

ESRC MACROECONOMIC  
MODELLING BUREAU

*NEWSLETTER*

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Newsletter 38. March 1999

## **CONFERENCE DIARY**

### **ESRC Macroeconomic Modelling Seminar, 6-8 July 1999**

The venue for the Bureau's annual residential seminar will again be Radcliffe House, University of Warwick. Intending participants are invited to offer papers for possible presentation, preferably by 16 April. The guest speaker on the Tuesday evening will be Gus O'Donnell (HM Treasury). Further details will be circulated in May.

### **Royal Economic Society Annual Conference**

The 1999 RES Conference will be held at the University of Nottingham on 29 March-1 April. See <http://www.nottingham.ac.uk/economics/RES/>

### **Society for Economic Dynamics**

The SED 1999 annual meeting will be held on June 27-30 at the Portoconte Research Center, Alghero, Sardinia, Italy. See <http://www.econ.umn.edu/sed99/>

### **European Meetings**

The 54th Econometric Society European Meeting (29 August-1 September) and the 14th Annual Congress of the European Economic Association (1-4 September) will be hosted by the University of Santiago de Compostela, Spain. See <http://web.usc.es/~esem99>

### **British Association for the Advancement of Science**

David Hendry is this year's President of Section F (Economics) of the British Association, whose Annual Festival of Science will be held in Sheffield in mid-September. He has chosen the theme of economic forecasting and speakers will include, in addition to himself, Lord Burns and Clive Granger. See <http://www.britassoc.org.uk/festival/>

### **(EC)<sup>2</sup> - European Conference of the Econometrics Community**

The tenth meeting in this international conference series will be held on 16-17 December in Madrid on the theme of financial econometrics. See <http://www.fee.uva.nl/ke/ecsquare.htm>

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## **THE VIRTUAL ECONOMY WEBSITE**

Launched at the end of February, *Virtual Economy* has been produced by a consortium of the [Institute for Fiscal Studies](#) (IFS), [Biz/ed](#) and the Bureau, with funding from the Nuffield Foundation. The site combines an updated version of IFS's popular "Be Your Own Chancellor" (BYOC) internet service and a macroeconomic model based on the Treasury model with teaching materials developed by Biz/ed, a curriculum development service for economics and business education based at the [Institute for Learning and Research Technology](#) at the University of Bristol.

Now in its fourth year, BYOC is a web-based service which uses the IFS Tax and Benefit Model (Taxben II) to show the effects of changes to taxes and benefits on a small sample of families. By incorporating a macroeconomic model, *Virtual Economy* allows users to see the effects of their changes not only on families but also on a range of macroeconomic variables such as GDP growth, unemployment, inflation, the public finances, current account and exchange rate. Among the policy choices available to users are changes in tax rates and allowances, the national insurance system, government expenditure and interest rates. The results reflect those obtained from the Treasury model as used in comparative research by the Bureau. At present, however, there are no micro-to-macro nor macro-to-micro links that might, for example, change the employment status of individual household types in association with changes in the aggregate labour market.

The *Virtual Economy* macro model is constructed in the same spirit as the [PC-Ready Reckoner program](#) developed by David Turner and Gary MacDonald and subsequently maintained and distributed by the Bureau. PC-Ready Reckoner allows comparison of the macroeconomic consequences of a variety of economic shocks as estimated by three different models. Both programs use multipliers which are calculated in full model simulations and then scaled according to the size and sign of the change specified by the user. One advantage of providing a model on a website is that only one copy needs to exist to serve all users. The Bureau's current arrangements for distributing PC-Ready Reckoner on disk and by e-mail attachment will end in September, and to ensure continued availability, the last update of the program is available to download from the *Virtual Economy* website.

The base forecast used by the *Virtual Economy* model is provided by the [National Institute of Economic and Social Research](#), since the Treasury's published forecasts do not extend sufficiently far into the future. Calculation of the model solution uses code provided by Ray Fair which is freely available from his Fairmodel website <http://fairmodel.econ.yale.edu/>

*Virtual Economy* is based around the Chancellor's official residence at No.11 Downing Street. There are five different floors to navigate through and on each floor there are various rooms with a wide variety of resources. The plan of each floor is shown below. Clicking on the plans moves the user from room to room while either the stairs or the lift transports the user to another floor.

