision and financial integration one year after the creation of the European Systemic Risk Board (ERSB) with speeches by central bankers and researchers.

III. Publications

What is the **natural interest rate** and which role does it play in monetary policy? These are the questions **Volker Wieland** examines in his contribution to *The Structural Foundations of Monetary Policy* edited by Michael D. Bordo, John H. Cochrane, and Amit Seru. The book brings together discussions and presentations from the Hoover Institution's annual monetary policy conference. The authors discuss long-run monetary issues facing the world economy, with an emphasis on deep, unresolved structural questions. Wieland's contribution takes up his **research on neutral interest rates**. Many economists argue in their papers that the natural rate of interest, or **R-Star**, has declined over the past decades. Based on this, central banks also refer to this decline while stating reasons for their low-interest rate policy. In various papers, Wieland demonstrated that estimates of medium-run equilibrium real rates are extremely uncertain and sensitive to technical assumptions. Thus, they are not a reliable basis for monetary policy.



A joint paper by former IMFS doctoral researcher Robert Beyer (now an economist at the World Bank) and Volker Wieland on estimates of equilibrium real interest rates has been accepted for publication in the Journal of International Money and Finance.

In his publications, **Michael Haliassos** focuses on asset and debt participation of households, as in a recent joint contribution with Alexander Michaelides to a book entitled *Capital Markets Union and Beyond*, of which he is also co-editor, to be published in 2019.

From the legal side, **Helmut Siekmann** clarified recent amendments to the financial constitution and requirements regarding the community tasks as well as Bundesbank and ECB in the 2018 edition of the commentary on German Basic Law (*Grundgesetz-Kommentar*) edited by Michael Sachs. Overall, Siekmann comments on 30 articles of the German Constitution in the 8th edition of the Sachs commentary and has published a comprehensive introduction to the German financial laws. Already since the publication of the first edition in 1996, Siekmann has been responsible for commenting on Section X of the German Basic Law, which encompasses all regulations of the financial constitution, and on the constitutional guidelines regarding the financing of the statutory social insurance scheme. Extensive modifications of the 8th edition especially involve the fundamental restructuring of the federal fiscal equalization system and financial control in July 2017.



In detail, Siekmann commented on Article 88 on Bundesbank and ECB, all regulation within Section VIII regarding community tasks and administrative cooperation (Articles 91 a, 91 b, 91 c, 91 d, 91 e) and Section X on the financial system (Articles 104 a, 104 b, 104 c. 105, 106, 106 a, 106 b, 107, 108, 109, 109 a, 110, 111, 112, 113, 114, 115) as well as Articles 120, 120 a, 125 c, 143 c, 143 d, 143 f and 143 g and gives a 70-page introduction to the German financial laws preceding Article 104 a.

Forthcoming in 2019, Siekmann will assess the asset purchase programs of the ESCB in the courts in a book edited by Frank Rövekamp, Moritz Bälz and Hanns Günther Hilpert and analyze the monetary aspects of the euro as single European currency from a German perspective in *The Euro as a Legal Tender*, edited by Robert Freitag and Sebastian Olmor.

In the *Critical Quarterly for Legislation and Law*, **Roland Broemel** examined the monetary transmission mechanisms as legal arguments and analyzed the platform regulation between media law and competition law, looking at algorithms, multi-sided markets and the need for conceptual adjustments.

Tobias Tröger contributed his legal expertise significantly to **scientific journals**, such as the *Zeitschrift für Bankrecht und Bankwirtschaft (ZBB)/ Journal of Banking Law and Banking (JBB)* where he shared a critical assessment of the bail-in tool under the European Bank Recovery and Resolution Regime. The same goes for the *Journal of Financial Regulation*, an international forum for the publication of scholarship examining theoretical, policy and practice-oriented issues relating to the regulation of financial markets and institutions.



Publications at a Glance

Articles in scientific journals in economics, finance, and law

- HS Book review on commentaries on European Union Treaties, Europäische Zeitschrift für Wirtschaftsrecht (EuZW), 24/2018, 1036-1037
- RB Monetary transmission mechanisms as legal arguments, Critical Quarterly for Legislation and Law 3/2018
- TT Zu kompliziert, um zu funktionieren Eine kritische Bewertung des Bail-in Instruments im europäischen Recht der Bankenabwicklung, (Too Complex to Work A Critical Assessment of the Bail-In Tool Under the European Bank Recovery and Resolution Regime), Zeitschrift für Bankrecht und Bankwirtschaft (ZBB) / Journal of Banking Law and Banking (JBB) 2018, 20-42
- To Complex to Work A Critical Assessment of the Bail-In Tool Under the European Bank Recovery and Resolution Regime, Journal of Financial Regulation (Fin. Reg.), Vol. 4/1, 2018, 35-72
- VW Instability, imprecision and inconsistent use of equilibrium real interest rate estimates, Journal of International Money and Finance, forthcoming, co-author Robert Beyer

Books

VW Setting the right course for economic policy, annual report 2018/19 of the German Council of Economic Experts (GCEE)

Contributions to books

- HS Comments on Section VIII a (Art. 91 a bis 91 e) and section X (introductory remarks, Art. 104a until 115) of the German Basic Law as well as Art. 88, 120, 120 a, 125 c, 143 c, 143 d, 143 f and 143 g of , in: Michael Sachs (ed.), Basic Law, 8th edition, C.H.Beck, Munich, 2018 (new regulations: Art. 104 c, 143 f, 143 g; modified regulations: Art. 91 c, 104 b, Art. 107, 108, 109 a, 114, 125 c, 143 d)
- HS Monetary Aspects of the Euro as Single European Currency a German Perspective, in: Robert Freitag and Sebastian Omlor (eds.), The Euro as Legal Tender, C.H.Beck (forthcoming in March 2019)
- MB/PL/ Model Uncertainty in Macroeconomics: On the Implications of Financial Frictions VW (Michael Binder with Philipp Lieberknecht, Jorge Quintana, and Volker Wieland), in: David G. Mayes, Pierre L. Siklos, and Jan-Egbert Sturm (eds.), The Oxford Handbook of the Economics of Central Banking, Oxford: Oxford University Press (forthcoming in 2019)
- MH Asset and Debt Participation of Households: Opportunities and Challenges in Eliminating Borders (with A. Michaelides), in: Franklin Allen, Ester Faia, Michael Haliassos, Katja Langenbucher (eds.), Capital Markets Union and Beyond, MIT Press (forthcoming September 2019)
- RB Platform Regulation between Media Law and Competition Law. Algorithms, multi-sided Markets and Need for Conceptual Adjustments, Martin Eifert, Tobias Gostomzyk (eds.), Medienföderalismus, Nomos, 2018
- TT Vom Rheinischen Kapitalismus zum Kapitalmarktrecht (und wieder zurück?), (From Rhineland capitalism to capital markets law (and back?), Stefan Ruppert/Thomas Duve (eds.), Das Recht der Berliner Republik (The Law of the Berlin Republic), 2018, 664-696

- TT Regulation of Crowdfunding in Germany, Martin Schmidt-Kessel (eds.), German National Reports on the 20th International Congress of Comparative Law, Tübingen: Mohr Siebeck 2018, 397-428
- VW The Natural Rate and Its Role in Monetary Policy, in: Michael D. Bordo, John H. Cochrane, Amit Seru (eds.), The Structural Foundations of Monetary Policy, Hoover Press, March 2018

Editorships

MH Capital Markets Union and Beyond, co-edited with Franklin Allen, Ester Faia, Katja Langenbucher, MIT Press (forthcoming September 2019)

Policy Papers

- VW Unternehmensbesteuerung unter Wettbewerbsdruck (Corporate taxation under competitive pressure), co-authors: Lars P. Feld, Clemens Fuest, Justus Haucap, Heike Schweitzer, Berthold Wigger, Kronberger Kreis Study No. 65
- VW Refocusing the European Fiscal Framework, co-authors: Lars P. Feld, Christoph Schmidt, Isabel Schnabel, VoxEU, September 2018
- VW Towards a forward-looking economic policy, Economic Center, Research Foundation for Economics, University of St. Gallen, commentary no. 19

Working Papers

- AMG Generalized Exogenous Processes in DSGE: A Bayesian Approach, co-author Daniel Neuhoff, IMFS Working Paper No. 125
- FS The Government Spending Multiplier, Fiscal Stress and the Zero Lower Bound
- HS Legal Tender in the Euro Area, IMFS Working Paper No. 122
- PL Inequality and Relative Saving Rates, co-author Philip Vermeulen, ECB Working Paper No. 2204
- PL, VW On the Macroeconomic and Fiscal Effects of the Tax Cuts and Job Act, German Council of Economic Experts Working Paper 10/2018
- TT Regulation of Crowdfunding in Germany (4.2.2018), SAFE Working Paper No. 199
- TT Germany's Reluctance to Regulate Related Party Transactions (15.2.2018), SAFE Working Paper No. 202, European Corporate Governance Institute (ECGI) Law Working Paper No. 388/2018
- The Law and (Some) Finance of Related Party Transactions: An Introduction (7.7.2018), European Corporate Governance Institute (ECGI) Law Working Paper No. 411/2018, with Luca Enriques

Miscellaneous

TT Editorial, SAFE Newsletter, Q1 2018, p. 3

TT Harm Peter Westermann zum 80. Geburtstag, (On the occasion of Harm Peter

Westermann's 80th birthday), Neue Zeitschrift für Gesellschaftsrechts (NZG) 2018, 28

(with Rüdiger Wilhelmi and Walter G. Paefgen)

TT Editorial, SAFE Newsletter, Q1 2018, p. 3

AMG Alexander Meyer-Gohde

FS Felix Strobel

HS Helmut Siekmann
MB Michael Binder
MH Michael Haliassos
PL Philipp Lieberknecht
RB Roland Broemel
TT Tobias Tröger
VW Volker Wieland

