

## COMPLEMENTS TO BASEL CONFERENCE 28-29 FEBRUARY 2012

With Basel III, the Committee on Banking Supervision has set down the latest rules that will govern global finance. Financial institutions worldwide are adjusting their daily business in preparation for the new regime, but onlookers from central banking and academia, as well as regulatory bodies themselves, are wondering whether the update is out-of-date even before its implementation is final.

The Complements to Basel conference was held to discuss the potential financial reforms currently left unaddressed by regulators. The conference focused on corporate governance and real estate; two factors of critical importance to the financial crisis of 2007-2009 but which remain largely outside the regulatory scope.

**Charles Goodhart** (FMG, LSE), a central figure in the policy world, opened the conference and introduced the first session which comprised of two papers on corporate governance dynamics: a theoretical study of its potential to cause crises and an empirical analysis of its role in 20th century America.

**Dimitrios Tsomocos** (Oxford) presented the first paper, co-authored with Alexandros Vardoulakis (Banque de France) and Kevin James (CCBS, Bank of England/FMG, LSE). Tsomocos referred frequently to his PhD professors from Yale, and the paper centred on the contrast between the well-known Yale figure Irving



l-r: **Kevin James** (CCBS, Bank of England/ FMG, LSE), **Ron Anderson** (FMG, LSE) and **Andrew Ellul** (Indiana)

Fisher and contrarian economist Hyman Minsky. Fisher's theory of economic fluctuations greatly influenced Ben Bernanke's academic work, which is formalised in the Federal Reserve Chairman's articles on the so-called financial accelerator and now plays a central role in US policy decision-making. Therefore Tsomocos believes that the time is right to question the belief that deteriorating credit markets induce financial crises, and instead to consider Minsky's idea that credit expansion triggers collapse. The authors saw the agency problem of moral hazard in poorly governed firms as the key mechanism necessary to model bad boom-time bets.

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# COMPLEMENTS TO BASEL CONFERENCE

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The paper produces a model of biased bank managers who have learnt over time to build upon Minsky's intuition. Adverse selection in funding markets obstructs Fisher's debt-deflation channel; as balance sheets blow up following a chain of successes, interest rates decrease, even though potential losses in default states are greater because the updated probability of future success has also increased in a dominant effect. Thus investment increases and booms create leverage until failure wipes a bank out. Adverse-selection across banks determines the lending rate and repeatedly investing successfully allows them to distinguish themselves, thereby lowering their costs of capital. Critically, gradual separation is path-dependent, so that only transparency forced separation of well-governed from poorly-governed financial institutions can prevent the over-investment in a bad bank with a long string of lucky successes. Tsomocos concluded by emphasising the importance of dynamics in corporate governance, suggesting that a firm's management style will determine the evolution of risk-taking behaviour in the financial sector and across the economy.

Next **Kevin James** (CCBS, Bank of England/FMG, LSE) presented his most recent work, "Corporate Governance 1926-2010: The SEC miracle drug and the evolution of resistance". The paper studies corporate governance over the course of nearly 100 years, employing a metaphor to illustrate its evolution. Poor firm governance is a strand of a virus contaminating the economic population; while doctor-regulators remain unable to quash the disease entirely, they can treat it with thoughtful policy-making. However, as diseases become resistant to old drugs, so do corporations become impervious to stale regulation. In order to examine the influence of regulation on corporate governance, its historical quality must be measured. James proposed two measures of economic health, the first describing corporate governance and the second transparency – calculated from the equity return skewness and variance respectively. They allowed him to plot time series of governance effectiveness and the degree of corporate transparency to examine the influence of regulatory changes. For his US data, the result was clear: the regulatory reforms



**Andrew Ellul** (Indiana)

that the Securities and Exchange Commission (SEC) implemented in the 1930s to enforce market transparency, immediately improved firm governance but unfortunately stopped being effective in the 1980s. Finally, he showed that the result held more generally: transparency predicted good governance throughout his sample, which he demonstrated from a lagged regression of his governance measure on his measure for transparency.

James proceeded to nickname corporate transparency "the SEC miracle drug". He asserted its importance in preventing crises between the depression and the 1980s, when the bad-governance disease finally gained resistance to the regulations, suggesting that we are in the need of new regulation and that some of Basel's attention should be devoted to improving corporate governance.

In the question and answer session that followed, James engaged with the audience in speculation about what the changes in the 1980s were that prevented the old transparency laws from sufficing. Everyone agreed that he had identified a real problem and that superior regulation of transparency could only improve firm governance and hence financial stability. The next step for researchers and policy makers is to identify the causes of the disease resistance in order to implement robust regulation.

**Andrew Ellul** (Indiana) opened the next session, entitled "Stronger risk controls, lower risk: Evidence from US bank holding companies", by highlighting the failure in risk management at banks as being a prominent explanation for why so many took excessive risks in the lead up to the financial crisis. He

suggested that risk managers at banks either failed to identify or correctly measure risks, or simply failed to communicate risk exposures to their top management. As a result, they could not restrain traders and bank executives who, given their high-powered pay-for-performance schemes, had incentives to take excessive risk.

Ellul then went on to examine the organisational structure of the risk management function at Bank Holding Companies (BHCs) in the United States, and asked whether BHCs with strong and independent risk controls in place had lower enterprise-wide risk.

In his joint work with Vijay Yerramilli (University of Houston), they construct an innovative Risk Management Index (RMI) to measure the strength and independence of the risk management function at each of the 74 largest publicly-listed BHCs. It is found that BHCs with stronger risk controls in place before the onset of the financial crisis (ie, higher levels of RMI in 2006) were more judicious in their risk taking, and fared relatively better during the crisis years. Specifically, such BHCs had lower exposure to private-label mortgage-backed securities and trading assets, were less active in trading of balance sheet derivative securities, had a smaller fraction of non-performing loans, and had lower downside risk during the crisis years 2007 and 2008. The relationship between the strength of internal risk controls and enterprise-wide risk also held more generally during normal times.

