

## Investment over the Life Cycle: Inertia and Financial Advice\_4

Hugh Hoikwang Kim • Raimond Maurer • Olivia S. Mitchell

## Structural Reforms in Banking: The Role of Trading\_10

Jan Pieter Krahenen • Felix Noth • Ulrich Schüwer

## Illiquidity versus Insolvency – A False Dichotomy\_14

Katharina Pistor

## IMPRINT

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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



[Rainer Haselmann](#)

Program Director “Financial Institutions”,  
Research Center SAFE

At the beginning of this year, the ECB Banking Supervision published its five supervisory priorities for 2016: business model and profitability risk, credit risk, capital adequacy, risk governance and data quality, as well as liquidity. These topics will also be top issues for our research activities in the Research Center SAFE this year. At our annual conference on Regulating Financial Markets on 30 and 31 May, we plan to discuss the relevance and impact of these priorities in depth.

A further focus of this conference, which SAFE organizes in cooperation with Deutsche Bundesbank, ZEW Mannheim and the CEPR, will be the evaluation of unconventional monetary policy measures by the ECB and the introduction of macroprudential tools. Having only a single monetary policy within the euro area but diverging economic cycles can be considered as one of the key problems for the stability of European banking markets. As a consequence of this challenge, several policy measures and regulatory interventions have been proposed with hardly any empirical or theoretical evidence of how these would affect financial institutions. The goal of this conference is to bring high level academics together to contribute to this debate by discussing the latest research output on these issues.

We are delighted that Patrick Bolton from Columbia University and Douglas Diamond from the University of Chicago will give keynote lectures during this event. Both economists have not only made major contributions to the theoretical foundations of modern economics, but have also significantly shaped the current debate on how to respond to the challenges of financial market instability. Douglas Diamond is among fifteen of the world’s leading economists who wrote the “Squam Lake Report” which provides recommendations for a reform of the financial system. Patrick Bolton, who delivered the presidential address at this year’s annual meeting of the American Finance Association, has tremendous influence on guiding research topics on financial regulation throughout the world.

Apart from the conference, there is one particular research project that I am personally very enthusiastic about. Jointly with Sascha Steffen from ZEW and Mannheim University, we are exploring how governance of financial institutions impacts their investment and lending decisions with regard to risk taking. I believe that more empirical evidence is required to improve our understanding of the relationship between bank governance and financial stability.

We will report our findings as well as the outcome of the conference in the upcoming issues of the SAFE Newsletter.

Yours sincerely,  
Rainer Haselmann

# Investment over the Life Cycle: Inertia and Financial Advice



Hugh Hoikwang Kim  
Sungkyunkwan University

Investor inertia, or the tendency to maintain one's investment portfolio for long periods of time without changing it, has long been interpreted as evidence of irrationality or financial illiteracy. In our paper we incorporate the opportunity cost of time associated with investment management and show that such inertia can be consistent with optimal behavior. We also explain why some investors rationally delegate the responsibility for their investment decisions to a financial advisor.

We focus on the question of how the opportunity cost of time devoted to investment management influences portfolio choice in the context of endogenous human capital accumulation. This allows us to diagnose reasons for portfolio inertia and the demand for financial advice over the life cycle. We develop a life cycle model with rational agents that generates household portfolio inertia patterns consistent with empirical evidence (see Van Rooij et al., 2011). In a dynamic consumption and portfolio framework with endogenous labor supply, we account for time

costs devoted to portfolio management. Time becomes particularly valuable when the individual has the opportunity to accumulate job-specific human capital, which in the model can be done via learning by doing.

We also posit that the time cost of making an efficient financial decision can vary with age. Consistent with the economics and neuroscience literatures on decision making (e.g. Agarwal et al., 2009), we suppose that middle-aged investors are more efficient in managing their wealth than younger or older individuals. In addition, we evaluate the role of financial advisors who, for a fee, help investors to manage their financial portfolios. This possibility enables individuals to invest more time in their job-related human capital and, by doing so, enhance lifetime earnings.

## Young and old investors are the least active

When investors cannot delegate, young and old investors optimally exhibit inertia, while middle-aged investors are more active (see Figure 1). This is because young workers have little job-specific human capital and the longest time horizon, so they prefer to invest in work skills and exhibit

portfolio inertia. Middle-aged investors with more job-specific human capital have lower opportunity costs of financial investment. Newly-retired individuals are again more active in managing their portfolios because they no longer forego learning on the job, and they must also optimally withdraw from their financial accounts before rising inefficiency in portfolio management and growing mortality risk set in.

Later in retirement, people are less involved in trading their financial assets, because growing mortality risk, which boosts preferences for current consumption and leisure, and falling decision making efficiency (e.g. because of diminishing cognitive ability) render active management costly. Accordingly, different portfolio management approaches are optimally selected over the life cycle depending on the investor's financial and labor market status. We also find that the average equity share of liquid assets is hump-shaped with age which is consistent with empirical evidence for U.S. households.

When households have an opportunity to delegate money management, results are rather



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different. Overall, we see that access to delegation reduces both inertia and active self-management. The delegation option is attractive for both young and old investors. Approximately 25% of investors younger than age 30, 20% of middle-aged investors (age 30-65), and around 40% of retirees now optimally delegate to financial advisors. Moreover, access to delegation substantially reduces active management, especially among the youngest and oldest investors. Active management is now adopted by only a small fraction

(less than 1%) of the youngest and oldest investors, but still by many of the middle-aged (around 30%) and the early retirees (around 50%). Later in life, retirees are more likely to delegate and become less active due to increased mortality risk and decision making inefficiency.

