

THE ESRC SYSTEMIC RISK CENTRE LAUNCHES AT LSE JANUARY 2013



Neo: There are only two possible explanations: either no one told me, or no one knows.

The Architect: Precisely. As you are undoubtedly gathering, the anomaly's systemic, creating fluctuations in even the most simplistic equations... an anomaly that if left unchecked might threaten the system itself.

Source: *The Matrix Reloaded*

While the subject of "systemic risk" is enjoying a well-deserved surge of interest in the practice and science of finance, and not just in science fiction. It is also true that if one spoke to researchers or practitioners in areas related to systemic risk in finance, many would privately admit of yearning for a more analytical definition of systemic risk, let alone for a way of measuring, forecasting and managing it in a rigorous and scientific fashion.

In order to commence filling these gaps, the ESRC – the UK government financed Economic and Social Sciences Research Council – is funding a new Systemic Risk Centre (SRC) at the London School of Economics and Political Science to study the subject of financial and economic systemic risk in a system(at)ic fashion and to develop insights that can be applied by the various stakeholders in financial markets, be they the policy makers, regulators and supervisors whose rules both respond to and shape systemic risk, or the financial institutions themselves so as to minimise exposure to systemic events. The Centre directors are Jon Danielsson and Jean-Pierre Zigrand (both members of the FMG), and the SRC is working in close partnership with the FMG. In order to provide useful and evidence-based analysis, the Centre is fortunate to be able to rely on Markit as its lead data partner.

In order to organise thoughts, it may be worthwhile to define, at least intuitively, what we mean by "system," for it seems difficult to talk authoritatively about "systemic risk" if one has not agreed on what a "system" is at the outset. In everyday language, a system is a functioning mechanism governing a set of elements (1) that make reference to something or to a central concept in a coherent fashion ("deductibility"), (2) that imply meaningful relationships ("irreducibility") and (3) that evolve.

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JP Zigrand (Co-Director, Systemic Risk Centre)



Jon Danielsson (Co-Director, Systemic Risk Centre)

THE ESRC SYSTEMIC RISK CENTRE LAUNCHES AT LSE

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Think “banking system” (under the Banking Principle with a central bank in the centre of a network of interrelated banks) as opposed to a collection of banks, “payment system” as opposed to a set of bilateral payment and settlement arrangements, “solar system” as opposed to a cluster of celestial bodies, “nervous system” as opposed to a collection of unrelated nervous cells, etc.

The term systemic risk comprises the risk to the proper functioning of the system (with the ensuing risk to the proper functioning of the wider real economy) as well as the risk created by and within the system itself. We label the risk created or amplified by the system as endogenous risk.

In the extreme, the risk may be a risk to the very central concept that guarantees the logical coherence of the system in the pursuit of the best use of scarce resources with multiple ends. For instance, the inability or unwillingness of a central bank to act as a lender and market maker of last resort removes the foundations to a banking system operating under the banking principle, a failure of the real time gross settlement processor in a payment system brings a payment system and all connected systems to meltdown, a stroke incapacitates a nervous system, hyperinflation reduces a price system to a set of primitive and inefficient bilateral barter operations, and so forth. The system stops being able to fulfil its function properly and consistently in a systemic event. The Financial Services Board (FSB) defines a systemic event as:

“the disruption to the flow of financial services that is (i) caused by an impairment of all or parts of the financial system; and (ii) has the potential to have serious negative consequences for the real economy.”

While an asteroid would constitute a risk to the system, we believe it is more fruitful to focus on endogenous risk where the risk is both to the system and amplified by the system. One could follow standard risk modelling methodology and view systemic risks as being mainly extreme exogenous shocks drawn from some distribution – the Millennium bridge was wobbling because hurricane-force winds were battering it, the payment system ground to a halt because the

processor was hit by a meteorite. We believe it more fruitful to view systemic events as being mainly endogenous – a small gust of wind promptly induced pedestrians to adjust their stance simultaneously leading to a bigger wobble, closing the positive feedback loop and forming non-linear amplifying dynamics.

On that basis, and in keeping with the initial quote from *The Matrix*, systemic risk may be defined as:

“The risk of an event – labelled systemic event – occurring. A systemic event is defined by the occurrence of positive feedback loops within the given system that adversely affect the proper functioning, the stability and in extreme cases the structure of the overall system itself, with resulting costs to the wider real economy of which the system is a subcomponent of.”

We can note a few consequences of this definition. First, while in normal times positive feedbacks can adequately be kept in check by counterbalancing negative feedback loops, in a systemic event they cannot. Second, the dominant positive feedback loops in a systemic event would lead to relatively quick destructive transitions that are difficult or lengthy to reverse in the given system and may require intervention from outside of the given system. Third, the destructiveness of the nonlinear dynamics may depend on a variety of factors defining the system, for instance the network structure (defining characteristic (2)) of exposures and market connections. Fourth, systemic risk is therefore distinct from the concept of

“systematic risk” appearing in the literature that refers to any risk that cannot be perfectly diversified away.