Ellul concluded his talk by emphasising that strong internal risk controls play an important role in lowering enterprise-wide risk at banking institutions. He also suggested that bank supervisors should more closely monitor the effectiveness of internal risk controls at banking institutions.

**Stuart Lewis** (Deutsche Bank) then opened discussions on Ellul's paper. Lewis continued to emphasise the importance of risk management within the bank and complemented the talk by outlining Deutsche Bank's risk management framework and also the bank's risk and capital plan.

**Ron Anderson** (FMG, LSE) opened the next session, "Bankers and bank investors: A reconsideration of the economies of scale in banking", by outlining the phenomenon of the ever growing size of the largest financial institutions. He pointed out that previous studies have been unable to find economies of scale in banking beyond a model size because they were based on pure cost efficiency measures and assumed competitive input pricing.



**Charles Goodhart** (FMG, LSE)

In order to satisfactorily account for this propensity towards a small number of very large banks within most financial systems, in his joint work with Karin Jöeveer (Queen's University Belfast), banks are viewed as combining financial and human capital to create rents, which are then allocated to investors and bankers through a bargaining process that will reflect the mix of businesses operated by the bank.

Empirically, they measure bank performance not only by investor returns (measured as return on equity) but also by an estimate of bankers' rents. By applying this approach to annual data of US bank holding companies since 1990, they found much stronger evidence of economies of scale in returns to bankers as compared to returns to investors. The scale economies appear to be particularly strong in the top size decile of banks measured by total assets. In trying to account for these scale differences, they found that incorporating observable proxies for funding efficiency, leverage, and presence in wholesale banking activities greatly reduces the pure size effect.

Anderson concluded his talk by using estimates of the determinants of total bank performance to compare the performances of the largest US banks since 2000. By decomposing performance into separate components of: scale, funding, wholesale and X-efficiency, he provided an interpretation of the relative strengths and weaknesses of these large banks and argued that these factors are useful in understanding the dramatic transformation of the US banking sector in the last ten years.

**Rhiannon Sowerbutts** (Bank of England) led a discussion following Anderson's talk. She pointed out that he addressed three very important questions: Are banks too big to fail? Are bankers paid too much? And what is the output of the bank? She also suggested various robustness checks for the paper's results.



**Jean-Pierre Zigrand** (FMG, LSE)

At the end of day one Charles Goodhart chaired a panel discussion. He opened it by raising the important question of: how can we improve governance of the banking system? He gave a historical perspective on how banks have changed from originally bearing unlimited liability, to now bearing limited liability with auditing as a monitoring system to prevent excessive risk taking. He then pointed out the significant challenge that innovation of IT technology and financial products (eg, derivatives) pose on how we carry out appropriate accounting and other regulatory checks. He suggested that as unlimited liability gave bank management and shareholders incentives to take excessive risk, one potential solution to this could be to transfer ownership from shareholders and management to debt holders and tax payers, as the bank took on more risk.

Kevin James continued by discussing the excessive risk taking behaviour at various banks and emphasised the need for a more transparent banking system.

Ron Anderson carried on the discussion by highlighting the fact that investors sometimes prefer non-information-sensitive products. Also, the investors search for yield, means that various risk measures are often ignored with risks being overlooked.

Andrew Ellul spoke about the importance of looking at a wider range of risk measures rather than relying on a single measure. He illustrated this point by pointing out that just before Bear Stearns got into trouble, its Tier 1 capital ratio was around 10 per cent, a level much higher than required by the regulation. His second point was on bank transparency, he pointed out that in the reports filed by banks they often don't include important risk measures such as Value at Risk (VaR), causing a decrease in transparency in the banking sector.



**Kevin James** (CCBS, Bank of England/ FMG, LSE)

Finally, he expressed concerns about the fact that banks with good risk management systems were not rewarded uniformly by the market. This is supported by evidence that the stock price of the banks with good risk management is relatively lower in good times and only relatively higher in bad times. This is opposite to the view that risk management is always going to generate higher return.

Dimitrios Tsocomos made two points; first, banks are unique institutions that often differ significantly from other firms. Second, how can the incentives of bankers, traders and society align? Bank failure generates externalities for society, ie, the default cost imposed on the society as a whole. He made the observation that once these incentives are aligned, equilibrium can be reached.

In the question and answer session, **Jon Danielsson** (FMG, LSE) raised an interesting point that the information provided to investors was often too much, making it difficult to focus on the important metrics. He therefore stressed the need to provide the right balance between transparency and information supply.

Day two of the conference was opened by **Eugene White** (Rutgers) with a session entitled "The origins of the American mortgage disaster and its lessons for reform". White conducted a detailed historical comparison between the 1920s housing boom and bust where there was no banking collapse, with that of the 2000s. He demonstrated that although the general environment was similar in many aspects, the following features distinguished the recent financial meltdown: stricter bank governance, deposit insurance (creating a moral hazard problem for banks), the Presidential/Congress push for affordable housing, and the vast market for real estate derivatives.



**Dimitrios Tsocomos** (Oxford)

**John Muellbauer** (Oxford) argued that a marginal propensity to consume out of the housing wealth has increased dramatically in recent years, and has contributed to the fragility of the financial system. Furthermore, the policy of income tax with interest relief could have encouraged many households to get into debt, again making the current markets more vulnerable.

**David Greenlaw** (Morgan Stanley), in a session entitled "Achieving housing market equilibrium in the US: some policy options", provided a comprehensive analysis of the housing market, highlighting the consequences of the surge in mortgage foreclosures and delinquencies alongside the falling real estate prices. Although the negative tendencies have recently stabilised, the effects are still severe. Greenlaw discussed the possible implementation of a streamlined refinancing of mortgages, rentership initiatives and the conversion to a shared appreciation mortgage scheme.

