

SEVENTH ANNUAL PAUL WOOLLEY CENTRE CONFERENCE 5-6 JUNE 2014



The Paul Woolley Centre for the Study of Capital Market Dysfunctionalities (PWC) was established at the London School of Economics and Political Science in September 2007. Research at the Centre aims to understand the workings of capital markets and the social efficiency of allocations that these markets achieve. This research departs from the Arrow-Debreu view of “Frictionless Markets” and emphasises the role of Financial Institutions (e.g. investment banks, mutual, hedge, and pension funds) in influencing prices and allocations.

The seventh annual conference was organised by a committee consisting of: Georgy Chabakauri, Amil Dasgupta, Dong Lou, Igor Makarov, Christopher Polk, Dimitri Vayanos, Michela Verardo, Kathy Yuan, and Kostas Zachariadis.

The conference was comprised 5 sessions:

1. Leverage, Asset prices, and the Macroeconomy
2. Benchmarking, Portfolio choice and Equilibrium prices
3. Institutional Investors and Market Liquidity
4. Information and Incentives in Financial markets
5. Insurance markets and Safety premia

Session 1: Leverage, asset process and the macroeconomy

Alexi Savov (New York University) presented his paper “A model of monetary policy and risk premia”, co-authored with **Itamar Drechsler** (New York University and NBER) and **Philipp Schnabl** (Yale University).

This paper presents a new way of thinking about the effects of monetary policy, differing from the usual focus on sticky prices in most macro models. It focuses instead on how, when banks face a reserve requirement, the central bank controls banks’ cost of funding by varying

the nominal interest rate. Banks are forced to keep some of their assets in reserves which pay no nominal interest, but raise funds at the nominal interest rate. Therefore, when nominal interest rates are high, banks face a high cost of raising funds, since a fraction of any borrowed funds must be deposited at zero interest.

This creates a novel channel through which raising nominal interest rates effects economic activity: high nominal interest rates increase the cost to banks of raising funds, and hence reduce bank leverage and lending.

Hongjun Yan (Yale University) discussed the paper. He pointed out that the rise of the shadow banking sector could reduce the importance of the mechanism presented, as many institutions are not required to hold reserves. Questions from the audience focused on whether the magnitude of the mechanism presented would be large in a calibrated model.

Arvind Krishnamurthy (Northwestern University and NBER) presented “A macroeconomic framework for quantifying systemic risk”, co-authored with **Zhiguo He** (University of Chicago and NBER). Their paper attempts to build a stylised model of a modern



Hongjun Yan (Yale University)



Dong Lou (LSE)



Igor Makarov (LSE)



Dimitri Vayanos (Director of the PWC, LSE)

economy, featuring rare financial crises, which can be calibrated and used to quantify several aspects of systemic risk.

Their paper belongs to a growing literature that studies the global dynamics of models with financial frictions. Their first contribution is to show that this class of model can successfully match key macroeconomic and asset pricing data. One area where the model does particularly well is matching the nonlinearity in the data: in both the data and the model, negative shocks are much more destructive when intermediaries are distressed. Finally they use their model as a basis to construct estimates of the probability of another crisis, and general equilibrium assessments of stress tests.

Jack Favilukis (LSE) discussed the paper, starting with a clarifying discussion of the roles of the various financial frictions present in the model. He also commented on the ad hoc nature of some of these frictions. Krishnamurthy responded to this, arguing that they were happy to have ad hoc elements in the model which captured reasonable and realistic frictions.

Session 2: Benchmarking, Portfolio choice and Equilibrium prices

Dimitri Vayanos (LSE, CEPR and NBER) presented *"Asset management contracts and equilibrium prices"*, co-authored with **Andrea Buffa** (Boston University) and **Paul Woolley** (LSE). Their paper focuses on the asset pricing distortions caused by asset managers and how they can help explain the volatility and beta anomalies.

Their paper starts by pointing out that, even without agency frictions, assets in high net supply must offer a high return (or low volatility) compared to the market index to induce the asset manager to demand more of

them. This already speaks to the volatility and beta anomalies, but this effect is even more pronounced once agency frictions between the asset manager and depositor are introduced.

They show that in the presence of agency frictions it becomes optimal, in a certain class of contracts, for the asset manager's pay to be benchmarked to his performance compared to the market index. The asset manager has the opportunity to inefficiently divert funds and benchmarking mitigates this problem. However, this privately optimal arrangement has general equilibrium effects on asset prices, since the manager now wants to stick closer to the benchmark portfolio. He therefore needs to be further discouraged from doing so, and so the return on high supply assets must rise even further. Their paper therefore speaks to the Dot-com bubble, where benchmarking forced even those who feared a collapse to keep buying.

Ron Kaniel (University of Rochester) discussed and praised the modelling simplifications and overall message. He suggested, and the authors concurred, that the assumption that benchmarking had to be to the market return was restrictive and that it would be interesting to study the choice of optimal benchmark.

Mikhail Simutin (University of Toronto) presented *"On the demand for high-beta stocks: evidence from mutual funds"* co-authored with **Susan E. K. Christoffersen** (University of Toronto and CBS). Their paper uses a first-difference approach to show that, in an effort to beat benchmarking, fund managers who control large pension assets reduce fees and increase their exposure to high-beta stocks without affecting the tracking error. They're able to do this because they strategically substitute low-beta stocks for high-beta stocks with low idiosyncratic volatility. These findings support theoretical conjectures that the pressure of benchmarking increases demand

for high-beta stocks and helps to explain their low returns.

