Abstracts for Keynote Lectures

Frank Hahn Lecture, Monday 17 March, 15:30-16:45, Room R0.21
Susan Athey  Efficiency in Dynamic Games and Contracts with Hidden Information

This talk synthesizes recent research concerning dynamic games and contracts with hidden information. When individuals interact in a dynamic game with persistent private information, learning-by-doing, or experimentation, is it possible to attain efficiency? Can players enforce efficiency in a decentralized way, or do they need a centralized mechanism designer to enforce contracts? A leading application, studied by Athey and Bagwell (forthcoming), concerns colluding firms in an environment where private information is partially persistent. They provide conditions under which firms can sustain efficiency in a decentralized pricing or bidding game. Athey and Segal (2007) analyze a general class of models, deriving budget balanced transfers that provide incentives for truthful reporting of private information with efficient allocation and investment. Their transfers provide the right incentives when agents have independent private values. They further provide sufficient conditions for the transfers to be self-enforcing in a decentralized game without commitment.

Economic Journal Lecture, Tuesday 18 March, 11.00-12.15, Room R0.21
Hyun Song Shin  Securitisation and Financial Stability

Financial contagion is often viewed through the lens of cascading defaults, where if A has borrowed from B and B has borrowed from C, then the default of A impacts B, which then impacts C, etc. However, in a modern market-based financial system where assets have been securitised and dispersed widely in the financial system, the main channel of contagion is through the fluctuations of balance sheets that arise from changes in the measured risks of leveraged financial intermediaries. Securitisation amplifies financial cycles. On the way up, securitisation increases the leverage of the financial system as a whole. In the downturn, even when credit exposures are dispersed widely throughout the financial system the impact of a shock can be amplified through contractions of balance sheets. This lecture aims to outline a theoretical framework for the analysis of boom-bust cycles in financial systems that are organized around the shadow banking system and the securitisation of loans. The events surrounding the credit crisis of 2007/8 provides a live laboratory for the main ideas.
Denis Sargan Lecture, Wednesday 19 March, 11:00-12:15, Room R0.21

Ernst Fehr  
Reciprocity and Reputation

Much research indicates that deviations from pure self-interest ("Reciprocity") are common. We show that reputation incentives greatly magnify the effects of reciprocity such that already a very small amount of reciprocity has powerful effects on market outcomes. We also demonstrate the two-edged implications of reciprocity-reputation interactions. On the one hand, they greatly contribute to micro-economic efficiency by facilitating mutually beneficial exchanges even in the absence of third party contract enforcement; on the other hand, they diminish macro-economic efficiency by creating strong price and wage rigidities involving rent-sharing, and by rendering organizations less responsive to competitive pressures.
## Abstracts for Special Sessions

**Special Session A1, Monday 17 March, 17:45 - 19:15, Room SS0.21**

**Tax Reform for the 21st Century: the Mirrlees Review**

The Mirrlees Review is a major 3-year project aiming to identify the characteristics of a good tax system for any open developed economy in the 21st century, to assess the extent to which the UK tax system conforms to these ideals, and to recommend how it might realistically be reformed in that direction. This Special Session will outline the latest thinking of the Review’s editorial team.

**Richard Blundell**

*Introduction*

An introduction to the Review and discussion of some of the central themes that have emerged in the Review’s deliberations.

**Stuart Adam**

*Household Taxation*

Discussion of issues in the design of household taxes: the rate structure of taxes on earnings and commodities and the treatment of savings, wealth and inheritance.

**Steve Bond**

*Company Taxation*

Discussion of the taxation of companies in the context of increasing international capital mobility, financial innovation and the growing importance of the financial sector.

**Paul Johnson**

*Tax Reform in Practice*

This presentation will consider some of the difficulties in translating economists’ ideas into practical policy reform.
Special Session A2, Monday 17 March, 17:45 - 19:15, Room H0.51

Innovation, the Knowledge Economy and Intangible Investment: What Do We Know? What Would We Like To Know?

Paul Stoneman
Soft Innovation: Changes in Product Aesthetics and Aesthetic Products

In Economics innovation has largely been considered to relate to changes in functionality of products and processes. This paper explores innovation in goods and services that primarily impacts upon sensory perception and aesthetic appeal, labeled soft innovation. The nature and measurement of such innovation is addressed. We argue that such innovative activity is extensive, especially in the creative sector, and it may be more widespread than the commonly analysed technological product and process innovation. From some examples there is evidence that such innovation proceeds at a fast rate and may be getting faster.

Fernando Galindo-Rueda
Innovation and the Knowledge Economy in the UK National Accounts: Progress Made and Future Developments

We discuss the progress that the Office of National Statistics has made on incorporating knowledge investments into the National Accounts. Software is now capitalised in the UK national accounts and progress is being made on R&D. Experimental work is looking at other knowledge assets. We report on current findings and challenges and where users can find these data.

Carol Corrado
Innovation, Intangible Investment and Growth in the US
Charles Hulten
Dan Sichel

Innovation seems to have completely transformed the economy. Goods like mobile phone ringtones, iPods and SatNavs would have been unheard of a decade ago. Firms have revolutionised their plant and supply chains using computer technology. We use the consistent accounting framework set out in our previous work that treats spending on knowledge as investment to update previous US work on intangible investment and innovation. We explore the reasons for the US productivity and TFP miracle.

Jonathan Haskel
Innovation, Intangible Investment and Growth in the UK
Mauro Giorgio Marrano
Gavin Wallis

A puzzle is that despite the apparent importance of the “knowledge economy”, UK macro performance appears unaffected: investment rates are flat, and productivity has slowed down. We investigate whether measurement issues might account for the puzzle. The standard National Accounts treatment of most spending on “knowledge” or “intangible” assets is as intermediate consumption. Thus they do not count as either GDP or investment. We find that treating such spending as investment has major effects on market sector GDP, business investment, capital and labour shares, growth in labour and total factor productivity, and capital deepening.
Learning in a Macroeconomic Environment

**Thomas J. Sargent**  
Diverse Beliefs, Learning, and the Market Price of Risk  
Timothy Cogley

We study prices and allocations in a heterogeneous agent, pure endowment, complete markets economy in which aggregate consumption growth evolves exogenously according to a two-state Markov process. The economy is populated by two types of agents, one that learns about transition probabilities and another that knows them. We examine how the presence of the better informed agent influences allocations, the market price of risk, and the rate at which asset prices converge to values that would be computed under the typical assumption that the agents know the transition probabilities.

**Tao Zha**  
Learning, Adaptive Expectations, and Technology Shocks  
Kevin Huang  
Zheng Liu

This study explores theoretical properties of the self-confirming equilibrium in the standard growth model. When rational expectations are replaced by adaptive expectations, we prove that the self-confirming equilibrium is the same as the steady state rational expectations equilibrium, but that the dynamics around the steady state are substantially different between the two equilibria. Learning has important effects on the amplification and propagation mechanisms of technology shocks. We show that, in contrast to Williams (2003), these important differences are not driven by escapes or large deviations from the self-confirming equilibrium. Overall, the learning model gives technology shocks a much more prominent role in shaping business cycles than does the rational expectations model.

**Martin Ellison**  
Learning in Duopoly Models of Resource Depletion  
Andrew Scott

The aim of this paper is to provide a theoretical model that can account for price fluctuations in depleteable resource markets. We do so by introducing learning into a Hotelling-style duopoly model of optimal resource depletion. Before the depleteable resource becomes scarce, the self-confirming equilibrium of the model mirrors noncooperative rational expectations equilibrium in that supply is high and price is low, although learning does induce occasional upward price spikes that are followed by a long period of falling price. Once the depleteable resource becomes scarce the dynamics of the market change significantly, with the self-confirming equilibrium mirroring the cooperative rather than noncooperative rational expectations equilibrium. Supply is low and price is high. Price spikes still occur but against a background of increasing prices. When scarcity is sufficient then the market is permanently in a self-confirming equilibrium that is equivalent to cooperative rational expectations equilibrium.
The Skills of an Economist: What Does a Degree Give You?

Paul Latreille
Franz Buscha

The first paper will provide background, utilizing a variety of datasets (including HESA data) to set out key developments in the Economics profession over the past 10 to 15 years. This will include trends in overall student numbers studying Economics at level 4 and above (benchmarked against key subjects where Economics is seen to have perhaps lost students). The challenge is to show where any growth or decline in student numbers has been concentrated; how this has impacted on the type of first destinations of students and how the returns to an economics degree have changed.

Peter Urwin
Philip Hedges
Franz Buscha

This paper investigates the importance of various characteristics on the probability of candidates passing the GES Economic Assessment Centre (EAC). A binomial probit regression identifies the marginal effects of each of the characteristics on the likelihood of passing and we then explore the significant variables determining scores in three skill areas; knowledge, application and communication of economics. The aim is to distinguish between those graduates who do and those who do not meet the skills criteria set by the GES.

Andy Ross
John Sloman

“The’s [Not Just] the Economy….. Stupid”

The final paper is by two economists who have strident views on the evolution of the Economics syllabus and the teaching of Economics. Andy Ross will consider developments in the syllabus at both A-level and Higher and how these relate to the skills that the GES is looking for in a ‘good’ Economist. John will consider the developments in Economics teaching and how that relates to the skills that Economist should have. Andy and John will consider the findings from the papers presented in the session, as well as those from more qualitative investigations that they have been involved in.
Special Session B1, Tuesday 18 March, 13.15-14.45, Room R0.21

Credit Boom, Credit Crunch and Central Banking

Charles Goodhart  Liquidity Risk Management

This paper considers the problem, faced by regulators and Central Banks, of managing the liquidity risks of the banking system. Arguably, the banks should be required to abide by principles of sound liquidity management, though in a discretionary manner. Many questions must be addressed before imposing new regulatory measures. Liquidity has many intertwined facets, including maturity transformation and the inherent liquidity of a bank’s assets. The strategic decisions of the Central Bank affect their liquidity. There is a huge task of positive research to be done on the question of how to measure the extent of maturity transformation.

Sujit Kapadia  Contagion in Financial Networks
Prasanna Gai

This paper develops a general model of contagion in financial networks, identifying both its probability and potential impact. We explore how contagion risk is influenced by aggregate and idiosyncratic shocks, changes in network structure, and asset market liquidity. Our findings suggest that financial systems exhibit a robust-yet-fragile tendency: while the probability of contagion may be very low, the effects could be extremely widespread should problems occur. The resilience of the system to large shocks in the past is also unlikely to prove a reliable guide to future contagion.

Sayantan Ghosal  Liquidity, Moral Hazard and Bank Runs
Surojit Chatterji

In a model of banking with moral hazard, efficient risk-sharing between depositors may no longer be implementable. When depositors have all the bargaining power, we show that contracts with the threat of bank runs off the equilibrium path of play improve on contracts with transfers, and equilibrium bank runs driven by incentives are linked to liquidity provision by banks. When the bank has all the bargaining power, there is production efficiency but no liquidity provision to depositors. The model is extended in several ways. Our results provide a theoretical foundation for the doctrine of "creative ambiguity".
Health and Labour Market Outcomes

Maarten Lindeboom
Bas van der Klaauw
Ana Llena Nozal

We investigate the relationship between onset of disability and employment outcomes; estimating an event history model with accidents as a measure for unanticipated health shocks, using data from the British National Child Development Study. Experiencing a health shock increases the likelihood of an onset of disability by around 172%. However, accidents are relatively rare events; therefore the larger part of observed disability results from gradual deterioration in health. We find no direct effect of accidents on employment, allowing us to use accidents as an instrument for disability. The onset of a disability at age 25 causally reduces the employment rate at age 40. The effect is stronger for males and for low educated workers.

Melanie K. Jones
Paul L. Latreille

There is a relatively small, but growing, literature on labour market outcomes of disabled people in the UK. Whilst these studies have considered how personal, household, regional and employment-related characteristics affect the outcomes of the disabled, the datasets deployed largely preclude examination of the potentially important role played by firm characteristics. This paper uses matched employee-employer data from the 2004 Workplace Employment Relations Survey to assess the impact disability has on earnings. Importantly, these data allow us to examine the hitherto neglected influence of firm characteristics such as recruitment schemes, equal opportunities policies and workplace accommodations on individual outcomes.

Jennifer Roberts
Sarah Brown
Karl Taylor

The concept of the reservation wage is important in labour market theory but attracts little empirical attention. We consider the determinants of reservation wages, with a particular focus on health. An endogenous switching model, predicting reservation wages for the unemployed and market wages for the employed, is estimated using the British Household Panel Survey. We deal with the endogeneity of health, measurement errors in self reported health and selection into economic activity. Results suggest that health is an important determinant of selection, both into economic activity and employment but, once these participation effects are accounted for, health is not a significant determinant of reservation or market wages.
**International Capital Flows**

**Harald Hau**  
*Global Portfolio Rebalancing under the Microscope*

**Hélène Rey**

The dramatic increase in gross stock of foreign assets and liability has revived interest in the portfolio theory of international investment. Evidence on the validity of this theory has always been scarce and inconclusive. The current paper derives testable empirical implications from microeconomic foundations. We then use a new comprehensive data set on the investment decisions of approximately 3,000 international equity funds domiciled in four different currency areas to revisit the empirical relevance of international portfolio rebalancing. The disaggregated data structure allows us to examine whether foreign exchange and equity risk triggers predicted rebalancing behavior at the fund level. We find strong support for portfolio rebalancing behavior aimed at reducing both exchange rate and equity risk exposure.

**Nicolas Coeurdacier**  
*International Portfolios and Current Account Dynamics: the Role of Capital Accumulation*

**Robert Kollmann**

Despite the liberalization of capital flows among OECD countries, equity home bias remains sizable, but is now less severe than in earlier decades; as a result, fluctuations in returns on foreign assets have a substantial effect on countries' wealth. As documented in this paper, changes in net foreign asset positions (NFA) are highly volatile, serially uncorrelated and countercyclical. We show that a two-country RBC model with productive investment and unrestricted international trade in stocks and bonds can explain these facts. Capital accumulation and shocks to the efficiency of investment are key ingredients for the success of the model. In contrast to related models that abstract from capital, equity home bias is not sensitive to preference parameters. In the model, NFA changes are largely driven by capital gains/losses due to movements in equity prices. The model thus matches the high volatility and low serial correlation of NFA changes. We compare settings with complete and incomplete financial markets. Imperfect hedging is required to generate a realistic conventional current account measure that solely reflects aggregate net flows of assets between countries.

*Continued...*
Special Session B3, continued

Akito Matsumoto  The Role of Nonseparable Utility and Nontradables in International Business Cycles and Portfolio Choice

This paper analyzes the role of nonseparable utility and nontradables in business cycles and portfolio choice using a two-country, two-sector production economy model with a fairly general utility function. I find that nonseparability in utility can change the optimal portfolio choice significantly. Unlike the results of Stockman and Dellas (1989) or Baxter, Jermann and King (1998), the optimal portfolio of the traded-good sector equities is no longer a well diversified portfolio under nonseparability. The optimal portfolios of both traded- and nontraded-good sector equities become sensitive to the elasticity of substitution between traded and nontraded goods and the coefficient of relative risk aversion. As a result, the model often generates extreme home bias or anti-home bias portfolios implying that some frictions in asset markets, which prevent agents from holding these extreme portfolios, can explain the lack of international risk sharing.

Harris Dellas  Goods Trade and International Equity Portfolios
Fabrice Collard
Behzad Diba
Alan Stockman

We show that international trade in goods is the main determinant of international equity portfolios and offers a compelling – theoretically and empirically – resolution of the portfolio home bias puzzle. The model implies that investors can achieve full international risk diversification if the share of wealth invested in foreign equity matches their country’s degree of openness (the imports to GDP share). The empirical evidence strongly supports this implication.
Well-Being and Reciprocity

Andrew Clark  
Job Satisfaction and Co-worker Wages: Status or Signal?  
N. Kristensen  
N. Westergård-Nielsen  

This paper uses matched employer-employee panel data to show that individual job satisfaction is higher when other workers in the same establishment are better-paid. This runs contrary to a large literature which has found evidence of income comparisons in subjective well-being. We argue that the difference hinges on the nature of the reference group. We here use co-workers. Their wages not only induce jealousy, but also provide a signal about the worker’s own future earnings. Our positive estimated coefficient on others’ wages shows that this positive future earnings signal outweighs any negative status effect. This phenomenon is stronger for men, and in the private sector.

Thomas Dohmen  
Homo Reciprocans: Survey Evidence  
A. Falk, D. Huffman, U. Sunde  
on Behavioral Outcomes

Experimental evidence has convincingly shown the existence of reciprocal inclinations, i.e., a tendency for people to respond in-kind to hostile or kind actions. Little is known, however, about: (i) the prevalence of reciprocity in the population, (ii) individual determinants of reciprocity, (iii) the correlation between positive and negative inclinations within person, and (iv) consequences of reciprocal inclinations for wages, subjective well-being, friendships and other economic and social outcomes. Answering these questions requires moving out of the lab and using a large and representative subject pool. In this paper we measure the reciprocal inclinations of 21,000 individuals. We show that most people state reciprocal inclinations, in particular in terms of positive reciprocity. However, there is substantial heterogeneity in the degree of reciprocity. In terms of economic implications, we provide the first evidence using a large representative survey that corroborates an important hypothesis arising from laboratory experiments: Positively reciprocal workers are in fact paid more, and exert greater effort, on the job. Moreover, positively reciprocal people are more likely to be employed, report having more close friends, and have a higher overall level of life satisfaction. In this sense, Homo Reciprocans - in the positive domain - is in fact more successful than his or her non-reciprocal fellows.

Continued...
We perform a standard investment game experiment in which questionnaires are alternatively administered to participants after the experiment and before they even know the rules of the game. We find that self declared happiness is significantly affected by Trustors’ contribution, but only when survey questions are answered after playing the game. This result contributes both to the empirical happiness and behavioural experimental literature. With respect to the first, we demonstrate that general questions on self declared life satisfaction evaluated over the entire life period are affected by most recent events. With respect to the second, we interpret our findings as a straightforward explanation of non Nash behaviour of players in investment games (they deviate from it because they are happy to do so) and as being not in contrast with the existence of “warm glow” (impurely altruistic) and/or a very extreme form of purely altruistic preferences. Our research also suggests that altruistic preferences cannot just be tested with the standard approach inferring implied preference structures from players’ choices. Only when measuring ex post the effects on happiness of players’ contribution, net of the outcome of the game, can we discriminate between altruistic and strategic motivations.
Special Session C1, Tuesday 18 March, 15.00-16.30, Room H0.51

Better Schools? The Economics of School Improvement Strategies in Europe

Francis Kramarz Teachers’ Training, Class Size and Students’ Outcomes:
Pascal Bressoux Learning from Administrative Forecasting Mistakes
Corinne Prost

This paper studies the impact of teacher and class characteristics on third graders’ outcomes in France. It uses a feature of the French system in which some novice teachers start their jobs before receiving any training. To identify effects, we use administrative mistakes in forecasting the number of teachers. We find that trained and untrained novice teachers are assigned to similar classes. We also show that the same sample can be used to estimate the causal effect of class size on student outcomes. We find that teacher training substantially improves student test scores in mathematics; this mainly works through subject matter competence; the class size effect is substantial and significant; we also explore heterogeneity of effects according to student ability.

Edwin Leuven School Competition Vs Scale Effects in Primary Education
Monique De Haan
Hessel Oosterbeek

In the early 1990s the Dutch government changed the enrollment norms that governed school openings and closures. Because of the law (implemented in January 1994), the minimal enrollment threshold increased for over 75 percent of municipalities. Within two years, over 10 percent of Dutch primary schools had to close. Consequently school density decreased and the scale of Dutch primary schools increased. We use the time and regional variation generated by the reform to estimate how changes in local competition and scale affect school performance as measured by centralized exit exams. We find small positive effects of the reform. Our decomposition analysis suggests that these are mainly generated by the increase in the scale of schools and that the impact of local competition is negligible.

Sandra McNally The Three Rs: How Effective Are the National Strategies?
Stephen Machin

The National Literacy and Numeracy Strategies have changed the way core subjects are taught in primary schools in England. The top-down approach to changing the way teachers’ teach is very controversial – and among the most important school improvement strategies aiming to raise standards in primary schools. In this paper we ask (1) have the strategies made a difference to pupil outcomes in the short and the long term? (2) do years of exposure matter? (as opposed to whether pupils were exposed to the strategies or not); (3) to what extent are the effects of the pilot strategies representative of effects when the policies are rolled out nationally?
Special Session C2, Tuesday 18 March, 15.00-16.30, Room SS0.21

The Econometrics Journal Special Session on Financial Econometrics

Frank X. Diebold Modelling and Forecasting Yield Curves
Glenn Rudebusch

We survey the development of the dynamic Nelson-Siegel (DNS) approach to yield curve modeling and forecasting, and we extend it to enforce arbitrage-free restrictions from finance. We cover the original Diebold-Li (2006) two-step DNS, the Diebold-Rudebusch-Aruoba (2006) state-space DNS with links to macro fundamentals, and Diebold-Li-Yue (2008) global DNS. We culminate with and emphasize the new Christensen-Diebold-Rudebusch (2007) arbitrage-free DNS.

Enrique Sentana Mean-Variance Efficiency Tests: A Survey

This paper provides a comprehensive survey of the econometrics of mean-variance efficiency tests. Starting with the classic F test of Gibbons, Ross and Shanken (1989) and its generalised method of moments version, I analyse the effects of the number of assets and portfolio composition on test power. I then discuss asymptotically equivalent tests based on mean representing portfolios and Hansen-Jagannathan frontiers, and study the trade-offs between efficiency and robustness of using parametric and semiparametric likelihood procedures that assume either elliptical innovations or elliptical returns. After reviewing finite sample tests, I conclude with a discussion of mean-variance-skewness efficiency and spanning tests.

Neil Shephard Realised Kernels in Practice
Ole E. Barndorff-Nielsen
Peter Hansen
Asger Lunde

The class of realised kernel estimators can be used to estimate the quadratic variation of an underlying efficient price process from high frequency noisy trade data. This method, together with alternative techniques such as subsampling and pre-averaging, extends the influential realised variance literature which has recently been shown to significantly improve our understanding of time-varying volatility and our ability to predict future volatility. In this paper we detail the implementation of our recommended realised kernel estimator in practice, focusing on end effect, bandwidth selection and data cleaning across different types of financial databases.
The Economics of Diet, Nutrition and Food Expenditures

**Marcos Vera-Hernandez**  
Health Shocks, Household Consumption, and Child Nutrition

This paper investigates the household’s response to health shocks suffered by working age household members. We account for unobserved household-specific factors by introducing household fixed effects. We use data from rural Colombia, and find that total household consumption, medical expenditure, and food consumption increases following a recent illness event of an adult active in the labor market. However, children’s weight decreases as a consequence of the same illness event. Our results show that households make difficult intrahousehold choices when an illness shock hits them, and implies that the literature on consumption smoothing and the literature on testing for full insurance might have underestimated the effect of health shocks on welfare.

**Pierre Dubios**  
Food Consumption and Obesity in France

C. Bonnet  
V. Orozco

The objective of this paper is to help the analysis of public policies aiming at reducing the prevalence of obesity. In particular, through the analysis of the price elasticity of Body Mass Index (BMI), we want to determine some policy implications on taxation and regulation of prices and assess which causal mechanism is at the source of this relationship. For that, we break down the price elasticity of BMI into the causal relationship between obesity and calorie consumption and the price elasticity of consumption using French data recording households and individual characteristics, households’ food purchases and nutrition information of all products. In this way, we can determine the real impact of food consumption on BMI and the regulatory compromise between the reduction of obesity and food consumption on consumer welfare.

**Rachel Griffith**  
Consumers' Willingness to Pay for Healthy Foods

Lars Nesheim

Governments have become increasingly concerned about nutrition. Many policies aim to provide consumers with information about the nutritional content of foods and on what constitutes a healthy diet, in order to encourage them to take better decisions about food purchases. The responsiveness of consumers to these types of policy interventions depends crucially on how willing consumers are to pay for healthier foods. This paper estimates consumers’ willingness to pay for different characteristics of food, including “healthiness”. We use detailed panel data on households’ purchases of food, along with detailed information on their attitudes and beliefs about how healthy food products are.
Special Session C4, Tuesday 18 March, 15.00-16.30, Room R0.21

International Financial Stability (round-table discussion)

This session will feature short presentations on international financial stability, by Richard Portes, Hyun Song Shin, Andrew Haldane (Bank of England) and Gillian Tett (Financial Times). The presentations will be followed by a round-table discussion.

Richard Portes  Discussion
Hyun Song Shin  Discussion
Andrew Haldane  Discussion
Gillian Tett  Discussion
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<tr>
<th>Session: 1-1</th>
<th>Monday 13:30-15:00</th>
<th>Rm: R2.41</th>
<th>Chair: Surajeet Chakravarty</th>
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**Jun Zhang**  
Ruqu Wang  

The Role of Information Revelation in Elimination Contests  

In this paper, we investigate how information revelation rules affect efficiencies in two-round elimination contests. We find that the no information revelation rule is optimal in maximizing the total effort of the contestants; the entries to the final round and the outcome of the contest are both efficient. Given that this rule may not be feasible in some contests, we consider an alternative: partial information revelation. We establish the existence of symmetric separating Perfect Bayesian Nash Equilibria under this rule and find that efficient entries to the final round are achieved but the outcome efficiency is distorted. We conclude that more information revelation between rounds leads to less efficient outcomes. We also find that under full revelation, there exists no separating equilibrium.

**Chirantan Ganguly**  
Peter Postl  
Indrajit Ray  

Coordination and Implementation  

We view the issue of coordination in a two-person normal form game with multiple pure Nash equilibrium as an implementation problem. Any social choice function that chooses one of the two pure Nash equilibria in two different states from the class of all correlated equilibrium distributions satisfies the Maskin monotonicity condition, however fails to satisfy Dutta-Sen condition \( \beta \) and therefore can not be fully (Nash) implemented.

**Surajeet Chakravarty**  
Sudeep Ghosh  

Studying the effect of sunk costs on bidding behaviour in auctions  

We use a prospect theory model to predict and analyse the bidding behaviour in first price and second price common value auctions and test the predictions using data from lab experiments. We find that in presence of sunk costs bids decrease in first, while in second price bids increase in presence of sunk costs.
Ben Ferrett
Ian Wooton

Competing for a Duopoly: International Trade and Tax Competition

We analyse the tax/subsidy competition between two potential host governments to attract the plants of firms in a duopolistic industry. Competition between identical countries for a monopoly firm's plant is known to result in subsidy inflation which leaves the winning country indifferent towards hosting the firm. In sharp contrast, we show that, with two firms, both are taxed in equilibrium and the host countries appropriate the entire social surplus generated within the industry—despite the explicit non-cooperation between governments. We extend our baseline model to allow for differences in country size. We investigate when this size asymmetry becomes sufficiently large to change the nature of the equilibrium, inducing concentration of production in the larger country.

