

SA Newsletter

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Bank Rescues and Bailout Expectations: The Erosion of Market Discipline During the Financial Crisis 4

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How to Achieve a Real "Skin in the Game" in ABS Transactions_10

Jan Pieter Krahnen • Christian Wilde

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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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Editorial



Andreas Hackethal
Program Director "Household Finance",
Research Center SAFE

Digitalization comes as both an opportunity and a challenge to many industries, to academia and to every individual. The rapid digitalization of so many areas of life is the result of three technological developments: the massive increase in computing and memory capacity of even the smallest devices, the interlinkage of these (mini-)computers via fast networks, and the development of powerful and, at the same time, user-friendly software.

As a consequence, ever larger amounts of data are being collected, stored, exchanged and intelligently processed. Digitalization has already changed many industries fundamentally, such as commerce, media and telecommunications. Hence, we are wondering what a completely digitalized financial industry will look like and how it will fulfill its key functions for the real economy in the future. How will digitalization affect the stability of the financial system? How can we use its potential for the benefit of all market participants?

The financial industry has been a power user of information technology for many decades. After all, markets and intermediation are, in their essence, about information processing. However, in light of today's omnipresent digitalization, the long-time use of IT seems to be more of a curse than a blessing for many institutions. Over the years, the IT systems of financial institutions have become ever more complex so that old and new technology is now almost inextricably linked.

This leads to competitive advantages for (mostly new) players who can profit from the full potential of digitalization, uninhibited by technological legacies. What is more, the threat by new players with innovative digitalized business models comes for many financial institutions at a time when they are still working off the long-term effects of the recent financial crisis and, at the same time, suffer from a low interest rate environment and returns that are smaller than ever before.

For empirical research, the abundance of data offers new opportunities for methodologically accurate experiments and studies. Simultaneously, many tech and finance firms are currently building up and strengthening their own research activities and, thus, headhunt promising junior talents. At SAFE, we take advantage of the digitalization by entering into promising research collaborations with incumbents and new industry participants alike. Through joint field studies in the fields of payments, digital wealth management, pensions and lending, we will aid in finding better solutions for regulators, industry and clients.

We are looking forward to presenting to you the fruits of these new activities soon.

Yours sincerely, Andreas Hackethal

Bank Rescues and Bailout Expectations: The Erosion of Market Discipline During the Financial Crisis



Florian Hett Goethe University & SAFE



Alexander Schmidt

Deutsche Bundesbank

The recent financial crisis triggered a series of unprecedented government interventions in the financial system. These interventions raised fears about a loss of market discipline: If investors perceive a higher likelihood of future support to troubled financial institutions, this may reduce their incentives to monitor and control the banks' risktaking. In turn, this investor behavior might increase the probability and severity of future crises. In sum, the indirect costs of bailouts might outweigh the positive short-run gains from improved financial stability, which makes this issue critically important for policymakers. This paper provides a novel approach to analyzing the strength of market discipline during the financial crisis in order to quantify this effect.

Until now, there has been a lack of academic consensus regarding theoretically and empirically sound methods to measure market discipline. With our paper we aim to address this gap in the literature. As Bliss and Flannery (2001)

point out, market discipline consists of two distinct components. First, monitoring refers to market prices reflecting the condition of a bank, in particular the probability of default. Second, influence describes how this market information translates into incentives for managers to alter risk taking behavior. By analyzing how the riskiness of banks is reflected in their different security prices, our paper relates to the first category in this classification.

Public bailouts favor debt over equity

As we are measuring changes in market discipline over considerable time intervals, we impose as few assumptions as possible about structural relations in order to maintain a maximum level of robustness. Hence, we base our analysis only on two general assumptions unlikely to be violated even during periods of severe market turmoil. First, we rely on the observation that the debt-to-equity hedge ratio, a specific measure of how debt prices react to changes in stock prices, unambiguously increases for declining firm values and generally increases when a firm becomes riskier. Second, we draw upon the fact that public bailouts favor

debt over equity such that the effective debtto-equity elasticity in the presence of bailouts will be lower than the fundamental elasticity in the absence of bailouts. By stating that the effective debt-to-equity sensitivity negatively depends on the size of the perceived bailout probability, we extend the work by Schaefer and Strebulaev (2008) and Campello et al. (2008).

In line with much of the empirical literature on measuring market discipline, our framework is conceptually based on a structural firm value approach. Furthermore, it is based on second moments, i.e. we analyze the co-movement of equity and debt returns. We theoretically derive that the relation between the debt-to-equity hedge ratio and individual firm risk depends on the strength of market participants' bailout expectations. It follows that observing changes in this debt-to-equity sensitivity will allow us to infer changes in bailout expectations and hence market discipline. Importantly, the effect of bailout expectations is independent from any particular assumption regarding the modeling of the firm value. As the aim of our method is to compare pricing relations during times of crisis,

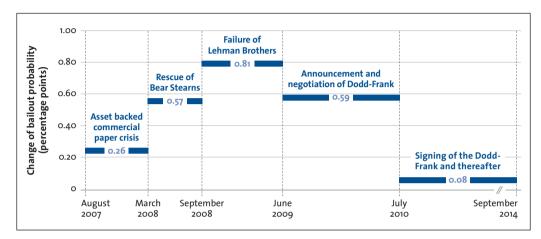


Figure 1: Change of bailout probabilities relative to pre-crisis period.

this robustness of our methodology is particularly beneficial.

