ANU THE AUSTRALIAN NATIONAL UNIVERSITY

CENTRE FOR APPLIED MACROECONOMIC ANALYSIS

ANU COLLEGE OF BUSINESS & ECONOMICS

CAMA Newsletter — **Issue 10, February 2011**

Contents

Welcome

Welcome to the tenth edition of the CAMA Newsletter. CAMA continues to strengthen with more research associates joining the program, bringing the number of research associates to over 150. We are delighted with the number of working papers that have been published in CAMA's working paper series since our last newsletter. Details of these recent working papers are listed on page six and all are available online.

CAMA has been busy with a number of exciting conferences and events taking place, including **The Transmission of International Shocks to Open Economies Conference**, jointly hosted with the Reserve Bank of New Zealand and the **Finance and the Macroeconomy Workshop** which saw members of the Finance and the Macroeconomy program coming together from all over the world. In April CAMA will hold a special session: '**Probability Forecasts and Monetary Policy**' at the Royal Economic Society Annual Conference 2011 in London.

CAMA is very sad to announce the passing of **Mr Ian Castles**, a CAMA Visiting Fellow and Research Associate in the Climate Change and Energy program. Ian was a prominent former public servant who passed away in August at the age of 75.

Staff News

We are delighted to welcome **Dr Liz Wakerly** as our new Research Fellow. Liz graduated with a PhD from UBC in 1997, and has worked at NERA (London), the University of East Anglia and the Melbourne Business School. Her research focuses on macroeconomics, in particular forecasting and the use of disaggregate information to explain aggregate movements.

Other News

New Model Uncertainty and Macro-Econometrics program

CAMA is pleased to announce the introduction of a new research program, Model Uncertainty and Macro-Econometrics. This program, directed by Professor Shaun Vahey and Associate Professor Rodney Strachan, focuses on the role of model uncertainty in empirical macroeconomics. The literature treats the 'true' model as an unobservable -- an admission that has implications for many areas of macroeconomic analysis and has generated two distinct research sub-programs. One represents a renewed interest in model evaluation, comparison, selection and combinations when model misspecification is explicitly recognized. A second sub-program is based on accounting for model uncertainty explicitly in constructing predictive densities for objects of economic interest, conducting statistical inference and evaluating policies.

New CAMA Policy group

The CAMA Policy Group is a new committee made up of CAMA members within the Research School of Economics to share information about the progress and future developments of CAMA and to discuss policy issues. The group will meet on a quarterly basis with the first meeting scheduled for February 23rd, 2011. Subsequent meetings in 2011 will be held on May 25th, August 31st and November 29th.

New 'Conference and Workshop Calendar' page

CAMA recently introduced the Conference and Workshop Calendar page to its website to share information about events in the region which may be of interest to CAMA members. There are already a number of interesting events listed on the page but there is room for more, if you know of an event which you would like to share with other CAMA members, please email the details to Michelle Cowie at cama.admin@anu.edu.au. http://cama.anu.edu.au/conferences.asp.

Call for interns

The Reserve Bank of Australia (RBA) is currently seeking applications from PhD students who wish to gain experience in a central banking environment. The RBA are offering three month internships starting in mid 2011. Further information is available from the RBA website:
http://rba.clients.pageup.com.au/content.asp?stp=AW&staticID=rba_internship.

The Reserve Bank of New Zealand is considering offering a similar internship, please contact Shaun Vahey for further information: shaun.vahey@anu.edu.au.

Recent Events

Finance and the Macroeconomy Workshop

The most recent workshop held in CAMA in Canberra on October 25th, 2010 was that on Finance and the Macroeconomy, as part of the Finance and the Macroeconomy program organised by directors Mardi Dungey and Renée Fry. Seven papers and discussant comments were presented on this broad theme with leading domestic and international scholars presenting. Speakers included Gerald P. Dwyer (Federal Reserve Bank of Atlanta), Shuping Shi (The Australian National University), Martin Berka (Massey University), Adrian Pagan University of Technology, Sydney), Jan Jacobs (University of Groningen), Simon van Norden (HEC Montréal) and Don Harding (La Trobe University). Discussants included Aaron Drew (New Zealand Superannuation Fund), Mardi Dungey (University of Tasmania), Pat Coe (Carleton University), Tim Hampton (New Zealand Treasury), and with Shaun Vahey and John Stachurski representing CAMA and the RSE. Topics ranged from the recent financial crisis, business cycles and financial intermediation, as well as understanding the effects of data revisions for policy makers. Several of these scholars subsequently spent a week contributing to the academic community as visitors to CAMA and the RSE. CAMA gratefully acknowledges financial support from the Gruen Economics Endowment, the ERIGS grant scheme, and ARC Grant DP0985783.