IV. Speeches and Conference Presentations

Keynote and major public speeches

08.12.	Bangkok, Thailand	Trends in the Global Economy – A European Glance on Production, Trade and Currencies, conference on Global Order in Disarray – A Quest for Global Governance, jointly organized by the German-Southeast Asian Center of Excellence for Public Policy and Good Governance (CPG) and the Asian Governance Foundation (AGF)	HS
29.11.	Pretoria, South Africa	The Macroeconomic Model Data Base: A Tool for Model Comparison, 6 th Annual Monetary Economics Workshop: Macroeconomic and Financial Modelling for Monetary Policy, Economic Research Southern Africa (Ersa)	FS
13.11.	Glasgow, UK	Financial Literacy Externalities, conference on "Financial Literacy and the Fintech Era: Capabilities and Challenges", University of Glasgow, Adam Smith School of Business	МН
21.09.	Frankfurt	Monetary Aspects of the Euro as Single European Currency – A German Perspective, conference of the Erlangen-Nürnberg University School of Law and Marburg University School of Law, The Euro as Legal Tender	HS
12.06.	Offenburg	For a Future-oriented Currency and Economy – Strengthening Individual Responsibility, Competition and Capacity for Action. Keynote speech at the Sparkassentag of the savings banks in Baden-Württemberg	VW
04.05.	Stanford, USA	Preview on next steps in macro model comparisons. Policy conference on currencies, capital, and central bank balances, Hoover Institution	VW
17.01.	Kassel	Towards a Forward-looking Economic Policy, Foundation Plansecur	VW



Helmut Siekmann

Speeches

14.12.	Cambridge, USA	Roundtable session on complementary currencies, conference on Money as a democratic medium, Harvard Law School	HS
04.12.	Helsinki, Finland	Setting the right course for economic policy, Municipal Guarantee Board	VW

28.11.	Frankfurt	Setting the right course for economic policy, IKB Deutsche Industriekreditbank	VW
20.11.	London, UK	European perspectives, Money, Macro and Finance Research Group, 2018 Monetary and Financial Policy Conference: The Central Bank Balance Sheet as a Tool of Monetary Policy: Effectiveness, Side Effects and Exit Strategies	VW
16.11.	Frankfurt	Financial frictions, the Phillips curve and monetary policy, 8 th Bundesbank-Center for Financial Studies (CFS)-ECB Workshop on Macro and Finance	PL
15.11.	Berlin	On the Role of Monetary and Macroprudential Policy, Conference of the Foundation of Monetary and Financial Stability: The Ongoing Low Interest Rate Phase and the Challenges for the Financial Markets	VW
15.11.	Berlin	Negative Interest Rates and the Legal System, Conference of the Foundation of Monetary and Financial Stability: The Ongoing Low Interest Rate Phase and the Challenges for the Financial Markets	TT
06.11.	Frankfurt	Robust Macroprudential Policy Rules under Model Uncertainty, conference on "Financial Cycles and Regulation", Deutsche Bundesbank, Research Center SAFE, German Institute for Economic Research (DIW), Halle Institute for Economic Research (IWH)	PL
31.10.	Clochester, UK	Financial Literacy Externalities, University of Essex, Business School	МН
31.10.	Berlin	Credibility of the Resolution Regime and Preference of Creditors: First Experiences with Decision Making, Liability and Bail-in, Financial Stability Conference 2018, ESMT Berlin	TT
26.10.	Berlin	Individual choices in the regulation of platforms and intermediaries, workshop on Media and Communications Law, Humboldt University Berlin	RB
24.10.	Crete, Greece	Financial Literacy Externalities, University of Crete, Department of Economics	МН
18.10.	Mainz	The new Interstate Treaty on Media, Mainz Media Forum, University of Mainz	RB
17.10.	Hamburg	Financial Literacy Externalities, University of Hamburg, Faculty of Business	МН
12.10.	Hamburg	Algorithm-Related Aspects of Banking Supervision, conference on Algorithms and Artificial Intelligence in the Administration, City Hall of Hamburg	RB
26.09.	Frankfurt	Resolution Planning: Too Complex to Work or Cornerstone of a Stable Financial Architecture?, Safe/BaFin Conference on Resolution Planning	TT
19.09.	Athens, Greece	The Role of Institutions in Development Dynamics, Foundation Constantinos Karamanlis	МН
19.09.	Kassel	Digitalization of the Health Care System, 50 th Annual Conference ("Richterwoche") of the Federal Social Court	RB

18.09.	Frankfurt	Big Data in Healthcare, conference on Health Care in Times of General Data Protection Regulation, Goethe University	RB
12.09.	Shanghai, China	International Financial Integration and Output Growth, Presentation at Shanghai Pudong Development Bank	МВ
06.09.	Edinburgh, UK	Government Spending Multiplier, Fiscal Stress and the Zero Lower Bound, 50 th Annual Conference of the Money, Macro & Finance Research Group	FS
05.09.	Edinburgh, UK	(Un)expected Monetary Policy Shocks and Term Premia, 50 th Annual Conference of the Money, Macro & Finance Research Group	AMG
04.09.	Freiburg	Forward Guidance at the Zero Lower Bound: Curse and Blessing of Time-Inconsistency, Annual Congress of Verein für Socialpolitik	GB
03.09.	Freiburg	Government Spending Multiplier, Fiscal Stress and the Zero Lower Bound, Annual Congress of Verein für Socialpolitik	FS
01.09.	Mannheim	(Un)expected Monetary Policy Shocks and Term Premia, 2 nd University of Mannheim and Euro Area Business Cycle Network (EABCN) conference, Asset Prices and the Marco Economy	AMG
28.08.	Cologne	Forward Guidance at the Zero Lower Bound: Curse and Blessing of Time-Inconsistency, European Economic Association, annual meeting Lower Bound, Annual Congress of Verein für Socialpolitik	GB
26.08.	Cologne	Government Spending Multiplier, Fiscal Stress and the Zero Lower Bound, European Economic Association, Annual Meeting 2018	FS
24.07.	Fukuoka, Japan	Legal Regulation of Crowdfunding, World Congress 2018, International Academy of Comparative Law (IACL)	TT
06.07.	Florence, Italy	Bank Funding Structures – An Academic Perspective, Executive Seminar: Financial Surveillance, Florence School of Banking and Finance, European University Institute (EUI)	TT
27.06.	Montreal, Canada	(Un)expected Monetary Policy Shocks and Term Premia, International Association for Applied Econometrics	AMG
20.06.	Cape Cod, USA	Macroeconomic Model Comparison and Policy Robustness: New Tools and Applications. MIT Laboratory of Financial Engineering and Becker Friedman Institute, Macrofinancial Modeling Summer Session	VW
19.06.	Hanoi, Vietnam	International Financial Integration and Output Growth, ABBank	МВ
15.06.	Bamberg	On the Evolutionary Fitness of Rationality, First Behavioral Macroeconomics Workshop: New Approaches to Macrofinancial Instability and Inequality, University of Bamberg	GB
08.06.	Amsterdam, Netherlands	Why Worry If There's Resolution?, Regulatory Forbearance in Stress Testing, CoCo Conversion, and Bank Resolution, CEPR and Macro Finance Risk Center Workshop, University of Amsterdam	TT
08.06.	Palo Alto, USA	Heterogeneous Information, Diverse Higher-Order Beliefs and Business Cycles, 2 nd Research Conference of the Macroeconomic Modelling and Comparison Network (MMCN)	MB

08.06.	Stanford, USA	U.S. Monetary Policy at the Zero Lower Bound, 2 nd Research Conference of the Macroeconomic Modelling and Model Comparison Network (MMCN)	GB
08.06.	Stanford, USA	On the Macroeconomic and Fiscal Effects of the Tax Cuts and Jobs Act, joint paper with Philipp Lieberknecht, 2 nd Research Conference of the Macroeconomic Modelling and Model Comparison Network (MMCN)	VW
07.06.	Stanford, USA	Heterogeneous Information, Diverse Higher-Order Beliefs and Business Cycles: Propagation Mechanisms and Empirical Performance, presentation of joint paper with Matyas Farkas and Volker Wieland, 2 nd Research Conference of the Macroeconomic Modelling and Model Comparison Network (MMCN)	МВ
07.06.	Stanford, USA	The Macroeconomic Model Comparison Initiative (MMCI) and the Macroeconomic Model Data Base 2.3 (MMB)	FS, MF, PL
24.05.	Toronto, Canada	Bail-in – The European Experience, Systemic Risk in the Financial Sector: Ten Years after the Global Financial Crisis, Center for International Governance Innovation (CIGI) Conference	TT
24.05.	Rio de Janeiro, Brazil	Robust Macroprudential Policy under Model Uncertainty, XX. Annual Inflation Targeting Conference of the Banco Central do Brasil	PL
18.05.	Ludwigshafen	The asset purchase programs of the ESCB in the courts, 4 th Ludwigshafen Conference on the Currency Area East Asia: Monetary Policy Execution in East Asia, East Asia Institute, Ludwigshafen University of Applied Sciences	HS
18.05.	Almagro, Spain	EU Supervisory Agencies, conference on EU Administrative Law within and beyond the single market, University of Castilla La Mancha	RB
04.05.	Frankfurt	European Central Bank, Directorate General Research Seminar	PL
20.04.	Frankfurt	Quo vadis Europe? The future of the European Union, European Academy Berlin (EAB)	HS
20.04.	Konstanz	Diversity as a challenge to banks - What can law and economics achieve conjointly?, comment on Günter Franke's presentation, The dynamic of diversity in the financial sector, University of Konstanz	RB
20.04.	Vienna, Austria	Corporate groups – Unity? – A Comparative Law Perspective and Review of International Developments, Annual Meeting of the Austrian Corporate Law Association	TT
20.04.	Eltville	Monetary Policy of the Leading Central Banks before, during and after the crisis, seminar on The Possibilities and Limitations of Monetary Policy, Action Group for Social Market Economy (Aktionsgemeinschaft Soziale Marktwirtschaft, ASM)	VW
12.04.	Berlin	Private Network Regimes, comment on Dan Wielsch's presentation at the conference Network Law, Humboldt University	RB

