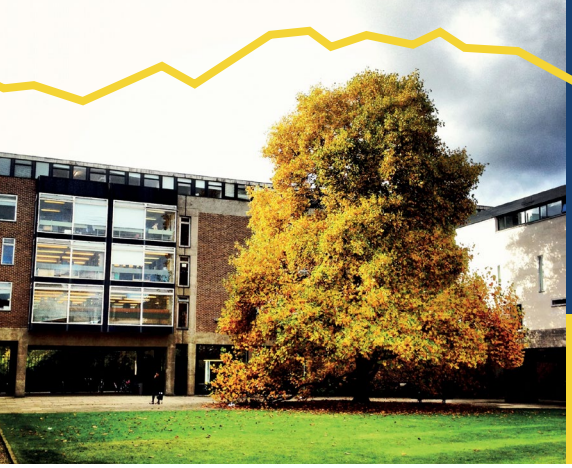

# Cambridge Economics

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Cambridge Faculty of Economics
Alumni Newsletter

## Welcome

FROM PROFESSOR WILLY BROWN

Our sixth Alumni newsletter once again places the current work of the Faculty in the perspective of its past achievements and our subject's future challenges. Some feel for what is going on now is given by pieces about Esther Duflo, who gave the Marshall Lecture, a conference on religion and economics, and the research of some prominent Faculty members. Looking back, we celebrate the very different intellectual contributions of the lives of Frank Hahn, Robin Marris and Dorothy Wedderburn. But economics as a subject has always been most effective when it has not been at ease with itself, and Paul Seabright castigates its current introversion. In the same spirit, we lead with Adair Turner's robust reflections on where his experience of the financial crisis leaves economic theory.

*We are keen to keep in touch with our alumni and welcome your feedback on*

**econalum@hermes.cam.ac.uk**

## Adair Turner: After the Deluge

On September 20th 2008, in the midst of the whirlwind released by the onset of the global financial crisis, Adair Turner[1] became Chairman of the UK's Financial Services Authority – until recently the statutory body responsible for the monitoring and regulation of the financial services industry. Five days before, Lehman Brothers had filed for bankruptcy after the US Treasury had declined to bail it out. And at home, just two days earlier Lloyds TSB bank had been persuaded to come to the rescue of HBOS, a mortgage and corporate lender, which was on the brink of collapse. Two weeks later, Royal Bank of Scotland, at the time the world's largest bank by assets, failed. Government had to provide a total of more than £65 billion of taxpayers' money to prop up the merged Lloyds-HBOS and RBS in order to support the financial system.

This experience, and that of the following four and a half years as the FSA worked to stabilise and reform financial services, has shaped Turner's critical yet constructive views on the strengths and weaknesses of the market mechanism; on the nature and role of policy making and of regulation; and on the current state of economic theory and analysis. At Cambridge (Caius, 1974-78), he read first History and then Economics, after which his career included McKinsey, the international management consultancy; the Confederation of British Industry, as Director-General; and Merrill Lynch, the investment bank, before leading the FSA.

### Theory and practice

At the FSA, Turner inherited an organisation whose policies were founded on 'light touch' regulation of banks and other financial institutions in a system where monetary policy, banking supervision, macro-prudential responsibility, and fiscal policy were split between different bodies. The FSA's approach to achieving competitive and efficient financial markets by forbidding or removing obstacles to self-generating adjustment drew on the general equilibrium models of modern neo-classical microeconomics. In these models, complete and competitive markets for factors, products and capital balance simultaneously within a framework of sustainable economic growth and low and stable inflation. For the many adherents of the 'efficient markets hypothesis', the 'Great Moderation' period of faster growth

and low inflation that lasted from the mid-1990s until the Crash was seen as proof of the essential truth of this analysis. In the face of this, Turner drew quickly and deeply on his knowledge of History and Economics and on his professional experience. He recognised that the financial sector is not the passive and compliant creature of competitive markets' theory. Rather it is prone inherently to fluctuations and to instability.

He explores three reasons for turbulence in financial markets. One is that all financial markets, including those for equities, debt securities or foreign exchange, can be subject to herd and momentum effects, and thus to periods in which valuations are fundamentally irrational. This contradicts the efficient market hypothesis, which he sees as based on a failure to understand the distinction between risk and uncertainty and on the erroneous assumption that human beings are wholly rational.

Second, Turner stresses the particular features of debt contracts, which in the economic upswing can be created in excessive quantities because investors ignore "tail risks", and which in the downswing create economic disruption because of the rigidities inherent in default and bankruptcy processes. Referencing the work of Harvard economist Andrei Shleifer he suggests that many of the debt securities created in the years before the crisis "owed their very existence to neglected risk".

**Minsky moment**

Third, Turner recalls the work of the American economist Hyman Minsky, who illustrated how credit creation by banks can fuel asset price rises, in particular in real estate, generating self-reinforcing cycles which end in crisis followed by deleveraging and recession. He stresses in particular the point that, contrary to many simplistic descriptions, banks do not merely intermediate pre-existing savings, but create credit and money *de novo*. This fact he believes is central to understanding why market economics can suffer extreme and harmful instability.

Overall Turner is convinced that financial markets are quite different from most product and service markets, and that the propositions in favour of market liberalisation, strong in many other sectors, are far less valid in finance. He notes that financial markets cannot only create endogenous instability, but also generate large opportunities for rent extraction. He highlights the danger that in many financial markets the pursuit of these opportunities is not moderated by social interaction or by pride in physical end products, which contain the unbridled pursuit of self-interest in many other sectors of the economy. The digits on the screen are so remote from reality that money becomes the measure of all things. The people involved are not evil, but we need a culture under which they are made aware of the consequences of their actions.

Turner is trenchant on the failure of economic theory to relate to, anticipate and explain turbulence in markets. During his time in Cambridge as a student, the Keynesian consensus, which had been dominant throughout the post-second world war period, was breaking apart in the face of falling output and employment accompanied by rising prices ('stagflation'). This paradigm came to be replaced by versions of the 'Washington Consensus', promoted in large part by the IMF, in which active fiscal policy was discouraged in favour of targeting inflation and economic growth through the use of monetary policy instruments, in particular interest rates. Flexible and competitive markets, it was claimed, would then ensure equilibrium.

