

# SA Newsletter

Q4 2017

Does More Competition Make Banks Safer?\_4

Towards a Three-Part Structure of Banking Capital\_10

Martin R. Götz • Jan Pieter Krahnen • Tobias H. Tröger

The Micro and Macro Approaches: A Happy Marriage?\_14

**Gabriel Bernardino** 

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## About SAFE

The Research Center SAFE – "Sustainable Architecture for Finance in Europe" – is a cooperation of the Center for Financial Studies and Goethe University Frankfurt. It is funded by the LOEWE initiative of the State of Hessen (Landes-Offensive zur Entwicklung wissenschaftlich-ökonomischer Exzellenz). SAFE brings together more than 40 professors and just as many junior researchers who are all dedicated to conducting research in support of a sustainable financial architecture. The Center has two main pillars: excellent research on all important topics related to finance; and policy advice, including the dissemination of relevant research findings to European decision makers from the realms of politics, regulation and administration.

In order to promote a fruitful exchange with interested parties from politics, academia, business and the media, SAFE issues a newsletter on a quarterly basis. This aims to provide an overview of the Center's ongoing research and policy activities. The SAFE Newsletter succeeds the House of Finance Newsletter, which was published between 2009 and 2012.

SAFE is based at Goethe University's House of Finance, however extends beyond by drawing on scholars from other parts of Goethe University as well as from fellow research institutions. The Center builds on the reputation of the House of Finance institutions, serving as an interdisciplinary think tank on the issue of finance.

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**Gabriel Bernardino** 

## Editorial



Alexander Ludwig
Program Director "Macro Finance"
Research Center SAFF

A new German government for the next four years is about to be formed. One major topic this government has to deal with is a fundamental reform of the German pension system. Given the demographic prospects, we will face contribution rates of up to 25% and a decrease in the gross pension level down to about 36% in 2040 if there are no major reforms in the next years. Pension scenarios brought forward during the election campaign based on calculations only until 2030 do not meet the challenges ahead.

Here are four measures that should be implemented:

Firstly, the retirement age needs to be linked to life expectancy so that the proportion of lifetime in work and lifetime in pension remains constant on average. In addition, the retirement age should no longer be a strict legal category but rather a reference point for premiums and deductions. In particular, we need to sanction early retirement with larger deductions. Also, if officials decide that it is desirable to keep in place the current early retirement legislation without any deductions after a certain number of years of contributions, 45 at the moment, this number has to increase with life expectancy too.

Secondly, this measure should be accompanied by a taxfunded minimum pension at the level of the unemployment benefit (ALG II) in order to fight old age poverty. The minimum pension should be subject to the condition of a certain number of years of contributions or, at least, the search for such employment in Germany.

Thirdly, the pension formula should become more progressive, like it is in the United States. Research shows that the pension scheme is very well suited to insure lifecycle earning risks by redistributing between people with high and low lifetime incomes. Such a redistributive scheme would also effectively adjust total pension payments to account for the difference of seven years in remaining life expectancy at age 65 between low and high income earners. This kind of redistribution would not entail significant negative work incentives.

Fourthly, the promotion of the private old age provision which has been gradually introduced since 2003 needs to be amended. Its dissemination is too low and the bureaucratic burden too high to really serve as compensation for an ever smaller public pension level. Therefore, the subsidies should be abolished and steadily replaced by a mandatory private savings scheme which could be implemented as a market solution, as, e.g., in Australia. Most importantly, all guarantees in the accumulation phase for certified products need to be eliminated in order to allow for higher yields.

Given that the baby boomers retire in the 2020s, the next legislative term is the very one to give the German pension system a sustainable set-up.

Yours sincerely, Alexander Ludwig

## Does More Competition Make Banks Safer?



Martin R. Goetz
Goethe University & SAFE

It is an open debate in economic research whether competition decreases or increases bank risk. Theoretical as well as empirical research provides mixed results. In this paper I use a novel way to capture changes in banking competition by exploring how the exogenous state-specific process of banking deregulation in the U.S. from 1976 to 2006 gradually lowered entry barriers into urban banking markets. I find that the ensuing increase in market contestability significantly improved bank stability. Moreover, greater competition reduced banks' failure probability and the share of non-performing loans; also, it increased profitability. These findings suggest that competition increases stability as it improves bank profitability and asset quality.

Theories highlighting the role of banks' charter values in shaping risk-taking incentives argue that greater competition increases bank fragility by lowering bank profits, eroding bank charter values and providing incentives for banks to take on more risk (e.g. Hellmann et al., 2000).

Studies that consider the effect of greater competition on borrowers' risk shifting, however, suggest that an increase in competition improves bank stability (Boyd and de Nicolo, 2005).

Empirical research does not give definite results either. Evidence from cross-country analyses suggests that systemic crises are more likely to occur in countries with concentrated, less competitive banking systems. Micro-level evidence from individual banks indicates that low bank risk correlates with low competition. The removal of geographic restrictions on bank expansion, which also affects competition, seems to improve bank performance.