Session 3: Institutional Investors and Market liquidity

Sheridan Titman (University of Texas) presented *"Investor composition and liquidity: an analysis of Japanese stocks"* co-authored with **Hao Jiang** (University of Texas/ Erasmus University) and **Takeshi Yamada** (National University of Singapore/ University of Adelaide). Their paper uses a panel of firm-level ownership data and finds that Japanese stocks held by foreign institutions tend to trade more actively, but that they are less liquid as measured by their quoted and effective bid-ask spreads and their short-term idiosyncratic volatilities. To address endogeneity concerns the authors use index membership, along with English news stories about Japanese companies, as instruments for change in foreign institutional holdings. They find cross-sectional evidence regarding changes in spreads and idiosyncratic volatility that is consistent with the findings in their panel regressions.

Ing-Haw Cheng (Dartmouth College) discussed this paper. He pointed out that the authors have attempted to provide a natural experiment to address a challenging empirical question regarding liquidity. However he also mentioned that reform in the Japanese market also suffers from some endogenous problems, since reform may influence all investors and it is therefore not clear whether the driving force underlying these findings is due to foreign investors. He also suggested that the authors do more work in documenting activities of different groups of investors and extending their analysis into other markets.

C. Bige Kahraman (Stockholm School of Economics) presented *"Leverage constraints and liquidity: what can we learn from margin trading?"* co-authored with **Heather Tookes**



Christian Hellwig (Toulouse School of Economics)



Cristian Badarinza (University of Oxford)



Jonathan Cohn (University of Texas)

(Yale School of Management). The authors address the question of whether traders' leverage constraints drive equity market liquidity. The consequences of limited arbitrage on the ability of arbitrageurs to supply liquidity are central to several theoretical models but, providing evidence of causality is empirically difficult. The identification challenge is to disentangle demand and supply of liquidity. The authors use the unique features of the margin trading system in India to test for causality. In India, the list of stocks eligible for margin trading is revised every month, creating a series of quasi-experiments that provide traders of newly eligible and ineligible stocks with shocks to the availability of leverage. The empirical design is a regression-discontinuity framework which compares the liquidity of stocks that lie close to the eligibility threshold. Causality can be identified because the assignment of treatment (eligibility) is as good as locally randomised around the cut-off point. Eligibility is equivalent to a relaxation of traders' leverage constraints. The authors find that liquidity is higher when stocks become eligible for margin trading and that it decreases with ineligibility, consistent with the pre-existing theory of Brunnermeier and Pedersen (2009). Using available data on margin financing activity at the individual stock level, the authors try to uncover the mechanisms driving this finding. They find evidence that margin traders are contrarian traders, which is consistent with liquidity provision. Finally, the authors find evidence of increased co-movement in liquidity for stocks in the same (in)eligibility group.

Session 4: Information and Incentives in Financial Markets

Christian Hellwig (Toulouse School of Economics) presented "*Risk-Taking, Rent-Seeking, and Investment when Financial Markets are Noisy*" co-authored with **Elias**

Albagli (Central Bank of Chile) and **Aleh Tsyvinski** (Yale University). The authors analyse how financial market imperfections, namely information aggregation frictions that drive a wedge between prices and fundamental values, provide shareholders with a rent-shifting motive and generate distortions in investment by firms. Market frictions cause over-investment (under-investment) when shares are over-valued (under-valued). The extent of the distortions depends on the characteristics of the return distribution, especially its tails. Upside risk (downside risk) induces over-investment (under-investment). When the firm operates close to constant returns to scale, the rent-seeking incentives and the associated efficiency losses become very large.

The authors discuss several applications of the model: First, they show that noisy information aggregation can induce excessive leverage. Second, public information disclosure is not necessarily welfare enhancing because it may enable shareholders to extract higher rents. Third, market frictions can result in excess sensitivity of investment to share prices through an informational feedback effect. Fourth, the authors show that conflicts of interest between successive generations of shareholders can induce time-inconsistent investment decisions when there are complementarities between the decisions of the current and future shareholders. Finally, the authors evaluate various welfare improving policy interventions such as a financial transaction tax.

Lastly two extensions of the model are presented, focusing on managerial incentives. When control is delegated to management, shareholders design managerial contracts to maximise their rent extraction, for example they incentivise excess risk-taking with stock option compensation. In this context, the regulation of executive pay may be used to rein in rent-seeking.

Günter Strobl (Frankfurt School of Finance and Management) presented "*Credit Ratings: Strategic Issuer Disclosure and Optimal Screening*" co-authored with **Jonathan B. Cohn** (McCombs School of Business, University of Texas) and **Uday Rajan** (Stephen M. Ross School of Business, University of Michigan).

Their paper addresses the impact of credit rating agencies' (CRA) practices on issuer moral hazard. The authors study a two-period model in which an issuer can manipulate the information it provides to a CRA which screens and rates the quality of its asset. An issuer who manipulates information to get a better rating faces a trade-off between being able to sell its asset at a higher price to investors in the first period of the model and incurring a reputational cost in the second period when manipulation becomes apparent. This reputational cost counters opportunistic behaviour in the first period of the model and opportunistic issuers may manipulate with a probability less than one in the first period. The CRA is modelled as minimising the cost of screening and the cost from rating errors. More intense CRA screening generates stronger manipulation incentives for the issuer because of certification benefits, ie the likelihood that the asset value is high when the rating is high increases. In equilibrium, increased manipulation undoes the benefit of more intense screening so that rating accuracy is invariant to scrutiny. Therefore, in some circumstances the CRA may optimally abandon screening and the equilibrium becomes one of low screening and low issuer manipulation.