The research of the SRC is laid out over four pillars. Pillar one corresponds to the founding philosophy of the Centre, endogenous risk. Endogenous risk describes the nonlinear dynamics arising from positive feedback loops within the system, whereby small shocks can create large destructive avalanches through the amplification mechanism of reinforcing feedback loops. We believe endogenous risk plays a major role in most financial crises, and the concept lends itself easily to applications to a variety of financial issues, such as the fat left tails in return distributions, the skew of the implied-volatility surface, the pro-cyclical correlations across asset classes, the optimal structure of central counterparts, the concurrent existence in equities markets of both short-term momentum and long-term value premia, flash-crashes in computer-based markets, and many more. It can also offer glimpses of solutions that reduce pro-cyclicality by designing regulatory measures that are themselves less pro-cyclical, for instance, or that embed either ex-ante or ex-post mechanisms to cut the feedback loops.

Systemic risk can build up over time, especially over times that are quiet and appear to be the least risky because such times see slack constraints, looser oversight and lower perceived risk as signaled by common risk models and methodologies, such as value-at-risk (VaR). As positions and leverage build up over quiet periods, a relatively small shock may at some stage suffice to reverse the flows. Agents are typically much keener, and face much more



strictly binding regulatory constraints, to sell out of risky positions than to buy into risky positions, fuelling violent reinforcing feedback loops on the down side.

Pillar two is concerned with networks, interrelationships being one of the core defining properties of any system. The nature and extent of the interrelationships of actors and markets influences the manner by which the positive feedback loops grip the entire system. Just like risky holdings, interrelationships also build up over time, often under the radar. The network matters in at least two respects. First, the structure of the network determines how large the buildup of risky exposures is in the first place. For instance, if a financial institution can easily pass on some risks to other parts of its network, it is encouraged to take on larger positions. Second, ex-post the way a local shock is transmitted through a networked financial system is again greatly determined by the structure of the network, even irrespective of the size of the exposures accumulated beforehand.

Policies and rules can play a major role in the transmission of endogenous risk, and rules are studied under pillar three. For one, the rules themselves can be the main factor driving the feedback loops in the first place. For instance, we have mentioned how uniform rules such as the VaR rules embedded in Basel II, II.5 or III, when interacted with accounting standards emanating from the International Accounting Standards Board and the US Financial Accounting Standards Board and market-based risk management practices (such as case contractual provisions relating to transactions both in the OTC markets or on exchange with respect to margin and collateral requirements), create reinforcing feedback loops that give rise to forced sales. But not only can rules generate feedback loops, the rules themselves suffer from pro-cyclicality for there is a clear endogenous risk feedback loop between the legal system, the political system and the economy. To understand this, an interdisciplinary approach is necessary, and the SRC brings together researchers from financial economics, law and political science. For instance, a socially costly crisis prompts policy makers to introduce new legislations that are seen to “be doing something about the crisis.” Those rules often

tend to be prescriptive and pro-cyclical, imposed at the wrong moment. They also are prone to leading to a displacement of the regulatory boundary as financial actors try to circumvent the rules in ways that often give rise to unintended consequences, such as a build-up of risk somewhere else in the system, that in turn will elicit further rules and regulations, etc.

Pillar four is concerned with one particular topic that can be viewed as a laboratory for the study of systemic risk, computer based trading (CBT). CBT, and in particular the special category of high-frequency trading (HFT), is in the process of taking over much of trading in financial markets, altering the characteristics and the dynamics of some of those financial markets that reveal the valuations and signals that guide investment behaviour. This impact has raised concerns by some investors and market commentators. For instance, in light of the fact that algorithms follow simple rules at nearly lightning speed, at a speed that guarantees that human intervention is bound to lag behind, and in light of the fact that robots follow these rules mechanically without much common sense, it is a promising and fast-moving topic of current research to analyse the stability (“flash crashes”) and systemic risk properties of such systems with robot and human traders interacting at different scales, and a preliminary collection of such systemic events can be found in the UK Foresight Report on the Future of Computer Trading. In order to help the SRC study HFT environments, the computing department of University College London is a co-investigator in the SRC.

The SRC has created a wide interdisciplinary network with top ranking academic experts in Britain, mainland Europe and the USA. The Centre combines those competences into an interdisciplinary net encompassing systemic risk from multiple angles, be they economic, financial, political, legal, mathematical, computational or biological and evolutionary. Together with our lead data partner Markit whose unique data help the Centre researchers shed light on a variety of unanswered empirical questions, we aim to become the place to go for informed, cutting edge empirical and theoretical research on systemic risk and related subjects. From this solid research basis the aim of the SRC is to provide evidence-based insights to the

policy and regulatory partners of the SRC and to inform their regulatory and legislative agendas on financial markets in a thoughtful, scientific and neutral fashion.