#### Access to financial advisors increases welfare

Using our baseline fee structure, we show that investors with access to financial advice enjoy greater lifetime welfare, equivalent to a 1.2%

improvement in their annual consumption streams. We also conduct a sensitivity analysis for different costs of financial advice to evaluate investors' potential welfare gains from lowering entry barriers to financial advisory services. To cover fixed costs of advisory services, financial advisors often stipulate a minimum balance they require if they are to take on the client for a percentage fee. Below that level they charge a fixed fee which could discourage consumers from delegation. We conclude that eliminating a minimum fee for advisory services would enhance welfare by 1.43% compared to the case where no delegation is available. Overall, lowering barriers to access financial advisors can help people of all ages (and particularly the young and the old) to better manage their finances and save time for accumulating more job-specific skills or enjoying leisure.

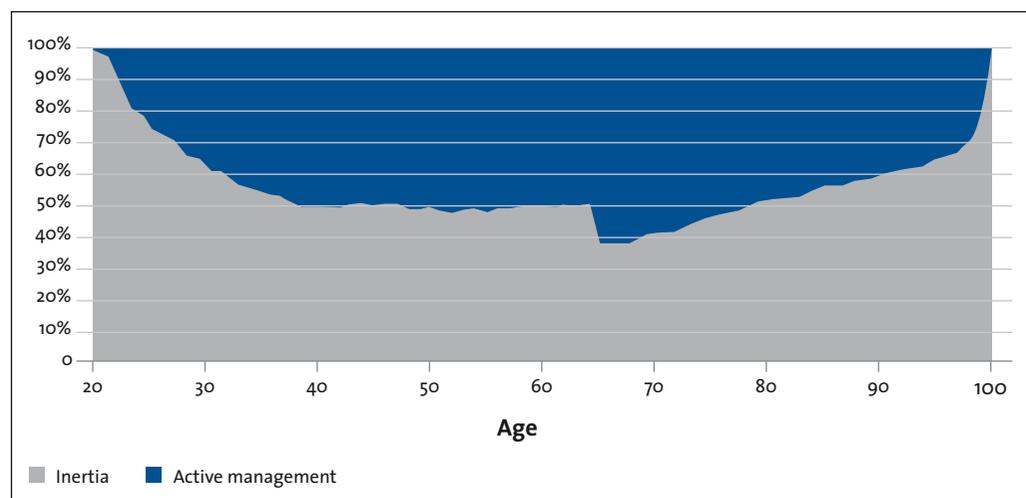
Our findings should be of interest to a variety of stakeholders including individual investors, financial advisors, retirement plan sponsors and policymakers. In particular, we show that those who most value financial advisory services are the young and the older age groups, so making such services available can enhance their well-being.

Policymakers could enhance welfare gains by improving investors' access to financial advisory services. Financial advisors with fiduciary responsibility can help investors to manage their financial wealth optimally, enabling more people to accrue job-specific skills and contribute to the economy as a whole.

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*This text summarizes research from the authors' paper "Time is Money: Rational Life Cycle Inertia and the Delegation of Investment Management", forthcoming in the Journal of Financial Economics. The working paper version is available at: <http://www.nber.org/papers/w19732.ack>*



**Figure 1:** Fraction of investors selecting inertia versus active management by age.

# Insurance Activities and Systemic Risk



Elia Berdin  
Goethe University & SAFE

Insurance companies have always been considered a negligible source of systemic risk. Recent empirical evidence, emerging in the aftermath of the financial and sovereign debt crises, suggests that this might not be the case anymore. The presence of non-traditional insurance activities in the balance sheets as well as the growing interconnectedness of investment portfolios substantially increase the systemic relevance of the insurance industry.

Following the 2007-2009 financial crisis and the 2010-2012 European sovereign debt crisis the concept of systemic risk has become increasingly relevant. In particular since the collapse of Lehman Brothers, the debate on systemic risk has been primarily focused on banks. However, recent empirical evidence suggests that institutions not traditionally associated with systemic risk, such as insurance companies, also play a prominent role in posing systemic risk. Thus, in this paper we investigate the relative systemic risk contribution of insurance companies vis-à-

vis other industries and the determinants of systemic risk within the insurance industry.

## Methodology

In the first part of the analysis, we conduct an aggregated industry analysis of three industry groups – insurers, banks and non-financials – based on three measures of systemic risk, namely CoVaR (Adrian and Brunnermeier, 2015), DMES (Brownlees and Engle, 2012) and the linear Granger causality test (Bilio et al., 2012). Moreover, we create an industry composition index which highlights the relative weight of each single group in posing systemic risk. The sample consists of the total return on equity of the top 60 companies in terms of capitalization listed in the Euro Stoxx industry indices over the period of 1999 to 2013, namely 20 banks, 20 insurers and 20 non-financials.

In the second part of the analysis, we investigate the relation between the systemic risk contribution and different balance sheet positions and proxies by conducting a panel regression as well as difference in difference robustness checks on a set of different specifications and

samples. Here we consider a broader sample, which includes yearly balance sheet items for 61 insurance groups listed in Europe over the period of 2005 to 2013.