While being sceptical towards the first proposal, Muellbauer agreed that converting owners to renters for the existing properties could potentially solve some problems, while the shared appreciation mortgage, if executed on a large scale, could be not only beneficial for society but also quite profitable for the government.

The fourth and final session focused on liquidity risk in the financial sector. Basel III adds explicit bank liquidity regulation to its purview and the speakers addressed the causes of liquidity crises as well as possible solutions and amendments. First, **Kathleen Tyson-Quah** (Absalon Project) and **Jesper Berg** (Nykredit) spoke about the narrow mortgage banking model that Tyson-Quah's firm, Absalon Project, is promoting based on the Danish system. Then **Jean-Pierre Zigrand** (FMG, LSE) presented his joint work with Jon Danielsson (FMG, LSE) about Basel III's liquidity ratios.

Absalon Project is a joint venture between the post-trade oriented Danish finance firm VP Securities and hedge fund Soros Fund Management LLP, it takes its name from the twelfth century bishop who helped to found modern Denmark. The firm attempts to promote the Danish mortgage model abroad, having succeeded in initiating its implementation around the world, with notable success and expansion in Mexico. Tyson-Quah is its UK Managing Director and Berg is the Head of Regulatory and Rating Affairs at the Danish mortgage bank Nykredit. Long before money market mutual funds replaced conventional bank accounts for some US savers and the current policy debate about narrow banking started, the concept was hard at work in the Danish mortgage market. Covered bonds are a critical financial instrument in Denmark: they finance mortgages and provide an essential savings vehicle – they are often used as collateral in place of sovereign debt, as the country issues few bonds itself. Their role in Denmark and perceived safety led Tyson-Quah and Berg to promote them as an excellent repo instrument as well as a systemic improvement that would remove most of the risks associated with retail banking elsewhere.

Since mortgagees issue bonds to offset their loans exactly – they do not perform maturity and liquidity transformation – the only residual risk in a Danish mortgage bank is credit risk. Tyson-Quah and Berg argue that the securitisation boom subverted the market discipline in mortgage markets in other countries, suggesting that narrow banks were the best road to financial stability. Their argument was compelling but one-sided, as they failed to address the question as to who would pick up the slack and provide liquidity services and maturity transformation for borrowers. They also did not mention that Denmark, despite being out of the Eurozone, has not totally avoided the ongoing financial crisis, as a number of banks have gone bust in recent years.

Such bank failures, epitomised by the collapse of Lehman Brothers in 2008, reaffirmed the importance of liquidity management not only for the survival of individual banks and non-banks but for the global financial system. To prevent liquidity crises, the global regulators are imposing constraints on financial institutions, legislating that a significant proportion of their assets can be monetised quickly in a liquidity emergency.





**Kathleen Tyson Quah** (Absalon Project)

Basel III's liquidity ratios, the thirty-day Liquidity Coverage Ratio (LCR) and the one-year Net Stable Funding Ratio (NSFR), have the exact aim of enforcing good liquidity management within institutions to prevent such failures, rather than the more global approach Absalon advocates. Danielsson and Zigrand, however, emphasise the systemic implications of Basel's new regulation. While they acknowledge that the regulators' movement toward global liquidity regulation is a step in the right direction, they criticise its implementation and suggest concrete improvements.

Like many speakers over the two days, Zigrand cited the influence of FMG co-founder Charles Goodhart more than once, firstly by recounting a favourite analogy, now termed the "Goodhart taxicab": upon leaving the airport after a flight, a traveller sees that there is only one cab left at the taxi stand, but when he approaches it the driver points to a sign reading "At least one taxi must be present at all times," indicating that the driver cannot accept the fare and the traveller is in fact stranded. What is the point of maintaining a capital buffer, Goodhart asks, if regulators enforce its maintenance even when it's needed most? Danielsson and Zigrand's analysis pursued the idea further, criticising the rigidity of the liquidity ratios on a number of fronts. They emphasised the importance of institution-specific implementation and updatable policies, observing that the more rigid a rule the sooner it is likely to become obsolete. Further, they spoke of the role of central banks in liquidity provision, noting that this is but one liquidity policy subject to national interpretation and dependent on other national regulators. The Basel Committee must therefore realise that a single mechanical rule could have rather different effects in different regulatory areas.

In suggesting improvements to the Committee's policy, they focussed on the LCR, arguing that the ratios should incorporate lessons from capital regulations; in particular that Basel should institute a two-part system of "core" and "auxiliary" LCRs, where the latter is the more flexible component. Finally, they said that they could find no economic justification for the thirty-day period associated with the LCR and called upon another of Goodhart's analogies to justify their suggestion that it be shortened to two weeks: "two weeks means two weekends," indicating that with four days of closed markets the ratios might buy bankers and regulators enough time to decide what to do in a liquidity crunch.

In the panel discussion that concluded the day, the talk focused around real estate more broadly, but the themes of coordination and endogenous fragility reappeared as panelists inquired into the details of the Danish mortgage model. Chairing the session, Goodhart asked Tyson-Quah directly: "Why isn't this in the US?" Her answer emphasised the systemic aspect of coordination, "Let me be clear. This is infrastructure. This is not something that any one bank can do independently," she said.

Conference organised by **Kevin James** (CCBS, Bank of England/FMG, LSE), **Charles Goodhart** (FMG, LSE) and **Jon Danielsson** (FMG, LSE)

Article written by **Wendy Yan** (FMG, LSE), **Giorgia Piacentino** (FMG, LSE), **Jason R Donaldson** (FMG, LSE) and **Svetlana Bryzgalova** (FMG, LSE).

