



Institute for Monetary
and Financial Stability

Annual Report
2017

**Institute for Monetary and
Financial Stability**

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IMFS Annual Report

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Helmut Siekmann and Volker Wieland (from left)

Dear friends of the IMFS,

We are delighted to inform you about last year's IMFS activities with this annual report. 2017 marks an important transition for the institute. The first 10-year funding period based on a generous grant by the Foundation of Monetary and Financial Stability (*Stiftung Geld und Wahrung*) came to an end mid-year. A new 10-year funding period was started. Going forward, the IMFS is financed jointly by the Foundation and Goethe University. Even more importantly, both institutions agreed to turn the IMFS into a permanent fixture of the research and policy sphere. On this basis, we will be able to expand our research and policy advice activities with a clear focus on economic and legal aspects of central banking, including monetary and macroprudential policy as well as financial regulation.

In 2017 we also kicked off a new research collaboration with the Hoover Institution at Stanford University – the Macroeconomic Model Comparison Initiative (MMCI). Its goal is to change how research on structural macroeconomic modeling for monetary, fiscal and macroprudential policy analysis is conducted – by making it much more reproducible, collaborative and comparable in nature. The initiative is funded by a grant from the Alfred P. Sloan Foundation.

On the legal side we are pushing forward with producing an updated English language version of the Commentary on the European Monetary Union, published first in German in 2013. The 1500-page Commentary is a major multi-year project that is accomplished thanks to the contributions of many legal experts and special financial support by the Foundation of Monetary and Financial Stability.

Finally, the last year was also characterized by major recruiting efforts at the IMFS. We are particularly pleased that Alexander Meyer-Gohde has assumed the Professorship of Financial Markets and Macroeconomics and that Roland Broemel is set to join the IMFS as Professor of Public Law. Thus, we are confident that the institute will be able to expand its interdisciplinary work at the cross-section of macroeconomics and finance as well as public and private law.

Volker Wieland,

Managing Director and Professor of Monetary Economics

Helmut Siekmann,

Deputy Managing Director and Professor of Money, Currency and Central Bank Law

Highlights 2017

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

IMFS receives financial support for another ten years

On March 7, Goethe University announced that the **IMFS will be able to expand its interdisciplinary research activities** in the areas of money and currency **during the next ten years** with the support of the Foundation of Monetary and Financial Stability (*Stiftung Geld und Währung*) and Goethe University Frankfurt. Goethe University has succeeded in raising **external funding in the amount of five million euro by the Foundation of Monetary and Financial Stability** for the next funding period. IMFS researchers will be able to expand their research and analysis of the **tasks, competences and powers of central banks in monetary policy and the reformed regulation and financial supervision** including their impact on the financial system and the real economy at large.



Stiftung
Geld und
Währung



“The IMFS has successfully established itself in the research community as a brand name in the area of money and currency. A particular strength is its dual interdisciplinarity: The IMFS takes an interdisciplinary approach regarding price and financial stability, on the one hand, and law and economics as disciplines on the other hand. In conjunction with the close ties between policy-relevant basic research and research-based policy advice, the IMFS can bring real added value to the public debate. Therefore, we are very pleased that together with Goethe University we have succeeded in further accompanying this fruitful work with a long-term perspective,” Gerhard Ziebarth, Chairman of the Executive Board of the Foundation of Monetary and Financial Stability, said.

In addition to the Chair of Monetary Economics and the Chair of Money, Currency and Central Bank Law, Goethe University contributes to the IMFS a new Chair of Financial Markets and Macroeconomics. “I am very pleased that research in this area can be further expanded at Goethe University. The IMFS is a strong and influential voice, which is listened to throughout Germany and Europe. In times of ‘perceived truths’ it seems highly relevant to me that the public is more than ever made aware of decisions taken on the basis of profound scientific findings,” Prof. Birgitta Wolff, President of Goethe University, said.



New Developments in the MMCI

Quantitative macroeconomic models play an important role in informing policy-makers about the consequences of monetary, fiscal and macroprudential policies. The **Macroeconomic Modelling and Model Comparison Network (MMCN)** is a new research network that aims to make progress in this area by promoting collaboration among researchers in academia and policy institutions in cooperation with the Centre for Economic Policy Research (CEPR). It forms **part of the Macroeconomic Model Comparison Initiative (MMCI) by the Hoover Institution at Stanford University and the IMFS**. The MMCI initiative is supported financially by the Alfred P. Sloan Foundation (for more information see section on Major Research Projects, p. 31).



Impressions from the first MMCI research conference on the effects of quantitative monetary policy in structural models

About 90 participants from academia, central banks, ministries, financial institutions and companies, students and young researchers took part in the network's first research conference on **June 19 and 20** at Goethe University on "The effects of quantitative monetary policy in structural models". The conference was organized by Michael Binder, John B. Taylor and Volker Wieland.

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

At the annual "The ECB and Its Watchers" conference on **April 6**, an event with more than 400 participants, **Mario Draghi**, President of the European Central Bank (ECB), reaffirmed that the central bank would not need to deviate from its asset-buying program until at least the end of the year. **Peter Praet**, member of the Executive Board of the ECB, also underlined the status quo. **John B. Taylor**, on the other hand, remained critical of the bond-buying program. "It's time to speak about the end of the program," the economist of Hoover Institution at Stanford University argued (see section on Conferences, p. 66)

Central bankers, market participants and academics have been debating current issues of monetary policy and financial stability at this forum since 1999. The eighteenth edition of this conference series for the first time took place at Goethe University’s lecture hall building and was simultaneously available for the general public on the internet via Goethe University’s live stream.



ECB President Mario Draghi and John B. Taylor; participants in the main lecture hall (from left to right)

In 2017, **Valdis Dombrovskis**, Vice-President of the European Commission, and **Jens Weidmann**, President of Deutsche Bundesbank, held **Distinguished Lectures at the IMFS**, which attracted a large audience and were both widely reported on by the media (see Distinguished Lectures, page 79). As Dombrovskis emphasized on February 13 in his speech entitled “How to Make the Euro a Lasting Success”, there were good chances of ending the dispute regarding the Greek rescue package and the involvement of the IMF. He saw the Greek program “on track”, with the economy recovering and the deficit target almost reached. Concerning the German current account surplus, Dombrovskis suggested stimulating public investment further and eliminating inefficiencies in the tax system such as corporate taxation and local trade tax. However, he pointed out that the European Commission only gives recommendations, not orders.



Bundesbank President Jens Weidmann arriving for his IMFS Distinguished Lecture

During his IMFS Distinguished Lecture on September 14, Jens Weidmann, President of Deutsche Bundesbank, reminded the European Central Bank not to miss the exit from quantitative easing (QE) even though the expansionary monetary policy is still adequate currently. “We’re not talking about slamming on the brakes but rather about no longer constantly putting our foot down on the accelerator”, Weidmann said, speaking to more than 350 guests and media representatives.

The Distinguished Lectures series is designed to provide a platform for the dissemination of the significance of monetary and financial stability.

On March 20, the IMFS hosted the presentation of the economic forecast of the **German Council of Economic Experts (GCEE)** at Goethe University's House of Finance. The GCEE called on the ECB to start tapering, ending the bond-buying program as soon as possible. A majority of the council members argued that the current criticism of Germany's current account surplus by the U.S. government was not justified as the current account balance was not a useful indicator of macroeconomic imbalances, which are better measured by output relative to potential. The latter indicates a need for a more restrictive fiscal policy in Germany. The press conference of the GCEE's economic forecast was reported on widely by news agencies as well as financial dailies and newspapers.



Since 2013, Volker Wieland is a member of the GCEE, along with Christoph M. Schmidt (chair), Peter Bofinger, Lars P. Feld and Isabel Schnabel.

Interdisciplinary research publications



On the occasion of the 70th birthday of **Prof. Theodor Baums**, legal expert in commercial law and corporate governance and IMFS Distinguished Fellow, **Helmut Siekmann** edited a two-volume collection of essays on German, European and international commercial law. Ninety-five authors contributed 86 essays regarding current legal issues, ranging from supervisory law and

regulation to aspects of takeovers, liability issues in case of compliance infringements, the cancellation of real estate loans and the women's quota. Topics like hedge fund activism in Germany and the US and the development of the Chinese currency into an international reserve currency are also addressed. The essays of the Liber amicorum comprise issues of German and European law as well as special questions of individual European countries and comparisons of American and European law. Co-editors of the commemorative publication are IMFS Professor Tobias Tröger as well as Andreas Cahn, Tim Florstedt, Katja Langenbucher, Julia Redenius-Hövermann, and Ulrich Segna. In his contribution, Helmut Siekmann analyzes the warranty obligation of the Federal Republic of Germany for the Deutsche Bundesbank and the European Central Bank. He concludes that there is neither a liability of the Federal Republic of Germany nor an obligation to top up equity that has been consumed.

Festschrift für Theodor Baums zum siebenzigsten Geburtstag Mohr Siebeck 2017

including: Helmut Siekmann, "Die Einstandspflicht der Bundesrepublik Deutschland für die Deutsche Bundesbank und die Europäische Zentralbank"

(The warranty obligation of the Federal Republic of Germany for the Deutsche Bundesbank and the European Central Bank)

p. 1145-1178

The **Commentary on the European Monetary Union** (*Kommentar zur Europäischen Währungsunion*), also edited by Helmut Siekmann, filled a gap between the existing works covering the Treaty on the European Union and the Treaty on the Functioning of the European Union in general and the detailed monographs on specific aspects of the Monetary Union. An **English translation** that also delivers an update of the commentary is in preparation. This project is also supported by the Foundation of Monetary and Financial Stability. The 1500-page commentary ranks among the major IMFS projects, having been carried on over several years until its publication in April 2013. The project was supported by the Foundation of Monetary and Financial Stability. A particular emphasis has been put on court rulings concerning the European Monetary Union as well as the problems that resulted from the financial crisis and the budgetary problems of single member states of the European Union.



Over the past years, the ECB has adopted a new course. Its expansionary monetary policy has reached an unprecedented scale. With quantitative easing (QE), the ECB has almost quadrupled its balance sheet. The aim of the **IMFS Interdisciplinary Study 1/2017** entitled “**Quantitative Easing in the Euro Area: Its Record and Future Prospect**” is to shed some light on this development. The study was presented on the occasion of the IMFS Distinguished Lecture with Bundesbank President Jens Weidmann in September 2017. It contains contributions by the ECB’s chief economist Peter Praet, Julian Callow of Element Capital, Deutsche Bank Group’s chief economist David Folkerts-Landau together with Deutsche Bank Group’s chief German economist Stefan Schneider, Alex Cukierman, Professor emeritus at Tel Aviv University, and IMFS Research Fellow Günter Beck together with Volker Wieland.



Contributing to the R-Star debate in monetary policy

Influential research by Thomas Laubach and John C. Williams suggests that the equilibrium real interest rate, often referred to as **R-Star**, has dropped from around two percent to a level near zero percent since the financial crisis. Their estimates have been referred to by Fed Chair Janet Yellen and ECB President Draghi as an **important reason for keeping policy rates lower for longer**. In two debates, **John C. Williams**, President of the Federal Reserve Bank of San Francisco, and **Volker Wieland** have discussed the issues of this neutral interest rate.



Williams argued that there is convincing evidence that the equilibrium real rate has declined. He attributed this decline to a lower potential GDP growth, demographic trends and higher risk premiums. Hence, policy need not be tightened much, episodes at the zero bound would be more frequent in the future, and policy would need to rely on quantitative measures. Williams recommended adapting the Taylor rule to these circumstances. With regard to other popular

monetary policy strategies, he suggested considering a price level targeting strategy instead of inflation targeting.

Wieland, on the other hand, drew attention to the **huge degree of imprecision and sensitivity** associated with measuring R-Star. He argued that the medium-term equilibrium real rate estimates discussed by Williams are extremely uncertain, potentially biased and should not form the basis for major policy decisions. If policy-makers wish to use them in a Taylor-style policy rule as suggested by Fed Chair Janet Yellen, the R-Star estimate should be used together with a consistent estimate of the output gap. Since the low R-Star estimates come with low estimates of potential GDP, they imply that actual GDP is already above potential, thus calling for policy tightening. Wieland suggested that central banks could benefit from a more rules-oriented approach as they plan and implement their exit from quantitative easing.

The first debate between Williams and Wieland took place during the conference “The ECB and Its Watchers” in Frankfurt on April 6. Sam Fleming of the Financial Times moderated the discussion. The second debate was held at an event of the Stanford Institute of Economic Policy Research (SIEPR) and Hoover Institute in San Francisco on May 6, moderated by John B. Taylor. Both discussions are available as video podcasts on the IMFS website. In his blog “Economics One”, Taylor also shared his assessment of the debate.

Recent publications by Volker Wieland on the neutral interest rate:

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

R-Star and the Draghi rules: Correctly measuring the equilibrium interest rate for policy use, Co-author: Henrike Michaelis, VoxEU, May 2017

R-Star and the Yellen rules, Co-author: Henrike Michaelis, VoxEU, February 2017

[Volker Wieland called to testify before the Federal Constitutional Court](#)

The Federal Constitutional Court examines the **duty of disclosure of the German Government** vis-à-vis opposition parties in the German parliament. The Green Party has filed a complaint, citing the responses of the government to questions regarding certain aspects of public railway management and the governments’ handling of banking supervision during the financial crisis in 2009 and 2010. On May 10, Volker Wieland appeared as an expert before the court.

The lawsuit concerns the so-called minor inquiry (*Kleine Anfrage*). Such inquiries can be submitted to the federal government in written form by a parliamentary group or by five percent of the parliamentarians. A minor inquiry has to be answered within two weeks.

According to the plaintiff, the answers received on questions regarding banking supervision and bank rescues were not sufficient and did not allow them to fulfill their function as opposition party in conjunction with parliamentary oversight of the executive branch. These included questions concerning the frequency of special supervisory visits at banks that required major government bailouts later on, such as IKB, WestLB and others. Another question concerned the amount received by the government in the sale of IKB. Government officials and civil servants from the respective agencies involved in banking supervision testified that such public transparency would have risked triggering a worsening of the financial crisis and would have permanently damaged the ability of supervisory agencies to elicit sensitive information from banks regarding their business models and the risks associated with their balance sheets.

In his **testimony**, Wieland pointed out that transparency can improve the effectiveness of banking supervision. For example, increased transparency would help improve market discipline for banks. In the United States, for example, information provided by banks to supervisors is made publicly available in the form of call reports. Furthermore, supervisory actions are also made public immediately in the United States. Such regular release of information did trigger crises. Wieland also acknowledged that the inherent fragility of banking implies that the release of negative information in crisis times can trigger a bank run or worsen a crisis.

Given the situation in 2010, with markets doubting Greek debt sustainability and the fear of contagion rising, Wieland expressed sympathy for the German government's reluctance to reveal information that might have damaged the public's trust in the effectiveness of banking supervision and the government's ability to prevent a second banking crisis. Yet, he also pointed out that banking supervision in Europe and the United States failed to prevent the buildup of major risks in banking prior to the financial crisis. At the current juncture, more transparency about the performance of German supervisory processes prior to the financial crisis would be useful and, indeed, help design better and more effective supervisory processes for the future.

In its **judgment** pronounced on 7 November 2017, the **Second Senate of the Federal Constitutional Court** held that the Federal Government failed to fulfill its duty to give answers in response to parliamentary queries relating to Deutsche Bahn AG and financial market supervision, and thereby violated the rights of the applicants and of the German Bundestag. Without sufficiently substantiating why, the Federal Government provided incomplete answers or refused to respond altogether to the questions in dispute concerning Deutsche Bahn as well as regulatory measures of the Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin) directed at various financial institutions during the years 2005 to 2008 (judgment of the Second Senate – 2 BvE 2/11 – paras. (1-372).



Foto: Bundesverfassungsgericht/lorenz fotodesign, Karlsruhe

Volker Wieland receives “Public Service Fellowship”

In recognition of his services in promoting the connection between science on the one hand and policy-making and the public on the other hand, Volker Wieland received the **“Public Service Fellowship”** by the foundation of **Alfons and Gertrud Kassel** on June 21. The prize is endowed with a sum of 10,000 euros and was awarded for the first time. “Goethe University is proud of having an excellent researcher such as Volker Wieland among its faculty, who is capable of successfully conveying his research findings regarding monetary policy not only within the scientific community but also at the highest political level and in open public forums,” Prof. Birgitta Wolff, President of Goethe University, said during a ceremony in Frankfurt.



Foto: Goethe University / Micha Ober

“Prof. Wieland distinguishes himself by an undogmatic scientific excellence,” Hermann Remsperger, Founding Chairman of the Council of the Foundation of Monetary and Financial Stability, emphasized in his laudatory speech. Remsperger commended Wieland on his research on quantitative easing and the zero lower bound, which he praised as pioneering work in the area of monetary theory and monetary policy. “Not only on a European level but also worldwide he ranks among the top economists,” Remsperger added.

“I am very happy about this distinction. My objective is to develop scientific models and methods that can be applied to real-world economic problems and to bring the findings into the debate on economic policy. In this context, the exchange with the decision-makers in central banks, the financial markets and in fiscal politics is particularly important to me,” Wieland said on the occasion of the ceremony.

The foundation of Alfons and Gertrud Kassel (***Alfons und Gertrud Kassel-Stiftung***) was created in 2007 in Frankfurt. It is dedicated to promoting science, research and teaching at Goethe University. It has an endowment fund of 33 million euros, left by the banker couple as a legacy, which the foundation uses to promote several projects at Goethe University, including also Goethe University’s “Scientist of the Year” award.

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”. In 2007, the IMFS was established as part of the project “Currency and Financial Stability” 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 euro by the Foundation of Monetary and Financial Stability.

The focus of the institute is on the tasks, competences and powers of central banks in monetary policy and the extended regulation and financial supervision as well as their impact on the financial system and the real economy. The IMFS encompasses three chairs: (1) Monetary Economics; (2) Financial Markets and Macroeconomics; and (3) Money, Currency and Central Bank Law. These chairs are complemented by professors from the university’s regular faculty with relevant research interests who can apply for membership with the institute’s Board of Directors. The institute is headed by a Managing Director. Since 2012, Prof. Volker Wieland has been serving in this role. A Board of Trustees supervises and guides the activities of the institute.



House of Finance, located at Goethe University’s Campus Westend

The institute’s main objective is to promote public awareness of the benefits of monetary and financial stability. It is set up to fulfill this objective through economic and legal research, doctoral and post-doctoral training, economic and legal policy advice, and public outreach. It focuses on questions regarding monetary and financial stability that are to be addressed from economic, financial and legal perspectives. The IMFS provides a platform for interdisciplinary cooperation and debate covering all four dimensions of its work.

1. Economic and legal research

The research program of the “Currency and Financial Stability” project covers monetary economics, financial market economics and systemic financial stability, and monetary, currency and central bank law. These areas define the activities of the three chairs:

- **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 macro-prudential 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.

- **Money, Currency and Central Bank Law:**

This field of research centers around the stability of financial markets, financial institutions and public finances from a legal perspective. Its focus is on the European Monetary Union encompassing the European system of central banks (ESCB); the legal aspects of money and monetary policy; provisions of European and national law to secure sound government finances including government deficits and debt, support mechanisms, and fiscal federalism. Supervision and control of the financial sector is included as well.



The European Central Bank and the national central banks constitute the Eurosystem

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. Typically, research findings are at first presented at research conferences and seminars, then made available in IMFS Working Papers or, in the case of joint interdisciplinary work, in the form of IMFS Interdisciplinary Studies in Monetary and Financial Stability. Ultimately, research findings are published in scientific journals, collections or monographs according to the practice of the respective field. 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.

2. 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 at Goethe University. IMFS professors teach advanced Master and Ph.D. level courses and organize research-oriented seminars at the Master and Ph.D. level. IMFS professors interact and collaborate with pre-doctoral and post-doctoral research staff and visitors at the IMFS in various formats, including dissertation supervision, discussions, seminars and occasionally also joint research.

Pre-doctoral members of the IMFS research staff often participate in structured Ph.D. and doctoral programs at Goethe University under the auspices of the Graduate School of Economics, Finance and Management. Training at the IMFS involves a preparation for basic research and academic careers as well as practice-oriented work in international organizations, central banks, government and the financial sector. Key indicators of success in doctoral and post-doctoral training include new teaching and seminar formats, research conference presentations and publications by pre-doctoral and post-doctoral research staff and ultimately the placement of young IMFS researchers at top academic or practice-oriented institutions.

3. Economic and legal policy advice

An essential task of the IMFS involves transferring research 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.