11./12. 04.	Paris, France	Legal and Ethical Design, International Kick-off Conference for EURHISFIRM	HS
09.04.	Auckland, New Zealand	Optimal Bail-in Instruments, Banking Law Symposium 2018, University of Auckland Business School	TT
27.03.	Ho Chi Minh City, Vietnam	Heterogeneous Information, Diverse Higher-Order Beliefs and Business Cycles, Vietnamese-German University	MB
15.03.	Paris, France	Robust Macroprudential Policy under Model Uncertainty, Theories and Methods in Macroeconomics (T2M) Conference	PL
28.02.	Frankfurt	Laudatory Speech, Young Innovators Award	MB
21.02.	Essen	Inflation Conservatism and Financial Frictions, 11 th Ruhr Graduate School Doctoral Conference in Economics	PL
14.02.	Oxford, UK	Optimal Bail-in Instruments, Business Law Workshop, Oxford Law Faculty	TT
08.02.	Frankfurt	DSGE Group Meeting, Deutsche Bundesbank	MK
08.02.	Frankfurt	Panel on Global Monetary Policies – Similarities and Divergences on the Way to the New Normal. GIC / SUERF / Deutsche Bundesbank conference on monetary and economic policies on both sides of the Atlantic	VW
24.01.	Mainz	The supervisory powers of the ECB within the framework of the SSM in the light of the current experience, Center for German and International Law of Financial Services, University of Mainz	TT
24.01.	Potsdam	Towards a Forward-looking Economic Policy, Potsdam University, Potsdam Research Seminar in Economics	VW
10.01.	Brussels, Belgium	Systemic risk in concentration of CCP activities post Brexit, European Banking Institute, Brexit Seminar	TT
09.01.	Paris, France	Legal and Ethical Design of the Project "European Historical Firm Data (EURHISFIRM)" within the EU-framework "Horizon 2020", Paris School of Economics	HS
07.01.	Philadelphia, USA	Europe and the Euro: Proposal for a Workable Way Forward, American Economic Association, Annual Meeting 2018	VW
AMG FS GB HS MB MH MK	Alexander Meyer-Gohde Felix Strobel Gregor Böhl Helmut Siekmann Michael Binder Michael Haliassos Meguy Kuete		

Philipp Lieberknecht

Roland Broemel

Tobias Tröger

Volker Wieland

PL RB

TT

 $\mathsf{V}\mathsf{W}$

Events

Conferences

14.03. The ECB and Its Watchers XIX

07./08.06. Second Research Conference of the Macroeconomic Modelling and Model

Comparison Network (MMCN)

IMFS Working Lunches

07.02.	Robert Kaplan, President of the Federal Reserve Bank of Dallas
22.02.	Stephen L. Schwarcz, Duke University School of Law
29.05.	Tobias Adrian, International Monetary Fund
07.11.	Peter Lutz, Federal Financial Supervisory Authority (BaFin)
22.11.	Wolf-Georg Ringe, University of Hamburg

IMFS Distinguished Lectures and Policy Lectures

30.01. Yves Mersch, European Central Bank

12.12. Volker Wieland, IMFS and German Council of Economic Experts



I. Conferences

14.03. The ECB and Its Watchers XIX

The assessment of the economic development in the euro area and its impact on monetary policy were the crucial topic of the nineteenth edition of the conference "The ECB and Its Watchers", organized by Volker Wieland. In his opening address, **European Central Bank (ECB) President Mario Draghi** said the ECB would avoid surprising investors with sudden changes to its stimulus plans, stressing that inflation is still too low. "We still need to see further evidence that inflation dynamics are moving in the right direction. So monetary policy will remain patient, persistent and prudent." He warned that U.S. trade policies and a stronger euro could cloud the outlook.



Conference venue: ECB chief economist Peter Praet; Volker Wieland talking to conference speakers, ECB President Mario Draghi; Volker Wieland giving an interview to CNBC reporter Annette Weisbach (clockwise)

ECB President Draghi was followed at the conference by **Executive Board member Peter Praet**, the ECB's chief economist, who underlined that it's too soon to declare "mission accomplished" on inflation. Praet added that the ECB will need to change its forward guidance on interest rates, being more specific.

During the first conference session on quantitative easing (QE) and policy normalization, **Daniel Gros** of the Brussels-based think tank Centre for European Policy Studies characterized Quantitative Easing (QE) as a "monetary placebo plus fiscal Aspirin", a treatment, which should be stopped right away.



According to **Elga Bartsch**, Chief European Economist at Morgan Stanley, QE has been very effective. "The bond-buying program allowed the ECB to take back control of financial conditions in the euro area". As she pointed out, the shadow short rates show the power of ECB policy: Without the bond-buying program, the ECB would have had to lower interest

rates to minus seven percent in order to reach the same effect. The ECB's 2.55 trillion euro bond buying program launched three years ago is due to expire at the end of September.

Regarding financial stability, the core topic of the second session, **ECB Vice President Vítor Constâncio** said that the euro area is not immune to global financial-market shifts. "The sharp movements that took place in the U.S. equity market in February 2018 demonstrated how sentiment can change very quickly — and market participants should be well aware of this risk," he said. Monetary policy, on the other hand, should not respond to financial stability concerns. **Elena Carletti** of Bocconi University analyzed the impact



of non-performing loans (NPL) on financial stability, coming to the conclusion that banks with high NPLs tend to keep lending to zombie firms.

Poul Thomsen, Director of the IMF's European Department, said the IMF was "fully supportive of the ECB's current strong accommodation". Although macroprudential decisions were primarily subject to national authorities, he asked policymakers "to remain vigilant about potential financial sector risks". Thomsen emphasized that the EU macroprudential framework would benefit from some simplification in a way that "the decision-making processes should be simplified to ensure that national authorities act in a timelier manner".



In the third session, François Villeroy de Galhau, Governor of the Banque de France, argued that national reforms are prerequisite to reforms of the European Monetary Union (EMU) but not sufficient. In his opinion, Banking Union should soon be completed. The European Deposit Insurance System (EDIS), however, is not needed from the start. According to Villeroy de Galhau, it is high time to make progress. "There needs to be some compromise in order to come forward".

For **Varadarajan V. Chari** of the University of Minnesota, the EMU has been very successful in leading to lower and less variable inflation. On the other hand, he recognized free riding as a major problem in the monetary union since there are strong incentives to issue too much debt.

Lars Feld of the Eucken Institute and member of the German Council of Economic Experts presented the council's proposal for reforming the architecture of the EMU under the heading of Maastricht

2.0. Feld stressed the priority for sound fiscal policy in the member states. In his view, there is no necessity of a joint fiscal capacity as "this provides the wrong incentives", similarly as an EU unemployment scheme. When completing the Banking Union, risk sharing should be implemented only after risk reduction, Feld said. "We need well calibrated balance between national and common responsibilities".



Program

March 14, 2018

8:55 – 9:00 Welcome

Volker Wieland (IMFS)

9:00 – 9:40 President's Address

Mario Draghi (President of the European Central Bank)

9:45 – 11:15 Debate 1: Assessment of Quantitative Easing and Challenges of Policy Normalization

Chair: Volker Wieland (IMFS)

Speakers:

Peter Praet (Member of the Executive Board of the ECB)

Elga Bartsch (Morgan Stanley)

Daniel Gros (Centre for European Policy Studies)

Lead questions:

Ulrich Kater (Deka)

Claudia Broyer (Allianz SE)

Casper de Vries (Erasmus University Rotterdam)

11:45 – 13:15 Debate 2: The Pursuit of Financial Stability and Tasks for Monetary, Regulatory, and Macro-Prudential Policies

Chair: Luisa Lambertini (Ecole Polytechnique Federale de Lausanne)

Speakers:

Vitor Constâncio (European Central Bank)

Elena Carletti (Bocconi University)

Poul Thomsen (International Monetary Fund)

Lead questions:

Frank Engels (Union Investment)

Natacha Valla (European Investment Bank)

Hermann Remsperger (Foundation of Monetary and Financial Stability)

13:15 – 14:30 Lunch

14:30 – 16:00 Debate 3: The Sustainability of European Monetary Union and Institutional Reform

Chair: Michael Binder (Goethe University and IMFS)

Speakers:

François Villeroy de Galhau (Banque de France) Varadarajan V. Chari (University of Minnesota) Lars Feld (German Council of Economic Experts)

Lead questions:

Ester Faia (Goethe University)
Dirk Schumacher (Natixis)
David Marsh (OMFIF)

16:00 – 16:10 Closing Remarks Volker Wieland (IMFS)



07./08.06.

Second Research Conference of the CEPR Network on Macroeconomic Modelling and Model Comparison (MMCN): Explaining and forecasting the Great Recession and its aftermath with structural models

On June 7-8, the MMCN held its **Second Research Conference**, which took take place **at the Hoover Institution**. 86 researchers from academia, central banks and international institutions presented new structural macroeconomic models that help explain macrofinancial linkages, new solution and estimation methods, and novel analyses of monetary, fiscal and macroprudential policies. The conference was organized by Michael Binder, John B. Taylor and Volker Wieland.

The keynote speech was delivered by Lars Peter Hansen, University of Chicago, who shared his insights on comparative valuation dynamics in models with financing restrictions. Hansen is the David Rockefeller Distinguished Service Professor of economics at the University of Chicago and a 2013 recipient of the Nobel Memorial Prize in Economics. At the dinner speech, John B. Taylor looked by back at the financial crisis ten years on and drew a summary on the new insights concerning models and policy since then.





The conference included sessions on model estimation and shocks, DSGE models and financial frictions, financial crisis and recession, model uncertainty and monetary policy, nonlinearity and recession, unconventional monetary policy and money, heterogeneous agents and bounded rationality, macroeconomic models and policy, R-Star, zero bound and monetary policy, structural and tax policy in macro models, banks, leverage and crises, numerical methods, estimation as well as macroeconomics and climate change.