Giuseppe Migali
Ben Lockwood

Did the Single Market Cause Competition in Excise Taxes? Evidence from EU Countries

The introduction of the Single Market resulted in a switch from destination to origin-based taxation of cross-border transactions by individuals. Standard theory predicts that this change should give rise to excise tax competition and thus intensify strategic interaction in the setting of excise taxes. We provide an empirical test of this prediction using a panel data set of 12 EU countries over the period 1987-2004. We find that for all excise duties that we consider (still and sparkling wine, beer, ethyl alcohol, and cigarettes), strategic interaction between countries significantly increased after 1993, consistently with the theoretical prediction. Indeed, for all these products except for cigarettes, there is no evidence of strategic interaction prior to 1993, so our findings are consistent with the hypothesis that the single market caused tax competition. For beer and ethyl alcohol, there is evidence that the minimum taxes, also introduced in 1993, have intensified strategic interaction.

Frank Somogyi
Christoph A. Schaltegger
Jan-Egbert Sturm

Tax Competition and Income Segregation: Evidence from Switzerland

In this paper, we use community-level data from the Swiss canton of Zurich to study the influence of income taxes on the choice of residence of households. The fact that Swiss communities can individually set tax multipliers shifting the progressive tax scheme which is fixed on the cantonal (federal state) level enables to study the effect of differences in income taxation on the locational choice of households within a small and economically and culturally homogeneous region. Using cross-sections of the years 1995 and 1999, we find substantial evidence for income sorting in the Canton of Zurich.
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<tr>
<th>Session: 1-3</th>
<th>Monday</th>
<th>13:30-15:00</th>
<th>Rm: SS0.09</th>
<th>Chair: Karen Mumford</th>
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<tr>
<td><strong>Paul Grout</strong></td>
<td>An Economic Theory of the Glass Ceiling</td>
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<td>In-Uck Park</td>
<td>Silvia Sonderegger</td>
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Empirical evidence shows that fewer women (and minority ethnic/racial group members) are promoted to higher positions than white males in almost all industries. Furthermore, it is frequently claimed that women have to work harder to achieve the same promotion opportunities and that they may be paid less than the equivalent male worker when promoted. The paper provides a theoretical explanation of such phenomena. In particular, even when multiple firms compete in the hiring stage for a given measure of labor force, all firms may exhibit all these features to varying degrees (i.e., some firms are more gender friendly than others) in the unique equilibrium. The focus on the information transmission aspect of employment contracting distinguishes our analysis from previous literature developed along the lines of statistical discrimination theory. The framework also enables us to explore the equilibrium consequences of alternative anti-discrimination policies, giving insight into gender policies in the workplace.

<table>
<thead>
<tr>
<th>Sara Connolly</th>
<th>Glass ceilings - thicker at the top?</th>
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<td>Susan Long</td>
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Specialist job markets (such as academe) provide an interesting case study for discrimination because although all of those employed in the sector have made the same high levels of investment in human capital and typically have a strong commitment to their careers. We find evidence that female scientists in the UK do face glass ceilings, although they arise at different stages in careers in Higher Education and Research Institutes. Even when we control for experience, responsibilities and a range of productive characteristics we find that in universities women are less likely to be promoted to a Chair and in research institutes that they are less likely to be promoted out of post-doctoral posts. These differences are even more acute when we restrict our attention to internal promotions, it seems that even within their own institution female scientists have to do or achieve more to be promoted.

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<tr>
<th>Karen Mumford</th>
<th>Assessing the importance of male and female part-time work for the gender earnings gap in Britain.</th>
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<td>Peter N. Smith</td>
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This study examines the role of individual characteristics, occupation, industry, region, and workplace characteristics in accounting for differences in hourly earnings between men and women in full and part-time jobs in Britain. A four-way gender-working time split (male full-timers, male part-timers, female full-timers and female part-timers) is considered, and allowance is explicitly made for the possibility of both workplace and occupational female segregation across each group. Individual and workplace characteristics are shown to explain much of the earnings gaps examined. Within gender groups, the striking difference between full and part-time employees is that full-timers work in higher paying occupations than do part-timers. Also, female occupational segregation makes a significant contribution to the earnings gap between male and female part-time employees but not for full-time workers. A further new result is that female workplace segregation contributes significantly to the full/part time earnings gap of both males and females.
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<tr>
<td><strong>Gerald Eisenkopf</strong></td>
<td>Learning and Cooperation</td>
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<td>Peer effects are possibly very important for educational performance but hard to identify. This paper confirms the existence of peer effects, operationalized as benefits from cooperation, in a learning process with data from an experiment. The experimental approach circumvents key econometric problems which greatly restrict the analysis of educational peer effects with administrative or survey data. The experimental setting offers some insight into the mechanisms of peer interaction. The results show that prospective cooperation has a motivational effect. There is no evidence with respect to an optimal group composition. The benefit from the pair treatment is largely independent of the characteristics of the partner.</td>
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<td><strong>Renuka Metcalfe</strong></td>
<td>Human Capital Spillovers and Economic Performance in the Workplace in 2004: Some British Evidence</td>
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<td>Peter J. Sloane</td>
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<td>This paper considers the impact of education and training on both individual and co-worker pay and establishment performance using the matched employer-employee data in WERS 2004, and the new Financial Performance Questionnaire. We establish that workplace education and training can have positive impacts on establishment productivity and financial performance. Workplace education and workplace training are found to have contrasting effects on hourly pay in terms of the interaction between individual worker and co-worker education and training, in returns to scale and in terms of their dispersion across the workplace.</td>
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<tr>
<td><strong>Kerry Papps</strong></td>
<td>The dynamics of productivity spillovers in Major League Baseball</td>
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<td>This paper examines whether team-mate performance influences individual performance and salaries in Major League Baseball. Team-mates may inflate a player’s output in a single year or they may have a lasting influence on his performance. Evidence of these effects, which are termed spillovers and learning, respectively, are found among both pitchers and non-pitchers. Pitchers are more likely to post low earned run averages if other pitchers on their team achieve low earned run averages in the same season or the previous season. Batters tend to have high batting averages if their teammates had high batting averages in the previous season. Team performance measures are found to have some direct influence on salary. However, the productivity regression estimates indicate that team-mate ability operates largely indirectly, by augmenting individual performance.</td>
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Maik Heinemann  
Christiane Clemens

Credit Constraints, Idiosyncratic Risks, and the Wealth Distribution in a Heterogeneous Agent Model

This paper examines the effects of credit market imperfections and idiosyncratic risks on occupational choice, capital accumulation, as well as on the income and wealth distribution in a two sector heterogeneous agent general equilibrium model. Workers and firm owners are subject to idiosyncratic shocks. Entrepreneurship is the riskier occupation. Compared to an economy with perfect capital markets, we find for the case of serially correlated shocks that more individuals choose the entrepreneurial profession in the presence of credit constraints, and that the fluctuation between occupations increases too. Workers and entrepreneurs with high individual productivity tend to remain in their present occupation, whereas low productivity individuals are more likely to switch between professions. Interestingly, these results reverse if we assume iid shocks, thus indicating that the nature of the underlying shocks plays an important role for the general equilibrium effects. In general, the likelihood of entrepreneurship increases with individual wealth.

John Gathergood  
Richard Disney


This paper investigates the existence of liquidity constraints facing entrepreneurs in the United Kingdom. Using a household-level panel data set, entry to self-employment is shown to be a function of household net worth. The role of liquidity constraints is further explored using inheritances and unanticipated movements in house prices as instruments for shocks to liquidity. Results indicate that inheritances perform badly as an instrument for liquid wealth. Both past and future inheritances predict entry to self-employment. House prices shocks are a more plausible instrument but indicate little evidence of sizeable liquidity constraints facing the would-be self-employed.
**Arti Grover**

Intra-firm Trade versus Arm's Length Trade: The Role of Technological Complexity and Absorptive Capacity

Technology transfer costs have a profound influence on the organization of trade in a production sharing relationship. To explore this nexus, we associate the technological complexity of the offshored input with the organizational mode of international production sharing by extending the Antras (2005) model. We modify the Antras model by proposing that the low-tech input, as qualified within the model, cannot be produced in the low wage south without costly technology transfer. The cost of technology transfer in turn depends on three factors, which are the technological complexity of this input, the absorptive capacity of the host country and the wages in the host country. Our model refines the results obtained in Antras (2005). Our model also has policy suggestions for host countries which aspire to maximize their benefits from the exploding global production sharing phenomenon.

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**Fabrice Defever**

Productivity and the Sourcing Modes of Multinational firms

We investigate the role of firms total factor productivity in its decision to import from their affiliates rather than from independent input suppliers. We propose a slightly modified version of the Antras and Helpman (2004) model. We assume higher fixed costs under outsourcing and a firm-specific production function. We use detailed French firm-level data that provides a geographical breakdown of French firms imports at product level and their sourcing modes in 1999. We find strong empirical support for the theoretical predictions of the model. In particular, high-productivity firms that have a production process intensive in suppliers inputs source their inputs through independent foreign suppliers.

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**Peter Neary**

Multi-Product Firms and Flexible Manufacturing

We present a new model of multi-product firms (MPFs) and flexible manufacturing and explore its implications in partial and general equilibrium. Globalization affects the scale and scope of MPFs through a competition effect and a demand effect. Confirming recent empirical evidence, our results suggest that MPFs in conjunction with flexible manufacturing play an important role in the impact of international trade on product diversity. In particular, the model highlights a new source of gains from trade: productivity increases as firms become leaner and concentrate on their core competence; but also a new source of losses from trade: product variety may fall.
Serafeim Tsoukas
Paul Mizen

Evidence on the external finance premium from the US and emerging Asian corporate bond markets.

Empirical investigation of the external finance premium has been conducted on the margin between internal finance and bank borrowing or equities but little attention has been given to corporate bonds especially for the emerging Asian market. In this paper we hypothesize that balance sheet indicators of creditworthiness could affect the external finance premium for bonds as they do for premia in other markets. Using bond-specific and firm-specific data for the United States, Hong Kong, China, Korea and Thailand during 1995-2005 we find that firms with better financial health face lower external finance premia in all countries. When we introduce firm-level heterogeneity we show that financial variables appear to be both statistically and quantitatively more important in the Asian market than in the US. Finally, the premium is more sensitive to firm-level variables during credit crunches, recessions and sudden stops than other periods, with stronger effects for the Asian bond market.

Guiying Wu
Stephen R. Bond
Mans Soderbom

Uncertainty and Capital Accumulation

This paper presents estimates of the effects of uncertainty on both short run investment behaviour and long run capital accumulation for panels of African and Asian firms. We estimate structural investment models in which the level of uncertainty influences investment behaviour through different forms of adjustment costs: partial irreversibility, a fixed cost of undertaking any investment at all, and quadratic adjustment costs. Structural parameters are estimated by matching simulated model moments to empirical data for firms in China, India, Morocco and Ghana, using a simulated minimum distance estimator. The estimated models suggest that a lower level of uncertainty would have only modest effects on short run investment dynamics, but would result in much higher capital stocks.

Rebeca Munoz Torres
Mustafa Caglayan

The Effect of the Exchange Rates on Investment in Mexican Manufacturing Industry

This paper, considering revenue and cost exposure channels, investigates the effects of exchange rate behaviour on fixed capital investment in Mexican manufacturing sector over 1994-2002. Our analysis also allows for the role of market structure and product differences in that relationship. We find that i) currency depreciation has a positive (negative) effect on fixed investment through the export (import) channel; ii) exchange rate volatility impacts mostly export oriented sectors; iii) the sensitivity of investment to exchange rate movements is stronger in non-durable goods sectors and industries with low mark-up ratios.
Harald Fadinger  
Pablo Fleiss  

Trade and Sectoral Productivity

What do we know about cross country differences in sectoral productivity? Not much, even though they are at the heart of trade theory and many models of growth and development. In this paper we try to fill this gap by using a Hybrid-Ricardo-Heckscher-Ohlin trade model and bilateral sectoral trade data to overcome the data problem that has limited previous studies, which have used input and output data to back out productivities to the sample of OECD countries. We provide a comparable set of sectoral productivities for 24 manufacturing sectors and more than fifty countries at all stages of development. Our results show that TFP differences in manufacturing sectors between rich and poor countries are substantial and far more pronounced in skill intensive sectors. We also apply our productivity estimates to test trade models and theories on development that have implications for the patterns of sectoral productivities across countries.

Sebastian Freille  
M Emranul Haque  
Richard Kneller  

Decentralisation, corruption and economic development

This paper studies the relationship between corruption and decentralisation from a macroeconomic perspective. The analysis presented in this paper is unique in that it provides an explicit formulation of the relationship between corruption, decentralisation and economic development. We bring together the theoretical and empirical predictions of both the traditional and modern fiscal federalism theories and find that the aggregate effect of decentralisation on development depends crucially on the existence and extent of corruption. Without corruption, decentralisation is unambiguously the best outcome for development. However, if corruption is pervasive, decentralisation may be associated to lower capital accumulation than centralisation. This result is more likely to be observed in developing countries with weak political institutions and significant information asymmetries between the central government and local administrations.

Mikhail Drugov  

Competition in Bureaucracy and Corruption

This paper studies the consequences of introducing competition between bureaucrats. Bureaucrats are supposed to grant licences to firms that satisfy certain requirements. Firms have to invest into satisfying these requirements. Some bureaucrats are corrupt, that is, they give the license to any firm in exchange for a bribe. Some firms prefer to buy the licence rather than to invest and satisfy the requirements imposing negative externalities on the society. The competition regime is found to create more ex ante incentives for firms to invest while the monopoly regime is better at implementing ex post allocation, that is, distributing the licences given the firms' investment decisions. Additional results on the effects of intermediaries, staff rotation, red tape and punishments are provided.
Altay Mussurov  The Political Economy of Riot-type Violence in Developing Countries: A Case Study
Norbet Fiess
Paul Mosley

We have argued that small-scale violence, which is often the type of violence most frequently occasioned by episodes of economic crisis, is different from the kind of violence most frequently modelled by economists, namely civil war; it is shorter-term, more localised, more reactive rather than initiatory in nature, and much more than civil war it is a reflection of short-term political variables, in particular the credibility of government and the politicisation of the opposition. We simulate these factors through the use of a model in which income can be derived from two different sorts of endowments, one of which is contestable and exogenous and the other is endogenously determined within the model. In the empirical estimations, indicators of the politicisation of the opposition, of the public mistrust of government, as well indicators of unemployment and inequality, emerge as significantly related to the likelihood of violence of this type.

Juan Vargas  'Bad Peace': Massacres and Territorial Control in Civil War

Recent literature on civil war has recognized the strategic value of killing civilians to secure territorial control by weakening the local grip of the enemy through the spreading of fear among supporters. To the extent that this strategy is successful and territorial control is achieved by one party, a prediction of this theory is that relatively peaceful periods will follow episodes of intense killings. I offer a simple dynamic model where massacres make peace more likely but at the expense of welfare costs. I also use a unique dataset of the long term longitudinal dynamics of the civil war in Colombia to test this theory. Results from duration models suggest that the duration of violence at sub-national level is negatively associated with the intensity of massacres. Finally I repeat the exercise after pre-processing the dataset with matching techniques, to show that results are not model-dependent.

Florence Kondylis  Conflict-Induced Displacement and Labour Market Outcomes: Evidence from Post-War Bosnia and Herzegovina

This study uses a longitudinal data source to study the effects of conflict-induced displacement on labour market outcomes for Bosnians in post-war Bosnia and Herzegovina. To account for endogeneity in the displacement status, I exploit the fact that the level of violence in the pre-war residence likely affected the displacement decision for Bosnians and yet is not associated to economic performance. I find evidence of positive selection into displacement and that displaced Bosnians men and women are less likely to be in work. Interestingly, whereas this translates into higher unemployment for men, it decreases women's participation with no effect on unemployment once selection is accounted for. The informality of the labour market in BiH and the destruction of networks are not only the most plausible candidates to explain the high cost of displacement, but they also help rationalise the lack of an effect on participation for displaced men.
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**Galindev Ragchaasuren**  
The Evolution of Population, Technology and Output

The paper presents a unified model that generates the historical evolution of fertility and income per capita in relation to technological progress. An industrial revolution leads to a transition from the Malthusian Regime, where the agricultural society is dominant and income per capita remains roughly constant as population growth absorbs technological progress, into the Post-Malthusian Regime where the industrial sector is dominant and technological progress in this sector leads to an increase in both income per capita and population growth. Finally, economies move into the Modern Growth Regime, where the relationship between income per capita and population growth is reversed into negative, when the relative price of children to that of leisure goods increases as a result of technological progress which induces parents to choose more leisure goods and fewer children.

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**Moshe Hazan**  
The Baby Boom and World War II: A Macroeconomic Analysis

Matthias Doepke  
Yishay Maoz

We argue that one major cause of the U.S. postwar baby boom was the increased demand for female labor during World War II. We develop a quantitative dynamic general equilibrium model with endogenous fertility and female labor-force participation decisions. We use the model to assess the long-term implications of a one-time demand shock for female labor, such as the one experienced by American women during wartime mobilization. For the war generation, the shock leads to a persistent increase in female labor supply due to the accumulation of work experience. In contrast, younger women who turn adult after the war face increased labor-market competition, which impels them to exit the labor market and start having children earlier. In our calibrated model, this general-equilibrium effect generates a substantial baby boom followed by a baby bust, as well as patterns for age-specific labor-force participation and fertility rates that are consistent with U.S. data.
Katsuyuki Shibayama
Inventory Cycles

This article investigates a rational dynamic stochastic general equilibrium model with a stockout constraint and a production chain. Our model shows that the stockout avoidance and cost shock models satisfy stylised inventory facts -- production is more volatile than sales and inventory investment is procyclical -- for demand and supply shocks, respectively, while production smoothing works at very high frequencies. Note that the cost shock and production smoothing models are naturally embedded in our micro-founded general equilibrium framework. Moreover, as a by-product, the production chain causes the slow adjustment of inventories in aggregate. Consequently, our model generates (a) high labour volatility and (b) low correlation between labour productivity and output; the standard RBC cannot produce these two empirical findings. Finally, our model yields inventory cycles.

Domenico Marchetti
Effort and Hours over the Business Cycle
Francesco Nucci

Factor hoarding is widely recognized as a crucial feature of economic fluctuations and its importance in business cycle models has grown in recent years. Yet, very little is known about the cyclical behavior of work effort. By resorting to high-quality firm-level data, we obtain an estimate of labor effort from a dynamic cost minimization model. We then add preferences into the model using a fairly comprehensive set-up and show that, contrary to common assumptions in business cycle models and production function regressions, the equilibrium relationship between hourly effort and hours is not monotonic. During a recovery, if a critical level of hours per worker is reached, every additional hour is worked with decreasing effort, due to physical fatigue. We provide empirical support for a hump-shaped profile of the effort function by estimating the elasticity of effort to hours under a variety of different business cycle conditions.

Giulio Nicoletti
Estimating DSGE models with long memory dynamics
Gianluca Moretti

Recent literature points out that key variables such as aggregate productivity and inflation display long memory dynamics. We study the implications of this high degree of persistence on the estimation of Dynamic Stochastic General Equilibrium (DSGE) models. We first show that long memory data can produce substantial bias in the deep parameter estimates when a standard Kalman Filter-MLE procedure is used; therefore we propose an original modification of the Kalman Filter which deals with this problem. We show then that the modified Kalman Filter procedure can beat the standard one in a real-data out-of-sample forecasting exercise.
### Chiara Forlati - Optimal Monetary and Fiscal Policy in the EMU: Does Fiscal Policy Coordination Matter?

I develop and analyze a DSGE model of a currency union to revise the question of how to conduct monetary and fiscal policy in countries that share the same currency. In contrast with the previous literature which assumes coordination, this paper analyzes the case where coordination lacks among fiscal authorities as well as between fiscal and monetary authorities. I show that the normative prescriptions emphasized by previous analyses are not valid anymore once policymakers are not coordinated. Indeed, in that case the common central bank does not stabilize the average union inflation as if it were a closed economy because she has to take into account the distortions caused by the lack of coordination among fiscal policymakers. At the same time, if there is not a common agreement to coordinate fiscal policies, autonomous governments should use government expenditure as a stabilization tool even if shocks are symmetric.

### Katrin Rabitsch - Capital Liberalization and the U.S. external imbalance

Differences in financial systems are often named as prime candidates for being responsible for the current state of world global imbalances. This paper argues that the process of capital liberalization and, in particular, the catching up of emerging market economies in terms of financial account openness can explain a substantial fraction of the current US external deficit. We assess this link in a simple two country one good model with an internationally traded bond. Capital controls are reflected in the presence of borrowing and lending constraints on that bond. A reduction in the foreign country lending constraint enables the US to better insure against consumption risk and therefore decreases its motives for precautionary asset holdings relative to the rest of the world. As a result, the US runs a long run external deficit.
### Hans-Martin Krolzig

**Gets Model Selection with Sign Restrictions**

We propose an operational procedure using PcGets to integrate sign restrictions in the Gets model selection process. When considering its properties, we find that correct sign constraints on detectable DGP variables are rarely non-binding; false sign constraints on DGP variables are usually rejected from the onset producing omitted-variables problems when imposed on the model search. In contrast, imposing sign constraints on nuisance variables are beneficial by reducing the size without affecting the power of Gets model selection. There is ample evidence that the contribution of sign restrictions to econometric model selection has been overrated in the literature. As the reduction process will induce a sign reversal only in extreme cases, rejections of sign restrictions signal the need for revisions of the general statistical model or the underlying economic theory.

### J. James Reade

**Modelling and Forecasting Using Model Averaging**

David F. Hendry

In this paper the econometric technique of model averaging, which has gained much popularity in recent years, is assessed. Model averaging tends to be viewed as a polar opposite of model selection; often the motivation for averaging is to avoid the potential pitfalls of selecting models. However, in this paper simple averaging without any selection is shown to provide very poor modelling and forecasting output. Furthermore, bad selection will lead to bad averaging and bad output, it is argued. The clear conclusion is that averaging ought to be augmented with effective selection: the two ideas are not conflicting, but in fact complementary.
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<tr>
<td><strong>Inci Gumus</strong></td>
<td>Debt Denomination and Default Risk in Emerging Markets</td>
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<td>The inability of emerging market economies to borrow in domestic currency in international markets often leaves them vulnerable to real exchange rate fluctuations. In these countries, real exchange rate depreciations are associated with declines in output, which increase the cost of foreign currency debt when the repayment capacity is low, thereby hindering debt service. This paper develops a small open economy model to analyze the effect of debt denomination on default risk in emerging markets. Default risk is determined endogenously and depends on the incentives for repayment. The economy can borrow using bonds denominated in tradable or nontradable goods, which are proxies for foreign and domestic currency debt respectively. The model predicts that tradable denominated debt increases default risk and leads to higher interest rates. Additionally, this type of debt is shown to reduce the amount of debt that can be sustained and the welfare while increasing interest rate volatility.</td>
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<td><strong>Emanuel Kohlscheen</strong></td>
<td>A Sovereign Debt Model with Trade Credit and Reserves</td>
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<td>Stephen O'Connell</td>
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<td>We present a unified model of sovereign debt, trade credit and international reserves. Our model shows that access to short-term trade credit and gross international reserves affect the outcome of debt renegotiations. We derive propositions that: establish the size of haircuts as a function of economic fundamentals; predict that defaults should occur during economic downturns; provide a rationale for holding costly borrowed reserves and show that the stock of international reserves tends to increase when global interest rates are low.</td>
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<td><strong>Christine Richmond</strong></td>
<td>Regaining Market Access: What Determines the Duration of Exclusion?</td>
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<td>Daniel Dias</td>
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<td>This paper examines why some countries are able to regain access to international capital markets immediately after resolving a default, whereas other countries appear to be punished for longer periods. We first develop a methodology to determine when market access occurs after default settlement. Our main findings from examining the duration of exclusion from international capital markets between 1980-2005 in Latin American countries are the following: i) countries regain partial market access after 1.8 years on average while it takes 4.8 years on average to regain full market access; ii) partial market access depends mostly on short-term domestic macroeconomic conditions; and iii) full market access depends primarily on external market conditions and investor ratings of the country.</td>
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<td><strong>Julien Idier</strong></td>
<td><strong>Long term vs short term transmission in stock markets: the use of Markov switching multifractal models</strong></td>
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Empirical techniques to assess market integration and contagion between stock markets are numerous from cointegration to dynamic conditional correlations. The subsequent paper uses the fractal properties of asset returns developed by Mandelbrot and estimates Markov switching multifractal models (MSM) to give new insights about short and long run transmission effects. The main advantage of the model is to give several indicators of comovements: state dependent correlations, probabilistic structure associated with volatility states, cycles or probability of contagion. Long term cycle are determined for four indexes (CAC DAX FTSE NYSE) at daily frequency between 1996 and 2007. Crises are detected and a special focus is done on the 2007 subprime period. This last is not identified as a crisis since the long term volatility cycle is still low. However short and medium term volatility has rised and this has weakened the market.

| **Marianne Sensier** | **Explaining co-movements in US and UK stock prices using international information and time-varying correlations** |

This paper provides evidence on the role of macroeconomic and financial variables in a two-equation model for monthly US and UK stock price movements with time-varying conditional correlations. In addition to domestic effects, international variables play an important role, with the US Federal Funds rate having a negative influence on UK returns and UK bond yields negatively affecting the US market. Oil price inflation has negative effects on returns in both markets. Compared to a bivariate model without explanatory variables, the inclusion of macroeconomic and financial variables increases the persistence of time varying correlations in a DCC-GARCH model. Further, a regime-switching STCC-GARCH specification finds that conditional correlations increase dramatically after 1999-2000 and also increase in periods of high volatility.
Litigation seems to be a Pareto-inefficient outcome of pretrial bargaining; however, this paper shows that litigation can be the outcome of rational behavior by a litigant and her lawyer. If the lawyer has more information than his client concerning the characteristics of the lawsuit, the client can use litigation as a way of extracting information. This paper uses an asymmetric information model where the lawyer has information about the strength of the lawsuit that the plaintiff does not know. The settlement-litigation decision by the litigant then depends on her prior information about the strength of her claim. It is shown that litigation will occur only when the plaintiff is pessimistic about her prospects at trial. The plaintiff is more likely to sue if she is more pessimistic about winning the case and faces more uncertainty in litigation. Empirical results provide support for the theory.

The prosecution of cartel members by an antitrust agency could lead to public fines and criminal charges imposed on the management of the firms involved. At the same time private parties affected by those antitrust violations could take legal actions against the cartel to recover damages. As another instrument to fight cartels, antitrust authorities in most jurisdictions have introduced a leniency program to deter the formation and improve the detection of cartels. In our paper we argue that the application for the leniency program by a member of a cartel could be effectively blocked by a ring-leader.

This paper investigates the allocation of scarce resources for which monetary trading is not possible.
Christian Ruzzier: Product-Market Competition and Managerial Autonomy

This paper proposes a theory of the impact of product-market competition on managerial decision-making autonomy based on managers' concern about keeping their incumbency rents, and on the idea that changes in market conditions affect the congruence between the interests of the principal and the manager. My main result is that higher degrees of managerial autonomy are more likely for intermediate levels of competition. Increased competition may induce a manager, who risks having his rents reduced if performance is poor, to make decisions more in line with the interests of the organization—but further increases in competitive forces might as well lead him to take excessive risks. With an intermediate level of competition, the threat on incumbency rents is just enough to align the manager's interests with those of the organization without pushing him to take value-reducing risks.