More details can be found at http://cama.anu.edu.au/finance_macro_workshop.asp.

The Transmission of International Shocks to Open Economies

On December 16th to the 17th, 2010 the Reserve Bank of New Zealand and CAMA hosted a conference on the transmission of international shocks to open economies. The recent financial crisis has illustrated the importance of the linkages that connect financial systems and economies around the globe. The conference was aimed at characterizing recent global shocks, understanding the transmission mechanism of these shocks, and identifying appropriate policy responses.

More details can be found at http://www.rbnz.govt.nz/research/workshops/December2010/index.html.

Australian Conference on Quantitative Macroeconomics

The University of Adelaide and CAMA jointly hosted the 2010 Australian Conference on Quantitative Macroeconomics on December 19th to the 20th, 2010 at the University of Adelaide. Speakers included Professor Fabio Canova from the Universitat Pompeu Fabra who presented his paper 'Fiscal policy, pricing frictions and monetary accommodation'.

More details and the conference program can be found at http://cama.anu.edu.au/Aust_Conf_Quant_Macro.asp.

Future Events

Royal Economic Society Annual Conference 2011 Special Session "Probability Forecasts and Monetary Policy"

CAMA will be holding a special session at the Royal Economic Society Annual Conference 2011 in London on April 18th, 2011 which will focus an exciting area of macroeconomic research: communicating probabilities and forecast densities for monetary policy. Following The Bank of England, fan charts have been adopted by many central banks. Recent research has pursued two streams: ex post evaluations of density forecasting performance; and, the usefulness of probabilistic information for monetary policy communication. Both research streams will be explored in the papers presented in this session, with monetary policymakers as discussants.

More details about the CAMA special session can be found at http://cama.anu.edu.au/RES_2011.asp and details about the Royal Economic Society Annual Conference can be found at http://www.resconference.org.uk/.

Publication News

If you have a publication that you would like to report in this section of future editions of the newsletter, please email the details to Michelle Cowie at cama.admin@anu.edu.au.

Associate Professor Jaime Alonso-Carrera of the Macroeconomic Theory Program:

● With X Raurich, "Growth, sectoral composition, and the wealth of nations" Journal of Economic Dynamics and Control (number 34, pp.2440-2460, 2010). **[CAMA Working Paper 15/2007]**

Dr Kang Yong Tan of the Multi-Country Models and Methods Program:

● With M Tanakab, "Does better information about foreign shocks improve monetary policy?" Journal of International Money and Finance.

Dr Timo Henckel, Dr Gordon Menzies and **Professor Daniel Zizzo** of the Behavioural Macroeconomics Program:

● With N Prokhovnik, "Barro-Gordon Revisited: Reputational Equilibria with Inferential Expectations" Forthcoming in Economics Letters. **[CAMA Working Paper 29/2010]**

Dr Kerim Peren Arin of the Finance and the Macroeconomy Program:

● With **N Spagnolo** (Finance and the Macroeconomy Program) "Short term effects of fiscal policy revisited: evidence from Markov switching approach" Forthcoming in Economics Letters.

● With O Lorz, **N Spagnolo** (Finance and the Macroeconomy Program) and OF Reich "Exploring the dynamics between terrorism and anti terrorist spending: Theory and UK evidence" Forthcoming in Journal of Economic Behavior and Organization.

● With Viera Chmlerova, Eberhard Feess and Ansgar Wohlschlegelk, "Why are Corrupt Governments Less Successful in Consolidating Their Budgets?" Forthcoming in Journal of Public Economics.

Dr Sambit Bhattacharyya of the Economic Growth and Development Program:

● "Growth Miracles and Growth Debacles: Exploring Root Causes" Cheltenham: Edward Elgar. March 2011.

● With **Raghbendra Jha** (Economic Growth and Development Program): "Five Centuries of Economic Growth in India: The Institutions Perspective" Forthcoming in Handbook of South Asian Economics, London and New York: Routledge, April, 2011.