**Washington retrospective**

The Washington Consensus and its aftermath are now under heavy attack from both inside and outside Economics. Turner joins in the criticism on three main grounds. First, the reliance of the analysis on rational expectations, which assumes that agents work in pursuit of their own self-interest with complete or near-complete information, is inadequate and potentially misleading, given evidence on individual and group behaviours from branches of knowledge that include biology, psychology and sociology. Second, analytical frameworks are frequently presented as internally consistent and complete in themselves, whereas reality is complex and sometimes contradictory. Lastly, the distinctive characteristics of the financial sector – in particular its significance in the economy and its tendency towards instability – are often overlooked. He reflects on what he labels "the strange amnesia of modern macroeconomics" which he suggests has ignored insights about the importance of the financial system and of credit and money creation processes which were central to the work of both John Maynard Keynes and Friedrich Hayek even though they drew different conclusions from their analysis.

In Turner's view, it is baying for the moon to hope for a 'scientific' paradigm for Economics, where experiments can be replicated and fundamental and enduring principles can be established. Economic analysis will always involve discourse, debate and dissent – indeed, that is its fascination. But theory now needs to move forward - on two fronts in particular. First, it must take into account the broad range of evidence and theories that research in Economics and other disciplines makes available, including those from paradigms and analyses that are currently out of fashion with mainstream thinking. Such work is complex and difficult but is very important. Following directly from this, his interest in History comes into play when he urges awareness and understanding of both economic history and the history of economic thought: the latter, he points out with a hint of criticism, has not been taught explicitly in the Economics Tripos for some years.

**Looking forward**

Although having come to the end of his term as FSA Chairman, Turner is still vitally engaged in the debate on economic policy. In the light of the extended recession in the UK and elsewhere since the Crash, and of the strident debate about austerity, he has put forward the case for Overt Money Finance (OMF) to reduce fiscal deficits. This calls for central banks permanently to monetise additional budget deficits so as to boost consumption and investment in both the private and public sectors without raising expectations that policy would be reversed at some future date, perhaps sharply, which would negate the incentive to spend. He recognises that if the taboo against money finance is broken there is a danger that politicians might use this tool to excess and in the many circumstances where it would be harmful as well as the few where it is required. But he argues that it is possible to locate decisions on the use of money finance within independent

central banks pursuing appropriate inflation or nominal GDP targets.

Turner has now become a Senior Fellow of the Institute for New Economic Thinking, and is working on a major book on the financial crisis and the deficiencies of both policy and economic analyses which led to it. He also holds University Professorships at the London School of Economics and the Cass Business School at City University.

But after a full and as yet not complete career, what comes next? He isn't saying.

**Tony Cockerill and Willy Brown**

1. Lord Turner of Ecchinswell (1955– ). Chairman: Financial Services Authority, 2008–13; Climate Change Committee, 2008–12; Pensions Commission, 2003–06; Low Pay Commission, 2002–06. Vice-Chairman, Merrill Lynch Europe, 2000–06. Director General, Confederation of British Industry, 1995–99. McKinsey & Co., 1982–95. Gonville and Caius College, Cambridge, 1974–78.

## Professor Oliver Linton

Oliver Linton came to Cambridge from the London School of Economics in 2011. His research stretches widely across theoretical and empirical analysis, bringing together the development of new forms of computable econometric models with their application to financial markets' operations. His work on econometric methods stems out of his frustration with the limits to modelling imposed by the conventional linear models that require initial assumptions to be made about their 'functional form'; that is, the nature and characteristics of the system that is to be investigated.

He calls this limitation 'the curse of dimensionality'. To extend the accuracy and realism of analysis, he is contributing significantly to the development of nonparametric and semi-parametric methods of estimation. These make it possible for econometric models to be flexible and adaptive, with feedback loops that help the model – and hence the investigator – to 'learn' about the system that is being proposed and studied. To illustrate his point, Linton makes comparison with models of evolution and adaptation in biology. His main contribution in this area is the development of a technique for smoothing estimations (the 'marginal integration' method) which helps improve the accuracy of the output of non-linear models. The technique is simpler than 'backfitting', the main alternative method, and can now be reconciled with it.

Esoteric though this work may be, it has direct relevance and application to the operation of financial markets, in particular the causes and consequences of unpredictable and unanticipated price volatility. An important focus within this setting is the analysis of data sets associated with very short term, high-frequency, and irregular movements in the prices of financial assets, where feedback loops may be expected to influence the outcomes. In these circumstances it is often very difficult to identify, to study, and to understand the fundamentals that underlie asset price movements and hence to take an informed view of the stability of financial markets.

The practical application of this work is to very high frequency algorithm-based computer trading of financial stocks. High frequency trading now accounts for about 30 per cent of all equity trades in the UK and possibly more than 60 per cent in the US. While advocates of these methods assert that they enhance the efficiency of financial markets by speeding-up adjustment to changing market conditions through increasing information and improving transparency, critics allege that they aggravate asset price movements and volatility by encouraging speculation which can lead in turn to price 'bubbles' and instability.

**Markets and instability**

Linton has been a member of the Expert Group for a report on the future of computer trading in financial markets, undertaken by the Department for Business, Innovation and Skills of the UK Government[1]. The report finds that computer-based trading has helped to improve the functioning of financial markets by increasing liquidity, reducing transactions costs and assisting better price discovery. But it has also from time to time contributed to instability, in particular by giving rise to temporary but intense periods of illiquidity, the consequences of which for market

volatility have been exaggerated by self-reinforcing feedback effects. It is in this area of the study that Linton's work into modelling non-linear relationships and endogeneity (feedback) in financial markets has had most impact. Among its many recommendations, the report emphasises the importance for regulators of making sure that appropriate 'circuit breakers' are in place in the sequences of financial market interactions so as to guard against critical failure.

Linton graduated in Mathematics from LSE and completed his doctorate in Economics at Berkeley (University of California). After a Research Fellowship at Nuffield College, Oxford, he had professorial appointments at Yale before returning to LSE in 2000. His latest book, *Financial Econometrics*, will be published shortly. As Professor of Political Economy at Cambridge, Linton is in direct line of succession from Alfred Marshall, who would approve strongly his capability of fusing together rigorous theory and policy-oriented empirical analysis.