Identifying a causal impact of competition on bank stability is difficult for two reasons in particular. The first is endogeneity of competition: Greater competition may be the outcome rather than the cause of bank risk; an increase in bank risk may lead to more bank failures, resulting in less competition among surviving banks. Secondly, measuring competition is demanding: Empirical studies capture competition by estimating structural parameters derived

from theoretical models or by computing measures of market concentration. While estimates of structural parameters rely on the validity of the underlying model, concentration measures fail to adequately capture competition.

Given these challenges, I analyze the impact of a competition shock on bank stability by examining how the removal of entry barriers to metropolitan banking markets in the U.S. affected market contestability and thus banks' risk. Since accounting data from commercial banks in the United States are publicly available, I examine this question for the years 1976 to 2006.

### **Deregulation and market contestability**

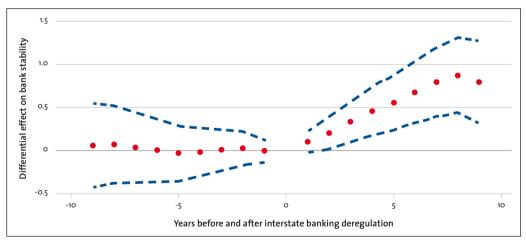
Due to regulatory restrictions, banks in the United States have been protected from the entry of new competitors for many decades. Starting in the 1970s, states gradually removed these entry restrictions over a period of several years. This process of interstate banking deregulation both allowed banks to expand across state borders and removed entry barriers for out-of-state banks, increasing contestability of local banking markets and fostering competition.

Earlier research examined how the process of interstate banking deregulation affected bank value and risk as it allowed banks to diversify geographically (Goetz et al., 2013, 2016), but it has not examined how an increase in competition due to (a) a higher threat of entry by out-of-state banks and (b) an incumbent's possibility to exit affects incumbent banks' stability.

## Significant effect on bank stability

My findings suggest that banks become safer once competition intensifies. Exploring the gradual lifting of entry restrictions, I find that an increase in potential entrants significantly increases bank stability. This result is not sensitive to the definition of market contestability, as my results indicate a strong and statistically significant effect on bank stability across different measures. My estimates suggest that a one standard deviation increase in the size of potential entrants' markets reduces a bank's average annual failure probability by about 10%.

The positive effect of competition on bank stability is robust to other influences. In particular, I find that more competition reduces bank risk



**Dynamic effects of removing entry restrictions on bank stability:** This figure displays estimates from an event study where I plot the average effect of a removal of entry restrictions around the year of deregulation (year o). Dots indicate point estimates on a bank's stability measure (natural logarithm of z-score) and dashed lines represent the 95% confidence interval. The pattern indicates that following the removal of entry restrictions bank stability steadily increases, while there was no effect prior to the removal of entry restrictions.

after accounting for the effect of mergers and acquisitions, banks' geographic expansion and autocorrelation in the dependent variable. Moreover, to capture unobservable time-varying local factors that affect bank stability and competition, I include several fixed effects in my regression model. Because I examine bank stability and competition at the metropolitan level, I add state-time fixed effects to capture unobservable time-varying changes in competition and stability at the state level. My results are robust to these fixed effects as I continue to find a strong statistical impact of competition on bank stability.

## Loan performance and bank profitability

To further examine the channels through which greater competition affects bank risk, I analyze how the removal of entry barriers impacts loan performance and bank profitability. Greater competition may increase bank stability as it also disciplines banks to increase monitoring and/or improve their selection of borrowers. Consistent with this, I find that more competition increases banks' asset quality by reducing the share of non-performing loans. Hence, my results indicate that greater competition increases profitability and lowers a bank's earnings volatility. This leads to the overall conclusion that greater competition makes banks safer because they improve their asset quality and

experience more stable and higher profits in more competitive markets.

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## The Welfare Costs of Temperature Shocks



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Climate change, mainly caused by carbon dioxide, increases the probability of extreme weather events, such as heavy rainfalls, floods, hurricanes or droughts. In addition to the temperature- and weather-related consequences, global warming may also have an impact on macroeconomic quantities such as aggregate productivity or consumption growth and even affect asset prices. We examine the potential economic welfare implications of rising temperatures resulting from the overall impact on the economy and financial markets. We show that productivity tends to decrease and welfare costs to increase with rising temperatures. The negative effects on productivity and welfare can be long lasting, but they can be mitigated when economic agents adapt their behavior to rising temperatures.

A growing number of studies investigates the empirical linkage between economic performance and weather events. However, clima-

tologists and economists alike have not yet reached a consensus about the long-term economic effects of global warming. This study is a first step towards the joint analysis of real business cycles, asset pricing and temperature changes in one integrated production-based framework. Our model builds on the production economy framework introduced by Croce (2014). We integrate time-varying temperature dynamics into our production-based model featuring recursive preferences, long-run risk, and investment adjustment costs.

