

The Paul Woolley Centre for the Study of Capital Market Dysfunctionality



Dr Paul Woolley and Professor Dimitri Vayanos

The Financial Markets Group at the London School of Economics and Political Science launched **The Paul Woolley Centre for the Study of Capital Market Dysfunctionality** in September 2007.

The new Centre has been introduced as an FMG research programme and is funded through a generous donation of £4 million over six years by **Dr Paul Woolley**. **Professor Dimitri Vayanos** (Professor of Finance at LSE) is the Centre's Director.

The Paul Woolley Centre for the Study of Capital Market Dysfunctionality aims to understand the workings of capital markets and the social efficiency

of allocations these markets achieve. In standard models, markets operate efficiently in the sense that prices reflect assets' true values and capital is put to its best uses. The efficiency ideal seems, however, often violated in practice. For example, during the tech bubble of the late 1990s, prices of tech stocks rose to levels incommensurate with companies' earning potential. Such discrepancies between price and value can generate important misallocations of capital in the economy, for example, excessive capital was diverted to the tech sector during the bubble.

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The Paul Woolley Centre

Research at The Paul Woolley Centre for the Study of Capital Market Dysfunctionality has three main goals:

- To understand the causes of market dysfunctionality, eg, informational asymmetries between market participants, or frictions arising from the delegation of money management.
- To evaluate the consequences of dysfunctionality, eg, how frictions impact price behaviour and capital allocation, and whether the allocation of capital to the financial sector itself is efficient.
- To propose policy remedies for dysfunctionality so that the financial sector can better serve society at large.

The Centre's work-programme allows scope for a wide variety of activities, including the publication of a dedicated working paper series, conferences and seminars, a visitors programme and scholarships.



Howard Davies, Director, LSE

Howard Davies, Director of the LSE and a member of The Paul Woolley Centre's Advisory Board, said: 'We are very grateful to Paul Woolley for his generous and public-spirited support for this important research. The output will attract a lot of interest from financial market participants and regulators.'

Dr Paul Woolley, founder of The Paul Woolley Centre for the Study of Capital Market

Dysfunctionality, said: 'I am thrilled to have been able to establish the Centre here at the LSE with such a talented team. I believe the Centre's research into the social efficiency of capital markets will deliver ground-breaking results at the theoretical, empirical and policy level.'

Professor Dimitri Vayanos, Director of The Paul Woolley Centre for the Study of Capital Market Dysfunctionality, said: 'I believe that the research questions are of fundamental importance to finance, and are likely to become the dominant paradigm for Capital Markets research in the years to come.'



David Webb, Director of FMG at LSE

Professor David Webb, Director of the Financial Markets Group at LSE said: 'Recent episodes in global financial markets have highlighted the need for new research on the functioning and potential failure of financial markets in allocating capital. The new centre promises an original and challenging research agenda that will deepen our

understanding of a host of fundamentally important questions.'

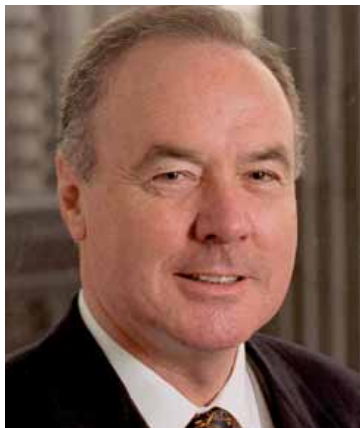
The establishment of the Paul Woolley Centre for the Study of Capital Market Dysfunctionality at the Financial Markets Group of the London School of Economics and Political Science took place in parallel with the introduction of two similar initiatives at the University of Technology in Sydney and The Institut d'Economie Industrielle (IDEI) of Toulouse University. **The Paul Woolley Centre** at the University of Technology in Sydney is lead by **Professor Ron Bird**, and **Professor Bruno Biais** is the Director of **The Paul Woolley Research Initiative** in Toulouse. Our research effort at the London centre in FMG will be conducted in synergy with the Paul Woolley initiatives in Toulouse and Sydney.

For more information please visit The Paul Woolley Centre website at
www.lse.ac.uk/PaulWoolleyCentre/

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Paul Woolley dialogue with Bob Nobay

15 September 2007



BN: Paul, your background as a one time academic, IMF staffer and fund manager allows for a rich perspective which motivates a challenging agenda for the Woolley programme of research, which you have generously made possible. What I would like to start off with, and there could be no better day than today, given the unravelling of 'Northern Rock', is to draw you back to the experiences which have informed and motivated your research agenda.

PW: If I were to try to capture in one sentence the research agenda for the centre, it is to address the question: 'Is society at large being well-served by its capital markets and financial institutions?'. Surprisingly, this question is hardly ever posed, let alone attempts made to answer it. There seems to be a tacit, and more or less universal, assumption that competitive markets are efficient markets and, since competition does not appear to be in short supply among financial institutions and investors, everyone seems to be happy.

Indeed, the notion of efficiency lies at the core of finance theory. The belief in the efficacy of competition propounded by the classical economists from before Adam Smith, was applied formally to finance in the shape of the Efficient Market Hypothesis in the 1960's. The ability of equity markets to deliver efficient pricing leading to the most productive allocation of resources, was unquestioned by academics through the 1980s and even now holds centre stage as the principal building block of academic finance. In the last decade or so the behavioural school has identified some qualifications to

the pure notion of efficient pricing but these do not even begin to challenge the social efficiency of capital markets. Meanwhile the practitioners – the investment bankers and fund managers – cannot believe their good fortune and are hardly likely to question the received wisdom.

My own fascination with the competitive state of equity markets began in 1966 when coming across a little gem of a book entitled 'Higgledy Piggledy Growth Again'¹. This was one of the first attempts to document the random walk of corporate earnings and prices, and to begin to draw out the implications. The book caused me to change the direction of my career. On leaving school, I had gone into a stockbroking firm working as one of the early equity analysts. The implication of randomness, that all publicly available information was immediately captured in share prices, left me convinced that the only way to add value for the firm's clients was to have access to insider information. Although the use of insider information was not then illegal, it seemed to be a dubious way of making a living. So I left the City to become a student at York University reading economics.

BN: I believe that you then stayed on at York University after graduating.

PW: Yes, it was a happy and successful economics department under Alan Peacock, who I still regard as a mentor. He offered me a lectureship there in 1970 and, amongst other things, I taught with conviction about the efficiency of capital markets.

Several years later I moved to the International Monetary Fund in Washington starting as a mainstream economist going off on Fund missions to fascinating countries, such as India, Sri Lanka and the Philippines. Then sitting at my desk one sultry August afternoon, I felt disinclined to address myself to the Egyptian balance of payments and idly looking in my in-tray found a report on the Fund's pension plan. To my surprise, I discovered that the pension

¹ Little, J D M, and A C Rayner 'Higgledy Piggledy Growth Again', Oxford: Basil Blackwell, 1966

About Paul Kerrison Woolley

Dr Paul Woolley's career has spanned the private sector, academia and policy-oriented institutions. He has worked at the International Monetary Fund in Washington and as a director of the merchant bank Baring Brothers. For the past 20 years he has run the European arm of GMO, the global fund management business based in Boston, US. Dr Woolley has now returned to academic life founding The Paul Woolley Centre for the Study of Capital Market Dysfunctionality. He is chairman of the Advisory Board for the Centre and will be a full time member of the research team.