Giorgia, Jason and Wendy are all PhD candidates in LSE's Finance Department. Svetlana is a PhD student in LSE's Economics Department.

Giorgia's main research interests are financial intermediation with a special focus on delegated portfolio managers, rating agencies and corporate governance.

Jason is currently working on the theory of financial intermediation and his present focus is on collateral in the interbank market.

Wendy's main research interests are asset pricing and fixed income markets.

Svetlana's research interests lie in empirical asset pricing with emphasis on model uncertainty.



**Michele Manna** (Banca d'Italia)

This event was supported by the AXA Research Fund and CCBS, Bank of England.



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## CORPORATE GOVERNANCE AT LSE RESEARCH DEBATE: SHORT-TERMISM – A DISCUSSION WITH JOHN KAY

19 April 2012

**John Kay**, a leading British business economist and a regular editorial contributor to the *Financial Times*, visited the FMG to participate in a seminar discussing his interim report; “The Kay review of UK equity markets and long-term decision making”.

The report examines investment in UK equity markets and its impact on the long-term performance and governance of UK quoted companies. The two discussants, **Lord Myners** (former City Minister and Chairman of Marks & Spencer) and **Colin Melvin** (CEO of the Hermes Equity Ownership Services), opened the seminar by presenting their views on Kay’s report.

Lord Myners was supportive of Kay’s report and predicted that it should lead UK businesses towards big changes. He noted that a major concern for UK asset management firms is that there is no sense of long-term commitment amongst businesses. He viewed that highly fragmented ownership, coupled with strong management, gave a rise to such short-termism. To encourage long-term vision from boards he suggested that UK shareholders need to be more active in their involvement, as seen in Nordic countries where institution investors sit on boards frequently. He also noted the importance of the Chairman in managing the board and with it the firm overall.

Melvin presented his opinions from a pension fund angle. He pointed out that intermediaries that are dominating financial industries are the contributing factor to short-termism, and that more long-term alignment of interests between companies and pension funds would offer a solution to this problem. He suggested two key areas to focus on. Firstly, ways to address the process of pension funds consolidation needs to be considered. And secondly, a strategy needs to be devised that challenges fund managers’ short-termism in risk management.

Kay responded by raising two points. First he argued that the governance of various types of asset management firms needs to be reformed, since the classical holder of assets, insurance companies, are fading in influence. Secondly, he said that it may be necessary to promote the need for consensus towards the necessity of long-termism amongst firms. Kay expressed concern over the fact that relatively few inquiries about his report came from companies, which may signal that firms are not yet conscious of the issue of short-termism.

**Geoffrey Owen** (Department of Management, LSE), who chaired the seminar, raised a discussion on how much damage has been done so far due to short-termism. Issues raised by audience members included whether short-termism is actually damaging British industry, and if the lack of shareholder involvement is in fact a greater issue than management’s lack of long-termism.

Research debate organised by: **Tom Kirchmaier** (FMG, LSE).

Reported by **Min Park** (FMG, LSE). As part of her PhD in Management, Min is looking at the interactions amongst the different stakeholders of a company. Her current research is focussed on uncovering the various ways in which stakeholders influence executive pay.



# DEUTSCHE BANK PRIZE IN FINANCIAL RISK MANAGEMENT AND REGULATION 2012



**Malcolm Knight** (Deutsche Bank and LSE)

The annual prize essay competition for LSE students' research papers in the field of financial risk management and regulation is organised by the FMG with the generous support of Deutsche Bank. The award committee for 2012 consisted of **Ron Anderson** (FMG, LSE), **Malcolm Knight** (Deutsche Bank and LSE) and **Christopher Polk** (FMG, LSE).

In judging the submitted papers the committee applied three criteria:

- The paper dealt with a substantial problem of financial risk management and regulation.
- The paper was submitted by one or more LSE research students.
- The paper exhibited the high standards of originality and rigour appropriate for a leading international research university.

## Winning paper:

**"Portfolio credit risk of default and spread widening"** by **Hongbiao Zhao** a PhD student in the Department of Statistics



Prize winner  
**Hongbiao Zhao**

The experience of the financial crisis has demonstrated the importance of developing reliable, tractable methods for studying the risks contained in portfolios of credit sensitive instruments. The pitfalls of over-reliance on a narrow class of credit portfolio models which were too quickly adopted as the industry norm by credit ratings agencies and other key institutions were exposed by the break-down of those models as the crisis unfolded in 2007 and 2008. Hongbiao has made an excellent contribution in setting out a rich framework for modelling portfolio credit risk that is at once flexible and quite practical to implement. It gives an innovative way to combine the two principal sources of information on credit sensitive instruments – market spreads on traded instruments and historical information on default, and is applicable to portfolio credit risk management, stress test, or to fit into regulatory capital requirements.

## Runner-up paper:

**"Systemic liquidity requirements"** by **Toni Ahnert**, a member of the FMG and a PhD student in the Department of Economics



Runner-up  
**Toni Ahnert**

Toni's paper was written jointly with **Dr Benjamin Nelson** of the Bank of England. It examines tougher bank regulation in light of the recent financial crisis, including regulation of the liquidity position of financial intermediaries.

Contributing to the development of a macro-prudential tool-box, Ahnert and Nelson study the system-wide consequences of a bank's liquidity and diversification choices. They show that individually beneficial diversification, results in systemic fragility that exposes one bank to runs on other banks, generating a positive liquidity externality. Despite a perfect alignment between banks and their creditors, the competitive bank holds too little liquidity and over-diversifies relative to the constrained efficient allocation. The authors show that a liquidity buffer is welfare-improving and study the sensitivity of such a liquidity buffer to changing business conditions.