## Long-lasting negative impact on productivity

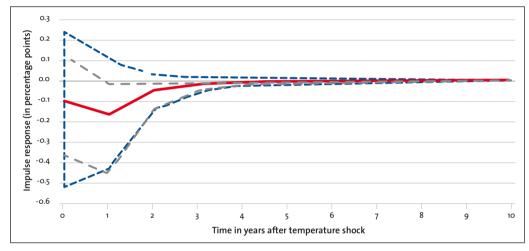
Using a bi-variate vector autoregression (VAR) analysis with data on U.S. temperature from the period 1950 to 2015, we observe a statistically significant and long-lasting negative impact of temperature change on total factor productivity (TFP). The figure shows the estimated impulse-response function of TFP for a temperature shock, and it clearly documents this negative effect of rising temperatures on the growth of TFP in the U.S.

Since positive temperature shocks reduce TFP growth instantaneously, consumption, output,

investment and labor productivity growth decline both in the short-run and over a longer horizon, which leads to lower asset valuations as well. An important feature of our model is that it endogenously generates the negative effect of rising temperatures on labor productivity (see Park, 2016). Over a 50-year horizon, a one standard deviation temperature shock leads to long-lasting negative effects and reduces cumulative output and labor productivity growth by 1.4%, which is a sizeable number.

## High elasticity of welfare costs

When it comes to assessing the ultimate economic consequences of rising temperatures for an individual, it is more informative to look at welfare effects. According to our economic model, agents optimally react to a change in economic conditions with respect to their consumption and investment behavior as well as with respect to the amount of time they want to devote to work instead of leisure. This optimizing behavior has to be taken into account when, for example, prices of financial assets are computed or when aggregate output in the economy is to be determined.



Impulse response of total factor productivity (TFP) to temperature shocks: The red solid line represents the estimated impulse response of TFP growth to a temperature shock. The dashed lines represent intervals around the estimated impulse response indicating the statistical uncertainty associated with these estimates. The values reported are deviations from the steady state (i.e. long-run mean) in percentage points. TFP growth is computed from the private business sector multifactor productivity index provided by the Bureau of Labor Statistics. Data on U.S. temperature are from the NOAA National Centers for Environmental information.

For this purpose, we take a standard production model and introduce temperature shocks as an additional source of risk. We introduce only minor structural changes compared to existing models to focus as much as possible on the direct consequences of rising temperatures.

When we express the economic costs of higher temperatures in terms of additional consumption needed to compensate the agent for temperature risk, we find that welfare costs are quite sensitive to the degree to which temperature changes impact TFP growth. Increasing the negative impact of temperature in absolute

terms makes welfare costs rise exponentially. Specifically, in our model with a standard parametrization, the welfare costs of rising temperatures amount to about 18% of the agent's lifetime utility. The already sizeable loss could quickly become even larger when the impact of rising temperatures on productivity becomes more negative.

An important driver of welfare costs is the speed of adjustment in response to temperature shocks. Lower welfare costs can be achieved by a faster adaptation to increasing temperatures while a slower adaptation increases welfare costs even more. Most importantly, a permanent change in the speed of adaptation affects welfare costs substantially. In this respect, increasing adaptation efforts can reduce welfare costs to a large extent while decreasing efforts may have drastic consequences for agents' welfare.

## **Summary**

Our results suggest that temperature shocks have a negative impact on both economic activity and financial markets by lowering long-run growth prospects and asset valuations. Further-

more, we show that the overall welfare costs of rising temperatures amount to a sizeable loss of the agent's lifetime utility. However, if economic agents manage to adapt to rising temperatures, e.g. by introducing new technologies, welfare losses could become smaller and might even turn into welfare gains.

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http://www.sciencedirect.com/science/article/pii/So165188917301483

## Collective Action between Regulatory Goals and Individual Claimants' Rights



Brigitte Haar Goethe University & SAFE

In this interview, Brigitte Haar, Professor of Law at Goethe University Frankfurt and a member of the SAFE Scientific Board, gives an overview of the recent legal developments concerning collective redress mechanisms in Europe. Brigitte Haar holds the Chair for Private Law. German, European and International Business Law, Law and Finance, and Comparative Law at Goethe University since 2004 and has held visiting positions at Yale Law School, Penn Law School, Columbia Law School and Vanderbilt Law School. Her main research interests are comparative corporate governance, financial market regulation, competition law and policy, and law and finance.

In a new research paper (Haar, 2017) you compare different collective redress mechanisms across Europe, one being the German Capital Investors' Test Cases Act (Kapitalanleger-Musterverfahrensgesetz, KapMuG), that were partly introduced as a response to the EU Commission recommendation on common principles for injunctive and compensatory collective redress mechanisms. What was the objective of this development?

According to the EU regulatory concept, collective redress is targeted towards an effective enforcement of the underlying regulatory goals, supplementing public enforcement. In this sense, collective redress can be regarded as a means to improve consumers' material rights. In the last two decades, the European Commission tried to move forward from a sectoral to a coherent approach. It started with the directive on misleading advertising, went on to the field of antitrust and ended now with the encouragement of EU member states to provide relief for private plaintiffs across different sectors for violations of competition, consumer protection, environmental and other laws on a collective basis.