● With Roland Hodler, "Natural Resources, Democracy and Corruption," European Economic Review, 2010, 54, 608-621.

● With Tim Hatton, "Australian Unemployment in the Long Run, 1903 – 2007" Forthcoming in Economic Record.

● With Jeffrey G. Williamson, "Commodity Price Shocks and the Australian Economy since Federation" Forthcoming in Australian Economic History Review.

● With **Raghbendra Jha** (Economic Growth and Development Program) and Raghav Gaiha, "Temporal Variation of Capture of Anti-poverty Programs: Rural Public Works and Food for Work Programs in Rural India" Forthcoming in International Review of Applied Economics.

● With **Raghbendra Jha** (Economic Growth and Development Program) and Raghav Gaiha "Social Safety Nets and Nutrient Deprivation: An Analysis of the National Rural Employment Guarantee Program and the Public Distribution System in India" Forthcoming in Journal of Asian Economics.

● With Edward Miguel. "Africa's Turn?" Economic Record, 2010, 86 133-134

Dr Iris Claus of the Macroeconomic Policy Frameworks Program:

● With **E Claus** (Finance and the Macroeconomy Program) "Inside the black box: How important is the credit channel relative to the interest and exchange rate channels?" Economic Modelling, Volume 28, Issues 1-2, January-March 2011, Pages 1-12. **[CAMA Working Paper 3/2007]**

● With **E Claus** (Finance and the Macroeconomy Program) "New Zealand's economic reforms and changes in production structure" Journal of Economic Policy Reforms, Volume 12, Number 2, Pages 133-143. **[CAMA Working Paper 16/2005]**

Professor Sirimon Treepongkaruna of the Macroeconomic Policy Frameworks Program:

● With **R Brooks** (Macroeconomics and Longer Run Issues), K Chan and S Gray, "Asset linkages across different asset classes" Forthcoming in Journal of Banking and Finance.

● With E Bissoondoyal-Bheenick, "An Analysis of the Determinant of Bank Ratings: Comparison Across Ratings Agencies" Forthcoming in Australian Journal of Management.

New Research Associates

We are delighted to welcome our newest Research Associates to the following CAMA programs:

Behavioural Macreconomics

Dr Corrado Di Guilmi, Postdoctoral Research Fellow, School of Finance and Economics, University of Technology, Sydney.

Climate Change and Energy

Professor Kihoon Lee, Professor, Department of Economics, Chungnam National University, Korea.

Mr Barckhordair Sajad, PhD Candidate, Institute for Economic Research and Development, University of Tehran, Iran.

Economic Growth and Development

Dr Creina Day, Fellow, Crawford School of Economics and Government, The Australian National University, Canberra.

Finance and the Macroeconomy

Professor Hilde Bjørnland, Professor, Department of Economics, Norwegian School of Management, Norway.

Dr Emmanuel De Veirman, Researcher, Reserve Bank of New Zealand.

Ms Yin Liao, PhD Candidate, Research School of Economics, The Australian National University, Canberra.

Professor Jenny Ligthart, Professor, Department of Economics, Tilburg University, Netherlands.

Professor James Morley, Professor, The Australian School of Business, The University of New South Wales, Sydney

Professor Simon van Norden, Professor, Service de l'enseignement des affaires internationales, HEC Montréal, Canada

Ms Shu Ping Shi, PhD Candidate, Research School of Economics, The Australian National University, Canberra.

Macro-econometric Models and Methods

Professor James Morley, Professor, The Australian School of Business, The University of New South Wales, Sydney

Macroeconomic Theory

Dr Nicolas Groshenny, Researcher, Reserve Bank of New Zealand.

Dr Chung Tran, Lecturer, Research School of Economics, The Australian National University, Canberra.

Model Uncertainty and Macro-Econometrics

Dr Joshua Chan, Fellow, Research School of Economics, The Australian National University, Canberra.

Professor Kevin Lee, Professor, Department of Economics, University of Leicester, UK.

Dr James Nason, Vice President and Economist, Research Department, Federal Reserve Bank of Philadelphia, USA.

Professor Simon Price, Directory of Economists, Monetary Analysis, Bank of England, UK.

Associate Professor Kalvinder Shields, Associate Professor, Department of Economics, University of Melbourne.