Zhijun Chen: Cartel Organization and Antitrust Enforcement

This paper develops a simple framework to characterize the dual-coalition structure of cartel organization and highlights the interactions between cartel organization and antitrust enforcement. We show that delegation of authority over decision rights can make cartels more robust to deviation, whereas this efficiency gain of cartel organization can be mitigated by the optimal design of leniency policy. In particular, this framework allows us to analyze the optimal design of individual and corporate leniency programs which contributes further to fight collusion.

Matthew Olczak: Tacit Collusion, Firm Asymmetries and Numbers

The purpose of this paper is to identify empirically the implicit structural model, especially the roles of size asymmetries and concentration, used by the European Commission to identify mergers with coordinated effects (i.e. collective dominance.) Apart from its obvious policy-relevance, the paper is designed to shed empirical light on the conditions under which tacit collusion is most likely. We construct a database relating to 62 candidate mergers and find that, in the eyes of the Commission, tacit collusion in this context virtually never involves more than two firms and requires close symmetry in the market shares of the two firms.
Simon Luechinger  
Valuing Air Quality Using the Life Satisfaction Approach

We use the life satisfaction approach to value air quality, combining individual-level panel and high-resolution SO2 data. To avoid simultaneity problems, we construct a novel instrument exploiting the natural experiment created by the mandated scrubber installation at power plants, with wind directions dividing counties into treatment and control groups. We find a negative effect of pollution on well-being that is larger for instrumental variable than conventional estimates, robust to the inclusion of local unemployment and particulate pollution, and larger for environmentalists and predicted risk groups. To calculate total willingness-to-pay for clean air, the estimates are supplemented by hedonic housing regressions.

Dan Anderberg  
Arnaud Chevalier  
Jonathan Wadsworth  
Health and Knowledge: The UK Measles, Mumps and Rubella Controversy

One theory for why there is a strong education gradient in health outcomes is that more educated individuals more quickly absorb new information about health technology. We use the recent MMR controversy in the UK as example where, for a short period of time, research was suggesting that a particular vaccine could have potentially serious side-effects. We find that, as the controversy set in, the uptake rate among more educated parents indeed decreased faster than among less educated parents, and also seems to have recovered faster once the research claims failed to be corroborated. However, we also find that the same group seem to have reacted by reducing their relative uptake of other non-controversial childhood vaccines.

Emilia Simeonova  
Doctors, Patients, and the Racial Mortality Gap: What Are the Causes?

Disparities in health between whites and minorities are well documented. Discrimination and unequal access to care are cited explanations for those differences. It is alleged that doctors treat minority patients differently or that they are trapped in facilities of inferior quality. I employ a novel estimation strategy to investigate the sources of the racial gap for the most expensive chronic condition. Quality of the clinics or doctors is not the underlying reason for racial differences in mortality. Doctor competence significantly influences patient outcomes; minorities have access to similar physician quality, and doctors treat patient similarly regardless of race. Differences in patient self-management trigger a racial mortality gap even when access and treatment are equalized. Considerable reductions in costs could be achieved by instructing patients about the importance of strictly following the therapy regimen. Educating minorities will have the added benefit of reducing the black-white mortality gap by at least two-thirds.
Georgios Panos
Ioannis Theodossiou

Job Satisfaction, Aspirations and Earnings Comparisons

Developments in the well-being literature have highlighted the importance of norms of comparison. The status quo until recently was that relative deprivation dominates inter-personal comparisons. However, another strand of the literature has revealed the potential of positive satisfaction flows from peer progression, in accordance with the Hirschman tunnel effect. This study provides evidence from the British labour market in favour of the tunnel effect. Its prevalence depends on individual-specific financial circumstances entailing uncertainty. Using a longitudinal dataset of employees, it is found that rises in peer earnings signal positive information about own future advancement. However, this effect is likely to be short-lived and individuals with higher reference norms are more likely to be less satisfied with their jobs on average. Individuals in uncertain income paths are the ones more likely to receive information from the observation of their peers, particularly the young and the financially vulnerable.

Sonja Kassenboehmer
John P. Haisken-DeNew

You’re Fired! The Causal Negative Effect of Unemployment on Life Satisfaction

This paper examines the impact of unemployment on life satisfaction for Germany 1984-2006, using a sample of men and women from the German Socio-Economic Panel (SOEP). Across the board we find large significant negative effects for unemployment on life satisfaction. This paper expands on previous cornerstone research from Winkelmann and Winkelmann (1998) and explicitly identifies truly exogenous unemployment entries starting from 1991. We find that for women in East and West Germany, company closures in the year of entry into unemployment produce strongly negative effects on life satisfaction over and above an overall effect of unemployment, providing prima facie evidence of a reduced outside work option, large investments in firm-specific human capital or a family constraint. The compensating variation in terms of income is dramatic, indicating enormous non-pecuniary negative effects of exogenous unemployment due to company closures.

Andrew Clark
Orsolya Lelkes

Deliver us from evil: religion as insurance

This paper focusses on the insurance role of religion in buffering the well-being impact of stressful life events, and the ensuing economic and social implications. Using two large-scale European data sets, we show that the religious enjoy higher levels of life satisfaction, and that religion does insure against some adverse life events. All denominations suffer less psychological harm from unemployment than do the non-religious; equally both Catholics and Protestants are less hurt by marital separation. However, while Protestants are protected against divorce, Catholics are punished for it. These results do not seem to come about from the endogeneity of religion. These patterns in subjective well-being correspond to data on both attitudes (the religious are both anti-divorce and anti-job creation for the unemployed) and behaviour (the religious unemployed are less likely to be actively looking for work).
### Andreas Georgiadis

**Efficiency Wages and the Economic Effects of the Minimum Wage: Evidence from a Low-Wage Labour Market**

We exploit a natural experiment provided by the 1999 introduction of the UK National Minimum Wage (NMW) to investigate the relationship between wages and monitoring and to test for Efficiency Wages considerations in a low-wage sector, the UK residential care homes industry. Our findings seem to support the wage-supervision trade-off prediction of the shirking model, and that employers didn’t dissipate minimum wage rents by increasing work intensity or effort requirements on the job. Our estimates suggest that higher wage costs were more than offset by lower monitoring costs, and thus the overall evidence imply that the NMW may have operated as an Efficiency Wage. This evidence could provide an explanation of recent findings from the care homes sector that although the wage structure was heavily affected by the NMW, there were moderate employment effects.

### Patrick Puhani

**Privatization and Changes in the Wage Structure - Evidence from Firm Personnel Records**

Blaise Melly

We investigate the wage effects of privatization using person-level firm-based data sets of a privatized and non-privatized public sector firm in the same country. Our observation period covers the years immediately before and after privatization. The investigated situation comes very close to a natural experiment for switching workers from the public to the private sector. We find significant changes in the wage structure in the privatized, but not in the non-privatized firm. The distribution of wages and of wage growth became significantly wider after privatization. Conditioning on the characteristics of workers, we find that younger employees and those with shorter tenure gained from privatization. There is also evidence that high-skilled gained relative to medium-skilled workers. Surprisingly, low-skilled workers also gained; this seems to have been a temporary compensation given by the firm in order to increase the acceptance of privatization.

### Alex Bryson

**The Wage Impact of Trade Unions in the UK Public and Private Sectors**

David G. Blanchflower

We estimate union membership wage premia in the UK public and private sectors. In parsimonious models we find the premium is larger in the public sector than it is in the private sector. Using data from the Labour Force Survey the gap between the membership premium in the public and private sectors closes with the addition of occupational controls. However, using data from the Workplace Employment Relations Survey 2004, the public sector union membership wage premium remains roughly twice the size of the private sector membership premium having accounted for workplace fixed effects, worker occupations, their job characteristics, qualifications and worker demographics. Furthermore, the membership wage premium among workers covered by collective bargaining is only apparent in the public sector. We argue that these findings are worthy of further investigation since they have public policy implications for wage setting.
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<th>Chair: Hans Gruner</th>
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<tr>
<td><strong>Marko Koethenbuerger</strong></td>
<td>Does Tax Competition Really Promote Growth?</td>
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<td>Ben Lockwood</td>
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This paper considers the relationship between tax competition and growth in an endogenous growth model where there are stochastic shocks to productivity, and capital taxes fund a public good which may be for final consumption or an infrastructure input. Absent stochastic shocks, decentralized tax setting (two or more jurisdictions) maximizes the rate of growth, as the constant returns to scale present with endogenous growth implies extreme tax competition. Stochastic shocks imply that households face a portfolio choice problem, which may dampen down tax competition and may raise taxes above the centralized level. Growth can be lower with decentralization. Our results also predict a negative relationship between output volatility and growth, consistent with the empirical evidence.

<table>
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<tr>
<th><strong>Stefanie Haller</strong></th>
<th>Determinants of ICT adoption: Evidence from firm-level data</th>
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<td>Iulia Traistaru-Siedschlag</td>
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This paper examines factors driving ICT adoption at firm level. We use a novel data set including information on ICT and e-commerce in Irish manufacturing firms over the period 2001-2004 and estimate a model derived from the new technology adoption literature that relates ICT adoption indicators to two sets of factors: characteristics of firms and characteristics of the environment in which firms operate. Our research results indicate that the adoption of ICT in Irish manufacturing has been uneven across firms, industries and space. On average, other things equal, firms with more skilled workers, operating in ICT producing and ICT using industries, located in the capital city region have been relatively more successful in adopting and using ICT. To a certain extent, patterns of ICT adoption have been different for domestic and foreign-owned firms, in particular with respect to the effects of international competitive pressure and firm size.

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<tr>
<th><strong>Hans Gruner</strong></th>
<th>Information Technology, Efficient Restructuring</th>
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Labor productivity in the US has recently grown more strongly than in most European countries. It is often argued that the American productivity increase is due to the widespread introduction of new information and communication technologies (ICT). But why have the same technologies not similarly increased Europe's labour productivity? This paper provides a theoretical explanation for this productivity puzzle based on an extension of Radner's (1992) model of hierarchical information aggregation. The introduction of new ICTs enables organizations to process any given amount of information with a shorter delay. This enables organizations to restructure and solve incentive problems without risking to produce with excessive delay. Even a marginal improvement in the ICT can yield significant increases in labor productivity if - and only if - the organization is drastically restructured. Restructuring yields hierarchies with less layers and less managers, all working under incentive pay and providing first best effort.
### General Sessions: Abstracts for detailed programme RES2008

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<tr>
<td><strong>Mevlude Akbulut Yuksel</strong>&lt;br&gt;Adriana D. Kugler</td>
<td>Inter-generational Transmission of Health Status in the U.S among Natives and Immigrants</td>
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The research on education points to significant inter-generational transmission which likely contributes to the inter-generational transmission of earnings and income. This paper addresses the question of whether another form of human capital, health, also provides similar insight in understanding mobility of earnings. Using NLSY, we first present new evidence on inter-generational transmission of health outcomes including weight, height, the body mass index, depression and asthma for both natives and immigrants. We show that both native and immigrant children inherit a prominent fraction of their health status from their parents. Next, we also find that mother’s education decreases child’s weight and the body mass index for natives, while single motherhood increases weight and BMI of children for both natives and immigrants. Taken together, these findings suggest that along with inter-generational correlation in education, persistence in health also contributes to the inter-generational transmission of economics.

| Pavel Vacek | Panel Data Evidence on Productivity Spillovers from FDI: Firm-level Measures of Backward and Forward Linkages |

I examine whether foreign direct investment increases the productivity of manufacturing firms. I test the proposition that local firms benefit from supplying multinational firms (spillovers through backward linkages) and by purchasing inputs from multinationals (spillovers through forward linkages). The existing literature on productivity spillovers has relied on industry-level proxies for spillovers. I identify spillovers directly at the firm level. I have conducted field work in the Czech manufacturing sector and built a unique data set that enabled me to construct firm-level measures of backward and forward linkages. My results provide strong support for the existence of productivity spillovers through backward linkages.

| Gabriel Montes-Rojas<br>Kishore Gawande<br>William Maloney | Can Foreign Lobbying Enhance Development? The Case of Tourism in the Caribbean |

There exist legal channels for informational lobbying of US policymakers by foreign principals. Foreign governments and private sector principals frequently and intensively use this institutional channel to lobby on trade and tourism issues. This paper empirically studies whether such lobbying effectively achieves its goal of trade promotion in the context of Caribbean tourism and it is the first paper to examine the potential for using foreign lobbying as a vehicle for development. Panel data are used to explore and quantify the association between foreign lobbying by Caribbean principals and US tourist arrivals to Caribbean destinations. A variety of sensitivity analyses support the finding of a strong association. The policy implications are obvious and potentially important for developing countries.
Hitoshi Sato, Taiji Furusawa

A Factor-Endowment Theory of Endogenous Firm Heterogeneity

In the model where the choices of technology by firms endogenously determine productivity differences, we investigate the link between factor endowment and the productivity both in the firm and industry levels. We find among others that firms in capital-abundant countries tend to adopt new advanced technologies more in their production processes, and that opening to international trade increases the average adoption rate of new technologies although firms with intermediate productivity levels adopt less of new technologies than in autarky.

Zhihong Yu

Openness, Managerial Incentives and Heterogeneous Firms

Recent micro-level empirical studies have found robust evidence that increasing exposure to trade leads to productivity changes at both firm and industry level. This paper provides a principal-agent mechanism explaining such effects under the new heterogeneous firm trade framework. We build an industry model with monopolistic competitive firms where international trade induces changes in the optimal incentive contract offered by the firm to the manager and leads to productivity gains or losses at both firm and industry level. The model reveals that firm heterogeneity plays a crucial role in the effects of increasing exposure to trade on within firm productivity. We show that when firms are heterogeneous (homogenous) so that there is strong selection into the export market (all firms export), increasing exposure to trade leads to stronger (weaker) managerial incentives and efforts, leading to a positive (negative) impact on endogenous firm level productivity and welfare gains.

Ashley Taylor

Trade, finance and productivity: a heterogeneous firm approach

Reforms to trade policy, domestic financial sectors and international capital market access are key elements of policy packages aimed at reducing productive distortions. Although widely studied individually, the important question of how their macro-economic implications interact has received less attention. I develop a unifying model to address this issue and examine the channels through which home and foreign financial development condition the impacts of international trade and financial liberalisation on aggregate productivity and real wages. Motivated by recent firm-level studies, I draw on the heterogeneous trade approach of Melitz (2003) but add two-way linkages between firms’ production and exporting decisions and the domestic and international financial constraints. In financial autarky, domestic financial reforms condition the effects of trade liberalisation on both the domestic economy and also its trading partners via the trade channel. With international financial flows domestic financial reforms are also transmitted internationally via a direct financing channel.
### Joana Pereira
Salvador Ortigueira

**Markov-Perfect Optimal Fiscal Policy: The Case of Unbalanced Budgets**

We study optimal income taxation and debt policy in a neoclassical economy populated by infinitely-lived households and a benevolent government. Since the government is assumed to lack the ability to commit to future policies, we restrict our attention to Markov-perfect equilibria. In a calibrated version of the model, we find a stable, steady-state equilibrium where income taxes are in the order of 20% and the debt-GDP ratio is 60%. We argue that the model can account for income taxes and debt levels observed both in the U.S. and in most developed economies. Our results stand in sharp contrast to previous theories on optimal fiscal policy assuming government's full commitment, which predict zero income taxes and positive government asset holdings in the long run.

### Davide Debortoli
Ricardo Nunes

**Political Disagreement, Lack of Commitment and the Level of Debt**

This paper analyzes how public debt evolves when successive policymakers have different policy goals and cannot make credible commitments about their future policies. We consider several cases to be able to disentangle and quantify the respective effects of imperfect commitment and political disagreement. Absent political turnover, imperfect commitment drives the long-run level of debt to zero. With political disagreement, debt is a sizeable fraction of GDP and increasing in the degree of polarization among parties, no matter the degree of commitment. The frequency of political turnover does not produce quantitatively relevant effects. These results are consistent with much of the existing empirical evidence. Finally, we find that in the presence of political disagreement the welfare gains from commitment are lower.

### Costas Milas
Gabriella Legrenzi

**Non-linear adjustments in fiscal policy**

We apply non-linear error-correction models to the analysis of fiscal policy. Our empirical analysis, based on Italy, shows that the burden of correcting budgetary disequilibria is entirely carried by changes in taxes, rather than changes in government spending or policy mixes. On the other hand, the tax instrument displays rigidities, as taxes are downward inflexible not only with respect to their long-run level, but also during periods of decreasing economic growth. As a consequence, structural expenditure reforms aiming at a higher degree of government expenditure adjustment are needed. This would also relax the asymmetries reported in the paper.
Economic fluctuations in most of the industrialised world have for over the past 30 years been characterised by declining volatility, a trait also witnessed for output fluctuations in the Euro Area. This paper has two objectives. The first is to provide a comprehensive characterisation of the decline in volatility using a large number of Euro area economic time series and a variety of methods designed to describe the time-varying time series processes. The second objective is to provide new evidence on the quantitative importance of various explanations for this Great Moderation. This paper focuses on the central elements in the literature contending why real output growth has stabilised. Such factors include improved monetary policy, and a good luck factor. Taken together, the moderation in volatility is attributable to a combination of improved policy and identifiable forms of good luck that manifest themselves as smaller reduced-form forecast errors.

Anton Nakov
Oil and the Great Moderation
Andrea Pescatori

We assess the extent to which the great US macroeconomic stability since the mid-80s can be accounted for by changes in oil shocks and the oil share in GDP by estimating the model in Nakov and Pescatori (2007) before and after 1984 and performing counterfactual simulations. We nest two popular explanations for the Great Moderation: (1) smaller (non-oil) shocks; and (2) better monetary policy. We find that the reduced oil share accounted for one third of the inflation moderation, and 13% of GDP growth moderation, while smaller oil shocks accounted for 7% of GDP growth moderation and 11% of the inflation moderation.

Fabio Milani
Learning and Time-Varying Macroeconomic Volatility

This paper presents a DSGE model in which agents' learning about the economy can endogenously generate time-varying macroeconomic volatility. Economic agents use simple models to form expectations and need to learn the relevant parameters. Their gain coefficient is endogenous and is adjusted according to past forecast errors. The endogenous gain is jointly estimated with the structural parameters of the system. The estimation results show that private agents appear to have often switched to constant-gain learning, with a high constant gain, during most of the 1970s and until the early 1980s, while reverting to a decreasing gain later on. As a result, the model can generate a pattern of volatility, which is increasing in the 1970s and falling in the second half of the sample, with a decline that can roughly match the magnitude of the Great Moderation.
<table>
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<tr>
<th>Alessia Campolmi</th>
<th>Oil price shocks: Demand vs Supply in a two-country model</th>
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<td>From the last quarter of 2001 to the third quarter of 2005 the real price of oil as increased by 103%. Such an increase is comparable to the one experienced in the 1970s. At the same time, the behaviour of real GDP growth, Consumer Price inflation, GDP Deflator inflation, real wages and wage inflation in USA in correspondence of the shocks in the 1970s is very different from the one exhibited in the 2000s. What can explain such a difference? Within a two-country framework where oil is used in the production, two kinds of shocks are analyzed: reduction in oil supply; persistent increase in foreign productivity (as proxy for the experience of non-OECD countries in the last years). It is shown that, while the 1970s are consistent with the first one, the shock to foreign productivity generates dynamics close to the one observed in the 2000s.</td>
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<tr>
<th>Christoph Thoenissen, Parantap Basu</th>
<th>Investment frictions and the relative price of investment goods in an open economy model</th>
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<tr>
<td>Is the relative price of investment goods a good proxy for investment frictions? We analyze investment frictions in an open economy, flexible price, two-country model and show that when the relative price of investment goods is endogenously determined in such a model, the relative price of investment can actually rise in response to a reduction in investment frictions. Only when the model is driven by TFP shocks do we observe a data congruent negative correlation between investment and the relative price of investment goods</td>
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<td><strong>Andreas Thams</strong></td>
<td>Inflation Transmission in the EMU: A Markov-Switching VECM Analysis</td>
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<td>This paper analyzes the transmission of inflation across the five largest economies in the European Monetary Union, i.e. France, Germany, Italy, Netherlands and Spain. We use CPI inflation rates for the period 1970-2006. We first investigate, if there were changes in inflation dynamics in these countries using univariate Markov-switching models. To assess the inflation transmission mechanism, we first establish a long-run relationship between the five countries using cointegration methods. As implied by the results of the univariate models, we allow for changes in the adjustment coefficients of the cointegrating relationships and the short-run dynamics. Using a Markov-switching vector error correction model we find evidence for multiple regime switches during the early 1970s till the mid 1980s. Since the mid-1980s we find evidence for a stable transmission mechanism both in the long- and the short-run characterized by a low degree of inflation persistence.</td>
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<tr>
<td><strong>Erdenebat Bataa</strong></td>
<td>Structural breaks in inflation and causality in international transmission of price shocks</td>
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<td>Denise Osborn, Marianne Sensier Dick van Dijk</td>
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<td>This paper analyses monthly consumer price inflation in G-7 countries and the Euro Area (aggregate) over 1960 to 2006. An initial univariate analysis documents changes in mean, persistence and volatility, with subsequent analysis utilising two VAR models for the mean-adjusted series. One VAR examines international interactions between Canada, the Euro Area, the UK and the US, while a second considers major Euro Area countries. After allowing for structural breaks, we find evidence of the international transmission of inflation from the Euro Area to Canada, the UK and the US during certain sub-periods, and also from France to Germany. After allowing for volatility changes, causality in variance tests show inflation uncertainty is transmitted between the countries of the Euro Area. There is also evidence of such transmission from the US to Canada and Euro Area, but not vice versa, and bidirectional causality between the Euro Area and the UK.</td>
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<tr>
<td><strong>Daniel Dias</strong></td>
<td>Using Mean Reversion as a Measure of Persistence</td>
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<td>Carlos Robalo Marques</td>
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<td>This paper suggests a new scalar measure of persistence together with a companion estimator, which has the advantage of not requiring the specification and estimation of a model for the series under investigation. The statistical properties of the companion estimator are established, which allow tests of hypotheses to be performed, under very general conditions. The use of the new measure is illustrated by re-evaluating persistence of inflation for the United States and the Euro Area. The conclusions for the United States do not differ significantly from what has been found in previous empirical studies. However, for the Euro Area we find evidence of a significant break occurring in 2000/2001, such that persistence becomes virtually nil for the period that follows the launch of the euro and the implementation of a common monetary policy by the European Central Bank.</td>
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Pawel Zabczyk
Bianca De Paoli

Why do risk premia vary over time?

Existing asset pricing theories ascribe moves in risk premia to changes in volatility or risk aversion. Nevertheless, in a simple general equilibrium model risk premia can be pro-cyclical even though the volatility of consumption is constant and despite a countercyclically varying risk aversion coefficient. We show that agents' expectations about future prospects also influence premium dynamics. In order to generate countercyclically varying premia, as found in the data, one requires a combination of hump shaped consumption dynamics or highly persistent shocks and habits.

Steffan Ball
Sule Alan

Household Portfolio Choice and Expected Stock Market Returns

Empirical evidence strongly suggests that the average historical stock market return is an inadequate proxy for expected returns. One route taken by some researchers to identify expected returns is to use direct survey responses. However, it is evident from these studies that direct expectations questions are answered in rather uninformed manner by survey respondents. In this paper, we propose a different route. We treat expectations (likely to be heterogeneous) as structural unknowns and estimate them using households’ portfolio choice and consumption information. Using a simulated minimum distance (SMD) estimator, we estimate a dynamic portfolio choice model with income and return uncertainty. We find that expected returns and expected stock market risk vary across cohorts and education groups, and are quite different from the realized historical values.

Andreas Schrimpf

International Stock Return Predictability under Model Uncertainty

This paper examines return predictability when the investor is uncertain about the right state variables. A new feature of the ‘frequentist’ model averaging approach used in this paper is to account for finite-sample bias of the coefficients in the predictive regressions. Drawing on an extensive international dataset, we find that interest-rate related variables are usually among the most prominent predictive variables, whereas valuation ratios perform rather poorly. Yet, predictability of market excess returns weakens substantially, once model uncertainty is accounted for. We document illuminating patterns in the degree of in-sample and out-of-sample predictability across different stock markets.
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#### Andreas Panagopoulos  
In-Uck Park  
**Patent Portfolios As Stimulants For Open Innovation; A Dynamic Approach**

In a world of large patent portfolios and complex technologies many startup firms can be accused of developing ideas that infringe on existing patents owned by larger incumbents, an accusation that, if substantiated in court, may peril an entrant's existence. Nonetheless, as this paper shows, a fine-tuned legal system can lead to a positive bargaining surplus, in the form of a takeover offer (an out of court settlement) that allows both entrant and incumbent to profit. Such an outcome effectively creates a secondary market for ideas, on top of the stock market, offering entrant entrepreneur innovators an extra option for reaping the benefits of their inventions.

#### Luca Bossi  
**Per Unit Versus Ad Valorem Taxes Under Dynamic Monopoly**

In the partial equilibrium framework of a static monopoly, ad valorem taxes always Pareto dominate per unit taxes. This paper shows that this result can actually be reversed in a dynamic framework where the government generates an exogenous stream of revenues through the taxation of commodities produced by a dynamic monopoly (i.e. a single producer facing dynamic demands for an intertemporal good). We show that per unit taxes Pareto dominate ad valorem taxes provided that the per period demands are relatively elastic. We provide a taxonomy concerning the Pareto dominance of the tax systems in this context and numerical examples that support our theoretical results.

#### Flavio Toxvaerd  
**Dynamic Limit Pricing**

This paper studies a simple multi-period model of limit pricing under one-sided incomplete information. I characterize pooling and separating equilibria, determine conditions under which the latter exist and study under which conditions on the primitives the equilibria involve limit pricing. Last, I consider a perturbed version of the model and find that the equilibria of this game, separating as well as pooling, correspond in a natural way to the equilibria of the static benchmark game.
### Michalis Drouvelis
Maria Montero
Martin Sefton

**The Paradox of New Members: Strategic Foundations and Experimental Evidence**

Power indices suggest that adding new members to a voting body may affect the balance of power between the original members even if their number of votes and the decision rule remain constant. Some of the original members may actually gain, a phenomenon known as the paradox of new members. We show that the paradox can occur as an equilibrium of a non-cooperative bargaining game based on the Baron-Ferejohn (1989) model of legislative bargaining. We implement this game in the laboratory and find empirical support for the paradox.

### Elisabeth Schulte

**Communication in committees: Who should listen?**

In a collective decision framework, we study communication among individuals with heterogeneous preferences and private, decision-relevant information. We compare two decision procedures, which differ with respect to the extent to which decision makers can exchange information. If information disclosure is observed by decision makers with different preferences, individuals may strategically withhold information. In this case, a committee member’s silence arouses the other members’ suspicion. As a consequence, in case of residual uncertainty, individual votes may be less sensitive to observed information than if the possibility to exchange information between individuals with different preferences is prohibited. We show that limiting the individuals’ access to communication may yield a higher expected social surplus than full access.