The German Capital Investors' Test Cases Act was introduced at a quite early stage of this development. What experiences have been made so far?

The initial cause for this law was the Telekom-case that occupied several courts in the last decade and a half: Thousands of lawsuits filed by individual investors congested the courts. These investors claimed damages for alleged misrepresentations by Telekom in its prospectus related to real estate valuation at the time of its third initial public offering in 2000, leading to declining stock prices thereafter. This case, just as the more recent example of the VW

case, nicely illustrates three possible objectives of collective redress: Firstly, there is an enforcement deficit with respect to a specific regulation that may be compensated

by a collective action. This was the case here where the infringement of the prospectus liability provisions by Telekom had not been penalized.

A second objective is to compensate the individual plaintiffs for their monetary damages. At the same time, such a liability for damages may produce a deterrent effect, thus achieving a third overall objective of collective redress.

A common concern against collective redress is that it entails the danger of procedural abuse. How do different European mechanisms address this problem?

Most of them ensure a certain judicial control over the proceedings in order to prevent an overuse of this instrument – in the worst case in an entrepreneurial and profit-oriented way

"In the EU, consumer regulation is

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which can sometimes be ob-served in the United States. In France, for example, only a limited number of consumer organizations have been granted the

right to file a class action lawsuit. In Belgium, a judge has to decide on which organizations are allowed to file such an action. In Germany, the

legislator tried to eliminate abuses through certain procedural particularities in the KapMuG (see Haar, 2014). For example, the test case decision by the higher regional court is binding for the individual lawsuits whose proceedings with parallel underlying fact patterns have been stayed.

# The instrument of collective redress sometimes leads to changes in regulation – which entails the concern that this might be the main objective of an action in the first place. Is this concern legitimate?

This is certainly overgeneralizing things. A possible example could be the occasional situation in the U.S. where litigation has forced companies to accept negotiated regulatory policies such as in the Master Settlement Agreement of 1998 on smoking-related medical costs that resulted in huge payments of the tobacco industry and a ban on cigarette advertising. This was criticized by some (e.g. Viscusi, 2002) because, according to them, the locus of establishing tax policy and of regulating advertising was shifted from the legislator to the parties to the litigation.

## Do you think we will face a similar development in Europe?

The situation in Europe differs from the U.S. where the beginning of the regulatory role of

collective action can be attributed to ineffective regulation. In the EU, consumer regulation is relatively far-reaching, which may even be the reason underlying the relatively lax version of collective action in place in general. However, given the above-mentioned access restrictions

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in some countries, there is a certain risk that some interest groups will end up in a position to file actions that, in the end, produce some regulatory ef-

fect. This is particularly the case in France. In Germany, similar conditions may evolve given the ongoing discussion about group proceedings, which has lately been pushed by the Green Party against the background of the VW case. This proposal also aims to put certain interest groups in the position to file claims on behalf of consumers.

## Is it an advantage for consumers with small claims to bundle their cases?

This is not so clear. Of course, if they join an action that has already been filed, they can rely on the support structure of this action which saves them a lot of time. On the other

hand, they are part of a mass litigation and subject to the ensuing delays. It is left to the judgment of the courts to decide whether to stay an individual lawsuit with a view to a pending test case.

# Would you call the German legislation a success from a consumer protection perspective?

As a result of the Telekom case, the KapMuG was amended in order to resolve some inefficiencies. For example, the first ver-

sion did not provide for an opt-out settlement procedure that usually results in a decision binding for everyone affected who did not opt out. In an opt-in mechanism, in contrast, claimants must choose to join the action to become a member of the class. As the complexity of the Telekom case showed, largely self-driven proceedings in the hands of the higher regional court with neither an opt-in nor an opt-out mechanism come with certain risks and adverse effects. In the interests of the constitutional rights of the individual investors I would always call for a differentiating answer and not pursue the opt-out mechanism in all cases. However, in my view, the opt-out mechanism may be preferable to settle scattered low-value damages

because it may overcome the rational apathy problem better than the opt-in version of collective proceedings. Also, the opt-out mechanism could play an important role in collective settlement proceedings that encourage the parties to work on a mediatory solution outside the court. Ideally, this offers the parties the opportunity to arrive at a win-win solution, which is binding for those who do not choose to opt out. At the end of the day this could produce the optimal result for everyone involved. Therefore, the provision on the opt-out settlement in the KapMuG of 2012 is pointing in the right direction.

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## Towards a Three-Part Structure of Banking Capital



Martin R. Götz Goethe University & SAFE



Jan Pieter Krahnen
Goethe University & SAFE



Tobias H. Tröger Goethe University & SAFE

Following the recent financial crisis, the EU has overhauled and extended existing financial regulations. In particular, it introduced the ability to bail in certain debtholders when banks fail in order to reintroduce market discipline in the financial sector. The current regulatory setting, however, does not yet meet all the conditions necessary to ensure private liability and market stability. While creating the necessary incentives for investors to take individual bank risk into account, the bail-in threat also gives rise to the risk of a bank run that may endanger financial stability. We therefore propose to set an upper limit to bail-in and to implement a three-part structure of banking liabilities, comprising a bail-in section, a deposit-insured bailout section and an intermediate runendangered mezzanine-like section.

