

Systemic Risk in an Interconnected Banking System with Endogenous Asset Markets _4

Marcel Bluhm · Jan Pieter Krahen

“Better Educating the Workforce can Mitigate the Expected Loss in Productivity and Capital Returns” _8

Alexander Ludwig

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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



Wolfgang König

SAFE Executive Board

Stable financial markets, transparent financial transactions, sound risk management in banks – these are all objectives towards which we in SAFE and the House of Finance aim to make a contribution. Therefore, it will come as no surprise that we are involved in one of the currently most ambitious international regulatory projects seeking to achieve these goals: GLEIS, the “Global Legal Entity Identifier System” recently pushed forward by the inaugural meeting of its same-named foundation, which I was able to attend as a member of the Supervisory Board.

GLEIS is a Financial Stability Board initiative endorsed by the G20 leaders. It involves “Legal Entity Identifiers” (LEIs), namely the 20-digit alphanumeric codes which will be assigned to the contracting parties of financial transactions, such as banks, investment funds or asset managers, in order to enable clear and unique identification. In this way, transactions will become more transparent. In other words: the LEI System will enable us to draw a global risk map that displays the transfer of risks between market actors, as identified by their LEIs.

The benefit for regulatory authorities is obvious. The system will improve the detection of risks and, thus, supervisory tasks. And it will also simplify the collection, adjustment and transfer of data and therefore the contracting parties’ controlling and accounting activities, which, in turn, will naturally lower costs for the financial services industry.

The implementation of the GLEIS has already begun. At present, there are about 300,000 LEIs in issuance, recognized by the Regulatory Oversight Committee (ROC), which includes the U.S. Commodity Futures Trading Commission, Deutsche Bundesbank and BaFin, Germany’s financial regulator. If you want to trade derivatives in the European Union, LEIs are already required. Of course, there are still challenges to overcome, in particular in terms of quality management and standardizing data and procedures.

What are the benefits for research? Apparently, standardized data on global financial trade will provide researchers with new opportunities to analyze transactions and the transfer of risk. Scholars will be in a much better position than today to test and improve their assumptions, models, predictions and warnings. Hence, we consider our commitment to the Global Legal Entity Identifier Foundation (GLEIF) that is tasked with designing, implementing and supervising the GLEIS, not only as a contribution towards improving the regulation of financial markets but also towards advancing financial research.

Yours sincerely,
Wolfgang König

Systemic Risk in an Interconnected Banking System with Endogenous Asset Markets



Marcel Bluhm
Xiamen University & SAFE

Since the outbreak of the global financial crisis in 2007 and the dramatic effects of the Lehman collapse in 2008, systemic risk has become a matter of great concern for policy makers and central bankers. However, financial stability regulation is still at a very early stage and there is no generally accepted metric to measure systemic risk. Not surprisingly, there is also no general agreement on an adequate policy response.



Jan Pieter Krahn
Goethe University & SAFE

This article draws upon Bluhm and Krahn (2014), who study the consistency of two policy instruments aiming at safeguarding the financial system as a whole. The first instrument is a systemic capital requirement that compels banks to hold capital buffers consistent with financial stability at the system level. The second instrument is a systemic risk charge that implies levying a tax on banks depending on the effect of their riskiness on financial stability. Using this setup we show that a fair systemic risk charge which is proportional to a bank's individual contribution to systemic risk diverges from the opti-

mal macroprudential capitalization of banks from a planner's perspective. The results therefore have implications for the design of macroprudential capital surcharges.

Interbank borrowing drives systemic risk

For our analyses, we develop a structural model building upon Cifuentes, Ferrucci and Shin (2005), portraying a network of three interrelated bank balance sheets with endogenous asset markets. This model allows for measuring systemic risk – defined as default risk for the financial system as a whole – as well as an individual bank's contribution to it – measured by the Shapley (1953) value. In this setting, systemic risk is driven essentially by three channels: (i) the size of banks; (ii) the direct exposures among these institutions induced by the amounts that they have borrowed from and lent to each other; and (iii) the indirect exposures driven by banks' investments in similar asset products. Among other things, we find that the direct exposures are a dominant driver of systemic risk. Figure 1 displays a box plot of systemic risk (vertical axis on lower panel) as well as a bank's contribution to it (vertical axis on upper panel), depending on the level of interconnectedness.

Investigating the upper and lower quartiles (designated by the upper and lower lines closing the boxes), the whiskers which extend to the extreme data points (horizontal lines above and below the boxes) and outliers (plus symbol), shows that there is no clear monotonic relationship between the number of interbank links and the resulting systemic risk, or the bank's systemic risk contribution. That is, a higher interconnectedness can account for lower or higher systemic risk and banks' contribution to it. In the network literature, this property is labeled “robust-yet-fragile”, meaning that a growing number of interbank linkages can render the network more robust vis-à-vis small shocks, and, at the same time, more vulnerable to large shocks. Our result therefore provides further evidence in favor of the findings in Gai and Kapadia (2010) among others, who also find this property. However, focusing on the medians (red horizontal lines in the boxes), the box plots indicate that systemic risk, as well as a bank's contribution to it, tends to increase with the number of active links across banks. In our paper we also investigate the impact of bank size and exposure to similar derivative investments and find that both are also important drivers of systemic risk.

A system-wide value-at-risk calculation

Furthermore, using our model, we propose a new metric – a system-wide value-at-risk calculation –

which we call SVaR. We look at the two aforementioned policy instruments, i.e. a special bank levy and a mandatory capital injection into indi-

vidual financial institutions, and assume that the regulator neither invests any funds of its own, nor keeps any levies generated by the charge on its own account. In other words, the macroprudential supervisor invests the systemic risk levy into the banking system in order to fulfill its macroeconomic objective. Based on this assumption, we investigate whether the capital injection and the risk charge are congruent.

our results are of particular importance for regulators, supervisors, central banks and governments. Our analysis suggests the need to distinguish carefully between a bank's negative externality vis-à-vis the financial system, the corresponding risk charge levied by the supervisor, and the intended macroprudential capitalization.