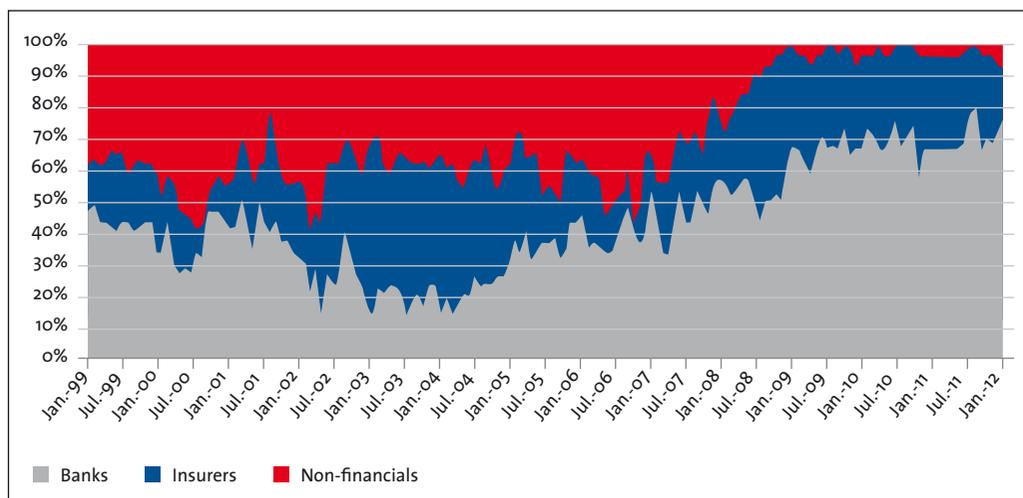
## Results

Our evidence suggests that in the aftermath of the crises, financial institutions tend to cause more systemic risk than non-financial institutions; among financial institutions, banks pose more systemic risk than insurers, especially after the Lehman bankruptcy. Figure 1 reports the industry composition of the top 10 most systemically relevant institutions according to each of the three measures. After the crises, financial institutions are the most systemically relevant, with banks being more systemic than insurers, although insurers are persistently among the most systemically relevant institutions throughout the period. The systemic risk contribution of insurers mainly stems from non-insurance activities, such as banking activities.

Furthermore, we find that the liability side, i.e. the capital structure, rather than the asset side is the main driver of systemic risk in

the insurance industry. However, we can show that on the asset side the level of diversification is also a strong determinant of systemic risk, although further investigation is needed. In addition, traditional variables associated with systemic risk in financial institutions, such as size, are of importance, whereas price-to-book and leverage seem to play a counterintuitive role. This is nevertheless in line with

previous findings, which confirm, for instance, that leverage in insurance is fundamentally different compared to leverage in banking. Results are robust to a set of different specifications, different panels and different econometric methods. Finally, the choice of the time span should shelter the analysis from biases stemming from sample (time-dependency) selection.



**Figure 1:** Industry composition index: At each point in time, we rank all institutions of our sample based on their systemic risk contribution and select the top 10 for each of the 3 systemic risk measures. The figure shows which sectors the selected 30 most systemically relevant institutions belong to.

### Conclusion and further implications

In this paper, we provide new evidence on the role of insurers in posing systemic risk, in particular on the role of insurance activities compared to non-insurance activities. Also, we are among the first to provide empirical evidence on the role of diversification in posing systemic risk, which should be further analyzed in future research. Moreover, we are the first to use a European set of companies and to use variables of stock rather than flow: the latter is particularly relevant to show how the stock of the outstanding business drives systemic risk contribution in the insurance industry.

In conclusion, our research has the potential to provide a significant contribution to shedding additional light on the debate on systemic risk in the insurance industry as well as insightful indications on how to assess the systemic relevance of insurance companies. This is particularly relevant in light of the ongoing discussion on the role of systemically important financial institutions (SIFIs) and on the specific regulations these might be subjected to in the future. Furthermore, our analysis could serve as a basis for a theor-

etical treatment of the systemic risk contribution of the insurance industry and, thereby, contribute to deepening the understanding of the underlying economic forces driving systemic risk.

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The full paper is available at:

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2701821](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2701821)

## Interview:

# “A Central Bank Cannot Solve Structural Problems”



Helmut Siekmann  
Goethe University & SAFE

**The European Central Bank (ECB) still plays a major role in fighting the consequences of the European sovereign debt crisis. Its latest move is to provide massive liquidity to the markets to boost the economy by buying government and corporate bonds. Is this measure of “quantitative easing” (QE) legal?**

In principle, the ECB is allowed to buy bonds in the open market according to its Statute. However, this right has to be limited to purposes that lie within the competences of the ECB, which are restricted to monetary policy. To be equipped with an instrument does not mean that you can use it for any purpose. So, if the objective of QE is to solve structural problems in some of the euro member states, this would be, to my opinion, general economic policy which is definitely in the domain of the member states and not the ECB.

**Would it solve the problem if the ECB mandate were to be extended to include economic policy, as is the case in the U.S.?**

Of course, the competences of the ECB can be amended. However, this is a very complicated

procedure, including referendums in several member states, and could cause new legal problems. For example, such a change might not be compatible with the democratic principle in Article 79, Par. 3 of the German Basic Law because it would give a tremendous amount of power to an institution that is basically not under democratic control.

But apart from these legal hurdles, such a move would not solve the underlying problems. With only the instruments of a central bank, you can-

***“The question with QE is where monetary policy ends and general economic policy begins.”***

not overcome structural problems. You can only buy time. Once you reach the lower bound and the member states have not implemented structural reforms, nothing will be won. And, on the downside, QE causes a lot of risks. It brings down interest rates for a long time which completely distorts financial markets. The danger arises that money is invested in risky or ineffective investments that have no basic returns.