**Tony Cockerill**

**Note**

1. *Foresight: The Future of Computer Trading in Financial Markets (2012)*. Final Project Report. The Government Office for Science, London. Accessible at:

**bis.gov.uk/assets/foresight/docs/computer-trading/12-1086-future-of-computer-trading-in-financial-markets-report.pdf**

## Staff comings and goings

**Kaivan Munshi** (PhD Massachusetts Institute of Technology, 1995) has joined the Faculty as the Frank Ramsey Professor of Economics. Professor Munshi's research career has been devoted almost exclusively to the analysis of communities and their interaction with economic activity. His early research focused on social learning in the adoption of agricultural and contraceptive technology, and the identification of migrant labour market networks. His subsequent research has examined the effect of community networks on education, health, and mobility, which are key determinants of growth and development. Much of this research has been situated in India, where caste is a natural social domain around which networks are organized. However, other work has been situated in diverse locales, including Kenya, Bangladesh, and the United States.

**Coen Teulings** (PhD University of Amsterdam, 1990) will be joining the Faculty as the Montague Burton Professorof Industrial Relations and Labour Economics. He plans to continue his past research focused on labour market institutions (wage setting, unions, minimum wages, employment protection, education, and income distribution), as well as pursuing research into cities and land prices for residential real estate. Coen joins the Faculty after seven years as General Director of the Netherlands Bureau for Economic Policy Analysis (the Dutch equivalent of the UK Office of Budget Responsibility) where he was active in the debate about policy responses to the fiscal crisis and austerity. He will continue to contribute to this debate in his new role.

We would like to welcome **Vasco Carvalho** (PhD University of Chicago, 2008) who will be joining the Faculty as Reader. Our new University Lecturers are **Meredith Crowley** (PhD University of Wisconsin, 2001) from the Federal Reserve Bank of Chicago; **Dmytro Hryshko** (PhD University of Houston, 2006) from the University of Alberto; and **Nicholas Zammit** (PhD University of Warwick, expected 2013).

**Tom Crossley** and **Sule Alan** will be leaving the Faculty to take up Chairs at the University of Essex. **Giammario Impullitti** will also be leaving this autumn. We thank them for their contributions to the Faculty's teaching and research.

## INET Centre and Keynes Fund

The Cambridge-INET Institute and the Keynes Fund were both set up in the last year. They have commenced a number of activities with the aim of supporting path-breaking research in economics at the University of Cambridge. The Keynes Fund, which was initiated in order to fund research related to the current economic crisis, gave out several grants in its first two funding cycles. The Cambridge-INET Institute supported economic research through a variety of programmes. The Institute hosted a number of distinguished visiting scholars and held several conferences and workshops. The Institute also supported doctoral students by providing studentships and scholarships, and awarded its first seed fund grants, designed to provide flexible support for new exploratory research. The Institute will welcome three new postdoctoral research fellows this autumn.

## Faculty News and Successes

**Robert Evans** (pictured, top) and **Hamish Low** (pictured, below) have been promoted to Professorships. **Robert Evans** is an economic theorist who specialises in game theory and contract theory. His main contributions to economic theory fall in four areas: bargaining theory, infinitely repeated games with renegotiation, models of reputation, and contract theory (or mechanism design) without commitment. Bargaining theory is concerned with coalitional bargaining and also with negotiation between asymmetrically informed players who share a common value for the object. In an infinitely repeated game with renegotiation the players are able to agree at any stage to change their strategies in a co-ordinated way, which substantially narrows down the set of equilibria, compared with the standard theory. Reputation theory concerns infinitely repeated games in which some players have private information about their preferences, so that they can build a reputation for being a particular

type of player. Finally, the work on mechanism design is concerned with settings in which the participants in the mechanism, or contract, are not fully committed to the contract, for example because they could jointly agree to renegotiate it.

**Hamish Low's** research focuses on two broad questions: first, what sort of risks do individuals face over their life-times and over the business cycle? Second, how well insured are individuals against these risks? Insurance comes through individuals own decisions, such as over how much to work or to save, as well as through social insurance such as unemployment and disability insurance. His research focuses on using computer simulations of behaviour to model these mechanisms in a realistic way that matches up to what is observed in the data.

**Hamid Sabourian**, Professor of Economics and Game Theory, has been elected as a Fellow of the British Academy.

## Conference on the Economics of Religion

The Association for the Study of Religion, Economics and Culture (ASREC) held their 12th Annual Conference in Washington DC from 11th -14th April 2013. Offering an exciting programme of 100 papers, these meetings are the largest international annual meetings of economists and other social scientists who work on the economics of religion and culture. The papers presented ranged across disciplines including economics, law, politics, sociology and philosophy. In the end, we had a very interesting programme that provided many different perspectives on religion and culture.

Sitting on the steps of the Jefferson Memorial, watching Washington's monuments bathed in the spring sunshine, the Tidal Basin adorned festively with the pale pink beauty and fragrance of hundreds of cherry blossoms, I could not but reflect on what Thomas Jefferson would have made of us economists thinking about religion on his doorstep. Famous of course for creating the phrase 'the wall of separation between church and state' Jefferson once wrote about religion in a letter from Monticello on 1st September 1820 thus:

*It excites in him the gratifying reflection that his country has been the first to prove to the world two truths, the most salutary to human society, that man can govern himself, and that religious freedom is the most effectual anodyne against religious dissension: the maxim of civil government being reversed in that of religion, where its true form is "divided we stand, united, we fall."*

The diversity of the topics addressed by our conference made me wonder if both the study of religion, as indeed the study of economics more generally, addressing as they do some of the most complex and difficult issues for our times, still do have much to learn from Jefferson's wisdom. The conference papers were presented in sessions that encompassed a range of broad areas that included international religious freedom, the economic effects of religion, historical perspectives, politics and religion, game theory, evolution and religion, experimental economics, as well as religious violence, conflict, crime and terrorism. Some sessions offered a more philosophical approach, contemplating the language of religion and the medium of religion. Sessions on culture more broadly examined ethnicity, culture and identity, integration and immigration in developed countries, as well as the interactions between religion, culture and gender. On data and methodology, a very important part of future religion research, there were two sessions introducing new datasets, including a session from the Association of Religion Data Archives (ARDA). We were particularly delighted to have exciting sessions on laboratory and field experiments on religion, the application of network theory to counter-insurgency efforts, and the keynote session in honour of Carmel and Barry Chiswick.