Session 5: Insurance Markets and Safety Premia

Ralph S.J. Koijen (London Business School) presented "*Shadow insurance*" co-authored with **Motohiro Yogo** (Federal Reserve Bank of Minneapolis). The authors develop a structural model of the life insurance industry and



Mikhail Simutin (University of Toronto)



Ralph Koijen (London Business School)



Stefano Giglio (University of Chicago)

estimate the impact of current policy proposals to contain or eliminate shadow insurance. In the counterfactual without shadow insurance, the average company currently using shadow insurance would raise its price by 12 percent and annual life insurance underwritten would fall by 11 percent for the industry.

Andrew Ellul (Indiana University) discussed this paper. He mentioned that it addresses a very important question for financial stability but suggested that the authors provide a more comprehensive modelling of the reinsurance decision in general and of shadow insurance in particular. He also suggested that their paper would benefit from the adding of other important dimensions, such as tax management, and from sharpening the results and implications for financial regulation.

Cristian Badarinza (University of Oxford) presented "*Preferred habitats and safe haven effects: evidence from the London housing market*" co-authored with **Tarun Ramadorai** (University of Oxford and NBER). Their paper uses the infrequent nature of economic and political crises to distinguish safe-haven demand effects on asset prices from a wide range of alternative drivers. The authors present a new cross-sectional approach, motivated by the insight that investors may have different "preferred habitats" within a broad asset class. They find that economic and political risk in Southern Europe, China, the Middle East, Russia and South Asia helps explain price and volume dynamics in the London housing market over the past two decades. Safe-haven effects on the London housing market are long-lasting and significant, but temporary.

This article was written by the Paul Woolley Centre scholars: **Alex Clymo**, **Shiyang Huang** and **Isabelle Roland**. Alex and Isabelle are both PhD students in the Department of Economics. Alex is currently researching the growth and business cycle implications of expected recurrent financial crises. Isabelle is currently looking at the impact of financial frictions on UK labour productivity during the financial crisis. Shiyang is a PhD student in the Department of Finance and will enter the job market this academic year.

ECONOMIC NETWORKS AND FINANCE CONFERENCE

Following the success of last year's excellent Economic Networks and Finance conference, a follow up conference was organised by the Systemic Risk Centre (SRC) and Financial Markets Group (FMG). As last year, the organising committee consisted of Christian Julliard (LSE) and Kathy Juan (LSE).



Mila Getmansky (University of Massachusetts Amherst) presented her paper "*Sovereign, Bank and Insurance Credit Spreads*", co-authored by Monica Billio, Dale Gray, Andrew W. Lo, Robert C. Merton, and Liorana Pelizzon.

In the paper they highlight interconnections among countries and financial institutions, considering both explicit and implicit connections. The authors stress that risks in the banking as well as in the insurance system have become increasingly interconnected with sovereign risk. Furthermore, they quantify the effect of assets-liabilities mismatches within as well as across countries and financial institutions. In order to measure these effects, they employ Contingent Claims Analysis (CCA), which builds upon the Merton Model, and they make use of a network approach.

They find that banks, insurance companies and sovereign in their sample are very highly connected. Especially insurance companies seem to become ever more connected to the whole network.

The paper was then discussed by **Marcin Kacperczyk** (Imperial College), who was stressing that the whole idea of systemic risk is really at the heart of the policy debate and that therefore the paper is highly relevant for the ongoing discussion. Some points of criticism were that the model does not incorporate debt restructuring and does not distinguish between different types of debt.



Daniele Condorelli (University of Essex) presented "*Bilateral Trading in Networks*", co-authored by **Andrea Galeotti**. In the paper the authors look at an incomplete-information

model of sequential bargaining for only a single object. In their model, as a novel feature, agents are located in a network.

The model is essentially a model of a decentralised market, like the Over The Counter (OTC). It is dynamic and incorporates multiple rounds of trade.

Their model yields the following results: first, dealers in this model arise endogenously and earn a rent. Second, traders who manage to fill structural holes will obtain a profit. Third, trading prices in the model are not monotone. Fourth, in equilibrium, there will be hot-potato trading.

The paper was discussed by **Silvio Johannes Enrico Petriconi** (Università Bocconi). He stated that the model might perhaps be applicable to the interbank market in Europe. During the general discussion, the stability of the networked model was being questioned. Furthermore, there was a comment that the model might not be suited for an anonymous market, but probably for a social one. The Bitcoin market was mentioned as another example.



Jose-Luis Peydro (Universitat Pompeu Fabra, Barcelona) presented "*Cross-Border Liquidity, Relationships and Monetary Policy: Evidence from the Euro Area Interbank Crisis*" co-authored with **Puriya**

Abbassi (Deutsche Bundesbank), **Falk Brauning** (Tinbergen Instituut) and **Falko Fecht** (Frankfurt School of Finance & Management). Their paper covers the topic of liquidity in financial markets, especially around the period of the European sovereign debt crisis. During the financial crisis it was hard for financial institutions to acquire financing. The theoretical literature has provided many explanations for the lack of liquidity, one of the reasons being the unwillingness of counterparties to supply additional credit at any interest rate (credit rationing).