Article written by **JP Zigrand**. This is a version of the article that appeared in **Markit Magazine** in March 2013.

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THE FUTURE OF COMPUTER TRADING IN FINANCIAL MARKETS: A CONFERENCE TO DISCUSS THE FORESIGHT REPORT

11 January 2013

In January the Systemic Risk Centre hosted its first event; a one day conference which discussed the recently published Foresight study *The Future of Computer Trading in Financial Markets – An International Perspective*. JP Zigrand and Charles Goodhart (both FMG members) along with Oliver Linton (former FMG member) were involved with the production of this report.

Following advances in technology, the volume of financial products traded through computer automated trading, at high speed and with little human involvement has increased dramatically in the past few years. For example, today, over one third of United Kingdom equity trading volume is generated through high frequency automated computer trading while in the US this figure is closer to three-quarters. Sponsored by Her Majesty's Treasury the report assembles and analyses

evidence on the effect of High Frequency Trading (HFT) on financial markets looking out to 2022.

The conference was conducted under Chatham House Rules so a full write-up of the content discussed isn't possible, instead, where possible, the slides presented at the conference, along with the Foresight Report, are available for download from the FMG website.

lse.ac.uk/SRCFutureOfComputerTrading



Doyne Farmer (University of Oxford)



Hans Degryse (KU Leuven and Tilburg University)



Alistair Milne (Loughborough University)



Albert Menkveld (VU University Amsterdam)



Jon Danielsson (SRC/FMG, LSE)



Oliver Linton (University of Cambridge)



JP Zigrand (SRC/FMG, LSE)



Kevin Houston (Rapid Addition, FIX Protocol)



Carole Gresse (Université Paris-Dauphine)



Charles-Albert Lehalle (CA Cheuvreux)



Andrei Kirilenko (MIT)

EUROPEAN BANKING UNION CONFERENCE

22 October 2012

Intertwined with the European sovereign debt crisis, a banking crisis plagues the Eurozone with political motives and the absence of so-called regulatory harmonisation stifling policy reaction.

On 12 September 2012, the European Commission published a “roadmap” for a banking union, a regulatory framework that, according to the *Financial Times*, aims to “brace eurozone banks against future shocks by bringing them under a common regulatory and supervisory structure, introducing common deposit insurance and a shared system for crisis resolution”. With the European Parliament aiming to reach agreement on stronger prudential requirements, as well as draft directives on deposit guarantee schemes and bank recovery tools to brace for a crisis, the Financial Markets Group hosted a conference on 22 October to discuss the future of the banking union, which it organised in partnership with Tilburg University and Queen Mary, University of London. The conference was timely as on 12 December 2012 the European Commission moved forward with a speech that acknowledged curbing the negative feedback between bank risk and sovereign risk required a single supervisory mechanism and that without a common view to financial regulation, the monetary union was not complete.

Charles Goodhart (FMG, LSE) opened the conference with a discussion of the single supervisory mechanism. He spoke with authority not only as an active participant in the policy debate throughout the development of the European crisis, but as a monetary economics expert, having spent thirteen years on the Bank of England’s Monetary policy committee. Goodhart explained the mechanism by which declines in housing prices lead to bank trouble, which in turn hit sovereign balance sheets by decreasing tax revenues: Governments are vulnerable to local shocks and unilateral policy is necessary to prevent these shocks from fragmenting the Eurozone. A single supervisory mechanism however should mitigate the risks

of negative feedback loops. While he expressed the urgency of the policy change, he did not overlook the dangers of the new system. In particular, without the deposit insurance scheme and crisis resolution mechanisms yet in place, the feasible implementation could be too slow and insufficient to save Italy and Spain or prevent the Eurozone break-up.

Three discussants responded to his presentation.

Iain MacNeil (University of Glasgow) cast a slightly sceptical eye on the plans for a single supervisory body, pointing out that adding another regulator to an already complex system would only be supplementary; instead he suggested a simpler implementation would be preferable. He reminded the audience that the adjustment to new policies is a slow process and that there is a trade-off between the costs of adjustment and the benefits of ultimate harmonisation. Next, **Rosa M Lastra** (Queen Mary, University of London) focused on the technical problems of implementation. Citing the only article providing a basis for the single supervisory mechanism, she emphasised that the time required for its formal establishment may be greater than the time available to rescue the Eurozone periphery. She finished her discussion by drawing attention to Spain and asked whether its recapitalisation is conditional on the establishment of a single supervisory mechanism? Finally **Julia Black** (LSE) pointed out a different set of considerations, in particular; could one supervisory body monitor sixty thousand banks effectively?