4. Public outreach

The IMFS aims to raise and promote awareness among the general public for 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. Furthermore, 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.

The IMFS in numbers

	2017	2016	2015	2014	2013
Number of IMFS Professors	4	4	4	6	4
External funds expended	901.000 €	851.000 €	967.000 €	951.000 €	907.000 €
IMFS Working Papers	11	10	14	9	9
IMFS Interdisciplinary Studies in Monetary and Financial Stability	1	-	1	-	2
Articles in scientific journals	10	5	13	5	6
Scientific books	1	1	1	2	3
Contributions to books	10	8	9	8	12
Policy papers	7	5	4	3	4
Google scholar citations	388	352	371	793	391
Completed dissertations (supervised by all IMFS Professors)	4	15	8	9	4
IMFS Post-Docs placements:					
Academia, government agencies, international organizations, and central banks	-	3	1	1	1
Banks, consultancies, law firms, and others	-	1	2	1	1
Keynote and major public speeches	7	9	5	3	2
Conference and seminar presentations	29	48	42	58	43
Policy meetings and hearings	10	14	11	10	8
Media references to IMFS research papers	5	4	4	5	5
Editorials and interviews by IMFS researchers	11	25	19	13	28
Press portraits of IMFS researchers	4	-	1	2	5
Short press commentaries of IMFS researchers	59	93	75	55	26
Radio and TV interviews with IMFS researchers	28	29	40	31	19
Conferences	3	2	2	2	2
IMFS Distinguished Lectures	2	1	-	2	1
IMFS Working Lunches and Policy Lectures	3	3	9	4	3
Registered participants at IMFS events	1168	840	1118	663	687
Registered media representatives at IMFS events	106	69	93	59	53

II. Statutes

With the new funding period, starting in 2017, the IMFS has revised its statutes.

Zentrumsordnung für das Institut für Währungs- und Finanzstabilität / Institute for Monetary and Financial Stability (IMFS)

**Beschlossen durch das Präsidium am 5. Juli 2016,
durch den Senat zur Kenntnis genommen am 20. Juli 2016**

§ 1 Rechtsstellung

Das Institut für Währungs- und Finanzstabilität / Institute for Monetary and Financial Stability (IMFS) ist ein wissenschaftliches Zentrum der Johann Wolfgang Goethe-Universität Frankfurt am Main (im Folgenden: Universität). Das IMFS trägt zur Umsetzung des von der Stiftung Geld und Währung geförderten Projekts „Preis- und Finanzstabilität“ (Monetary and Financial Stability) bei.

§ 2 Ziele und Aufgaben

Das IMFS verfolgt insbesondere folgende Ziele:

- (1) ausgewiesene wirtschafts- und rechtswissenschaftliche Forschung, die in Teilen interdisziplinär angelegt und durch Publikationen dokumentiert ist, deren Bedeutung und Einfluss durch hohe Zitierhäufigkeit oder durch das Erscheinen in renommierten Zeitschriften mit hohem Rating/Rang nach Zitierhäufigkeit ausgewiesen ist;
- (2) Einwerbung von Forschungsdrittmitteln, die durch das Land Hessen „bonierungsfähig“ sind;
- (3) nationale und internationale Sichtbarkeit und allgemeiner Bekanntheitsgrad des IMFS, belegt durch Förderung des wissenschaftlichen Austauschs, durch Veranstaltungen und externe Kooperationen;
- (4) Zusammenarbeit der Institutsprofessuren in den in Punkt 1, 2 und 3 genannten Bereichen;
- (5) akademische und praxisorientierte Nachwuchsförderung, unter anderem über universitäre Lehre;
- (6) Wissenstransfer in Form insbesondere von wissenschaftlicher Politikberatung und Teilnahme am öffentlichen Diskurs auf Grundlage von Ergebnissen aus dem Bereich der Forschungsschwerpunkte des IMFS;
- (7) Verwirklichung einer den Aufgaben des IMFS angemessenen Organisationsstruktur.

§ 3 Mitglieder

(1) Ordentliche Mitglieder des IMFS sind:

1. die Inhaber der Stiftungsprofessuren der Stiftung Geld und Währung sowie eine thematisch auf eine Mitarbeit am IMFS hin besetzte Professur am Fachbereich Wirtschaftswissenschaften („Kernprofessuren“);
2. Professorinnen und Professoren der Universität mit einschlägigen Forschungsschwerpunkten, deren Mitgliedsantrag durch das Kuratorium bestätigt wurde;
3. das an den beiden Stiftungsprofessuren tätige wissenschaftliche und administrativ-technische Personal;
4. wissenschaftliche Mitarbeiter der Universität, die an thematisch einschlägigen Projekten mitwirken und deren Mitgliedsanträge durch das Direktorium bestätigt wurden;
5. die Koordinatorin/der Koordinator des IMFS.

(2) Eine assoziierte Mitgliedschaft können Universitäts-externe Wissenschaftler und Angehörige der Universität mit einschlägigem Forschungsinteresse beim Direktorium beantragen.

(3) Die Mitgliedschaften nach Absatz 1 Nm. 2 und 4 sowie nach Absatz 2 gelten im Regelfall für die Dauer von drei Jahren. Eine Verlängerung der Mitgliedschaft auch in unmittelbarer Folge ist auf Grundlage einer neuerlichen Antragstellung möglich.

(4) Alle Mitglieder haben das Recht und die Pflicht, an der Erfüllung der Aufgaben des IMFS mitzuwirken.

§ 4 Organe

Organe des IMFS sind das Direktorium, der/die geschäftsführende Direktor/in, ihre/seine Stellvertretung und das Kuratorium.

§ 5 Direktorium

(1) Dem Direktorium gehören die ordentlichen professoralen Mitglieder des Zentrums an.

(2) Das wissenschaftliche und administrativ-technische Personal entsendet zwei Mitglieder in das Direktorium des IMFS.

(3) Die ordentlichen professoralen Mitglieder des IMFS wählen aus ihrem Kreis den/die geschäftsführende/n Direktor/in sowie dessen/deren Stellvertreter/in. Die Amtszeit des geschäftsführenden Direktors/der geschäftsführenden Direktorin beträgt drei Jahre. Wiederwahl ist möglich. Die Wahl ist durch das Kuratorium zu bestätigen.

§ 6 Aufgaben und Beschlussfassung des Direktoriums

(1) Das Direktorium ist verantwortlich für die strategische Umsetzung der Ziele und Aufgaben entsprechend § 2 dieser Ordnung.

(2) Zu den Aufgaben des Direktoriums gehören insbesondere:

- die Feststellung des Budgetentwurfs;
- Stellungnahme zu Anträgen auf Finanzierung von besonderen Vorhaben aus den von der Stiftung Geld und Währung zur Verfügung gestellten Sachmitteln des IMFS;
- die Beratung der Vorlage eines Jahresberichts an das Kuratorium innerhalb von drei Monaten nach Ablauf eines jeden Jahres und Stellungnahme zur Verwendung der Institutsmittel zur Erfüllung zentraler Aufgaben;
- die Entscheidung über Mitgliedsanträge nach § 3 Abs. 1 Nr. 4 und § 3 Abs. 2 dieser Ordnung;
- Stellungnahme zu Mitgliedsanträgen nach § 3 Abs. 1 Nr. 2 dieser Ordnung und deren Weiterleitung über den/die geschäftsführende Direktor/in an das Kuratorium.

(3) Soweit keine abweichenden Regelungen im Rahmen dieser Ordnung getroffen werden, gilt die Geschäftsordnung für Gremien der Goethe-Universität.

(4) Beschlüsse des Direktoriums werden in der Regel auf Sitzungen gefasst.

(5) Das Direktorium wird von dem/der geschäftsführenden Direktor/in oder seinem/ihrem Stellvertreter/in nach Bedarf, mindestens aber zweimal jährlich unter Angabe der Tagesordnung und Einhaltung einer Frist von zwei Wochen zu einer Sitzung einberufen. Sitzungen sind ferner einzuberufen, wenn mindestens zwei Mitglieder des Direktoriums dies verlangen.

(6) Das Direktorium ist beschlussfähig, wenn nach ordnungsgemäßer Ladung mindestens die Hälfte seiner Mitglieder, unter ihnen der/die geschäftsführende Direktor/in oder sein/ihr Stellvertreter/in, anwesend sind. Ladungsfehler gelten als geheilt, wenn alle Mitglieder anwesend sind und niemand widerspricht.

(7) Bei Stimmgleichheit entscheidet die Stimme des/der geschäftsführenden Direktors/Direktorin.

(8) Das Direktorium gibt sich eine Geschäftsordnung. In dieser sind diejenigen Rechtsgeschäfte benannt, zu denen der/die geschäftsführende Direktor/in in § 8 Absatz 1 dieser Ordnung ermächtigt ist, sowie solche, zu denen es vorher einer Beschlussfassung des gesamten Direktoriums bedarf.

§ 7 Aufgaben des/r Geschäftsführenden Direktors/Direktorin

- (1) Die/der Geschäftsführende Direktor/in führt die laufenden Geschäfte des Instituts und vertritt das IMFS nach außen. Sie/er ist berechtigt, alle Entscheidungen, die üblicherweise im Rahmen des laufenden Geschäfts anfallen, eigenständig zu treffen.
- (2) Er/sie wahrt die Ordnung in den Einrichtungen des IMFS und entscheidet über die Ausübung des Hausrechts. Das Hausrecht des/der Präsidenten/Präsidentin gem. § 38 Abs. 1 HHG bleibt unberührt und geht in Zweifelsfällen vor.
- (3) Er/sie entscheidet über die Verwendung der Mittel, die dem Institut zur Erfüllung zentraler Aufgaben und Aktivitäten zugewiesen sind.
- (4) Darüber hinaus hat er/sie folgende Aufgaben:
 - Vorbereitung und Leitung der Sitzungen des Direktoriums;
 - Vorbereitung und Weiterleitung von Stellungnahmen und Beschlüssen des Direktoriums an das Kuratorium;
 - Aufstellung des Budgetentwurfs und Umsetzung der Budgetplanung;
 - Umsetzung der Beschlüsse des Direktoriums;
 - Erstellung eines Jahresberichts einschließlich der Rechnungslegung über die jährliche Mittelverwendung;
 - die (Nach-)Besetzung der Koordinierungsstelle des IMFS.
- (5) Der/die geschäftsführende Direktor/in wird von dem/der Koordinator/in unterstützt.

§ 8 Kuratorium

- (1) Das Kuratorium besteht aus sechs Mitgliedern.
- (2) Mitglieder kraft Amtes sind: der/die Vorsitzende des Stiftungsrates der Stiftung „Geld und Währung“ und der/die Vorsitzende des Stiftungsvorstandes der Stiftung „Geld und Währung“ sowie der/die Präsident/in der Universität und die Dekane der Fachbereiche Rechtswissenschaft und Wirtschaftswissenschaften.
- (3) Die Stiftung „Geld und Währung“ beruft im Einvernehmen mit der Universität ein weiteres Mitglied in das Kuratorium. Die Amtszeit beträgt drei Jahre. Wiederberufungen sind möglich.
- (4) Aus der Mitte des Kuratoriums wird mit einfacher Mehrheit ein Vorsitzender/eine Vorsitzende des Kuratoriums gewählt.

§ 9 Aufgaben des Kuratoriums

- (1) Das Kuratorium berät, unterstützt und beaufsichtigt das Direktorium unter Beachtung der Freiheit von Forschung und Lehre bei der Umsetzung der Ziele und Aufgaben des Zentrums gemäß § 2 dieser Ordnung.
- (2) Aufgaben des Kuratoriums sind insbesondere:
 - die Entscheidung über die Aufnahme neuer Zentrumsmitglieder nach § 3 Abs. 1 Nr. 2 dieser Ordnung;
 - die Entscheidung über Förderung von Drittmittel-Antragstellungen aus den dem Institut von der Stiftung Geld und Währung zur Verfügung gestellten Sachmitteln;
 - die Zustimmung zum Budgetentwurf für das Zentrum;
 - die Genehmigung des Jahresberichts sowie der Rechnungslegung über die jährliche Mittelverwendung;
 - die Zustimmung zur Geschäftsordnung des Direktoriums gem. § 6 Abs. 8 dieser Ordnung;
 - die Zustimmung zur Wahl des/der geschäftsführenden Direktors/in sowie dessen/deren Stellvertreters/in.

§ 10 Beschlussfassung des Kuratoriums

- (1) Beschlüsse des Kuratoriums werden in der Regel auf Sitzungen gefasst.

(2) Das Kuratorium wird von seinem/r Vorsitzenden nach Bedarf, mindestens aber einmal jährlich mit einer Ladungsfrist von mindestens zwei Wochen unter Bekanntgabe der Tagesordnung einberufen.

(3) Beschlüsse des Kuratoriums werden mit einfacher Stimmenmehrheit der anwesenden Mitglieder gefasst. Bei Stimmgleichheit entscheidet die Stimme der Präsidentin/des Präsidenten der Universität.

(4) Die Mitglieder des Kuratoriums können sich von ihren jeweiligen Stellvertretern im Amt vertreten lassen. § 10 Abs. 3 Satz 2 gilt entsprechend.

(5) Einzelne professorale Mitglieder des Direktoriums und/oder der/die Geschäftsführende Direktor/in können zu den Sitzungen des Kuratoriums eingeladen werden.

§ 11 Evaluierung

Die Arbeit und die Organisationsstruktur des IMFS werden 2021/22 und 2025/26 evaluiert.

§ 12 Inkrafttreten

Diese Ordnung tritt nach dem Beschluss des Präsidiums gem. § 84 Abs. 3 HHG mit Bekanntgabe in Kraft. Die Zentrumsordnung ersetzt die Zentrumsordnung für das „Institut für Währungs- und Finanzstabilität“- „Institute for Monetary and Financial Stability“ (IMFS) vom 8. August 2007. Nach Ablauf der Drittmittelförderung im Jahr 2026 ist die Anpassung der Zentrumsordnung zu prüfen.

Frankfurt am Main, den 28. August 2017

Prof. Dr. Birgitta Wolff

Präsidentin der Johann Wolfgang Goethe-Universität Frankfurt am Main

III. 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 for the **ten-year funding period of the IMFS** starting in 2017.

Regarding research projects, within the **Macroeconomic Model Comparison Initiative (MMCI)**, the IMFS may start disposing of roughly 360,000 dollars until the end of 2019. This new initiative by the Hoover Institution at Stanford University and the IMFS is supported financially by the Alfred P. Sloan Foundation with a total of 955,000 dollars for Hoover and the IMFS during this three-year period. As a part of the MMCI, post-doc researchers Gregor Böhl and Felix Strobel joined the IMFS in 2017.



In 2017, the funding for the **MACFINROBODS project**, a 2.5 million euros three-year FP7 research grant by the European Commission for a research network on “Integrated Macro-Financial Modelling for Robust Policy Design”, expired. The grant had been obtained by Michael Binder and Volker Wieland in 2013. The project ended with a final conference in April 2017, organized by the IMFS. John B. Taylor of the Hoover Institution gave the keynote speech at this final MACFINROBODS event (for more

information see section on Major Research Projects, p. 24).

In addition, the IMFS received external funding for the organization of several other events in 2017. The Foundation of Monetary and Financial Stability supported the CEPR MMCN Conference on June 19-20 with the amount of 20,000 euros, and the IMFS Conference for Monetary and Financial Stability, including “The ECB and Its Watchers XVIII”, with 30,000 euros.

Recipient	Project	Time Period	External Funds Received TOTAL	External Funds Expended 2012-2017
IMFS	Project Currency and Financial Stability, RF S 126/10003/04	10 years	10.115.000,00 €	4.718.050,81 €
IMFS	Project Currency and Financial Stability, RF S 126/10133/16	Sep. 2017 - Aug. 2027	5.000.000,00 €	102.273,62 €
IMFS Conference	Project 5 th Stiftungskonferenz "The ESRB", 08./09.11.2011 RF S 126/10087/11	Oct. 2011 - June 2013	50.000,00 €	45.443,56 €
IMFS Conference	Project IMFS Conference "Economic and Legal Limits of Central Banking", 26.11.2013 RF S 126/10103/13	Nov. 2013 - May 2014	51.645,00 €	43.687,47 €
IMFS Conference	Project IMFS/CFS Conference "The ECB and Its Watchers XV", 12.03.2014, RF S126/10107/14	March 2014 - Oct. 2014	19.000,00 €	19.028,13 €
IMFS Conference HS	12 th German Turkish Colloquium for Constitutional Law, RF S126/10043/07	Aug. 2014 - Dec. 2014	20.354,00 €	20.354,00 €
IMFS Conference	Project IMFS Conference on Monetary and Financial Stability, 10./11.03.2015, RF S 126/10114/15	Feb. 2015 - Sep. 2015	59.000,00 €	52.276,10 €
IMFS Conference	Project IMFS Conference on Monetary and Financial Stability, 05./07.04.2016, RF S 126/10127/16 Project 380 2010010	April 2016 - Sep. 2016	49.000,00 €	49.000,00 €
IMFS Conference	Project IMFS Conference on Monetary and Financial Stability, 04./06.04.2017, RF S 126/10137/17 Project 380 2010011	April 2017 - Sep. 2017	30.000,00 €	30.000,00 €
IMFS Conference	Project IMFS Conference on Monetary and Financial Stability, 19./20.06.2017, RF S 126/10143/17 Project 380 2010013	June 2017 - Dec. 2017	20.000,00 €	20.003,00 €
VW	DFG GZ:WI 2260/1-1	July 2011 - Sep. 2014	182.571,52 €	155.126,52 €
MB / VW	EU Project MACFINROBODS	May 2014 - Apr. 2017	290.000,00 €	242.797,97 €
HS	Festschrift Baums	2016	12.000,00 €	12.000,00 €
HS	EU-Horizon 2020: EURHISFIRM	2017	52.000,00 €	
VW / MB	MMCI Sloan Foundation	Dec. 2016 - Dec. 2019	591.295,00 \$	51.015,35 €
Baums / VW / Sachs	Book project "Stability of the Monetary, Currency and Financial System" (managed externally)	Nov. 2017 – Nov. 2018	9.402,34 €	
SUM of all external funding expended				5.561.056,53 €

Project	External Funds Expended 2017	External Funds Expended 2016	External Funds Expended 2015	External Funds Expended 2014	External Funds Expended 2013	External Funds Expended 2012
Project Currency and Financial Stability, RF S 126/10003/04	612.709,62€	717.819,27 €	837.393,03 €	842.728,12 €	758.357,55 €	949.043,22 €
Project Currency and Financial Stability, RF S 126/10133/16	102.273,62€					
Project 5 th Stiftungs-konferenz "The ESRB", 08./09.11.2011, RF S 126/10087/11	closed	closed	closed	closed	45.443,56 €	
Project IMFS Conference "Central Banking", 26.11.2013, RF S 126/10103/13	closed	closed	closed	closed	43.687,47 €	
Project IMFS/CFS Conference "The ECB and Its Watchers XV", 12.03.2014, RF S126/10107/14	closed	closed	closed	19.028,13 €		
12 th German Turkish Colloquium, RF S126/10043/07	closed	closed	closed	20.354,00 €		
Project IMFS Conference 2015, RF S 126/10114/15	closed	closed	52.276,10 €			
Project IMFS Conference 2016, RF S 126/10127/16 Project 380 2010010	closed	49.000,00 €				
Project IMFS Conference, 04./06.2017, RF S 126/10137/17 Project 380 2010011	30.000,00 €					
Project IMFS Conference 19./20.06.2017, RF S 126/10143/17 Project 380 2010013	20.003,00 €					
DFG GZ:WI 2260/1-1	closed	closed	closed	62.666,79 €	59.630,19 €	32.829,54 €
EU Project – MACFINROBODS	85.224,31 €	72.884,38 €	78.134,59 €	6.554,69 €		
Festschrift Baums		12.000,00 €				
EU-Horizon 2020: EURHISFIRM						
Sloan Foundation	51.015,35 €					
Book project "Stability of the Monetary, Currency and Financial System"						
TOTAL	901.225,90 €	851.703,65 €	967.803,73 €	951.331,73 €	907.118,77 €	981.872,76 €

IV. Major Research Projects

MACFINROBODS (Integrated Macro-Financial Modelling for Robust Policy Design)

In this project, eleven European universities collaborated with the European Commission's joint research centre in a consortium of experienced researchers in the field of macro- and financial economics, supported by an advisory board of influential academics of the highest worldwide reputation and policy makers at central banks and finance ministries.