References

- Cifuentes, R., Ferrucci, G., Shin, H. S.** (2005) "Liquidity Risk and Contagion", *Journal of the European Economic Association*, Vol. 3, pp.556-566.
- Gai, P., Kapadia, S.** (2010) "Contagion in Financial Networks", *Proceedings of the Royal Society A*, Vol. 466, pp.2401-2423.
- Shapley, L. S.** (1953) "A Value for N-Person Games", in *Contributions to the Theory of Games*, Vol. 2, Princeton University Press.

The full paper was published in the Journal of Financial Stability (Vol. 13, 2014, pp. 75-94) and is available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2421265&download=yes

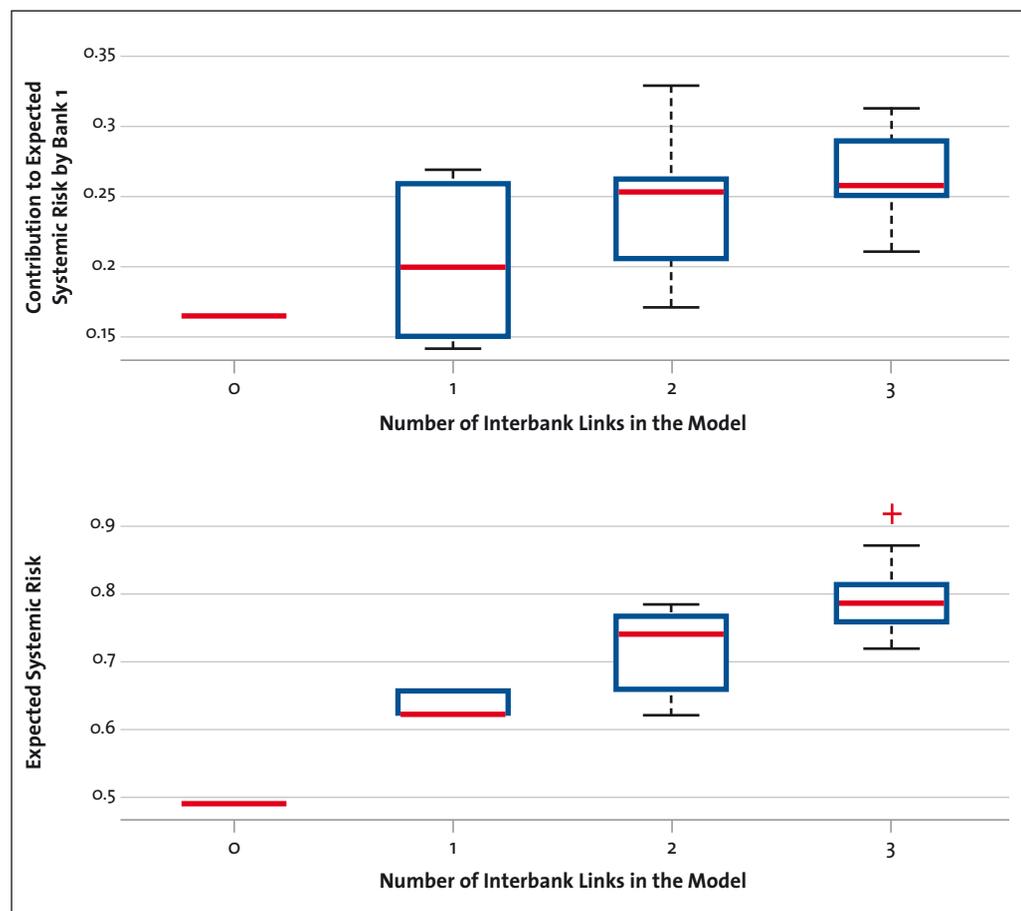


Figure 1: Expected systemic risk and the risk contribution of a bank depending on the number of its interbank links

Our analyses provide evidence that these two payments, that is, the individual charges flowing from the banks to the supervisor and the optimal individual capital injection flowing from the supervisor to the banks, will typically not be equal. Based on the parameters in our simulations, we rather find a net transfer of (additional) funds from some banks, namely those which mainly contribute to systemic risk via channels that are not affected by the macroprudential policy instrument, to other banks, namely those which contribute to systemic risk via channels that can be effectively dampened via the macroprudential policy instrument. The net transfer is achieved through the separation of the risk charge and the macroprudential capital injection.

In light of recent discussions on financial system stabilization without tapping taxpayers' money,

Thar She Blows Again: Reducing Anchoring Rekindles Bubbles



Sascha Baghestanian
Goethe University & SAFE

Markets play an important role in the aggregation of information. Competitive markets coordinate relative evaluations of goods and services via transaction prices. While individual evaluations are usually unobservable, market prices provide signals about the aggregate fundamental value of a traded item. Whenever a market ensures that transaction prices reflect fundamentals properly, economists refer to it as efficient.

However, ex ante there is no guarantee that markets fulfill their important role to accelerate price discovery. If mispricing in a market is persistently positive, i.e. if prices are above the fundamental value for an extended period of time, economists usually speak of a bubble. Bubbles are not only characterized by long periods of overpricing, but are also (at least, empirically) usually associated with a significant crash of prices towards the fundamental value. As Kindleberger and Aliber (2005) put it: “Bubbles always implode.” The consequences of bubble-crash patterns are usually severe. Bubbles lead to over-investment and mis-

allocation of capital, since the periods of increasing prices sent the wrong signal to producers. A crash, on the other hand, renders these investments unprofitable. Put differently, bubble-crash patterns can lead to a redistribution of wealth and therefore to social turmoil.

There are numerous examples of bubble-crash episodes. They range from the Dutch tulip mania (1634-37), the U.S. stock mania (1928-32), the dot-com bubble (1998-2001), the uranium bubble (2004-08), and, most recently, the U.S. real estate bubble (1996-2009). Although there is suggestive evidence indicating that the aforementioned episodes involved bubbles, there is no certainty that these markets did in fact experience mispricing, as the underlying fundamental values are usually not observable.