Professor Michael Smith, Professor, Melbourne Business School, University of Melbourne.

CAMA always welcomes new research associates. Applications can be sent to program directors with a CV and statement of interest in their chosen program.

Visitors to CAMA @ ANU

Recent Visitors to CAMA include:

Professor Peter Smith, University of York
04 August - 10 August 2010. Professor Smith presented a seminar on Thursday, August 5th 2010 - *Durable Consumption, Long-Run Risk and The Equity Premium.*

Professor Karen Mumford, University of York.
04 August - 10 August 2010.

Associate Professor Patrick Coe, Carleton University.
11 September 2010 – 31 January 2010. Associate Professor Patrick Coe presented a seminar on Monday, December 6th 2010 - *Downward Nominal Wage Rigidity: Evidence From Canada 1901-50.*

Dr Jan Jacobs, University of Groningen, 20 October - 29 October 2010. Dr Jacobs attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Professor Mardi Dungey, University of Tasmania, 20 October - 29 October 2010. Professor Dungey attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Dr Gerald Dwyer, Federal Reserve Bank of Atlanta, 20 October - 29 October 2010. Dr Dwyer attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Professor Simon van Norden, HEC Montréal, 21 October - 29 October 2010. Professor van Norden attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010

Professor Sirimon Treepongkaruna, University of Western Australia, 24 October - 26 October 2010. Dr Treepongkaruna attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010

Professor James Morley, University of New South Wales, 24 October - 26 October 2010. Professor Morley attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Mr Scott Bowman, New Zealand Treasury, 24 October - 26 October 2010. Mr Bowman attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Mr Tim Hampton, New Zealand Treasury, 24 October - 26 October 2010. Mr Hampton attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Dr Martin Berka, Massey University, 24 October - 26 October 2010. Dr Berka attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Professor Adrian Pagan, University of Technology Sydney, 24 October - 26 October 2010. Professor Pagan attended the *Workshop on Finance and the Macroeconomy* on October 25th 2010.

Dr Dirk Baur, University of Technology Sydney, 23 November - 25 November 2010.

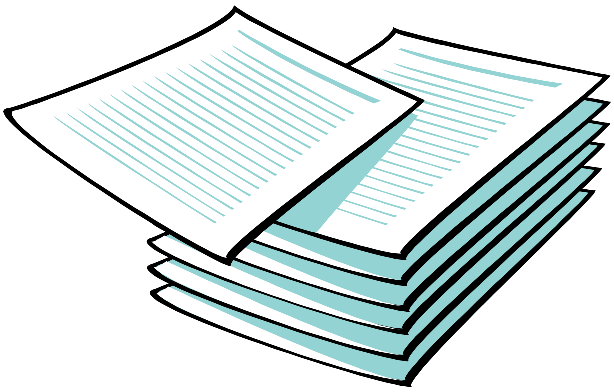
CAMA Staff at ANU are looking forward to welcoming upcoming visits by:

Mr Martin Davies, Washington and Lee University, April – July 2011.

Dr Chrismin Tang, La Trobe University, 6 June – 1 July 2011.

New Working Papers

Click on the title to download a paper.



2011

4/2011
Monetary Exit Strategy and Fiscal Spillovers
By Libich J, Nguyen DT and Stehlík P

The paper models strategic monetary-fiscal interactions in the aftermath of the global financial crisis - in a single country as well as a monetary union. It depicts both the short-term (stabilization) perspective and the long-term (sustainability) perspective, and the link between them. This is done in a game theoretic framework that allows for revisions of actions, deterministic or stochastic. In addition, we consider incomplete information about economic conditions, and different types of government. We find that, under ambitious fiscal policies, a legislated long-term monetary commitment may: (i) reduce the risk of a double-dip recession and deflation in the short-term, and at the same time (ii) facilitate the 'exit strategy' of monetary policy, ie prevent sub-optimally high future inflation caused by fiscal spillovers. Our analysis thus implies that an explicit numerical target for average inflation may play the role of a monetary 'credibility insurance' over all phases of the business cycle, and is beneficial especially in countries facing fiscal stress.