The three-year project (2014-2017) was funded by the European Commission and brought together different lines of research to systematically develop new behavioral and institutional model building blocks, to integrate such features in policy-focused models and to make use of these models in a new framework for policy evaluation. The funding stems from the **European Union's Seventh Framework Programme (FP7)** for research, technological development and demonstration under grant agreement number no. 612796.



Participants:

- Universiteit van Amsterdam (Coordinator)
- Centre Pour la Recherche Economique Et Ses Applications (Vice-Coordinator)
- Agencia Estatal Consejo Superior de Investigaciones Cientificas
- Goethe University
- JRC – Joint Research Centre – European Commission
- Katholieke Universiteit Leuven
- The City University
- Universita Cattolica del Sacro Cuore Universita Degli Studi di Pavia
- Universite Libre de Bruxelles
- University of Surrey
- Univerzita Karlova v Praze

Information on the project and all papers are available on www.macfinrobods.eu.

This EU proposal had been submitted in January 2013 by Volker Wieland as Coordinating Scientist. He resigned from the role of coordinator due to his appointment to the German Council of Economic Experts. Wieland received substantial support from Michael Binder in drafting the overall proposal. Binder then assumed steering the Frankfurt node of the project.

The vision of the MACFINROBODS project

During the global financial crisis and ensuing Great Recession, economists at policy-making institutions had little choice but to augment macroeconomic models with ad-hoc assumptions and adjustments in order to provide analysis and advice for policy-makers. The MACFINROBODS consortium aimed to move policy-focused macroeconomic modelling beyond this approach to the endogenous modelling of the dynamics resulting from financial risks and related decision-making in banks, households, firms and public institutions. Most importantly, the consortium aims to help improve model-based policy analysis at the European Commission, the ECB, national central banks within the euro area and other EU countries as well as international organizations such as the OECD and the IMF.

Macroeconomists had been criticized for failing to predict the Great Recession of 2008/9 or at least failing to provide adequate warning that global financial disruptions could trigger such a massive contraction. Practitioners and influential researchers have questioned the usefulness of macroeconomic research and training over the last three decades and blamed academic and central bank researchers' focus on dynamic general equilibrium modelling for misdirecting the attention of policy-makers. However, the Nobel committee awarded the 2011 Prize in Economic Sciences to Thomas Sargent and Christopher Sims "for their empirical research on cause and effect in the macroeconomy".

Against this background, researchers are still debating whether to re-invent macroeconomic and financial modelling from scratch or to improve existing frameworks that had already been used to inform policy makers. The researchers of the MACFINROBODS consortium planned to pursue a systematic, comparative approach to model design that is open to competing paradigms and aims to deliver robust policy prescriptions. They intended to address the problem of modelling uncertainty by searching for policy settings and rules that perform well across a range of diverse representations of the macroeconomy. This approach acknowledges and exploits diversity.

In conclusion, the MACFINROBODS project has been particularly successful, in terms of the quantity of work performed and the quality and the variety of the outputs. Beyond the management of the project and the dissemination activities, the twelve partners, through the work of international top researchers in macroeconomics and finance together with young talented Postdocs and PhD students, have produced an incredible amount of 75 deliverables with 348 persons/month, which corresponds to less than 5 PMs per deliverable. Indeed many of the involved senior researchers have spent their own research time on the project without claiming all or any person months.

Those deliverables encompass mainly articles, software components and policy briefs. Most of them are academic articles that present theoretical, empirical or experimental work that has been partly published in leading international peer-reviewed journals,

Objectives, research steps and results

In order to achieve the general goals of the MACFINROBODS project a list of objectives had been formulated, namely to test and adapt on the basis of laboratory experiments, behavioral assumptions that have recently been used to improve macroeconomic modelling, to craft macroeconomic models with behaviorally realistic heterogeneous agents and to analyze the effects of monetary, fiscal and macro-prudential policies in macroeconomic models with behaviorally realistic heterogeneous agents.

The project was divided into various parts. Regarding **expectations formation and belief heterogeneity**, the key element was to advance the modeling of heterogeneous expectations into macro-financial policy-oriented models following the general Keynesian concept of "animal spirits". To this end, learning and interaction models were developed that can generate episodes of crisis or unusually large fluctuations. The resulting expectations formation models were then be validated both against experimental and empirical data, and the resulting fit was compared to the fit obtained with traditional models under homogeneous, rational expectations.

This was done in five main research steps, starting out with the design of expectations models, the resulting heterogeneous expectation models were incorporated into macro models with financial frictions and the theory of diverse rational beliefs were incorporated to macro models with the zero lower bound of the nominal interest rate. After that, the macro model augmented with heterogeneous expectations was brought to the data, and its empirical fit and prediction properties were compared to those of the homogeneous rational expectations models. Finally, the

heterogeneous expectations models were assessed regarding their abilities to account for behavior observed in lab experiments.

Goethe University was responsible for delivering an empirical paper analyzing the performance of a New Keynesian model with diverse beliefs. This research was carried out by Michael Binder, Mátyás Farkas and Volker Wieland, and summarized in a paper entitled **“Heterogeneous Information, Diverse Higher-Order Beliefs and Business Cycles: Propagation Mechanisms and Empirical Performance”** (April 2016). This paper augments a standard DSGE model to capture production externalities, partially firm-specific cost shocks and heterogeneous information across firms. It is shown that this model structure leads to firms having to forecast the forecasts of other firms, and thus the presence of diverse higher-order beliefs. The model solution differs from that of the corresponding model with no firm-specific cost shocks (and thus homogeneous information) by a propagation component reflecting the belief diversity. The paper then documents how this belief diversity affects model dynamics using parameter values that are based on euro area data. The paper offers a business-cycle modelling framework that accounts for diverse higher order beliefs, and shows that such an augmentation of the underlying standard New Keynesian DSGE model can predict deeper and more prolonged recessions, with the magnitude of the differences in the recession dynamics being a function most prominently of the magnitude of the firm-specific costs shocks, relative to the aggregate costs shocks. This paper further argues that, ceteris paribus, the Great Recession of 2008/9 that followed the global financial crisis can be captured better in a business cycle model with diverse higher-order beliefs than in a corresponding business cycle model without belief diversity as a propagation mechanism. This is also a framework suitable to analyze policy implications, for example, monetary policy in face of deep recessions, as is expanded upon in the policy brief **“The Role of Diverse Beliefs in Predicting Recessions and Recoveries”** by Michael Binder, Mátyás Farkas and Volker Wieland in October 2016.

In another part of the project, the focus was on **temporary constraints and fiscal multipliers in normal and crisis regimes**. In the aftermath of the financial crisis, public authorities have actively reacted, especially by engaging into fiscal stimulus policies or bail-out programs of financial institutions. In order to assess the effectiveness of these policies, standard macroeconomic models need to be improved to account for non-linearities and binding constraints stemming notably from rising financial fragility and public indebtedness, the resulting endogenous borrowing constraints and the zero-lower bound of the interest rate. A critical issue is how such adverse conditions affect the size of the fiscal multiplier and the choice of multi-year fiscal plans. To address this issue, the project



aims at developing more realistic models of savings decisions of households in a context of limited life-time and models of optimal fiscal policy decisions of governments under uncertainty.

In order to achieve this, the following three research steps were planned: Introduction of a detailed fiscal sector in policy-oriented macroeconomic models; the resulting macro models will also feature a modeling of financial risk; introduction of common fund and

measuring fiscal multipliers and assessing multi-year fiscal plans in order to shed light on the magnitude and the composition of the impact of changes in fiscal policy, including public spending, transfers and various taxation policies, in a model that account for a number of features that are empirically relevant to assess the current situation, namely: the zero-lower bound constraint, high level of public debts, increased fragility of the financial sector, savings decisions of households with overlapping work-retirement periods, uncertainty.

The Frankfurt node was in charge of a theoretical/empirical paper evaluating the impact of changes in government expenditures and tax rates during fiscal consolidation and with financial sector risk, within the class of policy-focused macroeconomic models. The work entitled **“Fiscal Multipliers in Policy-Focused Models with Financial Sector Risk”**, was carried out by Michael Binder, Philipp Lieberknecht and Volker Wieland in October 2016. This paper analyzes government expenditure and tax multipliers in three New Keynesian models with and without financial frictions and estimated for the euro area. The model and policy evaluation tool is a software package that formed the algorithmic basis and had been delivered to the Model Database by the same researchers. In addition, base code for some of the models was delivered by Elena Afanasyeva.

This paper and the companion **Model and Policy Evaluation Software Tool Allowing for the Study of Alternative Consolidation Scenarios under Financial Sector Fragility** provide novel, model-comparison based, insights into the effectiveness of fiscal policy during a financial crisis, especially when monetary policy is constrained at the zero lower bound. In particular, this paper discusses the potential success of fiscal consolidation. The authors find the following results: The extent to which the combination of financial frictions and a binding zero lower bound increases fiscal multipliers temporarily above unity depends on how strongly monetary policy responds when the zero lower bound period ends. Refinancing additional government expenditure is not considerably cheaper in a liquidity trap. Output effects of tax rate decreases are generally lower than those based on direct government expenditure changes. In terms of policy recommendations, fiscal consolidation at the zero lower bound succeeds in reducing the debt-to-GDP ratio and providing stimulus if it combines a reduction of government expenditure and transfers with a decrease of labor tax rates. If sovereign debt is one of the primary concerns, such measures are suitable to reduce public debt back to sustainable levels, while at the same time providing some stimulus to the economy.

In a further step, the policy-oriented macro models developed by the consortium were centralized in the Macroeconomic Model Database (MMB). These models are highly innovative, as they offer more realistic representations of the financial sector, but raise several challenges. They cannot be solved using standard log-linearization techniques because higher-order moments are important to characterize regime switching and crisis times, and they involve non-smooth (i.e. time dependent) binding constraints. These models therefore require global approximation methods to be solved, and the high number of dimensions poses a methodological challenge. Another challenge is the empirical estimation of these models. Here again, standard techniques, based on Kalman filters for example,



cannot be employed and it is necessary to work with nonlinear filtering techniques and global sensitivity analysis procedures. This latter feature is critical as little is known on the empirical fit of these new class of models, and a deep assessment is needed. This assessment allowed to uncover the main features of financial market modeling that are necessary for policy-focused simulation exercises. WP8 aims at developing effective algorithms to address these challenges.

The Frankfurt node of the project was in charge of expanding the Macroeconomic Model Database by new policy-focused models with explicit financial sector and putting the insights into a paper. This work was carried out by Elena Afanasyeva, Michael Binder, Mátyás Farkas, Meguy Kuete, Volker Wieland and Jinhyuk Yoo. Seven policy-focused macroeconomic models with explicit financial sector were newly added to the MMB. The findings were explained in two papers: a paper entitled **“A Systematic Comparison of the Empirical Implications of Models with Explicit Financial Sector”**, by Elena Afanasyeva, Michael Binder, Mátyás Farkas, Meguy Kuete, Volker Wieland and Jinhyuk Yoo; and a paper entitled **“New Methods for**

Macro-Financial Model Comparison and Policy Analysis”, by Volker Wieland, Elena Afanasyeva, Meguy Kuete and Jinhyuk Yoo.

The first paper develops a new, user-friendly platform for estimation and forecasting with macroeconomic models in real time. The platform contains a newly constructed real-time data set for the U.S. and the euro area, a collection of New Keynesian DSGE and VAR models as well as a graphical user interface. Based on this platform, the paper conducts a comparative forecasting analysis to study the relative performance of New Keynesian DSGE models, VAR models and professional forecasters using real-time data vintages for the U.S. economy. The second paper takes off from the observation that since the global financial crisis, numerous new macroeconomic models have been developed that aim to deliver improved estimates of the transmission of macroeconomic policies and aim to better integrate the financial sector into business cycle analysis. This paper thus aims to assist policy-making institutions with comparing available models of policy transmission and evaluate the impact and interaction of policy instruments in order to design effective policy strategies. To do so, it presents and implements a new approach for comparative analysis.

The researchers made two important contributions in developing an in- and out-of-sample based approach for comparing the properties and predictions of a wide range of policy-focused macroeconomic models. This is important for policy-makers.

The first paper develops a new platform that contains a newly constructed real-time data set for the U.S. and the euro area, a collection of New Keynesian DSGE and VAR models. As the platform is designed to work with real-time data, it also allows easy comparisons with professional forecasts. In its platform-based comparative analysis assessing the relative out-of-sample performance of New Keynesian DSGE models, VAR models and professional forecasters (captured by the consensus forecast of the Survey of Professional Forecasters) using real-time data vintages for the U.S. economy, the paper finds that professional forecasters still outperform these classes of macroeconomic models at short horizons, whereas at medium horizons the performance is often similar. Also, New Keynesian DSGE models deliver poorer nowcasts, particularly relative to SPF. The reason appears to be the informational advantage professional forecasters have in real time when forming their nowcast. Studying the Great Recession episode in more detail, the paper finds that during the periods leading to the recession trough, a financial accelerator model predicts the decline in GDP growth earlier than models without financial frictions. In subsequent periods, the models without financial accelerator but with relatively strong endogenous propagation perform better.

The second paper reviews the literature on model comparison and presents a new approach for comparative analysis. Its computational implementation enables individual researchers to conduct systematic model comparisons and policy evaluations easily and at low cost. This is of utmost importance, as macroeconomic researchers, rather than building directly on work by others, in their modelling efforts usually start from scratch. Practices that would ensure easy reproducibility are not widespread in macroeconomics, and there is little systematic comparison of existing models. The paper makes the case that this need not be so. There has been tremendous progress in the literature with regard to model design, model solution techniques, econometric estimation methods and software implementation. Many researchers are using largely the same techniques. While model comparison was extremely cumbersome in the past, a task reserved for meetings of teams of modelers from policy institutions, it can now be accomplished fairly easily by individual researchers.

As this paper shows, comparative model analysis helps critically assessing available models, identifying similarities and differences as well as empirical inconsistencies that require further research. The model comparison approach advanced also contributes to improve reproducibility of computational research in macroeconomic modelling. Several applications serve to illustrate the usefulness of model comparison and the new tools in the area of monetary and fiscal policy. The paper inter alia includes an analysis of the impact of parameter shifts on the effects of fiscal policy, a

comparison of monetary policy transmission across model vintages, and a cross-country comparison of the impact of changes in monetary policy rates in the United States and the euro area. Furthermore, this paper includes a large-scale comparison of the dynamics and policy implications of different macro-financial models. The models considered account for financial accelerator effects in investment financing, credit and house price booms and a role for bank capital. A final exercise illustrates how these models can be used to assess the benefits of leaning against credit growth in monetary policy.

The consortium contributed to the MMB with many, sometimes competing policy-focused models. This variety of frameworks in which to perform policy analysis is known as model uncertainty. In another step, the project aims at making progress towards a **systematic approach for developing policy recommendations that are robust** to model uncertainty, i.e. policies that deliver good performance under a variety of competing expressions of macroeconomic interactions. These policies focus on monetary, fiscal, macro prudential and regulatory policies in the euro area. With an improved representation of the financial sector and microeconomic behavior, the new policy tools were incorporated.

The Frankfurt node was responsible for delivering two quantitative papers and a policy brief. This work was carried out by Elena Afanasyeva, Michael Binder, Meguy Kuete, Philipp Lieberknecht, Irina Popova, Jorge Quintana, and Volker Wieland. The first quantitative paper on the impact of new macroeconomic models with rich financial sector frictions on the search for robust optimal monetary and fiscal rules is entitled **“Robust Monetary and Fiscal Policies under Model Uncertainty”**, by Elena Afanasyeva, Michael Binder, Jorge Quintana and Volker Wieland (October 2016). The second paper is actually composed of two papers: Firstly, **“Robust Macroprudential and Regulatory Policies under Model Uncertainty”** (July 2017) by Michael Binder, Philipp Lieberknecht, Jorge Quintana and Volker Wieland focuses on models with a banking sector that are drawn from the Macroeconomic Model Database to analyze the implications of model uncertainty for robust macroprudential rules under three instruments: the capital-to-assets, loan-to-value and loan-to-deposits ratios. Secondly, **“Model Uncertainty in Macroeconomics: On the Implications of Financial Frictions”** by Michael Binder, Philipp Lieberknecht, Jorge Quintana and Volker Wieland (also available as IMFS Working Paper 114) employs a comparative approach to investigate the characteristics of a new generation of New Keynesian DSGE models that involve detailed characterizations also of the financial sector. Important for issues of studying robust fiscal and monetary policies, the paper documents a higher degree of model uncertainty relative to earlier generations of these models. In particular, policy transmission is highly heterogeneous across types of financial frictions and monetary policy causes larger effects, on average. This paper will be **forthcoming in 2018 in “The Economics of Central Banking: An Oxford Handbook in Economics”, Oxford University Press.**

The corresponding policy brief is entitled **“Robust Monetary, Fiscal and Macroprudential Rules for the Euro Area”**, by Elena Afanasyeva, Michael Binder, Philipp Lieberknecht, Jorge Quintana and Volker Wieland (March 2017).

The quantitative papers are concerned with the interaction between monetary and macroprudential policy, and investigate robust policy rules in the face of model uncertainty, an issue that has become more and more of a concern for policy-makers, given the increasing complexity of macroeconomic models used for policy design. The quantitative papers find that between a regime in which the monetary authority plays the role of the Stackelberg leader vs. one of perfect coordination between the central bank and the macroprudential authority, there are strong reasons to favor the former. The leader-follower regime is found to yield less volatile inflation dynamics without necessarily increasing the standard deviation of the credit gap by sizeable amounts.

Furthermore, because the monetary policy rule analyzed can ensure determinacy and stability in the set of financial frictions models considered, model-specific optimal policies under the leader-follower regime imply smaller potential costs due to model uncertainty than those under the perfect-coordination regime. Robust policies can further insure against model uncertainty and effectively stabilize the credit gap. The best-performing robust macro-prudential policies are modestly countercyclical and persistent capital-to-assets and loan-to-value ratio rules, as these yield the lowest credit-gap-based loss while achieving stable dynamics in inflation and the output gap. Robust policies under the perfect-coordination regime, in contrast, lead to passive monetary policy rules that increase the standard deviation of inflation and the output gap, while generating only marginal gains in credit gap stabilization. The papers further show that a simple policy rule robust to model uncertainty involves a weaker response to inflation and the output gap in the presence of financial frictions as compared to earlier generations of such models. Leaning-against-the-wind policies in the models estimated in this paper for the euro area do not lead to substantial gains. Looking forward, the authors argue that model-averaging and embracing alternative modelling paradigms is likely to yield a more robust framework for the conduct of monetary policy.



The **final conference** of the project was organized by Michael Binder and Volker Wieland in Frankfurt on April 4-5, 2017. The conference was a two-day event with over 50 participants, with two inspiring keynote lectures by Frank Schorfheide, professor of Economics at the University of Pennsylvania, and John B. Taylor, professor of economics at Stanford University and member of the MACFINROBODS Advisory Board.

Macroeconomic Model Comparison Initiative (MMCI)

(January 1, 2017 – December 21, 2019)

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 proposed to launch and establish a new **Macroeconomic Model Comparison Initiative (MMCI)**. In November 2016, the Alfred P. Sloan Foundation awarded a three-year grant in the amount of \$591,295 in support of the MMCI. 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, Goethe University Frankfurt and a member of the board of IMFS, contribute as principal investigators.

The MMCI is a three-year-project, starting in January 2017 and aiming 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, rewriting of 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, thereby rendering the archive self-expanding, and creating a network of researchers (**Macroeconomic Modelling and Model Comparison Network, MMCN**) interested in systematically comparing models and contributing to policy applications, in cooperation with the Centre for Economic Policy Research (CEPR) in London.

The MMCI core team is based at the IMFS. The core team includes two post-doctoral researchers, two advanced Ph.D. candidate research assistants and two early-stage Ph.D. research assistants. In 2017, several crucial steps towards the realization of this project were taken. The MMCI core team has been formed and a new version of MMB, version 2.2, has been released. The first MMCN conference was organized and took place in Frankfurt on June 19 and 20, 2017. Furthermore, the rewrite of the code underlying MMB and the creation of a new interactive MMB website has begun.

The MMCI Team

Two post-doctoral researchers, Gregor Böhl and Felix Strobel, joined the MMCI team in 2017 (see section Pre-Docs and Post-Docs, p. 38). 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. The research assistants contributing to the project are Mátyás Farkas, Meguy Kuete, 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. In line with the MMCI proposal, the team is working on extending the coverage of macroeconomic models within MMB, and enhancing the functionality of MMB, specifically establishing an interactive online-platform making all current and new elements of MMB conveniently accessible to users engaged in modeling research and policy advice.