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assets comprised only US equities and bonds. While at York I had become interested in the then relatively new topic of international portfolio diversification and it seemed surprising that the IMF pension plan with its multi-currency liabilities had no overseas investments. I wrote a critique that fell into the hands of Jacques de la Rosière, the managing director, and I soon found myself on the investment committee and a year or two later head of a new division handling the IMF's investments and borrowings.

The point of this anecdote is that it was through membership of the investment committee that I came into contact with Jeremy Grantham of GMO, the fund management firm. We had been looking for a replacement US equity manager and a consultant had given GMO as one of several to consider. After visits to a number of plush, white shoe firms, we found ourselves one day in 1979 at GMO's modest offices in Boston. I recall the occasion clearly; the meeting room contained only a dead rubber plant, a yellowed copy of the Wall Street Journal and the conference table collapsed during the meeting. But Jeremy spoke for two hours in a way I had never heard before by combining the insights of a practitioner with those of an academic. He had recently started the firm and there were two steps in the investment process. The first was a strictly quantitative valuation in the form of a dividend discount model that sought to establish the fair value of the principal industry and investment sectors of the US equity market. The second step was the work of the analyst using more traditional skills to identify individual stocks. To our surprise, Jeremy declined the Fund's business claiming that the potential illiquidity of the stocks they might want to buy limited the amount of assets the firm could successfully handle. We countered by suggesting GMO drop the second stage and simply concentrate on the more intellectually appealing, quantitative approach. Jeremy eventually agreed and the result was the creation of one of the pioneering attempts at quantitative, model driven investing.

BN: Did the results of this new approach measure up to your hopes and did it influence your views in any way?

PW: A huge yes to both questions. Statistical back-tests invariably show that stocks with low price-to-book and low p/e's generally outperform growth stocks on high price-to-book and high p/e's. The explanation is that corporate earnings growth regresses to the mean sooner than investors anticipate. The rate of growth of earnings of fast-growing companies tails off earlier than investors expect and those with poor returns on capital recover quicker, with the result that investors overpay for growth. So-called value stocks have outperformed growth stocks in most countries and over most decades and it is this class of stock that populates most quant-managers' portfolios.

This was the investment style of portfolios managed at GMO and in the early days the excess returns from value stocks were impressive. It sounds all rather straightforward but there were complications. The first concerned the data to be used for the back-tests and particularly the problem of dead companies that gave rise to survivorship bias. The data sources then available, left out companies that disappeared through takeover or liquidation and GMO had

to laboriously build back the dead companies so as to remove the bias. The other problem was that a value approach typically suffers quite badly in times of economic recession although over a full economic cycle it might outpace the broad index handsomely. There were many ways to fine-tune portfolios using the quantitative approach and it was huge fun doing this with talented mathematicians and physicists in those early days.

It was this experience with GMO, first as a client of the firm, then subsequently as a partner when I started its London office in 1987, that made me change my views about the efficiency of stock prices. I came to realise that there were systematic mispricings that could be exploited by a rigorous strategy. GMO had started with US equities but then used the same approach to manage European, Japanese, global and then emerging country equities. The firm's record over numerous product portfolios over many years is strong enough to warrant at least a footnote in any book on stock market efficiency.

BN: So things went well, but there must have been some difficult times.

PW: Yes indeed there were. The tech bubble of 2000 was a nightmare for a value manager. During the mid-90s, my partners and I had begun to believe that the pricing process for equities was becoming more efficient. Data sources were more reliable, trading costs were coming down and, most significantly, the quality of competition was rising, with fund managers using more sophisticated techniques for investing. But how wrong we were! The bubble drove TMT (telecom, media and technology) shares through the roof. At its peak this sector in the US and globally accounted for 45 per cent of total stock market capitalisation compared with less than 20 per cent before the bubble. Valuations were grotesquely inflated and there was also a flood of new issues at exorbitant levels. Fund managers with any sort of valuation model should have steered clear of the sector but few did. Unlike most, GMO stayed heavily underweight in technology shares and underperformed the index savagely in 1999 and the first quarter of 2000, the high point of the bubble. We lost something like 40 per cent of our assets from client withdrawals. Peer pressure, loss of nerve, short-termism – call it what you want – contributed to the actions of pension fund trustees and others who pulled money away from us even though may have they privately shared our assessments. The corollary is that over the six years following the bursting of the bubble, value managers stormed ahead in the performance stakes – indeed to the point where low price-to-book and low p/e stocks are now dear as a class. Such is the power of investor expectations, self-delusion and herding.

BN: This episode appears to have been a powerful influence on your thoughts and subsequent actions.

PW: The bubble had the effect of throwing into dramatic relief many of the issues and pressures that exist in capital markets. It resembled a laboratory experiment where all the interrelationships were magnified to an unusual degree. The experience led me to transfer my interest from exploiting the mispricings as a fund manager, to seeking to understand their causes. It got



me back to my obsession with the efficiency of financial markets, but this time on a broader front.

One of the prime suspects seemed to be the role of momentum. GMO had survived the bubble by recognising the need to have a momentum stream run alongside its valuation model. Irrespective of how good our valuation techniques might be, we realised it was essential not to ignore the ebbs and flows of investor sentiment in the short run. Something Keynes had warned about in Chapter 12 of the 'General Theory'².

The best way to do this is to employ a momentum strategy. Six month momentum – simply buying the 10 per cent of stocks that have risen most in the preceding six months – takes advantage of the trending observable in stock prices. It has a lower long-run return than a contrarian value model, but also lower risk in relation to the benchmark index. Momentum can actually have a higher information ratio and is a good way to keep tracking error within the guideline levels typically set by the clients – as well as helping the fund manager survive commercially. Without it, GMO would have been dead-right, but probably dead.

Momentum trading is pervasive in stock markets. It is adopted to reduce tracking error, to minimise losses as with portfolio insurance, or it may be a necessary response by a leveraged investor forced to sell as the value of his collateral falls. It can also be the most effective tool to add value for a short term investor acting on his own or in tacit collusion with others. There is also the momentum impact of manager selection, based on short-term performance; those with falling returns are fired and the recently successful hired.

Herding magnifies the trending in prices. A manager adopting a combination of value and momentum will be contributing to the distortion in prices with one part of his strategy and exploiting mispricing with the other. If this is representative of the entire market, prices are constantly subject to the competing forces of distortion and correction. Every participant is pursuing rational strategies to give each of them the best risk/return outcome but, collectively, the outcome may often be for mispricing and the misallocation of resources, as well as high levels of expenditure on asset management services. I characterise this as the paradox of private gain, public cost. The outcome may be socially inefficient.

Academics have never quite come to terms with why it is that investors do not step in to correct mispriced stock, sectors or markets. Practitioners, however, are constrained by the pressures of leverage, finite budgets, tracking error, risk control, short-termism etc that often cause them to observe other priorities. In recent years, there has been more interest in the limits to arbitrage as well as in the so-called agency problem as it applies to fund management, but there is still a lot more mileage in these areas.

² J M Keynes, 'The State of Long-term Expectation' in *'The General Theory of Employment, Interest and Money'*, Macmillan Cambridge University Press, Royal Economic Society, 1936



BN: As I understand it, in slightly different terms, we talk of the market which is a very complex social network, with gradations, linkages, liquidity etc. However, it is very hard to operationalise these interdependencies. These are important, though tough questions, to grapple with. You are saying that we might have individual actors or groups of actors behaving perfectly sensibly given constraints. Put them together and it is like a recipe – you break eggs to make an omelette, and the outcome can result in a bad omelette at the end of the day, depending on how the ingredients are mixed.