### Michelle Baddeley
George Christopoulos, D. Pillas
Philippe Tobler, Wolfram Schultz

**A Behavioural Analysis of Group Influence in Economic Decision Making**

This paper extends the experimental research on Bayesian herding models via an analysis of the differential impacts of group influence on individuals' decisions. Three potentially overlapping sets of economic, sociological and psychological factors are important in understanding why people herd i.e. why private decisions change when group decisions are revealed. First, with Bayesian updating, social information about group decisions affects individuals’ a posteriori probabilities; second, social pressure affects private judgements; and third, individual heterogeneity (e.g. psychological characteristics) determines susceptibility to group influence. Empirically, we estimate logistic functions quantifying the differential impacts of Bayesian-style thinking, social pressure and psychological factors. We identify firstly - statistically significant propensities to herd, increasing with the degree of group consensus and secondly - statistically significant associations between herding propensities and specific personality traits. Further research plans are outlined including an fMRI study to capture differential impacts of group influence on neurological processing of economic reward signals.
### Luca Merlino
(Dis)Assortative Matching and (Un)Directed Search

When there is heterogeneity in a labour market, a natural question is whether the good jobs go to the good workers and vice versa. I propose a model of a frictional labour market where assortativity depends on the ability of the workers to direct their search strategies to a particular type of vacancy. This allows to study the welfare effects of assortativity in a calibrated version of the model. Surprisingly, while total unemployment is reduced because of the reduction of the sorting externality, assortativity does not make everybody better off. Factotum workers face a decrease in the arrival rate of offers and hence are more likely to be unemployed. The reduced competition among types of vacancies results in a higher proportion of low tech vacancies and lower production. Hence, only unskilled workers receive higher wages.

### Edward Cartwright
Two agents and the Theory of Search

We consider a model of search in which there are two agents who can observe each others search. We demonstrate that one agent's optimal search strategy depends on the strategy of the other agent leading to both free-riding and over-search. Different types of Nash equilibria are discussed and compared to illustrate the consequences of social learning on search behavior and expected payoffs.

### Thomas Wagner
Do Targeted Hiring Subsidies and Profiling Techniques for Long-term Unemployed Reduce Unemployment?

To reduce equilibrium unemployment targeted hiring subsidies and profiling techniques for long-term unemployed are often recommended. To analyze the effects of these two instruments, our model combines two search methods: the public employment service and random search, job-seekers choose between an active and a passive search strategy, while labour market policy has two options available. First, only the long-term unemployed placed by the public employment service are subsidized. Second, the subsidy is paid for each match with a long-term unemployed irrespective of the search method used. We show that under both regimes the equilibrium unemployment rate is increasing with respect to the hiring subsidy. Like the subsidy, profiling measures, which improve the effectiveness of the public placement service, crowd-out the active jobseekers among the short- and the long-term unemployed and reduce total employment.
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**Marc-Arthur Diaye**  
Patricia Crifo  

The Composition of Compensation Policy: from Cash to Fringe Benefits

We develop a Principal-Agent model to analyze the optimal composition of the compensation policy with both monetary and nonmonetary incentives. We characterize nonmonetary benefits as symbols to capture a large set of non-wage compensations such as fringe benefits, status, identity (or self-image) or even sanctions. We characterize the optimal composition of the compensation policy when the Principal fully or imperfectly knows the Agent’s preferences.

**Sarah Smith**  
Paul Gregg, Paul Grout  
Anita Ratcliffe, Frank Windmeijer

How important is pro-social behaviour in the delivery of public services?

A number of papers have posited a relationship between institutional structure and donated labour (pro-social behaviour) in the delivery of ‘caring’ services (health, education etc). However, there is little empirical research that attempts to measure the relationship or to understand how any such relationship may work. This is the objective of this paper. We confirm that there is a positive relationship between non-profit organisations and donated labour (measured by unpaid overtime). After including a robust set of individual and job-specific controls, we find that individuals in the non-profit sector are 12 percentage points (or more than 40 per cent) more likely to do unpaid overtime than individuals in the private sector. We also seek to distinguish between the two main competing models, namely the organisation-form approach (Francois (2001)) and the mission oriented approach (Besley-Ghatak (2005)). We provide strong evidence against pure organisation effects and weaker evidence to affirm the latter.

**Vidhi Chhaochharia**  
Suman Ghosh

Ratings of charities and contributions

This paper investigates whether donor contributions to charities responds to the information incorporated in charity ratings. Using charity ratings data from 1999-2004, we find that ratings do have a significant effect on contributions received. We find that charities that have the lowest rating have 16% less contributions as compared to charities with the highest rating. In addition we find that charities in turn react to lower ratings by increasing their fundraising expenditures. Our results suggest that ratings do have an effect in reducing the asymmetry of information that exists amongst donors and the charities.
### General Sessions: Abstracts for detailed programme RES2008

**Session: 3-5**  
**Tuesday 16:45-18:15**  
**Rm: SS0.19**  
**Chair: Mike Brewer**

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<tr>
<th>Author 1</th>
<th>Title</th>
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<tbody>
<tr>
<td>Melanie Luehrmann</td>
<td>Who wears the trousers? A semiparametric analysis of decision power in couples</td>
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<tr>
<td>Jurgen Maurer</td>
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Intra-household decision processes depend on the balance of power between the partners. However, little is known about its determinants. We measure power using self-assessments of partners' say that are consistent with the definition of power in the collective model. We model balance of power in a semiparametric double index framework that features separate indices for each spouse. These aggregate partners' characteristics and allow for nonparametric interactions between them. Using the Mexican Health and Aging Study, we identify education and employment as main drivers of decision power, especially for women. Other determinants are health, income and the urbanity of the area.

<table>
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<tr>
<th>Author 2</th>
<th>Title</th>
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<tbody>
<tr>
<td>Tarja Viitanen</td>
<td>The Long Run Effects of Legalizing Divorce on Children</td>
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<tr>
<td>Libertad Gonzalez</td>
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The children of divorced parents perform worse than children in intact families in a variety of outcomes. However, identifying the causal effect of parental divorce on child outcomes has proven hard. We identify the long run effect of exposure to parental divorce on children by using the variation in the timing of divorce legalization across European countries. As a result, some cohorts of today's adults received no exposure to divorce as children at all. We use ECHP data on adults in the four legalizing countries, plus other European countries as controls. We find that exposure to divorce as a child had significant long run effects on a variety of adult outcomes, including marital status and family structure, fertility, education, health, living standards and labor supply.

<table>
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<tr>
<th>Author 3</th>
<th>Title</th>
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<tbody>
<tr>
<td>Mike Brewer</td>
<td>Does welfare reform affect fertility? Evidence from the UK</td>
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<tr>
<td>Sarah Smith</td>
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<tr>
<td>Anita Ratcliffe</td>
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This paper presents evidence on the fertility effect of welfare from reforms in the UK in 1999 that substantially increased support for poorer families with children. The reforms, including the introduction of Working Families' Tax Credit and increases in means-tested income support, raised benefits by up to 10% of household income. We exploit the fact that the reforms were targeted on low-income households and use a differences-in-differences approach to evaluate their impact on fertility. The fertility effect of the reforms on all women is ambiguous because WFTC can encourage work for some, so we focus on women in couples where WFTC tended to discourage work and so the reform should have had a positive effect on births. We find that the reforms raised the probability of birth among women in couples by around 10 per cent (implying an elasticity of 0.22), and the effect is greatest for first births.
<table>
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<tr>
<th>Session: 3-6</th>
<th>Tuesday</th>
<th>16:45-18:15</th>
<th>Rm: SS0.20</th>
<th>Chair: Rita Ginja</th>
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<tbody>
<tr>
<td>Karl Taylor</td>
<td>Social Interaction and Children’s Academic Test Scores: Evidence from the National Child Development Study</td>
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<tr>
<td>Sarah Brown</td>
<td>We explore the relationship between educational attainment and social interaction using individual level data from the British National Child Development Study. To be specific, we analyze whether an intergenerational aspect to this relationship exists by examining the relationship between the educational attainment of children and the degree of formal social activity undertaken by their parents. In accordance with the existing literature, our results support a positive association between education and social interaction. Furthermore, our results suggest that children's scores in reading, mathematics and vocabulary tests are positively associated with the extent of their parents' formal social interaction.</td>
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<tr>
<td>Rita Ginja</td>
<td>Preparing Behavior Problems in Childhood and Adolescence: Evidence from Head Start</td>
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<tr>
<td>Pedro Carneiro</td>
<td>This paper shows that participation in Head Start leads to decreases on behavioral problems, grade repetition, special education and obesity at ages 12 to 13, and depression, criminal behavior, and obesity at ages 16 to 17. Eligibility criteria to Head Start induce discontinuities in program participation as a function of income, which can be used for identification of program impacts. Furthermore, there is a range of income cutoffs, since they vary with family size, family income, state and year, allowing us study heterogeneity in program impacts. We find that Head Start has stronger impacts among children of richer and smaller households.</td>
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George Chouliarakis  
**The Time-Varying Natural Rate of Unemployment and Monetary Policy in the UK**

Since Milton Friedman's 1968 seminal paper on the role of monetary policy, the concept of a time-varying unemployment rate at which inflation remains stable has established itself as one of the most influential in macroeconomics. Yet, although few would dispute its analytical value, empirical estimates of the time-varying natural rate have largely been greeted with skepticism. To an extent, this is due to the uncertainty that accompanies estimates of unobserved variables as well as the fact that competing methods of estimation have delivered quite dissimilar results. In this context, the paper employs a number of univariate and multivariate methods to estimate the time-varying natural rate of Britain during 1960:1-2003:4 and examines which of these methods delivers estimates with the highest information content for future inflation. It also shows that, in times of structural economic change, one-sided estimates of the natural rate can help reduce perception lags in monetary policy.

Nicholas Fawcett  
**Forecast density evaluation in the presence of breaks**

This paper examines the effect of various kinds of breaks on the evaluation process of density forecasts. Using the probability integral transform method, we simulate the effect of different kinds of breaks, looking at temporary and permanent shifts. The results suggest that the evaluation method is not necessarily robust to breaks. An application to the Bank of England’s inflation forecast illustrates how the evaluation method might monitor the impact of breaks.

David Hendry  
Jennifer Castle  
Nicholas Fawcett  
**Forecasting, Structural Breaks and Non-linearities**

The paper synthesizes our research into methods for forecasting breaks. Success requires that: breaks are predictable from relevant information available at the forecast origin; we have a forecasting model which embodies such information, in a non-linear form, with a methodology for selecting that model; the resulting forecasts are usefully accurate with accurately measured forecast-error uncertainty; with estimates of the future impact of the break during its progress. We draw on a range of other papers which address these problems and the sub-problems within each. We distinguish two separate information sets, discuss the application of automatic model selection to non-linear models, and apply our approach to the much-studied example of UK M1. Given such demanding requirements, a failure to accurately forecast breaks is likely, so ‘insurance’ policies are essential: in related papers, we augment our strategy by robust forecasting devices, including model transformations, improved intercept corrections, and pooling of forecasts.
General Sessions: Abstracts for detailed programme RES2008

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<th>Session: 3-8</th>
<th>Tuesday</th>
<th>16:45-18:15</th>
<th>Rm: SS0.11</th>
<th>Chair: Evelyn Ribi</th>
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<tbody>
<tr>
<td><strong>Helen Simpson</strong></td>
<td>Investment abroad and adjustment at home: evidence from UK multinational firms</td>
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This paper provides new evidence on the effects of overseas foreign direct investment on the skill-mix of multinational firms' home-country operations. The analysis exploits plant-level data to investigate changes in industrial structure within firms driven by plant closures. As predicted by models of vertical multinationals the paper demonstrates that overseas investment in relatively low-wage economies is associated with firms closing down plants in relatively low-skill, labour-intensive industries in the UK. Understanding within-firm adjustment mechanisms, and their effects on different groups of workers, is important in the context of the relaxation of barriers to inward investment in low-wage economies.

| **Rosario Crino** | Service Offshoring and White-Collar Employment |

This paper empirically studies the effects of service offshoring on U.S. white-collar employment, using data for more than one hundred occupations. A model of firms' behavior based on homothetic weak separability allows for tractable derivation of labor demand elasticities to service offshoring for each occupation. Estimation of the model is performed with quasi-maximum likelihood, to account for high degrees of censoring in the employment variable. Results show that service offshoring raises high skilled employment and lowers medium and low skilled employment. Within each skill group, however, service offshoring penalizes tradeable occupations and benefits complex non-tradeable occupations.

| **Evelyn Ribi** | Outsourcing, Unemployment and Welfare Policy |
| **Christian Keuschnigg** | |

This paper analyzes the effectiveness of welfare policies when heterogeneous firms can outsource labor intensive activities to low-wage countries. The main results are: (i) Globalization, interpreted as lower transport costs for imported components, leads to more outsourcing, depresses low-skilled wages, raises low-skilled unemployment, and boosts per capita profit. (ii) A redistributive linear income tax reduces gross wages, outsourcing and unemployment, but increases profits. (iii) Social insurance raises wages, outsourcing and unemployment, but squeezes profits. The paper finally separates the redistributive and efficiency effects of public policy and characterizes the welfare state's optimal redistribution and social insurance policies.
### Session: 3-9  
**Tuesday 16:45-18:15**  
**Rm: SS0.13**  
**Chair: Derek Headey**

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<th>Abstracts for detailed programme RES2008</th>
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| **Sai Ding and John Knight**  
Can the Augmented Solow Model Explain China’s Economic Growth? A Cross-Country Panel Data Analysis |

China’s economy grew at an average annual rate of 9 percent over the last three decades. Despite the vast empirical literature on testing the neoclassical model of economic growth using data on various groups of countries, very few cross-country regressions include China and none of them particularly focuses on the explanation of China’s remarkable economic growth. We attempt to fill this gap by utilizing panel data on 146 countries over the period 1980-2004 to examine the extent to which the rapid growth of China and the huge gap in the growth rate between China and other countries can be explained by the augmented Solow model. Using system GMM estimation techniques, we find that, in spite of the restrictive assumptions involved, the Solow model augmented by both human capital and structural change provides a fairly good account of international variation in economic growth.

| Davide Fiaschi  
Marzia Romanelli  
Nonlinear Dynamics in Welfare and the Evolution of World Inequality |

We propose a new methodology to measure country’s welfare on the basis of per capita GDP and life expectancy of its population. We apply such methodology to a large sample of countries in order to assess the evolution of world distribution of welfare. From 1980 to 2000 inequality across countries’ welfare increased, on the contrary, the inequality of the cross-population distribution of welfare decrease. In the long run inequality across countries’ welfare is expected to be increasing, while the long-run dynamics of welfare across world population is ambiguous. In 2000 both cross-country and cross-population distributions of welfare appears to be polarized (bimodal). This evidence is expected to persist in the long run for the cross-country distributions of welfare. The shape of the long-run distribution of welfare across world population is instead ambiguous, depending on the assumption on the expected growth rate of per capita GDP.

| Derek Headey  
Appraising a Post-Washington Paradigm: What Professor Rodrik Means by Policy Reform |

This essay critically reviews Professor Dani Rodrik’s work on growth and development. The review first provides an outline of Rodrik’s critique of the Washington Consensus and his alternative ‘post-Washington’ paradigm for formulating and implementing growth strategies. The remainder of the paper then critically assesses some key elements of this alternative vision for development. In particular, the critical analysis focuses on Rodrik’s institutionalist revision of the existing growth evidence, his proposed changes to the way in which technocrats formulate policies in a post-Washington era, and his call for greater democratization as a universal institutional reform.
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<th>Session: 3-10</th>
<th>Tuesday</th>
<th>16:45-18:15</th>
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<th>Chair: Luis Correia</th>
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<tr>
<td><strong>Gregory Verdugo</strong></td>
<td>Dynamics of the Intergenerational Allocation of Labour</td>
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This paper emphasizes that many industries are characterized by fluctuations in the average age of their employees. I build a dynamic Roy model to account for these fluctuations in an economy with different generations of workers and two industries. The model predicts the existence of cohort effects in the allocation of workers across industries even with a stationary distribution of abilities across generations. The average age of workers in an industry cyclically converges toward a steady state with no age difference between sectors. At steady state, the allocation of a worker is only determined by her ability, whereas during the transition, it is affected by cohort effects.

| Luis Correia | On the Macroeconomic Impact of Declining Populations |

Researchers assessing quantitatively the future macroeconomic impact of low fertility rates invariably assume that young and old workers are perfect substitutes and that workers of all ages are paid their productivity. But there is evidence which suggests that young and old workers are essentially imperfect substitutes; and that young workers are typically underpaid whereas old workers are overpaid. Using a simple many periods overlapping generations model, we show that working under the simplifying assumptions of perfect substitutability and pay equals productivity can be misleading as far as simulation results go for cases of population ageing accompanied by a significant ageing of the labour force. Our analysis suggests that (1) low substitutability between young and old workers could be good news; (2) the widespread use of deferred compensation could be bad news; but (3) the combination of both low substitutability and deferred compensation may turn out to neutralise their opposing effects.
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<th>Session: 3-11</th>
<th>Tuesday</th>
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<th>Chair: Christopher Bowdler</th>
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**Matthieu Bussiere**  
Tuomas Peltonen  
Export and Import Prices in Emerging Markets: What Role for Exchange Rate Pass-Through?

Although many papers have analyzed the degree of exchange rate pass-through and pricing-to-market among advanced countries, similar results are very scarce for emerging economies. To fill this gap, this paper proceeds in two steps: it first estimates export and import price equations for 42 countries and, second, relates the elasticities obtained in the first stage to structural factors. Results indicate that (i) the elasticity of trade prices is sizeable in emerging markets; (ii) such elasticity is primarily influenced by macroeconomic factors, though microeconomic factors such as product differentiation also play some role; (iii) export and import prices elasticities tend to be strongly correlated with each other across countries, partly reflecting the strong import content of exports; (iv) the exchange rate elasticity of export prices has increased in several emerging markets over time, consistent with a decline in pass-through to import prices in some developed economies.

**Megumi Kubota**  
Cesar Calderon  
Does higher openness cause more real exchange rate volatility?

Our goal is to evaluate the role of trade and financial openness in explaining real exchange rate (RER) volatility. Using information for 82 countries for the period 1975-2005 on RERs, openness and RER fundamentals we find that: (a) Higher RER volatility results from highly volatile shocks to fundamentals. (b) Countries with deeper trade linkages to the world economy tend to display more stable RERs. (c) Financial openness seem to destabilize RERs. (d) Trade and capital flow composition plays a role in explaining the smoothing properties of trade and financial openness: while the former is mainly driven by manufacturing trade, the latter depends on the share of debt (and equity) in total foreign liabilities. (e) Financial openness would attenuate (magnify) RER volatility, the greater the share of equity (debt) in foreign liabilities. (f) The composition of flows also matters for explaining the smoothing properties of openness in periods of currency crisis.

**Christopher Bowdler**  
John Bluedorn  
The Empirics of International Monetary Transmission: Exchange Rate Regimes and Interest Rate Pass-through

The transmission of monetary policy across borders is central to many open economy models. Research has tried to evaluate Mundell’s ‘impossible trinity’ through estimating international interest rate linkages for alternative exchange rate regimes using realized nominal interest rates. Such interest rates include anticipated and endogenous elements, which need not propagate internationally. We compare interest rate passthrough from an identified, unanticipated and exogenous U.S. interest rate measure and the realized interest rate. We find important differences in estimated transmission from the two measures, with identified interest rate changes demonstrating a significantly greater concordance with the impossible trinity than realized rate changes.
**General Sessions: Abstracts for detailed programme RES2008**

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<th>Session: 3-12</th>
<th>Tuesday</th>
<th>16:45-18:15</th>
<th>Rm: R2.41</th>
<th>Chair: Giulia Iori</th>
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<tbody>
<tr>
<td>Leo Ferraris</td>
<td>Collateral secured loans in a monetary economy</td>
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<tr>
<td>Makoto Watanabe</td>
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We present a microfounded model of money where durable assets serve as a guarantee to repay consumption loans. We establish steady state equilibria where money and bank credit coexist. In such an equilibrium, a larger investment in durable capital relaxes the borrowing constraint faced by consumers and thus provides a way to mitigate their costs of money holdings. We show that the occurrence of over-investment and the behavior of capital accumulation depend on the rate of inflation, relative risk aversion of agents and the marginal productivity of the capital goods.

<table>
<thead>
<tr>
<th>Mike Felgenhauer</th>
<th>Information sellers in financial markets</th>
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<td>Tri Vi Dang</td>
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This paper analyzes the market for financial information and the incentive of institutions, such as Reuters, to provide information to traders in decentralized financial markets. We derive the following results. (i) The optimal selling strategy consists of selling identical information (Reuters’ screen) to all traders. (ii) The traders buy information from the same providers. If the traders may either buy information from the incumbents or an entrant and the incumbents charge not too high a price, then the entrant has no demand even though he sells for free information of the same quality. (iii) The social benefit of an information provision industry is non-monotonic in the acquisition cost. Depending on this cost, economy of scale may have both a positive and negative effect.

<table>
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<tr>
<th>Giulia Iori</th>
<th>Modeling Stock Pinning</th>
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This paper investigates the effect of hedging strategies on the so called pinning effect, i.e. the tendency of stock's prices to close near the strike price of heavily traded options as the expiration date nears. We propose an explanation of stock pinning in terms of delta hedging strategies for long option positions. In particular we show that pinning is driven by two effects: a hedging dependent drift term that pushes the stock price toward the strike price and a hedging dependent volatility term that constrains the stock price near the strike as it approaches it. Finally we show that pinning can be generated by simulating trading in a double auction market. Pinning in the microstructure model is consistent with the Frey and Stremme model when both discrete hedging and stochastic impact are taken into account.
Stefan Reitz  
Markus Schmidt  
Mark P. Taylor

In this paper we provide evidence for Evans and Lyons' (2005b) model of an information aggregation process in FX markets using a German bank's end-user order flow from 2002 to 2003. Though customer order flow is unambiguously the vehicle incorporating non-public information into exchange rates over time, our empirical analysis does not support the widespread optimism in the market microstructure literature that customer order flow is the high-powered source of information easily exploitable for short-run speculation. Moreover, commercial customers' order flow produces negative coefficients in contemporaneous return regressions, stressing their role as liquidity providers.

Maik Schmeling  
Michael Melvin  
Lukas Menkhoff

This paper describes and analyzes 'automated intervention' of a target zone. Unusually detailed information about the order book allows studying intervention effects in a microstructure approach. We find that intervention increases exchange rate volatility (and spread) for the next minutes but that intervention days show a lower degree of volatility (and spread) than non-intervention days. We also show for intraday data that the price impact of interbank order flow is smaller on intervention days than on non-intervention days. Finally, we reveal that informed banks take different positions than uninformed banks as they tend to trade against the central bank, which reflects a rational stance. Despite this position taking, the targeted exchange rate range holds and volatility, spread and price impact go down. Overall, the credible expression of an intervention band seems to achieve the desired effects of a target zone.

Zsolt Darvas  
Zoltan Schepp

This paper presents unprecedented forecasting results with a new model. Our error correction model assuming that long-maturity forward rates are stationary outperforms the random walk in out-of-sample forecasting at forecasting horizons mostly above one year, for US dollar exchange rates against nine industrial countries' currencies, using the 1990-2006 period for evaluating out-of-sample forecasts. The improvement in forecast accuracy of our models is economically significant for most of the exchange rate series and statistically significant according to a bootstrap test. Our results are robust to the specification of the error correction model and to the underlying data frequency.
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<tr>
<th>Session: 3-14</th>
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<th>Rm: R3.41</th>
<th>Chair: Andrea Cipollini</th>
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<tbody>
<tr>
<td><strong>Frank Strobel</strong></td>
<td>Does uncertainty matter for loan charge-offs?</td>
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<td>Laetitia Lepetit</td>
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<td>David Dickinson</td>
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We develop a stylized real options model of a bank's decision whether to charge off a non-performing loan when there is a chance of loan recovery and the expected present value of reinvesting the potentially reclaimed collateral is uncertain. Banks' discretionary behavior in loan charge-offs is shown to be influenced by variability in the market for collateral and general economic conditions. This implied hypothesis of an 'uncertainty management' aspect in loan charge-offs is empirically tested and confirmed using a panel of European banks over the period 1992 to 2005.

<table>
<thead>
<tr>
<th>Andrea Cipollini</th>
<th>Dynamic Factor analysis of industry sector default rates and implication for Portfolio Credit Risk Modelling</th>
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<td>Giuseppe Missaglia</td>
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We use a reduced form model for the analysis of Portfolio Credit Risk. In particular, we fit a Dynamic Factor model, DF, to a large dataset of default rates proxies and macro-variables for Italy. Multi step ahead density and probability forecasts are obtained by employing both the direct and indirect method of prediction together with stochastic simulation of the DF model. We, first, find that the direct method is the best performer regarding the out of sample projection of financial distressful events. In a second stage of the analysis, we find that reduced form Portfolio credit risk measures obtained through DF are lower than the one corresponding to the Internal Ratings Based analytic formula suggested by Basel 2. Finally, when using the indirect method of forecasting, the simulation results suggest that an increase in the number of dynamic factors (for a given number of principal components) increases Portfolio Credit Risk.
### Karen Croxson  
**Promotional Piracy**

Unauthorized reproduction of goods such as software and music can displace sales. At the same time, because word-of-mouth communications alert those yet to experience a product to its existence and characteristics, individuals who copy may serve a marketing function. A simple model takes both business stealing and promotional effects into account and uncovers the sensitivity of piracy's overall profit impact to the presence and shape of conceivable relationships between product valuation and personal piracy cost. Piracy may be good or bad for business, with much hinging on the sign and curvature of this relationship. Key predictions help demystify observed differences in anti-piracy measures, such as between the markets for computer games (high protection) and office software (low protection).

### Daniel Birke  
**Who you are or whom you know? Consumption interdependences in social networks**

This paper uses a unique dataset, which contains social network data based on call records from a large European mobile phone operator to approximate a consumer’s social network and estimate consumption interdependences in the mobile telecommunications market. A consumer’s decision to switch mobile phone operators is modelled as driven by both individual characteristics and by the structure of her social network. The model is estimated using survival analysis with data that is updated daily over a period of 120 days. Results show that network effects have an important impact on consumer switching decisions: Subscribers with a high percentage of off-net calls have a higher likelihood to switch operators than subscribers with less off-net calls. Furthermore, switching decisions are interdependent between consumers who interact with each other. In other words, if a subscriber switches operators, she is also affecting the switching probabilities of other individuals in her social circle.
### Session 4-2: Tuesday 18:30-20:00, Room SS0.08, Chair: Stephane Zuber

<table>
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<tr>
<th>Speaker</th>
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<tbody>
<tr>
<td>Valerie Lechene</td>
<td>Demand properties in household Nash equilibrium</td>
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<tr>
<td>Ian Preston</td>
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</table>

We study noncooperative household models with two agents and several voluntarily contributed public goods, deriving the counterpart to the Slutsky matrix and demonstrating the nature of the deviation of its properties from those of a true Slutsky matrix in the unitary model. We provide results characterising both cases in which there are and are not jointly contributed public goods. Demand properties are contrasted with those for collective models and conclusions drawn regarding the possibility of empirically testing the collective model against noncooperative alternatives.