Version 2.2 of the MMB

The recently released **version 2.2** of MMB has added 25 new structural macroeconomic models to the model database, many of these involving more detailed modeling of macro-financial linkages. MMB now encompasses a total of **93 models**, in comparison to 68 models in version 2.1. Beyond addressing issues of macro-financial-linkages, the new models in version 2.2 focus on fiscal policy

issues and the modeling of labor market frictions. Also to be emphasized, MMB 2.2 includes several models with adaptive learning, in part entirely different models, and in part the adaptive learning counterparts of models within MMB that involve rational expectations formation. Version 2.2 of MMB is available for immediate and unrestricted download at www.macromodelbase.com. With version 2.2, users may conduct model analysis and comparison exercises under a range of monetary policy rules, based on an interface that is more user-friendly than in previous releases of MMB.

With respect to the interactive online platform for model replication and inclusion, a **new website** for MMCI (upgrading the existing site at www.macromodelbase.com) shall enhance the accessibility of MMB as well as serve as a widely-used platform for research on model comparison and model replication. The existing website is re-structured and expanded. Part of this expansion is the creation of a discussion forum for researchers to gather information and communicate with the MMCI team as well as with each other.

The website code will be enhanced so that the interactive online platform may be readily used on mobile devices also. A discussion forum is supposed to strengthen the interactive character of the website, facilitating contributing to MMB and carrying out research on model replication at large. An **expansion of the MMB** public archive is among the major goals of this project. The current number of about 93 models (including some variations of the same model core, such as rational expectations and adaptive learning versions of an otherwise similar model) shall be increased to at least 140 models. The additional models to be brought into MMB are supposed to primarily contribute substantively in the areas of:

- (i) Macroeconomic models with heterogeneous banks and their portfolio decisions, systemic risk, interbank market freezes and the risk of default;
- (ii) Macroeconomic models involving the dynamic interaction of heterogeneous firms and households who are using a range of behavioral rules;
- (iii) Macroeconomic models with detailed capturing of the fiscal sector, providing deepened insight specifically into evaluations of tax policy.

In order to complete this expansion of the MMB archive successfully, the MMCI core team will continue to regularly approach authors of relevant models with the aim of integrating these into MMB. As part of this, the MMCI core team is currently setting up a protocol for working with model authors that aims to ensure efficient and timely model replication as well as archive integration, with a more limited work effort for the MMCI core team. A major milestone in this process will be reached when the interactive platform for contributing models to MMB will be in place. At that stage, the core team will take efforts on seeing the macroeconomic model research community taking increased advantage of this platform. Eventually, the model archive is meant to become close to self-expanding, with much less effort from the MMCI core team needed for the integration of individual models into MMB.

Open-source platform

The rewrite of the code underlying MMB drawing on open-source scientific software has begun. The specifications for a GUI in PYTHON have been finalized. The GUI will be able to communicate with both OCTAVE and MATLAB, and share the same corporate identity scheme with the website. PYTHON as a programming language is well suited for the project objectives, as it is entirely open-source and widely used in a broad range of applications that involve scientific programming. In addition to the current functionality of the GUI, both PYTHON and OCTAVE/MATLAB will access a joint database that defines and contains model-specific variables. This database can later also be integrated into the website and provide in-depth information on the set of models, policy rules etc. The interaction between PYTHON and OCTAVE/MATLAB requires major rewriting of the current code underlying MMB, which, however, will also have the positive side effect of condensing legacy code.

The task of rewriting the MMB code is ongoing. In the established tradition of a good many open-source projects, the code and the replication archive have migrated to GitHub.

Once the open-source platform is established, these new features shall be widely communicated not only to the existing group of registered MMB users, but will also be advertised through various other channels at the disposal of the IMFS and its staff, including to researchers in macroeconomics at large as well as monetary, fiscal and macroprudential policy-makers. The current MMB graphical user interface is in the process of being entirely rewritten in PYHTON. This PYHTON interface will communicate the user input to the OCTAVE/MATLAB kernels and retrieve the computational results from the kernels to display these within the GUI. (It may be added here that the MATLAB kernel will be maintained, in part as various institutional users of MMB have indicated that their IT departments would not allow them to install and execute various types of open-source software. At the same time, the OCTAVE kernel will ensure that MMB users who do not have or do not wish to make use of existing access to the proprietary MATLAB software can use the full functionality of MMB on the basis of open-source software only.) It will also be possible to save the results adduced by the kernels, in comma-separated value and other widely used spreadsheet file formats. A database that contains all relevant information about the models in MMB, such as policy rules that can be used and results to be generated, will be commonly accessed by the PYTHON back-end, the OCTAVE/MATLAB kernel, and the interactive website-based platform.

Macroeconomic Modelling and Model Comparison Network (MMCN)



The MMCN is a new research network of the London-based CEPR. The network forms part of 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.

The first annual conference of MMCN took place on June 19 and 20 at Goethe University in Frankfurt. 87 participants from academia, central banks, ministries, financial institutions and other private-sector entities, as well as students and young researchers took part (see Conferences, p. 66). In the plenary and parallel sessions, 25 researchers presented their work on macroeconomic modeling, which was reviewed and commented by 15 discussants. Additionally, 20 posters were presented, often by junior researchers, in the poster sessions. The special focus of this year's conference was on assessing the nominal and real effects of unconventional monetary policy measures within structural macroeconomic models.



To mention just a select few of the contributions, Winston Dou of the University of Pennsylvania contributed a critical review of macroeconomic models for monetary policy from a finance perspective. He pointed to the necessity of an overall coherent quantitative framework for the analysis of price and financial stability, and highlighted key modeling aspects, including fragile public finances, time-varying risk premia and uncertainty shocks, as needing to be considered for an analysis of systemic risk. Furthermore, he stressed the need for adopting nonlinear solution and estimation techniques. Douglas Laxton of the IMF's Economic Modeling Division presented work on the risks of excessive credit expansion and asset price bubbles. He argued that distinguishing good and bad credit expansions ex ante would require an extensive analysis of micro-level data. He also warned that "models can tell very little whether a financial crisis is coming". In a session on the

natural rate of interest, R-star, Marco del Negro of the Federal Reserve Bank of New York argued that monetary policy rates are currently low because of a decline in R-star. He attributed this decline to two factors: a secular decline of R-star as well as an increase in the convenience yield for safe and/or liquid assets. In the same session, Maik Wolters of Schiller University Jena presented work suggesting that the decline of R-star was less pronounced than often assumed. Within the context of an estimated structural macroeconomic model, he adduced evidence that R-star is still positive and that the currently low interest rates can be explained by temporary factors such as temporary risk premium shocks and expansionary monetary policy.

Looking at monetary theory in a low-interest world, John Roberts of the Federal Reserve Board stressed that monetary policy strategies based on traditional simple policy rules lead to poor economic performance when the equilibrium real interest rate is low and economic activity and inflation are volatile. Analyzing the ECB's approach to unconventional monetary policy, Roberto Motto of the ECB argued that the ECB had started late with its measures. In his view, this could be explained by the fact that the ECB's price stability objective was defined as a range rather than a symmetric inflation target. He argued that signs of de-anchoring in the face of commodity price deflation and demand shortfalls called for a bold strategy.



Unconventional monetary policy also took center stage in the presentation by Romanos Priftis of the European Commission, who assessed implications of quantitative easing in the euro area from a large estimated New Keynesian model. His main findings were that the contribution of quantitative easing to euro area real GDP growth and inflation until 2016:Q2 were 0.7 and 0.4 percent,

respectively. Furthermore, his analysis suggested quantitative easing to have stronger effects during extended zero lower bound periods, as well as in adverse macroeconomic environments. A new model for the analysis of global spillovers was presented by Alistair Dieppe of the ECB. The ECB-Global model is a large semi-structural model, allowing for global spillovers via oil markets, financial markets, and trade. Dieppe illustrated various applications of the model such as the investigation of global effects of a normalization of U.S. monetary policy or of a slowdown of growth in China.

The MMCI core team will keep responsibility for the operation of MMCN by providing organizational back-up especially for network communication and the annual MMCN conferences. Providing core team resources to MMCN is in the interest of MMCI, as the network can further enhance the visibility of MMCI, as well as attract new users and contributors to MMCI. There are **two annual conferences to be organized in 2018 and 2019**, following the first annual conference held in 2017.

These conferences will in part feature sessions based on submissions responding to a widely disseminated call for papers. The calls for papers will especially invite research in the areas of structural macroeconomic modeling, model solution, model estimation and model comparison. For 2018 and 2019, it is envisioned to 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. Latest in 2019, part of this comparison shall also entail a model competition, as outlined in the project proposal. Other special topics to be addressed at the MMCN conferences in 2018 and 2019 include tax policy and fiscal consolidation, as well as the macroeconomic effects of structural reforms.

V. Member in the European Banking Institute

Since 2016, the European Banking Institute (EBI) has been serving as an international center for studies of banking and regulation, in particular its legal underpinnings. Goethe University joined the academic members of the EBI with the IMFS and its Managing Director as representative of Goethe University on the EBI Board. IMFS Professor Tobias Tröger is the EBI's Managing Director.

The current 27 academic members include universities from 18 countries of the euro area, which have 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.

In 2017, the EBI organized seven events, such as a conference on major trends in regulation and supervision of the financial sector in 2017 and beyond or a conference on the judicial review in the Banking Union and in the EU financial architecture, jointly organized with Banca d'Italia.

VI. The Researchers

IMFS Professors

As of 2017, the Chair of Monetary Economics is held by Professor Volker Wieland, Ph.D., also Managing Director of the IMFS; the Endowed Chair of Money, Currency and Central Bank Law is held by Professor Dr. Dr. h.c. Helmut Siekmann.

Professor Michael Binder, Ph.D., from the Department of Money and Macroeconomics, and Professor Dr. Tobias H. Tröger, LL.M., contribute to the institute as members of its Board of Directors.

All IMFS professors come together on a regular basis for the Board of Directors meetings to discuss joint research projects as well as organizational aspects and future events. In 2017, the Board of Directors held two meetings, namely on September 20, and December 13.

IMFS Endowed Chair of Monetary Economics

Volker Wieland



Volker Wieland, Ph.D., has held the IMFS 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 about 90 models and over 7500 registered users (see Major Research Projects, p. 31). 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 2017 was cited on 350 occasions, according to Google Scholar. Overall, it received more than 5500 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*. Currently, the international research ranking of bibliographic database IDEAS-REPEC lists Wieland among the top two percent of economists worldwide, the top one percent in Europe and on 17th place among 3900 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 and CSU.

IMFS Endowed Chair of Money, Currency, Central Bank Law
Helmut Siekmann



Prof. Dr. Dr. h.c. Helmut Siekmann has held the IMFS Endowed Chair of Money, Currency, and Central Bank Law since 2006. 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.

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.

IMFS Professor
Michael Binder



Professor Michael Binder, Ph.D., holds the Chair for International Macroeconomics and Macroeconometrics at Goethe University. He also serves as Founding Dean of the Graduate School of Economics, Finance, and Management (GSEFM) at Goethe University, Johannes Gutenberg University Mainz and Technische Universität Darmstadt (with Ph.D. Programs in Economics, Finance, and Marketing). As part of his commitment to further opportunities for young researchers in economics and finance, he continues to serve as chairman of the jury of the Young Innovators Award of *Vordenker Forum*.

Part of Binder's recent research centers around two IMFS-affiliated research projects: the FP7 European Commission project "Integrated Macro-Financial Modelling for Robust Policy Design" as well as the Sloan Foundation Research Project "Macroeconomic Model Comparison Initiative". (see section Major Research Projects, p. 24).

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.

**IMFS 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 non-bank 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. Since 2016, Tobias Tröger has been serving as Managing Director of the newly founded European Banking Institute (EBI), an international center for banking studies. Among the EBI's 27 academic members, the IMFS is the representative of Goethe University.

Pre-Docs and Post-Docs

All Endowed 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.

In 2016, five IMFS researchers completed their Ph.D. programs. Consequently, the year 2017 marked a generational change: six new researchers took up their tasks at the IMFS. Two of these researchers are holding post-doc positions, supported by the Sloan Foundation grant.

Doctoral candidate Ass. iur. **Jan N. Asjoma** studied law at the University of Heidelberg, covering company and capital market law as an elective. Following his post-graduate legal traineeship at the district court of Wiesbaden from 2014 to 2016, Jan started his doctoral thesis at Goethe University on monetary policy with special focus on monetary stability, fractional reserve banking and redistributive effects of current monetary policy. Since 2017, Jan has been working as a research assistant at the Endowed Chair of Money, Currency and Central Bank Law.



Since June 2017, **Gregor Böhl** has been holding a Post-Doc position at the IMFS. 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 had been financed by a scholarship from the Bielefeld Graduate School in Economics and Management. Before, 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.



Mátyás Farkas joined the MACFINROBODS FP7 project in 2014. He is currently pursuing his Ph.D. in Finance at the Graduate School of Economics, Finance, and Management at Goethe University. He acquired his M.Sc. degree at Goethe University in Money and Finance in 2013. The Hungarian born researcher pursued his undergraduate studies at the Corvinus University Budapest and holds two Bachelor's diplomas, one in Finance and Accounting and one in International Relations. Prior to entering the Ph.D., he was an intern at the ECB, at the European Parliament and at the Central Bank of Hungary. In September 2016, he started a Ph.D. internship at the ECB's Monetary Policy Strategy Division. His research interests are related to forecasting using advanced time series methods and structural modeling. His research focuses on incorporating heterogeneous expectations into DSGEs, on practical questions of DSGE solution techniques and advanced time series methods, with special focus on Bayesian Econometrics. Mátyás also participates in the Macro Model Base Team.

Meguy Kuété Ngouguing started working at the institute in 2014, pursuing his project on "Balance sheet policies and quantitative effects of money in new Keynesian models". Born in Cameroon, he came to Germany to study mathematics in Darmstadt. After that, he took up the Ph.D. program at Goethe University. As a member of the Macro Model Base team of Volker Wieland, Meguy is 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 2017, Meguy worked as an intern at 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 and is currently visiting the ECB's research department as a trainee. 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.

Lazar Milivojević joined the IMFS in April 2017. As a member of the Macroeconomic Model Data Base (MMB) team, he is involved in further integrating new macroeconomic models into this platform. Additionally, he serves as a teaching assistant of Volker Wieland's Ph.D. course: "Monetary and Fiscal Policy: Theory and Practice". He is currently a third-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 policies and their interactions.



As a research assistant at the Endowed Chair of Money, Currency and Central Bank Law **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. She initially joined the IMFS as a student assistant in November 2011 and graduated in law from Goethe University (first state examination in law) in 2013. 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.



Felix Strobel, Ph.D., joined the institute in September 2017 as a postdoctoral researcher. He is supporting the extension of the Macroeconomic Database (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. 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*).



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 in April 2014 to work on her doctoral dissertation. As a German-American, Caren has a special interest in financial supervision in Europe and the United States. While her research mainly concentrates on money and currency law, she is also interested in banking and capital markets law.

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 policy-making institutions and in the financial sector that 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 Board of Trustees of the IMFS 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 first 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. 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 January 2017, Tobias Adrian took over as Financial Counsellor and Director of the Monetary and Capital Markets Department of the IMF in Washington. Until then, he was 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 that capacity, he had contributed to the New York Fed's financial stability policy and to its 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".

Dr. Emanuel Mönch



Foto: Frank Rumpfenhorst

Dr. Emanuel Mönch is Head of Research at Deutsche Bundesbank. 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. Since 2007, Mönch had been working at the research group of the Federal Reserve Bank in New York until he took over as Head of the Research Center of the Deutsche Bundesbank in 2015. 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.

Athanasios Orphanides, Ph.D.



Athanasios Orphanides, Ph.D., is Senior Lecturer 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.

Athanasios Orphanides, Ph.D., is Senior Lecturer 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 Assistant 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 II-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. Julia Redenius-Hövermann is Assistant 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 II-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. 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. Wolters is also a Research Fellow at the Kiel Institute for the World Economy (IfW).

Conversations with former IMFS researchers



Tilman Bletzinger, ECB

“My expertise at the IMFS helped me to work with a holistic approach”

Tilman Bletzinger joined the Chair of Monetary Economics at the IMFS as a research assistant from 2012 until August 2016 with a focus on monetary and fiscal policies since the financial crisis. In 2014, he obtained his M.Sc. degree in Quantitative Economics at Goethe University. Prior to entering the Ph.D. program, he completed his undergraduate studies at Maastricht University and University of California, Los Angeles. In 2016, he entered the ECB graduate program where he now works in the risk strategy division of the Directorate Risk Management.

How would you describe your job to other people?

I am an economist in the risk management function of the European Central Bank. It is our task to protect the ECB's balance sheet against financial risks and to ensure that its monetary policy is implemented in a risk-efficient way. In this context, risk efficiency means that the chosen stance of monetary policy (be it conventional or unconventional) is implemented in the least risky fashion from the perspective of the ECB and the Eurosystem.

What are your main tasks at the ECB?

Within the Directorate Risk Management, I am working in the Risk Strategy Division. This division is responsible for the design and maintenance of the risk management frameworks. My specific tasks relate to the third covered bond purchase programme (CBPP3), the public sector purchase programme (PSPP) and the collateral framework for standard refinancing operations. I am responsible for preparing background analyses, drafting and presenting policy proposals internally in the ECB and to the Eurosystem, and writing policy briefings for the ECB Executive Board and the Governing Council.

What do you like most about your job?

While being a relatively small directorate, the Directorate Risk Management is involved in a large amount of policy decisions taken at the ECB due to the very nature of its operations, which all inherit some sort of financial risk. As a result, it is crucial to have both a broad and, at the same time, deep understanding of the different operations. I like the broad range of tasks and the corresponding variety in my work. Moreover, all tasks I am working on have an impact on the Eurosystem and hence often contain a political dimension as well. The ensuing challenges certainly enrich my daily work.

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

At the IMFS, I was working on my dissertation with the entitled 'Essays on the monetary policy in the euro area'. As the title suggests, I mainly worked on questions related to monetary policy in the euro, starting from more applied research on how the ECB set its interest rate in the past and how it embarked on forward guidance (together with Prof. Volker Wieland) up to purely theoretical research on questions about quantitative easing in a multi-country model of a currency area. As part of my job at the IMFS, I was also responsible for the regular calculation of interest rate prescriptions resulting from different interest rate rules.

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

Having worked at the Chair of Monetary Economics of Prof. Wieland at the IMFS, I was continuously exposed to the current political debate about monetary policy. The possibility to attend a number of great events, such as lectures and conferences, including “The ECB and Its Watchers” conference, helped me understand monetary policy better and also form my own view on the various decisions. This expertise allows me to prepare policy briefings at the ECB, not only with a technical, expert-based analysis but also with a more holistic approach.

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

The IMFS made it possible to combine my work and the research for my dissertation as part of my doctorate. I am thankful for this valuable opportunity. Also the fact that the IMFS has contributed and shaped the current political debate made my time very interesting and passing by quickly



Patrick Tuschl, FPS Lawyers
“Interdisciplinarity is important for legal work”

As a doctoral candidate at the Endowed Chair of Money, Currency and Central Bank Law, Diplom-Jurist Patrick Tuschl studied the EU recovery and resolution directive and the German bridge bank tool. After completing his doctoral research in July 2016, he took up a position as a lawyer at the Frankfurt-based law firm FPS.

How would you describe your job to other people? What are your main tasks?

Our team advises owners and operators of nursing homes on acquisitions and regulatory affairs.

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

The focus was on matters regarding safeguarding financial market stability, in particular the intervention and resolution tools set in force after the financial crisis of 2007.

How did you benefit from the interdisciplinary work at the IMFS?

Interdisciplinary work, as done at the IMFS, is an important characteristic of legal work in business sectors as the nursing home sector.

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

Working together with interesting and high potential colleagues.

Teaching Concept and Activities

In 2008, the Faculty of Economics and Business Administration established, in cooperation with the Johannes Gutenberg University of Mainz, the “Graduate School of Economics, Finance and Management (GSEFM)”. Currently, 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.

Since 2011, Helmut Siekmann has been offering an interdisciplinary seminar on law, monetary and financial economics conducted as a block seminar. Siekmann organized his seminar jointly with Volker Wieland, Günter Beck or IMFS Distinguished Fellow and former Chairman of the Council of the Foundation for Monetary and Financial Stability Hermann Remsperger. Experts from the ECB, the Bundesbank and the Federal Financial Supervisory Authority (BaFin) also participate regularly.

In his own courses, Volker Wieland primarily focuses on teaching second year Ph.D. students. The courses focus on theory and practice of monetary and fiscal theory as well as various aspects of macro-financial modeling.

Prof. Volker Wieland, Ph.D.