The current EU regulation is often thought to imply that a bail-in can and should be limitless as it, in principle, affects all the liabilities of a bank. The notion of a comprehensive private liability

of debtholders corresponds to the desire that a bank should never again be bailed out by the taxpayer. At first, this desire seems plausible and consistent with regulatory objectives. After all, a comprehensive private liability also applies in the case of insolvencies in the manufacturing or service sectors.

## The bright and dark side of the run risk

And yet, this demand misses its target as it causes additional problems. The error in reasoning lies in the disregard of a fundamental difference between (non-financial) companies and banks: Banks are exposed to the risk of a bank run by its investors - a risk which may threaten the existence of virtually any bank. Due to their financing structure, internationally operating major banks constantly find themselves under the sword of Damocles of a sudden withdrawal of investors' money. Two factors in particular make a bank's liability side fragile and expose a bank to the possibility of a run: First, its liabilities tend to consist to a significant portion of big corporations' cash reserves and current assets. Second, major banks choose to use short-term refinancing on a large scale through the interbank market.

On the one hand, the resulting fragility acts as a disciplining device: The threat of sudden outflows curbs a bank's risk taking. On the other hand, this positive effect can become a problem when the bank experiences difficulties to withstand a large outflow of their financing sources. When restructuring failing banks, the constant risk of withdrawal by short-term investors creates a lot of time pressure. It is specifically the bail-in threat which motivates investors to run for the door and withdraw shortterm liabilities quickly and in an avalanchelike manner. It is important to balance these two opposing forces: the positive incentive effect of private liability through the introduction of subordinated long-term borrowed capital (bail-in bonds) and the negative incentive effect of the risk of a bank run due to the bail-in threat.

Differences in the liquidity between assets and liabilities contribute to the fragility of banks. Liabilities above the level of Total Loss Absorbing Capacity (TLAC) and Minimum Requirements for Own Funds and Eligible Liabilities (MREL) that are not secured savings deposits tend to be very liquid so that banks do not experience a difficulty

when refinancing. A crisis period – or rumors of a possible crisis – may, however, lead to a drying up of this liquidity and drive a bank into insolvency. Emergency measures by its home country can then only be expected if the stability of the system as a whole is at stake. As a result, depositors remain insecure and add to the bank's uncertainty.

## Overcoming the bail-in threat

The increased risk of a bank run due to the possibility of a bail-in may undermine bank stability. As a consequence, requiring credibly binding bailin capital that is primarily governed by regulations can reinforce desired market discipline only to a certain extent. However, this was the reason why the equity and debt capital of TLAC / MREL was created in the first place. Therefore, it is necessary to consider the extent to which the disciplining, positive effect of the additional risk of a bank run creates a benefit that outweighs the negative effect on financial stability due to the inefficient liquidation of banks. To curb the negative effect, it is beneficial to restrict the threat of a bail-in to those investors who are involved in the area of the TLAC / MREL capital. Hence, an

upper limit should be set in addition to a minimum limit for the amount of bail-inable capital.

We arrive at a division of the liabilities side of a bank balance sheet in three parts: (a) a liable (TLAC / MREL) part, (b) a non-liable (secured) part and (c) a conditionally liable segment between those two for which the amount needs to be determined. The latter part is a mezzanine-like intermediate tier because it is located in the risk-earnings structure between TLAC / MREL and (guaranteed) savings deposits. Depending on the cost-benefit ratio, this mezzanine-type loss absorption zone can also be set to zero and thus omitted.

## Public backstop at the European level

The need of a bailout guarantee for run-prone liabilities beyond the aforementioned threshold leads to a follow-up question: How can the credibility of the bailout commitment be ensured? Only large industrialized countries have a sufficiently broad fiscal base to guarantee the secured savings deposits of large banks. In the case of small countries, the ability to pay (and probably also the willingness to pay) arises

when their banks are very large. It is difficult to imagine a bailout guarantee above a sufficiently large liability core without fiscal coordination regarding a public backstop at the European level.

Our proposal of a trichotomy of liability corresponds more to the regulatory requirements than a complete bail-in by reducing or even eliminating the unintended consequences of an irrational run on bank liabilities. This does not imply a softening up of the bail-in rules, as these must be enforced with all consistency within the scope of a TLAC / MREL requirement.

Outside of the framework of TLAC / MREL, a consistent regulatory approach should aim to avoid externalities such as a bank run and its impact on other companies in the financial and non-financial sector. Achieving this regulatory balance requires a creative effort towards the design of an incentive-based public protection umbrella for the European financial markets and economies.

