No. 184
April 2003

niesr

National Institute Economic Review

2/ 2003

https://doi.org/10.1017/S0027950100010036 Published online by Cambridge University Press

National Institute of Economic and Social Research

Discussion Papers

No. 208.
Panel estimation of the impact of exchange rate uncertainty on investment in the major industrial countries
by Joseph P. Byrne and E. Philip Davis
This paper estimates the impact of exchange rate uncertainty on investment, using panel estimation featuring a decomposition of exchange rate volatility derived from the components GARCH model of Engle and Lee (1999). For a poolable subsample of EU countries, it is the transitory and not the permanent component of volatility which adversely affects investment, implying that high frequency shocks of the type that may be generated by volatile short-term capital flows are most deleterious for investment. Results based on EGARCH also suggest that the response of investment to exchange rate uncertainty may depend partly on the sign of the initial shock.

No. 209.
Choosing the regime in an uncertain world: the UK and monetary union
by Ray Barrell, Ian Hurst and Tatiana Kirsanova
The UK has to take a decision on EMU membership at some point, and the costs and benefits have to be evaluated. Different policy frameworks result in differing outcomes for the means and variances of economic variables such as inflation, output, nominal and real exchange rates and interest rates. Changing the level of uncertainty in the economy may change the equilibrium level of output and investment so membership of EMU has to be evaluated in the light of its impact both on the volatility of target variables and the level of output and welfare. This paper examines a theoretical framework within which these issues can be discussed, and undertakes stochastic simulation on a large, New Keynesian model including all the European economies in order to evaluate the effects of membership on the level and volatility of output. Experiments suggest that membership of EMU would reduce volatility and as a result raise the sustainable level of output and employment in the UK.

No. 210.
Reconsidering the evidence: are Eurozone business cycles Converging?
by Michael Massmann and James Mitchell
Using 40 years of monthly industrial production data, this paper examines the relationship between the business cycles of the 12 Eurozone countries. Since estimates of the business cycle have been found to be sensitive to how the cycle is measured, a range of alternative measures are considered, focussing on both parametric and non-parametric univariate measures of the 'classical' and 'growth' cycles. An investigation follows into whether Eurozone business cycles have converged, based on an analysis of the distribution of bivariate correlation coefficients between the 12 countries' business cycles. This extends previous work which tested for convergence, in a similar manner by focusing on correlation, but without considering the entire distribution, instead focusing on the mean correlation coefficient or particular bivariate correlation coefficients.

No. 211.
What determines industrial R&D expenditure in the UK?
by Bettina Becker and Nigel Pain
The purpose of this paper is to try and identify some of the factors behind the comparatively poor R&D performance of the UK in the 1990s, a decade when R&D intensity in the business sector declined consistently. An econometric model of R&D expenditure is estimated using a panel of UK manufacturing industries. The results highlight the importance of industry characteristics such as sales and profitability, product market competition, macroeconomic factors such as real long-term interest rates and the real effective exchange rate, skilled labour, and the composition of R&D expenditure and funding. A rise in either the share of R&D funded by the government or the share of R&D undertaken by foreign firms is found to have a significant positive impact on the aggregate level of R&D expenditure.

All National Institute discussion papers are now available on our website www.niesr.ac.uk or free of charge on application to:

NIESR Publications Office
2 Dean Trench Street
Smith Square
London SW1P 3HE

0027-9501(200304)184;1-5

In 2003 National Institute Economic Review [ISSN: 0027–9501] is published in January, April, July and October by SAGE Publications (London, Thousand Oaks, CA and New Delhi).

Annual subscription: full rate (including electronic version): £199/US$318; individual rate: £96/US$154; secondary school/teacher/student: £26/US$41. Single issue rates: full: £51/US$81; individual: £25/US$40; teacher/student: £8/US$11. Apply to the Marketing Department at SAGE Publications' London address. Full rate subscriptions include the right for members of the subscribing institution to access the electronic content of the journal (except the Statistical Appendix) at no extra charge from SAGE. The content can be accessed online through a number of electronic journal intermediaries, who may charge for access. Full details are available on our website: http://www.sagepublications.com. Student discounts, single issue rates and advertising details are available from SAGE Publications Ltd, 6 Bonhill Street, London EC2A 4PU, UK. Tel + 44 (0)20 73740645; Fax + 44 (0)20 73748741 [e-mail: subscriptions@sagepub.co.uk; website www.sagepublications.com; and in North America from SAGE Publications Ltd, PO Box 5096, Thousand Oaks, CA 91359, USA.

Aims and Scope

The *Review* is the quarterly publication of the National Institute of Economic and Social Research – one of Britain's oldest and most prestigious independent research organisations. The Institute's objective is to promote, through quantitative research, a deeper understanding of the interaction of economic and social forces that affect people's lives so that they may be improved. It has no political affiliation, and receives no core funding from government. Its research programme is organised under the headings of Economic Modelling and Analysis; Productivity; Education and Training and the International Economy.

The *Review* welcomes the offer of high quality articles. Content should relate in some way to the explanation of economic performance (broadly defined) in the UK or internationally. There is some emphasis on quantitative research. Articles should normally be research-based and comprise 4–10,000 words, excluding tables. All articles are externally refereed, but the *Review* is able to organise quick publication in appropriate cases. Full notes for contributors are available from Fran Robinson on
Tel: + 44 (0)1650 511333
Fax: +44 (0)1650 511712
email: f.robinson@niesr.ac.uk
website: http://www.niesr.ac.uk

The *Review* is abstracted in Anbar International Management Database, Linguistics and Language Behavior Abstracts, World Banking Abstracts, Worldwide Political Science Abstracts, Sociological Abstracts and Social Services Abstracts. It is indexed in Business Periodicals Index, EconLit, IBZ: International Bibliography of Periodical Literature, e-JEL and JEL on CD.
Printed by Direct Image, London.
ISSN: 0027–9501