And, not least, the pressure on governments to consolidate their budgets and to follow sound fiscal policies is released – with severe consequences: When interest rates suddenly go up, many entities would be immediately bankrupt. Germany could face a sudden budget deficit of up to 40 billion euros, not to speak of Italy or France which have a much higher debt level. In general, interest rates would lose their function to allocate capital to its most beneficial use.

By the way, the U.S. Federal Reserve System does not have a general competence for economic policy either, even though its competences are wider than those of the ECB. It is an open question if the Fed would be allowed to perform structural economic policy. It would be definitely forbidden to use economic measures discriminately for only a number of states – as we have seen in Europe with the ECB’s OMT program (see Siekmann 2015a and Siekmann and Wieland 2013).

***“When interest rates suddenly go up, many entities would be immediately bankrupt.”***

From this aspect, QE is less problematic as it does not favor certain

member states or their banks. Still, it can be seen as indirect financing of sovereign states.

**Many people argue that we are in a situation of fiscal dominance where the ECB has no choice but to act the way it does because the member states' governments are not consolidating their budgets.**

From the legal point of view, it is questionable to argue that the ECB has to transgress its competences because others are not fulfilling their duties. From an economic point of view, this argument has some merit. In the beginning of the crisis, Jean-Claude Trichet, the former ECB President, always stressed that he would use these unconventional measures only for a short period to provide the time needed for the member states to act. No other institution in the Eurozone was able to act quickly enough at the time. But now, six years later, this argument has become weaker and weaker.

**But does the ECB not have a mandate to fight deflation?**

The ECB often bases its arguments on an inflation target of little below two percent. But this is a self-set goal. The term "inflation target" cannot be found in the Statute or any other part of the primary law of the EU. The objective set

there is price stability which means zero percent plus maybe a certain margin to control for measurement failures (see also Siekmann 2015b). In my view, it is more the wish for some inflation than the fight against deflation that drives this policy. Inflation is to the detriment of people who have monetary claims while debtors profit from it. So, any kind of inflation has distributional effects between member states and, within states, between certain parts of the population. In Germany, most people tend to have bank accounts and other types of savings whereas

***"It is legally highly questionable why national central banks are allowed to grant ELA."***

In my view, this is why a certain level of inflation has become an accepted policy goal. But it is not the job of a central bank to change the distribution of wealth.

**When you take the example of "Emergency Liquidity Assistance" (ELA), do national central banks in Europe have too much power?**

It is legally highly questionable that national central banks are allowed to grant ELA. In the Statute of the ECB and the ESCB, the European

in other European countries people invest more in real estate which is usually credit-financed. And the biggest debtors are states.

System of Central Banks, this can only be based on a very opaque clause, Article 14, Par. 4, which says that national central banks may perform functions on their own responsibility and liability, but only when these do not interfere with the objectives and tasks of the ESCB. To my interpretation, this clause only allows measures which could not be considered as monetary policy, such as for example banking supervision. ELA, however, usually comes into play when the ECB has to reject further credit to a bank or a banking system of a member state. When you take the Greek example: as long as the government bonds that the Greek banks held were considered worthy, Greek banks used these as collateral to obtain liquidity from the ECB. But once the ECB did not accept them anymore, the national central bank stepped in and granted ELA. So, if you call the ECB's liquidity provision monetary policy, what else is ELA? But the ECB set up a procedure according to which it would not object assistance granted by a national central bank as long as it is for a limited time and stays within a limit specified in advance. From a legal point of view, this is a somewhat awkward construction and lacking a sound basis.

**Is this balance of competences between the center and the branches better organized in the U.S.?**

The most important difference between the European and the U.S. system is that the regional

branches of the Federal Reserve System act within economic and not political boundaries. The reason is that they are owned by the local commercial banks and, thus, are more private than public law entities. So, they do not see themselves as representatives of a certain state. In Europe, we have always the danger that national politicians put pressure on their central bank governors to vote in the ECB council according to political needs of their home country. And although you cannot prove it, indications exist that the national biases may play a role in the decisions of the ECB council.

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# Structural Reforms in Banking: The Role of Trading

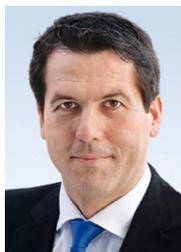


Jan Pieter Krahen  
Goethe University & SAFE

In the wake of the recent financial crisis, significant regulatory actions have been put forward, which are aimed at limiting risks emanating from trading in bank business models. Prominent reform proposals are the Volcker Rule in the U.S., the Vickers Report in the UK, and, based on the Liikanen proposal, the Barnier proposal in the EU. A major element of these reforms is to separate “classical” retail and commercial banking activities from securities trading activities, notably from proprietary trading. While the reforms are at different stages of implementation, there is a strong ongoing discussion on what possible economic consequences are to be expected. In a recently published SAFE White Paper, we compare the alternative separation approaches of these reform proposals and assess their likely consequences for bank business models, risk-taking and financial stability.



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The separation of banking activities is an intricate exercise. It is not only difficult to assess the intended consequences of such reforms – such as improved resolvability, reduced risk-taking and protection of depositor money – it is even more difficult to anticipate the unintended consequences, e.g. regulatory ambiguity, reduced efficiency of business models and growth of shadow banking. Because the separation of banking activities constitutes a major intervention in the business model of modern day banks, it should be well understood before the respective legislation is introduced.