## DEUTSCHE BANK DOCTORAL FELLOWSHIP 2012-14



**Nathan Converse**

The Deutsche Bank Doctoral Fellowship Programme was established in the FMG with the support of Deutsche Bank. These two year fellowships are awarded to first-rate students on an annual basis and aim to support them as they pursue their doctoral studies at LSE, in affiliation with the FMG. Successful applicants are awarded £15,000 per year for up to a maximum of two years. The award is intended to cover tuition fees along with their research and living expenses incurred as part of their full-time research at LSE.

Awardees must demonstrate an outstanding aptitude for financial research and have the intention of pursuing doctoral research in the following areas:

- Financial Risk Measurement
- Risk Management
- Financial Regulation

The Deutsche Bank Doctoral Fellowship for 2012-14 was awarded to **Nathan Converse**.

Nathan is a fifth year PhD student in the Department of Economics, whose research interests include international macroeconomics and applied econometrics. Nathan's research examines how the volatility of portfolio capital flows affects investment and growth in emerging market economies, and the role for policy in mitigating the risks posed by these so called hot money flows. He holds a BA from the George Washington University and an MPhil from the University of Oxford. Before coming to LSE, he worked as a senior research assistant at the Institute of International Finance in Washington DC.

Nathan will be joining the FMG in September 2012.

**Toni Ahnert** and **Giorgia Piacentino** (both FMG students) will enter the second year of their fellowships in September 2012.

## THE PAUL WOOLLEY CENTRE SCHOLARSHIPS 2012-13

## The Paul Woolley Centre for the Study of Capital Market Dysfunctionality

The Paul Woolley Centre for the Study of Capital Market Dysfunctionality, established within the FMG at LSE, invited applications from LSE Economics and Finance PhD students for The Paul Woolley Centre Scholarships Programme. The programme aims to support students pursuing postgraduate research in the areas covered by the Paul Woolley Centre research agenda. The scholarship was awarded by a committee consisting of **Christopher Polk** (Director of the FMG), **Dimitri Vayanos** (Director of the Paul Woolley Centre), and **Paul Woolley** (Founder of the Paul Woolley Centre). The scholarships provide a stipend to support fees and/or living expenses. The Paul Woolley Centre Scholars are based within the Paul Woolley Centre and the FMG where they can work closely with its staff and faculty members.



**Shiyang Huang**

There are three scholarship recipients for the academic year 2012-13: **Shiyang Huang**, **Luca Fornano** and **Christoph Ungerer**.

Shiyang is a third year PhD student in the Department of Finance at LSE. His research interests centre on both the theory and empirical study of asset pricing and institutional finance. He received a BSc and a Master's



**Christoph Ungerer**



**Luca Fornaro**

degree in Economics from Tsinghua University in China before coming to LSE in 2009.

Luca and Christoph were awarded Paul Woolley Centre Scholarships in 2011. Due to the commitment they have shown and the level of their work it has been decided to renew their scholarships for an additional year.



## FMG LEAVERS 2012

A number of students will be leaving the FMG and LSE this summer, following the completion of their PhDs. We asked them about their time in the FMG and their future plans.



### Thomas Maurer

Thomas is leaving the FMG to take up the position of Assistant Professor of Finance at the Olin Business School (Washington University, St Louis). He had this advice

for students entering the job market next year:

*"Enjoy your fly-outs, you get a free trip around the world and everyone is (or pretends to be) extremely interested in you and your research!"*



### Gabriela Domingues

Gabriela is a long standing member of the FMG, joining as an FMG research student in 2009. Her new role is within the banking industry. Gabriela had this to say about her time in the FMG:

*"I hope I will be as happy in my next position as I was here at the FMG. I will really miss the people and also attending the conferences and seminars. My tip for those going on the job market next year is just to work hard now, because it is over quickly."*



### Pragyan Deb

At the time of writing, Pragyan was in the final stages of his PhD in Finance. He joined the PhD programme in 2007, and prior to this completed an MA in Economics at Delhi

University and a MSc in Finance and Economics at LSE. In 2011 Pragyan was awarded the Deutsche Bank Prize in Financial Risk Management and Regulation for his paper entitled "Credit rating and competition" which he co-authored with Nelson Camanho and Zijun Liu (both FMG students at the time of the award). Pragyan now works at the Bank of England.



### Yu-min Yen

Since joining the FMG in 2011, Yu-min has collaborated on research with Philippe Mueller and Andrea Vedolin (both FMG, LSE). Their paper's title is "Bond variance risk

premia" and is available to download from the FMG's website as Discussion Paper 699. Yu-min is now on the job market with his job market paper entitled "Sparse weighted norm minimum variance portfolio".

He has this advice for students entering the job market next year:

*"Try to write more than 200 words about your research, every day. Although I admit this isn't an easy habit to keep and I certainly struggled...."*



### Terence Teo

At the time of writing, Terence was in the final stages of his PhD in Finance. He has been a member of the FMG since 2010. His research interests are financial econometrics and credit risk.



## FMG EVENTS

Events that have taken place since the publication of the previous *Review* in April 2012 (winter issue).