Participants at the conference included academic economists from around the world (with plenty of representation from our own graduate student community in Cambridge Economics) as well as other scholars, researchers and policymakers from the World Bank, Microsoft Research, the Pew Global Trust and the National Science Foundation.

Having spent a whole year coordinating and planning the conference with other colleagues in the US and elsewhere, ably assisted by one of our students, Zsoka Koczan, who is moving to the IMF to start work in Washington DC in the autumn, a very nervous programme chair was immensely relieved in the end that it all went smoothly. It was a pleasure to organise the conference program for ASREC 2013 and I will look forward to doing it all over again next year when the ASREC 2014 Annual Conference will be held from 21st -22nd March 2014 in Chapman University, Orange County, California.

Naturally, I will still miss the cherry blossoms next year, but I will await hopefully the orange blossoms instead.

**Sriya Iyer**

**Paternalism, Freedom, and Hope in the Fight Against Poverty**
**Professor Esther Duflo, Massachusetts Institute of Technology**

Esther Duflo's thoughtful Marshall Lectures are based upon her recent book *Poor Economics,* co-authored with Abhijit Banerjee, drawing out two themes that underlie their thinking on poverty and poverty alleviation. These themes include how in the fight against poverty, paternalism might form a basis upon which we might increase our freedom to pursue what is most important in life. The second theme is how stress- and hopelessness-induced poverty traps keep the poor from achieving their full potential.

To illustrate these themes, the first lecture, on *Paternalism and Freedom*, revisits the present-day fashionable discomfort of aid donors and others about 'knowing better than the poor' in seeking ways to alleviate poverty. Duflo begins by referring to the economic and religious origins of paternalism in France in the 19th century, deriving as in England from the self-interest of employers in the welfare of their workers ('le devoir du patron') so as to achieve productivity and loyalty. Although 'enlightened' to some degree, this self-interest is widely seen as exploitative: workers had jobs but were often rewarded in part with goods in kind, were forbidden to join social (trades union) organisations, had no involvement in management, and were given no financial provision for retirement and old age.

Today, some direct similar criticisms apply towards development aid. Donors are seen as acting largely in their own self-interest and that of the (rich) countries they represent. Their charity is a salve to their conscience but may deny the poor a voice, the initiative, or the power to make their own decisions. The developed world, working from its own perspectives of poverty, stresses information and choice for the least advantaged as essential waypoints on their path to 'freedom', a stance that informs aid programmes and policies.

To illustrate the difficulties that this approach presents, Duflo refers to aid-financed initiatives to improve health in poor countries. Tests for malaria may be offered and vaccinations for this and other diseases provided, but typically the unprompted take-up of such services is very low, in sharp contrast to the experience in rich countries. The people to whom the services are offered are likely to lack both the time and the resources to travel to the treatment centres, may find it hard to understand the information they are given, may not trust those who are providing the service, and may have more pressing and immediate concerns for their families than paying attention to their own longer-term health.

**Trust**

Achieving self-motivated participation in such initiatives as these requires people to have trust in their governments and in the policies they implement. This marks a defining difference between those who live in the rich world and those who dwell in poverty. It leads in turn to the problem of the freedom to choose, which is seen by many as an essential part of the model of democracy that informs much development aid. Duflo makes two points strongly. First, the poor live in an environment where they need to exercise active choice in order to arrive at a desirable outcome, while the rich are often protected by a set of favourable default options. For example, the water the rich drink comes clean out of the tap, while the poor must do something to clean it. Second, choosing is costly and risky; information has to be collected, absorbed and evaluated, and notwithstanding this, the wrong choices might still be made. This is so particularly for those in poverty since many live under conditions of continuous stress that constantly requires their attention and decisions. For an example she refers to the immediate pressures of home life that, for women in particular, unavoidably divert attention from employment and enterprise opportunities which lowers their productivity in business compared to men, so reinforcing the vicious cycle that traps people in poverty.

This brings her argument back to paternalism. Initiatives aimed at alleviating poverty should be shaped to empower those for whom they are intended by offering to them a carefully focused and constrained set of choices that are realistic and relevant to their economic and social circumstances. Limiting choice is not inimical to freedom. Indeed, as Duflo argues, this might give the poor the opportunity to think about things in life other than their material needs, providing them with, as she puts it, the 'freedom to stumble'. She reminds us of Amartya Sen's emphasis on the freedom to achieve, which calls for the poor to be given the opportunity and motivation to develop appropriate capabilities and goals.

Escaping from the poverty trap forms the theme of the second lecture: *Hope as Capability*. Duflo begins by casting a critical look at the causes of the poverty trap that are usually quoted. She points out that inadequate nutrition, interventions that are too small in scale to be effective, and a lack of credit are some possible explanations for poverty traps but are by no means exhaustive. The weight of evidence overall shows that an increase in income, starting from a low level, is associated with increases in the consumption of food of higher quality and of non-food items, rather than being spent on buying still more basic foodstuffs. Very small scale projects, applied at village level, can have disproportionate and sustainable effects on income. She illustrates this with the example from her own work of the benefits that can come by providing one family with a cow. And the increasing availability of micro-finance means that lack of credit is less and less a barrier to income growth.

It is the lack of hope – hopelessness – that plays a much more important part in the poverty trap. The evidence for this is that enabling people to improve their confidence, optimism, and self-awareness – their mental health – is a key factor in helping them to lift themselves out of poverty. Duflo stresses that it is the *fear* of malnutrition, of unreliable sources of aid, and of not being able to get a loan,

rather than the underlying conditions themselves, that can sometimes be the true cause of the poverty trap.

This leads people to adopt a pessimistic outlook and to be averse to taking on risk. She quotes small farmers' reluctance to use fertilizer to boost their crops ('not worth it'); and of people's unwillingness to learn, in the (potentially false) expectation that their income gains will be transitory and small. Institutional inequality can be a problem here too: evidence shows that in some cultures low caste children are given lower grades when their teacher knows that they are low caste, thus perpetuating their poverty. Interestingly, Duflo reports early results from current work into the physiological consequences of stress. Stress is found to be associated with the production of cortisol, a steroid hormone that may impair memory and motivation, leading in particular to avoidance of thinking about the future, and placing an emphasis on present satisfaction – an outcome that the economist would attribute to a high rate of time discount.