Next, the conference shifted attention to deposit insurance. **Dirk Cupei** (European Forum of Deposit Insurers) gave an overview of the recent history of European policy, starting with a detailed description of the original Deposit Guarantee Schemes Directive of 1994 and continuing through to the 2009 Directive. He then commented on the role of a pan-European Deposit Guarantee Scheme (DGS) backed with common resources, as the first step towards a European banking union. Finally he discussed three possible implementations of a pan-European DGS and their respective difficulties and shortcomings. First, a pan-European DGS for all banks in the European Union would require pan-European banking supervision and



Dirk Cupei (European Forum of Deposit Insurers)

deeper harmonisation of legal standards to be in place. Second, a pan-European DGS for all systemically important financial institutions may not be practical as the failure of any of these institutions would prove to be too big for any DGS. Lastly, a system of “solidarity” amongst national DGS’s would face the problem of conflicting property rights. **Franco Bruni** (Bocconi University) was the first discussant in this session. He emphasised the importance of a good pan-European resolution scheme to complement the DGS, because a severe moral hazard problem would arise if a DGS was in place but banks were not allowed to fail. The second discussant, **Costanza Russo** (Queen Mary, University of London) warned of the potential conflict of interest between the deposit guarantee and the supervision service. From a deposit guarantee perspective one should close a distressed bank early to reduce the cost of guarantee, while in contrast the supervisor might want to give more time to the bank in order to replenish its capital. Russo therefore suggested separating the DGS from the European Central Bank.

Harald Benink (Tilburg University) closed the morning by presenting a statement from the European Shadow Financial Regulatory



Adam Farkas (European Banking Authority)



Harald Benink (Tilburg University)

Committee (ESFRC) which presented a highly cautious view of the establishment of the banking union. A strong opening asserted that regulators must address the current crisis independently, as crisis management requires immediate and decisive action. It must not be contingent on the establishment of a banking union. While the statement still emphasised the benefits of harmonisation, and advocated the banking union as a long-term plan, it enumerated the potential difficulties of transition and the risks of poor implementation,

listing a number of points that require more careful thought including, institutional arrangements and common rules across states.

Recently, the *Financial News* called **Adam Farkas** "Europe's most important man in banking regulation". Farkas is the first executive director of the newly established London-based European Banking Authority (EBA). His keynote speech, The Single Supervisory Mechanism and the Role of the EBA, restarted proceedings after lunch. Since the EBA already has the power to overrule national regulators should they fail to monitor their financial systems properly, the institution would play a natural role in the establishment of a banking union. Farkas' main focus was harmonisation which he broke down into three distinct parts: establishing a single set of rules for European banks, ensuring that supervisors acted consistently across the Eurozone, and defining risks equivalently across banks. His concise talk underscored all of these concerns with a more positive few than the European Shadow Financial Regulatory Committee, suggesting that the EBA could indeed play an important role in overcoming the difficulties. However, he understood that, even after harmonising regulation, a single regulator would not be able to escape political struggles, and different member states would still attempt to sway policy in different directions. Farkas advocated addressing political risks with political solutions, by considering optimal voting policies for important decisions in order to avoid deadlock and bringing attention to independent panels with reverse majority voting as a potential mitigating mechanism.

Kern Alexander (University of Zurich) presented a review of the recent European regulatory reform focusing on the Basel III and the Capital Requirement Directive. He started with the common view that the focus of regulations should shift from a micro-prudential to a macro-prudential perspective, ie, from the solvency of individual institutions to the stability of the financial system. Nonetheless, he believes the current Basel III, which emphasises higher capital and liquidity ratios, is still largely micro-prudential and he therefore suggested more policies on the liability side, such as strict leverage caps and a levy on non-core liabilities. He then considered the Capital Requirement Directive and acknowledged that, while the Directive will increase the capital requirement for systemically important financial institutions, there is a tension between maximum harmonisation of the



Rosa M Lastra (Queen Mary, University of London)

requirements and the member state's discretion power to impose a stricter capital or liquidity environment. He concluded that the EBA will have the power to resolve disputes between member states. Discussant **Victoria Saporta** (Bank of England) highlighted that another shortcoming of Basel III was that, as in Basel II, it still relied on the internal modelling of banks for the measure of risk weighted asset, which had lost much credibility after the crisis. She suggested requiring more transparency on these internal models and placing a floor on model outputs in order to restore investor confidence in these measures.

Charles Randell (Slaughter and May) closed the conference with a discussion of the crisis resolution mechanism. He initially addressed the common theme; of the problems of cross-border implementation but also raised several new issues and paid close attention to the role that domestic regulators will play. Emphasising what he called the "territoriality of outcomes", he explained that national supervision, financial group structure, and bankruptcy laws vary across countries and that not only would laws have to be harmonised, but also that local authorities would have to relinquish some of their power. At the same time, national regulators are limited in their purviews and they must therefore coordinate their actions. Given that supervision is costly, good regulation is a public good leading to an under-provision

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EUROPEAN BANKING UNION CONFERENCE