To name just a few contributions, **Thomas M. Mertens** of the Federal Reserve Bank of San Francisco employed data of derivative prices to show that the zero lower bound on nominal interest rates has sizable effects of future interest rates while only modestly affecting the forecast density of inflation. **Matthias Trabandt** of the Free University of Berlin discussed the puzzle of a lack of deflation in the Great Recession and pointed to the importance of non-linearities in the explanation of inflation dynamics in the crisis. **John H. Cochrane** of the Hoover Institution at



Stanford University laid out the difficulties of modern macroeconomic models to deal with the zero lower bound on nominal interest rates and stressed the importance of fiscal policy affecting the consequences of monetary policy at the zero lower bounds.

Roger Farmer of the University of Warwick compared the New Keynesian model with a model in which the Phillips Curve is replaced by a belief function and in which search frictions lead to the

existence of multiple equilibria. He finds that the latter outperforms the New Keynesian model in explaining persistent unemployment. **Marco del Negro** of the Federal Reserve Bank of New York compared the real-real time forecast performance of the New York Fed's DSGE models with forecasts by private forecasters in the Great Recession. He finds that the accuracy was comparable. He explained that financial frictions were key in generating a slow output recovery in the US following the crisis.

In addition to the presentations in plenary and parallel sessions, 15 posters were presented in the poster sessions. In this context, junior researchers were given the opportunity to present their work.

Thursday	v. June 7
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08:00 – 08:50 Registration and Coffee

Pavilion (David and Joan Traitel Building)

08:50 - 09:00 Welcome

Hauck Auditorium (David and Joan Traitel Building)

Thomas W. Gilligan, Tad and Dianne Taube Director, Hoover Institution

09:00 – 09:40 Keynote Speech

Hauck Auditorium (David and Joan Traitel Building)

Chair: John B. Taylor, Stanford University and Hoover Institution

Lars Peter Hansen, University of Chicago

Comparative Valuation Dynamics in Models with Financing Restrictions

09:40 - 10:40 Parallel Session I

Model Estimation and Shocks
Hauck Auditorium (David and Joan Traitel Building)

Chair: **Volker Wieland**, IMFS, Goethe University Frankfurt and CEPR

Maik Wolters

University of Jena How the Baby Boomers' Retirement Wave Distorts Model-Based Output Gap Estimates

Discussant: **Christopher Tonetti**, Stanford University

Massimo Ferrari

Università Cattolica del Sacro Cuore Monetary Policy Spillovers, Global Commodity Prices and Cooperation (jointly with A. Filardo, M. Lombardi, C. Montoro)

Discussant: **Hashmat Khan**, Carleton University

DSGE Models and Financial Frictions
Blount Hall (David and Joan Traitel Building)

Chair: **Michael Binder**, IMFS, Goethe University Frankfurt

Paolo Gelain

Federal Reserve Bank of Cleveland DSGE Models with Financial Frictions: Does Frequency Matter? (jointly with C. Foroni, M. Macellino)

Discussant: **Gregor Boehl**, IMFS, Goethe University Frankfurt

Sacha Gelfer

Bentley University Financial Crises, Recoveries and Labor Market Dynamics: Evidence from a Data-Rich DSGE Model

Discussant: **Jonathan Swarbrick**, Bank of Canada

10:40 – 11:00 *Coffee Break*

Pavilion (David and Joan Traitel Building)

11:00 - 12:30 Parallel Session II

Financial Crisis and Recession

Hauck Auditorium (David and Joan Traitel Building)

Chair: Arvind Krishnamurthy, Stanford

University

Callum Jones

International Monetary Fund

Household Leverage and the Recession
(jointly with V. Midrigan, T. Philippon)

Discussant: **Elena Pastorino**, Stanford University

Gernot Müller

University of Tübingen
Financial Repression in General
Equilibrium (jointly with A. Kriwoluzky,
A. Scheer)

Discussant: **Arvind Krishnamurthy**, Stanford University

Francesco Furlanetto

Norges Bank
Output Gap, Monetary Policy Trade-offs
and Financial Friction (jointly with

P. Gelain, M. Sanjani)

Discussant: Jorge Abad, CEMFI

Lunch

12:30 - 13:30

Pavilion (David and Joan Traitel Building)

13:30 – 15:00 Plenary Session I: Nonlinearity and Recession

Hauck Auditorium (David and Joan Traitel Building)

Chair: Joshua D. Rauh, Hoover Institution, Stanford University

Thomas M. Mertens, Federal Reserve Bank of San Francisco
What to Expect from the Lower Bound on Interest Rates: Evidence from

Derivatives Prices (jointly with J. Williams)

Mathias Trabandt, Free University of Berlin *Resolving the Missing Deflation Puzzle* (jointly with J. Lindé)

John H. Cochrane, Hoover Institution, Stanford University

Observational Equivalence and a Simple Fix for Zero Bound Puzzles

15:00 – 16:30 Poster Session I

Blount Hall (David and Joan Traitel Building)

Model Uncertainty and Monetary

Blount Hall (David and Joan Traitel Building)

Chair: **John B. Taylor**, Stanford University and Hoover Institution

Martin Bodenstein

Federal Reserve Board

Employment, Wages and Optimal

Monetary Policy (jointly with J. Zhao)

Discussant: **Chad Jones**, Stanford University

Francesca Rondina

University of Ottawa

Model Uncertainty and the Direction of
Fit of the Postwar U.S. Phillips Curve(s)

Discussant: **Felix Strobel**, IMFS, Goethe University Frankfurt

Raymond J. Hawkins

University of California, Berkeley

Monetary Policy Rules and PID Control
(jointly with J. Speakes, D. Hamilton)

Discussant: **Sebastian Guarda**, Central Bank of Chile

16:30 - 18:00 **Parallel Session III**

Unconventional Monetary Policy and Money

Hauck Auditorium (David and Joan Traitel Building)

Chair: Pablo Kurlat, Stanford University

Heterogeneous Agents and Bounded Rationality

Blount Hall (David and Joan Traitel Building)

Chair: Yuriy Gorodnichenko, University of California, Berkeley

Francesco Ferrante

Federal Reserve Board Risky Lending, Bank Leverage and **Unconventional Monetary Policy**

Discussant: David Laszlo Zeke,

University of Southern California

Robert Kurtzman

Federal Reserve Board Misallocation Costs of Digging Deeper into the Central Bank Toolkit (jointly with D. Zeke)

Discussant: Alexander Clymo, University of Essex

Linda Schilling

École Polytechnique, CREST Some Simple Bitcoin Economics (jointly with H. Uhlig)

Discussant: Pablo Kurlat, Stanford University

18:15 - 20:30 Dinner

Pavilion (David and Joan Traitel Building)

Dinner Speech

John B. Taylor, Stanford University and Hoover Institution The Financial Crisis Ten Years On: What Have We Learned about Models and **Policy**

Michael Binder

IMFS, Goethe University Frankfurt Heterogeneous Information, Diverse Higher-Order Beliefs and Business Cycles: Propagation Mechanisms and Empirical Performance (jointly with M. Farkas, V. Wieland)

Discussant: Yuriy Gorodnichenko, University of California, Berkeley

Karl Schmedders

University of Zurich Re-use of Collateral: Leverage, Volatility, and Welfare

Discussant: Hanno Lustig, Stanford University

Jonathan Benchimol

Bank of Israel Optimal Monetary Policy under Bounded Rationality (jointly with L. Bounader)

Discussant: Mátyás Farkas, IMFS, Goethe University Frankfurt

Friday, June 8, 2018

08:00 - 08:30Coffee

Pavilion (David and Joan Traitel Building)

08:30 – 10:00 Plenary Session II: Macroeconomic Models and Policy

Hauck Auditorium (David and Joan Traitel Building)

Chair: Michael Binder, IMFS, Goethe University Frankfurt

Roger Farmer, University of Warwick, NIESR and UCLA *Keynesian Economics without the Phillips Curve*

Michael Kumhof, Bank of England

Towards a New Monetary Theory of Exchange Rate Determination (jointly with A. Cesa-Bianchi, A. Sokol, G. Thwaites)

Volker Wieland, IMFS, Goethe University Frankfurt and CEPR

On the Macroeconomic and Fiscal Effects of the Tax Cuts and Jobs Act (jointly with P. Lieberknecht)

10:00 - 10:30

Coffee Break

Pavilion (David and Joan Traitel Building)

10:30 - 12:00 Parallel Session IV

R-Star, Zero Bound and Monetary Policy

Hauck Auditorium (David and Joan Traitel Building)

Chair: **Carlos Zarazaga**, Federal Reserve Bank of Dallas

Claus Brand

European Central Bank

Taylor-Rule Consistent Estimates of the

Natural Rate of Interest (jointly with

F. Mazelis)

Discussant: **Jae Won Lee**, University of Virginia

Olaf Posch

University of Hamburg Resurrecting the New-Keynesian Model: (Un)conventional Policy and the Taylor Rule

Discussant: **Yevgeniy Teryoshin**, Stanford University

Gregor Boehl

IMFS, Goethe University Frankfurt Forward Guidance at the ZLB: Curse and Blessing of Time-Inconsistency (jointly with F. Strobel)

Discussant: **Carlos Zarazaga**, Federal Reserve Bank of Dallas

Structural and Tax Policy in Macro Models

Blount Hall (David and Joan Traitel Building)

Chair: **Grace Weishi Gu**, University of California, Santa Cruz

Woong Yong Park

Seoul National University

Macroeconomic Effects of Capital Tax

Rate Changes (jointly with J.W. Lee,

S. Bhattarai, C. Yang)

Discussant: **Philipp Lieberknecht**, IMFS, Goethe University Frankfurt

Jan in 't Veld

European Commission Growth Effects of Structural Reforms and Their Impact on the Functional Income Distribution (jointly with J. Varga, W. Roeger, L. Vogel)