**From theory to policy**

Duflo's work and interests are about the design and socio-economic impacts of small-scale interventions intended to alleviate poverty at a local level in the developing world. Yet in concluding her review of the challenge of poverty and of the contribution of her own work, she is able to point to important opportunities and implications for policy. First, it is essential to ensure minimum levels of income and health protection. These then form the basis for the growth of aspirations and capabilities which need to be related to realistic and achievable goals. For example, where women's participation in politics is increased, aspiration levels are raised and the gender gap in achievement is narrowed.

Esther Duflo has been a Faculty member of the Economics Department at The Massachusetts Institute of Technology (MIT) since 1999 and currently holds the Abdul Latif Jameel Chair of Poverty Alleviation and Development Economics, a title which underscores her active outreach and engagement with the world's poor and the challenges and opportunities which they face. Esther joined MIT as a doctoral candidate in 1996, presenting

a thesis titled 'Three Essays in Empirical Development Economics', a study which set the scene for her outstanding work that was to follow.

Prior to all of this, she first studied Economics and History in Paris before taking a taught Master's course offered jointly by three prestigious French schools: the École Normale Supérieure, the École Polytechnique and the École Nationale de la Statistique et de l'Administration Economique (ENSAE). Her book, written with her long-time collaborator Abhijit Banerjee, 'Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty', won the Financial Times/Goldman Sachs Business Book of the Year Award in 2011.

Esther developed her interest in the opportunities for systematic field experiments and other applied research into the causes and perceptions of poverty – and hence into practical and sustainable measures to lift the burden on the poor - through her initial graduate studies. Influenced by scholars such as Michael Kremer, Josh Angrist and Abhijit Banerjee, she saw that the value of empirical work on poverty was being weakened by the lack of carefully controlled experiments. She adopted the methodology of randomised control trials from medical science, in which two cohorts of participants are matched in terms of essential characteristics such as age, gender and experience, one then being subject to a set of interventions intended to promote a specified outcome (the 'treatment group') while the other (the 'control group') is not.

This approach forms the basis of her studies of the effects on health and other aspects of economic and social wellbeing, usually at village level, of small-scale initiatives such as: adding fluoride to drinking water or iron to flour at the milling stage; providing remedial education for basic language and numeracy skills; encouraging vaccinations; and enabling women to develop and engage in income-generating activities. These studies which began with Michael Kremer's work in Busia in Kenya were extended later to many parts of the world.

As her two lectures made clear, the studies show encouraging results in improving overall individual and social welfare, including better physical and mental health and the ability and motivation to take part in enterprising activities. Although experiments are at the heart of her work, Esther stresses the importance of setting the studies in their socio-economic, spatial and political context. Evidence from studies in disciplines alongside Economics, both quantitative and qualitative, must also be taken into account in the analysis,

although she acknowledges the difficulties of combining quantitative and qualitative work effectively. Perhaps stemming from her own diverse experience, she is passionate about the need for lead investigators and students to spend significant amounts of time in the field.

**Fieldwork**

Esther's main involvement in the research is in conceiving, planning and carrying out pioneering interventions, and analysing and publishing the findings. This informs her contribution to applied theory in development economics. Yet she is encouraged by the work of development agencies and others in extending the scale and scope of appropriate projects and in making sure that they are capable of being sustained. Looking ahead at the future of development economics research, she believes that, increasingly, development economics will benefit from and contribute to other areas of economics, including political economy and industrial organization, and to other academic disciplines, the behavioural sciences in particular. She sees greater creative synergies between laboratory and field experiments; as well as better linkages between microeconomic and macroeconomic studies of development. Her advice to those who, early in their careers, would follow in her footsteps into applied development economics is first to take time out to gain direct experience in the field by assisting some of the least advantaged in our global village.

Esther enjoys being in MIT's 'intellectual bubble' (as she describes it), appreciating the diverse, lively, challenging and non-hierarchical society of which she is part. Listening to her thoughtful views and insightful Marshall Lectures this year, we could not help but be reminded of her former MIT colleague Paul Samuelson's philosophy that when we do economics, it is important both to do 'economics with a head', but equally, 'economics with a heart'. Perhaps then it is no slight coincidence that with her charming demeanour and creative research, Esther epitomises both qualities of head and heart in such ample measure.

**Tony Cockerill and Sriya Iyer**

# Thoughts on the direction of economics research

**Toulouse School of Economics and Institute for Advanced Study in Toulouse**

Photograph by Stéphanie Renard

The lamentable failure of the economics profession to predict, avoid or repair the financial and economic crisis that began in 2007 and continues to this day has prompted a certain amount of soul-searching among our colleagues – but not, it must be said, very much. There is no shortage of economists from one school or tribe pointing the finger of blame at other schools and tribes, usually to claim that the first group was right all along. But there has been little overt change of mind by economists who command respect among their peers. This contributes to a startling discrepancy between what it feels like from the inside to be doing economic research – that there has never been a better time to be doing this, never better data, methods and opportunities – and the widespread perception among policymakers, journalists and the public that the economics profession has never floundered more helplessly in the face of world events.

True, depressions and financial crises are not the only economic developments that matter. Much of the innovative research action is in microeconomics where new data and methods (notably lab and field experiments) have transformed our understanding of economic decision-making and the impact of policy, in certain domains. But we have been slow to translate this into thinking about the macro-economy and the political influences on policy-making.

We are learning more every day about how such influences as testosterone, conformism, status-seeking, hyperbolic discounting, and the neglect of small and unquantifiable risks affect the decisions taken by market participants. But we know almost nothing about how these same factors affect the behaviour of regulators and policy-makers, though it seems reasonable to conjecture that such people are drawn from the same population as the market participants. We teach our students in impressive detail how regulators can respond to market failures. But we do not teach them how markets in turn respond to regulatory failures, and indeed create new regulatory failures through exploiting the complacency of regulators. Like retired generals at staff college we lecture in detail about the last war, much less about the previous one, and without noting that the reason the last war happened the way it did was because too many generals thought they had learned the lessons of the previous one. We could learn a lot from the way in which biologists study the co-evolution of predators with their prey.

We lack lucidity about our own profession, failing to note that whereas most industrial innovations come from outside the circle of established firms, we operate hiring policies based on publications edited by a small circle of the profession's most admired insiders. It's as if the only route to success in the restaurant business were to submit your meals in advance to a committee of established chefs who would taste them, suggest improvements to the recipe and eventually approve them several years after first submission. Certainly, ideas keep fresh for longer than food, but still…

In spite of it all, it remains a wonderful time to be doing economic research!