One way to circumvent the problem of unobservable fundamental values and to study the causes and the cures of bubbles is via experimental methods. Experimental economists since Smith et al. (1988) have focused their attention on mispricing in experimental asset markets. Smith and his co-authors illustrate that asset

prices may deviate systematically from their underlying fundamental value (FV), even in controlled laboratory environments in which the dividend distribution is common knowledge. Moreover, they show that experimental asset prices follow bubble-crash dynamics: initially, asset prices increase beyond the fundamental value until they peak and “crash” back towards the FV. The observed price dynamic proved to be highly replicable and persist under various experimental conditions.

Do visual stimuli affect investment decisions?

Our work uses experimental methods to investigate one particular cause of the formation of bubbles in laboratory environments: visual stimuli. Visual stimuli are omnipresent in the investment industry: traders, analysts, risk managers etc. usually make decisions based on graphical, chart-based, representations of their “numbers”. So far, researchers have not addressed whether this graphical representation itself can affect investment decisions.

We show that visual stimuli induce anchoring behavior (Kahneman and Tversky, 1983 and 1974)

that can substantially mitigate bubble behavior (see Figure 1). We set visual stimuli by manipulating within-period price charts used by our experimental traders. Most importantly, our evidence suggests that the visual stimulus needs to be provided only in the first period of a standard asset market experiment to affect overall price dynamics. We support our hypothesis with new experimental evidence from 22 laboratory sessions (216 subjects) and adapt existing theoretical frameworks to rationalize our findings.

Our insights suggest that trading behavior in the initial period is crucial for generating the well-established bubble-crash dynamics in experimental asset markets. Inducing an anchor at the fundamental value in the first period is suffi-

cient to eliminate or significantly reduce bubbles in laboratory environments. If no anchor is set, standard bubble-crash patterns emerge.

Deviant initial prices induce asymmetric price dynamics

We also set anchors at normatively irrelevant numbers below and above the asset's fundamental value. Interestingly, both cases induce asymmetric price dynamics. Anchors below the fundamental value trigger an upward trend of prices, peaking well above the fundamental value and crashing thereafter. Anchors above the fundamental value induce prices which slowly converge to the fundamentals from above: in other words, anchors set above the fundamental value may persist for an extended period of time.

We rationalize this finding in a model in which investor sentiment may trigger price momentum.

Our insights further improve our understanding of stock market dynamics and suggest that setting initial prices is perhaps more important than previously believed. Stock exchanges such as the New York Stock Exchange (NYSE) determine opening prices through pre-opening auctions. Between 8.00 am and 9.30 am, market makers at the NYSE collect limit orders and try to implement a market clearing price. Our findings suggest that opening prices have very important implications for subsequent intra-day price dynamics. More specifically, underpricing the asset during the pre-opening may induce steep price rallies, peaking well above the asset's fundamental value. Our work therefore suggests that the market structure and price determination in pre-openings should be discussed when addressing asset market stability.

The results presented in our paper also contribute to the well-established literature on initial public offerings (IPO). Interpreting the first-period price in our experimental sessions as the IPO price of a stock, our findings suggest that mispricing the IPO could lead to non-trivial price dynamics. Since our experimental setup gives us more control over the stock's "IPO price", we can make predictions about the consequences

of over- and underpricing the asset initially. Our insights suggest that underpricing the IPO can lead to price rallies, peaking well above the asset's FV. Overpricing the IPO, on the other hand, is followed by trading prices above the FV for an extended period of time.

References

- Kahneman, D., Tversky, A.** (1983) "Extensional Versus Intuitive Reasoning: The Conjunction Fallacy in Probability Judgment", *Psychological Review*, Vol. 90, pp. 293-315.
- Kahneman, D., Tversky, A.** (1974) "Judgement under Uncertainty: Heuristics and Biases", *Science*, Vol. 185, pp. 1124-1131.
- Kindleberger, C. P., Aliber, R. Z.** (2005) "Manias, Panics and Crashes: A History of Financial Crises", Sixth edition, Palgrave Macmillan.
- Smith, V. L., Suchanek, G. L., Williams, A. W.** (1988) "Bubbles, Crashes, and Endogenous Expectations in Experimental Spot Asset Markets", *Econometrica*, Vol. 56, Issue 5, pp. 1119-1151.

The full paper was published as SAFE Working Paper No. 54 and is available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2456941

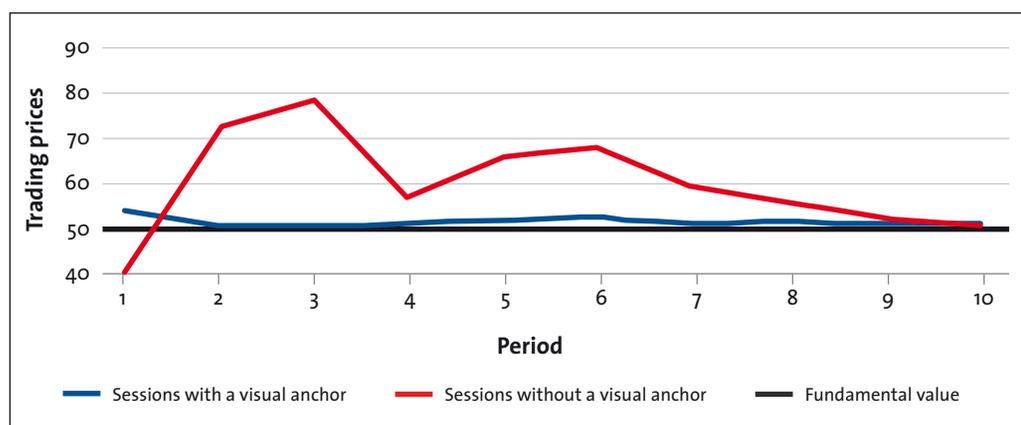


Figure 1: Average trading prices in sessions with a visual anchor and in sessions without a visual anchor

Interview

“Better Educating the Workforce can Mitigate the Expected Loss in Productivity and Capital Returns”



Alexander Ludwig
Goethe University & SAFE

Alexander Ludwig took over the SAFE Professorship of Public Finance and Debt Management in April 2014. Before coming to Frankfurt, he was a Professor for Macroeconomics at the University of Cologne’s Center for Macroeconomic Research. He earned his doctoral degree at the University of Mannheim in 2005.