Significant cross-sectional differences

We apply our approach to several key events relevant to market discipline: the outbreak of turmoil in the asset backed commercial paper market in August 2007, the rescue of Bear Stearns in March 2008, the failure of Lehman Brothers and subsequent support measures during the autumn of 2008 and the implementation of the Dodd-Frank Act in July 2010. Our results show a considerable decline of market discipline following the outbreak of the asset backed commercial paper crisis. Bailout expectations further increased after the rescue of Bear

Stearns and ultimately peaked after the Lehman collapse and the unprecedented series of public interventions thereafter. Following the announcement of the Dodd-Frank Act in June 2009, estimated bailout probabilities started to decline again, reaching pre-crisis levels after the signing of the law in July 2010 (see Figure 1).

We find evidence for significant cross-sectional differences in estimated bailout probabilities for government-sponsored enterprises (e.g. Freddie Mac), investment banks and systemically important banks. Market participants perceive actual default risk of government-sponsored enterprises to be almost negligible. For investment banks, perceived bailout probabilities are sub-

stantially lower than for other financial institutions, which is in line with the historical interpretation according to which investment banks, in the spirit of the Glass-Steagall Act, are regarded as having a smaller impact on the real economy as compared to deposit banks. For systemically important banks, perceived bailout probabilities are significantly higher. We also use our approach to analyze the development of market discipline for non-financial firms and find no comparable effects. This ensures that we can interpret our results as driven by differences in bailout expectations.

Policy Implications

Further, we analyze the heterogeneity of the development of market discipline across different sub-samples of financial firms. We find that the effect of the rescue of Bear Stearns is particularly severe for investment banks as well as for systemically important banks. In contrast, following the sector-wide support measures enacted after the Lehman failure, nearly all sub-sample differences in perceived bailout probabilities vanished, reflecting the general willingness to support the financial system that characterized that period.

Overall, our results suggest that market participants rationally adjust their bailout expecta-

tions in response to government interventions. Given these findings, policymakers need to take into account the potential effects on market discipline when considering future public responses to financial crises.

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Add-on Pricing in Retail Financial Markets and the Fallacies of Consumer Education



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Empirical evidence shows that some consumers are naïve about the full costs of the products they purchase. Firms are likely to exploit this. This is especially relevant in retail financial markets where banks intensely compete for customers to open a bank account and then have enhanced market power to charge high overdraft fees or to sell high-priced investment products to naïve customers. Financial education initiatives are often considered simple and effective measures to mitigate adverse effects for naive consumers with only positive effects on consumer protection and welfare. However, as this paper shows, effects are more complex due to banks' strategic responses. In particular, the desired effects of educating consumers are difficult to realize when banks can discriminate between naïve and sophisticated consumers, and welfare effects can even be negative.

As shown by theoretical work of Gabaix and Laibson (2006), the equilibrium pricing strategy

of firms in a situation with sufficiently many naïve consumers is to compete purely on the price of a base good (bank account) and to shroud information about prices of add-ons (overdrafts, investment products). While the base good is priced below marginal costs, the price of the add-ons is above marginal costs. The consequences for consumers are twofold: First, sophisticated consumers who rationally expect that add-ons are overpriced will search for substitution possibilities, leading to smaller firm revenues and inefficiencies if substitution costs exceed firms' costs of production. Second, naïve consumers who buy the add-on at the high price subsidize the low-priced base good and thereby also sophisticated consumers.

This raises the question if and how a regulator may intervene to protect consumers in their decision making and to increase economic welfare. Intuition suggests that effective consumer education will lead to efficient market outcomes and have only positive effects on consumer protection and welfare only if the educational boost is strong enough to make many naïve consumers sophisticated.

Price discrimination as optimal strategy

We start our theoretical analysis by investigating banks' optimal information and pricing strategy when their consumers are composed of naïve and sophisticated types. Banks can choose between: (i) high shrouded add-on prices for all consumers, (ii) low unshrouded add-on prices for all, or (iii) high shrouded add-on prices for naïve consumers and low unshrouded add-on prices for sophisticated consumers. The third strategy is an important extension of the existing literature. It represents a particular form of third-degree price discrimination and considers situations where banks collect information from new customers with regard to their degree of sophistication after the purchase of the base good.

For example, banks may analyze information provided by a new customer when opening a bank account and track the usage of this account. They may then use this information to classify consumers as either naïve or sophisticated and fine-tune their pricing strategy for investment products accordingly. Premiums of investment products offered to consumers

classified as naïve may be substantial. Empirical evidence shows, for example, that US retail investors paid, on average, an 8 percent premium for popular structured equity products relative to the fair market value of these securities (Henderson and Pearson, 2011).