## The Volcker, Vickers and Liikanen/Barnier proposals

The structural reform projects currently discussed or implemented in the U.S., the UK, and the EU differ substantially in at least two dimensions. First, with respect to the range of services covered by the separation decree, i.e. which activities are to be separated, and second, with respect to how separation is to be implemented, i.e. what legal, organizational and financial restrictions will be imposed on separated activities.

The Volcker rule draws the “magic” line dividing prohibited and permitted trading activities between proprietary trading (bank investment in capital markets using a bank’s own money, with the intention of profit making for the bank’s own account) and non-proprietary transactions. The Liikanen proposal, in contrast to Volcker, does not single out proprietary trading for special treatment, but instead requires that all trading business, be it proprietary or client-oriented, is either prepared for separation in a crisis situation (avenue 1), or effectively separated from retail/commercial banking (avenue 2). After considering the Liikanen proposal, the EU Commission, in January 2014, put forth a legislative proposal (Barnier proposal) which recommends a ban for proprietary trading and a conditional separation of all trading activities for big banks in Europe. Other forms of trading, like market making activities as well as hedging transactions for the banks’ own accounts remain permitted under normal circumstances. However, the proposal does grant the competent supervisor the power to require from a bank the separation of all trading activities, if problems occur that potentially put the whole bank and the wider financial system at risk.

Finally, Vickers proposed a partial separation of UK retail banking services from global wholesale and investment banking services, the so-called “retail ring-fence”. The idea behind this separation proposal is to limit public guarantees to ring-fenced banks and their activities which are supposed to be vital for the economy. Concurrently, the proposal aims at reducing incentives for excessive risk-taking by non-ring-fenced banks. Within Vickers, proprietary trading is not forbidden, it must however be practiced outside the ring-fenced segment of the bank.

#### Modern banking business models and bank risk

For all reform proposals, the difficulty of classifying securities transactions as being either client business, treasury business, or proprietary trading is a key element. Clear-cut dividing lines between these activities are very difficult to observe and supervise because of the high complexity characterizing today’s bank business models. This is very different from how it used to be only twenty years ago. One important reason for this is the integration of trading activities into classical banking activities.

Today, major commercial banks are typically closely connected to investment banking lines

of business. They thus benefit from large flow of customer business from retail, corporate and institutional clients. This may result in excessive risk-taking by universal banks, particularly if funding costs of high risk trading are quasi (cross-) subsidized. For example, banks’ funding benefits stemming from public guarantees (incl. deposit insurance) cannot be restricted to retail and commercial banking activities of universal banks. Further, if segment profitability is determined on the basis of the average of the bank’s overall market funding costs, and these funding costs reflect a weighted average of (low risk) retail/commercial bank funding costs and (high risk) trading business funding costs, then segment profitability will be distorted. Trading income goes up, and banking income decreases in an off-setting manner. This may lead to increased investment and risk-taking in trading and reduced investment in the banking segment. Moreover, the risk sharing across business segments may entail increased risk-taking by the trading segment, relative to a stand-alone alternative business organization. Such arguments give rise to policy reform proposals calling for a separation of banking and trading.

Nevertheless, in our paper we explain that a prohibition of proprietary trading, as envisaged in the current EU proposal, is inadequate. It does not necessarily reduce excessive risk-taking, while it is likely to crowd out useful trading activities, like hedging and market making, thereby negatively affecting financial stability. We argue that there is a better solution to limit excessive trading risk by banks, namely the separation of trading business (including proprietary trading) into a ring-fenced

entity within the existing banking organizations. This kind of separation limits cross-subsidies between banking and proprietary trading and diminishes contagion risk (which limits public guarantees), while still allowing for synergies across banking, non-proprietary trading and proprietary trading.

*The full paper is available at:*

<http://safe-frankfurt.de/structural-reforms-in-trading>

#### Selected Policy Center Publications

**Behr, P., Schmidt, R. H.** (2015)  
“The German Banking System: Characteristics and Challenges”,  
White Paper 32, SAFE Policy Center.

**Gebhardt, G.** (2015)  
“Impairments of Greek Government Bonds under IAS 39 and IFRS 9: A Case Study”,  
White Paper 30, SAFE Policy Center.

**Gründl, H.** (2015)  
“Solvency II at the Gates: Benefits and Risks of the New Insurance Regulation”,  
Policy Letter 48, SAFE Policy Center.

**Maurer, R., Mitchell O. S., Rogalla, R., Schimetschek, T.** (2015)  
“The Potential Effect of Offering Lump Sums as Retirement Payments”,  
Policy Letter 50, SAFE Policy Center.

**Wahrenburg, M., Kaffenberger, B.** (2015)  
“Fragmentation in the European Retail Deposit Market and Implications for Loan Availability in European Member States”,  
White Paper 31, SAFE Policy Center.

## SAFE Researchers Advise European Parliament

A team of researchers from the Research Center SAFE at Goethe University Frankfurt has been chosen to provide the European Parliament's Committee on Economic and Monetary Affairs (ECON) with independent expertise in the field of banking supervision. Participating researchers are Martin Götz, Rainer Haselmann, Jan Pieter Krahen, Lorian Pelizzon, Tobias Tröger and Mark Wahrenburg. They will support the Banking Union Working Group, a subgroup of the ECON committee, with written and oral expertise, especially for the regular, bi-annual hearings in the framework of the Single Supervisory Mechanism. The European Parliament had announced an open call for tender for the provision of external expertise in the fields of banking supervision and resolution in April 2015.