PW: Yes, I believe that the agency structure and contract arrangements in asset management can have a big influence on the way prices are set. The growth of hedge funds is a case in point. Hedge funds represent only around 2 per cent of the funds allocated to equity investment but they punch well above their weight in determining prices. The bulk of equity assets have always been managed in fully-invested portfolios with performance measured in relation to the benchmark index and with guidelines that preclude short sales, leverage and high risk. This seemed fine to investors when the equity indices were moving strongly ahead in the 1980's and 1990's. It seemed less appealing in the equity declines following the bursting of the bubble. Hence the initial stimulus to the emergence of market-neutral hedge funds for which the guidelines were quite different. Their performance is measured against cash, they have unrestricted freedom to leverage, sell stocks short and enjoy opaque reporting. They trade frenetically and now account for 30-50 per cent of the value of all daily share trades in the various national markets. The prices set in this polarised structure of unconstrained hedge-funds and tightly restricted long-only funds are likely to be different from those arising under the traditional structure. In my experience, the high, performance-related fees charged by hedge funds make their investors and managers impatient for quick results. This impatience is likely to encourage hedge funds into short-term momentum-based strategies, which the evidence of the high



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turnover in their portfolios rather supports. The outcome could well be for an increase in the trending pattern of stock prices.

Hedge funds, individually and collectively, also seem to use their freedom to engage in more predatory behaviour than their long-only counterparts by seeking to force outcomes in corporate deals and to attack weak companies, as in the Northern Rock affair. One thing is certain, hedge funds in many instances have become the price-determining marginal investors but it is open to doubt whether markets have become more or less efficient as a result.

I mentioned fees just now. Whether or not the scale and structure of the fund management industry is delivering efficient prices, the costs it imposes on end-investors is daunting. As a rough estimate, the costs of managing and trading the \$40 trillion of global equity capitalisation is around \$500 billion annually. Put this into the context of a set of pension funds with liabilities 25 years into the future. Active management of their assets, with its accustomed turnover of 100 per cent per annum, will involve pension funds exchanging holdings with other pension funds for no net gain in value but at a cost in terms of management fees and brokerage that reduces the end value of the fund by a quarter compared with the alternative of a passive index-tracking strategy.

BN: If indeed there is distortion or excessive volatility in stock prices, does this really matter for the real economy?

PW: There have been few empirical studies. I certainly hope we can try to investigate assertions such as 'bubbles are a necessary stimulus to the development and commercialisation of new technologies'.

I find it helpful to make a distinction between the micro and macro impacts of mispricing. The micro effects concern the consequences of relative share movements for the allocation of resources across companies and industrial sectors, whereas the macro effects relate to the impact of aggregate share prices on consumption, investment and growth. The macro analysis becomes complex because of the policy responses designed to offset the potential damage to confidence following a collapsing stock market. The present credit crunch, for example, is the latest link in the long tail of disturbances that began with the technology bubble, or even further back with the collapse of Long Term Capital Management in 1998.

Any study of efficiency of resource allocation in an advanced economy cannot overlook the growth of the financial services sector itself. By most measures finance has become the dominant industry sector accounting, for example for between 35-40 per cent of the aggregate corporate profits of the quoted corporate sector in the US, UK and globally, compared with only around 10 per cent forty years ago. What model can explain its dominance? It seems strange that an industry whose role is that of intermediation rather than the production of consumption goods and services should command such a high share of capital, profits and brains. Is it a coincidence that the industry whose role it is to allocate resources, retains the biggest share for itself?

I hasten to add that I am not a Trotskyite as one French colleague, on hearing this agenda, hopefully suggested. Rather, I see myself as an engineer viewing the financial sector as a vast machine. It seems misspecified, overly complex,

with parts seemingly in conflict with other parts, it drinks fuel, needs vast numbers of highly paid operators and occasionally blows up.

Most of my comments today have related to the equity markets because that is the field that I have most knowledge of. But I am keen that the work of the centre will stretch across the full spectrum of financial intermediation and the capital markets.

One of the prizes will be to devise a model that suggests the optimal size and structure of the financial sector as a whole.

BN: The website for the Woolley Centre says that, as well as trying to understand the cause and consequences of dysfunctionality, you hope to propose policy remedies so that the financial sector can better serve society at large. Could you tell me whether you see regulatory intervention as the principal remedy?

PW: I am quite optimistic that much can be done without resorting to a battery of regulation. Take fund management again. Some of the helpful measures here could be to encourage the use of passive index-tracking strategies, especially in equity investment; to reduce somehow the resort to momentum investing by agents; to reduce the amount of trading which is equivalent to extending the investment horizon of agents and principals, and to find investment vehicles that better match the needs of long-term investors.

Although there has been a move towards socially responsible investing in recent years, that has so far only taken the form of avoiding investment in companies that are socially or politically tainted. At present, it would be a step too far to expect investors, even large pension funds, to change their practices in ways that might improve the social efficiency of capital markets unless it gave rise to some obvious private gain. Fortunately there are steps that can be taken that meet the twin objectives of private and social gain.

One of these might be to encourage governments to issue a new class of investment, GDP bonds, that would give a return equal to the growth of real GDP. Capital markets have failed to develop an asset class that truly matches investors' needs. Most investors seek three objectives: long-term growth, inflation protection and low price volatility. Conventional bonds give a fixed money return but no protection against inflation. Equities offer long-term growth and the prospect of a higher overall return but at the cost of excessive volatility. Index-linked bonds hedge inflation but are without growth.

Investors are engaged in a perennial search for some combination of the three that they hope will fulfil their needs. They lurch between them as economic conditions and conventional wisdom dictate, collectively provoking the extreme price volatility that each is aiming to avoid.

GDP bonds would be alone in offering the attributes of growth, inflation-protection and stability. As such they would appeal to personal savers, pension funds as other long-term investors. The attraction for issuers is that the servicing costs of GDP bonds rise and fall in line with tax revenue. There are technical issues to be overcome but work is going to overcome them. It really is worthwhile since GDP bonds offer the ultimate passive investment.



BN: You earlier pointed to the damage you felt was done by momentum investing. Are there any steps that could be introduced to limit its use?

PW: It seems strange that end-investors should issue contracts that have the effect of encouraging the agent simply to follow trends and pay him good money to do it. Remedies might include reporting data that revealed the extent of the agents' use of momentum, much as they now do for tracking error, volatility etc. In the past, tax-exempt investors in the UK used to jeopardise their status if they indulged in excessive turnover on the grounds they were trading rather than investing in shares. Maybe this could be revived.

Investors would be prepared to commit a higher proportion of their assets to passive index-tracking strategies once they saw a more stable market and fewer apparent opportunities for gain.

Finally, I don't believe even serious professional trustees have a proper understanding of the real odds of winning, net of fees, from active management. Either that or they got very high utility from entering the tournament.

BN: Which comes back to this notion that you are clearly exercised by a very old economic problem which is social efficiency. You are interested in fundamental economic issues, difficult issues. The FMG is very much part of LSE tradition, and finance is still anchored to economics, in contrast to the usual business school setting. Your generosity in terms of financial support is to places such as the LSE and Toulouse, another archetypal serious economics orientated finance group.