3/2011
Has the Euro Affected the Choice of Invoicing Currency? By Ligthart JE and Werner SEV

We present a new approach to study empirically the effect of the introduction of the euro on the pattern of currency invoicing. Our approach uses a compositional multinomial logit model, in which currency choice is explained by both currency-specific and country-specific determinants. We use unique quarterly panel data of Norwegian imports from OECD countries for the 1996{2006 period. We find that eurozone countries have substantially increased their share of home currency invoicing after the introduction of the euro, whereas the home currency share of non-eurozone countries fell. In addition, the euro as a vehicle currency has overtaken the role of the US dollar in Norwegian imports. The substantial rise in producer currency invoicing by eurozone countries is primarily caused by a drop in inflation volatility and can only to a small extent be explained by an unobserved euro effect.

2/2011
[UK World War I and Interwar Data for Business Cycle and Growth Analysis]
By JM Nason and SP Vahey

This article contributes new time series for studying the UK economy during World War I and the interwar period. The time series are per capita hours worked and average capital income, labor income, and consumption tax rates. Uninterrupted time series of these variables are provided for an annual sample that runs from 1913 to 1938. We highlight the usefulness of these time series with several empirical applications. Per capita hours worked is used in a growth accounting exercise to measure the contributions of capital, labor, and productivity to output growth. The average tax rates are employed in a Bayesian model averaging experiment to re-evaluate the Benjamin and Kochin (1979) regression.

1/2011
[The Role of Energy in the Industrial Revolution and Modern Economic Growth]
By DI Stern and A Kander

The expansion in the supply of energy services over the last couple of centuries has reduced the apparent importance of energy in economic growth despite energy being an essential production input. We demonstrate this by developing a simple extension of the Solow growth model, which we use to investigate 200 years of Swedish data. We find that the elasticity of substitution between a capital-labor aggregate and energy is less than unity, which implies that when energy services are scarce they strongly constrain output growth resulting in a Malthusian steady-state. When energy services are abundant the economy exhibits the behavior of the "modern growth regime" with the Solow model as a limiting case. The expansion of energy services is found to be a major factor in explaining the industrial revolution and economic growth in Sweden, especially before the second half of the 20th century. In the latter period, labor-augmenting technological change becomes the dominant factor driving growth.

2010

37/2010
[Monetary Policy, Inflation and Unemployment In Defense of the Federal Reserve]
By N Groshenny

To what extent did deviations from the Taylor rule between 2002 and 2006 help to promote price stability and maximum sustainable employment? To address that question, this paper estimates a New Keynesian model with unemployment and performs a counterfactual experiment where monetary policy strictly follows a Taylor rule over the period 2002:Q1 - 2006:Q4. The paper finds that such a policy would have generated a sizeable increase in unemployment and resulted in an undesirably low rate of inflation. Around mid-2004, when the counterfactual deviates the most from the actual series, the model indicates that the probability of an unemployment rate greater than 8 percent would have been as high as 80 percent, while the probability of an inflation rate above 1 percent would have been close to zero.

36/2010
[The effects of taxation on migration: Some evidence for the ASEAN and APEC economies]
By E Claus, I Claus and M Dörsam

This paper investigates the effects of taxation on migration. It develops a stylized, two-country model to examine the impact of taxation on labor mobility. The theoretical prediction that taxation affects migration decisions is supported by some empirical evidence for the ASEAN and APEC economies. Average tax rates are found to have a larger impact on migration choices than marginal rates. Moreover, the results suggest that educated migrants are more responsive to taxation than migrants with no education. Average tax rates are most important for migrants with secondary education, while marginal rates have a greater influence on the decisions of migrants with tertiary education than secondary educated migrants. The finding that taxation affects migration decisions, in particular of educated migrants, has important policy implications.

35/2010
[Estimating the Wage Elasticity of Labour Supply to a Firm: What evidence is there for Monopsony?]
By AL Booth and P Katic

In this paper we estimate the elasticity of the labour supply to a firm, using data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. Estimation of this elasticity is of particular interest not only in its own right but also because of its relevance to the debate about the competitiveness of labour markets. The essence of monopsonistically competitive labour markets is that labour supply to a firm is imperfectly elastic with respect to the wage rate. The intuition is that, where workers have heterogeneous preferences or face mobility costs, firms can offer lower wages without immediately losing their workforce. This is in contrast to the perfectly competitive extreme, in which the elasticity is infinite. Therefore a simple test of whether labour markets are perfectly or imperfectly competitive involves estimating the elasticity of the labour supply to a firm. We find that the Australian wage elasticity of labour supply to a firm is around 0.71, only slightly smaller than the figure of 0.75 reported by Manning (2003) for the UK. These estimates are so far from the perfectly competitive assumption of an infinite elasticity that it would be difficult to make a case that labour markets are perfectly competitive.