As a first result, our model shows that price discrimination is a symmetric competitive equilibrium if banks can classify consumers relatively well and the fraction of naïve consumers is neither very small nor very large. If it is very small, banks would unshroud prices for all consumers; if it is very large, they would shroud add-on prices for all. Thus, fully unshrouded prices, which would be the socially most desirable outcome,

will not emerge in many situations – even if markets are competitive. This suggests that, in the light of recent technological developments ("big data") which both ease and advance possibilities for consumer classification and price discrimination, it is less relevant how consumer costs and welfare change when firms are pushed into an equilibrium where they disclose prices towards all consumers (since this is unlikely to happen), but how these outcomes change in a price equilibrium where firms price discriminate between sophisticated and naïve consumers.

Hidden costs of consumer education

In contrast to common intuition, we find that educating some consumers may entail hidden

costs for all other consumers, leading to increased prices and a reduction in overall welfare. Such negative effects come from substitution efforts of sophisticated and educated naïve consumers as well as from banks' strategic reactions via prices. The left panel of Figure 1 illustrates for a particular combination of parameters (i.a. assuming that consumer education succeeds in educating 40% of naïve consumers) that consumer education results in lower costs for educated naïve consumers but higher costs for non-educated naïve and sophisticated consumers when the ex-ante share of naïve consumers is above 33%. The right panel illustrates corresponding welfare losses with and without consumer education.

Finally, we show that consumer education, without knowing whether firms are able to engage in price discrimination or not, yields welfare effects that can go in any direction.

Overall, our analysis suggests that policymakers are advised to carefully examine consumer and bank behavior before implementing the seemingly harmless intervention of consumer education. They may not want to jump too quickly, or rely exclusively, on consumer education to solve problems of consumer protection or inefficient information and pricing strategies of banks. Consumer education is no panacea.

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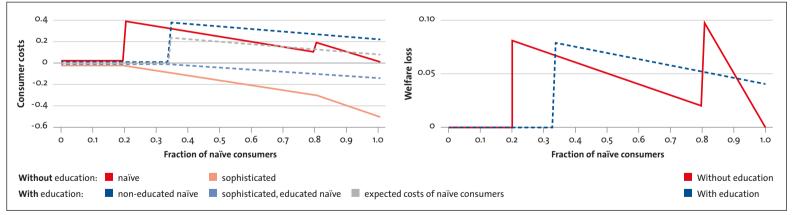


Figure 1: Consumer costs and welfare loss with and without consumer education. The solid lines in the left panel represent consumer costs before education for sophisticated (lower solid line) and naïve consumers (upper solid line). The dashed lines in this panel represent consumer costs after education for sophisticated and educated naïve (lower dashed line), non-educated naïve consumers who are immune to education (upper dashed line) and expected costs of ex-ante naïve consumers (middle dashed line). The right panel shows corresponding welfare losses with and without consumer education.

Interview:

Elite Networks Negatively Affect Credit Allocation in Germany



Rainer Haselmann Goethe University & SAFE

Rainer Haselmann joined Goethe University and the Research Center SAFE as a Professor of Finance, Accounting and Taxation in October 2014. His research focuses on banking regulation, lending and portfolio allocation. Previously, he was a Professor of Finance at the University of Bonn. After having earned a Ph.D. in 2006 from the Leipzig Graduate School of Management, Rainer Haselmann worked as a postdoctoral researcher at the Columbia Business School and the University of Mainz. From 2009 to 2011, he was an Assistant Professor at the Bonn Graduate School of Economics.

In your most recent paper, "Rent-Seeking in Elite Networks", you examine the role of elite social networks in Germany for the allocation of economic resources. How did you approach this topic?

We focus on the allocation of credit between banks and firms whose officials are members of the same elite service club organization. Based on member data for about 400 service club branches throughout Germany as well as contract-level financial data, we compare the lending relationship between a bank and a firm whose senior managers are members of the same club branch (in-group) to the lending of banks to firms whose officials are not connected via membership in the same club branch (out-group).

What are your results?

We were quite surprised by the enormous magnitude of our findings. First, we observe a drastically higher share of in-group as compared to out-group lending. This effect can be illustrated nicely by focusing on the event when a new entrepreneur joins a given club branch.

Subsequent to this event, the firm experiences a 37 percentage points (pp) higher increase in lending from in-group banks than from outgroup banks. This increase in in-group lending is not just due to a shift from lending by one bank to another, but due to a boost in total lending, resulting in a higher leverage ratio of the firm whose CEO joins the club.

As banking has to do with asymmetric information, it is, in a way, not surprising that proximity and, with that, possibly more transparent information facilitates credit relations. The interesting question is how these connection-based credits perform.

Yes, the really interesting finding of our paper is that these in-group lending relationships tend to be significantly less profitable for the bank as compared to out-group lending relationships. To look into this question we calculated the return on loans (ROL) that banks generate from in-group vis-a-vis out-group transactions. We find that a given bank generates a 4.4 pp lower ROL on in-group loans compared to out-group loans in the same city. When comparing

lending from in-group and out-group banks to the same firm, we observe a 2.7 pp lower ROL for in-group banks. This is a considerable difference, so we were wondering about the reasons for the relatively bad performance of in-group loans. We first looked at the credit conditions, such as interest rates, but we did not find any evidence for the assumption that in-group firms are offered special conditions. Instead, it turned out that the bad performance is a result of too late exits: In-group banks still continue to lend to in-group firms when these firms' business is turning bad and when out-group banks have already started to withdraw lending (see Figure 1).