PW: I think we should all be a little uncomfortable with the current state of finance theory. The behaviouralists have helped loosen the grip of efficient market proponents by introducing the idea that psychological biases lead to systematic mispricing. But what we observe is often far from systematic, more like systemic distortion. Also, as I have tried to point out there are other features of financial markets, such as structure, scale and fees that remain unexplained or unconsidered.

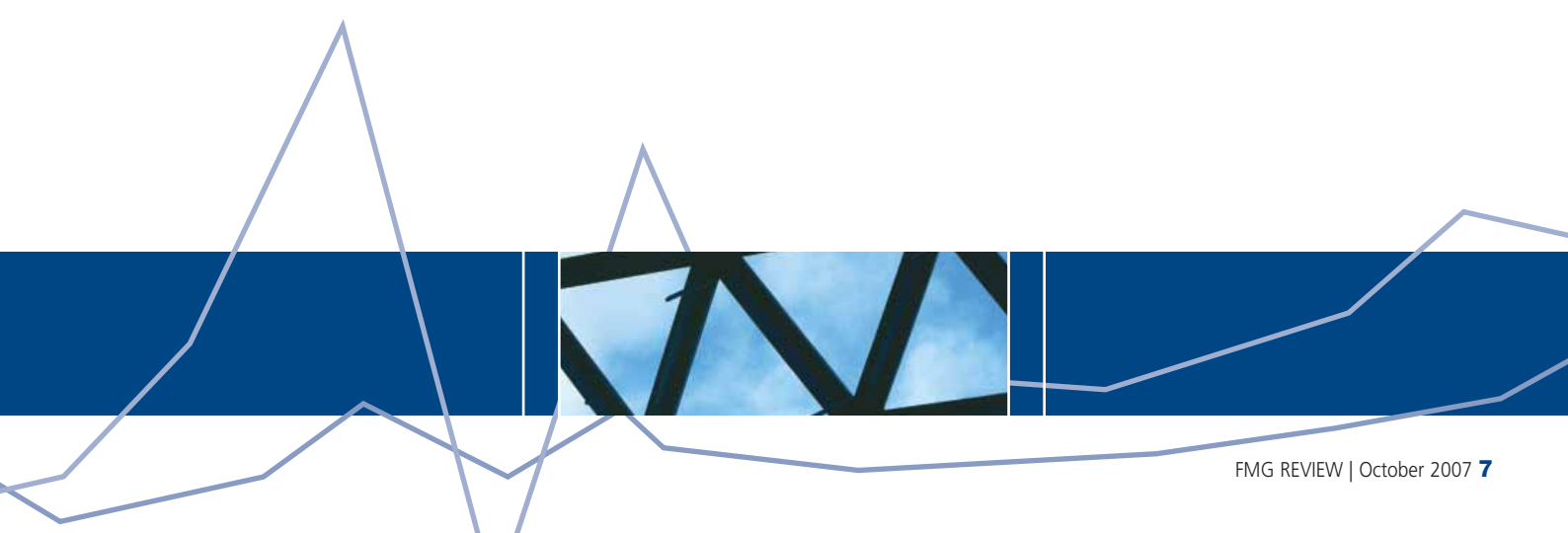
An alternative conceptualisation is that all participants are acting rationally and optimally in the pure economic sense, but that the outcomes may be socially sub-optimal. Adam Smith's dictum that the pursuit of private gain leads to the highest utility for all may not, after all, apply in financial markets. I have chosen to use the term dysfunctionality to try to capture the intended direction and originality of the research. It is a huge pleasure that Dimitri Vayanos shares my vision and has gone so far as to say that he believes that dysfunctionality will become the dominant paradigm in finance for decades to come. I am very grateful to LSE and the FMG, personified by David Webb, for having accepted the idea for the centre. LSE with its traditions and strengths in economics, finance and social efficiency is the perfect base.

I also regard the links with the sister centres at Toulouse and UTS as important and a source of fruitful collaboration – plus a little competition even. At Toulouse, where the director of the centre³ is Bruno Biais, finance and economics are also treated as interrelated and there is similar interest in the general equilibrium approach and concern about the social optimum. At UTS, where the centre⁴ is led by Ron Bird, an old colleague from my GMO days, the skills and interests are complementary to those of LSE and Toulouse in that there is a stronger emphasis on empirical investigation conducted by academics with a good command of the institutional framework.

At all three centres, I sense a frisson of excitement about what can be achieved by all of us in the coming years.

³ The Paul Woolley Research Initiative at IDEI, Toulouse. Bruno Biais is also a member of The Advisory Board of The Paul Woolley Centre for the Study of Capital Market Dysfunctionality at LSE

⁴ The Paul Woolley Centre for Capital Market Dysfunctionality, University of Technology, Sydney.





Charles Goodhart (FMG/LSE)

At the time of going to press, the by now familiar 'Northern Rock' episode was unravelling. **Professor Charles Goodhart**, Programme Director of the FMG Regulation and Financial Stability Research Programme, and an acknowledged expert in monetary policy and regulation issues, contributed to a series of press and broadcasting commentary on the broader issues following Northern Rock. Below, we reproduce his Comment article, which appeared in the September 15th issue of the Financial Times. On 1 October the FMG hosted a special one day conference on questions of financial stability and regulation, as part of the London Financial Regulation Seminar. The proceedings will appear in the next issue of this Review.

The Financial Problem is not Liquidity; it is Capital

By Charles Goodhart

There are several odd features about current financial difficulties. It appears to have been initiated by relatively minor problems, rising defaults, in a subsection of the US housing market when the world's economy was otherwise in splendid shape. If this is enough to cause the financial system to have a 'heart attack', there must be underlying systemic problems. What are these?

First, there is a lack of information and transparency. Regulators, in their Financial Stability Reviews, have been complaining for years that financial innovation has made it difficult for them to observe where risk has become concentrated. What was overlooked was that it made risk just as difficult for anyone else to observe. So once risk aversion started rising, everyone comes under suspicion. How does one know how many SIVs your bank has tucked away off-balance-sheet?

Second, one, usually valuable, source of information, ratings agencies have been criticised for failing to provide good-enough up-to-date ratings assessments, and many investments are based on agencies' ratings rather than on direct credit analysis. When ratings come under suspicion, entire funds and institutions likewise become suspect.

Rather than a blanket call for regulation, we should ask what information is required to keep markets operating efficiently and how to get it.

The third key issue is that, just as the central bank is lender of last resort to banks, so banks are lenders of last resort to capital markets, especially to their own clients in such markets. When those markets seize up, whether private equity deals or asset-backed commercial paper, contingent claims on banks become transformed into huge loan obligations. Such sudden extensions of credit can cause banks to reach prudent lending limits quickly. Whether regulators have had sufficient information on, and control over, such contingent commitments is a question needing answers.

The problem is not the availability of cash, (liquidity in that sense). In order to keep market rates close to the policy rate, central banks have to inject whatever the banking system wants. Indeed Barclays has stated that it is 'awash with cash', as are probably most other commercial banks. Nor does it matter in which market the central bank operates; so long as the central bank wants short rates at a particular level, it must inject a given quantity of cash; whether by operations in the overnight, one-

week, three-month, or consol market is a second-order issue. Of course, a central bank could target three-month Libor, rather than a one-week or overnight, rate, but doing so now would be tantamount to a large cut in the existing policy rate.