The full text is available as SAFE White Paper No. 50 and available at: www.safe-frankfurt.de/bail-in limits

## **Selected Policy Center Publications**

Hett, F. and J. Kasinger (2017)

"Undermined Market Discipline:
The Role of Bank Rescues and
Bailout Expectations",
Policy Letter No. 59, SAFE Policy Center.

Langenbucher, K., Milione, L., Roth, A. and T. Tröger (2017)

"EU Mapping 2017: Systematic Overview on Economic and Financial Legislation", White Paper No. 49, SAFE Policy Center.

Kotz, H.-H. and R. H. Schmidt (2017)

"Corporate Governance of Banks –

A German Alternative to the

'Standard Model'",

White Paper No. 45, SAFE Policy Center.

Goldmann, M. (2017)

"Karlsruhe Refers the QE Case to
Luxembourg: Summer of Love",
Policy Letter No. 58, SAFE Policy Center.

## News

## Regulatory Technology (RegTech) – Practice, Supervision and Research in Dialogue



An increasing number of financial service companies use external service providers to comply with their regulatory duties. Since it would be too costly for the banks to provide the necessary know-how themselves, they tend to outsource compliance, monitoring and reporting tasks to so-called RegTech companies, which process big amounts of customized data using digitalized and automatized procedures. At a Regulatory Technology Conference on 26 September, organized by SAFE and the Center for Financial Studies, the question was discussed how RegTech companies perform these tasks and how this development is supervised by the respective authorities. Felix Hufeld, President

of the Federal Financial Supervisory Authority (BaFin), welcomed the improvement of quality and efficiency promised by the new technologies. However, he made clear that all responsibility would stay with the financial service companies. "Banks have to explain credibly how they will meet their duties," Hufeld stated. The BaFin insists that banks who outsource services to RegTech companies agree by contract with the insourcer to allow the BaFin to supervise the outsourced services.

## Hans-Joachim Voth Appointed Visiting Professor of Financial History 2017



Hans Joachim Voth, UBS Professor of Macroeconomics and Financial Markets at the University of Zurich, holds the Visiting Professorship of Financial History at the House of Finance this year. His research focuses on economic and financial history, in particular long-run economic growth, the history of sovereign debt, causes and consequences of the Nazi Party's rise to power and the economic history of the Industrial Revolution. Hans Joachim Voth was educated in Bonn, Freiburg, the European University Institute (Florence) and Oxford where he graduated in 1996 from Nuffield College. From 1998 to 2013, he was a Professor at Universitat Pompeu Fabra in

Barcelona. Professor Voth is the third holder of the Visiting Professorship of Financial History which was endowed by Metzler Bank and the Edmond de Rothschild Group in 2014 on the occasion of Goethe University's centennial. Cooperation partners are the Research Center SAFE and the Institut für Bank- und Finanzgeschichte. Previous holders were Benjamin Friedman, Harvard University, in 2015 and Caroline Fohlin, Emory University, Atlanta, in 2016.

## SAFE Summer Academy: Developing Capital Markets in Europe



On 21 and 22 September 2017, the 5<sup>th</sup> SAFE Summer Academy, entitled "Developing Capital Markets in Europe", was held in Brussels. Jan Pieter Krahnen, Program Director of the SAFE Policy Center, welcomed more

than 50 participants, representing institutions involved in the legislation and implementation of financial markets regulation: the European Commission, the European Parliament, European regulatory and supervisory institutions, national ministries of finance and

economics as well as the European Central Bank (ECB) and national central banks. This year's Summer Academy dealt with aspects that impact capital markets' development in Europe. The agenda on the first day focused on pension and life insurance schemes and their effects on the European capital markets. The second day was dedicated to the integration of financial markets in Europe, i. a. with a panel that discussed the necessity of an integrated European market supervision performed by a single authority similar to the U.S. Securities and Exchange Commission (SEC). The European Commission's proposal to create a stronger and more integrated European financial supervision had been published only two days earlier.



## Selected Publications

### Bick, A. and N. Fuchs-Schündeln (2017)

"Taxation and Labor Supply of Married Couples across Countries: A Macroeconomic Analysis", accepted for publication in the Review of Economic Studies.

### **Curatola, G.** (2017)

"Optimal Portfolio Choice with Loss Aversion over Consumption",

forthcoming in the Quarterly Review of Economics and Finance.

### Haar, B. (2017)

"Too-big-to-fail im Spannungsfeld von Wettbewerb und Regulierung",

Festschrift für Theodor Baums zum siebzigsten Geburtstag, Mohr Siebeck, Tübingen, pp. 517-530.

## Haferkorn, M. (2017)

"High-Frequency Trading and its Role in Fragmented Markets",

Journal of Information Technology, Vol. 32, Issue 3, pp. 283-296.

## Huffman, D., Maurer, R. and O. S. Mitchell (2017)

"Time Discounting and Economic Decision-Making in the Older Population",

forthcoming in the Journal of the Economics of Ageing.

### Kraft, H., Munk, C. and S. Wagner (2017)

"Housing Habits and Their Implications for Life-Cycle Consumption and Investment", forthcoming in the Review of Finance.