Which research questions are you currently focusing on?

My research is mainly on public finance questions in macroeconomics. In the context of demographic transition, I focus on the financial conditions of households over their life cycle. One key question, for example, is: how can we optimize social security or intergenerational tax and transfer systems, given the demographic trends that we are facing in the next decades? The fraction of older people in the population will increase tremendously, while the fraction of those who produce resources is going to decline. Therefore, we can expect an overall loss in productivity. As a consequence, capital will also be less productive, and rates of return on capital will go down. The question of the extent to which productivity and capital returns will decrease has long been discussed under the catch phrase “asset market meltdown.”

What are your expectations with regards to capital returns?

Based on fully-fledged quantitative models that take into account equilibrium relationships of supply and demand for capital on the international

capital market, we expect that the average rate of return on capital will drop by no more than 0.8% by 2030-2035, from its current level of roughly 7 to 7.5%. So, compared to papers from the early 1990s, where some authors predicted a tremendous decrease in the capital return rate, we do not foresee a huge asset market meltdown. The average annual growth rate of GDP per capita will decrease by at most 0.5 percentage points according to our findings (Ludwig et al., 2012).

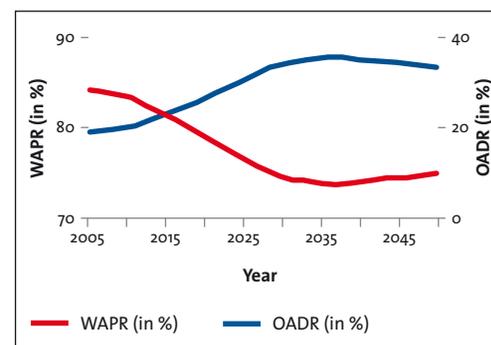


Figure 1: Working-Age and Old-Age Dependency Ratio. WAPR (Working-age population ratio): ratio of population of age 16-64 to total adult population of age 16-90. OADR (Old-age dependency ratio): ratio of population of age 65-90 to working-age population. Source: Ludwig et al. 2012

Could the overall quantity of workers in the labor force increase – say, due to people starting work earlier, retiring later, or more women entering the workforce?

To address this question, you have to look at the aggregate hours worked in an economy, and these are not going to increase in the same proportion when you add more people to the workforce. The reason is behavioral responses to policy reforms at the extensive margin. When you take these into account in a realistically calibrated model, reforms are at least partially offset (Börsch-Supan et al., 2014). Regarding female labor supply, take for example Germany and the Nordic countries. The role model in Germany is still – somewhat exaggeratedly – that, in an average household, the man works full-time and the woman works part-time, i.e., yielding the equivalent of 1.5 units of work. In the Nordic countries, men and women in households typically each work three quarters of average work hours, thus still adding up to the equivalent of 1.5 units of work. So, whatever reform you will have on the extensive margin of labor supply, say better childcare provision, there has still to be someone who picks up the children from the childcare

institution. This means, if women start to work more, there will be an extensive margin adjustment of men working less. Thus, the effect will be zero, in the extreme example. An increase in the retirement age will have a small positive effect on the working population but not one-for-one. People who have sufficient assets will work fewer hours.

Can you mitigate the effects of demographic change by a rise in human capital?

Yes, educating the workforce better can mitigate a lot of the effect of a shrinking labor force. According to our predictions, the projected fall in the rate of return on capital of 0.8 percentage points would be just 0.5 percentage points in the case of sufficient adjustments in human capital. The expected average growth rate reduction of 0.5 percentage points in the baseline scenario instead becomes a less pronounced drop of 0.2 to 0.3 percentage points (see Figure 2).

Going back to the first question you raised: What do your results imply for social insurance systems?

On the one hand, a contribution-based system puts more and more pressure on the shrinking fraction of workers. On the other hand, saving on your own is difficult when the rate of return on capital is going down. There are probably two

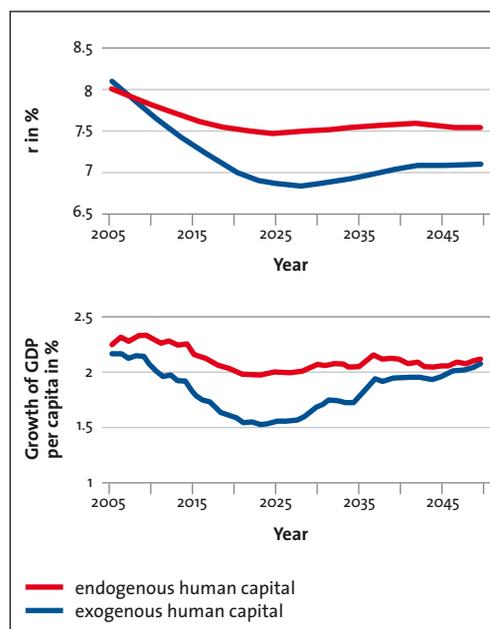


Figure 2: Rate of return on physical capital (r) and growth of GDP per capita with endogenous and exogenous human capital. Source: Ludwig et al. 2012

perspectives to take on this. One is that rates of return on capital are still higher than the implicit returns in social insurance systems. As rates of return fall due to demographic effects, you should diversify your portfolio internationally and probably relax some of the restrictions on how to reinvest retirement funds that institutions in Germany face. Restrictions on how much you can invest abroad or on how much you are

supposed to invest in risk-free versus risky assets should be revised.