Their paper emerges to fill the gap of empirical evidence for the liquidity change in supply and credit rationing. There are ample papers on finding theoretical motivations for this phenomenon, but empirical support is lacking. The access to a comprehensive micro-level dataset on wholesale transactions was not readily available until recently. Target2 is the Euro system's payment and settlement system and carries out more than 90 percent of all fund flows between two credit institutions in the euro area. With this dataset they are able to isolate banks which borrow from two different lenders with identical contracts but at different rates. This allows them the isolation of the banks that are willing to borrow more at the contracted rate. They find indeed that volume and access after external shocks is indeed restricted and that previous trade relation plays an important role in the restrictions.

Daniel Ferreira (LSE) was the discussant of the paper. He was very positive and complemented them for being able to utilise and explore this data. There are a lot of patterns in the interbank market which are exposed in this paper and have not been shown before. Ferreira was skeptical about the identification strategy used for determining specific phenomena of credit rationing and he put forward an alternative reason for their results. The result of the multiple contracts at different rates is preferred by the buyer due to the price schedule of the seller; one of the sellers might charge an increasing marginal cost leading the buyer to prefer two counter parties instead of one.



Matthew Elliott

(Caltech) presented his paper "*Inefficiencies in Networked Markets*". Unlike the previous paper by Mila Getmansky, which was an empirical paper, Elliott's paper is focused on a theoretical

framework describing financial markets with relationship investment prior to trade. A possible example is where countries need to first invest in pipelines in order to trade oil or gas on a future date.

This cost of the investing into a relationship for the purpose of creating future trade opportunities or improving your current terms of trade can lead to market inefficiencies. Elliott considers two protocols in his theoretical framework. In the first protocol both parties invest beforehand. A result of making a costly upfront investment is that there will be a fear of not recovering the investment

costs. This might lead to an underinvestment (hold-up problem). In the second protocol the agents negotiate the costs overcoming the hold-up problem. But this may lead to overinvesting to open up alternative trading relationships to improve the current terms of trade. This overinvesting is inefficient as well.

The main contribution of the paper is in the methodology used to show the results: they characterise the bargaining solution in a network setting. The algorithm used can decompose how different trading opportunities affect the bargained outcomes. Elliott further considers three applications for his theoretical market where these problems might arise. He discusses the markets for high skilled labour, industry consolidation and gas pipelines.

Francesco Nava (LSE) continued the afternoon session as the discussant of the paper. He first summarised the presentation by pointing out the contributions of the paper in the different areas of the literature. He commented on the assumption made that the endowments in the network are assigned, this might limit the type of applications for the theoretical model. Furthermore, there is a possibility that the core is empty or that intermediation might alter the structure of the core. He also commented on the set-up of the model where equilibria are imposed rather than analysed.



Norman Schuerhoff

(Université de Lausanne) discussed "*Dealer Networks*" co-authored with **Dan Li** (Federal Reserve Board). In his talk, Schuerhoff explored the inner workings of the otherwise opaque

Over The Counter (OTC) market. In utilising the Municipal Securities Rulemaking Board's proprietary Transaction Reporting System audit trail, he demonstrates how dealer centrality affects trading costs, liquidity provision, and price discovery in the US municipal bonds market.

Where existing literature focuses on market quality measures across market structures or market-wide measures over time, the question of how market quality is impacted based on network characteristics has thus far been an understudied topic in the literature.

After defining the concept of "centrality" in a dealer market, Schuerhoff proposed a dual hypothesis for the impact such centrality may have in a dealer network. In an underdeveloped

market, search and contractual frictions are bound to impose distortions in transaction costs and price discovery. In the OTC market, it is therefore reasonable to assume that central, well connected dealers may reduce such frictions by either offering cheaper transaction costs to clients, or serve to improve liquidity in the market by offering speedier execution. The latter may result with increases in transaction costs in comparison to less connected "peripheral" dealers.

The authors find that central dealers also take more inventory risk and, in doing so, provide more liquidity to customers than peripheral dealers. As a trade-off, transaction costs increase with dealer network centrality, where central dealers charge up to 80 percent larger spreads than peripheral dealers. Their findings suggest that competition is greater at the periphery than in the core of the network due to the opacity of the OTC market.

Tarun Ramadorai (University of Oxford) provided the audience and the presenter with some closing thoughts in his discussion. He asked us to delve deeper into the concept of the network by examining their inception, rather than their properties. In providing a fruitful avenue for future research he added that the authors might wish to utilise their novel dataset by attempting to identify exogenous variations in liquidity demand, which may shed light on the nature of network formation.



Maryam Farboodi

(Chicago Booth) presented her paper "*Intermediation and Voluntary Exposure to Counterparty Risk*". Positive intermediation rents drive a wedge between the private and social returns to

linking up financial institutions via credit lines. Banks that can offer the highest expected returns become intermediaries. These are banks with profitable but risky investment opportunities. Banks without profitable investment opportunities channel funding to investing banks through the shortest connecting path in order to avoid paying intermediation spreads. A core-periphery network emerges, with a core of banks who make risky investments and a periphery of non-investing banks that provide funding to the core via credit lines. As investing banks face the risk of costly default, this banking architecture creates excessive counterparty risk with those financial institutions most at risk to default being at the centre of intermediation.

Farboodi discussed two potential policies to reduce counterparty risk: a cap on the number of counterparties and the introduction of a Central Clearing Party (CCP). While the former policy turns out to be counterproductive, lengthening intermediation chains and thereby increasing the bilateral exposure among banks, the latter policy can indeed be welfare improving if the CCP is a non-investing bank and all lending is required to go through it.