<table>
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<tr>
<th>Speaker</th>
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<tr>
<td>Stephane Zuber</td>
<td>The aggregation of preferences: can we ignore the past?</td>
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</table>

The present paper shows that a Paretian social objective can be history independent and time-consistent only if a stringent set of conditions is verified. Individual utilities must be additive. The social welfare function must be a Utilitarian aggregation of those utilities. If we moreover want social preferences to be stationary, all individuals must have the same discount rate. The results, obtained in a general setting, are implemented in several frameworks: deterministic dynamic choice; stochastic dynamic choice, with von Neumann and Morgenstern utilities, and then with Kreps and Porteus preferences. These applications highlight the restrictiveness of the conditions uncovered.
### Silvia Sonderegger, Paul A. Grout, Sebastien Mitraille

**Cohesion and self-bias in communities**

We investigate the impact and desirability of segregated versus mixed communities in a society that contains two different types of individuals. Individual payoffs depend on personal preferences, and on the extent to which actions are coordinated with those of others in the same community. Preferences contain both an idiosyncratic and a type-specific component. We characterize the unique equilibrium of the game and describe how the composition of a community affects the equilibrium strategies of its members. From this, we derive induced preference over community composition. Mixing with ‘strangers’ has direct costs, in that it introduces people over whom we possess little information. However, it also has indirect benefits, such as improving cohesion among the incumbent members of the community. Although people prefer to live in communities where their type is majoritarian (‘self-bias’), there exist mixed communities where both types are simultaneously better off than if they lived in segregated environments.

### Dominic Rohner

**Reputation, Group Structure and Social Tensions**

Social tensions impede social cohesion and public goods provision. They can also be a driving force for more serious conflicts such as civil wars. Surprisingly, however, the emergence of social tensions has only rarely been studied in the literature. In the present contribution a game-theoretic model highlights how reputation concerns and the structure of group cleavages matter for the emergence of social tensions. In particular, the respective effects of fractionalisation, polarisation and segregation are assessed. The predictions of the model can account for recent empirical evidence on ethnic conflicts. The framework can also be applied to the study of social capital and merger failures.

### Irma Clots-Figueras, Oriol Aspachs-Bracons, Paolo Masella

**The Effect of Language at School on Identity and Political Outlooks**

The process of individual identity formation is still an enigma, as it is the capacity of public bodies to intervene on it. In 1983 the Catalan education system became bilingual, and Catalan, together with Spanish, was taught in schools. Using survey data from Catalonia and exploiting within and between cohort variation in exposure to Catalan language at school, results show that individuals who have experienced greater exposure to teaching in Catalan are more likely to say that they feel more Catalan than Spanish. Interestingly, the effect appears to be present also among individuals whose parents do not have Catalan origins. In addition, the reform also affects actions, as individuals exposed to more teaching in Catalan are more likely to vote in regional elections and vote for Catalan regionalist parties. To the best of our knowledge, this is the first paper to analyze empirically how policies affect individual identity.
Julia Nafziger  
Alexander Koch  
Job Assignments under Moral Hazard: The Peter Principle Revisited

The Peter Principle captures two stylized facts about hierarchies: first, promotions often place employees into jobs for which they are less well suited than for that previously held. Second, demotions are extremely rare. Why do organizations not correct 'wrong' promotion decisions? This paper shows in a complete contracting setting that a simple trade-off between incentive provision and efficient job assignment may make it optimal to promote some employees to a job at which they produce less than they would at the previous level.

Steffen Altmann  
Promotions in Multi-Stage Elimination Tournaments: an Experimental Investigation

Promotion tournaments play an important role for the provision of incentives in firms. In this paper we study behavior in such elimination tournaments in a laboratory experiment. Our main treatment is a two-stage tournament that is incentive maintaining in the sense of Rosen (1986). We compare this treatment to a strategically equivalent one-stage tournament and to another two-stage tournament with a more convex wage structure. Average effort in our one-stage treatment is close to the Nash equilibrium. In contrast, subjects in our main treatment provide excess effort in the first stage both with respect to Nash predictions and compared to the equivalent one-stage tournament. The results for the more convex two-stage tournament suggest that excess effort in the first stage is a robust finding and that subjects react only little to changes in the wage structure. We discuss several potential determinants of subjects' behavior, such as gender or risk attitudes.
**General Sessions:** Abstracts for detailed programme RES2008

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<th>Session: 4-5</th>
<th>Tuesday</th>
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<th>Rm: SS0.20</th>
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<tr>
<td><strong>Arnaud Chevalier</strong></td>
<td>Steve Gibbons, Andy Thorpe</td>
<td>Martin Snell, Sherria Hoskins</td>
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Participation rates in higher education differ persistently between some groups in society. Using two British datasets we investigate whether this gap is rooted in students' mis-perception of their own and other's ability, thereby increasing the expected costs to studying. Among high school pupils, we find that pupils with a more positive view of their academic abilities are more likely to expect to continue to higher education even after controlling for observable measures of ability and students' characteristics. University students are also poor at estimating their own test-performance and over-estimate their predicted test score. However, females, white and working class students have less inflated view of themselves. Self-perception has limited impact on the expected probability of success and expected returns amongst these university students.

| Damon Clark | | |
| Elite Schools and Academic Achievement |

In this paper I consider the impact of attending an elite high school in the UK. Students are assigned to these schools on the basis of a test taken in primary school and, using data on these assignment test scores for a particular district, I exploit this rule to estimate the causal effects of attending an elite school on test scores and the probability of taking various ('O' level) courses, thought to be important in the UK. I show that four years of elite school attendance generates at best small effects on test scores but much larger effects on course-taking. These results support recent US findings on the test score impacts of attending 'high-achievement' high schools, but suggest that elite high schools in the UK may still have large impacts on labor market performance.

| Monazza Aslam | | |
| What can Teachers do to Raise Pupil Achievement |

Improving weak teaching may be one of the most effective means of raising pupil achievement. However, teachers' classroom practices and the teaching 'process' may matter more to student learning than teachers' observed resume characteristics (such as certification and experience). This paper delves into the black-box representing 'teaching' to uncover the teacher characteristics and teaching practices that matter most to pupil achievement. This is done using unique, school-based data, collected in 2002-2003 from government and private schools from one district in Punjab province in Pakistan. The data allow exploitation of an identification strategy that permits the matching of students' test scores in language and mathematics to the characteristics of teachers that teach those subjects. Within pupil (across subject rather than across time) variation is used to examine whether the characteristics of different subject teachers are related to a student's mark across subjects.
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<th>Tuesday</th>
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<th>Chair: Christoph Knoppik</th>
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<tr>
<td><strong>Stefan Boes</strong></td>
<td>Nonparametric Analysis of Treatment Effects in Ordered Response Models</td>
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<td>This paper deals with the identification of treatment effects when the outcome variable is ordered. If outcomes are measured ordinally, previously developed methods to investigate the impact of an endogenous binary regressor on average outcomes cannot be applied as the expectation of an ordered variable, in its strict sense, does not exist, and a shift in focus to distributional effects is indispensable. Without imposing a fully fledged parametric model the treatment effects are generally not point-identified. Assuming a threshold crossing model on both the ordered potential outcomes and the binary treatment variable leaving the distribution of error terms and functional forms unspecified, it is discussed how the treatment effects can be bounded and inference on the bounds can be conducted.</td>
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<td><strong>Murray Smith</strong></td>
<td>Wage Gaps in the New Zealand Labour Market: Modelling Sample Selection Using a Copula Approach</td>
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<td>Using data from the Statistics New Zealand’s 2003 CURF (Confidentialised Unit Record File) data set, we estimate wage regressions taking account of sample selection bias arising from the exclusion of individuals with no market income. We use the ‘copula approach’ in the specification of sample selection models. We find evidence of a statistically and economically significant female/male differential. Ethnicity, however, is found to matter for certain groups only, not for Maori.</td>
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<td><strong>Christoph Knoppik</strong></td>
<td>Nonparametric Evidence on Extent and Functional Form of Downward Nominal Rigidity in Germany: An Application of the Kernel-Location Approach</td>
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<td>Applying the kernel-location approach proposed by Knoppik (2007) to the regional file of the German IAB employment statistics (IABS), we find significant downward nominal rigidity in West-German earnings over the period 1975-2001. The reliability of our results is strengthened by the fact that the kernel-location approach does not rely on restrictive assumptions with respect to either the functional form of the counterfactual distribution or the functional form of downward nominal wage rigidity.</td>
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<td>Session: 4-7</td>
<td>Tuesday</td>
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<td>Chair: Marina Pavan</td>
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<tr>
<td><strong>Erlend Berg</strong></td>
<td>Does payment into bank accounts encourage saving? Evidence from South Africa</td>
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Savings have been linked to financial intermediation and economic growth at the macro-level, and consumption smoothing and investment at the micro-level. We show that offering to pay poor people's income into a bank account rather than in cash can increase the proportion of households that save formally. A theoretical framework is set up to study four possible mechanisms through which electronic payment may have an impact on savings. Using difference-in-difference estimates from a policy shift in South Africa, we find that households receiving a child support grant are more likely to have savings of any form when they have the option of having the grant paid directly into an account. The bulk of the increase is explained by bank account savings, and there is some indication that this is fresh savings rather than portfolio reallocation. The estimated effect is entirely driven by households headed by women.

<table>
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<tr>
<th><strong>Olivier Dagnelie</strong></th>
<th>Rosca Participation in Benin: a Commitment Issue</th>
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<td>Philippe LeMay</td>
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In the light of first-hand data from a Beninese urban household survey in Cotonou, we investigate several motives aiming to explain participation in Rotating Savings and Credit Associations. We provide empirical findings which indicate that individuals use their participation in a rosca as a device to commit themselves to save money, and probably to deal with self-control problems.

<table>
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<tr>
<th><strong>Marina Pavan</strong></th>
<th>Assessing the Impact of Public Transfers on Private Risk Sharing Arrangements: Evidence from a Randomized Experiment in Mexico</th>
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<td>Aldo Colussi</td>
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We adopt a structural estimation approach to studying the effects of public transfers on consumption smoothing, risk sharing and welfare in small village economies. We estimate the key parameters of a dynamic limited commitment model using data gathered as part of the Mexican Progresa program, and take advantage of the randomized experimental design of the data to validate the model using the treatment sample. The limited commitment model enriched to allow for unobserved heterogeneity in preferences can reasonably well explain consumption dynamics and cross-sectional distributions. The estimated model correctly predicts the increase in consumption smoothing and risk sharing within transfers recipients, and the decrease in risk sharing between beneficiaries and non beneficiaries of the program.
### Leandro Magalhaes
**Lucas Ferrero**  
Budgetary Separation of Powers in the American States, A Regression Discontinuity Analysis

We define budgetary separation of powers and present a theoretical model of budgetary bargaining in the American States. If the state allows the governor to 'line item veto' the budget and if there is a divided government in place, there is budgetary separation of powers and taxes are lower. We use regression discontinuity design to establish a causal relation between a divided government and lower tax rates in states with line item veto. The discontinuity arises at the point where the governor gains control of both chambers. We estimate the jump at the discontinuity semiparametrically and compare the results to a fixed effects estimation.

### Cecilia Testa
Reforming US state legislatures: is one house better than two?

During the last decade unicameral proposals have been put forward in fourteen US states. We propose a theoretical framework casting lights on the drawbacks of bicameral state legislatures and the effects of the proposed constitutional reforms. In a setting where lawmakers interact with voters and a lobby, we show that when time constraints on the legislative process are binding, bicameralism can lead to a decline in the legislator’s bargaining power versus the lobby and to a reduction in his electoral accountability. However, when bicameralism does not harm electoral accountability, its effectiveness depends on the rules governing the relationship between the two chambers. Bicameralism with restricted amendment rights provides the best incentives, while unrestricted amendment rights generate a status quo bias. Hence, bicameralism is not in general a panacea against the abuse of legislators’ power and the proposed unicameral reforms in US states may indeed reduce corruption levels among elected representatives.

### Paolo Naticchioni
**Stefano Gagliarducci**  
**Tommaso Nannicini**  
Outside Income and Moral Hazard: The Elusive Quest for Good Politicians

In most modern democracies elected officials can work in the private sector while appointed in parliament. When the political and market sectors are not mutually exclusive, a trade-off arises between the quality of elected officials and the effort they exert. If high-ability citizens can keep earning money outside of parliament, they will be more likely to run for election; however, they will also be more likely to shirk. These predictions are confronted with a unique dataset about members of the Italian Parliament from 1996 to 2006. Empirical evidence shows that bad but dedicated politicians come along with good but not committed politicians. There is in fact a non-negligible fraction of citizens with remarkably high pre-election incomes who are appointed in parliament. These citizens are those who gain relatively more from being elected in terms of outside income. Conversely, they are less committed to the political activity, like attendance and bills.
<table>
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<tr>
<th>Jose Groizard</th>
<th>Skilled migration and sending economies. Testing brain drain and brain gain theories.</th>
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<td>Joan Llull</td>
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Traditional models of brain drain stress its negative impact on the welfare and growth of sending economies, while new models introduce the possibility of brain gain through several channels (human capital, remittances, return migration or FDI and trade linkages). We test all these theories by estimating cross-country individual regressions for each channel, and a system of equations to assess the overall effect of brain drain on economic growth. Results suggest a negative effect on human capital stock, negligible on remittances (controlling for total migration) and a positive effect on trade and FDI. The net impact of skilled migration on economic growth remains ambiguous.

<table>
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<tr>
<th>Alejandro Donado</th>
<th>Trade Unions Go Global!</th>
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<td>Klaus Walde</td>
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Worker movements play a crucial role in making workplaces safer. Workplace safety is costly for firms but increases economy-wide labour supply. Factor allocation in a laissez-faire economy is suboptimal. Occupational and health (OHS) standards set by trade unions can be output and welfare increasing. Trade between a country with trade unions (the North) and a union-free country (the South) can imply a reduction in work standards in the North. When trade unions are established in the South, world-wide welfare increases but northern unions and the North as a whole tend to lose.

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<th>Michael Wycherley</th>
<th>Innovation versus Imitation: Intellectual Property Rights in a North-South Framework</th>
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This paper examines differences in the country-specific optimal strength of intellectual property rights protection in a North-South endogenous growth model where protecting intellectual property rights can cause the South to switch from imitation to innovation. The social benefits of poor countries protecting intellectual property rights are U-shaped, implying that a level of protection insufficient to induce innovation in poor countries is not optimal. The benefits from preventing imitation rise as the size of the workforce in the poor country increases and the cost of research in the poor country falls. There exists a range of values for which the rich countries desire that intellectual property rights are protected but poor countries do not, leading to potential policy conflict.
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**Ricardo Nunes**  
Monetary Policy with Alternating Regimes  
Davide Debortoli

We analyze optimal monetary policy choices when the central bank does not necessarily have the same policy objectives over time. In the first setting, the current monetary regime may disagree on the policy objectives of its successor. Each monetary regime has commitment during its tenure, but cannot make promises regarding the future regime. In the second setting, there is no disagreement on policy objectives, even though policy priorities may change over time. In this case, we consider that each monetary regime can make promises regarding the future regime.

**Eleni Angelopoulou**  
The Narrative Approach for the Identification of Monetary Policy Shocks in a Small Open Economy

This paper reviews 22 years of UK monetary policy in the pre-inflation targeting period (1971-1992) using official record from the Bank of England Quarterly Bulletin. A definition of policy episodes, which allows for the exclusion of cases of interest rate increases, which were unrelated to the monetary policy objectives, is used. The empirical analysis shows that output displays the usual hump-shaped response after a shock to the policy indicator but adjustment to pre-shock levels is slow. Other variables also display theory-consistent behaviour. Based on this policy indicator monetary policy and exchange rate volatility are found to cause substantial output fluctuation in a four year horizon. The *narrative model* compares well with a small open economy structural VAR.

**Steffen Sorensen**  
Extracting inflation expectations and inflation risk premia from the term structure: a joint model of the UK nominal and real yield curves  
Mike Joyce  
Peter Lildholdt

This paper analyses the UK nominal and real term structure over the 15-year period that the UK has had an explicit inflation target, using a four-factor essentially affine term structure model. The model imposes no-arbitrage restrictions across nominal and real yields, enabling us to decompose nominal forward rates into inflation expectations, expected real policy rates and term/inflation risk premia. We find that inflation risk premia and longer-term inflation expectations fell significantly after the Bank of England was made operationally independent in 1997. The more recent ‘conundrum’ of unusually low long-term real rates is attributed by the model to negative real term premia, but also by a rise in the unexplained component of real forward rates, which may reflect strong pension fund demand for index-linked bonds. The model breakdown suggests that special factors affecting the index-linked market may also partly account for the recent rise in longer horizon inflation breakeven rates.
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<th>Chair: Attila Korpos</th>
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<td><strong>Santiago Acosta Ormaechea</strong></td>
<td>Why credit market imperfections and currency mismatches do not affect traditional Mundell-Fleming results</td>
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This paper extends the small-open-economy version of Obstfeld and Rogoff (1995) along the lines of Cespedes, Chang and Velasco (2004) (CCV). The form in which credit market imperfections affect the economy, however, differs: while here is microfounded in CCV is postulated. Two unexpected and permanent shocks are considered: a monetary expansion and a currency devaluation. Contrary to the balance-sheet-effects literature, we find that traditional Mundell-Fleming results hold since both shocks are expansionary. The effects are amplified, though moderately, by the presence of credit market imperfections. The mechanics are conventional: the unforeseen shocks produce a trade balance surplus on impact via expenditure-switching effects. Hence, the economy accumulates net foreign assets, implying that the non-neutrality property of nominal shocks is not satisfied. The shocks are propagated through capital and net worth. Finally, we show that a devaluation has (slightly) larger effects, and that in terms of households' welfare it is preferred.

<table>
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<tr>
<th><strong>Zhuoshi Liu</strong></th>
<th>A Two-Country Macro-Finance Model Analysis of Spillovers and Common Shocks: the US and UK case</th>
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<td>Peter Spencer</td>
<td>This paper develops a two-country macro-finance model to study how the UK's economy is affected by US spillovers and common factors. We find empirical evidence of real, price and short rate spillovers from the US to the UK economy even after the common factors are taken into account. We extract the latent common factors from the macroeconomic and bond data of both the US and UK. The empirical results show that these latent common factors are important drivers of the synchronized UK and US business cycle as well as the comovement of the bond yields of the US and UK financial markets.</td>
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<tr>
<th><strong>Attila Korpos</strong></th>
<th>Strategic Interactions Among Central Banks and Labor Unions Under Flexible Exchange Rates</th>
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<td>The paper presents a two-country open-economy framework for the analysis of strategic interactions among central banks and labor unions under flexible exchange rates. The model shows that the beggar-thy-neighbor effect of monetary policy is always overturned by foreign optimal monetary policy. The implication is that the foreign central bank represents a threat to home labor unions and acts as a deterrent against higher wage demands. Hence, the home economy benefits from the conservativeness of the foreign central bank.</td>
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<td>Session: 4-12</td>
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**Christian Fons-Rosen**  
*Relative Factor Endowments and International Portfolio Choice*

Alessandro Cunat

This paper presents a model of international portfolio choice based on the pattern of comparative advantage. Countries have varying degrees of similarity in factor endowment ratios, and are subject to aggregate productivity shocks. Risk averse consumers can insure against these shocks by investing at home and abroad. The change in relative prices after a positive shock in a particular country provides insurance to countries that have dissimilar factor endowment ratios, but is bad news for countries with similar factor endowment ratios, since their incomes will worsen. Therefore countries with similar comparative advantages have a stronger incentive to invest in one another for insurance purposes than countries with dissimilar comparative advantages. Empirical evidence linking bilateral international investment positions to proxies for comparative advantage supports our theory: similarity of host and source countries in relative capital-labor ratios has a positive effect on the source country’s investment position in the host country.

**Aidan Corcoran**  
*International Financial Integration and Consumption Risk Sharing*

This paper tests the importance of international financial assets and liabilities for consumption risk sharing in a general framework which allows for separate effects of equity and debt holdings as well as country-specific sensitivity to aggregate risk. Integration into both the international equity and debt markets is found to be an important determinant of risk sharing for OECD countries over the period 1987-2004, while integration into international equity markets is found to be a robust determinant of risk sharing for emerging and developing countries over the period 1987-2003.

**Roberto De Santis**  
*Assessing the Benefits of Global Portfolio Diversification in Financial Markets*

Lucio Sarno

This paper considers a stylised asset pricing model where the returns from exchange rates, stocks and bonds are linked by basic risk-arbitrage relationships. Using GMM estimation and monthly data for 18 economies and the US (treated as the domestic country), we identify through a simple structural test the countries whose assets are strongly correlated with US assets and the countries whose assets might offer larger diversification benefits. Moreover, we show that the strengthening of co-movement is neither a gradual process nor a global phenomenon, reinforcing the case for international diversification and the optimality of holding global portfolios. The advantage of our method is that fund managers are better off in constructing portfolios selecting assets from a sub-set of countries than relying on global or domestic benchmark portfolios.
### Session: 4-13  
**Tuesday 18:30-20:00  
Rm: R2.41  
Chair: Giuliana Battisti**

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<th>Speaker</th>
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<tr>
<td><strong>Fabian Waldinger</strong></td>
<td>Peer Effects in Science - Evidence from the Dismissal of Scientists in Nazi Germany</td>
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This paper analyzes peer effects among university scientists. Specifically it investigates whether the number of peers and their average quality affects the productivity of researchers in physics, chemistry, and mathematics. The usual endogeneity problems related to estimating peer effects are addressed by using the dismissal of researchers by the Nazi government as a source of exogenous variation in the peer group of scientists staying in Germany. Using a newly constructed panel dataset of all physicists, chemists, and mathematicians at the German universities from 1925 until 1938 I investigate (1) department level peer effects and (2) peer effects among co-authors. There is no evidence for peer effects at the department level. Among co-authors, however, I find positive and significant peer effects from having high quality co-authors in physics and chemistry. The very low level of co-authorships of mathematicians makes it impossible to estimate peer effects among co-authors in mathematics.

| **Antoni Rubi-Barcelo** | Scientific Collaboration Networks: The role of Heterogeneity and Congestion |

We propose a dynamic model to analyze the formation of scientific collaboration networks. In this model, individuals continuously make decisions concerning the continuation of existing collaboration links and the formation of new links to other researchers through a link formation game. Agents are heterogeneous - they have different levels of productivity - and they have a limited processing capability; so congestion can arise when a researcher receives a sufficiently high amount of collaboration requests. Consequently, the decision of whether to form a link must consider the trade off between the rewards (or costs) from collaborating with more (or less) productive agents and the costs (or rewards) from collaborating with more (or less) congested co-authors. Focusing on the role of heterogeneity among agents' productivity and congestion problems derived from their limited processing capability we show how self-interested researchers can organize themselves forming the kind of scientific collaboration network topologies observed in reality.

| **Giuliana Battisti**  
Amid Mourany  
Paul Stoneman | Pursuing a Basic Principle of Measurement Performance: The Case of a Firm Level Innovation Scoreboard |

A principle that is basic to the validity of any measure of firm performance is that the indicator must be endogenous to, i.e. the caused output of, the performance generating process. In this paper this principle, plus the requirement that any measure must also be conceptually acceptable, is applied to the development of a firm level innovation scoreboard both as an example and because of inherent interest in such a scoreboard. A balanced panel of data on 552 UK firms over the period 1994 to 2005 is used to test for causality using GMM and other techniques. With innovation defined as the successful exploitation of new ideas, it is proposed that: exploitation be measured by total factor productivity; success be measured by the return on capital employed; and their multiple be taken as the indicator of innovation. Results for the sample firms are presented and discussed.
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**Laura Coroneo**  
Ken Nyholm  
Rositsa Vidova-Koleva  

*How Arbitrage-Free is the Nelson-Siegel Model?*

We test whether the Nelson and Siegel (1987) yield curve model is arbitrage-free in a statistical sense. Theoretically, the Nelson-Siegel model does not ensure the absence of arbitrage opportunities, as shown by Bjork and Christensen (1999). Still, central banks and public wealth managers rely heavily on it. Using a non-parametric resampling technique and zero-coupon yield curve data from the US market, we find that estimated parameters from the no-arbitrage model are not statistically different from those obtained from the Nelson-Siegel model, at a 95 percent confidence level. We therefore conclude that the Nelson and Siegel yield curve model is inherently arbitrage-free. To corroborate this result, we show that the Nelson-Siegel model performs as well as its no-arbitrage counterpart in an out-of-sample forecasting experiment.

**Dennis Philip**  
Chihwa Kao  
Giovanni Urga  

*Testing for Instability in Factor Structure of Yield Curves*

A widely relied upon but formally untested consideration is the issue of stability in factors underlying term structure of interest rates. In testing for stability, practitioners as well as academics have employed ad-hoc techniques such as splitting the sample into few sub-periods and determining whether the factor loadings have appeared to be similar over all sub-periods. Various authors have found mixed evidence on stability in the factors. In this paper we develop a formal test for evaluating the factor structure stability of the US zero coupon yield term structure. We find the factor structure of level to be unstable over the sample period considered. The slope and curvature factor structures are however found to be stable. Common structural changes affecting all interest rate maturities have fostered instability in the level factor. We corroborate the literature that variances (volatility) explained by the level, slope, and curvature factors are unstable over time.

**Mark Salmon**  
Wing Wah Tham  

*Time Deformation and the Yield Curve*

This paper considers how trading activity at one maturity of the yield curve affects and is affected by trading at other maturities. We approach the modeling of bond prices from a stochastic volatility and market microstructure perspective based on time deformation. We find that individual yields are driven by different ‘market clocks’ suggesting different price discovery processes at different yields. These separate market time scales are related to each other through a multivariate Hawkes model which effectively coordinates activity along the yield curve. We show that bond returns standardized by the instantaneous volatility estimated from the Hawkes model are Gaussian.
Basak Akbel, Monika Schnitzer  
Creditor Rights and the Capital Structure within Multinationals

We analyze the optimal debt structure of multinational corporations depending on the legal and institutional environment. In principle, multinational corporations decide whether to centralize or decentralize the borrowing of its subsidiaries. We identify how this choice is affected by creditor rights and bankruptcy costs, while taking into account managerial incentives and coinsurance considerations. We find that equally with very strong and very weak creditor rights a partially centralized borrowing structure is optimal. For intermediate levels of creditor rights the optimal borrowing structure depends on managerial incentives: For strong (weak) empire-building tendencies a fully decentralized (centralized) borrowing structure is optimal. We further show that short-term profitability increases the attractiveness of a decentralized borrowing structure, whereas long-term profitability has the opposing effect. Finally, differences in the legal environment induces bias in the debt allocation towards the country with better creditor rights and more efficient insolvency systems.

Albert Banal-Estanol, Marco Ottaviani  
Diversification with Bankruptcy Costs: The Good, the Bad, and the Ugly

According to the conventional wisdom in corporate finance, expected bankruptcy costs are reduced then projects are financing jointly rather than separately. In this paper, we argue that the same logic that generates the diversification synergies of joint financing also generates dissynergies in some cases. By exploiting a connection with the industrial organization literature on product bundling, we characterize conditions for diversification to increase (rather than reduce) the probability of bankruptcy. We also identify situations in which it is optimal for a firm to finance two projects separately, even though joint finance would result in a lower interest rate.

Christina Atanasova, Dimitar Antov  
How Do Firms Choose Between Intermediary and Supplier Finance?