34/2010
Real-time Inflation Forecast Densities from Ensemble Phillips Curves
By A Garratt, J Mitchell, SP Vahey and EC Wakerly

We examine the effectiveness of recursive-weight and equal-weight combination strategies for forecasting using many time-varying models of the relationship between inflation and the output gap. The forecast densities for inflation reflect the uncertainty across models using many statistical measures of the output gap, and allow for time-variation in the ensemble Phillips curves. Using real-time data for the US, Australia, New Zealand and Norway, we find that the recursive-weight strategy performs well, consistently giving well-calibrated forecast densities. The equal-weight strategy generates poorly-calibrated forecast densities for the US and Australian samples. There is little difference between the two strategies for our New Zealand and Norwegian data. We also find that the ensemble modelling approach performs more consistently with real-time data than with revised data in all four countries.

33/2010
Lessons From the Latest Data on U.S. Productivity
By JPAM Jacobs and S van Norden

Productivity growth is carefully scrutinized by macroeconomists because it plays key roles in understanding private savings behaviour, the sources of macroeconomic shocks, the evolution of international competitiveness and the solvency of public pension systems, among other things. However, estimates of recent and expected productivity growth rates suffer from two potential problems: (i) recent estimates of growth trends are imprecise, and (ii) recently published data often undergo important revisions. This paper documents the statistical (un)reliability of several measures of aggregate productivity growth in the US by examining the extent to which they are revised over time. We also examine the extent to which such revisions contribute to errors in forecasts of US productivity growth. We find that data revisions typically cause appreciable changes in published estimates of productivity growth rates across a range of different productivity measures. Substantial revisions often occur years after the initial data release, which we argue contributes significantly to the overall uncertainty policymakers face. This emphasizes the need for means of reducing the uncertainty facing policymakers and policies robust to uncertainty about current economic conditions.

32/2010
Does the Size and Quality of the Government Explain the Size and Efficiency of the Financial Sector?
By A Cooray

This study examines the impact of two dimensions of the government, namely, size and quality, on two dimensions of the financial sector, size and efficiency, in a cross section of 71 economies. The study finds that while increased quality of the government as measured by governance and legal origin positively influence both financial sector size and efficiency, that the size of the government proxied by government expenditure and government ownership of banks, has a negative effect on financial sector efficiency, however, a positive impact on financial sector size, particularly in the low income economies.

31/2010
Business Cycle Implications of Internal Consumption Habit for New Keynesian Models
By T Kano and JM Nason

This paper studies the implications of internal consumption habit for new Keynesian dynamic stochastic general equilibrium (NKDSGE) models. Bayesian Monte Carlo methods are employed to evaluate NKDSGE model fit. Simulation experiments show that consumption habit often improves the ability of NKDSGE models to match output and consumption growth spectra. Nonetheless, the fit of NKDSGE models with consumption habit is susceptible to the source of the nominal rigidity, to spectra identified by permanent productivity shocks, to the frequencies used for evaluation, and to the choice of monetary policy rule. These vulnerabilities suggest that NKDSGE model specification is fragile.

30/2010
Appreciating the Renminbi
By R Tyers and Y Zhang

International pressure to revalue China's currency stems in part from the expectation that rapid economic growth should be associated with an underlying real exchange rate appreciation. This hinges on the Balassa-Samuelson hypothesis, which sees growth as stemming from improvements in traded sector productivity and associated rises in wages and non-traded prices. Yet, despite extraordinary growth after the mid-1990s China's real exchange rate showed no tendency to appreciate until after 2004. We use a dynamic general equilibrium model to simulate the economy and show that, during this period, trade reforms and a rising national saving rate were offsetting forces in the presence of elastic labour supply. We then examine the possible determinants of the striking transition to real appreciation thereafter, noting mounting evidence that an improved rural terms of trade has tightened China's labour market. We show that, should the Chinese government bow to international pressure by appreciating the renminbi either via an extraordinary monetary contraction or via export disincentives the consequences would be harmful for both Chinese and global interests.