1. Macro-Financial Modeling: Economic Frictions, Monetary and Fiscal Policy

Winter semester 2016/17 (18.10.2016-07.03.2017)

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 will consist of a combination of lectures, supervision of modeling projects, student presentations and group discussions with extensive feedback. Each project, which should ideally be pursued by a team of two students, will involve studying an existing macroeconomic model from the literature. Students are guided in the development of a software implementation of the model in DYNARE with a policy application. At the end of the seminar, students should be able to start working on a dissertation project that involves structural macroeconomic modeling. Successful participation in this seminar is a precondition for the supervision of a dissertation at the chair.

Students are expected to give two short presentations for group feedback. The first presentation will discuss the assigned paper from the literature and modeling project. It will take place in the middle of the semester. The second presentation will report on the implemented model and policy application. Grading for the seminar course is based on a problem set, presentations and model implementation

2. Monetary and Fiscal Policy: Theory and Practice

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

Summer semester 2017 (18.04.17-31.05.18)

Winter semester 2017/18 (12.12.17-07.02.18)

The objective of this course is to provide an introduction to the analysis of monetary and fiscal macro-prudential policy making with practical applications to current policy challenges. Examples from 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 will also conduct practical simulation exercises and make use of MATLAB-based software tools for model analysis.

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

1. Einstandspflicht des deutschen Steuerzahlers für die EZB und andere Notenbanken des Eurosystems

(The liability of German tax payers for the ECB and other central banks of the Eurosystem)

- Block seminar
- Winter semester 2016/17 (23./24.01.2017)
- Summer semester 2017 (07./08.07.2017)
- Law students can obtain an evidence of academic achievement in one of the following key areas: “internationalization and Europeanization of law”, “law and finance” or “constitution, administration and regulation”
- Students of the master program in economics and business studies can obtain evidence of academic performance in “International Economics and Economic Policy” and “Money and Finance”
- Topics:
 - Die Bilanz einer Notenbank im Überblick (jur. und ökon.)
 - Risiken in der Bilanz einer Notenbank und ihre Folgen für Eigentümer oder Träger der Einrichtung (ökon.)
 - Die Bedeutung des Eigenkapitals einer Notenbank (jur. und ökon.)
 - Die Entstehung von Verlusten einer Notenbank (jur. und ökon.)
 - Die tatsächliche Behandlung von negativem Eigenkapital einer Notenbank in der Vergangenheit (jur. und ökon.)
 - Vorgaben für die Qualität der von einer Zentralbank des Eurosystems angekauften oder als Sicherheiten akzeptierten Vermögenswerte (jur. und ökon.)
 - Die allgemeine Diskussion über Haftung und Nachschusspflicht des Trägers einer juristischen Person des öffentlichen Rechts (jur.)
 - Haftung für Verluste der EZB oder einer anderen Zentralbank des Eurosystems (jur.)
 - Haftung des Bundes für die Deutsche Bundesbank (jur.)
 - Pflicht zum Ausgleich von Verlusten der Deutschen Bundesbank durch die Bundesrepublik Deutschland (jur. und ökon.)
 - Pflicht zum Ausgleich von Verlusten der EZB (jur. und ökon.)
 - Pflicht zum Ausgleich von Verlusten einer anderen Zentralbank des Eurosystems (jur. und ökon.)

2. How deep is your law? Brexit, Technologies, Modern Conflicts

- 5th International Conference of Ph.D. Students and Young Researchers, Vilnius, Lithuania
- 27./28.04.2017
- Moderator

3. Introduction to German Constitutional Law

- Summer Academy
- Goethe University and Thammasat University Bangkok
- 28.06.2017

4. International Monetary and Financial Law

- Frankfurt Summer School
- Goethe University and Thammasat University Bangkok
- 31.07.2017

Prof. Michael Binder, Ph.D.

1. Macroeconomics 1 (12 CP)

(winter semester 2016/17, winter semester 2017/18)

This is a large-scale course in the Faculty's Bachelor program. The primary purpose of this course was to give participants a thorough grounding in macroeconomic theory, building up an understanding of macroeconomic measurement and developing a modelling framework to analyze the two issues at the core of macroeconomic analysis: business cycles and economic growth. This modelling framework provided the basis for the course to discuss some of the current macroeconomic issues subject to public scrutiny.

As a novel feature in winter semester 2017/18, the course introduced new Excel-based workbooks for the quantitative analysis of business cycle and growth models.

2. Advanced Econometrics 2 (4 CP)

(summer semester 2017)

This is a first-year course in the Ph.D. programs of GSEFM. The course examined single- and multiple-equation modelling in time series and panels, with a specific focus on so-called autoregressive distributed lag models, vector autoregressions and vector error correction models.

3. Macroeconometric Forecasting (6 CP)

(summer semester 2017)

This is a specialization course for students in the Master program in Money and Finance, as well as International Economics and Economic Policy. The course provided (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.

4. Topics in Macroeconometrics (6 CP)

(summer semester 2017)

This is a seminar for second- and third-year students in the Ph.D. programs of GSEFM. The seminar examined issues in time-series econometrics, with a specific emphasis on forecasting using reduced-form and structural models.

5. Econometric Issues in the Analysis of DSGE Models (6 CP)

(winter semester 2017/18)

This is a seminar for second- and third-year students in the Ph.D. programs of GSEFM. It encompassed (i) a lecture-based discussion of issues in the econometrics analysis of DSGE models: model solution, model identification, model estimation using instrumental variables and using Bayesian likelihood techniques, and (ii) student-contributed presentations on bringing new models within the DSGE class to the Macroeconomic Model Database, and using these for purposes of policy analysis.

6. Orientation sessions for first-, second- and third-year students of the Graduate School of Economics, Finance, and Management (GSEFM)

(winter semester 2016/17, winter semester 2017/18)

7. Organization of pre-semester courses in mathematics, statistics and econometrics for first-year students of GSEFM

(winter semester 2016/17, winter semester 2017/18)

8. Goethe Graduate Academy (GRADE) Workshop on Scientific Paper Writing: Special Focus on Economics and Finance

(summer semester 2017)

9. Supervision of theses at the Bachelor, Master and Ph.D. levels

(winter semester 2016/17, summer semester 2017, winter semester 2017/18)

Prof. Dr. Tobias Tröger, LL.M

Winter Semester 2016/17:

Current Issues Corporate Governance - SWS)	Seminar
European law on banking supervision - 2.0 SWS	Colloquium
Corporate law - 2.0 SWS	Lecture with exercises
Tutorials on corporate law – 14-day interval	
Legal revision course	

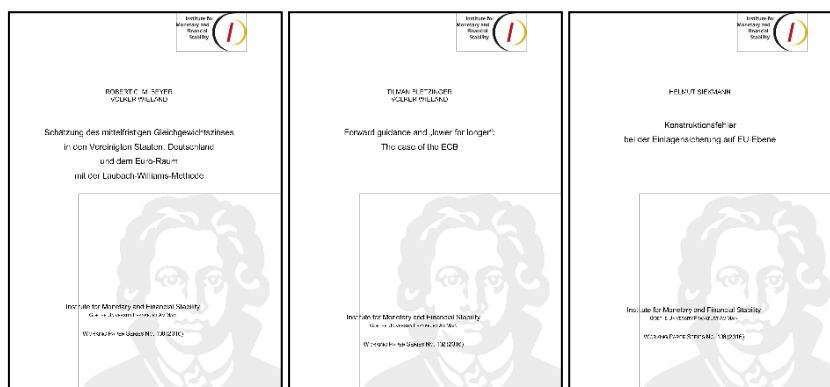
Summer Semester 2017:

Capital Markets Law - 2.0 SWS	Colloquium
Topics in Corporate Governance - 2.0 SWS	Seminar
Tutorial on Civil law III b (property law)	
Civil law III b (property law) - 4.0 SWS	Lecture with exercises

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. 120** Helmut Siekmann
Die Einstandspflicht der Bundesrepublik Deutschland für die Deutsche Bundesbank und die Europäische Zentralbank
- No. 119** Gregor Böhl
Monetary Policy and Speculative Stock Markets
- No. 118** Gregor Böhl, Thomas Fischer
Can Taxation Predict US Top-Wealth Share Dynamics?
- No. 117** Tobias Tröger:
Why MREL Won't Help Much
- No. 116** Tobias Tröger:
Too Complex to Work - A Critical Assessment of the Bail-in Tool under the European Recovery and Resolution Regime
- No. 115** Günter Beck, Volker Wieland:
How to Normalize Monetary Policy in the Euro Area
- No. 114** Michael Binder, Jorge Quintana, Philip Lieberknecht, Volker Wieland:
Model Uncertainty in Macroeconomics: On the Implications of Financial Frictions
- No. 113** Mewael F. Tesfaselassie, Maik Wolters:
The Impact of Growth on Unemployment in a Low vs. a High Inflation Environment
- No. 112** Gerhard Rösl, Franz Seitz, Karl-Heinz Tödter:
Doing away with cash? The welfare costs of abolishing cash
- No. 111** Jinhyuk Yoo:
Capital Injection to Banks versus Debt Relief to Households
- No. 110** Robert C.M. Beyer, Volker Wieland:
Instability, imprecision and inconsistent use of equilibrium real interest rate estimates

- No. 120** **Helmut Siekmann**
Die Einstandspflicht der Bundesrepublik Deutschland für die Deutsche Bundesbank und die Europäische Zentralbank
- In this paper on the liability of the Federal Republic of Germany for the Deutsche Bundesbank and the ECB, the author comes to the conclusion that there is neither a liability of the Federal Republic of Germany for the national central bank nor for the ECB.
- No. 119** **Gregor Böhl**
Monetary Policy and Speculative Stock Markets
- Financial market interactions can lead to large and persistent booms and recessions. Instability is an inherent threat to economies with speculative financial markets. A central bank's interest rate setting can amplify the expectation feedback in the financial market and this can lead to unstable dynamics and excess volatility. The paper suggests that policy institutions may be well-advised to handle tools like asset price targeting with care since such instruments might add a structural link between asset prices and macroeconomic aggregates. Neither stock prices nor indices are a good indicator to base decisions on.
- No. 118** **Gregor Böhl, Thomas Fischer**
Can Taxation Predict US Top-Wealth Share Dynamics?
- The level of capital tax gains has high explanatory power regarding the question of what drives economic inequality. On this basis, the authors develop a simple, yet micro-founded portfolio selection model to explain the dynamics of wealth inequality given empirical tax series in the US. The results emphasize that the level and the transition of speed of wealth inequality depend crucially on the degree of capital taxation. The projections predict that – continuing on the present path of capital taxation in the US – the gap between rich and poor is expected to shrink whereas “massive” tax cuts will further increase the degree of wealth concentration.
- No. 117** **Tobias Tröger**
Why MREL Won't Help Much
- The bail-in tool as implemented in the European bank resolution framework suffers from severe shortcomings. The author argues that it is hardly conceivable that the pricing of instruments for the minimum requirements for own funds and eligible liabilities (MREL) reflects an accurate risk-assessment of investors because of the many discretionary choices a multitude of agencies are supposed to make and revisit in the administration of the new regime.
- No. 116** **Tobias Tröger**
Too Complex to Work - A Critical Assessment of the Bail-in Tool under the European Recovery and Resolution Regime
- This paper analyzes the bail-in tool under the Bank Recovery and Resolution Directive (BRRD) and predicts that it will not reach its policy objective, putting forward an alternative regulatory approach that seeks to disentangle private sector involvement as a precondition for effective bank-resolution.
- No. 115** **Günter Beck, Volker Wieland**
How to Normalize Monetary Policy in the Euro Area
- The authors argue that the ECB should develop a strategy for policy normalization and communicate it very soon to prepare the ground for subsequent steps towards tightening. It provides analysis and makes proposals concerning key aspects of this strategy.

- No. 114** **Michael Binder, Jorge Quintana, Philip Lieberknecht, Volker Wieland**
Model Uncertainty in Macroeconomics: On the Implications of Financial Frictions
The authors argue that the speedy adoption of New Keynesian DSGE models featuring financial frictions in the toolkit of central banks should be acclaimed and central banks would be well advised to increase the diversity of modelling approaches they employ.
- No. 113** **Mewael F. Tesfaselassie, Maik Wolters**
The Impact of Growth on Unemployment in a Low vs. a High Inflation Environment
The authors demonstrate that the effect of growth on unemployment may be positive or negative. Faster growth leads to lower unemployment if the rate of inflation is high enough. There is a threshold level of inflation, below which faster growth leads to higher unemployment and above which faster growth leads to lower unemployment.
- No. 112** **Gerhard Rösler, Franz Seitz, Karl-Heinz Tödter**
Doing away with cash? The welfare costs of abolishing cash
To broaden the scope of monetary policy, cash abolishment is often suggested as a means of breaking through the zero lower bound. Rösler, Seitz and Tödter gauge the welfare effects of abolishing cash for the euro area and for Germany.
- No. 111** **Jinhyuk Yoo**
Capital Injection to Banks versus Debt Relief to Households
Yoo comes up with a dynamic stochastic equilibrium (DSGE) model to evaluate the relative effectiveness of a policy to inject capital into banks versus a policy to relieve households of mortgage debt. He concludes that in the middle of a housing debt crisis, when households are highly leveraged, the short-run effects of the debt relief policy are more substantial.
- No. 110** **Robert C.M. Beyer, Volker Wieland**
Instability, imprecision and inconsistent use of equilibrium real interest rate estimates
Beyer and Wieland re-estimate the U.S. equilibrium rate with the methodology of Laubach and Williams and further modifications, finding evidence for great uncertainty and sensitivity.

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”

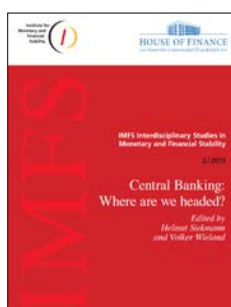
Over the past years, the ECB’s expansionary monetary policy has reached an unprecedented scale. The aim of the study is to shed some light on the risks and a possible exit strategy. It contains contributions by Peter Praet (ECB), Julian Callow (Element Capital), David Folkerts-Landau and Stefan Schneider (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 (ESRB) with speeches by central bankers and researchers.

III. External Publications

In 2017, much of **Volker Wieland's** research focused on the architecture of the euro area and the consequences of low interest rates. His findings in this area were also integrated in his publications as a member of the **German Council of Economic Experts (GCEE)**. As illustrated in the GCEE's Annual Report 2017/18 "Towards a forward-looking economic policy", the extension of the ECB's bond purchase program further increases the degree of monetary policy expansion. Given the higher rates of growth and inflation and increased risks to financial stability, for quite some time the Council has been strongly recommending that the ECB should publish a strategy for monetary policy normalization and end the bond purchase program earlier than planned. Furthermore, the Governing Council of the ECB should enhance its forward guidance communication to make it easier for market participants to form expectations and increase the effectiveness of monetary policy.



In a paper published by the **scientific journal "Economics Letters"**, Volker Wieland and former IMFS researcher Tilman Bletzinger analyze the ECB's monetary policy. Especially, they investigate to what extent past ECB decisions can be explained with a simple reaction function and whether the policy easing implemented since summer 2013 deviates from it. Bletzinger and Wieland come to the conclusion that the policy easing deviates since 2015, thereby indicating a lower-for-longer approach to monetary policy at the lower end. The paper was first published as IMFS Working Paper No. 102 in 2016.

Apart from that, Wieland's **research on neutral interest rates** loomed large in 2017. 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 two debates, John C. Williams, President of the San Francisco Fed, and Volker Wieland discussed the issues of the neutral interest rate (see Highlights, p. 9). Together with co-author Henrike Michaelis, Wieland explained in two VoxEU columns why estimates of medium-run equilibrium real rates are extremely uncertain and sensitive to technical assumptions. However, if used nevertheless, a consistent application together with associated output estimates calls for a tightening of the policy stance. He also contributed his research on R-Star, "The Natural Rate and Its Role in Monetary Policy", to the book "The Structural Foundations of Monetary Policy", edited by Michael D. Bordo, John H. Cochrane, Amit Seru and published in March 2018.

Tobias Tröger contributed his legal expertise significantly to scientific journals, such as *Neue Juristische Wochenschrift* or *Europäische Zeitschrift für Wirtschaftsrecht*. Besides analyzing case studies in corporate, banking and contract law, he focused on the regulation of shadow banks and banking regulation in general. Together with **Helmut Siekmann**, Tröger also was involved in editing the *Festschrift für Theodor Baums*. 95 authors contributed 86 essays regarding current legal issues in German, European and international commercial law. The Liber amicorum was presented during an official ceremony in May 2017 (see Highlights, p. 8).



Publications at a Glance

Articles in scientific journals in economics, finance and law

- MB On the Conditional Effects of IMF Program Participation on Output Growth, *Journal of Macroeconomics*, 51, pp. 192-214 (with Marcel Bluhm)
- TT Prudentielle Regulierung von Schattenbanken (Prudential Regulation of Shadow Banks), 116 *Zeitschrift für Vergleichende Rechtswissenschaften (ZVglRWiss)* 287-298 (2017)
- TT Zum Nutzen der Rechtsökonomik für die Rechtswissenschaft (The Relevance of Economic Analysis for Legal Scholarship), 4 *Ad Legendum (AL)* 273-280 (2017) (with Philipp Scheibenpflug)
- TT Fünf Jahre nach dem Liikanen-Bericht: Was haben wir gelernt? (Five Years after the Liikanen-Report: What have we learned?) 18 *Perspektiven der Wirtschaftspolitik (PWP)*, 205-225 (2017) (with Jan Pieter Krahen and Martin R. Götz)
- TT Book Review: *Kreditwesengesetz (Banking Act)* (Andreas Schwennicke and Dirk Auerbach (eds.), 3 ed. 2016), 71 *Zeitschrift für Wirtschafts- und Bankrecht (WM)* 159-160 (2017)
- TT Case Note on the Judgement of the EGC of 05/16/2017 - T-122/15 - Landeskreditbank Baden-Württemberg - Förderbank/Europäische Zentralbank (EZB), 12 *Europäische Zeitschrift für Wirtschaftsrecht (EuZW)* 472-473 (2017)
- TT Case Note on the Judgement of the BGH of 07/04/2017 - XI ZR 233/16, 70 *Neue Juristische Wochenschrift (NJW)* 2994-2995 (2017)
- TT Case Note on the Judgement of the BGH of 11/15/2016 - II ZR 217/15 - 33 *Entscheidungsanmerkungen zum Wirtschafts- und Bankrecht (WuB)* 264-267 (2017)
- TT Remarks on the German Regulation of Crowdfunding, 12 *Revue Trimestrielle de Droit Financier/Corporate Finance and Capital Markets Law Review* 79-84 (2017)
- VW Lower for longer: The case of the ECB, *Economics Letters* 159, 123-127 (with Tilman Bletzinger)

Books

- VW Für eine zukunftsorientierte Wirtschaftspolitik (Towards a forward-looking economic policy), Annual Report 2017/18 of the German Council of Economic Experts (GCEE)

Contributions to books

- HS Die Einstandspflicht der Bundesrepublik Deutschland für die Deutsche Bundesbank und die Europäische Zentralbank (The warranty obligation of the Federal Republic of Germany for the Deutsche Bundesbank and the European Central Bank), in: Helmut Siekmann (ed.), *Festschrift für Theodor Baums zum siebzigsten Geburtstag (Festschrift on the occasion of the 70th birthday of Theodor Baums)*, Mohr Siebeck, May 2017, pp. 1145-1179