### Ochsenfeld, F. (2017)

"Mercantilist Dualization: The Introduction of the Euro, Redistribution of Industry Rents, and Wage Inequality in Germany, 1993-2008",

Socio-Economic Review, doi: 10.1093/ser/mwx026.

#### **Tröger, T.** (2017)

"Case Note on the Judgement of the EGC of 05/16/2017 – Case T-122/15 – Landeskreditbank Baden-Württemberg – Förderbank v. European Central Bank (ECB)",

Europäische Zeitschrift für Wirtschaftsrecht (European Journal of Business Law), Vol. 22, pp. 472-473.

## **Recent SAFE Working Papers**

Tröger, T. (2017)

"Remarks on the German Regulation of Crowdfunding",

SAFE Working Paper No. 184.

Joost, D., Nijman, T. E. and Z. Simon (2017) "The Missing Piece of the Puzzle: Liquidity Premiums in Inflation-Indexed Markets", SAFE Working Paper No. 183.

Bellia, M., Pelizzon, L., Subrahmanyam, M., Uno, J. and D. Yuferova (2017)
"Coming Early to the Party",

SAFE Working Paper No. 182.

Kaft, H. and F. Weiss (2017)

"Consumption-Portfolio Choice with Preferences for Cash",

SAFE Working Paper No. 181.

Tröger, T. (2017)

"Why MREL Won't Help Much",

SAFE Working Paper No. 180.

Tröger, T. (2017)

"Too Complex to Work: A Critical Assessment of the Bail-in Tool under the European Bank Recovery and Resolution Regime",

SAFE Working Paper No. 179.

Goldmann, M. (2017)

"United in Diversity? The Relationship between Monetary Policy and Banking Supervision in the Banking Union",

SAFE Working Paper No. 178.

The SAFE Working Papers can be downloaded at http://safe-frankfurt.de/working-papers

## The Micro and Macro Approaches: A Happy Marriage?



Gabriel Bernardino
Chairman of the European
Insurance and Occupational
Pensions Authority

Supervisors, regulators and policymakers all over the world have experienced difficult times during the financial crisis, fighting a war without an adequate arsenal. Indeed, one of the main lessons learned is that the focus on microprudential supervision alone is not enough to ensure financial stability. This needs to be supplemented by a macroprudential approach. To cite Crocket's (2000) words, financial stability can be most productively achieved if a better "marriage between the microprudential and the macroprudential dimensions" is achieved.

Can the micro and macro approaches have a happy marriage? My view is that they can, but there are several considerations to be made.

First, there is the need to have a **sound frame-work** in place, laying down a strategy that con-

siders, among other things, the possible interactions between the micro and macro spheres in terms of objectives, tools to be used and side effects on the other area(s).

Secondly, endless debates on whether a certain policy is **micro or macro** should be avoided. Furthermore, I agree with the IMF (2013) that, although conceptually it is useful to split the two approaches, this separation is not easy to draw in practice. The same happens in a marriage. What matters is that both members contribute to the overall objectives of the household to the extent they can.

Thirdly, with regard to the **objectives**, although they differ in theory, in practice they will coincide quite often. It is widely acknowledged that the microprudential approach should focus on risks of individual institutions (with the protection of consumers being the ultimate objective), whereas the macroprudential approach should focus on system-wide distress to avoid output costs (Borio, 2003). In many instances, however, micro- and macroprudential policies will use similar or even the same instruments and will supplement each other. Furthermore, in the case of insurance, because of the way it exerts systemic risk compared to banking, this potential conflict

is probably different in practice. However, further research is needed to better understand the sources of systemic risk in insurance as well as in the transmission channels.

Fourth, in situations in which the coexistence between the micro and the macro approach is not sufficiently smooth, there is a clear need for **coordination and cooperation**. In case of potential conflict between macroprudential and microprudential policies, a certain hierarchy between the policies should be considered. For example, it might be that during a severe crisis, financial stability considerations may temporarily have to take precedence to avoid the materialization of systemic risk and an impact on the real economy.

Fifth, in addition to ensuring coordination and cooperation to solve potential tensions, it is also important to ensure consistency and complementarity between the micro and macro spheres. Several microprudential instruments can be readily adapted to serve macroprudential objectives. Therefore, it is important to consider the combined effects of both policies to avoid overreactions or unintended counterbalances. The regulatory framework plays a key role in this regard. For example, one way to ensure consistency and complementarity between the micro and macro

spheres in the EU will be to discuss all relevant micro and macro issues in the context of the Solvency II review in 2021 (EIOPA, 2016).

The coexistence of the micro and macro approaches, like any marriage, is not easy. It is almost certain that tension will arise at some point, but a clear framework, well defined objectives, adequate coordination and cooperation, as well as a proper regulatory framework should help overcome these difficulties.

#### References

**Borio, C.** (2003), "Towards a Macroprudential Framework for Financial Supervision and Regulation?", BIS Working Papers No. 128.

**Crocket, A.** (2000), "Marrying the Micro- and Macroprudential Dimensions of Financial Stability", Remarks before the Eleventh International Conference of Banking Supervisors, held in Basel, 20-21 September 2000.