### Conferences

**Fifth Annual Paul Woolley Centre Conference**  
7-8 June 2012

### Corporate Governance Events

**Research Debate: Short-termism, a seminar discussion with John Kay**

19 April 2012

John Kay, Colin Melvin (CEO Hermes Equity Ownership Services Ltd) and Lord Paul Myners (former city Minister and chairman of Marks & Spencers)

**Brownbag Seminar: Rights offerings and coercion**

21 May 2012

Moqi Xu (FMG, LSE)

**Brownbag Seminar: Are US CEOs paid more? New international evidence**

11 June 2012

Pedro Matos (University of Virginia)

**Brownbag Seminar: Who writes corporate governance codes, and does it matter?**

25 June 2012

Carsten Gerner-Beuerle (Department of Law, LSE)

### Capital Markets Workshops

**Survival and long-run dynamics with heterogeneous beliefs under recursive preferences**

22 February 2012

Jaroslav Borovicka (University of Chicago)

**Estimating the value of the boss: Evidence from CEO hospitalization events**

29 February 2012

Daniel Wolfenzon (Columbia University)

**Leverage stacks and the financial system**

7 March 2012

John Moore (Edinburgh University/LSE)

**CEO preferences and acquisitions**

14 March 2012

Dirk Jenter (Stanford University)

**The bubble game: An experimental study of speculation**

25 April 2012

Sebastien Pouget (University of Toulouse)

**Embedded leverage and betting against beta**

2 May 2012

Lasse Pedersen (NYU Stern School of Business)

**The optimal design of insurance schemes for preventing liquidity runs**

9 May 2012

Ilan Kremer (Stanford University)

**Horizon pricing**

16 May 2012

Ronnie Sadka (Boston College)

**Investment cycles and start-up innovation and financing risk and innovation**

23 May 2012

Matthew Rhodes-Kropf (Harvard University)

**Liquidity and fragility in OTC credit derivatives markets**

30 May 2012

Andrea Eisfeldt (UCLA, Anderson School of Management)

**Systematic risk and debt maturity**

6 June 2012

Hui Chen (MIT, Sloan School of Management)

### Lunchtime Workshops

**International correlation risk**

7 March 2012

Philippe Mueller and Andrea Vedolin (both FMG, LSE)

**Industrial organisation and equity risk**

14 March 2012

Maria Cecilia Bustamante (FMG, LSE)

**Regime changes in executive labour markets**

25 April 2012

Daniel Ferreira (FMG, LSE)

**Choreographing calls**

2 May 2012

Dong Lou (FMG, LSE)

**An intertemporal CAPM with stochastic volatility**

9 May 2012

Christopher Polk (FMG, LSE)

**Network risk and key players: A structural analysis of interbank liquidity**

16 May 2012

Christian Julliard and Kathy Yuan (both FMG, LSE)

**Time-varying correlations, investor heterogeneity and portfolio constraints**

23 May 2012

Georgy Chabakauri (FMG, LSE)

**Real estate crises and bank lending**

30 May 2012

Vicente Cuñat and Kathy Yuan (both FMG, LSE)

## London Financial Regulation Seminars

### Limited purpose banking – moving from “trust me” to “show me” banking

16 April 2012

Laurence Kotlikoff (Boston University)

### The insufficiency of traditional safety nets: What bank resolution fund to the EU?

30 April 2012

María J Nieto (Banco de España)

### Efficient systemic capital can address the regulator’s dilemma

14 May 2012

Nicholas Beale (Sciteb)

### The liquidity consequences of the euro area sovereign debt crisis

21 May 2012

Bill Allen (Cass) and Richhild Moessner (BIS)

### Quantitative monetary policy and government debt management in Britain since 1919

18 June 2012

Bill Allen (Cass)

### Financial firm bankruptcy and contagion

25 June 2012

Jean Helwege (University of South Carolina)

## PhD Seminars

All seminars are given by current LSE PhD students.

### Product market competition, authority delegation and information acquisition

23 February 2012

Yiqing Lu (FMG/ Department of Finance)

### The effect of investor sentiment on conglomerate firms

1 March 2012

Huaizhi Chen (FMG/ Department of Finance)

### Information production and authority delegation in competitive markets

8 March 2012

Gennaro Catapano (FMG/ Department of Finance)

### European venture capital: Myths and facts

15 March 2012

Milan Martinovic (FMG/ Department of Finance)

### Outside CEO succession and firm performance

26 April 2012

Christian von Drathen (Department of Finance)

### How do career-concerned traders affect firms’ financial constraints?

3 May 2012

Giorgia Piacentino (FMG/ Department of Finance)

### Investment mandates and the downside of precise credit ratings

10 May 2012

Jason Donaldson (FMG/ Department of Finance)

### Currency downside risk and macroeconomic variables

17 May 2012

Victoria Dobrynskaya (Department of Finance)

### Co-pricing of stocks and bonds

24 May 2012

Wendy Yan (FMG/ Department of Finance)



# DISCUSSION PAPERS

Discussion papers are authored primarily by FMG staff, associates and research students, and provide specialist insights into cutting edge financial markets research currently being carried out at the FMG.

Research undertaken within the core FMG Research Programmes is published in the FMG Discussion Paper (DP) series. The Paul Woolley Centre for Capital Market Dysfunctionality (PWC) and the AXA – funded Risk Management Programme (AXA) have also published some of their research as FMG Discussion Papers.

**DP 700**

## Transparency in the financial system: Rollover risk and crises

Matthieu Bouvard, Pierre Chaigneau and Adolfo de Motta

The paper presents a theory of optimal transparency in the financial system when financial institutions have short-term liabilities and are exposed to rollover risk. Our analysis indicates that transparency enhances the stability of the financial system during crises but may have a destabilizing effect during normal economic times. Thus, the optimal level of transparency is contingent on the state of the economy, with the regulator increasing disclosure in times of crises. Under this policy, however, an increase in disclosure signals a deterioration of the economy's fundamentals, so the regulator has incentives to withhold information ex-post. In that case, the regulator may have to commit ex-ante to a degree of transparency which trades off the frequency and magnitude of financial crises. The analysis also considers the possibility that financial institutions, in an attempt to deal with rollover risk, either diversify their risks or increase the liquidity of their balance sheets.