- HS Exit, exclusion, and parallel currencies in the euro area, in: Thibaut Massart and Abdoulaye Mbotaingar (eds.), *Liber amicorum en l'honneur du Professeur Joël Monéger* (Festschrift in honor of Prof. Joël Monéger), Lexis Nexis, May 2017, pp. 773-796
- HS Restricting the Use of Cash in the European Monetary Union: Legal Aspects, in: Frank Rövekamp, Moritz Bälz, Hanns Günther Hilpert (eds.), *Cash in East Asia*, Springer International, Cham et al., 2017, pp. 153-178
- HS Kommentierung von Abschnitt VIII a (Art. 91 a bis 91 e) und Abschnitt X (Vorbemerkungen, Art. 104 a bis 115) des Grundgesetzes sowie von Art. 88, 120, 120 a, 125 c, 143 c, 143 d, 143 f und 143 g GG, in: Michael Sachs (Hrsg.), *Grundgesetz*, 8. Auflage, C.H.Beck, München, 2018 (Dezember 2017 erschienen); völlig neue Bestimmungen: Art. 104 c, 143 f, 143 g; geänderte Vorschriften: Art. 91 c, 104 b, Art. 107, 108, 109 a, 114, 125 c, 143 d (Gesetz zur Änderung des Grundgesetzes vom 13. Juli 2017, BGBl I 2347)
- TT Kapitalschutz fünf Jahre nach „Telekom III“ (Capital Protection Five Years after “Telekom III”), in *Festschrift für Theodor Baums zum siebzigsten Geburtstag* (Festschrift on the occasion of the 70th birthday of Theodor Baums), pp. 1249-1266 (Helmut Siekmann, Andreas Cahn, Tim Florstedt, Katja Langenbacher, Julia Redenius-Hövermann, Tobias Tröger, Ulrich Segna, eds., Tübingen, Mohr Siebeck, 2017)
- TT §§ 133 - 134, 136 - 137 AktG in: *Kölner Kommentar zum AktG* (Cologne Commentary on the Stock Corporation Act) in Wolfgang Zöllner and Ulrich Noack (eds.), Cologne, Wolters Kluwer, 2017
- TT §§ 446, 447 BGB in *beck.online.Großkommentar* in Beate Gsell/Wolfgang Krüger/Stephan Lorenz/Jörg Mayer (eds.), Munich: C.H. Beck, 3rd Edition 03/01/2017, 4th Edition 06/01/2017)
- TT § 6 Die Entstehung der Personenhandelsgesellschaft im Außenverhältnis (The Establishment of a Commercial Partnership in Relation to Third Parties), in *Handbuch der Personengesellschaften* (Handbook of Partnerships), Harm Peter Westermann and Johannes Wertenbruch (eds.), Cologne: Dr. Otto Schmidt, 4th ed. 68th delivery. loose-leaf 08/2017
- TT § 59 Die Personengesellschaft im Unternehmensverbund (The Partnership in a Group of Companies), in *Handbuch der Personengesellschaften* (Handbook of Partnerships) I 2921 - I 3000, Harm-Peter Westermann and Johannes Wertenbruch (eds.), Cologne: Dr. Otto Schmidt, 4th ed. 1994, 68th delivery, loose-leaf 02/2017
- VW Negativzinsen: Geldpolitik oder Gleichgewichtszins? (Negative interest rates: Monetary policy or neutral interest rate?) in: *Swiss National Bank* (ed.), *Monetary Economic Issues Today*. Festschrift zu Ehren von Ernst Baltensperger, Orell-Füssli-Verlag, July 2017

Editorships

- HS, TT Festschrift für Theodor Baums zum siebzigsten Geburtstag (Festschrift on the occasion of the 70th birthday of Theodor Baums), Helmut Siekmann, Andreas Cahn, Tim Florstedt, Katja Langenbacher, Julia Redenius-Hövermann, Tobias Tröger, Ulrich Segna (eds.), Mohr Siebeck, May 2017
- VW Quantitative Easing in the Euro Area: Its Record and Future Prospects, edited with Günter Beck, IMFS Interdisciplinary Studies 1/2017, September 2017

Policy Papers

- EA, MB, Robust Monetary, Fiscal and Macroprudential Rules for the Euro Area, MACFINROBODS
PL, JQ, Policy Brief D11.6, March 2017
VW
- TT Taking Bail-in Seriously – The Looming Risks for Banking Policy in the Rescue of Monte Paschi di Siena, SAFE Policy Letter No. 54
- TT Fines for Misconduct in the Banking Sector – What is the Situation in the EU? In-Depth Analysis for the Committee on Economic and Monetary Affairs of the European Parliament, expert opinion, available via European Parliament Think Tank, with Martin R. Götz
- TT EU Mapping 2017: Systematic overview on economic and financial legislation, graphic overview and explanations for the Committee on Economic and Monetary Affairs of the European Parliament, expert opinion, available via European Parliament, with Katja Langenbacher, Lara L. Milione and Andreas Roth
- VW How to Normalize Monetary Policy in the Euro Area, co-author: Günter Beck, IMFS Working Paper No. 115, September 2017
- VW Weckruf für die deutsche Wirtschaftspolitik (Wake-up call for the German economic policy), co-authors: Lars P. Feld, Clemens Fuest, Justus Haucap, Heike Schweitzer, Berthold U. Wigger, Kronberger Kreis Study No. 64, Berlin
- VW Diskriminierungsverbote für die digitale Welt (Prohibition of discrimination for the digital world), co-authors: Lars P. Feld, Clemens Fuest, Justus Haucap, Heike Schweitzer, Berthold U. Wigger, Kronberger Kreis Study No. 63, Berlin

Working Papers

- GB Monetary Policy and Speculative Stock Markets, IMFS Working Paper No. 119
- GB Can Taxation Predict US Top-Wealth Share Dynamics?, co-author: Thomas Fischer, IMFS Working Paper No. 118
- HS Die Einstandspflicht der Bundesrepublik Deutschland für die Deutsche Bundesbank und die Europäische Zentralbank (The liability of the Federal Republic of Germany for the Deutsche Bundesbank and the European Central Bank), IMFS Working Paper No. 120
- MB, PL, Model Uncertainty in Macroeconomics: On the Implications of Financial Frictions, CEPR

- JQ, VW Discussion Paper 12013 and IMFS Working Paper No. 114, April 2017, forthcoming in: The Economics of Central Banking: An Oxford Handbook in Economics, 2018, Oxford University Press
- MB, PL, JQ, VW Robust Macroprudential and Regulatory Policies under Model Uncertainty, MACFINROBODS Paper D11.5, March 2017
- TT Too Complex to Work - A Critical Assessment of the Bail-in Tool under the European Recovery and Resolution Regime, IMFS Working Paper No. 116
- TT Why MREL Won't Help Much, IMFS Working Paper Series No. 117
- TT Remarks on the German Regulation of Crowdfunding, SAFE Working Paper No. 184
- VW Instability, imprecision and inconsistent use of equilibrium real interest rate estimates, co-author: Robert C.M. Beyer, IMFS Working Paper No. 110 and CEPR Discussion Paper No. 11927
- VW Die Balance zwischen Eigenverantwortung und gemeinschaftlichem Handeln für ein starkes Europa (The balance between national responsibility and joint action for a strong Europe), co-authors: Lars P. Feld, Christoph M. Schmidt, Isabel Schnabel, Wirtschaftsdienst – Zeitschrift für Wirtschaftspolitik, 97 (7), July 2017.

Miscellaneous

- VW R-Star and the Draghi rules: Correctly measuring the equilibrium interest rate for policy use, co-author: Henrike Michaelis, VoxEU, May 2017
- VW R-Star and the Yellen rules, co-author: Henrike Michaelis, VoxEU, February 2017
- VW Risiken und Nebenwirkungen einer lang anhaltenden Niedrigzinspolitik (Risks and side-effects of a long-lasting low interest rate policy), in: Nullzinsen in Europa (Zero interest rates in Europe), conference report of the 5th Kaden Talks, February 2017
- EA: Elena Afanasyeva
- GB: Gregor Böhl
- HS: Helmut Siekmann
- JQ: Jorge Quintana
- MB: Michael Binder
- PL: Philipp Lieberknecht
- TT: Tobias Tröger
- VW: Volker Wieland

IV. Presentations

Conferences and Seminar Presentations at a Glance

Keynote and major public speeches

13.12.	Frankfurt	Towards a forward-looking economic policy. IMFS Policy Lecture	VW
08.12.	London / UK	Towards a forward-looking economic policy. CEPR	VW
08.12.	London / UK	Towards a forward-looking economic policy. CDU economic council	VW
29.06.	Frankfurt	The macroeconomic situation and interest rate expectations, Handelsblatt annual forum on company valuations	VW
04.05.	Stanford / USA	R-star. The natural rate. Hoover Institution and Stanford University. The Structural Foundations Of Monetary Policy: A Policy Conference	VW
06.04.	Frankfurt	Moderated debate on natural interest rates with John C. Williams, San Francisco Fed. The ECB and Its Watchers conference	VW
23.03.	Berlin	Low interest rate as a horror for savers. German Association of Savings Banks (DSGV), 9 th forum private household	VW



Volker Wieland at the Handelsblatt annual forum on company valuations, giving a keynote speech on the macroeconomic situation and interest rate expectations. Major discussions and key speeches usually have an audience of more than a hundred participants.
(Foto: Handelsblatt Fachmedien/Michael Heipel)

Speeches

07.12.	London / UK	Towards a forward-looking economic policy. Official Monetary and Financial Institutions Forum (Omfif)	VW
30.11.	Frankfurt	Towards a forward-looking economic policy. Rotary Club	VW
23.11.	Frankfurt	Proposals of the Council of Economic Experts regarding the stabilization of the financial system. Colloquium of the Institute for Banking and Financial History (IBF)	VW
16.11.	Frankfurt	Towards a forward-looking economic policy. Euro Finance Week, executive roundtable of chief economists	VW

13.11.	Helsinki / Finland	Towards a forward-looking economic policy. Municipal Guarantee Board	VW
10.11.	Frankfurt	R-Star, neutral interest rates and monetary policy. Research on Money in the Economy (ROME) Network	VW
02.11.	Bologna / Italy	Can taxation predict US top-wealth share dynamics? International Conference on Inequality: Trends in inequality: social, economic and political issues	GB
20.10.	Frankfurt	Germany's Reluctance to Regulate Related Party Transactions, European Corporate Governance Institute – Oxford University, SAFE Conference on The Law and Finance of Related Party Transactions	TT
19.09.	Frankfurt	How to normalize monetary policy in the euro area, Circle of Friends of "The ECB and Its Watchers"	VW
07.09.	Hannover	Umgang mit Negativzinsen, Fachtagung Bankrecht, Sparkassenakademie Niedersachsen	TT
06.07.	Paris / France	Séminaire franco-allemand sur l'actualité du droit des sociétés et du droit des marchés financiers 2017, Université Paris I (Sorbonne): Crowdfunding under German Law	TT
29.06.	Frankfurt	Restricting the use of cash in the euro area and the concept of legal tender, ECB legal colloquium: Return to lender: The legal nature of euro banknotes	HS
29.06.	Florence / Italy	Executive Seminar on Banking and Resolution, Navigating through TLAC and MREL, Florence School of Banking and Finance, European University Institute (EUI)	TT
28.06.	New York / USA	Monetary policy and speculative stock markets. 23 rd International Conference of the Society for Computational Economics	GB
24.06.	Bad Homburg	Does Say on Pay Matter? Evidence from the German Natural Experiment. ETH, NYU, SAFE Law & Banking/Finance Conference	TT
20.06.	Brussels / Belgium	Banking Package Review. QED Conference	TT
16.06.	Milan / Italy	Bank Managers' Duties Towards Shareholders and Debtholders. Society of European Contract Law (SECOLA) Annual Conference, Bocconi University	TT
14.06.	Frankfurt	Chair on panel on "Benefits on boundaries of unconventional monetary policy" with Masaaki Shirakawa, Jean-Claude Trichet and Axel Weber. Bundesbank conference on Frontiers in Central Banking – Past, Present and Future	VW
02./03.06.	Tokyo / Japan	The Changing Structure of Ownership. Global Corporate Governance Colloquia (GCGC)	TT
20.05.	Frankfurt	Academic Ceremony honoring Theodor Baums	HS
19.05.	Worms	Are low interest rates and bond purchases still adequate? International symposium of economists	VW
06.05.	Stanford / USA	Debate on the question whether the neutral interest rate has declined with John C. Williams, San Francisco Fed, moderated by John Taylor. SIEPR and the Hoover Institution	VW

24.04.	Frankfurt	Trump, Brexit and other challenges for the German economy. Company lawyers' summit	VW
27.03.	Frankfurt	Bank Resolution – Will it Work? IMFS Panel Discussion	TT
23.03.	Potsdam	Private Law Challenges in a Low Interest Rate Environment. Bankers Campus, expert conference on banking law	TT
22.02.	Frankfurt	An exit strategy of the ECB. Committee of Economic and Monetary Policy, meeting of chief economists	VW
10.02.	Alveslohe	Risks and side effects of long-persisting low-interest rate policy, 5 th Kaden talks, Stiftung Marktwirtschaft	VW
20.01.	Nuremberg	Real Estate Loans and Financial Market Stability – Is there a Need for Macroprudential Intervention? Friedrich Alexander University Erlangen-Nürnberg, Forschungsstelle für Bank- und Kapitalmarktrecht in Nordbayern	TT
17.01.	Helsinki / Finland	Time for reforms. Municipal Guarantee Board	VW

GB: Gregor Böhl

HS: Helmut Siekmann

MB: Michael Binder

TT: Tobias Tröger

VW: Volker Wieland

Events

Conferences

- 06.04. The ECB and Its Watchers XVIII
19./20.06. 1st Research Conference of the Macroeconomic Modelling and Model Comparison Network (MMCN): The effects of quantitative monetary policy in structural models

IMFS Working Lunches

- 27.03. Discussion on Bank Resolution with Danny Busch, Pierre-Henri Conac, Tobias Tröger
27.11. Panel Discussion with Greek economists

IMFS Distinguished Lectures and Policy Lectures

- 13.02. Valdis Dombrovskis, Vice-President for the Euro and Social Dialogue, European Commission
14.09. Jens Weidmann, President of Deutsche Bundesbank
13.12. Volker Wieland, IMFS and Council of Economic Experts

Other Events

- 20.03. German Council of Economic Experts presents economic forecast



I. Conferences

06.04.

The ECB and Its Watchers XVIII

The statement that the monetary policy stance of the European Central Bank was still appropriate was the key message **Mario Draghi**, President of the ECB, delivered at the eighteenth edition of the conference series “The ECB and Its Watchers”.



Conference venue: Goethe University lecture hall building; ECB President Mario Draghi; participants in the main lecture hall; Volker Wieland giving an interview to CNBC reporter Annette Weisbach (clockwise)

At the event, which took place at the lecture hall building of Goethe University, the ECB President reaffirmed that the central bank would not need to deviate from its asset-buying program until at least the end of the year.



Peter Praet, member of the Executive Board of the ECB, also underlined the status quo. “In our expectation, the policy interest rate will remain at present or lower levels for an extended period of time and well past the horizon of our net asset purchases.” The ECB’s chief economist reiterated the importance of sticking to the current policy plan to avoid the risk of reversing the success of its measures. Raising the deposit rate too early would render its other policies less effective, Praet said.

John B. Taylor, on the other hand, remained critical of the ECB's bond-buying program. "It's time to speak about the end of the program," the economist of Hoover Institution at Stanford University said. In view of the Federal Reserve's monetary policy, Taylor, who developed the Taylor rule, illustrated how a more rule-oriented monetary policy could even strengthen the independence of a central bank. Currently, there is a debate in the United States whether the Fed should introduce more transparency, explaining its monetary policy with regard to rules.



In the discussion on the assessment of the expanded asset purchase program **Jan Hatzius**, chief economist of Goldman Sachs, made the point that the impact of quantitative easing was very hard to determine. However, he was confident that the ECB should stick to its monetary strategy. "Stay on the course but the job is not yet done," this is what the ECB could learn from the Fed according to Hatzius.

Regarding macroeconomic adjustment in the euro area and the role of monetary and fiscal policy, **Christoph Schmidt** of the German Council of Economic Experts pointed out that it was time for the governments to reduce legacy debt and to restart the structural reform process. Meanwhile, the ECB should start tapering. **Vitor Gaspar**, Director of Fiscal Affairs of the International Monetary Fund (IMF), stressed the importance of having a well-functioning financial system in the euro area and illustrated the complex interplay between reforms and fiscal policy. **Marco Butti**, Director-General for Economic and Financial Affairs at the European Commission, warned against too many governments relying too much on the expansionary monetary policy.



Concerning the international challenges for monetary policy, **Thomas Laubach** of the Federal Reserve as well as the Deputy Governor of the Bank of Japan, **Hiroshi Nakaso**, agreed on the point that most central banks were primarily oriented towards domestic objectives. International collaboration still seemed to be an exception. Laubach, who is an advisor to Fed chair Janet Yellen and a former Professor at Goethe University, stressed the need to foster clear communication between central banks.



As a lesson from recent experiences, **Philip Lane**, Governor of the Central Bank of Ireland, emphasized the advantages of international coordination by sharing economic assessments, thus gaining clarity about policy feedback rules.

How to deal with rules and uncertainty in monetary policy was one of the questions **John C. Williams**, President of the San Francisco Fed, and IMFS Professor **Volker Wieland** discussed in a debate moderated by the Financial Times journalist Sam Fleming. Williams appealed to include instruments of unconventional monetary policy as part of the regular toolkit in times of low inflation. He asked academics and researchers to rethink whether inflation targeting was the best way for central banks to achieve their objectives. Wieland pointed out that a setup with rules “could strengthen a central bank's decisions”.



Program

April 6, 2017

- 8:55 – 9:00 **Welcome**
Günter W. Beck (CFS and IMFS)
- 9:00 – 9:30 **President's Address (Speech)**
Mario Draghi (President of the European Central Bank)
- 9:30 – 11:00 **Debate 1: Assessment of the expanded asset purchase programme**
- Chair: **Natacha Valla** (European Investment Bank)
Speakers:
Peter Praet (Member of the Executive Board of the ECB)
John B. Taylor (Stanford University)
Jan Hatzius (Goldman Sachs)
- Lead questions:
Frank Seitz (Stiftung Geld und Währung, OTH Amberg-Weiden)
Julian Callow (Element Capital)
Claudia Broyer (Allianz SE)
- 11:30 – 13:00 **Debate 2: Macroeconomic adjustment in the euro area: the role of monetary policy, fiscal policy and structural reforms**
- Chair: **Michalis Haliassos** (Goethe University Frankfurt)
Speakers:
Vitor Gaspar (International Monetary Fund)
Christoph Schmidt (German Council of Economic Experts)
Marco Buti (European Commission)
- Lead questions:
Sylvain Broyer (Natixis)
Stefan B. Schneider (Deutsche Bank)

13:00 – 14:00

Lunch

14:00 – 15:30

Debate 3: International challenges for monetary policy - a need for coordination?

Chair: **Hans-Helmut Kotz** (CFS)

Speakers:

Philip R. Lane (Central Bank of Ireland)

Thomas Laubach (Board of Governors of the Federal Reserve System)

Hiroshi Nakaso (Bank of Japan)

Lead questions:

Frank Engels (Union Investment)

Gerhard Illing (LMU Munich)

15:30 – 16:30

Moderated Debate: Do monetary policy frameworks need to be adjusted in a world of (potentially) low natural real interest rates? If so, how?

Moderator: **Sam Fleming** (Financial Times)

Participants:

John C. Williams (Federal Reserve Bank of San Francisco)

Volker Wieland (IMFS and German Council of Economic Experts)

16:30 – 16:40

Closing Remarks

Günter W. Beck (CFS and IMFS)



19./20.06.

1st Research Conference of the Macroeconomic Modelling and Model Comparison Network (MMCN): The effects of quantitative monetary policy in structural models

The analysis of macroeconomic models and the financial sector served as a starting point for the conference's special topic: the effects of quantitative monetary policy in structural models. In his presentation **Douglas Laxton** of the IMF's Economic Modeling Division studied the risks of excessive credit expansion and asset price bubbles. As he pointed out, distinguishing good and bad credit expansion ex ante would require a large amount of micro-level data analysis. However, "models can tell very little whether a financial crisis is coming," he warned.

Analyzing the ECB's approach to unconventional monetary policy, **Roberto Motto** of the ECB argued that the central bank started late with its unconventional monetary policy. In his view, this could be explained by the fact that the ECB's price stability objective was defined as a range rather than a symmetric inflation target. He explained that signs of de-anchoring in the face of commodity price deflation and demand shortfalls called for a bold strategy. Looking at monetary theory in a low-interest world, **John Roberts** of the Federal Reserve Board pointed out that monetary policy strategies based on traditional simple policy rules lead to poor economic performance when the equilibrium real interest rate is low and volatile economic activity and inflation.



Douglas Laxton, Volker Wieland, and Winston Dou; impression from the conference; Alina Tänzer; participants (clockwise)

About 90 participants from academia, central banks, ministries, financial institutions and companies, students and young researchers took part in the first research conference of the network. In further sessions, researchers discussed models with regard to fiscal as well as macroprudential policy, cross and multi-country models and unconventional monetary policy. Moreover, young academics presented their findings regarding issues in modelling financial markets and macroprudential policy and, on the other hand, issues in monetary and fiscal policy.

The MMCN is a research network in collaboration with CEPR, which forms part of the Macroeconomic Model Comparison Initiative (MMCI). MMCI is a joint venture of the Hoover Institution at Stanford University and the IMFS that is supported financially by the Alfred P. Sloan Foundation (see section on Major Research Projects, p. 24).