## Research Grant for Marti Subrahmanyam and SAFE



Following an initiative of SAFE, the Alexander von Humboldt Foundation has granted an Anneliese Maier Research Award to Marti Subrahmanyam, Charles E. Merrill Professor of Finance, Economics and International Business at the Stern School of Business, New York University. Purpose of the grant is the promotion of international cooperation in the humanities and social sciences. The

award of 250,000 EUR will be used over a period of five years to finance research cooperation between Subrahmanyam and SAFE/Goethe University. The official host will be Lorian Pelizzon, SAFE Professor of Law and Finance. Marti Subrahmanyam has published numerous articles and books in the area of corporate finance, capital markets and international finance. His current research interests are the valuation of corporate securities, options and futures markets, corporate debt markets, market microstructure and liquidity, and Indian financial markets.

## Rajan Called for Collective Action by Central Banks



On 10 November, Raghuram Rajan, Governor of the Reserve Bank of India, gave a speech on “Rules of the Game in the Global Financial System”. The lecture was jointly

organized by the SAFE Policy Center, the Center for Financial Studies and Deutsche Bundesbank. In his talk, Rajan stated that there is high pressure on central banks around the world to foster more growth. The fiscal stimulus programs that many countries had launched after the 2008 financial crisis only worked temporarily, he said. Therefore, central banks decreased interest rates in order to encourage investments and demand. However, this measure had only limited success so that, as interest rates hit the zero lower bound, unconventional monetary policy measures were implemented.

Rajan expressed the concern that these measures could create problems for financial stability and cause large negative spillover effects to other countries. The countries were forced in a sort of prisoner's dilemma, he said, because every country has to implement expansionary monetary policy measures to avoid negative effects from the expansionary monetary policy measures taken on elsewhere. No one would be able to end this policy on his own. All in all, the positive effects of this policy were only temporary while the negative effects would increase the longer this policy is implemented. Therefore, Rajan called for collective action by central banks to end unconventional monetary policy measures jointly.

## 3<sup>rd</sup> Frankfurt Conference on Financial Market Policy: Digitizing Finance



On 6 November 2015, the 3<sup>rd</sup> Frankfurt Conference on Financial Market Policy on the topic “Digitizing Finance” was held at Goethe University Frankfurt. High-level regulators, academics and industry representatives discussed how the digitization of the banking business and big data are changing the landscape of the financial sector. In the keynote address, Peter Praet, Board Member of the European Central Bank (ECB), explained how

central bankers use data to analyze medium to long-term effects and developments to guide their decisions, especially when confronted with different types of uncertainty. He argued that a better institutional framework or improved mechanisms in the euro area would help to manage potential mistakes made by the central bank. The conference was organized around three panels entitled “High volume, highly unstructured data – finance’s new background conditions”, “FinTechs – Disrupting and performance enhancing?” and “Banking on big data – different policy issues?” The conference was organized by Hans-Helmut Kotz, a program director of the SAFE Policy Center.

## Finance between Liquidity and Insolvency

Whether institutions or markets are more or less deserving of protection from binding liquidity constraints has been a recurring theme in debates about bail-in, closeout netting protocols and access to central bank lending. A conference on “Finance between Liquidity and Insolvency” organized by Dan Awrey (Oxford), Brigitte Haar (SAFE) and Katharina Pistor (Columbia) at the House of Finance on 11 and 12 December 2015 brought together prominent legal scholars and economists from academia and the policy-making sector, such as the ECB, the Chicago Fed and the Banque de France, to discuss this issue. Prior to the financial crisis, there was a tendency in finance to view (il)liquidity and (in)solvency as conceptually distinct problems, capable of being analyzed and regulated independently of one another – especially in banking regulation. However, many of the challenges of bank governance faced over the centuries are now replicated at the level of non-bank financial intermediaries and at the intersection of financial institutions and markets. (See also: *Guest Commentary by Katharina Pistor, p. 14*)

# Selected Publications

**Ascheberg, M., Branger, N., Kraft, H., Seifried, F. T.** (2016)

“When Do Jumps Matter for Portfolio Optimization?”,  
forthcoming in Quantitative Finance.

**Baums, T.** (2016)

“Recht der Unternehmensfinanzierung”,  
C.H.BECK, ISBN 978-3-406-68963-5.

**Haar, B.** (2015)

“Marktintegration als Bestimmungsfaktor der europäischen Finanzmarktregulierung”,  
Stumpf, C., Kainer, F., Baldus, C. (eds.), Privatrecht, Wirtschaftsrecht, Verfassungsrecht? Privatinitiative und Gemeinwohlorizonte in der europäischen Integration, Festschrift für Peter-Christian Müller-Graff, pp. 696-703.

**Hambel, C., Kraft, H., Schendel, L., Steffensen, M.** (2016)

“Life Insurance Demand Under Health Shock Risk”,  
forthcoming in Journal of Risk and Insurance.

**Krueger, D., Ludwig, A.** (2016)

“On the Optimal Provision of Social Insurance”,  
forthcoming in the Journal of Monetary Economics.

**Massenot, B., Straub, S.** (2016)

“Informal Sector and Economic Growth: The Credit Supply Channel”,  
forthcoming in Economic Inquiry.