On a large scale, this behavior must have a considerable negative impact on the economy as a whole. How is it possible that firms are not able to reap benefits from the generous credit supply?

Overall, we observe that in-group firms do not use the extra financing to make new investments but rather to increase payments to the shareholders. In most cases, this means paying

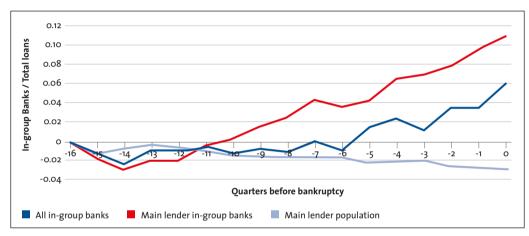


Figure 1: Bank lending shares before bankruptcy. Share of in-group bank loans in total firm loans relative to the share sixteen quarters before bankruptcy which is set to zero. The dark blue line comprises all firms with a default event in the sample, whereas the red line only includes those firms for which the in-group bank is their main lender. The light blue line depicts the share of loans from firms' main lender in total firm loans for the population of all non-member firms.

out to the CEO, as our sample consists to a large part of relatively small family-owned firms. This indeed implies that, in a broader context, in-group lending as a consequence of elite networks results in an inefficient allocation of resources and that a developed economy like Germany would likely experience a higher overall economic growth rate if bank officials would not engage in elite networks.

Can you be sure that new or intensified lending relations are a consequence of club membership? One could argue that clubs regularly offer a new membership to the local economy's shooting stars, so that your findings would display mere correlations rather than causality. Analyzing the consequences of social networks on economic outcomes is clearly prone to serious selection concerns. However, the highly regulated

procedures for membership in this service club organization does not make the timing you suggest very likely. Nevertheless, to strengthen our analysis in this respect, we introduced several tests on this issue. In particular, we focused on a purely exogenous event, namely the election of existing club members as mayors. In Germany, the mayor of a district often becomes chairman of the local state bank's supervisory board. In this capacity, he or she gains great influence on the bank's loan-granting activity, especially for corporate loans. So, while the elected candidate has been a member of the club branch before, his or her degree of influence changes with the election.

What we find is that, after an existing club member is elected mayor and becomes head of the local state bank, this bank increases lending to in-group firms by 49 pp compared to other banks. Additionally, total debt and leverage of in-group firms significantly increase after the election. In contrast, if a club member is elected mayor but is not appointed supervisory board chairman of the local state bank, there is no effect on in-group financing. This quasi-natural experiment with a control

group provides a very strong argument for a causal relationship between proximity to a – in this case new – banker and boosting credit relations.

According to your findings, state-owned banks engage more actively in in-group lending than private banks and also face significantly lower returns on these loans. How can you explain this? One reason for this result might be that the corporate governance of state-owned and private banks differs considerably. The objectives of state banks, as laid down in the respective laws, are more diverse than those of private banks. Also, private banks are controlled by shareholders who benefit from higher profits while state-owned banks tend to be controlled by local politicians. A well designed corporate governance framework seems to be the key to prevent inefficient ingroup lending from the perspective of the bank.

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How to Achieve a Real "Skin in the Game" in ABS Transactions



Jan Pieter Krahnen Goethe University & SAFE



Christian Wilde
Goethe University & SAFE

A major lesson from the 2007 subprime crisis is that originators of asset backed securities (ABS) need to keep a part of the default risk of the securitized loans on their own books, i.e. have sufficiently much "skin in the game" in order to be incentivized to thoroughly screen and monitor the individual loans. As a consequence, regulators in the US and the EU made a minimum level of retention held by the originator a mandatory element of all publicly issued deals. We argue that this new regulation does not achieve its objective to tie sufficient risk incentives to the originator since it is based on nominal retention rather than real retention. We present a retention metric that exposes the real "skin in the game", and we propose to make the reporting of such a metric mandatory for all issued deals.

An ABS transaction is constructed of loans that are pooled in a portfolio and then divided into tranches with different seniority: Usually, there is a large, rather safe senior tranche, several mezzanine tranches and a rather small first loss piece that comprises most of the risk of the entire transaction. The losses incurred in the loan portfolio are first allocated to the first loss piece and, when this is exhausted, also to more senior tranches.

Regulatory responses to problems of ABS transactions: risk retention

Due to the experiences during the 2007/2008 financial crisis and in accordance with the academic literature on the sources of systemic risk in those years, regulators around the world have tried to counter the observed decline of asset qualities in securitizations through appropriate regulation. Both the Dodd-Frank Act in the US and the Capital Requirements Regulation (CRR) in the European Union now demand a minimum retention level of 5% in order to incentivize the originator to engage in proper screening of loan applicants and in monitoring them during the repayment term.