Nor is it a good idea for central banks to widen the range of assets acceptable as collateral. Here my views are much closer to those of Raghuram Rajan (FT, 7 September) and of Tim Congdon (FT, 11 September) than to those of Willem Buiter and Anne Sibert (FT, 6 September). Central banks want commercial banks to hold a stock of undoubtedly liquid assets. If every time a market seizes up, the authorities move to liquefy the assets involved, in this case ABCP, what incentive is left for banks to hold lower-yielding TBs or government bonds? A liquidity bail-out has just as severe a moral hazard consequence as a capital bail-out.

Meanwhile the contingent commitments are coming home to roost. The financial system needs the banks to lend more, possibly much more, if only temporarily. Banks are currently

struggling to find the necessary funding. No wonder that they will not lend to each other; they need all their spare resources for themselves. If the primary reason for the high interest rates in the three month inter-bank market had been counter-party credit risk, we should have seen much more tiering of rates, between different categories of banks, than has been reported.

But in the longer term the underlying problem will become capital availability, not funding problems, and certainly not cash liquidity. Worsening risk raises capital adequacy requirements, and lower profits and higher write-offs reduce the capital base. Basel II raises the sensitivity of CARs to risk. When it is introduced in Europe at the start of 2008, many banks will find their prior cushions of capital, above the required limit, eroding fast. That could extend and amplify the crisis.

Several of my colleagues at the Financial Markets Group foresaw the dangerous procyclicality of Basel II. Our foreboding may turn into reality sooner than we expected.

Press and Broadcasting commentary on Northern Rock by Charles Goodhart

Newspapers

Financial Times	14 September Comment article, 'The Problem is not Liquidity; it is Capital'
News of the World	16 September Business Pages, 'Northern Rock'
Financial Times	20 September Comment article, 'A better way to protect depositors'

Radio

BBC	14 September, 8.20am Today Programme, immediately after Chancellor
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BBC	20 September, 8.30am Five Money Programme
BBC	24 September, 5pm World Services

TV

BBC	14 September
Channel 4 News	17 September
BBC World Service	20 September
BBC News	20 September



The London Financial Regulation Seminar



The Financial Crisis Conference

1 October 2007

Programme

2-2.30pm **Charles Goodhart**, (FMG, LSE)
'A brief history of the crisis.'

2.30-3pm **Willem Buiter**, (LSE)
'What should the authorities have done?'

3-3.30pm **Brandon Davies**, (GARP)
'What happened in markets?'

3.30-4pm **Jon Danielsson**, (FMG, LSE)
'Implications for Financial Regulation.'

4-4.30pm **Gillian Tett**, (Financial Times)
'The role of the media; and the effects on the future of the banking industry.'

4.30-4.45pm **Ros Altmann**, (LSE)
'Savers and the crisis.'

4.45-5pm **Matt King**, (Citi)
'The effect of the crisis on the future of credit products.'

5-6pm **Round-table**
Chair Charles Goodhart with the above and **Paul Woolley** (FMG, LSE)

An event summary and the complete conference is available to **watch online** on the FMG website at <http://fmg.lse.ac.uk>

This Conference was organised as part of the London Financial Regulation Seminar.

The organisers of this seminar series are (in alphabetical order):

Professor E Philip Davis, Professor of Economics and Finance, Brunel University;
Professor Charles Goodhart, Professor of Banking and Finance, Financial Markets Group, London School of Economics; **Dr Thomas Huertas**, Financial Services Authority, **Professor Rosa Maria Lastra**, Professor of International Financial and Monetary Law Centre for Commercial Law Studies, Queen Mary, University of London; **Dr Alistair Milne**, Senior Lecturer in Banking, Cass Business School; and **Professor Geoffrey Wood**, Professor of Economics, Faculty of Finance, City University Business School.

For more information, please call 020 7955 6301

For details of any changes to the scheduled programme, please see the FMG's website at <http://fmg.lse.ac.uk>

World Economy and Finance Research Programme

Cycles, Contagion and Crises Conference

28-29 June 2007



On 28-29 June 2007, the FMG hosted a conference on 'Cycles, Contagion and Crises' as part of its research project on 'The Stability of the Global Financial Systems: Regulation and Policy Response' funded by the ESRC research programme on 'World Economy and Finance'. Organised by Professors **Charles Goodhart** (FMG/LSE) and **Hyun Shin** (FMG/LSE & Princeton University), the main objective of the event was to report research in this field by established academics alongside that of FMG junior researchers affiliated with the project who received valuable comments from an audience of senior researchers and practitioners. The Conference covered topics under all three themes of its title:

- **Cycles:** Financial factors have long been recognised as one of the driving forces of the propagation and amplification of aggregate output shocks. Papers in this theme explored different aspects of this relationship from the linkages between liquidity and financial cycles through to sudden stops and the role of credit constraints in emerging market economy business cycles.

- **Contagion:** The widespread diffusion of the financial crises of the 1990s led to a large theoretical and empirical literature on the causes and consequences of financial contagion. Papers under this theme examined how the increasing interlinkages and innovation in modern financial markets influence how systemic crises can spread within domestic financial systems.

- **Crises:** Papers focused on the costs of crises, both domestic banking crises and sovereign debt crises, and the optimal ex ante and ex post policy responses. For example, how can sovereign debt markets, monetary policy and banking regulation (such as liquidity regulation) and regulatory practices, eg, forbearance, be reformed to minimise the magnitude and risks of such costs.

The event was run in parallel with a conference on 'Finance and Development' organised by **Panicos Demetriades** (University of Leicester) and falling under the same ESRC programme.

The lead speaker in the first session was **Jean-Charles Rochet** (Toulouse University) with research reports by **Gara Minguez Afonso** (Princeton University) and **Lev Ratnovski** (Bank of England). They brought to the fore the discussion on the pro-cyclicality of international lending and sudden stops, market liquidity and bank liquidity management. Jean-Charles Rochet commenced by introducing a novel approach to the modeling and



Patrick Honohan (Trinity College Dublin)

understanding of sovereign debt crises. Instead of focusing on the incentives of governments to repay, as most of the literature does, he considers that governments always try to repay the debt, if they can. However, the governments are considered to be myopic, a fact that induces them to borrow as much as possible without paying attention to the burden of future

payments. As a result the governments end up borrowing as much as they can until a sudden stop of lending occurs, generating default and economic crises. The second speaker, Lev Ratnovski, focused on the sources of financial instability that arise from the mismanagement of liquidity and transparency carried by commercial banks. He claims that both are important components of risk management, as liquidity buffers provide complete insurance against small liquidity needs, and transparency offers partial insurance against large ones. He notes that, due to leverage, banks may under invest in both types of insurance, and that while liquidity buffers can be imposed, an adequate level of transparency may be more difficult to regulate. The final speaker of the session was Gara Minguez Afonso, who discussed the relationship between new investors and market liquidity in a search-based model of asset trading. She computes explicitly the price at which investors trade with each other, and shows that it is higher as potential investors are attracted to the market, buyers have more bargaining power and liquidity shocks are less frequent.

In the second session, **Marcus Miller** (Warwick University) addressed issues of crises and recovery in emerging economies. Assessing the experience of Asian economies (eg, Korea) since the beginning of the nineties, he argued that drastic fluctuations in economic activity are not restricted to capital flow sudden stop phenomena or to 'Phoenix miracles', where, following Calvo, factor productivity falls in recession, but rises promptly thereafter.