**Paul Seabright**

# Obituaries

## Frank Hahn 1925–2013

Photograph by kind permission of the Master and Fellows of Churchill College

In this tribute to Frank Hahn I concentrate on his understanding of and contributions to the economics of Keynes. These start with his LSE doctoral dissertation, "The share of wages in the national income. An enquiry into the theory of distribution", Frank amalgamated Keynes's aggregate demand and supply analysis, with the then state-of-the-art theories of the firm and entrepreneurial behaviour. He related the short-period level of overall activity to the share of wages in the national income, exploiting the implications of the differences in the marginal propensities to save of wage-earners and profit-receivers.

As well as his many articles, Frank was associated with (at least) three major treatises: the 1964 survey of the theory of economic growth in The Economic Journal, written with Robin Matthews, the role model for survey articles ever after; the 1971 definitive volume on modern general equilibrium theory written with Ken Arrow; and the 1995 critique from within of modern macroeconomics, written with Bob Solow. Increasingly he came to accept that general equilibrium theory was not the appropriate approach with which to tackle Keynes's insight, that the monetary and real aspects of the processes at work in capitalism had to be integrated from the start of analysis, and could not be captured within a general equilibrium framework where money is at best a ticket. Indeed Frank was eventually to say that general equilibrium's major contribution was a negative one. It was to make precise the conditions that had to hold for what he perceived to be Adam Smith's conjecture, that greedy people in a competitive environment could bring about a sort of social optimum

Frank's great love of mathematics led him always to strive for preciseness in analysis, hence his attraction to general equilibrium. But increasingly he recognized that for the economics of Keynes to be properly developed; it may be better sometimes to be "vaguely right rather than precisely wrong". A most succinct statement by Frank of this view is in his courageous 1982 Birmingham lectures, Money and Inflation, in which he criticizes the new classical macroeconomics of the Lucasians, writing that he had been forced to make at times "plausible" rather than "clinching" arguments.

Frank had a deep understanding of the nature of money and its link to an inescapable environment of fundamental uncertainty in which all major economic decisions had to be made. With his colleagues he built on this base analysis of the implications of missing markets for the processes at work in the economy. Earlier on he had made an astute analysis of the implications for accumulation and growth theory of the same insight. With Bob Solow he investigated the implications of imperfectly competitive market structures within the Keynesian system, developments that have increased our positive understanding as well as contributing an incisive critique of the results of modern, non – anti – Keynesian macro analysis.

Frank had very clear views on the links between theory and policy and was extremely modest about what could be claimed – hence his considerable ire for those who claim that their policies are based on coherent theoretical structures which show that their predicted results will follow from implementing their advocated policies. Nevertheless, with Robert Neild and then with the 364 British economists, he went after the ill-informed and damaging policies implemented by Geoffrey Howe as Chancellor of the Exchequer in the early 1980s.

Frank Hahn was a serious intellectual who thought deeply and was willing to change his mind. He had extremely high standards that he applied even more harshly to himself than to others. He has left an indelible mark on the thinking of serious members of the profession and I doubt if we will see his like again.

**G.C. Harcourt**

Frank Hahn, who died 29th January 2013, was an economist of international stature. With his inspirational intellect, Frank attracted both young economists in Cambridge and the future Nobel laureates from the United States, encouraging and entertaining all around him with constructive attacks on received, sometimes simplistic theory. At the same time he was willing to battle other economists both in Cambridge, in Whitehall and around the world, for their theoretically illiterate attacks on the beautiful and logically consistent General Equilibrium theory, about which he co-authored a definitive text with the visiting Overseas Fellow and Nobel Laureate, Kenneth Arrow, in their 1971 *General Competitive Analysis*.

Frank Hahn was born on 26 April 1925 in Berlin. He moved to Prague in 1931 and left for England in 1938. He became a navigator in the air force in the Second World War, and then resumed his interrupted higher education at the London School of Economics, marrying Dorothy Salter in 1946 and obtaining a lectureship at Birmingham in 1948. He was subsequently elected Reader in mathematical economics at Birmingham before taking a post as a Lecturer in Economics at Cambridge in 1960, the year that Churchill College was opened and took in its first fellows.

The late 1960's were exciting if fraught times in the Cambridge Faculty of Economics. The battle between the "neo-Ricardians" and the neoclassicals was in full swing. Frank collected around him the bright young turks of Cambridge – Chris Bliss, Jim Mirrlees, Geoff Heal, Partha Dasgupta, Joe Stiglitz, Tony Atkinson, and myself. Together with more senior economists such as James Meade, Michael Farrell and David Champernowne, we confronted the old guard, led by Lord Kahn and Joan Robinson, who claimed to inherit the mantle of Keynes. When Frank returned to the chair in Cambridge in 1972, he decided to abandon the exclusive Monday Political Economy Club at King's and set up a rival Churchill Economic Theory seminar also on Monday

evenings. It triumphed and rapidly displaced its rival.

Frank's intellectual energy knew no bounds and he was an economist held in the highest regard internationally. As a mark of that international reputation he was elected President of the Econometric Society in 1968–69. In that capacity, he launched a strong critique of the inability of General Equilibrium theory to contain a role for money with a research programme to redress some of the shortcomings of General Equilibrium theory – its lack of a theory of unemployment, money and market adjustments. While very much the agenda of the earlier Keynes, this was to be more rigorously grounded in a coherent theory of imperfectly informed agent behaviour.

The resulting project, known informally as the Risk project, was supported by the then Social Science Research Council and ran until 1991. It attracted an amazingly impressive group of young researchers such as Eric Maskin, David Kreps, Oliver Hart, Mark Machina, Lou Makowski, Douglas Gale, Ben Lockwood, Jonathan Thomas, Paolo Gottardi, David Canning, Bob Evans, Paul Seabright, Luca Anderlini, Costas Gatsios, and David Kelsey, as well as many members of the Faculty. The Risk Project also attracted distinguished visitors, such as Bob Solow, Ken Binmore, John Geanakopolos, Herakles Polemarchakis, David Easley, Sandy Grossman, Menahem Yaari, and Steve Morris. Most of the researchers funded under this project went on to distinguished academic careers.