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problem. He then shifted gears by looking at the European crisis, restating the connection between the banking and sovereign crises and pointing out the banking system's dependency on liquidity provided by the European Central Bank. Randell asserted that to address crises' effectively, the banking union required not only a single resolution authority, but also an established system of funding for resolution costs. **Tom Berglund** (Hanken School of Economics) was the first to discuss Randell's presentation. Rather than first addressing the resolution mechanism's effectiveness in the event of a crisis, he discussed the policies that regulators could implement ex ante in order to make resolution effective. In particular he suggested banks be kept simple and small, which he suggested would encourage internal monitoring as a result of competition. Next, **Clas Wahlborg** (Chapman University) said that he "shared the scepticism about the likelihood that we will see a harmonised and effective EU or EMU framework for recovery and resolution in the near future." He paid particular attention to the institutions referred to by the new acronym SIFI for "Systemically Important Financial Institution", a category including not only big banks but also central counterparties and clearing houses. He emphasised their role in the potential for contagion to afflict the financial system. Rather than suggesting a solution he asked a pointed question: is cross-border harmonisation necessary?

Conference organised by **Harald Benink** (Tilburg University), **Charles Goodhart** (FMG, LSE), and **Rosa M Lastra** (CCLS, Queen Mary, University of London).

Article written by **Chi Fong (John) Kuong** and **Jason Donaldson**.

CORPORATE GOVERNANCE AT LSE

Corporate Governance at LSE is a research initiative launched by the FMG as part of the Group's Corporate Finance and Governance Research Programme. Its mission is to conduct and encourage high quality research in corporate governance, to facilitate debate between professionals and policy-makers, and to promote the implementation of best corporate governance practices.

The Corporate Governance at LSE Research Debates have become an established platform for practitioners, policymakers and academics to discuss current issues in corporate governance, underpinned by the latest research evidence. The mixture of academics and practitioners attending these debates gives rise to a stimulating discussion highlighting the views of the different stakeholders in corporate governance issues.

The content discussed in the Michaelmas term seminars is summarised here.



8 NOVEMBER

Professor John Kay (LSE) started the seminar by calling for a shift in the culture of the UK's equity markets. Based on his Final Report which examined the

impact of UK equity markets on the long-term performance of companies, Kay recommended the promotion of sustainable companies and better rights for savers, by restoring "relationships of trust and confidence in the investment chain". The central issues he highlighted have arisen from "the replacement of a financial services culture based on trust relationships by one based around transactions and trading". In the case of ICI and GEC, Kay argued that they were damaged by short-termism in financial markets, which was supposed to play a role in supporting innovative, sustainable long-term business performance instead. Asset manager's performance is often judged over a very short horizon; the shorter the performance horizon relative to the value discovery horizon, the less important it is to understand the impact of events on the fundamental value of the company. This is also true for corporate managers who focus on the price of their company's shares, or are incentivised to do so. Kay pointed out that this causes a problem as people look increasingly to what each other are doing and less to the long term fundamental value of their activities. On top of this, Kay believes that the regulation industry which has an interest in its own expansion is also problematic. The regulators come to see issues through the eyes of the industry they regulate, since regulations become more extensive and intrusive. This renders regulations ineffective in achieving their objectives: the promotion of the interests of the companies and savers that use financial markets. To tackle these problems, Kay suggested rebuilding trust and aligning interests in financial markets. The agents making investments should act in accordance with statements of good practice, and we should encourage large institutional investors to act collectively and to establish a forum to facilitate such collective engagement. Regarding executive compensation, he called for wide-ranging reform, including paying executives long-term incentives in shares

that do not devolve until after they have left the company. He also advocated regulation which focuses on structure and incentives rather than complex rule making.

The discussants expressed diverse views. Donald Brydon (Chairman of Smith's Group and Royal Mail Holdings) agreed with the lack of trust and agency problems prevalent in the financial markets. He, however, questioned the presumption that managers were over-influenced by short-term movements in the share price and that the shareholding structure did not prevent managers from focusing on the long-term health of the company. Richard Davies (The Economist) provided empirical evidence of excessive discounting of the future in favour of the present and showed that Britain's R&D to GDP ratio is declining compared to other countries. He stressed the need to reconsider which form of financing could better curb short-termism, equity or debt? He also highlighted the importance of devising a way that helps shorten the intermediation chain.



15 NOVEMBER

Colin Mayer (Saïd Business School) gave a passionate seminar in which he presented the main ideas from his new book, *Firm Commitment: why the*

corporation is failing us and how to restore trust in it, which centres on the importance of business corporation, its on-going decadence and how to restore its former positive reputation.