Discussant: **Paul Luk**, Hong Kong Baptist University

Herbert Dawid

Bielefeld University
Cohesion Policy and Inequality
Dynamics: Insights from a
Heterogeneous Agents Macroeconomic
Model (jointly with P. Harting,
M. Neugart)

Discussant: **Grace Weishi Gu,** University of California, Santa Cruz **12:00 – 13:00** *Lunch*

Pavilion (David and Joan Traitel Building)

13:00 - 14:00 Parallel Session V

Banks, Leverage and Crises

Hauck Auditorium (David and Joan Traitel Building)

Climate Change
Blount Hall (David and Joan Traitel Building)

Numerical Methods, Macro Models and

Hoover Institution, Stanford University

Numerical Dynamic Programming with

Quantification: An Application to Climate Policy (jointly with Y. Cai)

Biourit Hair (David and Joan Haiter Building

Chair: **Maik Wolters**, University of Jena Chair: **Volker Wieland**, IMFS, Goethe University Frankfurt and CEPR

Kalin Nikolov

European Central Bank
Bank Capital in the Short and in the

J. Suarez, D. Supera)

Long Run (jointly with C. Mendicino, Verification and Uncertainty

Discussant: **Tim Robinson**, The

University of Melbourne

Yongyang Cai

California, Santa Cruz

Kenneth Judd

Goethe University Frankfurt

Ambiguous Leverage Cycles (jointly

with M. Bassanin, V. Patella)

Ohio State University
To Build or Not to Build? Capital Stocks
and Climate Policy (jointly with

Discussant: Eric Aldrich, University of

E. Baldwin, K. Kuralbayeva)

Discussant: Nuno Paixão, Bank of

Canada

Ester Faia

Discussant: Andreas Tryphonides, Humboldt University Berlin

14:00 – 15:30 Poster Session II

Blount Hall (David and Joan Traitel Building)

15:30 – 17:00 Plenary Session III: Macroeconomic Models and Estimation

Hauck Auditorium (David and Joan Traitel Building)

Chair: John B. Taylor, Stanford University and Hoover Institution

Marco Del Negro, Federal Reserve Bank of New York

DSGE Forecast of the Lost Recovery (jointly with M. Cai, M. Giannoni, A. Gupta,

P. Li, E. Moszkowski)

Matthieu Darracq Pariès, European Central Bank

Synopsis of the Euro Area Financial Crisis (jointly with P. Jacquinot,

N. Papadopoulou)

Christopher Otrok, University of Missouri, Federal Reserve Bank of St. Louis *Estimating Macroeconomic Models of Financial Crises: An Endogenous Regime*

Switching Approach (jointly with G. Benigno, A. Foerster, A. Rebucci)

17:00 Concluding Remarks

Hauck Auditorium (David and Joan Traitel Building)

Volker Wieland, IMFS, Goethe University Frankfurt and CEPR

Poster Session I

Thursday, June 7, Blount Hall (David and Joan Traitel Building)

Tomohide Mineyama Downward Nominal Wage Rigidity and Inflation Dynamics

Boston College during and after the Great Recession

Felix Strobel and Philipp Lieberknecht MMCI and Macroeconomic Model Database 2.3

IMFS, Goethe University Frankfurt

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Hashmat Khan The Shifts in Lead-Lag Properties of the U.S. Business Cycle

Carleton University (jointly with J. Brault)

Carlos Zarazaga Fiscal Stabilization and the Credibility of the U.S. Budget

Federal Reserve Bank of Dallas Sequestration Spending Austerity (jointly with R. Hu)

Jonathan Swarbrick Business Cycles in Space (jointly with T. Holden)

Bank of Canada

Nuno PaixãoHousing Prices and Consumer Spending: The Bank Balance

Bank of Canada Sheet Channel

Matt Jensen Open Source Policy Simulation: Tax-Calculator, B-Tax, BRC,

American Enterprise Institute TaxData, C-TAM

Lars Peter Hansen MFM Executive Committee Projects

University of Chicago

Poster Session II

Friday, June 8, Blount Hall (David and Joan Traitel Building)

Andreas TryphonidesSet Identified Dynamic Economies and Robustness to

Humboldt University Berlin Misspecification

Alexander Clymo Firm Dynamics at the Zero Lower Bound

University of Essex

Jorge Abad Breaking the Feedback Loop: Macroprudential Regulation

CEMFI of Banks' Sovereign Exposures

Tim Robinson *Macroprudential Policies and Credit Creation* (jointly with

The University of Melbourne S. Elias)

Paul Luk Dynamics of Secured and Unsecured Debt Over the

Hong Kong Baptist University Business Cycle (jointly with T. Zheng)

And the same of th

Switching (jointly with A. Binning)

Junior Maih Modelling Occasionally Binding Constraints Using Regime-

Norges Bank; BI Norwegian Business

School

Sebastian Guarda Xmas: An Extended Model for Analysis and Simulation

Central Bank of Chile (jointly with B. García, M. Kirchner, R. Tranamil)

Mátyás Farkas and Lazar Milivojevic MMCI and Macroeconomic Model Database 2.3

IMFS, Goethe University Frankfurt

Lars Peter Hansen MFM Executive Committee Projects

University of Chicago

II. Working Lunches

These regular academic seminars deal with new research on a range of legal, monetary and financial topics. The Working Lunches usually take place from 12:00 to 1:00 pm. They are attended by Ph.D. students, IMFS faculty and researchers and also attract many participants from central banks, financial institutions and law firms in Frankfurt.

07.02.

Robert Kaplan, President of the Federal Reserve Bank of Dallas "A Discussion of U.S. Macroeconomic Trends and Their Implications for U.S. Monetary Policy"

For Robert Kaplan, President of the Federal Reserve Bank of Dallas, technology-enabled disruption is one of the major economic trends, which will shape the future. However, in his opinion the recent drop at the stock market is likely to be a healthy correction instead of the beginning of a new crisis. In his talk at the IMFS Working Lunch, Kaplan shared his insights on macroeconomic trends in the United States, comparing it to the economic development in Germany with Volker Wieland as his interview partner.



With regard to the emergence of dominant technology companies in the United States, such as Google or Amazon, Kaplan pointed out the importance of soft factors. "Apart from investment, you need an ecosystem for such companies", he argued referring to infrastructure, education and universities. These conditions were abundant in California as well as in the Boston area. However, "passion is the rocket fuel for innovation, not money", Kaplan concluded. In this context, he also emphasized the importance of education and life-long training. "In the U.S., we're lagging behind in helping people getting trained for middle-skill jobs".

In his opinion, technology-enabled disruption is one of the permanent economic developments in the US, together with the slowing workforce growth and rising government debt. As for the demographic development, Kaplan said that 50% of the workforce growth in the last twenty years was due to immigrants and their children. "This is also a way to grow faster than debt", he said. He expects the demographic situation to limit the way the central bank will apply fiscal policy in the future. Since September 2015, Kaplan heads the Dallas Fed. He is a non-voting member of the Fed's policy committee.

Regarding the implications for monetary policy, Kaplan told the audience that higher wages in the United States will not necessarily lead to faster inflation. Although the United States were nearly at full-employment – one of the goals forming the Fed's mandate – Kaplan was not convinced that this would translate into higher prices because businesses had much less pricing power due to technological advances. According to Kaplan, the Fed should continue to tighten monetary policy. "If you have significant enough overshoot of full employment, history shows that usually other excesses and imbalances build up", he warned.

22.02.
Stephen L. Schwarcz, Professor of Law & Business, Duke University School of Law "Central Clearing of Financial Contracts: Theory and Regulatory Implications"



Modern financial regulation requires that derivatives contracts be cleared and settled through central counterparties, such as clearing houses affiliated with derivatives and commodities exchanges, in order to try to reduce systemic risk. In his Working Lunch, Stephen L. Schwarcz, Professor of Law and Business at Duke University, examined whether regulators should also require the central clearing of non-derivative financial contracts.

In the aftermath of the financial crisis, the Financial Stability Board (FSB) felt that derivatives were inherently risky, given that fact they are debt and volatile. Therefore, by concentrating it on a CCP, the overall systemic risk should be reduced. However, as Schwarcz pointed out, the net counterparty exposure on non-derivative financial contracts greatly exceeds that on derivatives contracts. He raised the question whether derivatives were truly riskier than other types of financial contracts.

As he further pointed out, CCP often started out as special purpose entities (SPE). As they have expanded their tasks, Schwarcz claimed they should be ring-fenced as a way to protect other clearing members against the accumulated risk. However, according to Schwarcz, it is very hard to formulate specific laws to achieve this. Typically, regulators don't direct major financial institutions how to control their risk. He came to the conclusion that even the multi-lateral netting of non-derivative financial contracts does not systematically reduce risk.

29.05. Tobias Adrian, International Monetary Fund "The Current Global Financial Stability Assessment"

Although financial conditions are easy in every major region of the world, the economy is facing "a bumpy road ahead". This is the punchline of Tobias Adrian's Working Lunch talk. Adrian, who is an IMFS Research Fellow, is Director of the Monetary and Capital Markets Department of the International Monetary Fund (IMF) and Financial Counsellor to Christine Lagarde.

As a result of easy financial conditions persisting for many years, a lot of risk has been building up, Adrian who is also responsible for the IMF's Global Financial Stability Report (GFSR) explained. This report assesses the key risks facing the global financial system. Whereas one year into the future conditions still look good, Adrian emphasized that the situation is totally different for a three-year horizon: "In the medium-term we see a lot of risk". In comparison with the year 2000, those medium-term estimates for global GDP growth are even at a lower range.



According to Adrian, there are various aspects of underlying vulnerabilities. First of all, the global equity rally has pushed valuations higher worldwide. Markets are not pricing in a significant likelihood of sharply higher inflation.