**Pelizzon, L., Subrahmanyam, M. G., Tomio, D., Uno, J.** (2016)

“Sovereign Credit Risk, Liquidity, and ECB Intervention: Deus Ex Machina?”,  
forthcoming in Journal of Financial Economics.

**Schulz, F., Schlereth, C., Mazar, N., Skiera, B.** (2015)

“Advance Payment Systems: Paying Too Much Today and Being Satisfied Tomorrow”,  
International Journal of Research in Marketing, Vol. 32, Issue 3, pp. 238-250.

**Wandt, M.** (2015)

“Masterplan für die Lebensversicherung? – Vertragsrechtliche Prämienanpassungsbefugnis nach Paragraph 163 VVG stößt im wissenschaftlichen Diskurs auf Kritik”,  
Versicherungswirtschaft, 12/2015, pp. 30-31.

## Recent SAFE Working Papers

**Buss, A., Dumas, B., Uppal, R., Vilkov, G.**

“The Intended and Unintended Consequences of Financial-Market Regulations: A General Equilibrium Analysis”,  
SAFE Working Paper No. 124.

**Lalanne, M., Seabright, P.**

“The Old Boy Network: The Impact of Professional Networks on Remuneration in Top Executive Jobs”,  
SAFE Working Paper No. 123.

**Cumming, D., Walz, U., Werth, J.**

“The Dynamics of Entrepreneurial Careers in High-Tech Ventures: Experience, Education, and Exit”,  
SAFE Working Paper No. 122.

**Berdin, E., Sottocornola, M.**

“Insurance Activities and Systemic Risk”,  
SAFE Working Paper No. 121.

**Heinz, M., Schumacher, H.**

“Signaling Cooperation”,  
SAFE Working Paper No. 120.

**Brennan, M., Kraft, H.**

“Leaning Against the Wind: Debt Financing in the Face of Adversity”,  
SAFE Working Paper No. 119.

**Donadelli, M., Paradiso, A., Riedel, M.**

“A Quasi Real-Time Leading Indicator for the EU Industrial Production”,  
SAFE Working Paper No. 118.

**Bluhm, M.**

“Interbank Funding as Insurance Mechanism for (Persistent) Liquidity Shocks”,  
SAFE Working Paper No. 117.

# Illiquidity versus Insolvency – A False Dichotomy



Katharina Pistor  
Columbia Law School

There is a tendency in finance to view (il)liquidity and (in)solvency as conceptually distinct problems, capable of being described and regulated independently of one another. Nowhere is this more clearly the case than in banking regulation and Bagehot's dictum to lend freely to illiquid, but not insolvent, banks. In reality, however, liquidity and solvency are inextricably linked as suggested by the papers presented at the conference "Finance between Liquidity and Insolvency" held at Goethe University's House of Finance and co-sponsored by the Research Center SAFE, the Max-Planck-Gesellschaft and the Alexander von Humboldt Stiftung on 11/12 December 2015.

The solvency of the banking system requires the relaxation of banks' liquidity constraints by central banks as a matter of day-to-day practice. Central banks also play a critical role as liquidity backstops during periods of financial instability. They have broadened their reach by offering liquidity even to non-bank intermediaries at least if they can offer adequate collateral. The effect of these and other interventions is to insulate

financial intermediaries from the application of general insolvency rules.

Whether banks should be exempt from the application of general insolvency rules is of course an important question. On one level, the post Lehman answer to this question has been a resounding "no". On another level, the answer has been to develop more tailored substitutes for general insolvency laws in the form of bank resolution regimes, reflective of the particular challenges of resolving failing banks.

Neither of these answers, however, speaks directly to the question of where to draw the line, much less whether such line-drawing exercises go to the core of governing inherently instable financial systems. The new solution for bank resolution, bail-ins that force certain creditors and shareholders to foot the bill of failure amply illustrates this. The success of bail-ins hinges on the availability of bail-in-able capital and thus requires management of the liability side of banks' capital long before illiquidity becomes an issue.

To complicate matters even further, finance is no longer all about banks. With the rise of shadow

banking practices, many of the challenges of bank governance faced over the centuries are now replicated at the level of non-bank financial intermediaries and at the intersection between financial institutions and markets. Whether institutions or markets are more or less deserving of protection from binding liquidity constraints has been a recurring theme in debates about bail-in, closeout netting protocols, and access to central bank lending. However, they have rarely been addressed as a unifying theme for governing finance in all its manifestations. This conference filled this gap by including the rise of shadow payment systems, clearing and settlement systems and accounting rules in the discussion.

The discussions at the conference suggested that we need a clearer concept of liquidity as distinct from volume or turnover. In essence, liquidity stands for leveraged entities' access to lender and dealer of last resort facilities in times of distress. This conception captures the ambiguities of modern finance as a system that stands at the intersection of public and private: a rule bound system the survival of which depends on relaxing these rules from time to time. It follows that finance is inherently political.