The firm, which has been described with varying degrees of complexity; ranging from a nexus of contracts to a simple production function, is a central institution in market economies which explicates its action by interacting with many subjects. In recent years though, a series of negative events damaged its reputation. Mayer highlighted some of these events as being: the financial crisis of 2007; the dotcom bubble; and even the Fukushima disaster. These

negative events, in his opinion, are the end result of shareholders predominance over other stakeholders. One major factor that contributed to this imbalance has been the concentration in the banking sector, which led firms to use the stock market as the primary financing channel, which, in turn, increased the dispersion of the ownership and decreased the holding period. All this has resulted in a dramatic increase of agency conflicts (less effective monitoring by dispersed shareholders) and a stronger incentive to transfer wealth from other stakeholders in favour of shareholders. Mayer pointed out that the response to these problems so far has just been a dramatic increase in regulation. He wouldn't anticipate the full range of solutions, which constitute an important part of the book, but it was clear from his speech that a resurgence of the business company has to come from a radical change in its values and an effective way to enforce them.



6 DECEMBER

Tom Kirchmaier (FMG, LSE) and **Edmund Schuster** (Department of Law, LSE) presented the results from their study on "Shareholder Empowerment and Bank Bailouts" co-authored with Daniel Ferreira (FMG/ Department of Finance, LSE) and David Kershaw (Department of Law, LSE). This project has brought together the expertise of academics in Finance



and Law to investigate whether shareholder empowerment may be detrimental to overall economic efficiency. Specifically, they ask the question: are banks that have more powerful shareholder rights, and thus the possibility of shareholders influencing management, more likely to go bankrupt (or to be bailed out) during the recent financial crisis?

In order to answer this question, the lawyers in the team constructed a novel management insulation index based on banks' charter and by-law provisions, and on the provisions of applicable state corporate law in the United States that make it difficult for shareholders to oust a firm's management. From extensive empirical analysis, Kirchmaier and Ferreira (the finance experts) were able to show that this index is a good predictor of bank bailouts during the crisis. Moreover, a host of robustness checks and additional analyses shows that shareholder empowerment is associated with banks' riskiness.

These potentially controversial results, which challenge the classical view that shareholder rights and shareholder value are necessarily beneficial to the overall economy, generated a lively discussion amongst the audience. For example, Carsten Gerner-Beuerle (Department of Law, LSE) challenged some of the assumptions about the index and outcome variable construction. Another comment related to how the experience in the United States compares to that in the UK during the crisis and what implications the results may have for policy. Kirchmaier and Schuster discussed this comment extensively and admitted that it will need further research before specific advice can be given. Overall, however, the authors appear to have generated first-rate evidence against the idea that the provision of shareholder rights will solve all the issues of corporate governance.

All Corporate Governance Brownbag seminars are organised by **Tom Kirchmaier** (FMG, LSE). For details of upcoming events please visit: lse.ac.uk/FMGCorporateGovernance

If you would like to be added to the Corporate Governance mailing list please email Fmg.Corporate.Governance@lse.ac.uk



FMG EVENTS

Events that have taken place since the publication of the previous *Review* in December 2012 (Autumn issue)

Conferences

The Future of Computer Trading in Financial Markets

11 January 2013

Public Lectures

Unintended Consequences of the New Financial Regulations

11 March 2013

Chair: Professor Christopher Polk
(Director of FMG, LSE)

Speakers: Dr Jon Danielsson (Director of Systemic Risk Centre, LSE), Professor Charles Goodhart (Systemic Risk Centre/FMG, LSE) and Matt King (Global Head of Credit Strategy, Citi)

Capital Markets Workshops

An Empirical (S,s) Model of Dynamic Capital Structure

14 November 2012

Arthur Korteweg (Stanford University)

Liquidity-Based Security Design: the case of uninformed sellers

21 November 2012

Christopher Hennessy (London Business School)

A Model of Financialization of Commodities

28 November 2012

Anna Pavlova (London Business School)

Macroprudential Policy, Countercyclical Bank Capital Buffers and Credit Supply: evidence from the Spanish dynamic provisioning experiments

5 December 2012

José-Luis Peydró (Universitat Pompeu Fabra)

Examining Macroeconomic Models through the Lens of Asset Pricing

12 December 2012

Lars Hansen (University of Chicago)

Corporate Ownership and International Mergers and Acquisitions

20 February 2013

Kai Li (University of British Columbia)

Financial vs. Strategic Buyers

27 February 2013

Marc Martos-Vila (UCLA)

Too-Systemic-To-Fail: what option markets imply about sector-wide government guarantees

6 March 2013

Bryan Kelly (Booth School of Business, Chicago)

Production-Based Term Structure of Equity Returns

13 March 2013

Max Croce (Kenan-Flagler Business School, UNC)

Lunchtime Workshops

Economic Effects of Runs on Early 'Shadow Banks': trust companies and the impact of the panic of 1907

21 November 2012

Carola Frydman (Boston University)

Simple Variance Swaps

28 November 2012

Ian Martin (Stanford University and visiting Reader in Finance)

Expectations, Liquidity, and Short-term Trading

5 December 2012

Giovanni Cespa (Cass Business School)

The Value of a Good Credit Reputation: evidence from credit card renegotiations

15 January 2013

Andres Liberman (Columbia University)

Bank Competition, Information Choice and Inefficient Lending Booms

16 January 2013

Silvio Petriconi (Universitat Pompeu Fabra)