Both regulations provide originators with several options for the fulfillment of the 5% retention requirement, including a vertical risk retention, a horizontal risk retention, combinations of the two (only US), and some other forms (EU) – all based on nominal values (EU) or fair values (US). In the EU, the first option (vertical retention) implies retaining 5% of each tranche (ranging from the first loss piece to all mezzanine tranches and the senior tranche); option 2 implies retaining 5% of each individual exposure; option 3 implies withholding 5% of randomly selected exposures; and option 4 (horizontal retention) refers to withholding first losses up to a 5% threshold of the nominal transaction size.

Measuring "skin in the game" with the retention metric

It is important to note that in the current regulation, retention is defined in money terms, not in terms of the risk contained in the retained portion. Therefore, we develop a simple metric capturing the extent to which the issuer really has "skin in the game" by retaining a certain portion of the securitization transaction. The basic idea is to measure the magnitude of potential de-

fault losses that is included in the retained 5%, according to the retention option chosen by the issuer, rather than relying on the nominal value of the retained portion.

The retention metric we propose captures the magnitude of potential default losses kept by the originator relative to all potential losses of the transaction. It equals 100% if all possible

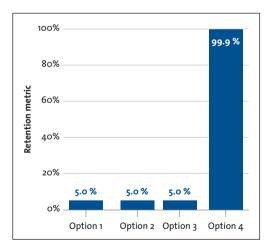


Figure 1: "Skin in the game" as captured by the proposed retention metric, applied to a real-world transaction (London Wall 2002-2) and depicted for four retention options as provided by EU CRR regulation (all implying 5% nominal retention).

losses are borne by the originator and zero if no losses are retained; for partial retention, it takes values between zero and 100%. The metric naturally gives more weight to the first loss piece than to more senior tranches since the probability of suffering a loss is much larger in junior tranches. Overall, the retention metric is simple, easy to understand, and it makes even complex transactions comparable.

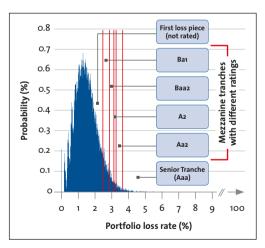


Figure 2: Simulated loss distribution of the London Wall 2002-2 transaction and the corresponding tranches. Note that the horizontal axis is truncated at 10%, implying that the loss distribution is concentrated at the very left end of the entire range.

Current regulation not effective

When applying our retention metric to major admissible options under the existing regulatory regimes in the EU and the US, we find that, for the same securitization transaction, retention can be close to zero under one option and close to 100% under another option. Figure 1 shows a real-world example, Deutsche Bank's London Wall 2002-2 transaction, in which the retention metric is 5% for options 1 to 3, and 99.9% for option 4. The reason for the huge difference is that, as usual in an ABS transaction, the first loss piece is the tranche that is most affected by losses (see Figure 2). If this is only to a minor extent part of the retention, as in options 1-3, retained risk will be rather small. Since risk retention is the explicit objective of the regulation in the EU and the US, this observation is troubling. It seems that the issuers can easily avoid having substantial "skin in the game" simply by selecting an option that does not tie retention to the first loss piece.

Not only does the true retention level vary widely across available options, also the market remains uninformed about the retention option chosen and the implied level of "skin in the game".

There is currently no disclosure about the actual risk retention in a specific securitization transaction. Investors have no way to assess the true level of retained risk and the implications for the originator's behavior. The added uncertainty is likely to impair the functioning of the securitization market and to decrease the attractiveness of this class of instruments.

Market standard for retention reporting needed

To solve this problem, we propose adding more transparency to the market by providing a clear piece of information about true risk retention in a particular transaction, using a metric like the one suggested in our paper. As far as asset backed securities are concerned, we see the development of an accepted market standard for retention reporting as a key element in improving the regulatory impact of the CRR and of the Dodd-Frank Act and in exploiting the potential of an active securitization market.

The SAFE White Paper No. 46 ("Skin-in-the-Game in ABS Transactions: A Critical Review of Policy Options") is available at:

www.safe-frankfurt.de/skin_in_the_game

News

Frankfurt Conference 2016: "Challenged by Low Interest Rates"



Low interest rates and asset returns have been an enduring legacy of the recent financial crisis. Against this background, the SAFE Policy Center dedicated the 4th Frankfurt Conference on Financial Market Policy, which took place at Goethe University Frankfurt on 28 October 2016, to the topic "Challenged by Low Interest Rates". The keynote address was given by Benoît Cœuré, Member of the Executive Board of the European Central Bank (ECB).

Cœuré defended the continuation of the ECB's unconventional monetary policy measures as being necessary to meet the ECB's inflation objective, because the below-potential economic activity in the euro area is putting a downward pressure on inflation. In his view, the ECB's monetary policy has had the desired effect in the euro area and there has been little evidence yet of negative side effects. At the same time, Cœuré admitted that, if interest rates will be low for too long, negative side effects may come up and impair the effectiveness of the ECB's measures. He stressed that structural problems need structural solutions and, thus, other actors have to shoulder some of the burden in order to ensure euro area resilience over the medium term.