We examine the dynamics of firm's choice of short-term financing between intermediated loans and trade credit. We argue that trade credit facilitates the access to and improves the terms of conventional loans. We model the idea that trade credit is a favorable signal of the creditworthiness of the borrower. Hence, some firms will use trade credit in addition to conventional institutional loans despite its higher cost. Our empirical results support the predictions of the theoretical model we develop. We show that firms with high agency costs rely heavily on supplier financing. For these firms trade credit has a significant positive effect on the level of intermediated borrowing.
General Sessions: Abstracts for detailed programme RES2008

Session: 5-1  Wednesday  9:15-10:45  Rm: SS0.11  Chair: John Vickers

Enrico Sette  Sorting, Reputation and Entry in a Market for Experts

This paper provides new insights on the market for expert services and investigates the effects of entry on the incentives to provide high quality services. Experts are motivated by reputational concerns and clients are characterized by an unobservable type which affects their willingness to pay for the service, may affect the informativeness of expert's performance as a signal of talent, and the likelihood the expert succeeds in providing high quality services. The paper shows that clients sorting affects incentives through three channels: modifying current and future equilibrium fees, modifying the informativeness of good performance as a signal of expert talent, modifying the marginal efficiency of effort. Entry of experts impacts the sorting behaviour of clients in equilibrium, and thus incentives of experts. The main result is that increased entry reduces incentives to exert effort, although when clients types affect the likelihood the service is provided successfully the opposite may occur.

Leonidas de la Rosa  Overconfidence in a Career-Concerns Setting

I study the effects of overconfidence in a two-period investment-decision agency setting. At the beginning of each period, the agent privately observes a signal which is informative about the expected benefits of investment in some project. I allow for principal and agent to hold heterogeneous beliefs regarding the profitability of the investment decision conditional on any given signal. An agent who is relatively overconfident about his ability believes that the principal is likely to update her beliefs upwards more often than not following investment. As a consequence, the agent overestimates the benefits of learning from first-period investment relative to the principal. This implies that agent overconfidence mitigates the agency problems arising from the agent’s reputational concerns. If the agent cannot bind himself to the agency relationship across periods, the extent to which he is exposed to outcome-related risk is bounded below by the possibility of receiving outside offers.

John Vickers  A Model of Delegated Project Choice With Application to Merger Policy

Mark Armstrong

We present a model in which a principal delegates the choice of project to an agent with different preferences. A project’s characteristics are verifiable once presented to the principal, but the principal does not know how many projects are available to the agent. The principal chooses the set of projects which the agent can implement. Three frameworks are considered: (i) a static setting in which the set of available projects is exogenous to the agent but uncertain; (ii) a dynamic setting in which by expending effort the agent can affect the number of projects, and (iii) a dynamic setting in which the agent must wait for projects to materialize. The model is applied to the choice of welfare standard for merger policy.
### Sirikamon Udompol
**Why Enter Tax Sparing Agreement?**

Tax sparing provision in a bilateral tax treaty implies tax credit given by capital-exporting, usually developed, country to its residential companies for taxes on profits earned abroad which are 'spared' by capital-importing, usually developing, country. While this scheme encourages FDI, the benefits to the parties of a tax sparing agreement are not obvious, as both incur losses in tax revenues. We use two alternative frameworks, a cooperation approach and a competition approach, to study the rational of the countries who engage in tax sparing negotiations. We show that in the former approach an agreement is more likely to emerge in the equilibrium when the bargaining power of the capital-exporting country in negotiations is relatively low, which is not likely to be the case. In the latter approach, a tax sparing agreement is an equilibrium outcome when capital-importing countries engage in tax competition to attract foreign investor.

### Celine Azemar
**Multinational Firms' Heterogeneity in Tax Responsiveness: the Role of Transfer Pricing**

This paper is concerned with the effect of transfer pricing manipulation on the sensitivity of foreign direct investment (FDI) to corporate tax rates. We offer a model of international capital allocation where investors considering abusive transfer pricing expect fiscal authorities to use price and profit detection methods. We show that firms which are more likely to manipulate transfer pricing, due to their ownership structure or their intensity in R&D, will invest more in low-tax countries. A comprehensive empirical study is then proposed to test these predictions in the case of Japanese foreign investment. Based on country, parent firm and sector characteristics, an investment equation is estimated on a sample of 3614 Japanese affiliates in 49 emerging countries. We obtain a greater semi-elasticity of investment to the statutory tax rate in affiliates that are wholly-owned and that have R&D intensive parents.

### Simon Loretz
**Increased efficiency through consolidation and formula apportionment in the European Union?**

This paper assesses the recent reform proposals of the European Union to introduce international loss consolidation and formula apportionment in terms of efficiency. For this exercise we extend the effective tax rate methodology of Devereux and Griffith (1999) to include a potential loss and use a large firm level data set to identify the distortions under the current system and after the proposed tax reforms. While allowing international loss consolidation in the current system would signify a move to the worse in terms of efficiency, a formula apportionment system would increase capital export neutrality. At the same time capital ownership neutrality would be violated because, the wide spread of statutory tax rates in the Member States would translate into different tax burdens for different companies.
Empirical evidence shows that the difference in the political support for redistribution between US and Europe appears to reflect a difference in social perceptions regarding the determinants of individual wealth and the sources of income inequality, rather than a substantial difference in the fundamentals of the two economies. In the spirit of the most recent theoretical contributions to the topic, I present a model of beliefs and redistribution which explains this evidence through multiple politico-economic equilibria; differently from the recent literature which obtains multiple equilibria by modeling agents characterized by psychological biases, my model is based on standard assumptions. This feature allows the analysis of different comparative statics in order to answer new policy questions and shows a new theoretical explanation for the existence of manipulated beliefs and multiple politico-economic equilibria, which is based on the role of information and relative problems of adverse selection and moral hazard.

The disincentive effects of social insurance have recently become a major point of debate in Western Europe, leading to cuts in benefits and renewed focus on providing incentives. We study the evolution of the welfare state in a context of cultural transmission and endogenous taxes. Insurance allows agents to spread risk between different states of nature, but it creates moral hazard opportunities that some agents take advantage of. This static cost of moral hazard is augmented by a dynamic cost: social insurance tends to reduce the number of productive agents in the population and can lead to its complete unraveling over time. We show that a long period of generous welfare benefits is not sustainable and is usually followed by reduced generosity in order to provide incentives to work. Even when the economy eventually reaches a state without any free riding the transition to this state is costly.

This paper analyzes work requirements as they have become standard in several Western welfare states. A discrete version of the Mirrlees (1971) optimal income tax model is extended by the concept of workfare. Whereas unproductive workfare is never part of a second-best tax-transfer scheme, productive workfare can be an optimally chosen instrument. Optimality depends on the relation between the productivity of the work obligation and the related marginal rate of substitution between consumption and working time. Work requirements as well as transfers are independent of individual productivities. The second-best tax schedule has positive marginal tax rates everywhere. This is also true when assuming workfare productivities that are positively correlated to the individual market wage. The implementation of workfare as part of an optimal tax mix does not only lead to an overall welfare increase but can even yield a Pareto improvement.
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<tr>
<td>Viola Angelini</td>
<td>The strategic bequest motive: evidence from SHARE</td>
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This paper examines whether the empirical evidence supports the strategic bequest motive, as opposed to pure altruism, using SHARE data on ten European countries. The availability of internationally comparable data, as in SHARE, allows to exploit the cross-country variability in inheritance laws and cultural backgrounds to identify the operation of a strategic bequest motive determining the attention that children provide to their elderly parents.

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<th>Emma Tominay</th>
<th>Better late than never? The Timing of Human Capital Investments in Children.</th>
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We measure household income across the entire childhood for over 450,000 children in Norway and estimate how the timing of income drives child education and explore dynamic complementarity in this process. Such a detailed dataset enables us to use nonparametric regression techniques and we employ a multivariate local polynomial regression approach. We find early income is more productive than later income in producing child education, but only up to a threshold above which early income no longer exhibits a return. Complementarities exist between early and later income measures. However, only credit constrained parents exhibit complementarity between middle and late income.

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<th>Kevin Staub</th>
<th>Hedonic Adaptation to Living Standards and the Hidden Cost of Parental Income</th>
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High parental income, while undeniably causing benefits for a child in terms of better access to education and more favorable labor market outcomes, may at the same time increase a child's income aspirations and thereby reduce financial satisfaction, ceteris paribus. In this paper, we investigate the relationship between financial satisfaction and parental income with data from the German Socio-Economic Panel. The results indicate that there is indeed a negative well-being externality of parental income, and that children appear to compare their actual income situation with the aspiration level acquired while growing up.
Margherita Fort
Giorgio Brunello
Guglielmo Weber

Changes in Compulsory Schooling, Education and the Distribution of Wages in Europe

Using data from 12 European countries and the variation across countries and over time in the changes of minimum school leaving age, we study the effects of the quantity of education on the distribution of earnings. We find that compulsory school reforms significantly affect educational attainment, especially among individuals belonging to the lowest quantiles of the distribution of ability. There is also evidence that additional education reduces conditional wage inequality, and that education and ability are substitutes in the earnings function. These results do not support an elitist public education policy - more education to the brightest - and suggest that investing in the less fortunate, either because of poor labour market fortune or because of poor talent, could pay off both on efficiency and on equity grounds.

Jeremy Smith
Wiji Arulampalam
Robin Naylor

Am I missing something? The effects of absence from class on student performance

We exploit a rich administrative panel data-set for cohorts of Economics students at a UK university in order to identify causal effects of class absence on student performance. We exploit the panel properties of the data to control for unobserved heterogeneity across students and hence for endogeneity between class absence and academic performance of students stemming from the likely influence of effort and ability on both absence and performance. Our estimations also exploit features of the data such as the random assignment of students to classes and information on the timetable of classes, which provides potential instruments in our identification strategy. Among other results we find, from a quantile regression specification, that there is a causal effect of absence on performance for students: missing class leads to poorer performance. There is evidence that this is particularly true for better-performing students.
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**Benedicte Rouland**  
Arnaud Charon  
**The Returns to Firm-provided Training on Wages and Employment Duration: Evidence from France, 1998-2000**

The contribution of this paper is to assess the empirical effect of continuous training (and employees-followed) not only on wages but also on employment duration, that is on employment-unemployment transition and job-to-job transitions. Using French data on labor force and continuous training, both gathered by INSEE, we find that while participating to a training session in 1998 increases by 4.79% wages in 2000 (with a two-step estimator), it cuts by two the probability to experience an employment-unemployment transition for treated people during the 1998-2000 period (matching estimators). The probability to switch firms during this period is also about two times higher for untrained workers than for the trained (3.82% vs 7.43%).

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**Gudio Schwerdt**  
**Labor Turnover before Plant Closure: 'Leaving the sinking ship' vs. 'Captain throwing ballast overboard'**

Involuntary job loss in administrative data is commonly identified by focusing on mass-layoffs or plant closures. However, such events usually do not happen without prior knowledge, which potentially leads to selection in the labor turnover of distressed firms. We find that workers separating from closing plants up to 2 quarters before closure are associated with significantly lower displacement costs and on average significantly higher pre-closure earnings levels as opposed to ultimately displaced workers. Furthermore, our results indicate that displaced workers with high pre-closure earnings experience significantly lower reductions in future employment probabilities. These findings suggest that compositional differences cause estimated displacement costs to differ between early leavers and ultimately displaced workers. Focusing exclusively on the latter group would lead to an overestimation of displacement costs.
Christian Hepenstrick
Reto Foellmi
Josef Zweimuller

We present a model of monopolistic competition and international trade in which income effects play a crucial role. Assuming non-homothetic utility in the form of '0/1 preferences' gives us a simple and tractable framework in which prices and mark-ups of monopolistic producers are determined by consumers' income levels. Our results are in stark contrast to the standard 'New Trade Theory' and reminiscent of the famous 'Linder hypothesis'. First, we find that all goods are traded when countries are very similar, whereas countries remain in autarky when they are very dissimilar. For intermediate income differences only a subset of goods is internationally traded. Second, the gains from trade liberalization (reduction in transport costs) may be divided very unequally between countries. When transportation costs are high, both countries gain from trade liberalization. However, when transportation costs are below a certain threshold, the poor country may lose and oppose further trade liberalization.

Riham Shendy

The empirical literature examining the effect of tariff reductions on productivity commonly proxies the former with Nominal Tariff Rates (NTR) and estimates the latter as the production function residual. Using industry data for the manufacturing sector in South Africa and covering the reform period from 1994 to 2004, we disentangle the differential effect of foreign competition, proxied by reductions in NTR, and that of the imported technology, proxied by the reductions in Input Tariff Rates (ITR), on productivity growth. Our measure of efficiency growth controls for the effect of tariffs on markups. The results suggest that the efficiency difference between foreign and domestic inputs have the major effect on productivity gains. Declines in ITR significantly raise productivity growth compared to an insignificant effect for NTR. Additionally, we find higher protection rates associated with higher markups, albeit this finding is not robust.
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<td><strong>Regis Deloche</strong></td>
<td>Bertrand Crettez</td>
<td>Terrorism, key assets, and critical infrastructures: To protect or to rebuild? That is the question</td>
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<td>Both the choice between ‘stick’ and ‘carrot’ and the tension between the concern for ‘control’ and for the preservation of ‘civil liberties’ characterize the policy debate over counterterrorism. Frey and Rohner (2007) argue for the ‘carrot’ and ‘civil liberties’ point of view. They propose reconstruction as an alternative to protection. Our paper aims at providing a comparative analysis of these two policies. First, we model the decision of the government whether or not to protect. Second, we focus on the decision of the government whether or not to rebuild. Next, we model a government who may combine protection and reconstruction.</td>
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<td><strong>Clara Delavallade</strong></td>
<td>David de la Croix</td>
<td>How do Failing Institutions Distort Public Investment? Theory and Evidence</td>
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<td>We analyze one channel through which corruption hampers growth: public investment can be distorted in favor of specific types of spending for which rent-seeking is easier and better concealed. To study this distortion, we propose a dynamic model where households vote for the composition of public spending subject to an incentive constraint reflecting individuals’ choice between productive activity and rent-seeking. At equilibrium, the structure of public investment is determined by the predatory technology and the distribution of political power. Among different regimes, the model shows a possible scenario of distortion without corruption in which there is no effective corruption but the possibility of corruption distorts the allocation of public investment. We test the implications of the model on a set of countries using a two-stage least squares estimation: developing countries with a high predatory technology invest more in physical capital in comparison with health and education.</td>
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<td><strong>Ahmad Saleh</strong></td>
<td>Nauro F. Campos</td>
<td>Whither Corruption? A Meta-Regression Analysis Study</td>
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<td>In this paper, we focus our attention on the econometric evidence regarding the impact of corruption on economic performance (per capita GDP growth rates). The underlying debate is whether corruption ‘greases or sands the wheels of commerce’ or, in our case, whether it helps or hinders growth. We use data set comprising 465 coefficients of the effect of corruption on economic growth from 41 different empirical studies; to understand the effects of differences in estimation methods and econometric specification features on the significance and magnitude of the effect. We also pay special attention to the possibility of publication bias and to the important measurement issue uncovered by recent research. Our main finding is that although publication bias is severe, there seems to be a true strong effect of corruption on growth. Moreover, we find evidence that the way corruption is measured significantly affects its empirical relationship with growth.</td>
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<td><strong>Guillaume Daudin</strong> Traders, Intercontinental Trade, and Growth Before the Industrial Revolution</td>
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<td>This paper models how intercontinental trade profits could have encouraged growth in Early Modern Europe. Households produce and consume autarkic and market goods in an archipelago-like setting. A single trader monopolizes trade between them. He can accumulate capital to increase his trade capacities. This yields a gradual Smithian growth model with properties similar to a Cass-Koopmans model. By offering high profits, intercontinental trade encourages capital accumulation and growth. The predictions of the model are consistent with the growth experience of England, France and the Netherlands in the 17th and 18th century.</td>
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<td><strong>Alex Trew</strong> Endogenous Financial Development and Industrial Takeoff</td>
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<td>There is a large and growing literature on the relationship between financial development and economic growth. It suggests a positive causal link running from finance to growth. We consider, in broad terms, the existing historical evidence on this connection. We demonstrate that constraints on investment finance occur primarily in the presence of fixed costs. Investments in physical transport infrastructures are prime examples of projects in which financial constraints can retard industrial growth. Furthermore, an appreciation of spatial and dynamic elements is central: Infrastructure development was privately financed by spatially concentrated coalitions of modest investors. We contrast the institutional environment in Britain with that in continental Europe. We develop a theory of finance and growth that can account for the disaggregated and dynamic nature of the finance and development of infrastructure.</td>
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<td><strong>Kerstin Gerling</strong> The Real Consequences of Financial Market Integration when Countries Are Heterogeneous</td>
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<td>This paper studies the mechanisms through which financial integration affects the pattern of international capital flows and the domestic economic performance when explicitly accounting for wealth inequality on imperfect capital markets. Balancing the impact of a firm size and a credit rationing effect on the net credit position and aggregate production will help predicting the distribution of gains and losses among and within countries on the basis of a country's aggregate wealth and its distribution. Altogether, the results contribute new explanations for some empirical puzzles. They also bear important implications for policy making, supranational treaty design and financial stability.</td>
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Tracy Wheeler  
**Has the growth in trade with China affected UK inflation?**

This paper estimates whether the level or growth of cheap imports from China has had an impact on UK inflation using panel data methods. The results suggest that over the 1997-2005 period the substitution of imports from more expensive countries with those from China had a small but significant downward impact on UK inflation. However, the same regressions also suggest that higher inflation in imports from China than in imports from other countries has put upward pressure on UK inflation. As this upward 'inflation effect' is likely to have outweighed the downward 'substitution effect' the regressions suggest that from 1997-2005 Chinese imports put upwards pressure on UK inflation.

Simon Price  
Jan J. J. Groen  
George Kapetanios  
**Real time evaluation of Inflation Report and Greenbook forecasts for inflation and growth**

We compare the Bank of England's Inflation Report and the Federal Reserve Board's Greenbook quarterly forecasts for growth and inflation to real-time forecasts using a variety of forecasting models, including linear and non-linear univariate models and VARs. It emerges that the Inflation Report forecasts for GDP growth are dominated by forecasts from linear and non-linear univariate models, but for the inflation forecast the Inflation Report dominates. In case of the Greenbook GDP growth projections statistical forecasts only dominate when the start of the forecast evaluation period is restricted to 1985, which seem to reflect the effect of the 'Great Moderation'. As for the UK Inflation Report inflation projections, Greenbook inflation projections cannot be beaten. The explanation for this appears to be that the official forecasts effectively incorporates information about regime changes leading to inflation mean shifts.

Jennifer Castle  
David F. Hendry  
**Forecasting UK Inflation: Empirical Evidence on Time Disaggregation and Robust Forecasting Devices**

Structural models' inflation forecasts are often inferior to those of naive devices. We consider forecasts from equilibrium-correction mechanisms, built by automatic model selection, and compare to robust devices. Forecast-error taxonomies for aggregated and time-disaggregated information are developed, revealing that impacts of structural breaks are identical between these. Location shifts and parameter changes have the same impact regardless of whether aggregated or disaggregated data is used; there is no clear benefit to higher frequency data as it depends on the information losses and parameter inconsistencies deriving from time aggregation. There is support for moving to higher frequency data, as in a real-time context breaks can be picked up sooner. The taxonomy for the double-differenced device demonstrates that robust devices adapt rapidly to structural breaks. Forecast failures in structural models are driven by their deterministic terms, confirming location shifts as a pernicious cause thereof, and explaining the success of robust devices.
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<th>Author(s)</th>
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<tr>
<td>Stephan Sauer</td>
<td>Liquidity risk and monetary policy</td>
<td>This paper provides a framework to analyse emergency liquidity assistance of central banks on financial markets in response to aggregate and idiosyncratic liquidity shocks. The model combines the microeconomic view of liquidity as the ability to sell assets quickly and at low costs and the macroeconomic view of liquidity as a medium of exchange that influences the aggregate price level of goods. The central bank faces a trade-off between limiting the negative output effects of dramatic asset price declines and more inflation. Furthermore, the anticipation of central bank intervention causes a moral hazard effect with investors. This gives rise to the possibility of an optimal monetary policy under commitment.</td>
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<td>Ulrike Neyer</td>
<td>Credit Default Swaps and the Stability of the Banking Sector</td>
<td>The size of credit risk transfer markets has increased substantially. This paper considers credit default swaps (CDS) in which both, the protection buyer and the protection seller is a bank, and analyzes the use of this instrument for the stability of the banking sector. It is shown that these CDS improve the diversification of the banks' credit risk which encourages the banks to invest more into an illiquid, risky credit portfolio and less into a relatively liquid, safe asset. This behaviour reduces the stability of the banking sector in a strong cyclical downturn, and it can reduce the stability of the banking sector in other phases of the business cycle.</td>
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<td>Jan Wenzelburger</td>
<td>Sophistication in risk management, bank equity, and stability</td>
<td>We investigate the question whether sophistication in risk management fosters banking stability. We compare a simple banking system in which an average rating is used with a sophisticated system in which banks are able assess the default risk of entrepreneurs. While a sophisticated system rewards entrepreneurs with low default risks with low loan interest rates, a simple system acquires more bank equity and finances more entrepreneurs. Expected repayments in a simple system are always higher and its default risk is lower if productivity is sufficiently high. Expected aggregate consumption of entrepreneurs, however, is higher in a sophisticated banking system.</td>
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| **Alexander Kriwoluzky**  
Christian Stoltenberg | Optimal Policy Under Model Uncertainty: A Structural-Bayesian Estimation Approach |

In this paper we propose a novel methodology to analyze optimal policies under model uncertainty in micro-founded macroeconomic models. As an application we assess the relevant sources of uncertainty for the optimal conduct of monetary policy within (parameter uncertainty) and across models (specification uncertainty) using EU 13 data. Parameter uncertainty matters only if the zero bound on interest rates is explicitly taken into account. In any case, optimal monetary policy is highly sensitive with respect to specification uncertainty implying substantial welfare gains of a robustly-optimal rule that incorporates this risk.

| Richard Dennis | Model Uncertainty and Monetary Policy |

Model uncertainty has the potential to change importantly how monetary policy should be conducted. In this paper, I use a standard new Keynesian business cycle model to analyze the behavior of a central bank that conducts policy with discretion while fearing that its model is misspecified. I begin by showing how to solve linear-quadratic robust Markov-perfect Stackelberg problems. Next, I exploit the connection between robust control and uncertainty aversion to interpret my results in terms of the distorted beliefs held by the central bank, households, and firms. My main results are as follows. First, the central bank’s pessimism leads it to forecast future outcomes using an expectations operator that assigns greater probability to extreme inflation and consumption outcomes. Second, the central bank’s skepticism causes it to move forcefully to stabilize inflation following shocks. Finally, I show that policy loss can be improved if the central bank implements a robust policy.

| Martin Ellison  
Giacomo Carboni | Learning and the Great Inflation |

We respond to the challenge of explaining the Great Inflation by building a coherent framework in which both learning and uncertainty play a central role. At the heart of our story is a Federal Reserve that learns and then disregards the Phillips curve as in Sargent’s Conquest of American Inflation, but at all times takes into account that its view of the world is subject to considerable uncertainties. Allowing Federal Reserve policy to react to these perceived uncertainties improves our ability to explain the Great Inflation with a learning model. Bayesian MCMC estimation results are encouraging and favor a model where policy reacts to uncertainty over a model where uncertainty is ignored. The posterior likelihood is higher and the internal Federal Reserve forecasts implied by the model are closer to those reported in the Greenbook.
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<td><strong>Clare Macallan</strong>&lt;br&gt;Stephen Millard&lt;br&gt;Miles Parker</td>
<td>The cyclicality of mark-ups and profit margins for the United Kingdom: Some new evidence</td>
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In this paper, we assess the cyclicality of mark-ups and profit margins within the United Kingdom, at both the aggregate and industry level. We find that the private-sector labour share moves counter-cyclically, suggesting that the aggregate mark-up moves procyclically. This result survives when we consider more sophisticated measures of the mark-up. And this result is also supported by industry level data. We find that the aggregate market-sector profit share moves procyclically and that the cyclical behaviour of profit margins is largely homogenous across industries. Nevertheless, there is some evidence that margins moved against the cycle in the late 1990s, starting to fall in 1997 whereas the cycle did not peak until until 2000. In tandem with these cyclical movements, we also find that the market-sector profit share has trended upwards since 1970, in contrast to the aggregate mark-up, which fell over the same period.

| Tatiana Damjanovic<br>Charles Nolan | Macroeconomic implications of relative price distortions: Seigniorage, output and welfare |

We compare macroeconomic models of sticky-prices (Calvo and Costs-of-adjustment) with flexible price models in terms of optimal seigniorage. This sheds light on the importance of relative price distortions. Sticky-price models with no price dispersion terms have unattractive implications, we argue, when it comes to the derivation of optimal policies. We provide examples where they may imply very high inflation as part of the optimal plan, or that inflation does not matter for the ranking of alternative policies.

| Efrem Castelnuovo<br>Paolo Surico | The Price Puzzle: Fact or Artifact? |

This paper re-examines the VAR evidence on the price puzzle and proposes a new theoretical interpretation. Using actual data and two identification strategies based on zero restrictions and model-consistent sign restrictions, we find that the positive response of prices to a monetary policy shock is historically limited to the sub-samples associated with a weak interest rate response to inflation. Using data generated by a sticky price model of the U.S. economy, we then show that the structural VARs are capable of reproducing the price puzzle only when monetary policy is passive. In contrast, the sticky price model does not generate, on impact, a positive inflation response to a policy shock. The omission in the VARs of a variable capturing expected inflation is found to account for the price puzzle observed in simulated and actual data.
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<td><strong>Deren Unalmis</strong></td>
<td>Do Macroeconomic and Financial Events Lead to Contagion?</td>
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In this study, contagion is allowed to occur during some macroeconomic and financial events (for example, recessions, periods with relatively high inflation, bear markets). We test for international financial contagion in the context of a structural vector autoregression (SVAR) model. Following the methodology put forward by Rigobon (2002), the heteroscedasticity in the financial data is utilised in order to construct an identified (or overidentified) SVAR model. In the empirical application, using quarterly US and UK returns, we reach some evidence of contagion from US to UK markets during some macroeconomic and financial events.

| **Wing Wah Tham** | Information Asymmetry and Macroeconomic News in Foreign Exchange Electronic Inter-dealer Market |

This paper examines the transmission channels through which macroeconomic news are impounded into foreign exchange rates and whether different categories of macroeconomic news like euro-area, UK and US news induce a different price discovery process in the FX market. The results show that macroeconomic announcements affect exchange rates through two channels. The first channel is the directional price impact of macro announcements immediately and directly after the announcements. The second source of impact is a gradual process of price discovery, where the information advantage of some market participants is revealed to the market through trading. My analysis also shows that the characteristics and durations of these price discovery processes in the FX market depend on the prevailing level of information asymmetry and the nature and complexity of the scheduled news.

| **Elvira Sojli** |
| **Dagfinn Rime** |
| **Lucio Sarno** |
| Exchange Rate Forecasting, Order Flow and Macroeconomic Information |