Regarding credit quality, Adrian warned that underwriting standards keep deteriorating. The demand for risky assets has compressed credit spreads. On the other hand, the global reach for yields has driven investor flows to private equity funds. "The leveraged loans market is at an all-time high, private equity funds are important players," he pointed out. As a consequence of the weakening credit quality, the nonbank investor base is growing.

With regard to emerging markets and low-income countries, Adrian cited the situation in China, which accounts for a considerable proportion of the 400 percent increase in total financial assets to GDP. In contrast to this, China has only five big banks and some small and medium-sized banks. This in turn has led to a very large shadow banking sector in China where a lot of risk is embedded, similar to the Chinese insurance sector, which he also considers very risky.

According to Adrian, another important source of vulnerability lies in the banking sector. Although banks are much safer than before the global financial crisis, having a higher level of liquidity, they end up pooling a lot of assets in US dollar, Adrian warned. Therefore, "we urge regulators to also look at the currency level". In his view, the risky situation is intensified by the political environment. "Trust in political institutions is eroding around the world, which generates a lot of risk." In this case, neither historical data nor models help. "We don't know where this will end up," Adrian concluded.

07.11.

Peter Lutz, Federal Financial Supervisory Authority (BaFin)

"Brexit: Challenges for Banks and Supervisors – A Supervisor's Perspective"



Four and a half months before Brexit, the treatment of derivate contracts is the area of most concern for Peter Lutz of the Federal Financial Supervisory Authority (BaFin). In his speech in the Working Lunch series, the Head of Department Coordination and Supervision of Foreign Banks described the potential cliff effects as the BaFin is trying to ensure the proper functioning and stability of the German financial system when the United Kingdom will leave the European Union at the end of March 2019.

As banks in the UK have to decide whether to wind down their business or get a new license for a European country, the BaFin is dealing with more than 40 applications. Three to four people cover a case, Lutz said. In this regard, the BaFin strives to avoid arbitrage, making an effort to finalize the approval process in time. "In the pre-application phase, we try to come closer with the banks in our explanations what we want to see. When the plans become clearer we involve the ECB". An issue that is discussed in great detail is the operating model. The BaFin underlines that letterbox firms are not allowed. Adequate management and staffing is a prerequisite according to Lutz. On the other hand, the question of dual hatting also arises. Can the same person act as a manager of the bank and the investment firm of the same institution? Besides, only for a certain time does the BaFin tolerate that banks use services in London or still provide business from London to a bank in a EU27 country. The BaFin is trying to keep a supervisory balance between maintaining a level playing field and making allowances for Brexit being an external effect, Lutz explained. Also the authorities have to cooperate. "The day the UK will become a third country, a Memorandum of Understanding is needed."

22.11.

Wolf-Georg Ringe, M. Jur. (Oxon), Professor for Economics Analysis of Law, University of Hamburg "The Dark Side of Bank Resolution: Counterparty Risk Through Bail-in"

The bail-in of financial institutions has been praised as one of the most significant achievement after the financial crisis since the losses are imposed on creditors instead of taxpayers. In his lecture, Prof. Georg Ringe, Chair for the Economic Analysis of Law at the University of Hamburg, argued that the effects of the bail-in tool actually might be counterproductive.



Based on the recognition that traditional bankruptcy laws weren't an appropriate framework, after the collapse of the investment bank Lehman Brothers the idea was "to reintroduce normal market discipline into the banking sector", Ringe explained. However, a bail-in of creditors is only possible if the holding company holds enough capital. Therefore, the Bank Recovery and Resolution Directive (BRRD) contains the rulings regarding MREL, the Minimum Requirement for Own Funds and Eligible Liabilities, and the Financial Stability

Board (FSB) issued the final Total Loss-Absorbing Capacity (TLAC) standard for global systemically important banks (G-SIBs).

In the new regulation, the systemic risk is externalized via counterparty selection. "But how effective a bail-in is depends on who those counterparties are", Ringe said. Based on the Securities Holdings Statistics (SHS) by the European Central Bank (ECB), he found that after 2016, banks were increasing their holdings in banks' securities whereas non-banks were reducing them. In his opinion, these interconnections between banks may exacerbate the propagation of systemic risk. "Banks have an interest in investing in other banks as this interconnectedness may help them when suffering small shocks", Ringe explained. In large shocks, this situation is reverse, according to Ringe. "With large shocks, the regulators may actually shy away from doing something because of the interconnectedness". Hence, Ringe advises against any ex-ante prescriptions. "Transparency is the key and the optimal risk design really depends on the type of systemic risk".

III. Distinguished Lectures

In 2010, the IMFS initiated the Distinguished Lecture series. It is designed to provide a platform for the dissemination of the significance of monetary and financial stability. The format promotes the exchange of ideas and views of leading policymakers and outstanding academics on important topics related to monetary and financial stability. The lectures are geared to a non-expert audience as well as to participants from policy and academic circles.

30.01.

Yves Mersch, European Central Bank "The Limits of Central Bank Financing in Resolution"

A financial institution that is close to or in resolution is not necessarily financed by a central bank. In his IMFS Distinguished Lecture, Yves Mersch, member of the Executive Board of the ECB, made clear that there are sharp limits for a central bank to finance in resolution.

Mersch, who is the longest-serving board member at the ECB, emphasized that the Eurosystem should be adequately protected against any risk associated with its lending activity. He pointed out that while central banks may be involved in administering resolution measures, they should not finance them. "The ECB has repeatedly stated that the financing of resolution measures is a government task," Mersch said. This was the reason why the Single Resolution Fund (SRF) was established, he argued. Financing of resolution should no longer come from the taxpayers but from the banks themselves. The SRF ensures uniform practice in the financing of resolutions within the Single Resolution Mechanism (SRM).

In this context, Mersch also referred to the monetary financing prohibition. "The ECB has repeatedly stated that financing by central banks, even when granted independently and at their full discretion, is incompatible with the monetary financing prohibition." As financing insolvent institutions was a government task, the ECB has identified criteria to distinguish between those possibilities. However, liquidity can be provided under certain circumstances, respecting the limits set out in the Treaty and any Governing Council decisions and under the



generally applicable monetary policy rules. "Whilst the provision of central bank liquidity should not be ruled out in resolution, it should not be assumed either". Mersch warned: "Resolution planning should not assume that central bank liquidity will fill the gaps". "Central banks provide liquidity, not solvency support," he concluded.

12.12.

Volker Wieland, IMFS and German Council of Economic Experts "Setting the right course for economic policy"

The German Council of Economic Experts has lowered its growth forecast for the German economy to 1.6 percent in the ongoing year. The German economy is maintaining one of its longest upswings. However, the pace of expansion is slowing down. As an open economy, Germany is highly sensitive to global developments, Prof. Volker Wieland warned at the presentation of the Council's recent annual report entitled "Setting the right course for economic policy". The title already implies that

there are several approaches in order to prepare the German economy for the anticipated downturn. "Due to its extremely high ratio of foreign trade to GDP, currently at 84 percent, Germany is particularly affected by the risks caused by US trade policy," Wieland explained.

Besides the uncertain future of the global economic order, the demographic change represents a domestic challenge for the German economy. The old-age dependency ratio that is the ratio of people aged over 65 to those between 20 and 64, which is around 35 percent at present, will rise dramatically after 2025 to more than 50 percent in the year 2050, Wieland illustrated. Therefore, in the Council's view, it is absolutely necessary to adjust the retirement age to the rising life expectancy and to increase



the potential labor force. Here, Wieland referred to measures such as the flexibilization of working time and the expansion of part-time employment in combination with all-day childcare. Another crucial aspect are the chances offered by digitalization, Wieland emphasized. According to the Council, the reduction of regulation and the growing acceptance among the population are more important than expanding broadband access.

Research-Based Policy Advice

IMFS researchers constantly share their insights regarding current economic and legal issues on both the national and international level. Since 2013, **Volker Wieland's** research has been closely intertwined with his work as a member of the German Council of Economic Experts (GCEE). In 2018, he was reappointed for another term until February 2023.



Throughout the year, the Council is in contact with ministers and leading officers of federal associations before finally publishing its analysis. On November 7, the Council members presented their Annual Report 2018/19 entitled "Setting the Right Course for Economic Policy" to Chancellor Angela Merkel, the Federal Minister for Economic Affairs and Energy Peter Altmaier, the Federal Minister of Finance Olaf Scholz, and the Federal Minister of Health Jens Spahn. Afterwards, the findings were discussed during a press conference.

In the recent Annual Report, among other things, the GCEE recommend the EU oppose protectionist tendencies and expand the European Banking and Capital Markets Union. As a recommendation for the German government, the council members suggest the complete elimination of the solidarity surcharge and the reduction of overcapacities in the healthcare system. Furthermore, digitalization as one of the major challenges requires better framework conditions and a modern education system. The GCEE consists of five members: Prof. Christoph Schmidt (Chair), Prof. Peter Bofinger, Prof. Lars Feld, Prof. Isabel Schnabel, and Prof. Volker Wieland.

As a member of the scientific advisory council of Market **Economy** Foundation, the the Kronberger Kreis, Volker Wieland also coauthors numerous studies and provides arguments for market-oriented solutions to crucial challenges in German and European economic policy. The members Kronberger Kreis are Prof. Berthold Wigger, Prof. Clemens Fuest, Prof. Heike Schweitzer, Prof. Lars Feld, Prof. Justus Haucap, and Prof. Volker Wieland.



In its Study No. 65, the Kronberger Kreis warned that the **German government should react to the fierce international tax competition**. Many countries such as the United States, France or the United Kingdom have implemented comprehensive tax reforms or announced tax cuts. Otherwise, Germany could carry the highest corporate tax burden in Europe within a couple of years. A digital services tax is not advisable according to the Kronberger Kreis.