Executive Compensation and Peer Effects

22 January 2013

Stefan Lewellen (Yale University)

The Financialization of Storable Commodities

23 January 2013

Steven Baker (Tepper School of Business)

Court Enforcement and Firm Productivity: evidence from a bankruptcy reform in Brazil

29 January 2013

Jacopo Ponticelli (Universitat Pompeu Fabra)

Delayed Capital Reallocation

30 January 2013

Wei Cui (Princeton University)

Call your Clients First: an examination of how analysts add value to their fund clients

5 February 2013

Lei Xie (Yale University)

Venture Capital and the Diffusion of Knowledge Venture

12 February 2013

Juanita Gonzalez-Urbe (Columbia GSB)

Financing from Family and Friends

13 February 2013

Samuel Lee (Stern, NYU)

Financial Crises, Risk Premia and the Term Structure of Risky Assets

20 February 2013

Tyler Muir (Midwestern University)

Crash Risk in Currency Returns

27 February 2013

Mike Chernov (LSE)

Reputational Contagion and Optimal Regulatory Forbearance

6 March 2013

Lucy White (Harvard Business School)

London Financial Regulation Seminars

The Pari Passu Debate and its Implications

21 January 2013

Lee Buchheit (Cleary Gottlieb)

What Should we do About (Macro) Pru? Macro Prudential Policy and Credit

4 February 2013

Ray Barrell (Brunel University)

Safe to fail?

4 March 2013

Thomas Huertas (Ernst & Young)

Central Bank Independence

18 March 2013

Geoffrey Wood and Forrest Capie (both Cass Business School)

PhD Seminars

All seminars are given by current LSE PhD students

Uncertainty Shocks and Investment in the Presence of Maturity Mismatch

15 November 2012

Nathan Converse (Department of Economics/FMG)

Firm Size and Financial Constraints

22 November 2012

Jason Donaldson (Department of Finance/FMG)

Do Institutional Investors Improve Capital Allocation?

29 November 2012

Giorgia Piacentino (Department of Finance/FMG)

Endogenous Information Acquisition with Sequential Trade

6 December 2012

Sean Lew (Department of Finance)

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13 December 2012

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7 March 2013

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Mutual Fund Activism

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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 under 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 715

From female labor force participation to boardroom gender diversity

Renée B Adams and Tom Kirchmaier

The list of barriers to female representation in management is analogous to the list of barriers to female labor force participation. Accordingly, we examine whether low female labor force participation is the main reason few women hold seats on corporate boards using data from 22 countries over the 2001-10 period. Using a novel country-level measure of female participation on corporate boards, we show first that the representation of women on boards across countries is actually worse than most surveys suggest. We then examine the extent to which female labor force participation and institutional and country-level characteristics are related to boardroom diversity. We find that labor force participation is significantly related to the representation of women on boards when part-time and unemployed workers are excluded. However, cultural norms, the presence of boardroom quotas and codes promoting gender diversity are also correlated with female representation. This suggests that economic and cultural factors may be important barriers to female career advancement, but that preferences may be less important. While quotas may overcome problems of discrimination, they may be too narrow a policy tool to address other causes of female underrepresentation in management.

DP 716

International correlation risk

Philippe Mueller, Andreas Stathopoulos and Andrea Vedolin

We provide novel evidence of priced correlation risk in the foreign exchange market. Currencies that perform badly (well) during periods of high

exchange rate correlation have high (low) average returns. We also show that high (low) interest rate currencies have high (low) correlation risk exposure, providing a risk-based justification for the carry trade. To address our empirical findings, we consider a general equilibrium model that incorporates preferences characterized by external habit formation and home bias. In our model, currencies which depreciate when conditional exchange rate correlation is high command high risk premia due to their adverse exposure to global risk aversion shocks.

DP 717

Investors' horizons and the amplification of market shocks

Cristina Cella, Andrew Ellul and Mariassunta Giannetti

This paper shows that during episodes of market turmoil 13F institutional investors with short trading horizons sell their stockholdings to a larger extent than 13F institutional investors with longer trading horizons. This creates price pressure for stocks mostly held by short horizon investors, which, as a consequence, experience larger price drops, and subsequent reversals, than stocks mostly held by long horizon investors. These findings, obtained after controlling for the withdrawals experienced by the investors, are not driven by other institutional investors' and firms' characteristics. Overall, the evidence indicates that investors with short horizons amplify the effects of market-wide negative shocks by demanding liquidity at times when other potential buyers' capital is scarce.

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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 213

Banking union: what will it mean for Europe?

Thomas F Huertas

Banking union will change the face of Europe. It will significantly deepen integration in what is arguably the key sector of the economy. For the Member States that join the banking union, this will mean signing up for “more Europe”. This will raise not only technical questions as to how banking union will actually work, but also political questions. These relate to how that deeper Europe should be governed and how the banking union will fit within the EU as a whole. This paper outlines what has to be done in order to make banking union a change for the better, one that will in fact break the link between banks and sovereigns so that neither the euro nor the EU is at risk from banks and banks are not at risk from sovereigns.