The MMCN in John B. Taylor’s blog “Economics One”:

**“Macro Model Comparison Research Takes Off”
Posted on June 29, 2017**

Last week a new Macroeconomic Modelling and Model Comparison Network (MMCN) was launched with a research conference at Goethe University Frankfurt. Economists from the IMF, the Fed, the ECB, and other central banks presented and compared policy models along with academics from Chicago, Penn, Amsterdam and elsewhere. Such collaboration and exchange will define the new network. Judging from the first conference, it got off to a good start.



The conference led off with a critical review of macroeconomic models used for policy from a finance perspective by Winston Dou, Andrew Lo, Ameya Muley, and Harald Uhlig. The paper surveyed monetary models used at central banks, and it pointed out problems with current models, especially linearized versions, suggesting newer solution, estimation, and evaluation methods. The paper also proposed research on a new generation of policy models incorporating the financial sector, the government balance sheet, unconventional monetary policy, heterogeneity, reallocation, redistribution effects, nonlinear risk-premiums, time-varying uncertainty, and imperfect product markets.

So there is much work to do, and indeed the conference showed that work had begun. Doug Laxton of the IMF presented research on new models with credit and financial constraints. Roberto Motto examined the ECB’s approach to unconventional monetary policy. John Roberts examined the implications of recent lower estimates of the equilibrium interest rates using both the ECB’s model and the Fed’s main model. Maik Wolters showed that the evidence was weak that the equilibrium real rate has fallen. There were also parallel sessions on fiscal policy, macro-prudential policy, and international monetary policy along with poster sessions with 20 different presentations with a range of fresh new ideas on models used to find good monetary policy rules.

The network will be operated under the auspices of the Centre for Economic Policy Research in London which is directed by Richard Baldwin. The network, which welcomes researchers interested in policy and model comparisons, is one part of a larger project called the Macroeconomic Model Comparison Initiative (MMCI) organized by Michael Binder, Volker Wieland, and me. That initiative includes the Macroeconomic Model Data Base, which already has 82 models that have been developed by researchers at central banks, international institutions, and universities. Key activities of the initiative are comparing solution methods for speed and accuracy, performing robustness studies of policy evaluations, and providing more powerful and user-friendly tools for modelers.

An essential prerequisite of the initiative is that the models be put forth in transparent ways that make replication easy. Obviously, quantitative macroeconomic models play an important role in informing policy makers about the consequences of monetary and fiscal policies, and an objective of the new initiative is to improve the interface between researchers and policy makers, and thus make better use of economics to improve policy.

Program

Conference organizers: Michael Binder (IMFS, Goethe University Frankfurt), John B. Taylor (Stanford University and Hoover Institution) and Volker Wieland (IMFS, Goethe University Frankfurt and CEPR).

Monday, June 19

8:00 – 8:50	Registration and Coffee
8:50 – 9:00	Welcome
9:00 – 10:15	Plenary Session: Macroeconomic Models and the Financial Sector Chair: Volker Wieland (IMFS, Goethe University) Macroeconomic Models for Monetary Policy: A Critical Review from a Finance Perspective Winston Dou (University of Pennsylvania), Andrew W. Lo, Ameya Muley, Harald Uhlig Designing Models for Macroprudential Policy Analysis Douglas Laxton (International Monetary Fund)
10:15 – 10:30	Coffee Break
10:30 – 12:15	Parallel Session: Fiscal Policy Chair: Gernot Müller (University of Tübingen) Fiscal Policy in EMU with Downward Nominal Wage Rigidity Werner Roeger (European Commission), Matthias Burgert Debt Overhang and the Macroeconomics of Carry Trade Eglė Jakučionytė, Sweder van Wijnbergen (University of Amsterdam) Can an Increase in Public Investment Sustainably Lift Economic Growth? Annabelle Mourougane (OECD), David Turner Discussant: Kerk Phillips (Brigham Young University)

10:30 – 12:15

Parallel Session: Financial Markets and Macroprudential Policy

Chair: **Maik Wolters** (University of Jena)

NAWM II: An Updated Version of the ECB's Micro-Founded Model for Policy Analysis and Forecasting with a Financial Sector

Günter Coenen (European Central Bank), Peter Karadi, Sebastian Schmidt, Anders Warne

Discussant: **Johannes Pfeifer** (University of Cologne)

Financial Regulation and Shadow Banking: A Small-Scale DSGE Perspective
Olivier Pierrard (Banque Centrale du Luxembourg), Patrick Fève

Discussant: **Philipp Lieberknecht** (IMFS, Goethe University)

The International Dimensions of Macro-Prudential Policies

Giovanni Lombardo (Bank for International Settlements), Pierre-Richard Agenor, Enisse Kharroubi, Leonardo Gambacorta, Luiz Pereira Da Silva

Discussant: **Jorge Quintana** (Goethe University)

12:15 – 13:30

Lunch

13:30 – 15:30

Poster Session 1: Issues in Modelling Financial Markets and Macroprudential Policy

Adverse Selection and Financial Crises

Jonathan Swarbrick (University of Surrey)

Countercyclical Capital Regulation in a Small Open Economy DSGE Model

Luca Onorante (European Central Bank), Matija Lozej

Optimal Macroprudential Rules

Aliaksandr Zaretski (Emory University)

Financial Intermediation, Resource Allocation, and Macroeconomic Interdependence

Galip Kemal Ozhan (University of St. Andrews)

House Prices and Macroprudential Policy in an Estimated DSGE Model of New Zealand

Petar Mihaylovski (University of Hamburg)

Cascades Along the Business Cycle

Massimo Ferrari (Catholic University of Milan)

Concerted Efforts? Monetary Policy and Macro-Prudential Tools

Richard Harrison (Bank of England)

Bank Capital in the Short and in the Long Run

Kalin Nikolov (European Central Bank), Caterina Mendicino

Solving DSGE Portfolio Choice Models with Asymmetric Countries

Grzegorz Dlugoszek (Humboldt University Berlin)

Financial Variables in a Policy Rule: Does It Bring Macroeconomic Benefits?

Jan Žáček (Charles University)

Macroeconomic Model Database

Alina Tänzler, Lazar Milivojevic (IMFS, Goethe University)

15:30 – 15:45

Coffee Break

15:45 – 17:00

Plenary Session: Natural Rate of Interest

Chair: **Michael Binder** (IMFS, Goethe University)

Safety, Liquidity, and the Natural Rate of Interest

Marco Del Negro (Federal Reserve Bank of New York)

R-Star: The long-run equilibrium rate has not declined by much

Maik Wolters (University of Jena)

Tuesday, June 20

8:30 – 9:45

Plenary Session: Monetary Policy, Zero Bound and International Spillovers

Chair: **Volker Wieland** (IMFS, Goethe University)

Monetary Policy in a Low Interest World

John Roberts (Federal Reserve Board)

The ECB's Approach to Unconventional Monetary Policies

Roberto Motto (European Central Bank), **Massimo Rostagno** (European Central Bank)

9:45 – 10:00

Coffee Break

10:00 – 11:30

Parallel Session: Cross- and Multi-Country Models

Chair: **Sebastian Schmidt** (European Central Bank) (tbc)

Natural Rates Across the Atlantic

Stefano Neri (Banca d'Italia), Andrea Gerali

Discussant: **Kai Christoffel** (European Central Bank)

Financial Heterogeneity and Central Bank Non-Standard Measures in a Monetary Union

Niki Papadopoulou (Central Bank of Cyprus), Matthieu Darracq Paries

Discussant: **Galip Kemal Ozhan** (University of St. Andrews)

Uncertainty Shocks in Currency Unions

Gernot Müller (University of Tübingen)

10:00 – 11:30

Parallel Session: Unconventional Monetary Policy

Chair: **Thorsten Drautzburg** (Federal Reserve Bank of Philadelphia)

The Macroeconomic Effects of Quantitative Easing in the Euro Area: Evidence from an Estimated DSGE Model

Romanos Priftis (European Commission), Lukas Vogel, Stefan Hohberger

Discussant: **Richard Harrison** (Bank of England)

Evaluating the Macroeconomic Effects of the ECB's Unconventional Monetary Policies

Sarah Mouabbi (Banque de France), Jean-Guillaume Sahuc

Discussant: **Jonathan Benchimol** (Bank of Israel)

	<p>Quantitative Easing in the Fiscal Theory Howard Kung (London Business School), Alexandre Corhay, Gonzalo Morales Discussant: Luca Onorante (European Central Bank)</p>
11:30 – 13:15	<p>Poster Session 2: Issues in Monetary and Fiscal Policy; Presentation of DBnomics</p> <p>Fiscal Policy Matters: A New DSGE Model for Slovakia Zuzana Mucka (Council for Budget Responsibility)</p> <p>Wage formation, unemployment and business cycle in Latvia Ginters Buss (Latvijas Banka)</p> <p>Integrating Microsimulation Models of Tax Policy into a DGE Macroeconomic Model: A Canonical Example Kerk Phillips (Brigham Young University)</p> <p>The Amplification of the New Keynesian Models and Robust Optimal Monetary Policy Gülserim Özcan (Bilkent University)</p> <p>The Missing Link: Labor Share and Monetary Policy Cristiano Cantore (University of Surrey)</p> <p>The Effects of Fiscal Policy in an Estimated DSGE Model - The Case of the German Stimulus Packages During the Great Recession Andrej Drygalla (Halle Institute for Economic Research)</p> <p>Are Nonlinear Methods Necessary at the Zero Lower Bound? Nathaniel Throckmorton (College of William & Mary), Alexander Richter</p> <p>Monetary Rules, Central Bank Losses and Households' Welfare: What Objectives Should the Fed Pursue? Jonathan Benchimol (Bank of Israel)</p> <p>DBnomics, the world's economic data Thomas Brand (CEPREMAP), Paula Forteza</p>
13:00 – 14:30	Lunch
14:30 – 16:00	<p>Parallel Session: Money, Finance and Fiscal Policy Chair: Werner Roeger (European Commission)</p> <p>The Macroeconomics of Central Bank Issued Digital Currencies Michael Kumhof (Bank of England) Discussant: Sören Karau (Goethe University)</p> <p>Macroeconomic Effects of Financial Shocks: Comment Johannes Pfeifer (University of Cologne)</p> <p>Fiscal Multipliers and Financial Crises Miguel Faria-e-Castro (New York University) Discussant: Felix Strobel (Humboldt University)</p>

15:00 – 16:00

Parallel Session: Solution and Estimation Methods

Chair: **Kai Christoffel** (European Central Bank)

Should Central Banks Worry about Nonlinearities of their Large-Scale Macroeconomic Models?

Lilia Maliar (Stanford University), Serguei Maliar, Vadym Lepetyuk

Discussant: **Nathaniel Throckmorton** (College of William & Mary)

Entropy-Based Affine Approximations of Dynamic Equilibrium Models

Pierlauro Lopez (Banque de France), David Lopez-Salido, Francisco Vazquez-Grande

Discussant: **Inna Tsener** (University of the Balearic Islands)

16:00 – 16:15

Coffee Break

16:15 – 17:15

Plenary Session: Business Cycles: Methods and Modelling

Chair: **Michael Binder** (IMFS, Goethe University)

ECB Global: Introducing ECB's Global Macroeconomic Model for Spillover Analysis

Alistair Dieppe (European Central Bank), Georgios Georgiadis, Martino Ricci, Ine van Robays, Björn van Roye

Political Distribution Risk and Business Cycles

Thorsten Drautzburg (Federal Reserve Bank of Philadelphia)

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 attract also many participants from central banks, financial institutions and law firms in Frankfurt.

27.03.

Panel Discussion: “Bank Resolution - Will it Work?”

Danny Busch, Professor of Financial Law at Radboud University

Pierre-Henri Conac, Professor of Commercial and Company Law at the University of Luxembourg

Tobias Tröger, Professor of Private Law, Trade and Business Law, Jurisprudence at Goethe University

One year after its entry into force bank resolution in the euro area still has to pass its fire test. However, the pitfalls have already become obvious according to financial experts. During the IMFS Working Lunch, Danny Busch, Professor for Financial Law at the Radboud University, Pierre-Henri Conac, Professor of Commercial Law and Company Law at the University of Luxembourg, and Tobias Tröger, Professor of Private Law, Trade, and Business Law, Jurisprudence at Goethe University and associated Professor at the IMFS, drew an interim balance.



“The concept of bail in is very tricky,” Tröger criticized the instrument of creditor participation that incurs liability towards investors and creditors as well as outside creditors, covering a banks' losses. “It is very hard to predict the outcome of bank resolution”. Referring to the Italian bank Monte de Paschi di Siena (MPS), Busch described how national governments tend to exploit the exceptions in regulation. “With the precautionary recapitalization national authorities remain in the driver seat,” Busch said. One day before Christmas the Italian government allowed MPS to receive financial aid. According to bank resolution, precautionary recapitalization is reserved for viable banks whose resolution would endanger financial stability.

For Conac, who had been an advisor to the ESMA, the situation in Italy illustrates the political resistance against bank resolution. In his opinion, this should be eliminated. “Mismanagement, political influence and bad governance are the reasons for banks going bust”, he said. The political influence could lead to a mixture of bail in and bail out, which finally neutralizes bail in, Conac summarized. Tröger pointed out that the request for higher equity in practice also presents many difficulties. Besides, due to the national differences in insolvency legislation cross-border resolution was very complicated. Tröger emphasized the need for a fiscal backstop. However, in his opinion the key message is clear: “Make bail in predictable”.

27.11.

Panel Discussion: “The Greek Crisis, Structural Reforms and Eurozone Convergence”

The crisis in Greece has disappeared from the frontpages of the newspapers. However, it is far from being solved. The underlying reasons for the slump of the Greek economy, the reforms undertaken so far and measures that foster sustainable growth were in the center of a joint CEPR panel discussion with Greek economists **Dimitri Vayanos** and **Nikolaos Vettas** moderated by **Michael Haliassos** of Goethe University.

According to Vayanos, Professor of Finance at the London School of Economics, low long-term growth and low corporate and foreign direct investment were the fundamental causes. “This was exacerbated by flaws in the euro area architecture,” Vayanos said, referring to the lacking framework for sovereign default in the euro area and banking supervision, which had been established in the aftermath of the sovereign debt crisis. Nikolaos Vettas, Professor of Economics at Athens University, sees Greece at a crossroads: “Currently, there are no new fiscal deficits but the current mix of tax revenue and expenditure doesn’t contribute to growth.”



For this reason, Vayanos and Vettas together with a number of Greek economists from institutions inside and outside Greece have analyzed the situation in Greece and have come up with concrete proposals and possible solutions in the new book “Beyond Austerity: Reforming the Greek Economy”.

According to the editors, some improvement has already been made, such as deregulation on the labor market, pension cuts, deregulation on the product markets and the establishment of an independent tax collection. However, Vayanos and Vettas emphasized that the key problem still persists: “Uncertainty keeps investment out”. They criticized that the state was more important for the economy than before the crisis. Therefore, they pointed out that Greece needed a new growth model with investment and exports representing a larger part of the economy. The welfare system, where there is no support for unemployed people after twelve months, the burden of the tax system on business activity and the obstacles for starting a business in Greece are only some of the areas for possible improvement identified by Vettas.

Vítor Constâncio, Vice-President of the ECB, stressed that in the euro area architecture no crisis management instruments had been foreseen and, therefore, had to be created in a rush. “Banking union was missing from the start in the design of the monetary union”, he said. The sharp decrease of the GDP per capita as well as the low level of Greek exports were the aspects that surprised the ECB Vice-President most in the course of the crisis: “The Greek economy was more closed than I thought,” Constâncio said.

Lars P. Feld, member of the German Council of Economic Experts (GCEE) and director of the Eucken Institute, showed himself in favor of a fourth program for Greece in order to allow reforms to go on for some time. “In three years, Greece could be finally over the cliffs”, Feld said. However, he recognized that a fourth program was not politically feasible in the euro area. Volker Wieland, also a member of the GCEE, proposed to the editors of the book to apply their analysis to the economic development: “Why not form an independent group of Greek economists to monitor the reforms in the country?”

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 policy-makers 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.

13.02.

Valdis Dombrovskis, Vice-President for the Euro and Social Dialogue, European Commission “How to Make the Euro a Lasting Success”

Valdis Dombrovskis, Vice-President of the EU Commission, sees a further need for closer economic and fiscal policy coordination in the EU. While presenting the Commission’s winter economic forecast during an IMFS Distinguished Lecture, Dombrovskis said the euro area had become “more resilient” since the beginning of the Greek crisis, which by now had “very little spillover effects to other euro area countries”. This was a big difference to 2010 and 2011, “when we were seeing some kinds of domino effects”. According to the assessment of the EU Commission, the global economy is “rebounding in 2017”, and “unemployment is continuing to decrease but still very high”.



With the EU Commission preparing country reports within the framework of the European semester, Dombrovskis outlined a range of recommendations for Germany where the EU Commission expects the economy to grow by 1.6 percent this year and by 1.8 percent in 2018. “Germany has weathered the crisis quite well”, Dombrovskis said. However, regarding the German current account surplus, he suggested to stimulate public investment further and to eliminate inefficiencies in the tax system such as corporate taxation and local trade tax. Dombrovskis also called for measures to boost competition in the services sector, in particular business services and regulated professions. On the other hand, Dombrovskis criticized the German pension system and the gender gap, calling for “increasing incentives for later retirements” and “reducing high tax wedges for low wage earners”, making references to the relatively high proportion of women in part-time and mini jobs.

In view of the Brexit decision in the UK, Dombrovskis underlined the need for building a capital markets union. “This makes the case for strengthening the capital market more important”, he said. The EU should also address issues such as the insolvency of member states and the support of fintechs. The Greek program, however, Dombrovskis argues is “on track” with the economy recovering. “If we now do this final push from outside we can conclude the second review”, Dombrovskis said. Regarding the cooperation with the International Monetary Fund (IMF), Dombrovskis was positive. “I think it’s solvable”, he said.

14.09.

Jens Weidmann, President of Deutsche Bundesbank
“Die Geldpolitik nach der Krise” (Monetary Policy after the Crisis)

During his IMFS Distinguished Lecture, Jens Weidmann, President of Deutsche Bundesbank, reminded the ECB not to miss the exit from quantitative easing even though the expansionary monetary policy is still adequate currently. “We’re not talking about slamming on the brakes but rather about no longer constantly putting our foot down on the accelerator,” Weidmann said, speaking to more than 350 guests.

The large-scale bond-buying program after the financial crisis has turned the Eurosystem into the member states’ largest creditor. “This has additionally blurred the line between monetary policy and fiscal policy,” Weidmann warned. In his opinion, government bond purchases should purely be used as an instrument of last resort. Moreover, economic recovery in the euro area continues and gains further momentum. Furthermore, even after the net purchases under the asset purchase program have been discontinued, government bond holdings are at a high level. Thus, euro-area monetary policy will remain extremely accommodative.



According to Weidmann, the expansionary monetary policy has an impact on the risk appetite of market participants and banks. However, he pointed out that government bond purchases also have some inherent unintended side effects. “Even the Germans, who tend to be very conservative in their investment decisions, are currently putting more money into potentially more profitable, but also riskier financial assets such as shares and mutual funds,” Weidmann noted. On the other hand, banks tend to become less wary of taking on excessive risk.

Regarding financial stability, Weidmann declined that policy-makers should make it an explicit objective maybe even on par with the objective of price stability. “The more objectives monetary policy-makers pursue, the more likely that they will get mired in a conflict of objectives,” he said. The concept of financial stability was much harder to grasp than that of price stability and there was no indicator for financial stability as it is the case for price stability.

According to Weidmann, macroprudential instruments such as countercyclical capital buffers for banks or measures that target the demand for credit were much better suited. “So where monetary policy is the hammer in a central bank’s toolkit in relation to financial stability, macroprudential instruments are the scalpel”, Weidmann added. Apart from that, many macroprudential measures require democratic legitimacy. Therefore, it is politicians who decide on the use of macroprudential measures, not the



Bundesbank, and for good reason. Nevertheless, in his opinion, a central bank must not lose sight of financial stability: “It may be advisable, even for a monetary policy that focuses exclusively on the objective of price stability, to heed developments on the financial markets,” Weidmann concluded. For permanent macroeconomic stability could not be achieved without financial stability.

13.12.

Volker Wieland, IMFS and German Council of Economic Experts “Towards a forward-looking economic policy”

Record employment, low unemployment rates – Germany is doing well economically at the moment. However, according to Volker Wieland, the reasons are partly based on temporary factors. During the presentation of the German Council of Economic Experts’ (GCEE) annual report 2017/18, Wieland described how Germany could respond effectively to unforeseen events. Since 2013, Wieland has been a member of the council.