Cycles, Contagion and Crises Conference

He argued that the real miracle in East Asia was economic growth. It can be interrupted by external shocks and restarted after recession, although there is an irreversible decline in level of trend GDP. **Anja Shortland** (Brunel University) presented research joint with Amil Dasgupta (FMG/LSE) and Roberto Leon-Gonzales (University of Leicester), on regions and the directions of spread of currency crises. Using Bayesian methodologies, they examine currency crises in the nineties and find an important role for institutional similarity to the ground-zero country (as measured by quality-of-governance indicators) in determining the direction of contagion in emerging market currency crises. Trade competition and financial links are other drivers, but rather sensitive to periods and priors. Therefore, they favour the 'wake up call' hypothesis for financial contagion. **Ossip Huhnerbein** (Munich Graduate School of Economics) reported on research on the impact of collective action clauses (CACs) in emerging market sovereign debt. His regressions suggest CACs have positive and negative effects on bond spread in secondary markets. The former are direct, whereas the latter come from the interaction with share of bonds with CAC. He interpreted the former as revealing the seniority of bonds without CACs. Professor Miller and other discussants found the impact of CACs on spreads interesting and suggested further clarification of the results by considering the overall effects of a CAC which may well be negative above a threshold in the share of debt including CACs.



Ashley Taylor (FMG/LSE)

On day two of the conference, the lead speaker of the first session, **Patrick Honohan** (Trinity College Dublin) presented a paper entitled 'Should bank supervisors in developing countries exercise more or less forbearance? He began by explaining the trade-off between regulatory forbearance potentially deepening banking crises versus the potential that a lack of forbearance could lead to bank closures thus precipitating a crisis. Whilst in theory forbearance may yield benefits in more sophisticated regulatory environments the paper considers whether this applies to developing economies. Three key differences in developing economies were emphasised: namely worse information on banks' balance sheets; less interdependence between banks; and greater agency problems affecting regulators. Although empirical evidence on the effectiveness or risks of policies of forbearance are difficult to obtain the above-mentioned features of their financial systems suggest that forbearance should be more restrictive in developing economies. The first research report presented by **Ashley Taylor** (FMG/LSE) joint with Gregor Irwin, Adrian Penalver and Chris Salmon (Bank of England) entitled 'Dealing with country diversity:

challenges for the IMF credit union model'. The paper examines the implications for the political determination of Fund subscriptions of changes in the characteristics of members, in particular their likelihood of crises. The discussion, led by Patrick Honohan, suggested that greater attention should be placed on spillovers amongst countries and conditionalities associated with IMF funding. The final paper was presented by **Sarquis Sarquis** (FMG/LSE and Graduate School of Diplomacy, Brazil) on 'Interest Rate and Business Cycles in a Credit Constrained Small Open Economy'. The paper was motivated by VAR analysis of Brazil's business cycle which suggests that shocks to the exogenous external real interest faced by the economy drive much of business cycle volatility. The paper then presents a standard business cycle small open economy model with the addition of an endogenous collateral constraint on foreign liabilities. The proposed model reveals considerable propagation of shocks, particularly in relation to interest rate innovations, and appears to match most of the empirical regularities presented. In the discussion the question of how the interest rate drives the results was explored.

The second session was led by **Jagjit Chadha** (University of Kent) who focused on explaining documented business cycle patterns of the main aggregate variables by studying the effects of certain financial frictions. The lead speaker presented work that tries to account for two important puzzles in international business cycle theory: the absence of complete international risk sharing and what is usually referred to as the 'exchange rate disconnect', or the weak relationship between the exchange rate and virtually any macroeconomic aggregate or fundamental suggested by international finance theory. The author introduces a sophisticated model that is able to shed light on both puzzles, and finds that the key factors are the different role of traded vs. non-traded productivity shocks, and the occurrence of preference shocks and expectational errors in exchange rates. The first research report of the session was introduced by **Ander Perez** (FMG/LSE), who presented joint work with Prasanna Gai, Sujit Kapadia, Stephen Millard (Bank of England) on 'Financial Innovation, Macroeconomic Stability and Systemic Crises'. The paper studies the effect of two recent trends, namely the decrease in macroeconomic volatility and the ongoing process of rapid financial innovation, on the likelihood and potential scale of systemic crises. They find that these changes lead to a financial system that is more resilient to moderate shocks and hence that crises are less likely, but that should a sufficiently severe shock occur, the severity of the crisis could be significantly larger. The discussant highlighted several policy implications of the study. The last speaker of the session, **Oriol Aspachs Bracons** (La Caixa, Spain) presented a paper entitled 'Financial and Real Business Cycles'. The paper studies the implications of including a micro-founded banking sector in an otherwise standard Dynamic Stochastic General Equilibrium model. Banks have a special role in screening and monitoring borrowers, and chose the optimal effort to put into this activity, which translates into a hiring and training decision of workers to perform that task. Labour market conditions affect this decision and this has implications for the cyclical lending behaviour of banks. The discussion



queried the importance of labour as an input into banks' activities, but stressed the importance of this work in moving us closer to the introduction of banks' special role in the standard macroeconomic models.



Hyun Song Shin (Princeton University)

In the final session of the conference, **Hyun Song Shin** (Princeton University) presented co-authored work with Tobias Adrian (Federal Reserve Bank of New York) on 'Liquidity and Financial Cycles'. First, he documented evidence that leverage is strongly procyclical for financial intermediaries. He then showed that expansions and contractions of balance sheets can forecast shifts in

risk appetite measured by the difference between the VIX index and realised volatility. Hyun Shin highlighted the significance of this result and discussed a novel notion of aggregate liquidity in financial markets as determined by the rate of growth of aggregate balance sheets. The second talk of the

session was delivered by **Camille Cornand** (BETA/CNRS – Université Louis Pasteur Strasbourg), who presented joint work with Romain Baeriswyl (Ludwig-Maximilians Universität München). The paper, entitled 'Monetary Policy and its Informative Value', studies the welfare implications of economic transparency. Recognising the dual role of monetary policy as both a stabilising central bank instrument and a signal about the state of the economy, Camille Cornand discussed the optimal monetary policy and the optimal disclosure strategy. She argued that greater transparency is desirable when the level of complementarities is low, when supply shocks are not too volatile, when the central bank is more inclined towards stabilising prices than output, and when firms have relatively precise information about the economy. The final presentation, by **Nikolaj Schmidt** (FMG/LSE) on 'Foreign Bank Entry and Credit Market Segmentation', analysed how local credit markets in developing economies are affected by the entry of international financial intermediaries. He stressed that the entry of these international banks allows the provision of funding to solvent firms during liquidity shortages in the local financial system. Features of the borrowers' business, rather than information about the borrower, then become the driver of the clientele effects following foreign bank entry. He then discussed how foreign bank entry, however, increases the vulnerability to liquidity shocks of the domestic financial sector.