**DP 701**

## Is historical cost accounting a panacea? Market stress, incentive distortions, and gains trading

Andrew Ellul, Chotibhak Jotikasthira, Christian T. Lundblad and Yihui Wang

This paper explores the trading incentives of financial institutions induced by the interaction between regulatory accounting rules and capital requirements by investigating insurance companies' trading behaviour during the recent

financial crisis. According to insurance regulation, life insurers have a greater degree of flexibility to hold downgraded instruments at historical cost, whereas property and casualty insurers are forced to re-mark many of their downgraded securities to market prices. Using firm-level insurance company transaction and position data, we study the implications of this accounting difference, and document direct evidence of 'gains trading' associated with historical cost accounting during the financial crisis. When faced with severe downgrades among their holdings in asset-backed securities (ABS), life insurers largely continue to hold the downgraded securities at historical cost and instead selectively sell their corporate bond holdings with the highest unrealized gains. This is particularly true for insurers facing regulatory capital constraints and with high ABS exposures. This behaviour is largely absent among property and casualty insurers; they instead disproportionately sell their re-marked ABS holdings. Finally, we find that the gains trading among life companies induces significant price declines in the otherwise unrelated corporate bonds that happen to exhibit high unrealized gains.

**DP 702 and AXA Paper 9**

## Financial regulation in general equilibrium

Charles A E Goodhart, Anil K Kashyap, Dimitrios P Tsomocos and Alexandros P Vardoulakis

This paper explores how different types of financial regulation could combat many of the phenomena that were observed in the financial crisis of 2007 to 2009. The primary contribution is the introduction of a model that includes both a banking system and a "shadow banking system" that each help households finance their expenditures. Households sometimes choose to default on their loans, and when they do this triggers forced selling by the shadow banks. Because the forced selling comes when net worth of potential buyers is low,



the ensuing price dynamics can be described as a fire sale. The proposed framework can assess five different policy options that officials have advocated for combating defaults, credit crunches and fire sales, namely: limits on loan to value ratios, capital requirements for banks, liquidity coverage ratios for banks, dynamic loan loss provisioning for banks, and margin requirements on repurchase agreements used by shadow banks. The paper aims to develop some general intuition about the interactions between the tools and to determine whether they act as complements and substitutes.

#### DP 703

### Estimating the quadratic covariation matrix for an asynchronously observed continuous time signal masked by additive noise

Sujin Park and Oliver Linton

We propose a new estimator of multivariate ex-post volatility that is robust to microstructure noise and asynchronous data timing. The method is based on Fourier domain techniques, which have been widely used in discrete time series analysis. The advantage of this method is that it does not require an explicit time alignment, unlike existing methods in the literature. We derive the large sample properties of our estimator under general assumptions allowing for the number of sample points for different assets to be of different order of magnitude. The by-product of our Fourier domain based estimator is that we have a consistent estimator of the instantaneous co-volatility even under the presence of microstructure noise. We show in extensive simulations that our method outperforms the time domain estimator especially when two assets are traded very asynchronously and with different liquidity and when estimating the high dimensional integrated covariance matrix.

#### DP 704 and AXA Paper 10

### Securitized banking, asymmetric information, and financial crisis: Regulating systemic risk away

Sudipto Bhattacharya, Georgy Chabakauri and Kjell G Nyborg

We develop a model of securitized (Originate, then Distribute) lending, in which both publicly observed aggregate shocks to values of securitized loan portfolios, and later some asymmetrically observed discernment of varying qualities of subsets thereof, play crucial roles. We find that originators and potential buyers of such assets may differ in their preferences over their timing of trades, leading to a reduction in the aggregate surplus accruing from securitization. In addition, heterogeneity in sellers' selected timing of trades arising from differences in their ex ante beliefs coupled with initial leverage choices based on pre-shock prices, may lead to financial crises, implying uncoordinated asset liquidations inconsistent with any inter-temporal market equilibrium.

We consider and contrast two mitigating regulatory interventions: leverage restrictions, and ex ante specified resale price guarantees on securitized asset portfolios. We show that the latter tool performs strictly better than the former, by ensuring not only bank survival, but also enhanced social surplus arising from securitized lending. It does so by inducing a more coordinated market equilibrium, that does not lead to interim leverage build up to support a "cherry picking" seller trading strategy.

#### DP 705

### Transparency, tax pressure and access to finance

Andrew Ellul, Tullio Jappelli, Marco Pagano and Fausto Panunzi

In choosing transparency, firms must trade off the benefits from better access to finance against the cost of a greater tax burden. We study this trade-off in a model with distortionary taxes and endogenous rationing of external finance. The evidence from two different data sets, one formed only by listed firms and another mainly by unlisted firms, bears out the model's predictions: First, investment and access to finance are positively correlated with accounting transparency, especially in firms that depend more on external finance, and are negatively correlated with tax pressure. Second, transparency is negatively correlated with tax pressure, particularly in sectors where firms are less dependent on external finance, and is positively correlated with tax enforcement. Finally, financial development enhances the positive effect of transparency on investment, and encourages transparency by financially dependent firms.

You can download all Discussion Papers for free from: [lse.ac.uk/fmg/workingPapers/home.aspx](http://lse.ac.uk/fmg/workingPapers/home.aspx)

# SPECIAL PAPERS

Special Papers investigate broader ideas in the financial markets than the Discussion Papers. They often follow conferences, at which debates have stimulated further research and cooperation between participants and the wider academic and professional financial community.