Policy Meetings and Hearings at a Glance

07.11.	Berlin	Meeting with Chancellor Angela Merkel, the Federal Minister for Economic Affairs and Energy Peter Altmaier, the Federal Minister of Finance Olaf Scholz and the Federal Minister of Health Jens Spahn presenting the Annual Report of the German Council of Economic Experts	VW
04.10.	Frankfurt	Policy workshop with the Finance Minister of Hesse Thomas Schäfer	HS
28.09.	Frankfurt	Meeting with Executive Board Members of Deutsche Bundesbank	VW
27.09.	Berlin	Meeting with Lars-Hendrik Röller, economic policy advisor, Federal Chancellery, and leading officers of the Federal Ministry of Health and the Federal Ministry of Labour and Social Affairs as well as representatives of the Confederation of German Employers' Associations (BDA)	VW
23.07.	Seoul, South Korea	Presentation at the Bank of Korea	VW
14.08.	Frankfurt	Meeting with Bundesbank Executive Board Member Joachim Wuermeling	VW
27.06.	Berlin	Permanent Representation of the State of Hesse, financial experts panel	VW
07.06.	Frankfurt	Meeting with Consul General of Switzerland Urs Hammer	HS
01.06.	Berlin	Lunch meeting with the Chancellor Angela Merkel, the Federal Minister for Economic Affairs and Energy Peter Altmaier, the Federal Minister of Finance Olaf Scholz, the Federal Minister of Labor and Social Affairs Hubertus Heil	VW
28.05.	Frankfurt	Meeting with Mr. Kishore, Bank of India	HS
20.04.	Frankfurt	Meeting with Yuka. Kida, Deputy Director, Material Industries Division, Ministry of Economy, Trade and Industry	HS
01.02.	Berlin	Meeting with representatives of the Chancellor's Office	VW
08.01.	Washington, USA	Presentation of the GCEE Annual Report, International Monetary Fund (IMF)	VW

Public Outreach and Press

IMFS researchers regularly participate in the public debate via the media. They comment on issues of price and financial stability and analyze the ECB's and the Fed's monetary policy. Overall, IMFS researchers shared their insights on questions of price stability and currency in opinion pieces and as interview partner for the press. They also acted as interview partners during TV programs. More than a hundred times, IMFS researchers provided commentaries and interviews on current issues in the media in 2018.



Volker Wieland talking to Matt Miller on the Bloomberg morning show in Berlin

Public Outreach and Press at a Glance

Media References to IMFS research papers and IMFS research

24.09	Bloomberg	Fed probes Border between Tight and Easy Money as Hike Looms	VW
11.09.	Börsen-Zeitung	Talentschmiede mit Strahlkraft	IM FS
		(A talent factory with charisma)	гэ
20.08.	WSJ.com	Presidents and policy makers	VW
28.07.	The Economist	The Federal Reserve: Channelling Richard Nixon Klodiana Istrefi	KI
16.03.	FAZIT-Blog	Populäre Illusionen über Geldpolitik	VW
		(Popular illusions on monetary policy)	

Guest E	Guest Editorials			
11.11.	Welt am Sonntag	Guter Rat für Deutschland - Europäische Geldpolitik (Advice for Germany: European monetary policy)	VW	
16.10.	Börsen-Zeitung	Neuregelung von Related Party Transactions – so bitte nicht! (New rules on related party transactions – not like this, please!)	TT	
25.03.	FAS	Freihandel, jetzt erst recht (Free trade, now more than never; with co-authors of the GCEE: Christoph M. Schmidt, Peter Bofinger, Lars Feld, Isabel Schnabel)	VW	
04.03.	FAS	Dynamik geht anders (Dynamics is different; with co-authors of the Kronberger Kreis: Lars Feld, Clemens Fuest, Justus Haucap, Heike Schweitzer)	VW	
31.01.	Corporate Finance	Die EZB sollte aufhören, Unternehmensanleihen zu kaufen (The ECB should stop buying corporate bonds)	VW	

Interviews

14.12.	Börsen-Zeitung	Es wäre ein Fehler, die Wende aufzuschieben (It would be a mistake to postpone the turnaround)	VW
30.09.	To Vima	First Reforms and Incentives for Private Investment and then the Debt	МН
19.09.	Consorsbank- Magazin	Zinsen rauf, Steuern runter (Raising interest rates, lowering taxes)	VW
09.08.	Süddeutsche Zeitung	Funktionierendes Zahlungssystem (A functioning payment system)	VW
21.07.	Börsen-Zeitung	Die Fed muss aufpassen (The Fed has to pay attention)	VW
27.06.	Börsen-Zeitung	Nein, die Krise kam nicht über uns wie ein Erdbeben (No, the crisis did not come over us like an earthquake)	VW
15.06.	Börsen-Zeitung	Diese Entscheidung war schon lange überfällig (This decision has long since been overdue)	VW
06.06.	The Corner.eu	The German states that receive money from the richer regions do not grow more	VW
01.06.	Consejeros	No podemos ignorar la bajada masiva de impuestos a las empresas en EEUU ni la reforma prevista en Francia (We cannot ignore the tax reform in the US nor the reform planned in France)	VW
07.03.	Handelsblatt	Die EZB könnte die Zinsen schon 2018 erhöhen (The ECB could already raise interest rates in 2018)	VW
06.03.	Handelsblatt Online	Die EZB könnte die Zinsen schon 2018 erhöhen (The ECB could already raise interest rates in 2018, long version)	VW
18.01.	HNA	30 Milliarden zurückgeben (Giving back 30 billion)	VW
Profiles	S		
14.09.	Börsen-Zeitung	Siekmann erhält Auszeichnung (Siekmann receives an award)	HS
25.07.	Börsen-Zeitung	Meyer-Gohde und Broemel lehren jetzt in Frankfurt (Meyer-Gohde and Broemel teach in Frankfurt now)	MG RB
24.04.	Schwäbische Zeitung	Das neue Goldene Buch ist in Betrieb (The Golden Visitor's Book has been opened)	VW
13.04.	Süddeutsche Zeitung	Weise Frauen (Wise women)	VW
11.04.	Mainzer Allgemeine	Wirtschaftsweiser vor Neuberufung (Economic expert expects reappointment)	VW
11.04.	dpa-AFX	Wieland soll Wirtschaftsweiser bleiben (Wieland is supposed to remain economic expert)	VW
05.04.	Handelsblatt	Grünes Licht für Wieland (Green light for Wieland)	VW
05.04.	Börsen-Zeitung	Wieland weiter Wirtschaftsweiser (Wieland remains among economic experts)	VW
04.04.	FAZ.NET	Volker Wieland darf Wirtschaftsweiser bleiben (Volker Wieland can stay member of economic experts)	VW

01.04.	FAS	Vier weise Männer und eine Frau (Four wise man and one woman)	VW
29.03.	Süddeutsche	Nummer fünf wartet	VW
28.03.	Zeitung Handelsblatt	(Number five is waiting) Streit um Wirtschaftsweisen (Dispute about economic expert)	VW
27.03.	Handelsblatt	SPD-Ministerium blockiert die Wiederberufung des Wirtschaftsweisen Wieland (SPD ministry blocks reappointment of economic expert Wieland)	VW
09.01.	FAZ	Volker Wieland vor Wiederberufung (Reappointment of Volker Wieland)	VW
09.01.	Börsen-Zeitung	Wieland soll Wirtschaftsweiser bleiben (Wieland to remain economic expert)	VW
Comme	entary/Mentions		
11.12.	Frankfurter Rundschau	Professoren gegen Tsipras (Professors against Tsipras)	МН
05.11.	FAZ	Einen Impact in der wirklichen Welt haben (Having an impact in the real world)	VW
24.11.	Die Welt	Gefährlicher Stillstand der Steuerpolitik (Dangerous standstill in tax policy)	VW
23.11.	Dow Jones	Prominente Ökonomen fordern Senkung der Unternehmenssteuern um 15 Milliarden (Prominent economists call for corporate tax cuts by 15 billion)	VW
17.11.	FAZ	EZB-Politik bleibt trotz steigender Inflation ultralocker (ECB policy remains extremely expansionary desdpite rising inflation)	VW
16.11.	Deutsche Apotheker- Zeitung Online	Wirtschaftsweise: Online-Apotheken schützen, Rx-Versandverbot vermeiden (Economic experts: protect online pharmacies, avoid prohibition on mail-order)	VW
16.11.	Capital.de	Warum die Zinsen (noch) nicht steigen dürfen (Why interest rates must not rise yet)	VW
12.11.	Focus Online	Fünf Maßnahmen, die Deutschland ergreifen muss, um erfolgreich zu bleiben (Five measures Germany has to take to remain successful)	VW
11.11.	Handelsblatt	Ökonom Wieland warnt: EZB könnte Wende zu spät einleiten (Economist Wieland warns: ECB could be too late to announce a monetary policy change)	VW
11.11.	Spiegel Online	Wirtschaftsweiser fordert Abkehr von lockerer Geldpolitik (Economic expert calls for end of expansionary monetary policy)	VW
11.11.	Welt Online	Eine krisenhafte Zuspitzung ist nicht völlig auszuschließen (An escalation of the conflict cannot not be ruled out completely)	VW
08.11.	Heise Online	Wirtschaftsweise zweifeln Glasfaserausbau und Netzneutralität an (Economic experts doubt fiber optic expansion and network neutrality)	VW
08.11.	FAZ	Altmaier legt sich mit Sachverständigen an (Altmaier starts a fight with economic experts)	VW