In contrast to the repeatedly growing debate on growing inequality in Germany, the council cannot find evidence for this. “Since 2005, income distribution has been stable”, Wieland said. This was also due to redistributive effects. Here, Germany is among the top group. On the other hand, in the council’s view, gradually appearing signs of overheating are threatening the economy. Since 2015, economic growth has been above potential.

In order to enhance the efficiency of the economy and create sustainable incentives, the council recommends returning 30 billion euro of fiscal revenues to the tax payer. That corresponds to the tax revenue from bracket creep due to the progressive income tax rate. Also the gradual abolition of the solidarity surcharge is considered appropriate. In the opinion of the council members, the demographic change is a big challenge. The notion of a flexible retirement age should help to solve this problem. Regarding the digital transformation, the council is in favor of the establishment of a Digitalization Commission. “The problem is rather the lack of use than the lacking infrastructure”, Wieland explained.

For the European Union, the council has identified various areas in which further and sustainable development would make sense. Wieland also pointed out that many euro area member states had not made use of the low interest-rate environment in order to reduce the debt burden and to implement reforms. However, according to Wieland, a common fiscal policy is not necessary. “The member states should be responsible for policy-making”, he said. In order to ensure that creditors contribute to crisis resolution and that the European Stability Mechanism (ESM) only grants loans to solvent member states, clear rules for orderly government debt restructuring in the event of a crisis should be added to the ESM's tool of macroeconomic adjustment programs.

Apart from that, Wieland cautioned to complete the capital market union. As far as the banking union is concerned, Wieland sees a great need for action regarding non-performing loans. “Before the concept of risk sharing is implemented, existing risks due to bad loans have to be reduced”, Wieland said.

IV. Other Events

20.03.

German Council of Economic Experts presents economic forecast

The German Council of Economic Experts called for the ECB to start tapering, ending the bond-buying program as soon as possible.

During the presentation of the economic forecast at the House of Finance in Frankfurt, the council was convinced that the economic upswing in Germany would go on. In 2017, the council expected GDP to grow by 1.7 percent, in 2018 by 1.8 percent.



According to the council, the current monetary policy shows many risks for financial stability. “The ECB should start announcing the end of the bond purchases until summer and end the bond-buying program by the end of the year,” Volker Wieland said. In his opinion, inflation development and growth rates had already indicated in November that the monetary policy stance was no longer adequate. This development had even become clearer now. “The macroeconomic assessment makes it necessary to tighten monetary policy,” he said. However, according to Wieland, it was wrong to start with raising interest rates. In any case, this would slow down economic development. “The bond-buying program sends out the wrong signals and therefore should be ended sooner rather than later”.

According to the majority of the council members, the criticism from the United States regarding the current account surplus is not justified and does not indicate macroeconomic imbalances. There had been a permanent deficit in the United States since 1983, Wieland said. Only the partners had changed. “During the 1980s there were discussions about that with Japan, then China and now Germany,” Wieland added.

Research-Based Policy Advice

IMFS researchers constantly share their insights regarding current economic and legal issues on a national as well as 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. Throughout the year, the Council is in contact with ministers and leading officers of federal associations before finally publishing its analysis. On November 8, the Council members presented their annual report entitled "Towards a forward-looking economic policy" to Chancellor Angela Merkel, Minister of Labour Brigitte Zypries, Head of the Federal Chancellery Peter Altmaier, also acting as Federal Minister of Finance, and the Minister of Health Hermann Gröhe. Afterwards, the findings were discussed during a press conference.



In its 437-page 2017/18 report, the council stated that the sound economic situation in Germany provided an opportunity to re-adjust economic policy which should focus on the future challenges from globalization, demographic change and digitalization. Regarding monetary policy, the council called for the ECB to end bond purchases earlier than announced. The experts considered it appropriate for the ECB to communicate a comprehensive normalization strategy for its monetary policy. "The ECB should react to increases in growth and inflation symmetrically to declines in those rates", the annual report states.

As a member of the scientific advisory council of the Market Economy Foundation, the Kronberger Kreis, Volker Wieland also co-authors numerous studies and provides arguments for market-oriented solutions to crucial challenges in German and European economic policy.

In 2017, the six professors forming the Kronberger Kreis warned against prohibition of discrimination in the digital world. In its study no. 63 ("*Neue Diskriminierungsverbote für die digitale Welt?*"), the Kronberger Kreis points out that an equal treatment of suppliers, regulated by law and enforced by regulators, would interfere with entrepreneurial freedom of action. Subsequently, necessary economic adjustments could be omitted and competition could be weakened. Before the federal elections in September 2017, the members of the Kronberger Kreis published a wake-up call for German economic policy (study no. 64) with several proposals regarding a forward-looking economic and finance policy, such as relief from income and corporate taxation and the automatic adjustment of the retirement age.



Policy Meetings and Hearings at a Glance

15.12.	Frankfurt	Meeting with the President of Deutsche Bundesbank Jens Weidmann, presenting the annual report 2017 of the German Council of Economic Experts (GCEE)	VW
20.11.	Frankfurt	Meeting with Peter Praet, Member of the Executive Board of the ECB, presenting the GCEE annual report	VW
08.11.	Berlin	Meeting with German Chancellor Angela Merkel, Acting Minister of Finance Peter Altmaier, Federal Minister of Labour Brigitte Zypries, presenting the Annual Report 2016 of the German Council of Economic Experts	VW
07.11.	Berlin	GCEE meeting with leading officers of the Federal Ministry of Finance and for Economic Affairs and the Chancellor's Office	VW
05.10	Frankfurt	GCEE meeting with Bundesbank President Weidmann	VW
26.09.	Frankfurt	GCEE meeting with ECB members	VW
22.09.	Berlin	GCEE meeting with leading officers of the German Confederation of Skilled Crafts (ZdH)	VW
02.06.	Berlin	GCEE meeting with leading officers of the Federal Ministry of Finance and the Federal Ministry for Economic Affairs	VW
01.06	Berlin	GCEE meeting with leading officers of the Federal Ministry of Labour and Social Affairs, the German Employers' Associations (BDA) and the Association of German Chambers of Commerce and Industry (DIHK)	VW
29.03.	Berlin	GCEE meeting with Chancellor Angela Merkel	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**. Matters of central bank law are also an important aspect of the IMFS' communication strategy.

Overall, **press activities of IMFS researchers maintained a high level**. IMFS researchers shared their insights on questions of price stability and currency in six extensive opinion pieces for national newspapers like *FAZ* and *Süddeutsche Zeitung* and also in written interviews. Almost sixty times, IMFS researchers provided commentary on current issues in the press. Volker Wieland was available as an expert for national TV programs, such as *Plusminus*. He also gave live interviews on international TV, e.g. the morning show *Bloomberg Markets*, commenting on the situation in Germany after the elections. Helmut Siekmann was a sought-after interview partner regarding the legal aspects of limiting cash.

Public Outreach and Press at a Glance

Media References to IMFS research

20.06.	Fazit-Blog	Warum der Realzins fällt (Why real interest rates are falling)	VW
05.06.	Blog Economics One	R-Star Wars	VW
09.04.	Blog Economics One	ECB Watching	VW
07.04.	Börsen-Zeitung	Zwist über Zinsregel für Fed & Co. (Dispute about interest rate rule for Fed and other central banks)	VW
14.02.	FAZ	Amerikas Geldpolitik vor neuer Epoche (American monetary policy enters a new era)	VW

Guest Editorials

17.09.	Frankfurter Allgemeine Sonntagszeitung (FAS)	Deutschland döst (Germany is snoozing), co-authors from the Kronberger Kreis: Lars P. Feld, Clemens Fuest, Justus Haucap, Heike Schweitzer	VW
08.09.	Wirtschaftswoche	Warum es höchste Zeit ist, die Geldpolitik zu straffen (Why it's about time to tighten monetary policy)	VW
06.09.	Süddeutsche Zeitung	Sagen, wie es weitergeht (Tell how it goes on)	VW
20.08.	FAS	Vertraut dem Markt! (Trust the market!), co-authors Lars P. Feld, Christoph M. Schmidt, Isabel Schnabel	VW
07.06.	Börsen-Zeitung	Unkonventionelle Geldpolitik: Zeit für den Ausstieg (Time to exit from unconventional monetary policy)	VW
26.02.	FAS	Gute Leistung, böse Leistung? (Good performance, bad performance?)	VW

Interviews

23.08.	Börsen-Zeitung	Notenbanker stehen vor riesigen Herausforderungen (Central bankers are facing big challenges, survey)	VW
16.08.	Börsen-Zeitung	EuGH wird wohl wieder übers Ziel hinausschießen (Most probably the ECJ will overshoot the mark again)	VW
06.07.	Handelsblatt	Die Bank darf das nicht einführen (The banks are not allowed to introduce this)	TT
22.06.	Goethe Uni aktuell	Die aktuelle Geldpolitik der EZB (The ECB's current monetary policy)	VW
17.01.	Börsen-Zeitung	Die EZB muss jetzt den Fuß vom Gas nehmen (The ECB has to take the foot of the accelerator)	VW

Profiles

25.11.	Börsen-Zeitung	Helmut Siekmann 70	HS
21.06.	Frankfurter Rundschau	Die Goethe-Uni ehrt Volker Wieland und Alexander Trog (Goethe University honors Volker Wieland and Alexander Trog)	VW
21.06.	FAZ-RMZ	Ein Fellow und ein Ehrenbürger (A fellow and an honorary citizen)	VW
21.06.	Börsen-Zeitung	Wirtschaftsweiser Wieland erhält Preis der Kassel-Stiftung (Economic expert Wieland receives award by Kassel foundation)	VW

Commentary/Mentions

28.12.	Die Zeit	Deutschland, es wird heiß (Germany, it's getting hot)	VW
11.12.	FAZ	Banken dürfen Negativzinsen nicht beliebig einführen (Banks are not allowed to implement negative interest rates)	TT
09.12.	FAZ	Negativzinsen vor Gericht (Negative interest rates in court)	TT
07.12.	Bloomberg	Steinhoff scandal leaves ECB with financial issues of its own	HS
07.12.	AP	Years after Lehman final rules set on strengthening banks	VW
05.12.	FAZ	Abschied vom magischen Zwei-Prozent-Ziel? (A farewell to the magic two percent objective?)	VW
29.11.	FAZ	Vordenker-Preis für Sachverständige (Thought leader award for economic experts)	VW

28.11.	Börsen-Zeitung	Mentale Erneuerung der griechischen Öffentlichkeit (Mental refreshment of the Greek pulic)	VW
25.11.	Börsen-Zeitung	Bankenaufseher in der Rolle des Bankenanwalts (Banking supervisor tanking on the role of banking advocates)	VW
23.11.	Börsen-Zeitung	Rentenkasse entlastet die Wirtschaft (Pension funds unburden the economy)	VW
09.11.	Bild.de	Deutschlands Wirtschaft kommt in eine Boomphase (German economy is entering a boom phase)	VW
09.11.	Badische Zeitung	Top-Ökonomen sind gegen Einführung des Baukindergeldes (Top economists are against introduction of additional child benefits when a house is being built)	VW
09.11.	El Mundo	El consejo de sabios alemán eleva la presión sobre el BCE (German economic advisors intensify pressure on ECB)	VW
09.11.	Börsen-Zeitung	Wirtschaftsweisse gehen hart mit EZB ins Gericht (Economic experts speak harshly about ECB)	VW
08.11.	Deutsche Welle.de	Wirtschaftsweisse heben Wachstumsprognose an (Economic experts raise economic forecast)	VW
08.11.	AFP	Wirtschaftsweisse: Deutschland kommt in eine Boomphase (Economic experts: Germany is entering a boom phase)	VW
08.11.	Reuters	Wirtschaftsweisse heben Wachstumsprognose kräftig an (Economic experts raise economic forecast considerably)	VW
04.11.	Süddeutsche Zeitung	Einigkeit und Streit und Weisheit (Unity and dispute and wisdom)	VW
15.09.	Wirtschaftswoche	Chaostage im Geldtempel (Chaotic period in the temple of money)	VW
14.09.	Die Zeit	Die Beziehungskrise (The relationship crisis)	VW
08.09.	Handelsblatt	Die EZB in der Kursfalle (The ECB is trapped by the exchange rate)	VW
27.08.	FAS	Der Letzte der Weisen (The last of the wise men)	VW
23.08.	Börsen-Zeitung	Debatte über Inflationsziel gewinnt an Fahrt (Discussion about inflation target is gaining momentum)	VW
19.08.	FAZ.NET	Einem Profi sollte das nicht passieren (This should not happen to an expert)	VW
06.07.	Handelsblatt	Strafzins bleibt die Ausnahme (Penalty interest remains an exception)	TT
06.07.	Handelsblatt	Streit über den Minuszins (Dispute about negative interest rates)	TT

22.06.	Reuters	Italy tries Europe's patience with fumbled Veneto banks' rescue	VW
17.06.	Neue Zürcher Zeitung	Festschrift für Ernst Baltensperger (Festschrift for Ernst Baltensperger)	VW
09.06.	Handelsblatt	Draghi deutet die Wende an (Draghi is hinting at the turning point)	VW
09.06.	FAZ	EZB macht ersten kleinen Schritt zum Kurswechsel (ECB takes first step to change the course)	VW
09.06.	Börsen-Zeitung	Kritik an Draghis Zaudern (Draghi is criticized for procrastinating)	VW
08.06.	Zeit online	Leitzins unverändert bei null Prozent (Interest rate remains unchanged at zero percent)	VW
08.06.	Spiegel Online	EZB deutet leichte Kurswende an (ECB indicates a slight course of correction)	VW
08.06.	Reuters	EZB wagt ersten Mini-Schritt Richtung Kurswechsel (ECB takes first step forward to a change of policy)	VW
01.06.	Das Erste.de	Plusminus – Bargeld ade (Plusminus – bye-bye cash)	HS
11.05.	Süddeutsche Zeitung	Bundesverfassungsgericht – das nervöse Monster (Federal Constitutional Court – the nervous monster)	VW
12.04.	Vertraulicher Schweizer Brief	Sachverständigenrat fordert sofortigen Kurswechsel der EZB (German Council calls on ECB to change course)	VW
08.04.	Focus	Der Brexit – Fluch oder Chance? (Brexit – a blessing or a curse?)	HS
06.04.	CNBC.com	Germany is doubling down on its resistance to ECB stimulus and it's now affecting the euro	VW
01.04.	FAZ	Erste Klagen gegen Negativzinsen (First lawsuits against negative interest rates)	TT
21.03.	FAZ	Sachverständige fordern sofortigen Kurswechsel der EZB (Economic experts ask ECB to change course immediately)	VW
21.03.	Börsen-Zeitung	EZB zur Exit-Debatte aufgefordert (ECB is asked to discuss the exit)	VW
20.03.	Deutschlandfunk.de	Wirtschaftsweiser heben Prognose für 2017 an (Economic experts raise forecast for 2017)	VW
20.03.	Dow Jones	Sachverständigenrat hebt deutsche Wachstumsprognose leicht an (Economic experts raise economic forecast for Germany)	VW
20.03.	Reuters	Wirtschaftsweiser rügen EZB-Geldflut und Trumps Handelspläne (Economic experts criticize the ECB's money flow and Trump's plans for trade)	VW

20.03.	dpa	Wirtschaftsweisse trauen deutscher Konjunktur höheres Tempo zu (Economic experts have confidence in higher speed of German economy)	VW
09.03.	Die Zeit	Rechtsherum oder linksherum? (Turn right or turn left)	VW
03.03.	FAZ	Inflation im Euroraum steigt auf 2,0 Prozent (Inflation in the euro area rises to 2.0 percent)	VW
02.03.	Reuters	Inflationsschub im Euroraum befeuert Kontroverse um EZB-Kurse (Rise in inflation in the euro area fuels debate on the course of the ECB's monetary policy)	VW
02.03.	Handelsblatt	Inflation setzt Draghi unter Druck (Inflation puts Draghi under pressure)	VW
01.03.	Forschung Frankfurt	Zeitschmelze im Finanzsektor (Time is melting away in the financial sector)	HS
04.02.	FAZ	Ökonomen zweifeln an der Zukunft des Euros (Economists doubt the future of the euro)	HS
31.01.	Wallstreet-Online.de	Sparer sind Verlierer: 2017 keine Änderung der ultralockeren Geldpolitik (Savers are losers: 2017 no changes of ultra-loose monetary policy)	VW
31.01.	Tagesspiegel	Warum Draghi die Inflation nicht schreckt (Why Draghi ist not frightened by inflation)	VW
31.01.	FAZ	Die deutsche Inflation nähert sich der 2-Prozent-Marke (German inflation is reaching 2 percent)	VW
31.01.	Börsen-Zeitung	Deutsche Inflation knackt EZB-Marke (German inflation reaches ECB goal)	VW
30.01.	Reuters	German inflation hits 3-1/2 year high in January	VW
30.01.	Reuters (Börse Online, Die Presse)	Deutsche Inflation befeuert Debatte über EZB-Niedrigzinspolitik (German inflation ignites debate about ECB low-interest rate policy)	VW
17.01.	Politico	Germany: Free trade's reluctant champion	VW

TV and radio interviews

08.12.	Bloomberg-Markets	Studio live interview on German economy and politics	VW
14.11.	Bloomberg-Markets	Comment regarding central bank communication	VW
08.11.	SR	Assessment of economic outlook	VW
08.11.	n-tv	Interview on new annual report of economic experts	VW
08.11.	Phoenix	Press conference of Council of Economic Experts	VW
25.09.	Bloomberg – Surveillance	Germany after the election	VW

21.09.	Omfif Podcast	Future of Europe post-German election	VW
07.09.	HR-Info	Statement regarding QE and the ECB	VW
28.08.	CNBC	Schulz not on the road to success by attacking Merkel	VW
17.08.	NDR-Info	Explanatory feature on interest rates	VW
15.08.	HR-Info	Comment regarding the decision of the Federal Constitutional Court on ECB bond-buying program	HS
29.06.	Corporate Finance.de	Statement regarding development of interest rates	VW
27.06.	CNBC	Wieland: Not expecting much change from ECB communication	VW
14.06.	ARD-Plusminus	EZB begünstigt Großkonzerne (ECB favors large corporations)	VW
12.06.	Bloomberg – Surveillance	Statement regarding ECB and Fed monetary policy	VW
31.05.	ARD-Plusminus	Statement regarding the limitations of cash payments	HS
26.04.	HR-Info	Statement regarding upcoming ECB meeting	VW
06.04.	ARD-Mittagsmagazin	Coverage of “The ECB and Its Watchers” conference and statement regarding the role of the ECB	VW
06.04.	CNBC	Wieland: ECB should be talking about how to exit QE	VW
30.03.	Hessenschau	Statement regarding bank fees	HS
21.03.	ARD-Hörfunk	Statement regarding German economy	VW
20.03.	n-tv	Statement regarding German economy	VW
09.03.	HR-Info	Interview regarding ECB decision	VW
01.03.	HR-Info	Statement regarding inflation development	VW
07.02.	HR-Info	Statement regarding financial deregulation in the United States	VW
02.02.	Bayern 2, Radio Wissen	Special feature on rating agencies	HS
09.01.	Gevestor.com	Economic Outlook 2017	VW

Press coverage of IMFS events

28.11.	Börsen-Zeitung	Mentale Erneuerung der griechischen Öffentlichkeit (Mental refreshment of the Greek public)
15.09.	Handelsblatt	Weidmann mahnt EZB-Rat zu rechtzeitigem Handeln (Weidmann asks ECB to act in time)
15.09.	Börsen-Zeitung	Weidmann sieht Inflation auf Kurs (For Weidmann inflation is on track)
14.09.	Efe	El president del Bundesbank pide levantar el pie del acelerador de la política de estímulos del BCE (Bundesbank president asks ECB to take foot of the accelerator)
14.09.	AFP	ECB must pick moment to take foot off gas: Bundesbank chief
14.09.	Dow Jones	Weidmann: EZB-Geldpolitik auch nach Ende der Nettokäufe sehr akkommodierend (Weidmann: ECB monetary policy also very accomodative after end of netto purchases)
06./07.04.	Various	The ECB and Its Watchers
14.02.	FAZ.NET	Mehr Europa für den Euro (More Europe for the euro)
13.02.	Börsen-Zeitung	EU-Kommission macht Griechen Hoffnung (EU Commission gives Greek people hope)

Social Media

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Bundesverfassungsgericht / lorenz fotodesign, Karlsruhe: p. 11

Deutsche Bundesbank / Frank Rumpenhorst: p. 45

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