29/2010
Barro-Gordon Revisited: Reputational Equilibria with Inferential Expectations
By T Henckel, GD Menzies, N Prokhovnik and DJ Zizzo

We incorporate inferential expectations into the Barro-Gordon model (1983a) of time inconsistency and consider reputational equilibria. The range of sustainable
equilibria shrinks as the private sector becomes more belief-conservative.

28/2010
Financial Frictions and Credit Spreads
By K Pang and PL Siklos

This paper uses the credit-friction model developed by C´urdia and Woodford, in a series of papers, as the basis for attempting to mimic the behavior of credit spreads in moderate as well as in times of crisis. We are able to generate movements in representative credit spreads that are, at times, both sharp and volatile. We then study the impact of quantitative easing and credit easing. Credit easing is found to reduce spreads unlike quantitative easing which has opposite effects. The relative advantage of credit easing becomes even clearer when we allow borrowers to default on their loans. Since increases in default offset the beneficial effects of credit easing on spreads, the policy implication is that, in times of financial stress, the central bank should be aggressive when applying credit easing policies.

27/2010
The Consumption Terms of Trade and Commodity Prices
By M Berka and MJ Crucini

Movements in a nation's terms of trade are widely viewed as important for the understanding the sources of business cycle fluctuations, the dynamics of the trade balance and economic welfare. Backus, Kehoe and Kydland (1994) emphasize the role of productivity movements in a two-country, two-good setting. In their model an increase in domestic productivity expands out-
put at home relative to output abroad and the terms of trade deteriorates. Put differently: a large country expanding the supply of the traded good it produces must (in equilibrium) drive down the relative price of its products on world markets. The importing country's terms of trade improves, a positive spillover. Backus and Crucini (2000) add a third region to this model; a region that specializes in oil production. When the oil region cuts back production, the relative price of oil rises, a terms of trade improvement for oil producers. Output falls in the oil importing regions because oil is an intermediate input into production of the two manufactured goods produced in those regions. The business cycle implications of this model are consistent with empirical work by Hamilton (1983) showing oil price increases in advance of U.S. recessions. Mendoza (1995) studies the terms of trade and business cycles in an extensive cross-country panel using a partial equilibrium business cycle model where terms of trade movements are exogenous. In his theoretical setting, terms of trade shocks are analogous to lotteries with the
sign and magnitude of the payout dependent upon a country's pattern of specialization across an array of internationally traded goods.

26/2010
The Effects of Bank Capital on Lending: What Do We Know, and What Does it Mean?
By JM Berrospide and RM Edge

The effect of bank capital on lending is a critical determinant of the linkage between financial conditions and real activity, and has received especial attention in the recent financial crisis. We use panel-regression techniques—following Bernanke and Lown (1991) and Hancock and Wilcox (1993, 1994)—to study the lending of large bank holding companies (BHCs) and find small effects of capital on lending. We then consider the effect of capital ratios on lending using a variant of Lown and Morgan's (2006) VAR model, and again find modest effects of bank capital ratio changes on lending. These results are in marked contrast to estimates obtained using simple empirical relations between aggregate commercial-bank assets and leverage growth, which have recently been very influential in shaping forecasters' and policymakers' views regarding the effects of bank capital on loan growth. Our estimated models are then used to understand recent developments in bank lending and, in particular, to consider the role of TARP-related capital injections in affecting these developments.

25/2010
Applying Shape and Phase Restrictions in Generalized Dynamic Categorical Models of the Business Cycle
By D Harding

To match the NBER business cycle features it is necessary to employ Generalised dynamic categorical (GDC) models that impose certain phase restrictions and permit multiple indexes. Theory suggests additional shape restrictions in the form of monotonicity and boundedness of certain transition probabilities. Maximum likelihood and constraint weighted bootstrap estimators are developed to impose these restrictions. In the application these estimators generate improved estimates of how the probability of recession varies with the yield spread.