08.11.	Süddeutsche Zeitung	Weichen ins Irgendwo (Switches to anywhere)	VW
07.11.	FAZ	Wirtschaftsweise rechnen mit Regierung ab (Economic experts call government to account)	VW
07.11.	BR.de	Wirtschaftsweise werden pessimistisch (Economic experts become pessimistic)	VW
07.11.	Reuters	Soccer club Man City boosted finances through creative plays, document says	TT
06.11.	n-tv.de	Wirtschaftsweise plädieren für spätere Rente (Economic experts advocate later retirement age)	VW
06.11.	Reuters / Handelsblatt.com	Wirtschaftsweise senken Prognose kräftig (Economic experts are considerably lowering forecast	VW
04.11.	FAS	Im Turm der Weisen (In the wise men's tower)	VW
02.11.	Börsen-Zeitung	Riskantes Spiel mit dem Dollar (Risky game with the dollar)	VW
20.10.	Der Spiegel	Finanzkrise – geschickt vertuscht (Financial crisis – covered up skilfully)	VW
08.10.	Handelsblatt	Streit um die Wissenschaftlichkeit (Dispute on the scientific character)	VW
06.10.	Süddeutsche Zeitung	Zeit für Reformen (Time for reforms)	VW
01.10.	Handelsblatt	Ein Gegner der schwarzen Null (An opponent to the financial break-even)	VW
01.10	Frankfurter Rundschau	Alle gegen einen (All against one)	VW
01.10.	FAZ	Achim Truger soll Wirtschaftsweiser werden – prompt gibt es Widerspruch (Achim Truger is supposed to join economic experts – and promptly meets opposition)	VW
28.09.	Börsen-Zeitung	Hoher Bedarf an Daten für Abwicklungsplanung (High demand for data on resolution planning)	TT
20.09.	Bloomberg	We should wait with the common deposit insurance	VW
14.09.	FAZ	Die Europäische Zentralbank bleibt vorsichtig (The European Central Bank remains cautious)	VW
14.09.	Wirtschaftswoche	Bei den Weisen ist eine Stelle frei (A vacancy among the economic experts)	VW
13.09.	Stuttgarter Nachrichten	Das schwere Erbe der Lehman-Pleite (The difficult legacy of the Lehman crash)	VW
31.08.	FAZ	Ein Trick könnte die Draghi-Nachfolge entscheiden (A trick could decide the succession of Draghi)	HS
31.08.	FAZ.Net	Deutschlands einflussreichste Ökonomen 2018 (Germany's most influential economists 2018)	VW
30.08.	FAZ	Der große EZB-Poker (The big ECB poker game)	VW
14.08.	Deutsche Welle.de	Warum sollen Zentralbanken unabhängig sein? (Why should central banks be independent?)	VW
21.07.	Börsen-Zeitung	Wieland kritisiert Trumps Fed-Attacke (Wieland criticizes Trump's attack on the Fed)	VW

13.07.	Bloomberg	ECB suffers setback as French banks win leverage ratio crash	HS
27.06.	Börsen-Zeitung	Debatte über Euro-Reform nimmt Fahrt auf	VW
	_	(Debate about reform of the eurozone is picking up speed)	
14.06.	Pforzheimer	Sparkassenverbände gegen Vergemeinschaftung von EU-	VW
	Zeitung	Bankrisiken	
		(Savings banks associations against communitization of debt)	
14.06.	Börsen-Zeitung	Sorge um den Zustand Europas lässt Kritiker an die EU heranrücken	VW
		(Concern about Europe's condition makes critics move closer to the EU)	
13.06.	Schwarzwald	Familientreffen der Sparkässler	VW
	Zeitung	(Family reunion of the savings banks)	
13.06.	Südwestpresse	Alarmglocken in Europa schrillen	VW
		(Alarm bells in Europe are ringing)	
12.06.	dpa-AFX	Sparkassenpräsident Schleweis hält EU-Einlagensicherung für falsch	VW
		(The president of the savings banks Schleweis considers	
		European deposit protection wrong)	
10.06.	Welt am Sonntag	Suche: Ökonomin mit SPD-Parteibuch	VW
00.00	Minte de efterne de e	(Female economist with SPD membership book wanted)	\
08.06.	Wirtschaftswoche	Schöner streiten mit deutschen Volkswirten (How to argue well with German economists)	VW
28.05.	Handelsblatt	Scholz struggling to find perfect candidate for Bundesbank board	VW
26.05.	Global		
27.05.	Handelsblatt	Suche nach einer Frau für den Bundesbank-Vorstand bereitet	VW
		Scholz Probleme (Search for a woman as Bundesbank Executive Board member is	
		a cause of concern for Scholz)	
27.05.	Die Welt	Zentralbank in der Klemme	VW
		(Central bank in a tight squeeze)	
26.05.	Welt online	Ökonomen warnen vor Risikofaktor Italien	VW
		(Economists warn against risk factor Italy)	
18.05.	Mannheimer	Was macht eigentlich Wolfgang Franz?	VW
	Morgen	(What exactly is Wolfgang Franz doing?)	
27.04.	FAZ	Die neue Liebe der Banken zum Verwahren von Geld	TT
		(The banks new love for storing money)	
26.04.	dpa	Brandaktuell oder bedeutungslos? Wie Ökonomen Karl Marx beurteilen	VW
		(Hot topic or insignificant? How economists judge Karl Marx)	
21.03.	Spiegel Online	Wirtschafsexperten rechnen mit Wachstum von bis zu 2,6 Prozent	VW
		(Economic experts expect growth rate of upt to 2.6 percent)	
21.03.	Reuters (Zeit Online)	Wirtschaftsweise sehen Deutschland in Hochkonjunktur (According to economic experts Germany is in a boom)	VW
21.03.	Tagesschau.de	Kräftiges Wachstum – trotz Handelsstreits (Robust growth despite trade dispute)	VW
17.03.	Deutsche	Will Trump einen schwachen Dollar?	VW
	Welle.com	(Does Trump want a weak dollar?)	
15.03.	FAZ	Virtuos	VW
		(Masterly)	

09.03.	FAZ	Die portugiesischen Zombies (The Portuguese zombies)	MB
08.03.	Handelsblatt Online	Ist die EZB reif für eine Generalüberholung? (Is the ECB ripe for a complete overhaul?)	VW
06.03.	Reuters (Business Insider, Cash)	Wirtschaftsweiser hält schon 2018 erste EZB-Zinserhöhung für möglich (Economic expert considers first ECB rate hike in 2018 possible)	VW
23.02.	Handelsblatt	Debatte über die richtigen Worte (Debate about the right words)	VW
12.02.	Handelsblatt	Italien und die USA sind anfällig (Italy and the US are vulnerable)	VW
09.02.	FAZ	Weidmann will EZB-Kurs ändern (Weidmann wants to change the course of the ECB)	VW
04.02.	Welt am Sonntag	Im Schatten von Trump (In the shadow of Trump)	VW
27.01.	FAZ	Bank darf nachträglich keine Negativzinsen einführen (Bank is not allowed to implement negative interest rates subsequently)	TT
17.01.	Reuters	Two-year race for top ECB job starts next week	VW
11.01.	Die Zeit	Eine(r) fehlt (One is missing)	VW
10.01.	Badische Zeitung	Kein Platz für eine zweite Frau (No room for second woman)	VW
08.01.	Handelsblatt	Streit über die Wirtschaftsweisen (Dispute about the economic experts)	VW

TV and radio interviews



Volker Wieland commenting on monetary policy in CNBC Squawk Box in London

19.12.	ARD-Plusminus	Statement regarding ECB monetary policy	VW
13.12.	HR-Info	Statement regarding ECB purchase program	VW
12.12.	HR-Info	Statement regarding ECB bond purchases	HS
12.12.	n-tv	Statement on European economy	VW
12.12.	n-tv Telebörse	Statement on German economy	VW
26.11.	BBC World	Interview on Europe's future	VW
16.11.	CNBC	German economy is sensitive and more fragile than people think	VW

15.11.	Bloomberg TV	Live interview on German economy and Brexit	VW
10.10.	Phoenix	Panel on "Tariffs, sanctions, trade war – how far will President	MB
		Trump go?"	
13.09.	CNBC	"I think the ECB should tighten earlier"	VW
05.09.	HR-Info	Statement on the candidates for the next ECB presidency	VW
10.07.	HR-Info	Statement on hearing on ECB bond-buying program at EU court	HS
17.06.	BW Family TV	Statement on Italy at triennial meeting of savings banks association	VW
14.03.	CNBC	ECB has recognized the massive improvement in the economy	VW
09.02.	ZDF-heute	Statement on private consumption in Germany	VW

Press coverage of IMFS events

08.11.	Börsen-Zeitung	Euro-Clearing treibt BaFin um (Euro clearing is an area of concern for BaFin)
09.06.	Börsen-Zeitung	Eine holprige Straße voraus (A bumpy road ahead)
14.03.	National & International Media	The ECB and Its Watchers
02.03.	Börsen-Zeitung	Falsche Antwort auf Lehman? (Wrong answer to Lehman?)
08.02.	Börsen-Zeitung	Fed-Gouverneur relativiert Lohn-Preis-Kopplung (Fed governor relativizes price wage concept)
31.01.	Börsen-Zeitung	Mersch betont Grenzen der EZB (Mersch emphasizes limits of the ECB)
08.01.	Deutsche Wirtschafts- nachrichten	Ökonom: Rettung Italiens erfolgt auf Kosten deutscher Steuerzahler (Economist: Italy's rescue happens at the expense of the German taxpayers)

Goethe University on IMFS

09/18	rer.pol.	Wieland doppelt ausgezeichnet (Double award for Wieland)	VW
02.03.	Goethe Uni	Prof. Volker Wieland mit Sachverständigenrat als "Vordenker	VW
	Online	2018" ausgezeichnet (Prof. Volker Wieland receives Thought Leader Award 2018)	

Social Media

The IMFS informs the academic and financial community as well as the interested public about new research findings and events via newsletter. The IMFS Update is received by more than 3,500 subscribers worldwide from Tokyo to San Francisco. On the institute's website www.imfs-frankfurt.de one can register for the newsletter. News about the institute, events, studies, and press statements are also available via social media, by following the Twitter account @IMFS_Frankfurt.

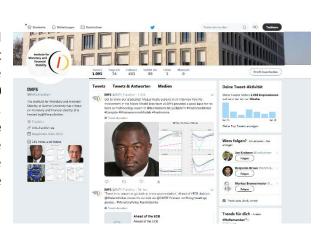


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