The ensuing panel sessions dealt with the topics "Managing private portfolios in a low return environment", "Public Debt Management and Low Rates" and "Banking – Challenged by Low Interest Rates and High Costs of Equity". They brought together representatives from academia, industry, politics, central banks, and regulatory and supervisory authorities. The conference attracted more than 300 participants.

SAFE White Paper on Internal Rating Models

Rainer Haselmann, SAFE Professor of Finance. Accounting and Taxation, and Mark Wahrenburg, Professor of Banking and Finance (both Goethe University) provided an assessment of the Basel Committee on Banking Supervision's (BCBS) proposal to restrict the internal ratingsbased approach on bank risk and to introduce risk-weighted asset floors. The paper – "Banks' internal rating models – time for a change? The system of floors as proposed by the Basel Committee" (SAFE White Paper No. 43) - was provided at the request of the Committee on Economic and Monetary Affairs (ECON) of the European Parliament. The authors conclude that, if well enforced, risk-sensitive capital regulation results in a more efficient credit allocation compared to the standard approach, so the internal ratings-based approach should be maintained. While the use of internal ratingsbased output floors potentially results in unintended negative side effects, input floors are likely a valuable tool to achieve risk-weighted assets comparability, the authors state. They also warn that the proposed measures will potentially have a detrimental impact for European banks as compared to others.

SAFE/IMFS Policy Lecture: Time for Reforms



On 15 December, Volker Wieland, Director of the Institute for Monetary and Financial Stability (IMFS) at Goethe University Frankfurt and member of the German Council of Economic Experts, presented the key findings of the Council's Annual Report 2016/17, "Time for Reforms", in a SAFE/IMFS Policy Lecture.

As Wieland elaborated, German economic policy should focus more on the economy's competitiveness. As an example for a necessary reform, the Council suggested linking the retirement age to longer life expectancy in order to ensure the long-term sustainability of the statutory pension scheme. Wieland also stressed the need for structural reforms in the euro area. Without the readiness for fundamental reforms, the long-term economic viability of the EU cannot be secured, he said. In order to bring Europe closer to its citizens again, institutional reforms should reinforce the principle of subsidiarity. With respect to the current monetary policy in the euro area, Wieland pointed out that core inflation has been fairly stable throughout the last decade. Therefore, the expansionary monetary policy of the ECB is not adequate and increasingly threatens financial stability, he warned. The ECB should normalize its monetary policy and slow down its bond-buying program. Monetary policy could stimulate demand, but it cannot create sustainable growth, Wieland said.

Selected Publications

Caporin, M., Kolokolov, A. and R. Renò (2017) "Systemic Co-Jumps",

forthcoming in the Journal of Financial Economics.

Donadelli, M., Kizys R. and M. Riedel (2017) "Dangerous Infectious Diseases: Bad News for Main Street, Good News for Wall Street?", forthcoming in Journal of Financial Markets.

Donadelli, M., Billio, A., Paradiso, A. and M. Riedel (2017)

"Which Market Integration Measure?", Journal of Banking & Finance, Vol. 76, pp. 150-174.

Goldmann, M. and J. Bohoslavsky (2016)
"An Incremental Approach to Sovereign Debt
Restructuring: Sovereign Debt Sustainability
as a Principle of Public International Law",
Yale Journal of International Law, Vol. 41,
Issue 2, pp. 13-43.

Gramatki, I., (2017)

"A Comparison of Financial Literacy between Native and Immigrant School Students", forthcoming in Education Economics. Hett, F. and A. Schmidt (2017)

"Bank Rescues and Bailout Expectations: The Erosion of Market Discipline During the Financial Crisis".

forthcoming in Journal of Financial Economics.

Lagenbucher, K. (2016)

"Die Regulierte Aktiengesellschaft – ein Beitrag zur Entstehung von Bankgesellschaftsrecht", Kalss, S. and U. Torgeller (eds.): Compliance. Beiträge zum 4. Wiener Unternehmensrechtstag (2015), Wien, p. 25 ff.

Maurer, R., Mitchell, O. S., Rogalla, R. and T. Schimetschek (2017)

"Will They Take the Money and Work? An Empirical Analysis of People's Willingness to Delay Claiming Social Security Benefits for a Lump Sum",

forthcoming in Journal of Risk and Insurance.

Siering, M., Clapham, B., Engel, O. and P. Gomber (2017)

"A Taxonomy of Financial Market Manipulations: Establishing Trust and Market Integrity in the Financialized Economy Through Automated Fraud Detection",

forthcoming in Journal of Information Technology.

Recent SAFE Working Papers

Maurer, R., Mitchell, O. S., Rogalla, R. and T. Schimetschek (2017)

"Optimal Social Security Claiming Behavior under Lump Sum Incentives: Theory and Evidence", SAFE Working Paper No. 164.

Curatola, G., Donadelli, M. and P. Grüning (2017) "Technology Trade with Asymmetric Tax Regimes and Heterogeneous Labor Markets: Implications for Macro Quantities and Asset Prices", SAFE Working Paper No. 163.