The thing is, the return on risk-free assets is going to shrink to a larger extent than the return on risky assets. This is because old people have a higher preference for holding or investing in risk-free assets. As the population ages, the demand for risk-free investment will go up, dampening its returns more as compared to the return on risky assets. Overall, I would expect that the short-run effects on risk-free interest rates that we currently see as a consequence of the recession will last, due to the demographic effects. I suppose that we are going to be seeing relatively low interest rates for many years to come.

The other perspective is that you need a mixture between a contribution-based and a capital-funded system. The first provides more insurance than any asset you can purchase on the capital markets. And the last years have taught all the critics that wanted to abolish the public system entirely a lesson about capital market risk. So, the “optimal portfolio” should be a mixture between the two systems. I think that Germany – based on the pension reforms in 2001 and 2003 – is on the right track here. These reforms were based on relatively realistic scenarios for what is going to happen to the overall workforce.

Selected Publications

Börsch-Supan, A., Härtl, K., Ludwig, A. (2014) “Aging in Europe: Reforms, International Diversification, and Behavioral Reactions”, forthcoming in *American Economic Review, Papers & Proceedings*.

Börsch-Supan, A., Ludwig, A., Winter, J. (2006) “Aging, pension reform, and capital flows: A multi-country simulation model”, *Economica*, Vol. 73, pp. 625-658.

Krueger, D., Ludwig, A. (2013) “Optimal Progressive Labor Income Taxation and Education Subsidies When Education Decisions and Intergenerational Transfers are Endogenous”, *American Economic Review, Papers & Proceedings*, Vol. 103, Issue 3, pp. 496-501.

Krueger, D., Ludwig, A. (2007) “On the Consequences of Demographic Change for Rates of Return to Capital, and the Distribution of Wealth and Welfare”, *Journal of Monetary Economics*, Vol. 54, Issue 1, pp. 49-87.

Ludwig, A., Reiter, M. (2010) “Sharing Demographic Risk: Who is Afraid of the Baby Bust?”, *American Economic Journal: Economic Policy*, Vol. 2, Issue 4, pp. 83-118.

Ludwig, A., Schelkle, T., Vogel, E. (2012) “Demographic Change, Human Capital and Welfare”, *Review of Economic Dynamics*, Vol. 15, Issue 1, pp. 94-107.

Forward Guidance: A New Challenge for Central Banks



Otmar Issing
Center for Financial Studies

Forward guidance is the most recent stage of communication in a long and ongoing process of central banks making their decisions and the underlying process increasingly transparent. The central bank uses communication for two purposes: One is the obligation to be accountable to the public for its policy. In this sense, accountability is the counterpart of independence. The other is to make monetary policy as effective as possible. Monetary policy can only fix the central bank interest rates, and thereby control the very short end of the interest rate spectrum. The influence of the central bank on the long end depends on market expectations regarding future central bank decisions.

One can distinguish two dimensions by which the central bank can steer market expectations. First, it employs short-term indications about policy inclinations in the run-up to policy decisions. The second dimension relates to the medium and longer term. The challenge here is to ensure consistency between the sequence of individual decisions and the mandate of the central bank. If this consistency is achieved, monetary policy is predictable in the short run and credible in the long run.

The financial crisis and the zero bound were seen as a new challenge for central banks using communication to guide market expectations. The key element of forward guidance is the announcement that the central bank expects a highly accommodative stance of monetary policy to remain appropriate for a considerable time after the recovery strengthens. Because the central bank rate is at (or close to) the zero bound, forward guidance tries to create an additional easing effect by signalling that the rate will be kept low for a longer period than the public expects. This effect would be achieved by encouraging

investors to shift their portfolio into longer maturities, thereby reducing long-term rates.

Some critical remarks

Forward guidance should be seen in the context of a long progression from opaqueness to transparency in central bank decision-making. Can forward guidance be seen as an improvement and does it bring us closer to a kind of optimum? Forward guidance is supposed to reduce the heightened uncertainty created by the great recession. But how convincing is this as the central bank, too, is sailing through uncharted waters?

All forms of forward guidance practiced so far boil down to a kind of promise that the central bank will raise the policy rate (and reduce or stop quantitative easing) later than the public expects. In concrete terms this means that the central bank for some time will tolerate a higher rate of inflation than its implicit or announced goal. Here lies a fundamental problem of forward guidance: It suffers from the same sort of time inconsistency malaise that it seeks to remedy. Announcing that the policy

rate will remain low well into the future does not imply that the central bank, from the perspective of a future date and in the face of rising inflation, will have an incentive to follow through on its commitment. The reason is, of course, that at that future moment, the central bank will be confronted with all the costs associated with keeping its promise, while all the benefits will already have been reaped.

Optimal policy?

Forward guidance suffers from two implicit fundamental flaws. First, forward guidance as a more or less pre-announced future interest rate path rests on the idea that monetary policy is a case for optimal control. However, all the models on which this approach is based are far away from integrating a financial sector accurately enough to adequately reflect the complexity of reality. Errors in monetary policy are, unfortunately, the logical consequence; central banks adopting this approach will end up undermining their credibility. Guidance of expectations based on this approach cannot deliver the expected results; uncertainty (and volatility) finally will not be reduced.

Maximal transparency?

Second, there is another fundamental aspect. The process of enhancing transparency can be interpreted as moving to a kind of optimum. However, this “optimum” often seems to be misunderstood as a “maximum.” Society demands transparency from public institutions. For an independent central bank, this requirement is even more pressing. Any selection of information, any retention of knowledge could be seen as a violation of the principle of transparency. From this perspective, absolute transparency seems to be a necessary counterpart of independence. Yet, demand for more information is almost unlimited. The requests from agents in financial markets (and the media) are insatiable. Yet, maximum transparency is impossible to achieve. Not maximum, but rather some kind of optimum of transparency should be the final stage to strive for.