The *Virtual Economy* website is at <http://ve.ifs.org.uk/> In the period around the Budget the models (but not the teaching materials) are also available at the BBC's news website ( <http://news.bbc.co.uk/> ) as part of its Budget coverage.



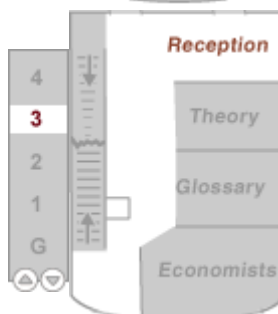
The ground floor contains the Chancellor's office with an introduction to the Virtual Economy and an information bureau with teachers' guides, student guides and details of the model.



Case studies about the impact of changes in the economy on people, business and governments live on the first floor.



On the second floor, which is devoted to economic policy, the economic variables in the model are explained. Here there is advice, explanations, worksheets and relevant economic theories about everything in the Virtual Economy.



The library is situated on the third floor. There is information on famous economists, different types of economic theory and a full glossary of all the economic terms used in the Virtual Economy.



Finally on the fourth floor is the model itself where users can change economic policy and examine the impact on both the macroeconomy as a whole and the sample family groups.

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## MODELS OF THE UK ECONOMY

The Bureau is committed to undertake a final round of model comparisons in 1999. Past experience indicates that work should begin on this exercise at the turn of the year, but on this occasion several larger models had still not been deposited at the Bureau at the end of February, hence this work will be delayed. A complicating factor for some modellers has been the revision of the National Accounts, not only to adopt the new European System of Accounts (ESA95) but also to rebase the constant-price series to 1995.

A new model which was received in Autumn 1998 is the Cambridge structural VAR model. This is a quarterly model in eight core variables, based on long-run relations from economic theory embodied in an otherwise unrestricted VAR framework. It is structural in the sense that classical exact or over-identifying a priori restrictions are imposed, but only on the cointegrating relations of the model, thus it is an example of what is termed in the MICROFIT manual and elsewhere "long-run structural modelling". Papers on this work have been presented at the Bureau's July meetings in 1997 and 1998, and at the ESRC Conference on Macroeconomic Modelling and Economic Policy in January 1998. "A long run structural macroeconometric model of the UK" by Anthony Garratt, Kevin Lee, M. Hashem Pesaran and Yongcheol Shin is downloadable at [www.econ.cam.ac.uk/dae/svar](http://www.econ.cam.ac.uk/dae/svar)

This model is rather different from the mainstream models to the extent that several of the Bureau's "standard simulations" are not relevant to the study of its properties. Accordingly the present plan is not to include it in the usual "Comparative properties of models of the UK economy" but to undertake a separate comparative exercise. The Bureau is being assisted in this by Jan Jacobs, a Visiting Fellow from the University of Groningen whose book *Econometric Business Cycle Research*, based on his PhD dissertation, was recently published by Kluwer.

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## RECENT PUBLICATIONS

Church, K.B., Mitchell, P.R. and Wallis, K.F. (1998). Short-run rigidities and long-run equilibrium in large-scale macroeconometric models. In *Market Behaviour and*

*Macroeconomic Modelling* (S. Brakman, H. van Ees and S.K. Kuipers, eds), pp.221-241. London: Macmillan.

Church, K.B. and Wallis, K.F. (1998). Comment on "JADE: A model for the Joint Analysis of Dynamics and Equilibrium" by F. Huizinga. *CPB Report*, 1998 No.4, 49-50.

Wallis, K.F. (1999). Asymmetric density forecasts of inflation and the Bank of England's fan chart. *National Institute Economic Review*, No.167, 106-112.

The ESRC Macroeconomic Modelling Bureau is established by the Economic and Social Research Council at the University of Warwick. The Council is however not responsible for the contents, opinions and conclusions of any Bureau publication. The Newsletter presents information about the Bureau's activities and facilities and serves as an information clearing house in the macroeconomics modelling area.