**EIOPA** (2016), "EIOPA Response – EC Consultation on the Review of the EU Macroprudential Policy Framework", 25 October 2016.

**IMF** (2013), "Key Aspects of Macroprudential Policy", 10 June 2013.

## **Events**

EFL E-Finance Lab

IBF

Institut für Bank- und Finanzgeschichte

November		23 Nov	ICIR Frankfurter Vorträge zum Versicherungswesen Die Umsetzung der IDD und deren Auswirkungen	12 Dec 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Daisuke Ikeda, Bank of England
1 Nov 2.00 – 3.15 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Athanasios Orphanides, MIT		auf den Versicherungsvertrieb Speaker: Matthias Beenken, FH Dortmund	12 Dec 4.15 – 5.30 pm	Finance Seminar – Joint with SAFE Speaker: Elisabeth Kempf, University of Chicago
2 – 3 Nov 12.00 – 18.45 pm	SAFE/CEPR Conference Macroeconomics and Growth Programme Meeting	24 Nov 7.00 pm	ILF – Evening Lecture Economic Conditionality and the Impact of Accession Negotiations on Economic Governance in the Candidate Countries Speaker: Tatjana Jovanić, University of Belgrade	19 Dec 4.15 – 5.30 pm	Finance Seminar – Joint with SAFE Speaker: Andrea Polo, Universitat Pompeu Fabra
3 – 4 Nov	SAFE Household Finance Workshop			19 Dec 4.30 – 6.00 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Gianluca Violante, Princeton University
6 Nov 5.30 – 7.00 pm	CFS/IBF Lecture Keynes the Investor Speaker: David Chambers, Cambridge University	28 Nov 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Andreas Fagereng, Statistics Norway	4.50 0.00 pm	January
7 Nov 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Martin Brown, University of St. Gallen	28 Nov 4.15 – 5.30 pm	Finance Seminar – Joint with SAFE Speaker: Paul Schneider, University of Lugano	9 Jan 18 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Stephanie Schmitt-Grohé, University of
7 Nov 4.15 – 5.30 pm	Finance Seminar – Joint with SAFE  Deciding with Judgment  Speaker: Simone Manganelli, European Central Bank	29 Nov 6.30 pm	ILF – Evening Lecture Brexit – Implications for the Financial Service Industry	9 Jan 18 4.15 – 5.30 pm	Columbia  Finance Seminar – Joint with SAFE  Speaker: Rüdiger Fahlenbrach, Swiss Finance Institut
9 Nov 5.30 – 7.00 pm	<b>CFS Presidential Lecture</b> Speaker: Thomas J. Jordan, Schweizerische Nationalbank	30 Nov 6.00 – 7.45 pm	<b>CFS Lecture/Festakt</b> Speaker: i.a. Rolf Breuer, prev. Deutsche Bank	12 Jan 18 12.30 – 14.00 pm	CFS/IBF Lecture Speaker: Catherine Schenk, University of Glasgow
5.00 pm	EFL Jour Fixe The Blockchain – A New Foundation for Building Trustworthy and Secure Distributed Applications (DAPP's) of the Future Speaker: Paul Müller, TU Kaiserslautern		December	16 Jan 18 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Jesper Rangvid, Copenhagen Business School
		1 Dec – 20 Jan	GBS Open Program Alternative Investments Speaker: Uwe Walz, Goethe University	23 Jan 18 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: David Martinez-Miera, CEMFI
14 Nov 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Frederic Malherbe, London Business School	1 Dec – 20 Jan	GBS Open Program  Derivatives & Financial Engineering  Speaker: Christian Schlag, Goethe University	26 Jan 18	Visiting Professorship of Financial History – Conference Real Effects of Financial Crises Organizer: Hans-Joachim Voth, University of Zurich
14 Nov 4.15 – 5.30 pm	Finance Seminar – Joint with SAFE Marketplace Lending, Information Aggregation and Liquidity	4 Dec 5.00 pm	EFL Jour Fixe Can Robo-advice Restore Rationality in Self-directed	30 Jan 18 2.15 – 3.45 pm	Frankfurt Macro Seminar – Joint with SAFE Speaker: Javier Suarez, CEMFI
21 Nov 4.15 – 5.30 pm	Speaker: Oren Sussman, University of Oxford  Finance Seminar – Joint with SAFE  Speaker: Oliver Boguth, Arizona State University	5 Dec	Portfolios? Speaker: Matthias Rumpf, E-Finance Lab Finance Seminar – Joint with SAFE	30 Jan 18 4.15 – 5.30 pm	Finance Seminar – Joint with SAFE Speaker: Alexei Ovtchinnikov, HEC Paris
21 Nov	Frankfurt Macro Seminar – Joint with SAFE	4.15 – 5.30 pm 7 – 8 Dec	Speaker: Oliver Spalt, Tilburg University  ICIR Frankfurt Insurance Research Workshop		

GBS Goethe Business School









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