Frank's weekly internal Risk seminars were typical of his idiosyncratic but effective research style – known as 'Quaker' meetings without a formal agenda but where the spirit moved participants to speak – if they were quick enough to seize the chalk. Newly minted post-docs could hold forth before visiting Nobel Laureates, rapidly gaining insights, experience and confidence that stood them in good stead later on. These Quakers were intensely productive, producing a steady stream of green discussion papers. In 1989 the project published *Economics of Missing Markets, Information, and Games* (edited by Frank) that summarised much of the contribution of the group. In 1992 his colleagues presented him with the suitably weighty Festschrift on his retirement from Cambridge: *Economic Analysis of Markets and Games: Essays in Honor of Frank Hahn.* Of course, Frank could not retire from active economics, and promptly took a post in Siena, to which he would invite his colleagues for stimulating conferences in the glorious Certosa outside the city walls in a monastery on a Tuscan hill – a wholly suitable place for Quakers to meet, though with the gastronomic delights to tempt a pope (Frank always had a secret yearning to be a prelate, a Lord, or at least a rural dean).

Another of Frank's initiatives was to establish (and secure funding for) the Churchill Lectures in Economics, which enjoyed lectures from Peter Diamond, Paul Milgrom (of spectrum auction fame), Douglas Gale and Ariel Rubinstein, all subsequently published by Cambridge University Press. It was another example of how he saw the College as a co-partner with the Faculty and the University in supporting research while providing a congenial location for the intense personal interactions that the galaxy of brilliant economists he gathered together unleashed.

**David Newbery**

## Dorothy Wedderburn (1925–2012)

It was as a research officer of the Department of Applied Economics from 1950 until 1965 that Dorothy Wedderburn, laid the foundations for her academic career. She left the Faculty to build up industrial sociology at Imperial College and ultimately to become the first principal of Royal Holloway, University of London. She came up to Girton to read economics in the 1940s, yet she was never persuaded of the ubiquity of 'rational man' or even, a phrase more to her liking: 'rational woman'. She upheld the fundamental importance of academic rigour within which mathematics, equations and equilibrium models have their place, but in seeking to understand aspects of industrial or political economy, she knew one had to infuse such analysis with a sociological imagination.

She was primarily an empiricist. She documented the what, how and why of things on the ground: in workshops where there was no equal pay; in factories where redundancies and restructuring were necessary through changes in technology or globalisation; in prisons where women were

detained in conditions which were not conducive to successful rehabilitation; in hospitals where care could be given more effectively and humanely. It was important that her empirical investigations were valued for their intellectual merit, but more important to her was that they were vehicles for building explanatory middle range theories which would offer avenues for making change in policies and practices and for the mobilisation of those who had little voice - the vulnerable, the poor or the elderly.

It is this theme of seeking change for the public good which is woven as a golden thread throughout her rich and varied life. She always looked for sound analysis to lead to real change. We see this first at Imperial College where with Joan Woodward she founded the Industrial Sociology Unit, which laid the foundations of the thriving Imperial Business School today. Just as political economy is more than economic equations and models; so she knew that technology is more than the underlying science and its manifestation in machines. Technology is infused with knowledge, created and used by people who bring their own interests and concerns into its very existence to impact economic and industrial performance. It was through her move to Bedford College where we witnessed the full strength of her remarkable academic leadership in the development of the merged Royal Holloway and Bedford New College.

Dorothy was always fuelled by values and steered by a sense of what would, at a particular time and place, be ambitious yet achievable; she was a pragmatist; a practical visionary determined to advance equality of access, fairness, academic excellence, interdisciplinarity and to build

sufficient consensus for change to secure the future for the better.

**Sandra Dawson**

I first met Dorothy Barnard, as she then was, when we were both reading Economics Part II in 1945–46. I particularly remember her at Dennis Robertson's lectures, along with Harry Johnson, Robin Marris, Lesley Cook, and Robert Neild, among others. I next came across her when she joined the Cambridge Department of Applied Economics as a research officer. Her research there was nearer industrial sociology than economics, and among her publications then and later were "White Collar Redundancy", "Redundancy and the Railwaymen", "The Aged in the Welfare State" (with Peter Townsend), and "Poverty, Inequality and Class Structure". Her last publication was "Justice for Women: the case for reform".

After the DAE Dorothy joined Imperial College, working as a colleague with Joan Woodward, and with her setting up the Industrial Sociology Unit. The pair attracted large sums from funding bodies, and their work on the relationship between structure, technology and performance earned them worldwide renown. Her work at that time had a major impact on sociological debate and attitudes, as did her articles in New Left Review and the Socialist Register.

I encountered Dorothy again when I joined Imperial College as Professor of Economics in 1978. I discovered then how tough she was. She had already had a struggle in setting up the Industrial Sociology Unit and was now working hard to establish the new department. She left Imperial in 1981 to become head of Bedford College. The College faced drastic cuts and the loss of its Regent Park sites. Dorothy took a major role in bringing about the merger with Royal Holloway College, becoming the principal of Royal Holloway and Bedford in 1985. Faced with government cuts she took the difficult decisions to put it on a sound financial footing, and ensured that it had a successful future.

On a personal level she was a loyal and enduring friend, and in all respects her life was a remarkable and valuable one.

**Aubrey Silberston**

## Robin Marris (1924–2012)

Robin Marris, who died on 25 September 2012, was a distinguished member of the Faculty for a quarter of a century, best known for his work on corporations.

*The Economic Theory of Managerial Capitalism* (1964) focused on the separation of ownership from management in large firms and the weakness of shareholder control, which allowed managers considerable discretion. In Robin's view, managers used their discretion to make their firms grow faster than shareholders would prefer, to get higher salaries and status. The book attracted a lot of academic attention, and Kenneth Galbraith's 1967 *The New Industrial State* made it known to a wider audience.

Earlier, Robin had published *Economic Arithmetic* (1958), an applied statistics text based on his Cambridge lectures. *The Economics of Capital Utilisation* (1964) was an innovative study of shiftwork. He argued in *How to Save the Underclass* (1996) that universal education and liberalisation had badly hurt workers with low IQs. *Ending Poverty* (1999) summed up his long involvement with international development.