This paper adds to the research efforts that aim to bridge the macro-micro approaches divide to exchange rate economics by examining the linkages between foreign exchange order flow, expectations of macroeconomic variables, and exchange rate movements. The basic hypothesis tested is that if order flow reflects heterogeneous beliefs about macroeconomic fundamentals, and currency markets learn about the state of the economy gradually, then order flow can have both explanatory and forecasting power for exchange rates. Using one year of high frequency data collected via a live feed from Reuters for three major exchange rates, we find that: i) order flow is intimately related to a broad set of current and expected macroeconomic fundamentals; ii) more importantly, order flow is a powerful predictor of daily movements in exchange rates in an out-of-sample exercise, on the basis of economic value criteria such as Sharpe ratios and performance fees implied by utility calculations.
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<th>13:30-15:00</th>
<th>Rm: R2.41</th>
<th>Chair: Topi Miettinen</th>
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<tr>
<td><strong>Tymofiy Mylovanov</strong></td>
<td>Informed Principal in Quasilinear Environments</td>
<td>Thomas Troeger</td>
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This paper studies the problem of mechanism selection by an informed principal in general quasilinear environments. Our model allows for large and continuous type spaces, multiple agents, and interdependent preferences. We provide conditions that guarantee that an essentially unique Perfect Bayesian equilibrium exists, coincides with Myerson's strong solution and with the ex-ante optimal allocation, and consists of allocations that would be optimal if the principal's information were publicly known. We demonstrate that these conditions are satisfied in a broad range of settings, including Myerson's optimal auction setting. Finally, we present an example of quasi-linear environments with independent private values where our conditions fail and Myerson's strong solution does not exist. This example is important because it demonstrates that the seminal results of Maskin and Tirole's (1990) do not immediately extend to quasi-linear environments with more than two types of the agent.

| **Tessa Bold** | Implications of Endogenous Group Formation for Efficient Risk-Sharing |

This paper models the implications of endogenous group formation for efficient risk-sharing contracts in the dynamic limited commitment model. Endogenising group formation requires that any risk-sharing arrangement is not only stable with respect to individual deviations but also with respect to deviations by sub-groups. This requirement alters the central predictions of the dynamic limited commitment model for efficient bilateral risk-sharing: Intervals for next period's marginal utility ratios are no longer history-independent and the covariance between current consumption and past income is no longer constrained to be nonnegative. Furthermore, current consumption of a constrained household now depends on the previous promised utility of the entire set of constrained households, and this provides an empirical test for the presence of endogenous group formation.

| **Topi Miettinen** | Commitment and Conflict in Bilateral Bargaining |

Building on previous work by Schelling and Crawford, we study a model of bilateral bargaining in which negotiators can make binding commitments at a low positive cost $c$. Most of our results concern outcomes that survive iterated strict dominance. If commitment attempts never fail, there are three such outcomes. In two of them, all the surplus goes to one player. In the third, there is a high probability of conflict. If commitment attempts succeed with probability $q < 1$, the unique outcome that survives iterated strict dominance entails conflict with probability $q$ squared. When $c = 0$, analogous results hold if the requirement of iterated strict dominance is replaced by iterated weak dominance.
<p>| Juergen Bracht | An experimental study of information mechanisms in the trust game: effects of observation and cheap talk |
| Nick Feltovich | |
| We use a human-subjects experiment to test the effects of several non-coercive 'information' mechanisms designed to increase cooperation and efficiency in the trust game. In the equilibrium of the standard trust game, the investor does not invest, foreseeing that the allocator would have kept all of the returns from investment. Our mechanism adds a pre-play stage in which the investor receives information, which can take the form of a cheap-talk message, observation of the allocator's past behavior, or both. None of these mechanisms alter the game's predictions in theory. We find that cooperation and efficiency are substantially increased when investors are able to observe the allocator's previous allocation decision, but the other types of information we consider have little effect. |
| Mariana Blanco | An experimental test of Blame-Free Justice |
| Andrew Schotter | |
| Several fairness theories in the behavioral literature explain deviations from purely self-interested behavior observed in the experimental lab. However, these theories assume that the most preferred allocation is the equal distribution of the total surplus. In this paper we propose a notion of fairness that relaxes this assumption. We conjecture that, when deciding if a given distribution is fair, individuals judge the behavior of the decision maker using their own behavior as a reference by putting themselves in the decision maker's position and ask if they would have acted as he did under the same circumstances. If the answer is yes, then he can not be blamed for his acts and his actions would be considered justified. Following Schotter (1990), we call this 'blame-free' justice. We test this hypothesis using an uneven tournament with punishment stage. A sizable part of our sample showed blame-free consistent behavior. |
| Alexander Sebald | Procedural Concerns in Psychological Games |
| | One persistent finding in experimental economics is that people react very differently to outcome-wise identical situations depending on the procedures which have led to them. In accordance with this, there exists a broad consensus among psychologists that not only expected outcomes shape human behaviour, but also the way in which decisions are taken. Economists, on the other hand, have remained remarkably silent about procedural aspects of strategic interactions. This paper provides a game theoretic framework that integrates procedural concerns into economic analysis. Building on Battigalli and Dufwenberg (2005)'s framework of dynamic psychological games, we show how procedural concerns can be conceptualized assuming that agents are (also) motivated by belief-dependent psychological payoffs. Procedural choices influence the causal attribution of responsibilities, the evaluation of intentions and the arousal of emotions. Two applications highlight the impact and importance of procedural concerns in strategic interactions. |</p>
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<th>Chair: Jonathan Haskel</th>
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**Helena Perrone**  
Consumers' Quality Choice during Demand Peaks

Recent literature finds evidence of price decreases during demand peaks. This paper develops a simple individual demand-supply model which illustrates the mechanism through which prices fall in response to a seasonal demand shocks. We argue that at periods of exogenous high demand, consumers shift their quality choices. Firms react to the increased perceived elasticity by cutting down prices. Implications of the model are tested using a comprehensive individual level database. We focus on the demand for ice-cream, which presents a peak during the summer.

**Catherine Waddams**  
Gain or Pain: What motivates consumer activity in markets?  
Yoonhee Tina Chang

We identify how consumers' action in switching suppliers depends on their expectations of gains from switching, and the cost which they anticipate (in terms of time spent) on search and switching. Our research is novel in two respects. It uses consumers' own direct estimates of likely costs and benefits before deciding on (in)action; and it identifies separately the effects of expected search and switching costs. Our findings that expected switching costs are much more influential than expected search costs and that consumers' trade-offs vary across markets and individuals have important implications for government policies on consumer empowerment.

**Jonathan Haskel**  
Ron S. Jarmin, Kazuyuki Motohashi  
Raffaella Sadun

Retail Market Structure and Dynamics: A Three Country Comparison of Japan, the U.K. and the U.S.

We use internationally comparable microdata to document features of the retail sectors in Japan, the United Kingdom and the United States. Our main findings are (a) small stores and large chains are common features of retail markets in Japan and the US respectively, with the UK in between; (b) the US shows higher churn and mobility in a number of different dimensions (c) there has been a rise in median store size in US non-specialized store chains but a fall in the UK (d) econometric work suggests a positive and statistically significant association between chain productivity and median within-chain store size, so that (c) and (d) could be part of the explanation of the different UK/US recent retailing productivity performance.
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<td><strong>Session: 6-4</strong></td>
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<td><strong>Giovanni Favara</strong></td>
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<td>Zheng Song</td>
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This paper presents a dynamic equilibrium model of the housing market in which agents consume housing services and speculate on future price changes. The model features a fixed supply of housing and a random variation in demand, originating from the fact that agents hold heterogeneous expectations about the future course of prices. Heterogeneous expectations generate a non linear demand of housing: agents expecting higher future prices buy in anticipation of capital gains; agents holding pessimistic expectations prefer to rent to avoid capital losses. By renting, the expectations of pessimistic agents are not incorporated in the price for sale houses. Thus, the equilibrium price reacts only the expectations of optimistic agents and it is biased upward. We find support to the the predictions of the model, using US state data and income dispersion as a proxy for households' imperfect information.

<table>
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<tr>
<th><strong>Garry Young</strong></th>
<th><strong>Durables spending, financial shocks and household balance sheets: evidence from UK households</strong></th>
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<td>Andrew Benito</td>
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In this paper we examine how households respond to financial shocks by varying their spending on durables goods. We consider how such responses are influenced by the household's balance sheet and identify financial shocks through a comparison of a household's expected change in financial situation with what, ex post, it experienced. We find significant spending responses to positive financial shocks, but less so to negative shocks. We find that low income households and those with few liquid assets respond to financial surprises more strongly, consistent with liquidity constraints and precautionary saving behaviour.

<table>
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<tr>
<th><strong>Matthew Wakefield</strong></th>
<th><strong>Using theory and simulation methods to understand micro-evidence on the relationship between house prices and consumption growth in the UK</strong></th>
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<td>Orazio Attanasio</td>
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<td>Andrew Leicester</td>
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Three mechanisms have been suggested to explain the strong correlation between house prices and consumption in the UK: ‘wealth effects’ and ‘collateral effects’ involve house prices driving consumption changes, but ‘common causes’ may drive both house price and consumption growth. Our central contribution comes from our systematic use of a realistic structural lifecycle model of consumption, savings and housing choices, to inform empirical analyses intended to distinguish the importance of these three mechanisms. We carefully match our model to recent episodes in the UK housing market and compare analyses of these episodes to analyses of counterfactual episodes in which the mechanisms identified above are shut down one-by-one. These comparisons indicate that common causes have been an important channel driving the observed correlation between house prices and consumption. The effects of house prices on borrowing possibilities can be important for consumption when price changes are large.
### Boubaker Hlaimi
Francois-Charles Wolff

Patterns of educational attainment and employment of first and second generation immigrants in France

This paper focuses on intergenerational educational mobility in France using the 'Generation 92' survey respectively for native children, second and first generation of immigrants. Drawing on ordered Probit models for educational attainment, we show that a higher level of parental education has differentiated impact on the child education among the three groups depending on the parental origin country and child gender. We find a higher intergenerational correlation in education for natives than for the first generation, but an intermediate level for the second generation which suggests a possible convergence over successive generations. In France, children of African parents are less likely to be employed than natives. Results from a non-linear decomposition indicate that this gap mainly stems from differences in individual characteristics between natives and children of immigrants. Finally, the first and second generations of African immigrants consider more frequently their school track as rather difficult.

### Marta Rubio Codina
Pierre Dubois

Child Care Provision: Semiparametric Evidence from a Randomized Experiment in Mexico

This paper focuses on the impact of the Mexican conditional cash transfer program, Progresa - renamed Oportunidades; on time allocated to child care. We semiparametrically estimate the impact of Oportunidades on the time mothers and older sisters spend taking care of kids ages under 3 in rural households. Results support the existence of substitution effects: mums in treatment households are more likely to substitute for their older daughters' time spent in child care, freeing up time for them to perform school related activities. We take these findings as evidence that Oportunidades is not only increasing human capital accumulation through keeping teenage girls in school but also through improved child care and arguably, improved early child development. We argue that more time spent with the mother in early ages leads to better motor and cognitive child development.

### Melanie Khamis
Omer Arias

Comparative Advantage, Segmentation And Informal Earnings: A Marginal Treatment Effects Approach

This paper uses recently developed econometric models of essential heterogeneity to analyze the relevance of labor market comparative advantage and segmentation in the participation and earnings performance of workers in formal and informal jobs in urban Argentina. Our results offer evidence for both labor market comparative advantage and segmentation. We find no significant differences between the earnings of formal salaried workers and the self-employed once we account for positive selection bias into formal salaried work based on tastes. This is consistent with compensating differentials and comparative advantage based on tastes as the main driver of choice between salaried work and self-employment. On the contrary, informal salaried employment carries significant earnings penalties. There is a considerable negative selection bias into formal relative to informal salaried work and only modest positive sorting based on expected earnings gains. These results are more consistent with labor market segmentation.
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<tr>
<td><strong>Stefanie Behncke</strong>&lt;br&gt;Markus Frolich&lt;br&gt;Michael Lechner</td>
<td>Unemployed and their Caseworkers - Should they be Friends or Foes?</td>
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In most countries, caseworkers in a public employment office have the dual role of counselling and monitoring unemployed persons, which often conflict with each other. Therefore, some caseworkers consider providing services to their clients and satisfying their demands as their primary task. Other caseworkers have a less cooperative attitude and pursue their strategies also against the will of the unemployed person. They may assign job assignments and less attractive labour market programmes without consent of the unemployed person. Based on a very detailed linked jobseeker-caseworker dataset, augmented with a detailed survey of caseworkers, we investigate the effects of caseworkers’ cooperativeness on the employment probabilities of their clients. Using statistical matching methods, we find that caseworkers who place less emphasis on a cooperative and harmonic relationship with their clients increase employment in the short and medium term.

| **Thomas Zwick**<br>Jens Mohrenweiser | Apprenticeship training in Germany: investment or productivity driven? |

The German dual apprenticeship system came under pressure because enterprises were not willing to offer a sufficient number of apprenticeship positions. A frequently made argument is that the gap could be closed if more firms would be willing to incur net costs. This paper investigates on the basis of representative data whether German enterprises on average indeed incur net costs during the apprenticeship period, i.e. if the impact of an increase in the share of apprentices on profits is negative. The paper uses the representative linked employer-employee panel data of the IAB and takes into account possible endogeneity of training intensity and unobserved heterogeneity in the profit estimation by employing panel system GMM methods. An increase in the share of apprentices has no effect on profits. This is interpreted as indication that most establishments in Germany do not invest more in apprentices than their productivity effects during the apprenticeship period.

| **Juha Tuomala**<br>Kari Hamalainen | Vocational Labour Market Training in Promoting Youth Employment |

This study evaluates the employment effects of vocational labour market training in Finnish youth labour markets. We are especially interested whether the timing of an intervention matters. We explore this issue by analyzing the monthly time paths of employment effects over the observation period of four years. The study adopts two different identifying assumptions in trying to identify the causal impact of training programmes, viz. conditional independence and the discontinuity in the probability of participation caused by the allocation of training to individuals over 20 years of age.
Ian Gregory-Smith  
Steve Thompson  
Peter W. Wright

Fired or retired? A competing risks analysis of chief executive turnover

We apply the techniques of duration analysis to model the tenure and mode of exit of Chief Executives from FTSE 350 companies from 1996-2005. We find the likelihood of forced departure sharply decreases from the 5th year of a CEO’s tenure. We find evidence that this is because CEOs who survive beyond year 4 are able to entrench themselves in their position.

Ania Zalewska  
Paul A. Grout

Stock Options, Managerial Portfolio Behavior and Corporate Governance

Why do boards not impose as many restrictions on managerial portfolio behavior as traditional corporate governance theory would indicate (Jensen and Murphy, 2004) and why is the relationship (that emerges from the literature) between options and discretionary executive stock ownership so complex? By explicitly analyzing the informational impact of executive options on managerial portfolio behavior we go some way to answering these questions. In particular, we show (i) that, depending on project characteristics and the managers' ability to succeed, options and managerial stock ownership will be complements or substitutes (e.g., they are more likely to be complements where there are a few managers 'superstars') able to succeed on the project, and substitutes where the problem is one of 'standard incentivisation') and (ii) that once a manager includes shares into his/her portfolio, his/her total expected return can decline as a result of more options being granted.
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<th>Speaker</th>
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<tr>
<td><strong>Paul Antoine Chevalier</strong></td>
<td>How do people make their political choice? Lessons from the 2007 French Presidential Elections</td>
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<td>Lionel Page</td>
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Why people vote and how do they decide to allocate their vote is still a challenging question for economic analysis. The economic model of voting decision making focuses on the rationality of a profit-maximising voter. On the opposite the political science point of view is often that voters are motivated by values, and preferences over the state of the society as a whole. Using a large database recording social preferences and political choices of voters for candidates in the 2007 French Presidential election, this study is the first to estimates the extent to which voting decisions are determined by political values, economic interest and candidate skills or individual characteristics.

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<tr>
<td><strong>James Rockey</strong></td>
<td>Ideology and the Growth of Government</td>
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<td>Andrew Pickering</td>
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We analyze the impact of ideology on the size of government. In a simple model the government sets redistribution and provision of public services according to the preferences of the median voter, for whom private consumption is a necessity. Ideology is defined on preferences for public services and the impact of ideology upon the size of government increases with mean income. In empirical work ideology is measured using data based on party manifestos. Much of the increases and divergence in government size observed across OECD countries can be explained by the interaction of ideology and mean income.

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<tr>
<td><strong>Michele Bernasconi</strong></td>
<td>Public education and redistribution when talents are mismatched</td>
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<td>Paola Profeta</td>
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In an overlapping generations model with two social classes, rich and poor, parents of the different social classes vote on redistributive policies for them and public education for their kids. Education is the engine for growth through its effect on human capital; but it is also the vehicle through which kids born from poor families may exchange their positions with kids born from rich families. This is because education reduces the probability of the mismatch, i.e. individuals with low talent but coming from rich families being placed in jobs which should be reserved to people with high talent (and vice versa). Equilibrium of the voting game is found using probabilistic voting. When the poor are more politically influential, the economy has a higher level of education, growth and social mobility than under political regimes supported by the rich; pre-tax inequality is greater in the first case, but post-tax is lower.
**Pavlos Petroulas**  
Stephen G. Hall  

**Spatial Interdependencies of FDI Locations: A Lessening of the Tyranny of Distance?**

Recent theoretical approaches stress the importance of complex integration strategies of multinationals and the interdependence between locations. Up till now little has been done to incorporate the potential cross-country dependencies into the empirical analysis of the determinants and the structure of foreign direct investment. By utilizing a panel data set that consists of real FDI stocks for 476 country pairs for the years 1994-2004 and a distance weighted spatial matrix, we find significant third country effects. Interestingly, the bilateral variables seem to be in concordance with the notion of horizontally motivated FDI while the spatial third country effects seem to comply with the notion of vertical FDI and production fragmentation. While bilateral variables seem to dominate location decisions the results confirm the importance of international interdependence.

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**Jeroen Hinloopen**

**Comparative advantage, the rank-size rule, and Zipf’s law**

Charles van Marrewijk

Using a comprehensive international trade data set we investigate empirical regularities (known as Zipf’s Law or the rank-size rule) for the distribution of the interaction between countries as measured by revealed comparative advantage. Using the recently developed estimator by Gabaix and Ibragimov (2006) we find strong evidence in favor of the rank-size rule along the time, country, and sector dimension for three different levels of data aggregation. The estimated power exponents that characterize the distribution of revealed comparative advantage are stable over time but differ between countries and sectors. These differences are related empirically to country and sector characteristics, including population size, GDP, and factor intensities.
### Session: 6-10  
**Wednesday 13:30-15:00  Rm: SS0.13  Chair: Mare Sarr**

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<tr>
<td><strong>Steven Poelhekke</strong></td>
<td>Volatility, Financial Development and the Natural Resource Curse</td>
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<td>Frederick van der Ploeg</td>
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Cross-country evidence is presented on resource dependence and the link between volatility and growth. First, growth depends negatively on volatility of unanticipated output growth independent of standard growth controls and the national income share of natural resources. Second, the adverse effect of resources on growth operates primarily through higher volatility. The positive effect of resources on growth is positive, but can be swamped by the indirect negative effect through volatility. Third, with well developed financial sectors, the resource curse is less pronounced. Fourth, landlocked countries with ethnic tensions have higher volatility. Fifth, restrictions on the current account lead to higher volatility and lower growth, but capital account restrictions lower volatility and boost growth. These effects are especially strong in resource-rich countries. We also present IV estimates to correct for the endogenous nature of investment, and panel estimates. Our key message is that volatility is a quintessential feature of the resource curse.

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<tr>
<th>Mare Sarr</th>
<th>Resources, Conflict and Development Choice: Public Good Provision in Resource Rich Economies</th>
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<td>Katharina Wick</td>
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The so-called resource curse has triggered a vast amount of subsequent research looking deeper into the causes for the curse. We argue that one of the causes is that resource rich countries under-invest in productive public goods, such as physical and social infrastructure. We model the policy choice of a ruler in a resource rich country who can, given the inherent threat of conflict over the distribution of the resource, either invest in military repression or in productive public goods. Whereas both policies aim at keeping the population from fighting over the resource, which of the two is chosen depends on the relative strength of the ruler and the population in contesting as well as on the characteristics of the resource in question. Finally we present empirical evidence supporting this model outcome.
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<td><strong>Monique Ebell</strong></td>
<td><strong>Real Origins of the Great Depression</strong></td>
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<td><strong>Albrecht Ritschl</strong></td>
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We propose a parsimonious model which accounts for both the American Great Depression and its precursor, the deep recession of 1920-21, as well as the intervening roaring 1920s boom. The model combines monopoly power in the goods market and search frictions with wage bargaining in the labor market, allowing for individual and collective bargaining. We attribute the extraordinary macroeconomic and financial volatility of the interwar period to two factors: shifts in the wage bargaining regime and the degree of monopoly power in the economy. A shift from individual to collective bargaining presents as a recession, involving declines in output and asset prices, and increases in unemployment and real wages. We provide historical evidence on these shifts, as well as a calibrated model which demonstrates that such shifts could account for recessions of the magnitude of the Great Depression.

| **Vanghelis Vassilatos** | **Do institutions matter for economic fluctuations? Weak property rights in a business cycle model for Mexico** |
| **Konstantinos Angelopoulos** | |
| **George Economides** | |

This paper shows that the dependence of the standard real business cycle (RBC) model on unobservable technology shocks can be reduced once we allow for weak property rights. This is motivated by the empirical observation that changes in institutions in emerging markets are related to the evolution of the main macroeconomic variables. We thus incorporate weak property rights in the baseline RBC model and use the ICRG dataset to obtain a proxy for the persistence and standard deviation of the degree of protection of property rights in Mexico. We find that this model does not need to rely on unobservable technology shocks, as innovations to the degree of protection of property rights only (i.e. without a technology shock) can predict the second moments of the main economic variables quite well.

| **Roman Sustek** | **Business cycle accounting for monetary economies** |

This paper extends business cycle accounting to investigate the importance of various frictions for the joint dynamics of real and nominal variables. After establishing mappings between frictions and wedges, it is applied to two US recessions, and two anomalies in the postwar business cycle: the cross-correlations between output and the nominal interest rate, and between output and inflation. The findings demonstrate that: (i) fluctuations in inflation during the 1973 recession can be accounted for in a model in which the Fed accommodates a decline in output caused by a fall in total factor productivity (TFP); (ii) the fall in inflation during the 1982 recession can be accounted for by a change in monetary policy, but worsening TFP prevented faster disinflation; (iii) the two anomalies can be accounted for by fluctuations in TFP and asset market distortions; (iv) sticky prices and investment distortions played only a minor role in fluctuations in the data.
Christopher Spencer
Robert Brooks
Mark N. Harris

An Inflated Ordered Probit Model of Monetary Policy: Evidence from MPC Voting Data

Even in the face of a continuously changing economic environment, interest rates often remain unadjusted for long periods. When rates are moved, the norm is for a series of small unidirectional discrete basis-point changes. To explain these phenomena we suggest a two-equation system combining a 'long-run' equation explaining a binary decision to change or not change the interest rate, and a 'short-run' one based on a simple monetary policy rule. We account for unobserved heterogeneity in both equations, applying the model to unique unit-record level data on the voting preferences of Bank of England Monetary Policy Committee (MPC) members.

Christopher Crowe

Testing the Transparency Benefits of Inflation Targeting

I test whether inflation targeting (IT) enhances transparency using inflation forecast data for 11 IT adoption countries. IT adoption promotes convergence in forecast errors, suggesting that it enhances transparency. This effect is robust to dropping observations, is strengthened by using instrumental variable estimation to eliminate mean-reversion, and is absent in placebo regressions (where IT adoption is shifted by a year). This result supports Morris and Shin's (2002) contention that better public information is most beneficial for forecasters with bad private information. However, it does not support their hypothesis that better public information could make private forecasts less accurate.

Alessandro Flamini

Markets Uncertainty, Central Bank Preferences and Distribution Forecasts in a Small Open Economy

This paper relates the central bank preferences to the quality of its forecasts and to the impact on the economy of real and financial shocks. The framework is a Markov jump-linear-quadratic new Keynesian model, where the central bank searches for the optimal policy in presence of uncertainty on the behaviour of households, firms and financial markets. Comparing CPI and domestic inflation targeting, the paper shows that the latter implies considerably less variability in the distribution forecast of the economic dynamics. In particular, the variability of the interest rates distribution forecast is much larger with CPI inflation targeting. Furthermore, domestic inflation targeting stands out for much less sensitiveness to interest rate smoothing, as well as for resulting in less economy-wide perturbation after a cost-push shock, a demand shock and a risk premium shock.
Mark Taylor
Hyeyoen Kim

Large Data Sets, Nonlinearity and the Purchasing Power Parity Puzzle

A well known puzzle in international finance concerns the observed very slow speeds of adjustment of real exchange rates in response to shocks - the so-called purchasing power parity puzzle. In this paper, we explore whether allowing for a wide range of influences on the real exchange rate in a nonlinear framework can help resolve this puzzle. Using recently proposed econometric methods for summarising very large macroeconomic data sets into a small number of observable factors, we find that there is a long-run relationship between these factors and real exchange rates. When put into a nonlinear framework, we find that allowing for the effects of macroeconomic factors dramatically increases the measured speed of adjustment of the real exchange rate.

Andros Kourtellos
Elena Andreou
Eric Ghysels

Regression Models with Mixed Sampling Frequencies

We study regression models that involve data sampled at different frequencies. We derive the asymptotic properties of the NLS estimators of such regression models and compare them with the LS estimators of a traditional model that involves aggregating or equally weighting data to estimate a model at the same sampling frequency. We explore the above theoretical aspects and verify them via an extensive Monte Carlo simulation study and an empirical application.