Camera, G. and A. Gioffré (2017) "Asymmetric Social Norms", SAFE Working Paper No. 162.

Hanspal, T. (2016)

"The Effect of Personal Financing Disruptions on Entrepreneurship", SAFE Working Paper No. 161.

Cembrea, D. R., Colonnello, S., Curatola, G. and G. Fantini (2016)

"Abandon Ship: Inside Debt and Risk-Taking Incentives in Bad Times", SAFE Working Paper No. 160.

Billio, M, Donadelli, M., Paradiso, A. and M. Riedel (2016)

"Which Market Integration Measure?", SAFE Working Paper No. 159.

Donadelli, M. and R. Kizys (2016)
"Globally Dangerous Diseases: Bad News for
Main Street, Good News for Wall Street?",
SAFE Working Paper No. 158.

Meyer, S., Urban, L. and S. Ahlswede (2016)
"Does Feedback on Personal Investment Success help?".

SAFE Working Paper No. 157.

Gropp, R., Mosk, T., Ongena, S. and C. Wix (2016) "Bank Response to Higher Capital Requirements: Evidence from a Quasi-Natural Experiment", SAFE Working Paper No. 156.

Saadi, V. (2016)

"Mortgange Supply and the US Housing Boom: The Role of the Community Reinvestment Act", SAFE Working Paper No. 155.

Haar, B. (2016)

"Shareholder Wealth vs. Stakeholder Interests? Evidence from Code Compliance under the German Corporate Governance Code", SAFE Working Paper No. 154.

Hirsch, J. and U. Walz (2016)

"The Financing Dynamics of Newly Founded Firms",

SAFE Working Paper No. 153.

Acharya, V., Eisert, T., Eufinger, C. and C. Hirsch (2016)

"Whatever it Takes: The Real Effects of Unconventional Monetary Policy" SAFE Working Paper No. 152.

Schneider, M., Lillo, F. and L. Pelizzon (2016) "How has Sovereign Bond Markets Liquidity Changed? – An Illiquidity Spillover Analysis" SAFE Working Paper No. 151.

More information on the SAFE Working Papers can be found on http://safe-frankfurt.de/working-papers

From Law & Finance to Law, Finance & Science



Gerard Hertig ETH Zurich

In past decades, there have been major changes in the production of academic contributions devoted to financial law. Thirty years ago, engaging in sophisticated legal analysis was deemed to be state of the art — especially when the contributors were working at well-known institutions. With the emergence of the law and economics movement, it then became trendy to integrate major financial theory insights. More recently, the "in-thing" has been to supply empirical results about the efficiency or effectiveness of legislative or judicial intervention.

Clearly, this evolution has improved the robustness and real-world suitability of financial law scholarship. However, there are limits to being theoretically innovative. To begin with, very few scholars are capable of making fundamental (i.e. Nobel Prize level) breakthroughs. More generally, there are limits to how many theoretical advances one can make in the absence of significant societal or technological changes. The same is true for empirical analyses. While data collection and processing still have a bright future, it is not clear how much space is left in that area for "mere" law and finance scholars.

A good example of these limitations is provided by academic responses to the recent economic and political interest in infrastructures. Major research centers have undertaken projects that approach infrastructure from a socio-technical perspective, thereby building bridges between disciplines and patterns of thought. In such an environment, scholars who limit themselves to legal and financial issues may soon face the critique of engaging in "outdated" research. What is required nowadays, is to also integrate "science" into the analysis.

This does not mean that future law and finance scholars will also be required to have a Ph.D. in, say, engineering. But they will have to know more about science and how to cooperate with scientists. Here, the Singapore-ETH Centre project on Future Resilient Systems (FRS) shows how contract or corporate governance experts can both contribute to and benefit from such cooperation. On the one hand, they can provide input as to how one can efficiently contract for infrastructure resilience or adopt a corporate governance structure to the same effect. On the other hand, they can get state of the art input regarding disruptive events identification, business continuity modeling and system interconnectedness.

More specifically, law and finance scholars can contribute to infrastructure resilience research

by empirically investigating the pricing and impact of resilience clauses in contracts governing major infrastructures. Alternatively, they can evaluate the value of corporate governance arrangements when it comes to business recovery in the wake of events that have a disruptive effect on (firm or industry) infrastructures.

From a practical perspective, this cooperation will not be limited to the ad hoc exchanges or co-authorships that are familiar to law and finance scholars. To be fruitful, it will require the undertaking of long-term projects, involving the joint hiring of a significant number of researchers and major coordination efforts. But the upside (getting access to large data sets, getting new ideas and, ultimately, having fun) makes it worthwhile.

The author is Vice Chair of the Research Center SAFE's Research Advisory Council.

¹ There is ongoing FRS research work in these areas (lead by Stefan Bechtold, Ettore Croci, Gerard Hertig, Layla Khoja, Luh Luh Lan, Jinhoa Lee and Lucien Rapp).