This Conference was organised as part of the ESRC-funded research project on the Stability of the Global Financial Systems: Regulation and Policy Response of the ESRC 'World Economy and Finance Research Programme' (www.worldeconomyandfinance.org/)

Corporate Governance at LSE

Forthcoming Corporate Governance Research Debates

'The Governance of Executive Pay'

Martin Conyon (ESSEC)

29 November 2007, 5.30pm

The objective of a properly designed executive compensation package is to attract, retain, and motivate CEOs and senior management. The standard economic approach for understanding executive pay is the principal-agent model. This paper documents the changes in executive pay and incentives in US

firms between 1993 and 2003. We consider reasons for these transformations, including agency theory, changes in the managerial labor markets, shifts in firm strategy, and theories concerning managerial power. We show that boards and compensation committees have become more independent over time. In addition, we demonstrate that compensation committees containing affiliated directors do not set greater pay or fewer incentives.

Attendance to the Research Debates is by invitation only. Further information is available on the Corporate Governance at LSE website:
www.lse.ac.uk/collections/corporateGovernance/

Capital Markets Workshop

The Capital Markets Workshop meets regularly throughout the academic year at 5pm on Wednesdays in room R405, Lionel Robbins Building, LSE. Please see the FMG website for updates and changes in times or locations.

Michaelmas term 2007

3 October	Lu Zhang (University of Michigan)	14 November	Gabriella Chiesa (University of Bologna)
10 October	Amir Yaron (University of Pennsylvania)	21 November	Rajnish Mehra (University of California, Santa Barbara)
17 October	Adair Morse (University Chicago)	28 November	Elu von Thadden (University of Mannheim)
24 October	Denis Gromb (London Business School and LSE)	5 November	Joel Peress (INSEAD)
31 October	Michael Roberts (University of Pennsylvania)	12 December	Ronnie Sadka (University of Washington)
7 November	Emmanuel Farhi (Harvard University)		

The updated schedule is available on the FMG website at <http://fmg.lse.ac.uk>. If you require further information, please call 020 7955 6301/7891 or email fmg@lse.ac.uk

The Capital Markets Workshop is funded by:
The Department of Finance, LSE

The Suntory and Toyota International Centres for Economic and Related Disciplines (STICERD), LSE

FMG Students Job Market Candidates 2008

Jan Bena

Research Interests: Financial constraints and product market competition. Real effects of financial development: corporate growth, capital allocation, efficiency. Corporate finance: ownership structures and governance, risk management
Job market paper: Competition and Innovation: Finance Related Explanation of the Inverted-UEffect. Email: J.Bena@lse.ac.uk

Ander Perez

Research Interests: Macroeconomics, Financial Economics, Monetary Economics and Banking
Job market paper: Insurance Cycles and the Financial Accelerator
Email: A.Perez1@lse.ac.uk

New FMG Students

The following students have joined the FMG in the Academic year 2007-08.



Cláudia Custódio

Cláudia Custódio, is a PhD student in Management and has joined FMG in June 2006. She did an MSc in Finance at IBS (ISCTE Business School) in Lisbon where she was also teaching Financial Accounting and Corporate Finance. Her main research area is corporate finance and currently she is working in corporate diversification. Other research interests also include corporate governance and cash holdings.



Vincent Fardeau

Vincent Fardeau started his PhD in 2006 in the Department of Finance and joined the FMG as a Deutsche Bank PhD fellow. He is supervised by Dimitri Vayanos and Rohit Rahi and his current research interests include the asset pricing implications of delegated portfolio management and financial innovation. Before joining the LSE, Vincent graduated from HEC (Paris), EHESS (Delta) and Sorbonne University. He spent one year working in investment banks in 2003-2004.



Marcelo Ferman

Marcelo Ferman is 3rd-year PhD student at the department of Economics, LSE. He is from Rio de Janeiro, Brazil, and completed his undergraduate degree in Economics in 2001 at the Catholic University of Rio de Janeiro (PUC-Rio). He then worked for two years at the macroeconomic group of a hedge fund in Brazil, and in 2004 came to the London. He completed his Msc in 2005 focusing on Monetary

Economics. In 2006 he started his MRes/PhD in Economics at the LSE and received an MRes degree this year. His research interests lie on exploring the role of asset prices in macroeconomic models. In particular, his research focuses on the excess return on nominal bonds relative to their real – inflation indexed – counterparts, that is, the breakeven inflation rate. His objective is to understand the links between breakeven inflation rates and monetary policy decisions or, more generally, monetary regimes.



Elisabeth Foote

Elisabeth Foote, is a PhD student in Economics. She did her MPhil at Oxford and spent last year at Harvard as a Kennedy Scholar. Her research interests include: asset pricing, liquidity risk, default risk, option-pricing and inter-sectoral risk transfer.



Daniel Metzger

Daniel Metzger is in the second year of the Econ MRes/ PhD program at LSE. His research interests lie in the area of Contract Theory, (Empirical) Corporate Finance, and Psychology and Economics. At FMG he will be working for 'The Paul Woolley Centre for the Study of Capital Market Dysfunctionality'. Before starting the program at LSE in September 2006 he studied Economics at UC Berkeley and University of Bonn (MA 2006, University of Bonn) and Mathematics at University of Bonn and Warwick University (MSc 2003, Warwick University).



Yuki Sato

Yuki Sato is a 3rd-year PhD student at the department of Economics. Yuki is from Yokohama, Japan and completed his BA and MA in Economics at Keio University, Japan. He completed an MSc in Economics at UCL in 2006, and just earned MRes in Economics from LSE this year. At FMG, he has joined The Paul Woolley Centre for the Study of Capital Market Dysfunctionality. His research interests are in theories of capital markets: eg, bubbles, herding, delegated portfolio management. He is also interested in their implications for macro economy.



Terence Teo

Terence Teo joined the PhD in Finance programme in 2006, after graduating from the MSc in Finance and Economics programme at the LSE with distinction. His current research interests are financial econometrics, volatility forecasting and asset pricing. Before joining the LSE, he worked in the finance industry in Singapore for four years. He obtained a Bachelor of Business Administration with First Class Honours at the National University of Singapore in 2001.

Discussion papers



DP 579

Money Illusion and Housing Frenzies

Markus K Brunnermeier, Christian Julliard

A reduction in inflation can fuel run-ups in housing prices if people suffer from money illusion. For example, investors who decide whether to rent or buy a house by simply comparing monthly rent and mortgage payments do not take into account that inflation lowers future real mortgage costs. We decompose the price-rent ratio into a rational component – meant to capture the proxy effect and risk premia – and an implied mispricing. We find that inflation and nominal interest rates explain a large share of the time-series variation of the mispricing, and that the tilt effect is very unlikely to rationalize this finding.

are destabilizing and market liquidity and funding liquidity are mutually reinforcing, leading to liquidity spirals. The model explains the empirically documented features that market liquidity (i) can suddenly dry up, (ii) has commonality across securities, (iii) is related to volatility, (iv) is subject to ‘flight to quality’, and (v) comoves with the market, and it provides new testable predictions.

departing from best practice. The paper suggest two areas where the Code could be strengthened with greatest potential benefits ie, a three-tier approach like in Austria and steps to foster greater shareholder attention to explanations.

DP 580

Market Liquidity and Funding Liquidity

Lasse Heje Pederson, Markus K Brunnermeier

We provide a model that links an asset’s market liquidity – ie, the ease with which it is traded – to traders’ funding liquidity – ie, the ease with which they can obtain funding. Traders provide market liquidity, and their ability to do so depends on their availability of funding. Conversely, traders’ funding, ie, their capital and the margins they are charged, depend on the assets’ market liquidity. We show that, under certain conditions, margins

DP 581 (Corporate Governance Series No 001)

Corporate Governance in the UK: is the Comply-or-Explain Approach Working?