Douglas Gale (NYU and Imperial) opened the discussion with a general observation on network models in finance, likening them to a double-edged sword. While they provide structure to economic interactions, they do so by artificially restricting the settings the researcher is able to analyse. In light of this observation, Gale commended Farboodi's work for deriving an unexpectedly simple core-periphery structure for the banking market from a complex network formation game. However, he wondered how strongly this result depended on the use of credit lines as funding instruments, group stability as the equilibrium concept, and the exogenously fixed division of rents between trading partners. Gale in particular pointed out that credit lines were not typically used by banks for their day-to-day funding activity. He furthermore would have liked to know how the optimal, incentive-efficient financial network looked and how it could be implemented. Finally he suggested to analyse the question from the angle of security design and to consider alternative funding contracts that would improve the efficiency of the financial architecture.



Martin Schulz (University of Michigan) presented "*Anti-Competitive Effects of Common Ownership: evidence from the airline industry*", co-authored by **José Azar** and **Isabel Tecu** (Both of Charles River Associates).

Asset management companies are often the single largest shareholder of several firms in the same industry, a position which would enable them to induce firms in their portfolio to collude. Current antitrust regulation does not concern itself with such potential anti-competitive behaviour arising from common ownership. To gauge the extent of the problem, Schulz focused on the airline industry as a laboratory, calculating measures of market concentration that take into account the network of cash flow and control rights which characterises the shareholders' economic interest. He found that the anti-competitive incentives implied by common ownership were considerably larger than what the FTC/DOJ 2010 horizontal merger guidelines deem likely to enhance market power. Examining whether changes in common ownership concentration for given flight routes would impact product market competition, his analysis found that ticket prices were approximately 5 percent higher on the average US airline route than would be the case under separate ownership.

Schulz concluded that measures of market concentration that take common ownership into account should be used in assessing the

competitive risks of proposed mergers and acquisitions. Furthermore antitrust authorities should be aware that combinations of asset management companies have both direct effects on the product market for investment products and indirect effects on the product markets of their portfolio companies.

Vicente Cuñat (LSE) started the discussion by emphasising that common ownership was an important question and would certainly gain more relevance in the future. While he was surprised by the extent to which common ownership influences market concentration measures, he pointed out that the impact on prices and quality was less important in size. By his calculations if all mutual funds left the airline industry, prices would drop by 2 percent and passenger numbers would increase by 3 percent. He would have liked to see a more detailed analysis of the impact common ownership has on product quality, a question of particular concern in multiproduct markets. Furthermore, concerning the case study provided by BlackRock's acquisition of Barclays Global Investors, he wondered whether the resulting changes in prices and quantities were due to reduced product market competition or rather changes in management style.

This article was written by the Systemic Risk Centre Research Officers: **Lerby Ergun, Kyle Moore, Katja Neugebauer** and **Andreas Uthemann**

THE CHANGING FACE OF FINANCIAL INTERMEDIATION AND THE SECOND PHASE OF GLOBAL LIQUIDITY

The Systemic Risk Centre (SRC) and Financial Markets Group (FMG) co-organised a special seminar with the Head of Research at the BIS, Hyun Song Shin.

Mr Shin took up the position of Economic Adviser and Head of Research at the BIS on 1 May 2014. Before joining the BIS, Mr Shin was the Hughes-Rogers Professor of Economics at Princeton University. In 2010, on leave from Princeton, he served as Senior Adviser to the Korean president, taking a leading role in formulating financial stability policy in Korea

and developing the agenda for the G20 during Korea's presidency.

During the seminar Mr Shin explained in greater detail the topics covered in the September issue of the BIS Quarterly Review concerning the shift from bank financing to capital market financing, especially its impact on emerging economies.



GIVING GUIDANCE ON FUTURE MONETARY POLICY IN A VERY UNCERTAIN WORLD

The Financial Markets Group (FMG) was delighted to co-host Professor David Miles (MPC member, Bank of England) when he spoke at LSE in September. His lecture was exceptionally popular with the Old Theatre at full capacity. For those unable to attend, a video of his speech is available online <http://tinyurl.com/mrvy5r9>.

Not so long ago, central bankers firmly believed that they should not explain their actions to the public. Since the 1990s, however, this mystery-man pose has been discarded and there has been a torrent of explaining. These days members of the Bank of England's Monetary Policy Committee churn out a cornucopia of speeches testified and televised to parliament. Summaries of their committee discussions are published, to be scrutinized by the public. In a speech at LSE on September 30, Professor David Miles, one of the independent Monetary Policy Committee members, asked what all this new communication can achieve. His answer: only a little.

The key reason is simple. Central bankers cannot tell the public what they will do in the future because the future is uncertain. If the Bank of England were to commit itself irrevocably to

a certain path of interest rates over the next twenty-four months, it would achieve high marks for clarity but low marks as a steward of prosperity, because it would be abandoning the option of modifying its course in the face of incoming data.

Promising a certain path of interest rates in the future might sound like an extreme option. But Professor Miles warned his audience that less specific forms of communication may also founder. Telling the public how the Monetary Policy Committee might react to certain events is harder than it sounds: current committee members cannot commit future committee members to a certain reaction function: and existing committee members are hard pressed to specify rules that would govern their decisions in unforeseen circumstances. Equally, the popular



practice of publishing a central bank's future expectations about interest rates may mislead more than enlighten. The probabilities of various future possible interest rates are unknown. To specify them is to claim excessive foresight.

Professor Miles was not arguing for a return to the Bank of England of a century ago, when Governor Montagu Norman did his best to appear as mysterious as possible. Modern central banks should try to communicate, by all means. It's just that the value their pronouncements will be modest.