SP 214

A Coasean approach to bank resolution policy in the Eurozone

Gregory Connor and Brian O’Kelly

The Eurozone needs a bank resolution regime that can work across seventeen independent nations of diverse sizes with varying levels of financial development, limited fiscal co-responsibility, and with systemic instability induced by quick and low-cost deposit transfers across borders. We

advocate a Coasean approach to bank resolution policy in the Eurozone, which emphasises clear and consistent contracts and makes explicit the public ownership of the externality costs of bank distress. A variety of resolution mechanisms are compared including bank debt holder bail-in, prompt corrective action, and contingent convertible bonds. We argue that the “dilute-in” of bank debt holders via contingent convertibility provides a clearer and simpler Coasean bargain for the Eurozone than the more conventional alternatives of debt holder bail-in or prompt corrective action.

SP 215

Bank capital standards: a critical review

Rainer Masera

As a consequence of the 1929 Stock Market Crash and the subsequent Great Depression, the pendulum of financial regulation swung towards heavier and broader regulation, notably with: (i) greater emphasis on bank safety and protection of depositors and (ii) forced separation of the various functions and segments of the industry.



SPECIAL PAPERS CONTINUED

SP 216

Maintaining confidence – understanding and preventing a major financial institution failure mode

David Murphy

This paper proposes the solvency/liquidity spiral as a failure mode affecting large financial institutions in the recent crisis. The essential features of this mode are that a combination of funding liquidity risk and investor doubts over the solvency of an institution can lead to its failure. We analyse the failures of Lehman Brothers and RBS in detail, and find considerable support for the spiral model of distress. Our model suggests that a key determinant of the financial stability of many large banks is the confidence of the funding markets. This has consequences for the design of financial regulation, suggesting that capital requirements, liquidity rules, and disclosure should be explicitly constructed so as not just to mitigate solvency risk and liquidity risk, but also to be seen to do so even in stressed conditions.

SP 217

What should we do about (Macro) Pru? Macro prudential policy and credit

Ray Barrell and Dilruba Karim

Credit growth is widely used as an indicator of potential financial stress, and it plays a role in the new Basel III framework. However, it is not clear how good an indicator it is in markets that have been financially liberalised. We take a sample of 14 OECD countries and 14 Latin American and East Asian countries and investigate early warning

systems for crises in the post Bretton Woods period. We show that there is a limited role for credit in an early warning system, and hence little reason for the Basel III structure. We argue that the choice of model for predicting crises depends upon both statistical criteria and on the use to which the model is to be put.

SP 218

“Theory anchors” explain the 1920s NYSE Bubble

Ali Kabiri

The NYSE boom of the 1920s ended with the infamous crash of October 1929 and subsequent collapse in common stock prices from 1929-1932. Most approaches have suggested an overvaluation of 100 per cent, usually dating from mid-1927 to September 1929. Excessive speculation based on high real earnings growth rates from 1921-28, amid a euphoric “new age” for the US economy, has been given as the cause. However, the 1920s witnessed the emergence of new ideas emanating from new research on the long-term returns to common stocks (Smith, 1924). The research identified a large premium on common stocks held over the long term compared to corporate bonds. This, in turn led to the formation of new investment vehicles that aimed to hold diversified stock portfolios over the long run in order to earn the large equity risk premium. Whilst such an approach was capable of earning substantial excess returns over bonds, new ideas derived from the research led to a change in stock valuations. The paper reconstructs fundamental values of NYSE stocks from long run dividend growth and stock volatility data, and demonstrates why such a change in theoretical values was unjustified. Investors switched to valuing stocks according to a new theory, which ignored the compensation for stock return volatility, which made up the Equity Risk Premium (ERP), on the assumption that “retained earnings” were the source of the observed ERP.

SP 219

The potential instruments of monetary policy

Charles Goodhart

In most standard (Dynamic Stochastic General Equilibrium, DSGE) macro-models, there is a single riskless rate, set by the Central Bank in accord with some reaction function, as developed by John Taylor (1993/1999). In this model all agents can lend and borrow at this same rate, because default, and hence credit risk, is assumed away. The one extra degree of freedom that a Central Bank may have in such a model is to play on the public’s expectations of their future policy. In particular, some have argued that, should a lower, zero bound to nominal interest rates be hit in a depression, then the Central Bank should publicly aim to achieve higher future inflation in order to lower real interest rates now.

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Charles Goodhart

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FMG Review

Editor: Frankie Clarke

Prepared by: Michael Boehm, Gennaro Catapano,
Jason Donaldson, Tom Kirchmaier,
Chi Fong (John) Kuong, Yiqing Lu, JP Zigrand

Photographs by: Simon Tuck

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