24/2010
Comparing Climate Commitments: A Model-Based Analysis of the Copenhagen Accord
By WJ McKibbin, AC Morris and PJ Wilcoxen

The political accord struck by world leaders at the United Nations negotiations in Copenhagen in December 2009 allows participating countries to express their greenhouse gas commitments in a variety of ways. For example, developed countries promised different percent emissions reductions relative to different base years by 2020. China and India committed to reducing their emissions per unit of gross domestic product (GDP)
relative to 2005 by 40 and 20 percent respectively. Such flexibility promotes consensus by allowing each country to use its preferred commitment formulation. However, the disparate approaches and widely varying baseline trends across different economies complicate comparing the likely emissions reductions and economic efforts required to achieve the commitments.

23/2010
Central Bank Transparency: Another Look
By PL Siklos

This paper extends the Dincer and Eichengreen (2007) index of central bank transparency. Improvements in transparency are notable in Central and Eastern Europe, while the index has shown much smaller rises in most other parts of the world. The pattern observed by Dincer and Eichengreen, consistent with a permanent increase in central bank transparency recorded earlier appear to be a feature of the pate 1990s and early 2000s. Whether the subsequent data reflect limits to central banks transparency or, to some extent, transparency 'fatigue', is unclear.

CAMA Newsletter **Issue 10, February 2011**

22/2010
Sign Restrictions in Structural Vector Autoregressions: A Critical Review
By R Fry and A Pagan

Structural Vector Autoregressions (SVARs) have become one of the major ways of extracting information about the macro economy. One might cite three major uses of them in macro-econometric research.
1. For quantifying impulse responses to macroeconomic shocks.
2. For measuring the degree of uncertainty about the impulse responses or other quantities formed from them.
3. For deciding on the contribution of different shocks to fluctuations and forecast errors through variance decompositions.
To determine this information a VAR is first fitted to summarize the data and then a structural VAR (SVAR) is proposed whose structural equation errors are taken to be the economic shocks. The parameters of these structural equations are then estimated by utilizing the information in the VAR. The VAR is a reduced form which summarizes the data; the SVAR provides an interpretation of the data. As for any set of structural equations, recovery of the structural equation parameters (shocks) requires the use of identification restrictions that reduce the number of "free" parameters in the structural equations to the number that can be recovered from the information in the reduced form.

21/2010
The Elasticity of Taxable Income in New Zealand
By I Claus, J Creedy and J Teng

This paper reports estimates of the elasticity of taxable income with respect to the net-of-tax rate for New Zealand taxpayers. The elasticity of taxable income was estimated to be substantially higher for the highest income groups. Generally it was higher for men than for women. Changes in the timing of income flows for the higher income recipients were found to be an important response to the announcement of a new higher-rate bracket. The marginal welfare costs of personal income taxation were consistent across years, being relatively small for all but the higher tax brackets. For the top marginal rate bracket of 39 per cent, the welfare cost of raising an extra dollar of tax revenue was estimated to be well in excess of a dollar. Furthermore, for the top bracket the marginal tax rate was often found to exceed the revenue-maximising tax rate.

20/2010
Debt, Policy Uncertainty and Expectations Stabilization
By S Eusepi and B Preston

This paper develops a model of policy regime uncertainty and its consequences for stabilizing expectations. Because of learning dynamics, uncertainty about monetary and fiscal policy is shown to restrict, relative to a rational expectations analysis, the set of policies consistent with macroeconomic stability. Anchoring expectations by communicating about monetary and fiscal policy enlarges the set of policies consistent with stability. However, absent anchored fiscal expectations, the advantages from anchoring monetary expectations are smaller the larger is the average level of indebtedness. Finally, even when expectations are stabilized in the long run, the higher are average debt levels the more persistent will be the effects of disturbances out of rational expectations equilibrium.

19/2010
On a Unique Nondegenerate Distribution of Agents in the Huggett Model
By T Kam and J Lee

The seminal work of Huggett ["The risk-free rate in heterogeneous-agent incomplete-insurance economies", Journal of Economic Dynamics and Control, 1993, 17(5-6), 953-969] showed that there exists a unique stationary distribution of agent types, given by their individual states of asset and income endowment pairs. However, the question remains open if the equilibrium individual state space might turn out to be trivial, in the sense that every agent's common borrowing constraint binds forever. If so, the invariant probability measure of agent types will place all mass on this minimal credit level. By invoking a simple comparative-static argument, we provide closure to this open question. We thus reinforce Huggett's result of a unique stationary equilibrium distribution of agents by showing that it must also be one that is nontrivial or nondegenerate.

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