Outlook

The intention of forward guidance is to reduce the uncertainty of the public about future monetary policy. However, forward guidance risks

giving the impression that the central bank can overcome the uncertainty to which the central bank itself is exposed. If the signal on future policy decisions is vague, but still called forward guidance, the value of information is meagre and will trigger calls for “more.” If the signal is strong, coming close to an unconditional commitment, the central bank is confronted with an unpleasant choice in case of new data or a new assessment of the situation. Either the central bank sticks to the decision on which financial agents have based their investment decisions, or it revises its communication, thereby causing immediate losses for investors. In the first case, the need for the central bank to change course increases over time; in the second case, forward guidance will immediately lose credibility. Forward guidance tries to give the impression of a kind of rule-based monetary policy. De facto, however, it is an over-ambitious discretionary approach which, to be successful, would need much more (or rather better) information than is currently available.

The full article is available at: <http://safe-frankfurt.de/en/policy-center/publications.html>

Selected Policy Center Publications

Gellings, M., Jungbluth, K., Langenbucher, K. (2014)
 “EU Mapping: Systematic Overview on Economic and Financial Legislation”,
 White Paper 18, SAFE Policy Center.

Gründl, H. (2014)
 “Stellungnahme zum Entwurf eines Gesetzes zur Absicherung stabiler und fairer Leistungen für Lebensversicherte”,
 Policy Letter 29, SAFE Policy Center.

Remsperger, H. (2014)
 “Der makroprudenzielle Komplex: der Prozess, das Schloss, das Urteil”,
 White Paper 17, SAFE Policy Center.

Weichenrieder, A. J. (2014)
 “Im Schatten der Lowflation”,
 Policy Letter 28, SAFE Policy Center.

Woll, C. (2014)
 “Curtailling capture through the European banking union: a note of caution”,
 Policy Letter 27, SAFE Policy Center.



Benjamin M. Friedman First Visiting Professor of Financial History

Benjamin M. Friedman, William Joseph Maier Professor of Political Economy at Harvard University, will be the first Visiting Professor of Financial History at the House of Finance. He will hold the new visiting chair financed by Metzler Bank and the Emond de Rothschild Group on the occasion of Goethe University's centennial. The aim of this chair is to strengthen the field of financial history at Goethe University and the Research Center SAFE. Friedman has written extensively on economic policy, in particular on the role of financial markets in shaping how monetary and fiscal policies impact overall economic activity. His work also focuses on: the effects of government deficits and surpluses on interest rates, exchange rates and business investment; appropriate guidelines for the conduct of U.S. monetary policy; and appropriate policy actions in response to crises in a country's banking or financial system. Friedman will be formally introduced at an inaugural event taking place on 13 October 2014.



SAFE Researchers Compile a Map of EU Legislation

A team of SAFE researchers have produced a systematic graphical overview of European legislation in the areas of economics and finance. This map was commissioned by the European Parliament's Committee on Economic and Monetary Affairs (ECON). Katja Langenbucher, Professor of Private, Business and Banking Law, Marcel Gellings and Kai Jungbluth compiled the overview of the most relevant pieces of legislation in force, as well as proposals and other relevant provisions, in 14 policy areas relevant to ECON, such as banking, insurance and occupational pensions, consumer protection in financial services or European Monetary Union. The main Directives, Regulations and Green and White Papers are mapped in an accessible way, providing a practical background source of information for those concerned with European financial and economic legislation. The study can be downloaded from the SAFE website.



New Junior Professor in Marketing joins SAFE

In July Simone Wies took over the SAFE Junior Professorship for Marketing and Finance. Before joining SAFE she held a postdoctoral research position at Duke University in the United States. Wies completed her education at Maastricht University, where she obtained her doctor's, master's and bachelor's degrees. Her research deals with the interaction of capital markets and managerial decision making. In her work, she investigates how marketing investments, e.g. as regards advertising of product innovations, affect capital markets and investor behavior and vice versa. Simone Wies is one of six new junior professors who joined SAFE during the course of the last academic year. With her, SAFE strengthens its link to the Marketing Department of Goethe University's Faculty of Economics and Business Administration.



Europe's Economic Situation is the "New Normal"

On 16 July, Ewald Nowotny, Governor of the Oesterreichische Nationalbank and a member of the Governing Council of the European Central Bank, gave a SAFE Policy Lecture on "Perspectives on the Structure of Europe's Banking Industry". Nowotny considers that Europe's current situation of low economic growth, low inflation, low profitability for banks, lower asset quality and less short-term funding is a "new normal", and can thus be expected to persist for some time. He noted that many banking sector risks have not disappeared, as they were often simply transferred, in particular to the shadow banking sector. While Nowotny emphasized that this sector should not be seen as sinister per se and that it may have positive economic effects in terms of the provision of financial services, he reminded the audience that one should not neglect the fundamental question: what are the risks involved and what is their distribution? As he sees it, the main objective in reforming the financial system should not be to simply shift risks from one place to another, but to reduce the overall amount of systemic risk.



Current Trends in the Regulation of Money Market Funds

In mid-July, Craig M. Lewis, who has just ended his tenure as Chief Economist of the U.S. Securities and Exchange Commission (SEC) and resumed the Chair of Management at Vanderbilt University, held a SAFE Policy Lecture on U.S. money market funds (MMF). He reviewed the main reform options discussed at that time – and officially adopted by the SEC only six days later – namely to: (1) require MMFs to introduce a floating net asset value (NAV), i.e. pricing their assets at market value instead of book value, which would allow the daily share prices of these funds to fluctuate along with changes and force them to give up their current constant share price of \$1.00; (2) allow MMFs to impose liquidity fees on investors who want to withdraw their money in a run-like situation; or (3) to suspend withdrawals by means of a temporary redemption gate. A further option, which has not been adopted by the SEC so far, is a capital buffer to absorb losses; recent proposals suggest a buffer of 3% – Lewis noted that this represents a figure that is larger than any single loss in the history of MMFs.