Events

| February | | |
|---|---|--|
| Monday, 6 th 5.00 pm | EFL Jour Fixe Client Involvement in Expert Advice – Antibiotics in Finance? Speaker: Annika Kasparek, EFL | |
| Tuesday, 7 th 4.00 pm | ILF Lecture and Discussion Bekämpfung von (organisierter) Schwarzarbeit und illegaler Beschäftigung | |
| Tuesday, 7 th 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE and Deutsche Bundesbank Speaker: Dean Corbae, University Wisconsin-Madison | |
| Tuesday, 7 th 5.30 – 7 pm | CFS Colloquium The Future of Banking: How Low Interest Rates Affect Business Models and the Industry Speaker: Claudio Borio, Bank for International Settlements | |
| Thursday, 9 th 12.30 – 2.00 pm | CFS Book Presentation Recht der Unternehmensfinanzierung Speaker: Theodor Baums, Goethe University | |
| Monday, 13 th 12.00 – 1.30 pm | IMFS Distinguished Lecture How to Make the Euro a Lasting Success? Speaker: Valdis Dombrovskis, European Commission | |
| Wednesday, 15 th 2.00 – 7.45 pm | EFL Spring Conference 2017 Cyber Security and Finance – Challenges, Counter Measures, and Application Experiences joint with usd AG | |
| Tuesday, 21 st 4.15 – 5.30 pm | Finance Seminar – joint with SAFE Speaker: Talis Putnins, University of Technology Sydney | |
| Thursday, 23 rd 4.00 pm | ILF Conference Kapitalmarktkonferenz 2017 | |

| | March |
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| Wednesday, 1 st 12.00 – 2.00 pm | SAFE Data Center Workshop EURHISFIRM: European Historical Firm Data |
| Monday, 6 th – Friday, 10 th | ILF/KAS-Seminar Die Zukunft des internationalen Finanzsystems |
| Tuesday, 14 th 10.00 am | CFS Conference Behavioral Risk Management |
| Thursday, 16 th 5.30 – 7.00 pm | CFS Presidential Lecture Finanzregulierung in Europa – Wissenschaft oder Kunst? Speaker: Felix Hufeld, Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) |
| Friday, 17 th | ILF Conference DAJV Fachgruppentag 2017 |
| Monday, 20 th – Friday, 31 st | ILF Spring School Unternehmensrecht in der Beratungspraxis |
| Friday, 24 th | ILF Conference Unternehmen im Visier der Staatsanwaltschaft – Unternehmensvertretung unter Wahrung der Rechte des Beschuldigten als Lackmustest für die StPO |
| Monday, 27 th | IMFS Working Lunch Speaker: Tobias Tröger, Goethe University |
| | April |
| Thursday, 6 th | IMFS/CFS Konferenz The ECB and Its Watchers XVIII |

| | April |
|--|---|
| Thursday, 6 th | IMFS/CFS Konferenz The ECB and Its Watchers XVIII |
| Thursday, 6 th – Friday, 7 th | SAFE Conference 4 th International Conference on Sovereign Bond Markets: Public Debt Markets, Government Expenditures and Fiscal Prudence |
| Tuesday, 25 th 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE Speaker: Conny Olovsson, Sveriges Riksbank |

| May | | |
|--|---|--|
| Tuesday, 2 nd 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE and Deutsche Bundesbank Speaker: Ayse Imrohoroglu, University of Southern California | |
| Thursday, 4 th 6.30 pm | Frankfurter Vorträge zum Versicherungswesen | |
| Monday, 8 th 5.00 pm | EFL Jour Fixe SaaS Cloud Services and their QoS Requirements – An Empirical Study in the Financial Services Industry Speaker: The An Binh Nguyen, EFL | |
| Monday, 8 th – Tuesday, 9 th | SAFE/CEPR/DFG Conference 2 nd Conference on Financial Markets and Macroeconomic Performance | |
| Tuesday, 9 th 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE and Deutsche Bundesbank Speaker: David Domeij, Stockholm School of Economics | |
| Monday, 15 th | ILF Conference 4 th Conference on Banking Union | |
| Tuesday, 16 th 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE Speaker: Brent Neiman, University of Chicago | |
| Thursday, 18 th – Friday, 19 th | ICIR/Karel's Club – Executive Networks Speaker: Karel Van Hulle, ICIR | |
| Tuesday, 23 rd 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE Speaker: Jonathan Heathcote, Federal Reserve Bank of Minneapolis | |
| Tuesday, 23 rd 4.15 – 5.30 pm | Finance Seminar – joint with SAFE Speaker: Heitor Almeida, College of Business at Illinois | |
| Tuesday, 30 th 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE Speaker: Emiliano Santoro, University of Copenhagen | |
| Tuesday, 30 th 4.15 – 5.30 pm | Finance Seminar – joint with SAFE Speaker: Steven Ongena, University of Zurich | |
| Wednesday, 31 st 2.15 – 3.45 pm | Frankfurt Macro Seminar – joint with SAFE and Deutsche Bundesbank Speaker: Silvana Tenreyro, London School of Economics | |









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A Cooperation of the Center for Financial Studies and Goethe University Frankfurt