Valentina Corradi
Andres Fernandez
Norman R. Swanson

Information in the Revision Process of Real Time Datasets

In this paper we first develop two statistical tests of the null hypothesis that early release data are rational. The tests are consistent against generic nonlinear alternatives. We apply them to a real-time dataset for money, output, prices and interest rates. We discuss and illustrate the importance of the choice between using first, later, or mixed vintages of data in prediction. Overall, we find no evidence that the data rationality null hypothesis is rejected for a variety of variables (i.e. we find strong evidence in favor of the 'news' hypothesis). Thus, it appears that there is little benefit to using later releases of data for prediction and policy analysis, for example.
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<th>Session: 6-14</th>
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<th>13:30-15:00</th>
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<th>Chair: Martin Seneca</th>
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<tr>
<td><strong>Gernot Mueller</strong></td>
<td><strong>International Dimensions of Fiscal Policy Transmission</strong></td>
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<td>Giancarlo Corsetti</td>
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<td>Andre Meier</td>
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This paper analyzes the transmission of fiscal policy shocks in economies at different degrees of integration into global goods markets. First, using a quantitative business cycle model, we show that trade integration (measured by openness) does not alter the effects of government spending on output, but mutes the negative impact of government spending shocks on private demand. In fact, for very open economies, the model predicts a positive response of consumption to public spending shocks, even though we assume Ricardian behavior. Second, we provide supporting evidence using panel data for 19 OECD countries: consistent with our model, crowding-out effects on consumption and investment are found to be decreasing in a country’s openness to trade. A relevant implication is that more open economies are more likely to experience twin deficits.

| **Martina Cecioni** | **External Trade and Monetary Policy in a Currency Area** |

Due to historical and geographical reasons, the member countries of the European Monetary Union (EMU) display different degrees of external trade openness. This paper aims at understanding whether such heterogeneity is relevant for the monetary policy design. I set up a model for a currency area with two regions that have different degrees of openness to trade with a third country outside the area. Heterogeneous degrees of openness imply that the relative competitiveness across regions influences the extent to which external impulses are transmitted to the area-wide inflation and output gap. Under plausible calibration for the EMU, strict inflation stabilization is not optimal as it is for a homogeneous currency area. This result is driven by two facts. (i) Under heterogeneity the monetary union central bank can affect the inflation differentials; (ii) Due to concavity of the regional utility functions, inflation differentials matter for the currency area aggregate welfare.

| **Martin Seneca** | **Labour market asymmetries in a monetary union** |
| Torben M. Andersen |

This paper takes a first step in analysing how a monetary union performs in the presence of labour market asymmetries. Differences in wage flexibility, market power and country sizes are allowed for in a setting with both country-specific and aggregate shocks. The implications of asymmetries for both the overall performance of the monetary union and the country-specific situation are analysed. It is shown that asymmetries can have important effects, and that there are substantial spill-over effects. It is found that aggregate output volatility is not strictly increasing in nominal rigidity but hump-shaped. A disproportionate share of the consequences of wage inflexibility may fall on small countries. In the case of country-specific shocks a country unambiguously benefits in terms of macroeconomic stability by becoming more flexible, but in general an inflexible country does not necessarily achieve more output stability by becoming more flexible.
Evagelos Pafilis

Privatising the Crown Jewels: A Theoretical Analysis of Partial Privatisation

We present a model that examines the extent of privatisation and the subsequent share allocation. Our analysis concentrates on the costs and benefits of different ownership structures to a self-interested politician. We find that in countries with relatively under-developed financial markets, conservative governments will partially privatise SOEs and allocate shares both to institutional and retail investors. On the other hand, socialist governments will sell far less shares and would either allocate them only to retail investors or only to institutional investors, depending on how; left&quo; they are (the stake allocated to institutional would in turn be much smaller than the one allocated to retail investors). In countries with relatively developed financial markets, we find that both conservative and socialist governments will partially privatise and would allocate shares only to institutional investors. However, the extent of privatisation would be much lower under a socialist government.

Jennifer Smith

Punishment without Crime? Prison as a worker discipline device

Could the absence of property rights and reliable monitoring have undermined the Stalinist command economy? An 'efficiency wage' model developed for Western economies with imperfect monitoring of effort is reinterpreted on the assumption that it is imprisonment not unemployment that acts as a 'worker discipline device'. What does it imply? That to secure resources for investment or war, consumption must be compressed; and to avoid incentive problems, prisons should be harsher: this, it seems, is the cruel logic of coercion. Adding randomised terror for political ends can, we find, easily prove economically counter-productive and threaten to destabilise the command economy. Why did Stalin’s system of coercion ultimately fail? We conclude with speculation based on the efficiency wage approach.

Mark Harrison

Quantity Versus Quality in the Soviet Market for Weapons

Military market places display obvious inefficiencies under most arrangements, but the Soviet defense market was unusual for its degree of monopoly, exclusive relationships, and intense scrutiny (in its formative years) by a harsh dictator. This provided the setting for quality versus quantity in the delivery of weapons to the government. The paper discusses the power of the industrial contractor over the defense buyer in terms of a hold-up problem. The typical use that the contractor made of this power was to default on quality. The defense ministry’s counter-action took the form of deploying agents through industry with the authority to verify quality and reject substandard goods. The final compromise restored quality at the expense of quantity. Being illicit, it had to be hidden from the dictator.
This paper presents a new theory of decision making with errors. The proposed theory explains all major violations of expected utility theory such as the preference reversal phenomenon (including the strong reversals and the preference reversals with the probability equivalents), the common consequence effect (the Allais paradox), the common ratio effect, the violations of the betweenness axiom and the fourfold pattern of risk attitudes. The theory also explains many well-known deviations from the Nash equilibrium such as the positive offers in the dictator game and in the ultimatum game, stopping at the intermediate nodes of the centipede game and own-payoff effects in the matching pennies game.

We study relative performance of stochastic and deterministic mechanisms in a principal-agent model with hidden information and no monetary transfers. We present an example in which stochastic mechanisms perform strictly better than deterministic ones and can implement any outcome arbitrarily close to the first-best. Nevertheless, under the common assumption of quadratic payoffs and a certain regularity condition on the distribution of private information and the agent's bias, the optimal mechanism is deterministic. We provide an explicit characterization of this mechanism.
John Thanassoulis  
Estimating Bargaining Power In The Supply Chain  
Howard Smith

We analyse the bargaining power and profit splits in supply chains for homogeneous inputs. Upstream suppliers are in competition to supply product to downstream buyers who are themselves in competition: (supermarket private label procurement, milk, car parts for example). We first set out a bargaining framework for modelling this bargaining interface. The model seeks to capture the core features of bargaining identified in a series of interviews we conducted with key executives in a supermarket supply chain. The model provides a method for calculating how profit splits would alter if parties were to merge or if costs were to change. We source data on costs and payments from the UK liquid milk supply chain. We then estimate the bargaining power of supermarkets, their milk suppliers and the farmers in Great Britain. We explain the division of profits in the chain and discuss its dependence on key market characteristics.

Hugh Sibly  
Vertical Product Differentiation and Quality Distortion

This paper considers a monopolist which conducts vertical product differentiation. Customers' demand is modelled in a general in than in previous analyses. Specifically customers purchase multiple units at a linear price. Customers differ in their income and preferences, particularly their willingness to substitution between quantity and quality. The model identifies the aspects of customer demand that are sources of vertical differentiation and those aspects that cause quality distortion. It is demonstrated that vertical differentiation only causes quality distortion when consumer demand is such that there is a material difference in the mark-up of different varieties.

Paul Dobson  
Claudio Piga  
Mergers and Business Model Assimilation: Evidence from Low-Cost Airline Takeovers

This paper examines mergers that lead to an almost immediate replacement of the target firm's business model in favour of that of the acquiring firm. We examine the post-merger behaviour of the two leading European dedicated low-cost airlines, EasyJet and Ryanair, each acquiring another low-cost airline, respectively Go Fly and Buzz. We find that both takeovers had an immediate and sustained impact on both the pricing structures and the extent of inter-temporal price discrimination used on the acquired routes, with early booking fares noticeably reduced and only very late booking fares increased. Overall, the analysis points to a pro-competitive effect of both takeovers as a consequence of the introduction of the acquiring firms' business models and associated yield management pricing systems.
Michael Smith, David Paton

Do Bookmakers Predict Outcomes Better than Betters?

Recent research has suggested that bookmakers display superior skills to bettors in predicting the outcome of sporting events. In this paper we use matched data from traditional bookmaking and person-to-person exchanges to test this hypothesis. Employing a conditional logistic regression model, we find that betting exchange nominal odds have more predictive value than the corresponding bookmaker odds for 693 horse races run in the UK. We attribute this to the favourite-longshot bias. Secondly, we repeat the regressions for probabilities adjusted for bias, and find that the betting exchanges continue to predict outcomes more accurately. Finally, to control for potential spillovers between the two markets, we repeat the analysis for cases where prices diverge significantly. In this case the predictive advantage is reversed, with bookmaker odds apparently yielding more valuable information concerning race outcomes than the exchange equivalents.

Alexander Koch, Hui-Fai Shing

Bookmaker and pari-mutuel betting: Is a (reverse) favourite-longshot bias built-in?

A widely documented empirical regularity in gambling markets is that bets on high probability events (a race won by a ‘favourite’) have higher expected returns than bets on low probability events (a ‘longshot’ wins). Such favourite-longshot (FL) biases however appear to be more severe and persistent in bookmaker markets than in pari-mutuel markets; the latter sometimes exhibit no bias or a reverse FL bias. Our results help understand these differences: the odds grid in bookmaker markets leads to a built-in FL bias, whereas that used in pari-mutuel betting pushes these markets toward a reverse FL bias.

Olivier Marie

Police and Thieves... And Football!

What is the impact on crime of important sporting events such as league football in England? They require heavy policing and attract a large male audience throughout the year. We exploit the variation in attendance and location matches for nine London football clubs between 1992 and 1996 and study its impact on same day violent and property crime in the capital and across its boroughs. Because we are interested in estimating both the displacement and incapacitation effects the games could have we design various econometric models to attempt to distinguish between them. Simple models at the city level generate opposite results depending on the number of games are being played on a certain day. Fixed effect estimates across areas suggest football match attendance increases crime in the borough where they take place. However when attendance is higher at the London level, it appears to decrease crime in that same borough.
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<tr>
<td><strong>Kenneth Clark</strong></td>
<td>The Employment and Earnings of Migrants in Britain</td>
<td>Martyn Andrews</td>
<td>William Whittaker</td>
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Using nationally representative, longitudinal data from the first 14 waves of the British Household Panel Survey we examine the labour market returns to inter-regional migration in Great Britain. Controlling for endogeneity, heterogeneity and self-selection, we find substantial long-run wage premiums associated with migration for both males and females who move for job-related reasons. There is, however, no evidence that moving across regions increases the probability of employment for males and females; in fact, some female movers experience a long-run employment penalty.

| Albrecht Glitz | How Do Industries and Firms Respond to Changes in Local Labour Supply? | Christian Dustmann |

In this paper we investigate how industries and firms respond to changes in the skill mix of local labour supply due to immigration. One way to absorb these changes is an expansion in size of those industries and firms that use the corresponding skill group more intensively with fixed relative factor inputs. Alternatively, industries and firms can adjust their production process and switch to a technology that uses the corresponding skill group more intensively. We investigate which of these channels is dominant using unique administrative data on all workers and their skill levels in all firms in Germany between 1985 and 1995. Our findings show that changes in relative labour supply are accommodated within, rather than between industries and firms. We also show that an analysis on the industry level alone may overestimate the contribution of endogenous adjustments in production technologies.

| Panu Pelkonen | Education, Mobility and the Efficiency of the Labour Market | Stephen Machin |

We show that the length of compulsory education has a causal impact on regional labour mobility and on the sensitivity of migrants to economic incentives. The analysis is based on a quasi-exogenously staged Norwegian school reform, and register data of the whole population. Based on the result, we discuss the possibility that part of the US-Europe difference, as well as the European North-South difference in labour mobility may be due to differences in level of education in the respective regions.
### General Sessions: Abstracts for detailed programme RES2008

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**Raffaella Sadun**  
Nick Bloom  
John Van Reenen  

Firm Decentralization is affected by structural characteristics of the firm's environment such as competition. However, successful informal delegation to a manager by a CEO will depend on the ability to sustain co-operation in a repeated game: the co-operative equilibrium will be more easily sustained if the parties have greater trust. To explore this hypothesis we use an innovative survey tool to collect organizational practice data from over 3,500 medium sized firms across 12 countries in the US, Europe and Asia. We find robust evidence that firms located in regions with higher levels of trust ('social capital') are characterized by greater decentralization, even after we control for countries. Consistent with our model, such firms are also more likely to outsource. If decentralization is complementary with information technology, low trust countries (like France) may benefit less from an era of rapid technological change than higher trust countries like Sweden and the US.

**Christian Bruns**  
Oliver Himmler  

Seeking re-election, politicians need voters to know what they have done for them. Thus, incentives may arise to spend more money where media coverage is higher. We present a simple model to explain the allocation of public spending across jurisdictions contingent on media activity. An incumbent seeking to maximize the probability of re-election will shift more money to jurisdictions where an extra dollar gains more votes because a larger share of the electorate is informed about his policy. This prediction is tested using US data on county-level public spending, Designated Market Areas (DMAs) and location of licensed television stations. Instrumenting for the possible endogeneity of media activity to public spending, 2SLS results confirm a positive effect of media on county-level public spending. Spatial regression rules out the possibility of confounding media effects with spatial autocorrelation.

**J Robert Branston**  
James R. Wilson  

Building upon the strategic decision-making literature of the theory of the firm, we consider the importance of the broadcasting industry to an economy and develop a rationale for 'public service broadcasting' that is distinct from standard market failure arguments. Our approach suggests a policy focus that is markedly different from traditional concerns with ownership, competition and regulation. Instead we argue the importance of the governance of broadcasting activities, using the case of the BBC to highlight various governance mechanisms that distinguish it from commercial broadcasters by enabling an identification of the 'public interest'. This opens up a new policy agenda that requires further detailed research on specific broadcasting institutions.
Ciro Avitabile, Vincenzo di Maro
Spillover Effects in Healthcare Programs: Evidence on Social Norms and Information Sharing

This paper studies the determinants of the decision to screen for cervical cancer in Rural Mexico. We exploit the randomized research design of Progresa to investigate how including screening tests among the conditionalities to receive the cash transfer affects the screening decision of non-eligible households. Our results show that, whilst the program has no indirect effect on non-female specific health outcomes, there is a strong and significant increase in the demand for cervical cancer screening of non-eligible households. When we focus on the mechanisms that drive the indirect treatment effect, we have two main findings. First, Progresa weakens the social norm related with husbands opposition to their women being screened by male doctors. Second, there is a significant information sharing between eligible and non-eligible women.

Gautam Hazarika, Basudeb Guha-Khasnobis
Household Access to Microcredit and Children’s Food Security in Rural Malawi: A Gender Perspective

This study seeks to discover if women’s relative control over household resources or intra-household bargaining power in rural Malawi, gauged by their access to microcredit, plays a role in children’s food security, measured by anthropometric nutritional Z-scores. Access to microcredit is assessed in a novel way as self-reported credit limits at microcredit organizations. It is found that whereas the access to microcredit of adult female household members improves 0 to 6 year old girls’, though not boys’, long-term nutrition as measured by height-for-age, the access to microcredit of male members has no such salutary effect on either girls’ or boys’ nutritional status. This may be interpreted as evidence of a positive relation between women’s relative control over household resources and young girls’ food security. That women’s access to microcredit improves young girls’ long-term nutrition may be explained in part by the subsidiary finding that it raises household expenditure on food.

Wiji Arulampalam
Changing Neighbourhood and Infant Mortality in Rural India

Childhood mortality rates in India are concentrated along geographic and family lines. This paper uses two waves of an all-India health survey to examine the factors that affect infant mortality and how this has changed over time. The results show that the observed death clustering found in the data can be explained as one due to a causal mechanism acting via the death of the previous sibling increasing the mortality risk of the index child only during the period 1986-1992. This effect was not present in the 1993-99 period. About 87% of families were estimated to have an elevated mortality risk due to a death of a previous sibling in infancy. A decomposition analysis revealed that the reduction in infant mortality observed in India over the period 1986-1997 was mainly associated with changing characteristics of women and the environment in which they lived.
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<tr>
<td><strong>Yundan Gong</strong>&lt;br&gt;Sourafel Girma&lt;br&gt;Holger Gorg, Zhihong Yu</td>
<td>Can production subsidies foster export activity? Evidence from Chinese firm level data</td>
<td>Using a unique firm level data set from the Chinese manufacturing sector, this paper analyses the impact of production subsidies on firms' export performance. It documents robust evidence that production subsidies stimulate export activity, although this effect is conditional on firm characteristics. In particular, the beneficial impact of subsidies is found to be more pronounced amongst profit-making firms in capital intensive industries and with previous exporting experience. Compared to firm characteristics, the extent of heterogeneity across ownership structure (SOEs, collectives and privately-owned firms) proves to be relatively less important.</td>
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<td><strong>Eckhardt Bode</strong>&lt;br&gt;Peter Nunnenkamp</td>
<td>Does Foreign Direct Investment Promote Regional Development in Developed Countries? A Markov Chain Approach for US States</td>
<td>This paper investigates the effects of inward FDI on per-capita income and growth of the US states since the mid-1970s. Using a Markov chain approach, it shows that both quantitative and qualitative characteristics of FDI affect per-capita income and growth. Employment-intensive FDI, concentrated in richer states, has been conducive to income growth, while capital-intensive FDI, concentrated in poorer states, has not. FDI has consequently tended to slow down rather than foster income convergence among US states. It appears to be less important whether FDI has been undertaken in the manufacturing sector of US states or in other sectors.</td>
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<td><strong>Dolores Anon Higon</strong>&lt;br&gt;Nicholas Vasilakos</td>
<td>Productivity, Multinationals and Knowledge Spillovers: Evidence from the British Retail Sector</td>
<td>This paper discusses the impact of foreign-ownership presence on the productivity performance of domestically-owned British retailers. To guide our estimations, we develop a simple Hotelling model in which we show how the transfer of operational knowledge from MNEs to non-MNE retailers, may result to an increase in the productivity of the latter and increased industrial activity in the regions with relatively higher concentration of foreign investment. Our empirical estimations lend support to the assumptions upon which the theoretical model is built, while confirming the positive and highly significant impact of these spillovers on the productivity performance of domestic firms. More specifically, using data from the Annual Respondents Dataset (ARD) we find that positive spillovers exist but are mostly confined to the region in which foreign subsidiaries locate. Furthermore, the productivity benefit from regional FDI spillovers increases with the absorptive capacity of domestic retailers.</td>
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Rafael Morais
TRIPs under no enforcement of the National Treatment Commit-ment Rule

This paper presents a North-South model dealing with the enforcement of the international protection to intellectual property rights. In the TRIPS Agreement, the National Treatment Commitment Rule (NTCR) obliges countries to treat equally national and foreign IPR applicants and holders. The literature on the topic takes its enforcement as granted, despite of empirical evidence on countries’ misbehavior. Using the setup of Lai and Qiu (2003), we relax this full enforcement assumption. Results change dramatically. Conditions on countries' market sizes and innovative capabilities determine interior and distinct corner solutions for the equilibrium. However, social optimum only requires global incentives to innovation, no matter who provides them. Moreover, since IPR implementation is more costly in the South, efficiency requires only the North to protect IPRs and more than at equilibrium, which contradicts Lai and Qiu (2003) and the outcomes of the TRIPs Agreement.

Monika Mrazova
Is the WTO’s Article XXIV bad?
David Vines
Ben Zissimos

This paper shows that Article XXIV increases slightly the likelihood of free trade, but may worsen world welfare when free trade is not reached. Customs union (CU) formation under Article XXIV is modeled as a coalition formation game with negative externalities. We assume that the usual mechanism through which block formation exerts a negative externality on non-members - a rise in external tariffs - is precluded by Article XXIV. The equilibrium CU structure is characterized under Article XXIV and compared to the equilibrium CU structure without Article XXIV.

Giovanni Facchini
Fast Track Authority and International Trade Negotiations
Paola Conconi

Under Fast Track Authority (FTA) the US President is granted the power to negotiate international trade agreements and Congress can only approve or reject a proposed deal, without the possibility of amending its content. In this paper, we examine the determinants of FTA voting decisions and the implications of this institutional procedure for international trade negotiations. We describe a simple two-country trade model, in which industries are unevenly distributed across constituencies. In Foreign, trade negotiating authority is delegated to the executive, while at Home Congress can retain the power to amend trade agreements. We show that representatives of constituencies with higher stakes in import-competing industries tend to vote against FTA, while representatives of more export-oriented constituencies vote in favor or against, depending on how protectionist is Congress’ majority. Empirical analysis of the determinants of all FTA voting decisions taken by Congress provides strong support for the predictions of our model.
### Livio Stracca

**Session: 7-10**

**Wednesday**

**15:00-16:30**

**Rm: SS0.17**

**Chair: Xavier Mateos-Planas**

**Should we take inside money seriously?**

This paper presents a dynamic general equilibrium model with sticky prices, in which 'inside' money, made out of commercial banks' liabilities, plays an active, structural role. It is shown that, in such a model, an inside money shock has a well-defined meaning. More generally, this paper is the first to give a truly structural role to inside money in a dynamic general equilibrium framework. A calibrated version of the model is shown to generate small, but non-negligible effects of inside money shocks on output and inflation. Moreover, I find that it is optimal for monetary policy to react to such shocks.

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### Xavier Mateos-Planas

**A model of credit limits and bankruptcy with applications**

This paper presents a macroeconomic model of unsecured consumer debt and default with the feature that loans take place against credit lines with a pre-approved interest rate and credit limit. With fixed costs of banking and an interest rate ceiling, free-entry competition in intermediation can give rise to loans of different size and risk being taken against credit lines with the same interest rate and credit limit. A version of the model calibrated to U.S. observations. Restricting bankruptcy filings - be it through a stricter Chapter 7 means testing or a longer period of credit exclusion - leads to sizable welfare losses. The recently observed rising levels of debt and filing rates are best explained by a combination of lower intermediation costs and more severe non-discretionary expenditures shocks. The endogenous response of the credit limit proves to be key for these findings.
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<td><strong>George Economides</strong>&lt;br&gt;Hyun Park&lt;br&gt;Apostolis Philippopoulos</td>
<td>How should the government allocate its tax revenues between productivity-enhancing and utility-enhancing public goods?</td>
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We present a fairly standard general equilibrium model of endogenous growth with productive and non-productive public goods and services. The former enhance private productivity and the latter private utility. We solve for Ramsey second-best optimal policy (where policy is summarized by the paths of the income tax rate and the allocation of the collected tax revenues between productivity-enhancing and utility-enhancing public expenditures). We show that the properties and implications of second-best optimal policy (a) differ from the benchmark case of the social planner’s first-best allocation (b) depend crucially on whether public goods and services are subject to congestion.

| Konstantinos Angelopoulos<br>Jim Malley<br>Apostolis Philippopoulos | Tax Structure, Growth and Welfare in the UK |

This paper studies the quantitative implications of changes in the composition of taxes for long-run growth and welfare in the UK economy from 1970-2005. Our setup is a dynamic stochastic general equilibrium model incorporating a detailed fiscal policy structure and whose engine of endogenous growth is human capital accumulation. The model’s spending instruments include public consumption, investment and education spending. On the revenue side, labour, capital and consumption taxes are employed. There is also a lump-sum instrument. Our results suggest that if the goal of tax policy is to promote long-run growth by altering relative tax rates, then it should reduce labour taxes while simultaneously increasing lump-sum, capital or consumption taxes to make up for the loss in labour tax revenue. In contrast, welfare promoting policy would be to cut capital taxes while concurrently increasing lump-sum, labour or consumption taxes to make up for the loss in capital tax revenue.

| Julia Darby<br>Jacques Melitz | Labor Market Adjustment, Social Spending and the Automatic Stabilizers in the OECD |

The macroeconomic literature on automatic stabilization tends to focus on taxes and dismiss the relevance of government expenditure except for unemployment compensation. Our results go sharply contrary to this view. We engage in an empirical analysis of 20 OECD countries from 1980-2001 and find that age- and health-related social expenditure as well as incapacity benefits all react to the cycle in a stabilizing manner. While possibly new in the macro literature, this conforms to many results in studies of labor and health. Moreover, when the focus is on the ratio of the net surplus to output, as it often is, automatic stabilization comes essentially from the spending side. Taxes contribute nothing at all.
### Mai Le
Patrick Minford

Dynamic races between New Keynesian and New Classical models of the US

We test New Keynesian models with three different assumptions about the indexation scheme: rational, lagged and non-indexation against the benchmark of New Classical model using the new testing method developed by Minford, Theodoridis and Meenagh (2007). We find that all New Keynesian models are rejected by the data, while the New Classical model is accepted. However, there are some cautions regarding the use of the proposed New Classical model to describe the data.

### Bo Yang
Vasco Gabriel, Paul Levine
Christopher Spencer

On the (ir)relevance of direct supply-side effects of monetary policy

This paper studies the relevance of direct supply-side effects of monetary policy in a New Keynesian DSGE model. We extend a model with several nominal and real frictions by introducing the presence of a cost channel of monetary transmission and allowing for non-separability of money and consumption in the utility of the representative household. We show that these features have important theoretical consequences for the output-inflation trade-off and indeterminacy of interest rate rules. We then estimate the importance of these effects, using a Bayesian maximum likelihood framework complemented with GMM single-equation estimation. Both estimation strategies point to weak evidence for the cost channel and non-separable utility.

### Jacinta Pires

An Empirical Analysis of US Inflation and Output Dynamics and Monetary Policy Rules using Survey Data

In this paper we estimate a small macro model for the US economy to evaluate macroeconomic dynamics and alternative monetary policy rules by which the interest rates may be set. We analyse, in a multivariate setting, the dynamics between actual and expected output growth, inflation and interest rates making use of direct measures of expectations provided by the Survey of Professional Forecasters. The economic model behind the system is based on three behavioural relationships: a Phillips curve; an IS curve, and a Taylor rule. The inclusion of direct measures of expectations allows an explicit analysis of the role played by expectations in the setting of the interest rates by monetary authorities; the Taylor rules is shown to be robust across different models; despite the non-rejection of Rationality, inflation dynamics were well captured by past inflation terms, which leads to a rejection of the traditional structural interpretation of the Phillips curve.
Session: 7-13
Wednesday 15:00-16:30  Rm: H0.52  Chair: Marcus Miller

Qiang Zhang
Yulei Luo
Chi-Wa Yuen
The Current Account and Macroeconomic Adjustment under Rational Inattention

We examine how introducing agents with finite information-processing capacity (called rational inattention) into an otherwise standard intertemporal current account model changes the dynamic effects of productivity shocks on consumption, investment, and the current account. We show that a model with such agents can (1) increase the volatility of the model-predicted current account by reducing the volatility of aggregate consumption; (2) lead to more realistic joint dynamics of the current account and income shocks; and (3) better explain the joint behavior of investment and the current account if we model output endogenously. In particular, we demonstrate that rational attention may resolve the Glick and Rogoff (1995) puzzle.

Christian Oberpriller
Exchange Rates and Global Imbalances: The Importance of Asset Valuation Effects and Interest Rate Changes

This paper analyzes two effects which might have an important impact on a reduction of global external imbalances. These are valuation effects on the one hand and interest rate effects on the other hand. We use a four-region model that is based on the models by Obstfeld and Rogoff (2005) and Oberpriller (2007) to analyze the difference in the occurring exchange rate changes with and without valuation and interest rate effects under two different scenarios of narrowing global imbalances. The outcome is a reduced need for real dollar depreciation because the United States will largely benefit from valuation gains on their foreign assets while the effect that stems from interest rate changes works in the opposite direction but is not as strong as the valuation effect. The magnitude of valuation and interest rate effects reduce the need for real exchange rate depreciation by two to seven percentage points.

Marcus Miller
Lei Zhang
Fear and Market Failure: Global Imbalances and 'Self-insurance'

Standard models of general equilibrium would predict modest current account surpluses in the emerging markets if they face higher risk than the US itself. But, with pronounced Loss Aversion in Emerging Markets, precautionary saving can generate substantial ‘global imbalances’, especially if there is an inefficient supply of global ‘insurance’. A combination of fear and market failure generates imbalances as a general equilibrium outcome. In principle, lower real interest rates will ensure aggregate demand equals supply at a global level: but disequilibrium may result if the required real interest rate is negative. A precautionary savings glut appears to us to be a temporary phenomenon, however, destined for correction as and when adequate reserve levels are achieved. But if the process of correction is triggered by ‘Sudden Stop’ on capital flows to the US, might this not lead to ‘hard landing’ that is forecast by several leading macroeconomists?