Selected Publications

Ait-Sahalia, Y., Laeven, R. J. A., Pelizzon, L. (2014)
“Mutual Excitation in Eurozone Sovereign CDS”,
forthcoming in Journal of Econometrics.

Angeloni, I., Aldasoro, I. (2014)
“Input-Output-Based Measures of Systemic
Importance”,
forthcoming in Quantitative Finance.

Betzer, A., Gider, J., Metzger, D., Theissen, E.
(2014)
“Strategic Trading and Trade Reporting by Corporate
Insiders”,
forthcoming in Review of Finance.

Bischof, J. (2014)
“Identifying Disclosure Incentives of Bank Borrowers
during a Banking Crisis”,
Journal of Accounting Research, Vol. 52, Issue 2,
pp. 583–598.

Fürth, S., Rauch, C. (2014)
“Fare Thee Well? An Analysis of Buyout Funds’
Exit Strategies”,
forthcoming in Financial Management.

Haar, B. (2014)
“Civil Liability of Credit Rating Agencies after
CRA 3 – Regulatory All-or-Nothing Approaches
between Immunity and Over-Deterrence”,
European Business Law Review, Vol. 25, pp. 315-334.

**Hackethal, A., Meyer, S., Pirschel, J., Schmitt-
mann, J. M.** (2014)
“The Impact of Weather on German Retail
Investors”,
forthcoming in Review of Finance.

König, F. (2014)
“Reciprocal Social Influence on Investment
Decisions: Behavioral Evidence from a Group of
Mutual Fund Managers”,
Financial Markets and Portfolio Management,
Vol. 28, Issue 3, pp. 233-262.

Langenbacher, K. (2014)
“Rechtsermittlungspflichten und Rechtsbefol-
gungspflichten des Vorstands – Ein Beitrag zur
aktienrechtlichen Legalitätspflicht”,
forthcoming in Festschrift für Hans-Jürgen
Lwowski.

Slavík, C., Yazici, H. (2014)
“Machines, Buildings, and Optimal Dynamic
Taxes”,
Journal of Monetary Economics, Vol. 66, pp. 47-61.

Tröger, T. (2014)
“Anteilseinzahlung und Abfindungszahlung”,
Gesellschaftsrechtliche Vereinigung (Eds.), Ge-
sellschaftsrecht in der Diskussion 2013, Verlag
Dr. Otto Schmidt, Köln, pp. 23-77.

Recent SAFE Working Papers

- | | |
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| No. 65 Berdin, E., Gründl, H.
“The Effects of a Low Interest Rate
Environment on Life Insurers” | No. 57 Haar, B.
“Financial Regulation in the EU –
Cross-Border Capital Flows, Systemic
Risk and the European Banking Union as
Reference Points for EU Financial Market
Integration” |
| No. 64 Herbold, D.
“A Repeated Principal-Agent Model
with On-the-Job Search” | No. 56 Curatola, G., Donadelli, M., Giofré, A.,
Grüning, P.
“Austerity, Fiscal Uncertainty, and
Economic Growth” |
| No. 63 Fuchs-Schündeln, N., Haliassos, M.
“Does Product Familiarity Matter for
Participation?” | No. 55 Krahen, J. P., Ockenfels, P., Wilde, C.
“Measuring Ambiguity Aversion:
A Systematic Experimental Approach” |
| No. 62 Behr, P., Drexler, A. H., Gropp, R., Guettler, A.
“Financial Incentives and Loan Officer
Behavior: Multitasking and Allocation of
Effort Under an Incomplete Contract” | No. 54 Baghestanian, S., Walker, T. B.
“Thar She Blows Again: Reducing
Anchoring Rekindles Bubbles” |
| No. 61 Aldasoro, I., Seiferling, M.
“Vertical Fiscal Imbalances and the
Accumulation of Government Debt” | No. 53 Kraft, H., Munk, C., Seifried, F. T.,
Steffensen, M.
“Consumption and Wage Humps in
a Life-Cycle Model with Education” |
| No. 60 Colonnello, S., Curatola, G., Hòang, G. N.
“Executive Compensation Structure and
Credit Spreads” | No. 52 Kraft, H., Seiferling, T., Seifried, F. T.
“Asset Pricing and Consumption-
Portfolio Choice with Recursive Utility
and Unspanned Risk” |
| No. 59 Ludwig, A., Harenberg, D.
“Social Security and the Interactions
between Aggregate and Idiosyncratic Risk” | |
| No. 58 Haliassos, M., Jansson, T., Karabulut, Y.
“Incompatible European Partners? Cultural
Predispositions and Household Financial
Behavior” | |

How Will the Banking Union Change Economic Policy Making?



Thomas Wieser
President of the Economic and Financial Committee of the European Union

The Banking Union is going to change the structure and organization of banking and financial markets in Europe. It will also bring about noticeable changes in the interaction of these sectors with other parts of our economies, and thus their functioning. Most recent commentary has focussed on the direct, immediate impact of a new Single Supervisor setting up business. Whilst important, the long-run structural effects may in fact be more significant than so far realised.

In the Banking Union, the cost of bank resolution will, over time, be brought down. More importantly, the distribution of losses will be shifted significantly. What are the main drivers of change?

The Single Supervisor will be quicker to identify risks to the viability of individual banks, and the

Single Resolution Mechanism will be more decisive in resolving failing banks than national authorities were. Thus, the Single Supervisory Mechanism spells the end of an industrial policy approach to supervision in the countries concerned. This constitutes a clearly positive economic effect, already in the short run.

Replacing bailouts with bail-ins will shift the cost away from sovereigns, and consequently away from future taxpayers to current investors, and possibly unsecured depositors. The inter-temporal distribution effects will thus change decisively. Also, the impact on banks, business and households will be much more direct. Wealth effects will be non-negligible. In a truly integrated financial market, the effects of this shift should ultimately be beneficial for the economy as a whole, not only for governments' budgets. The transition to this new equilibrium will be successfully completed over the average maturity of a bank's portfolio. In the meantime, however, the sign of the economic effects is less clear, and short run effects may be different than medium-term effects.