Antoine Faure-Grimaud, Valentina Bruno, Sridhar Arcot

This paper examines the effectiveness of the ‘comply or explain’ approach to corporate governance in the UK. Using a unique database of 245 non-financial companies for the period 1998-2004, the paper performs an analysis of both the degree of compliance with the provisions of the corporate governance code of best practice (Combined Code), and the explanations given in case of non-compliance. The quality of explanations is ranked based on their information content. The analysis reveals an increasing trend of compliance with the provisions of the Combined Code, but also a frequent use of standard and uninformative explanations when

DP 582 (Corporate Governance Series No 002)

The Role of Prestige and Networks in Outside Director Appointment

Thomas Kirchmaier, Michael Kollo

We study the role of prestige and social networks in the selection of outside directors, and the subsequent effect on firm value. Both prestige and social networks may act as barriers to good corporate governance, as merit based candidates might be disadvantaged compared to candidates with a similar social background to the incumbent board. Using a unique database of UK directors, Lord or Sir titles (one of the proxies we use for prestige) and networks, we find evidence of such self-selection amongst outside directors that hold the same title. Contrary to popular suspicion, appointments of prestigious outside directors have no effect on firm value, with the exception of appointments to very large boards. We find that titled directors are more likely to hold more directorships, and retire later from their positions. In addition to prestige, a director’s professional qualifications and higher education are positively related to the number of directorships they hold.

We find no evidence that a shared social network or prestige of outside directors is contrary to shareholder interests.

DP 583

Endogenous State Prices, Liquidity, Default, and the Yield Curve

Raphael A Espinoza, Dimitrios Tsomocos, Charles Goodhart

We show, in an exchange economy with default, liquidity constraints and no aggregate uncertainty, that state prices in a complete markets general equilibrium are a function of the supply of liquidity by the Central Bank. Our model is derived along the lines of Dubey and Geanakoplos (1992). Two agents trade goods and nominal assets (Arrow-Debreu (AD) securities) to smooth consumption across periods and future states, in the presence of cash in-advance financing costs. We show that, with Von Neumann-Morgenstern logarithmic utility functions, the price of AD securities, are inversely related to liquidity. The upshot of our argument is that agents' expectations computed using risk-neutral probabilities give more weight in the states with higher interest rates. This result cannot be found in a Lucas-type representative agent general equilibrium model where there is neither trade or money nor default. Hence, an upward yield curve can be supported in equilibrium, even though short-term interest rates are fairly stable. The risk-premium in the term structure is therefore a pure default risk premium.

DP 584

Regionality Revisited: An Examination of the Direction of Spread of Currency Crises

Anja Shortland, Roberto Leon-Gonzalez, Amil Dasgupta

What determines the direction of spread of currency crises? We examine data on waves of currency crises in 1992, 1994, 1997, and 1998 to evaluate several hypotheses on the determinants of contagion. We simultaneously consider trade competition, financial links, and institutional similarity to the 'ground-zero' country as potential drivers of contagion. To overcome data limitations and account for model uncertainty, we utilize Bayesian methodologies hitherto unused in the empirical literature on contagion. In particular, we use the Bayesian averaging of binary models which allows us to take into account the uncertainty regarding the appropriate set of regressors. We find that institutional similarity to the ground-zero country, as measured by quality of governance indicators, plays an important role in determining the direction of contagion in all the emerging market currency crises in our dataset. We thus provide persuasive evidence in favor of the 'wake up call' hypothesis for financial contagion. Trade and financial links may also play a role in determining the direction of contagion, but their importance varies amongst the crisis periods and may be sensitive to the specification of the prior.

Special Papers

SP 171

Prompt Corrective Action and Cross-Border Supervisory Issues in Europe

Robert A Eisenbeis, George G Kaufman,
David G Mayes, María J Nieto, Larry Wall,
Rosa María Lastra, Clas Wihlborg,
Thomas F Huertas, Gillian G H Garcia

This Special Paper is a collection of the contributions to the one day conference on Prompt Corrective Action and Cross Border Supervisory Issues In Europe which took place

on 20 November 2006 at the Financial Markets Group, London School of Economics and Political Science. This conference was part of the Regulation and Financial Stability Workshops organised with the support of the Economic and Social Research Council (RES-451-25-4005 and RES-165-25-0026). Building on the established FMG London Financial Regulation seminar series, which has run since 1999, the ultimate purpose of the workshops was to clarify the principles on which financial regulation should be based, and to advance practical proposals for improving the organisation and conduct of such regulation.

Forthcoming Discussion and Special Papers

Discussion Papers

DP 585

'Evolution of Decision and Control Rights in Venture Capital Contracts: An Empirical Analysis'

Carsten Bienz, Uwe Walz

DP 586

'On the Impact of Fundamentals, Liquidity and Coordination on Market Stability'

Jon Danielsson, Francisco Peñaranda

DP 587

'Portfolio Choice Beyond the Traditional Approach'

Francisco Peñaranda

DP 588

'Loan maturity and renegotiation: Evidence from the lending practices of large and small banks'

Ugo Albertazzi

DP 589

'Intergenerational Risksharing and Equilibrium Asset Prices'

John Y Campbell, Yves Nosbusch

DP 590 (Corporate Governance Series No 003)

'The Ownership of Ratings'

Antoine Faure-Grimaud, Eloi Peyrache,
Lucia Quesada

Special Papers

SP 172

'Whatever became of the Monetary Aggregates?'

C A E Goodhart



Visitors to the FMG

August – October 2007

John Armour (CBR, University of Oxford)

Söhnke M Bartram (Lancaster University)

Ron Bird (University of Technology, Sydney)

Brandon Davies (GARP)

Paolo Finaldi-Russo (Bank of Italy)

Matt King (Citi)

Kjell Nyborg (Norges Handelshøyskole)

François Ortalo-Magné (University of
Wisconsin-Madison School of Business)

Gillian Tett (Financial Times)

John Williamson (Peterson Institute for
International Economics)





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Financial Markets Group

The Financial Markets Group Research Centre at LSE is one of the leading centres in Europe for academic research into financial markets. [more about FMG](#)

Events this week @ FMG

Wednesday, 10th October 2007 - 1-2.00pm

Lunchtime Workshop | Can Rare Events Explain the Equity Premium Puzzle? | Christian Julliard (LSE)

location: R407, FMG, 4th Floor, Lionel Robbins Building, LSE

Wednesday, 10th October 2007 - 5.00pm

Capital Markets Workshop | Risks For the Long Run: Estimation and Inference | Amir Yaron (University of Pennsylvania)

In the news

The Paul Woolley Centre website is now live **8 Oct 2007**

The Paul Woolley Centre website will provide news and information about the Centre's members, research

Corporate Governance at LSE Research Debate: 25 October 2007 John Armour (University of Oxford) **4 Oct 2007**

25 October 2007 John Armour (Lovells Professor of Law and Finance, University of Oxford) will p

The Paul Woolley Centre website is now live - The Paul Woolley Centre website will provide news and information about the Centre's members, research

home	about	events	news	publications	Corporate Partnership Programmes
research	people	be involved	mailing list	contact	



<http://fmg.lse.ac.uk>

FMG Review

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Assistant Editor: Sooraya Mohabeer

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