This article was written by **Sebastian Mallaby** of the Council on Foreign Relations, who is visiting at the Systemic Risk Centre.

BRITISH ACADEMY ELECTS PROF VAYANOS AS FELLOW JULY 2014

Professor Dimitri Vayanos, Director of the Paul Woolley Centre and Head of the Department of Finance, has been elected a Fellow of the British Academy in recognition of his outstanding research.

Each year, the British Academy elects into its Fellowship UK-based scholars who are highly distinguished academics and who are recognised for their outstanding research and work across the humanities and social sciences.

Professor Dimitri Vayanos is among 42 new Fellows elected this year.

On announcing the new Fellows, British Academy President Professor Lord Nicholas Stern said: "I am delighted to welcome these fine researchers and scholars into our Fellowship.

Our Fellows are elected from across the UK for their distinction in the humanities and social sciences. Together they represent an unrivalled reserve of expertise and knowledge."

Commenting on the announcement Professor Vayanos said: "I feel very honoured to be elected at the British Academy, and to be part of such a select group of scholars. I am delighted that Finance research at LSE continues to be recognized at the highest levels".



Dimitri Vayanos (Director of the PWC and Head of Department of Finance)

The Financial Markets Group (FMG) has been fortunate to attract visitors from many prestigious institutions such as Stanford University, the University of Chicago, the Toulouse School of Economics and New York University. Visiting scholars stay for anything from between a week to an entire term, and during this time they form an important aspect of the FMG's research environment. For the 2014-15 academic year we are delighted to have three visiting scholars.

Visiting Scholars



Jim Goldman is a PhD candidate at INSEAD advised by Joel Peress, Denis Gromb and Maria Guadalupe. He holds an MS in Management from Université Libre de Bruxelles (Solvay Brussels

School) and an MSc in Economics and Finance from Warwick University. Jim's empirical research studies the interaction between financial markets and firms' organisational choices, with a particular focus on innovation, governance and multinational activity. Jim is visiting the FMG for the 2014-15 academic year.



Daniel Herbold is a PhD candidate at Goethe University Frankfurt under the supervision of Guido Friebe. He holds a BSc in Economics and an MSc in Quantitative Economics from Goethe

University Frankfurt. Daniel is a microeconomist who specialises in organisational economics and contract theory. He is especially interested in the provision of incentives in organisations and the economics of relationships. In his job market paper, Daniel investigates the impact of on-the-job search by workers on the incentive structure and the shape of optimal incentive contracts in organisations. Daniel is visiting the FMG for the duration of Michaelmas term 2014.



Jovan Stojkovic is a PhD candidate at University of Lugano and the Swiss Finance Institute University under the supervision of Alberto Plazzi. He holds an MSc in Quantitative Finance from the

Swiss Federal Institute of Technology, an MSc in Applied Mathematics and Statistics and a BSc in Applied Mathematics and Economics from State University of New York at Stony Brook. The primary interest of his PhD is to study how private firms interact with different financial

markets and how investors react to them. Jovan uses both theoretical and empirical approaches to address some of the following questions: "How much and why is IPO underpricing related to investors' flipping behaviour?", "How do diverse risks and premiums drive the price of CDSs issued on private firms, and are there arbitrage opportunities in their CDS-Bond bases?", and finally "How are CDS and equity markets segmented?" The answers lead to diverse explanations of new private firm-investor interactions, risks premiums, and novel limits to arbitrage opportunities. Jovan is visiting the FMG for the entirety of the 2014-15 academic year.

Visiting Academics

For the 2014-15 academic year we are fortunate to have Davide Fantino and Marcello Bofondi, both of Banca D'Italia, and Professor Carole Commerton-Forde of the University of Melbourne visiting the FMG.



Carole Commerton-Forde is Professor of Finance at the University of Melbourne. Her research is in the area of market structure, with a focus on market liquidity and market integrity. Her current interests include the impact of high

frequency trading and dark pools on market quality. Her research has been published in leading academic journals including the Journal of Finance and the Journal of Financial and Quantitative Analysis. Carole has previously held academic positions at the Australian National University, University of Sydney, New York University and was a Visiting Economist at the New York Stock Exchange. She has also acted as a consultant for a number of stock exchanges and market regulators around the world.



Davide Fantino is an economist in the Economics, Statistics and Research Directorate General of the Bank of Italy, where he works in the medium and long-term forecasting team. His

main fields of research regard the bank-firm relationships in the credit market, the innovative behaviour of the firms, the development of new forecasting tools and their use in micro and macroeconomic empirical models. Davide received both his PhD in Economics and his MSc in Econometrics and Mathematical Economics from the LSE.



Marcello Bofondi is a senior economist in the Financial Stability Directorate of the DG for Economics, Statistics and Research of the Bank of Italy, where he is in charge of the analysis of the structure of the

Italian banking system. In 2002 he was a visiting fellow at the Federal Reserve Bank of Chicago. His main research interests are on empirical banking, corporate finance and financial stability and his recent research focussed on the impact of the European sovereign debt crisis on credit supply. He holds a PhD in Economics from University of Naples "Parthenope", a MSc in Economics and Finance from University Pompeu Fabra and a BSc in Economics from University of Bologna.