In the medium term, bank finance will thus be considered relatively riskier. Therefore, the cost of funding will go up, and the structure of financing bank balance sheets will become more

conservative. Consequently, banks will have to re-evaluate their lending policies. As the loan-to-deposit ratio comes down, the costs of financing the economy will be pushed upwards, with slightly mitigating effects from positive selection bias for less risky projects and loans. The corporate sector may thus be encouraged to diversify its funding strategy and look for other sources of funding. For large corporates this is, even in Europe, not a new situation as they routinely finance themselves via capital markets. The challenge will be greater for midsize firms and particularly small and medium enterprises (SMEs). Especially in the present, low growth environment, governments will need to address this issue by developing the necessary framework conditions for the development of capital markets and for SME financing.

A gradually shrinking banking sector will inevitably become less of a growth driver than it has been in the more recent past. Policy makers will have to consider the impact of changing costs and risks of individual instruments on savings and investment decisions.

Sources of instability will not go away in the Banking Union, but dealing with them will require more careful analysis at the national level and subsequent policy action at the national

level, or at the Banking Union level – and sometimes jointly. We will therefore need to develop (or improve) our analytical apparatus for detecting emerging imbalances, and stand ready to take action.

As national regulatory and supervisory discretion fade away over time, other drivers of competition will emerge, especially as regards cross-border competition. Differentials in tax treatment will start to play a vital role in shaping the relative position of bank groups. In the medium term, it should not come as a surprise that bank groups will start relocating headquarters to the most tax friendly jurisdiction in the Banking Union. The associated loss of “national identity” will not harm financial stability – but how it affects overall tax revenues is quite open.

National and European authorities have to consider how best to adapt to this new environment, also in the way they interact with each other. The impact of policy decisions and events taking place beyond national borders – also on macro-financial stability in individual countries – will increase. Not all actors have yet thought this through.

The author held the keynote address at the SAFE Policy Center Summer Academy on 3 September 2014.

Events

October

Monday, 6 th 5.00 pm	EFL Jour Fixe The Development of German Installment Loans Among the Elderly Speaker: Philipp Blommel, E-Finance Lab
Wednesday, 8 th 5.30 pm – 7.00 pm	CFS Colloquium Herausforderungen für Investoren in Zeiten niedriger Zinsen Speaker: Maximilian Zimmerer, Member of the Board of Management of Allianz SE, Investments
Wednesday, 8 th – Friday, 10 th	GBS Executive Education An Advanced Understanding of Financial Risk Management
Friday, 10 th – Saturday 11 th	SAFE Conference Reorganization and Resolution of Transnational Financial Institutions
Monday, 13 th 12.30 pm – 2.00 pm	CFS Lecture on the Order of Money Die neue Ordnung des Geldes: Warum wir eine Geldreform brauchen Speaker: Thomas Mayer, CFS Senior Fellow
Monday, 13 th 11.30 am – 1.00 pm	Inaugural Lecture, Endowed Visiting Professorship of Financial History Speaker: Benjamin M. Friedman, Harvard University
Wednesday, 15 th	SAFE Policy Center Lecture Speaker: Suzanne Bishopric, Director of Investment Management Division of the United Nations Joint Staff Pension Fund
Friday, 17 th	2nd Frankfurt Conference on Financial Market Policy Banking Beyond Banks

Tuesday, 21 st 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Matti Keloharju, Aalto University
Wednesday, 22 nd 5.30 pm – 7.00 pm	CFS Colloquium Warum reichen die bisherigen Reformen der Bankenregulierung nicht aus? Speaker: Martin Hellwig, Max Planck Institute for Research on Collective Goods
Tuesday, 28 th 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Søren Leth-Petersen, University of Copenhagen
Wednesday, 29 th	ICIR Workshop IFRS und Solvency II: Aktuelle Entwicklungen im Versicherungsbereich Speaker: Helmut Gründl, Goethe University & ICIR; Michael Hommel, Goethe University
Thursday, 30 th – Friday, 31 st	ICIR Conference Karel's Club Speaker: Karel Van Hulle, ICIR

November

Tuesday, 4 th 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Peter Feldhütter, London Business School
Tuesday, 11 th 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Diego Garcia, University of North Carolina
Thursday, 13 th – Friday, 14 th	SAFE Conference Behavioral Aspects in Macroeconomics and Finance
Tuesday, 18 th 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Andrea Buraschi, Imperial College Business School

Friday, 21 st – Saturday, 22 nd	ILF Conference 7th ECLE Symposium “Strafverfolgung in Wirtschaftsstrafsachen – Strukturen und Motive”
Tuesday, 25 th 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Suleyman Basak, London Business School
Thursday, 27 th 4.30 pm – 7.15 pm	Mini-Workshop on Systemic Risk Speaker: Oliver Kley, TU Munich; Tom Fischer, University of Würzburg
Thursday, 27 th	Inaugural Lecture Speaker: Karel Van Hulle, ICIR
Friday, 28 th 5.00 pm	CFS Lecture Speaker: Andreas Dombret, Deutsche Bundesbank

December

Tuesday, 2 nd 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Kelly Shue, Chicago Booth School of Business
Wednesday, 3 rd 5.30 pm – 7.00 pm	CFS Colloquium Handling the Risks of Sovereign Defaults: An Alternative Speaker: Harold James, Princeton University
Monday, 8 th 5.30 pm	CFS Lecture Speaker: Isabel Schnabel, Mainz University Jointly organized with the Institut für bankhistorische Forschung
Tuesday, 9 th 4.15 pm – 5.30 pm	Finance Seminar – joint with SAFE Speaker: Dirk Hackbarth, Boston University

Please note that for some events registration is compulsory.



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