# Events

## February

- Tuesday, 16<sup>th</sup>  
2 – 7 pm  
**Joint Spring Conference 2016 of E-Finance Lab and IBM**  
Identifiers and Identification Management in the Financial World and Beyond – Requests, Solutions, and Applications
- Tuesday, 23<sup>rd</sup>  
12 – 2 pm  
**SAFE Policy Center Lecture**  
Speaker: Thomas Jordan, Swiss National Bank

## March

- Thursday, 3<sup>rd</sup>  
10.00 am – 3.45 pm  
**CFS Conference**  
**Reputational Risk Management**
- Friday, 4<sup>th</sup>  
1.00 – 10.00 pm  
**ILF/DAJV Fachgruppentagung**
- Monday, 7<sup>th</sup> –  
Friday, 18<sup>th</sup>  
**ILF Spring School**  
**Unternehmensrecht in der Beratungspraxis**
- Tuesday, 8<sup>th</sup> –  
Wednesday, 9<sup>th</sup>  
**Karel's Club – Executive Networks**  
**Good Governance: Myth or Reality?**  
Speaker: Karel van Hulle, ICIR
- Monday, 14<sup>th</sup>  
6.00 – 7.30 pm  
**CFS-Schmalenbach Lecture**  
Speaker: Reinhold Achatz, ThyssenKrupp
- Thursday, 17<sup>th</sup>  
2.15 pm – 3.45 pm  
**Frankfurt Macro Seminar – joint with SAFE**  
**Exporting and Plant-Level Efficiency Gains: It's in the Measure**  
Speaker: Nico Voigtländer, UCLA Anderson School of Management
- Tuesday, 22<sup>nd</sup>  
**CFS Presidential Lecture**  
Speaker: Wolfgang Schäuble, Federal Minister of Finance

## April

- Friday, 1<sup>st</sup> –  
Saturday, 30<sup>th</sup>  
**GBS Open Course**  
**Ethics in Finance**  
Speaker: Eberhard Schnebel, Goethe University
- Friday, 1<sup>st</sup> –  
June, Friday, 3<sup>rd</sup>  
**GBS Open Course**  
**Risk Management**  
Speaker: Mark Wahrenburg, Goethe University
- Tuesday, 5<sup>th</sup>  
**SAFE Policy Center/CFS/Bundesbank Lecture**  
Speaker: Christine Lagarde, IMF
- Wednesday, 6<sup>th</sup>  
**IMFS/CEPR Workshop**  
**New methods for macroeconomic modelling, model comparison and policy analysis**
- Thursday, 7<sup>th</sup>  
**IMFS/CFS Conference**  
**The ECB and Its Watchers XVII**
- Tuesday, 12<sup>th</sup>  
4.15 pm – 5.30 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Martijn Boons, Nova School of Business and Economics
- Friday, 15<sup>th</sup> –  
Saturday, 16<sup>th</sup>  
**3<sup>rd</sup> SAFE Conference on Sovereign Bond Markets**  
**Real and Financial Externalities of Non-Traditional Monetary Policy Tools**
- Tuesday, 19<sup>th</sup>  
2.15 pm – 3.45 pm  
**Frankfurt Macro Seminar – joint with SAFE**  
Speaker: Morten Ravn, University College London
- Tuesday, 19<sup>th</sup>  
4.15 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Kai Li, Sauder School of Business
- Tuesday, 26<sup>th</sup>  
2.15 pm – 3.45 pm  
**Frankfurt Macro Seminar – joint with SAFE**  
Speaker: Toni Braun, Atlanta Fed
- Friday, 29<sup>th</sup> –  
May, Friday, 21<sup>st</sup>  
**GBS Open Course**  
**Global Asset Allocation**  
Speaker: Raimond Maurer, Goethe University
- Friday, 29<sup>th</sup> –  
May, Friday, 21<sup>st</sup>  
**GBS Open Course**  
**Applied Credit Risk Management**  
Speaker: Björn Imbierowicz, Goethe University

## May

- Monday, 2<sup>nd</sup>  
5.00 pm  
**EFL Jour Fixe**  
**Are Shadow System Users the Better IS Users? – Insights from a Lab Experiment**  
Speaker: Steffi Haag, E-Finance Lab
- Tuesday, 3<sup>rd</sup>  
2.15 pm – 3.45 pm  
**Frankfurt Macro Seminar – joint with SAFE**  
Speaker: Nobuhiro Kiyotaki, Princeton University
- Tuesday, 3<sup>rd</sup>  
4.15 pm – 5.30 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Dirk Jenter, Stanford University
- Wednesday, 4<sup>th</sup>  
**Ceremony in Honor of CFS President Otmar Issing**  
Speaker: Mervyn Allister King, New York University
- Monday, 9<sup>th</sup> –  
Tuesday, 10<sup>th</sup>  
**SAFE Research Conference**  
**Banking, Monetary Policy, and Macroeconomic Performance**
- Tuesday, 10<sup>th</sup>  
4.15 pm – 5.30 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Ran Duchin, Foster School of Business, University of Washington
- Tuesday, 17<sup>th</sup>  
2.15 pm – 3.45 pm  
**Frankfurt Macro Seminar – joint with SAFE**  
Speaker: Josep Pijoan-Mas, CEMFI
- Tuesday, 17<sup>th</sup>  
4.15 pm – 5.30 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Tarun Chordia, Emory University
- Tuesday, 24<sup>th</sup>  
4.15 pm – 5.30 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Gustavo Manso, Haas School of Business, University of California at Berkeley
- Monday, 30<sup>th</sup> –  
Tuesday, 31<sup>st</sup>  
**SAFE Research Conference**  
**Regulating Financial Markets**
- Tuesday, 31<sup>st</sup>  
4.15 pm – 5.30 pm  
**Finance Seminar – joint with SAFE**  
Speaker: Andrei Simonov, Michigan State University
- Please note that for some events registration is compulsory.



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