In a fascinating book about Cambridge, *Reconstructing Keynesian Economics with Imperfect Competition* (1991), Robin argued that Keynesian macro theory made sense only if it was combined with the theory of imperfect competition. Curiously, one man, Richard Kahn, had played a key role in developing both lines of theory in the 1930s. What kept the strands apart, Robin believed, were tensions in the triangle of personal relationships between Kahn, Keynes and Joan Robinson.

Robin came up in 1941. He got a First in Part I of the Economics Tripos in 1942, but then became an RAF pilot, graduating with another First in 1947. His contemporaries included Harry Johnson, I. G. Patel and Aubrey Silberston (all 1946), Robert Neild, and Angus Maddison, a 1948 graduate who in an autobiographical sketch mentions Robin as one of the fellow-students who influenced him.

After working in the Treasury and the UN, he returned to Cambridge in 1951 as a fellow of King's, where he was for many years Director of Studies, and as a lecturer (later a reader) in the Faculty. A long series of students, including me, benefited from his lively mind and warm

Photograph by kind permission of the Provost and Fellows, King's College, Cambridge. Photograph by Edward Leigh.

personality. Christopher Bliss remembers that 'he was an inspiring teacher, who always made me feel that I was not just a little student, still learning the trade, but rather a full member of the economics profession.'

In the 1950s, Robin helped Piero Sraffa direct the Faculty's research students. Geoff Harcourt recalls that 'when I arrived in Michaelmas 1955, we all fronted up to RLM in the old Marshall library in Downing Street. He was extremely lively and helpful to us all. He tried to bring the Keynesians and the Robertsonians together, but had little success.' (I have not been able to identify any of Robin's own PhD students: can any reader help to fill this gap?)

In 1976, seeing no prospect of further promotion in Cambridge's divided Faculty, Robin moved to the University of Maryland and in 1981 to Birkbeck, London, from which he retired in 1987. He was a most attractive person and wonderful company, remembered affectionately even by most of those with whom he crossed swords.

**Adrian Wood**

More details can be found in obituaries in the *Guardian* of 14 November 2012 and the January 2013 issue of the *Royal Economic Society Newsletter*.

## Mervyn King

Peter Schrank, The Economist

Mervyn King (Lord King of Lothbury) ended his ten-year term as Governor of the Bank of England at the end of June. Mervyn graduated (eponymously from King's) with a First in Economics in 1969. He then joined the Department of Applied Economics in the Faculty to work with Richard Stone and Terry Barker on the development of a computable Multisectoral Dynamic Model of the UK economy which was the central part of the Cambridge Growth Project. His focus was on corporate taxation policy and dividend behaviour.

This led to two major books: 'Public Policy and the Corporation' (1977) and 'The British Tax System' (with John Kay, 1978). During his time in the DAE King was also a Fellow of St. John's and Director of Studies in Economics. After Cambridge, he moved to a Chair in Economics at Birmingham and then to LSE, where he established the Financial Markets Group.

In 1991 he became Chief Economist at the Bank of England before being appointed, first, Deputy Governor and then Governor in 2003. His time as head of the Central Bank spanned the later stages of the long boom and then the global financial crisis and its aftermath. He termed the period before the crash 'the NICE decade' – non-inflationary consistent expansion. But he warned against the risk of economic and financial turbulence as the consequence of excessive credit creation. Mervyn is taking up a visiting professorship at the Stern School of Business, New York University.

**Tony Cockerill**

## Sir Richard Stone Annual Lecture

The fifth in the series of the Centre for Research in Microeconomics (CReMic) **Sir Richard Stone Annual Lectures** at the University of Cambridge was held on 16 May 2013 as on previous occasions in the Bateman Auditorium at Gonville and Caius College. The Lecture provides an opportunity for a leading scholar to present and discuss issues of particular current research interest. The Lecture also honours Sir Richard Stone, the founding Director of the Department of Applied Economics in the University of Cambridge.

The Lecture, entitled "Ethnicity and Conflict", was delivered by Debraj Ray, Julian Silver Professor in the Faculty of Arts and Sciences and Professor of Economics at New York University. The Lecture started with a brief review of how conflicts internal to countries have been far more prevalent and destructive than wars between countries since the Second World War. Moreover, the majority of the internal conflicts have been ethnic in character. Popular explanations for the origin of internal conflicts have typically been based on notions of class and economic inequality. A major thesis of this Lecture is that non-economic markers such as ethnicity may provide a powerful and additional or alternative explanation for conflict since it differs between individuals of similar class and income or wealth. However, previous research based on particular measures of ethnicity such as fractionalisation has failed to provide a significant and satisfactory explanation. Debraj therefore set out an alternative theoretical economic model for conflict based on his recent research which allowed for both individual and group gains (and losses) from conflict incorporating altruism or intra group cohesion. Importantly the central difference with earlier research is that the resultant model incorporates a polarisation measure in addition to fractionalisation which provides a measure of conflict over public goods in contradistinction to the fractionalisation measure that captures conflict over private goods. The Lecture was concluded by an extensive discussion of a detailed empirical investigation which provided strong support for the theoretical model and, in particular, the relevance of polarisation as an explanation for internal conflict.

Further details may be found at **econ.cam.ac.uk/cremic/news/stone.html**

**Richard J Smith**

## Our Graduate Experience at Cambridge

We started our graduate experience as MPhil students in 2008. One of our lecturers predicted that by the end of the year, we would need to look up 'leisure' in a dictionary. Although the MPhil was tough, it prepared us well for independent research. Selma particularly enjoyed the Empirical Microeconomics course taught by Tom Crossley, which covered numerous up-to-date research techniques in a short space of time.

There were many things we did not know when we started our PhDs. One important skill we had to learn was to develop a clear research question before starting a project. More generally, starting a PhD requires a clear agenda. It was only halfway into our PhDs that we found ours. Ansgar decided to work on the theory of financial regulation under the guidance of Soenje Reiche. Selma became interested in household economics under the supervision of Hamish Low, who inspired her to aim high.

This year, we were on the job market. Thankfully, it was a short affair, as we were both offered a Postdoctoral Fellowship at the 'other place'. The placement officers Pontus Rendahl and Alexei Onatski gave us excellent advice for our applications and seminars. Although we look forward to moving to Oxford in October, we will miss the Faculty and everybody in it. We will remember Cambridge fondly as the place that allowed us to meet each other!

**Selma Telalagić & Ansgar Walther**

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