SP 206

## Time to set banking regulation right

Jacopo Carmassi and Stefano Micossi

When analysts and policy-makers tried to understand what happened after the 2008-09 financial crisis, excessive leverage in banking and quasi-banking (largely the Wall Street investment banks and parts of the wholesale money market) was immediately identified as the main transmission chain in the storm (Di Noia & Micossi, 2009; Rajan, 2010). Excessive leverage, in turn, was found to be made possible by the fact that some institutions that were behaving like banks were not subject to banking rules; and by a combination of lax rules on the definition of capital, off-balance commitments undertaken by banks thanks to new securitisation techniques, and massive resort to risk mitigation practices, including complacent ratings of complex securities and hedging instruments, notably credit default swaps (CDS), that reduced the absorption of regulatory capital to zero.

play key roles in the economy, such as providing market liquidity and pricing assets efficiently. Following deregulation, these institutions became “universal” groups covering a large range of financial markets and products. Internal conflicts of interest, opacity, and manipulated risk measures may arise. Regulation must change and new market instruments could exacerbate these internal problems. Here, we discuss some proposals to enhance the role of the Resolution Authorities (American and European laws are in the process of defining them). In particular, we examine a proposal for high-trigger contingent convertible bonds (HT CoCos), especially conceived for Systemically Important Financial Institutions – SIFIs (Calomiris and Herring, 2011). We propose that the bond conversion should be applied to all SIFIs’ HT CoCos as soon as one SIFI defaults. This solution could have many advantages: less costly recapitalization of the SIFIs’ system, more level playing field in the financial industry, good incentives to shareholders and supervisors to react promptly to potential systemic crisis, introducing breaks in SIFIs’ market values correlation (and with Sovereigns, too). We also provide a quantification of the potential market for such instruments.

SP 207

## Tackling the “too big to fail” conundrum: Integrating market and regulation

Renato Maino

Systemic risk is, by nature, unpredictable. Statistical models can fail to identify it. We need to maintain resource buffers as well as to implement better regulatory controls, and to improve managerial experience, and contingent strategies. International imbalances are nearly up to their sustainable limits, creating new systemic challenges. Some major financial institutions have recently assumed a critical position: they are highly interconnected and hard to replace in a panic. These institutions

SP 208

## A race to the top?

Thomas F Huertas

In the wake of the crisis, significant changes have been made to regulation, to deposit guarantee schemes, to central bank liquidity policy and to resolution. These will have a significant impact on supervision and on the interaction between supervision and market discipline. In particular, the reform of resolution could have significant implications for supervision, the way in which markets view supervision and the way in which banks regard supervision. Instead of a “race to the bottom”, there could well emerge a “race to the top”.

SP 209

## The insufficiency of traditional safety nets: What bank resolution fund for Europe?

**María J Nieto and Gillian G Garcia**

This paper analyses the rationale for Bank Recovery and Resolution Funds (BRRFs) in the context of the present European Union's (EU) decentralized safety net. As compared to pure micro and macro prudential regulation, BRRF's objective is to limit losses given financial institutions' default while allowing for a balanced share of costs between private investors and tax payers. Most important, BRRFs contribute to shifting the government's trade-off between bailing out and restructuring in favour of restructuring, to the extent that there is also an effective bank resolution legal framework. In turn, banks' contributions to BRRFs aim at discouraging their excess systemic risk creation particularly through financial system leverage. The paper makes some reflections on the governance aspects of BRRFs that would require minimum harmonization in the EU, emphasizing that BRRFs are only one institutional component of financial institutions' effective and credible resolution regime. This paper focuses on depository institutions, but the rationale of BRRFs could be extended to other credit institutions.

SP 210

## Towards a sustainable business model – how financial institutions have to change to win back society's trust

**Hugo Bänziger**

Banking and the extension of credit have always played an important role for the economies and communities it serves. The recent financial crisis not only resulted in staggering losses of around USD 2.3tr but led to a loss of confidence and trust that continues to affect the stability of financial markets, the global economy as a whole and which has sparked public outcry all over the world.

Reconciling the demands of society, investors and the financial sector is one of the big policy challenges we face today. Transforming the financial industry is integral to restoring confidence and trust to those we serve and thereby re-establishing our role in society

SP 211

## Did the globalization of finance undermine financial stability? Lessons from economic history

**Hugo Bänziger**

Information Technology, modern communication and liberalization of markets were the primary forces, which drove the globalization of finance and integration of financial markets over the last 30 years. As a result, the financial industry is today the biggest spender on IT and the majority of data pumped around the globe relates to finance. Indeed, financial markets are truly global and integrated. It is thus no surprise that the crisis of 2007, which had its origins in the US residential mortgage market, spread across the globe. It will not be the last one to do so either. The question this paper tries to answer is whether the globalization of finance contributed to financial instability. By looking at several waves of financial integration, I try to analyze what it meant for the people at the time, whether it affected financial stability and when it did, how societies responded. That domestic imbalances can lead to financial instability is obvious. The collapse of the German Mortgage Banks in the late 1990 resulting from a government sponsored real estate bubble after the fall of the Berlin Wall is a less well known but good example. Given the magnitude of the question, my answers are summary in nature.

# VISITORS TO THE FMG

**April 2012 – June 2012**

**Renée Adams** (The University of New South Wales)

**Bill Allen** (CASS)

**Ron Bird** (Paul Woolley Centre, Sydney)

**Hui Chen** (Sloan School of Management)

**Andrea Eisfeldt** (UCLA Anderson School of Management)

**Jean Helwege** (University of South Carolina)

**Ilan Kremer** (Stanford University)

**Andrey Malenko** (MIT)

**Aytek Malkhozov** (McGill University)

**Frank Milne** (Queen's School of Business)

**Lasse Pedersen** (NYU Stern School of Business)

**Sebastien Pouget** (University of Toulouse)

**Matthew Rhodes-Kropf** (Harvard University)

**Ronnie Sadka** (Boston College)

**Joel Shapiro** (Oxford University)

**Luke Taylor** (University of Pennsylvania)

**Hongjun Yan** (Yale University)

## FMG Review

**Editor: Frankie Clarke**

**Prepared by:** Svetlana Bryzgalova, Jason R Donaldson,  
Min Park, Giorgia Piacentino, Wendy Yan

**Photographs by:** Nigel Stead, Frank Huang, Simon Tuck

**Designed by:** LSE Design Unit  
[lse.ac.uk/designunit](http://lse.ac.uk/designunit)