FMG EVENTS

Events that have taken place since the publication of the previous Review in August 2013 (Spring/Summer issue)

Conferences

Economic networks and banking conference

3 October 2014

The changing face of financial intermediation and the second phase of global liquidity

6 October 2014

Start of European Banking Union: perspectives and challenges

10 November 2014

Public lecture

Giving guidance on future monetary policy in a very uncertain world

30 September 2014

Chair: Professor Wouter Den Haan (CfM)

Speaker: Professor David Miles (Bank of England)

Discussant: Professor Charles Goodhart (FMG/SRC, LSE)

Capital Markets

Workshops

Financial flexibility and corporate cash policy

8 October 2014

Jarrad Harford (University of Washington)

Contracting on credit ratings: adding value to public information

15 October 2014

Uday Rajan (University of Michigan)

Macroprudential bank capital regulation in a competitive financial system

22 October 2014

Marcus Opp (University of California Berkeley)

Liquidity and return reversals

29 October 2014

Kent Daniel (Columbia)

The power of the street: evidence from Egypt's Arab spring

5 November 2014

Tarek Hassan (University of Chicago)

Option-implied currency risk premia

12 November 2014

Jakub Jurek (Princeton University)

Robustly tractable optimal contracts

19 November 2014

John Zhu (Wharton)

Title TBC

26 November 2014

Haoxiang Zhu (MIT)

Governing through communication and intervention

3 December 2014

Doron Levit (Wharton)

Need for speed? Exchange latency and market quality

10 December 2014

Albert Menkveld (VU University Amsterdam)

London Financial Regulation Seminars

Lessons for financial regulation and supervision from Cyprus

29 September 2014

Panicos Demetriades (University of Leicester)

Restoring trust in the financial system

20 October 2014

David Vines (Balliol College), Nick Morris and Sue Jaffer

The post-1971 international monetary arrangement is dysfunctional: the source of turbulence is the large variability in cross border investment inflows

3 November 2014

Robert Aliber (University of Chicago)

Reconstructing Europe: beyond the politics of disintegration

10 November 2014

Athanasios Orphanides (MIT)

Alternatives cubed: alternative currencies, payment systems and finance providers

David Bholat (Bank of England)

24 November 2014

PhD Seminars

All seminars are given by current LSE PhD students

Delegated information acquisition and asset price

Shiyang Huang (Department of Finance/FMG)

9 October 2014

Co-pricing stocks and bonds

Wendy Yan (Department of Finance/FMG)

16 October 2014

A repeated principal-agent model with on-the-job search

Daniel Herbold (Goethe University/ visiting student in the FMG)

23 October 2014

The effect of foreclosure laws on securitisation: evidence from US states

Kristoffer Milonas (Stockholm School of Economics/ visiting student in Department of Finance)

30 October 2014

Mutual fund rebalancing and pricing pressure

Huaizhi Chen

6 November 2014

Career concerns and asset prices

Michael Punz (Department of Finance/FMG)

13 November 2014

Share buybacks and market microstructure invariance

Olga Obizhaeva (Department of Finance/FMG)

20 November 2014

If fail, fail less: banks' decision on systematic vs idiosyncratic risk

Una Savic (Department of Finance/FMG)

27 November 2014

Shooting for glory - spending cash on volatile inputs: evidence from the European football industry

Jesus Gorrin (Department of Finance)

4 December 2014

Operational management practices, agency conflicts, and productivity

Isabelle Roland (Department of Economics/FMG)

11 December 2014

Corporate Governance at LSE seminars

Short-termism, the market for corporate control and takeover regulation

Ian Gilham (Horizon Discover Plc),

David Kershaw (LSE), William Underhill

(Slaughter & May)

22nd October 2014

Myths and facts about women on boards

Renée Adams (UNSW)

17th December 2014

Paul Woolley Centre Brownbag Seminars

Multiple equilibria in noisy REE models

Gyuri Venter (Copenhagen Business School)

14 October 2014

Dark trading and price discovery

Carole Comerton-Forde (University of Melbourne)

28 October 2014

An equilibrium model of institutional demand and asset prices

Ralph Koijen (LBS)

11 November 2014

Information factor: a one factor benchmark model for asset pricing

Christian Julliard (FMG, LSE)

25 November 2014

Delegated information acquisition and asset pricing

Shiyang Huang (FMG, LSE)

9 December 2014

FMG PUBLICATIONS

Once a year we provide a summary of every research paper written by FMG staff and published in one of the top 8 journals during the year. The list below refers to papers published during 2014 and also those which are forthcoming.

Review of Financial Studies

Collateral-motivated financial innovation

Ji Shen, Hongjun Yan, and Jinfan Zhang
27 (10): 2961-2997

Attracting investor attention through advertising

Dong Lou
27 (6) pp. 1797-1829

Bond supply and bond excess returns

Robin Greenwood and Dimitri Vayanos
27 (3), pp. 663-713

Incentives to Innovate and the Decision to Go Public or Private

Daniel Ferreira, Gustavo Manso and Andre Silva
27 (1) pp. 256-300

Strategic investment and industry risk dynamics

Maria Cecilia Bustamante
forthcoming

The dynamics of innovation and risk

Bruno Biais, Jean-Charles Rochet, and Paul Woolley
forthcoming

Journal of Finance

Connected stocks

Miguel Anton and Christopher Polk
69 pp. 1099-1127

Sources of entropy in representative agent models

David Backus, Mikhail Chernov and Stanley Zin
69 (1) pp. 51-99

When uncertainty blows in the orchard: comovement and equilibrium volatility risk premia

Andrea Buraschi, Fabio Trojani and Andrea Vedolin
69 (1) pp. 101-137

Legal investor protection and takeovers

Mike Burkart, Denis Gromb, Holger M. Mueller and Fausto Panunzi
69 (3) pp. 1129-1164

The Wall Street walk when blockholders compete for flows

Amil Dasgupta and Giorgia Piacentino
forthcoming

Wall Street occupations

Ulf Axelson and Philip Bond
forthcoming

Rewarding trading skills without inducing gambling

Igor Makarov and Guillaume Plantin
forthcoming

Review of Economic Studies

Dissecting the effect of credit supply on trade: evidence from matched credit-export data

Daniel Paravisini, Veronica Rappoport, Philipp Schnabl, and Daniel Wolfenzon
forthcoming

FMG DISCUSSION PAPERS

DP 734 and AXA Paper 12

Network Risk and key Players: A Structural Analysis of Interbank Liquidity

Edward Denbee, Chrisitan Julliard, Ye Li, and Kathy Yuan

DP 735

Employment and wage insurance within firms: worldwide evidence

Andrew Ellul, Marco Pagano and Fabiano Schivardi

DP 736 and PWC Paper 41

Asset management contracts and equilibrium prices

Andrea Buffa, Dimitri Vayanos and Paul Woolley
DP 737

The value of informativeness for contracting

Pierre Chaigneau, Alex Edmans, and Daniel Gottlieb

FMG SPECIAL PAPERS

SP 233

Simecs, Ithace Hours, Berkshares, Bitcoins and Walmarts

Martin Shubik

FORTHCOMING PAPERS

The SSM sails past the starting line seeking high-quality supervision and level playing field

Ignazio Angeloni

VISITORS TO THE FMG

JULY – NOVEMBER 2014

Renée Adams (UNSW)

Robert Aliber (University of Chicago)

Ignazio Angeloni (European Central Bank)

Harald Benink (Tilburg University)

Tom Berglund (Hanken School of Economics, Helsinki)

David Bholat (Bank of England)

Marcello Bofondi (Banca D'Italia)

Franco Bruni (Bocconi University, Milan)

Santiago Carbo-Valverde (Bangor University)

Carole Comerton-Forde (University of Melbourne)

Daniele Condorelli (University of Essex)

Panicos Demetriades (University of Leicester)

Kent Daniel (Columbia)

Matthew Elliott (Caltech)

Davide Fantino (Banca D'Italia)

Maryam Farboodi (Chicago Booth)

Douglas Gale (NYU and Imperial)

Mila Getmansky (The University of Massachusetts Amherst)

Ian Gilham (Horizon Discover Plc)

Jim Goldman (INSEAD)

Jarrad Harford (University of Washington)

Tarek Hassan (University of Chicago)

Daniel Herbold (Goethe University)

Silvio Johannes (Bocconi University, Milan)

Jakub Jurek (Princeton University)

Marcin Kacperczyk (Imperial)

Ralph Koijen (LBS)

Doron Levit (Wharton)

Catherine Lubochinsky (Pantheon-Assas University, Paris)

Vincent Maagdenberg (ING)

Albert Menkveld (VU University Amsterdam)

Marcus Opp (University of California Berkeley)

Athanasios Orphanides (MIT)

Enrico Petriconi (Bocconi University, Milan)

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Norman Schuerhoff (Université de Lausanne)

Jovan Stojkovic (Swiss Finance Institute)

Niels Thygesen (University of Copenhagen)

William Underhill (Slaughter & May)

Gyuri Venter (Copenhagen Business School)

David Veredas (University Libre Brussels)

David Vines (Balliol College)

Clas Wihlborg (Chapman University, Orange County)

Haoxiang Zhu (MIT)

John Zhu (Wharton)

FMG Scholarships

The FMG is the proud host of, at current count, 23 LSE PhD students. Each is at a different stage in the PhD process but all make a huge contribution to the FMG, helping to make it the friendly and energetic research environment that it is. We are therefore extremely pleased to be able to provide financial support to a few students each year as they pursue their postgraduate research.

Through the FMG students can apply for two funding programmes: The Paul Woolley Centre Scholarship and The Deutsche Bank Fellowship. Both programmes offer up to £18,000 per year to cover tuition fees, and research and living costs. Each programme has its own requirements for candidates to meet but each accepts applications from non-FMG students.

As well as providing financial support, successful students are also often provided with desk space in the FMG, giving them access to an impressive annual events programme featuring speakers from top institutions, and enabling them to work closely with other students and researchers.

Applications for the Paul Woolley Centre Scholarship 2014-15 and Deutsche Bank Fellowship 2014-16 are open now and close on 27/02/15.

Keep an eye out for the official announcement which will be advertised around LSE and on the FMG website, URL to follow, from early December.

In the meantime you can read more about both programmes here:

www.lse.ac.uk/fmg/researchProgrammes/paulWoolleyCentre/scholarshipProgramme/home.aspx

FMG REVIEW

Editor: Frankie Clarke

Contributors: Alex Clymo, Lerby Ergun, Shiyang Huang,
Sebastian Mallaby, Kyle Moore, Katja Neugebauer,
Isabelle Roland and Andreas Uthemann

Photographs by: Simon Tuck

Designed by: LSE Design Unit
lse.ac.uk/designunit

The screenshot shows the homepage of the Financial Markets Group Research Centre at LSE. The header includes the LSE logo and the group's name. A navigation menu at the top provides links to various sections. A sidebar on the left offers a 'How to contact us' section with the group's address and contact information. The main content area features a large image of the Paul Woolley Centre, a description of the research centre, and several announcements including the 8th Annual Paul Woolley Centre Conference and an FMG Conference. A 'Corporate Governance' section is also visible at the bottom right.