

## **Discussion Paper No.38**

### **The effect of the wedge and productivity on the NAIRU in five major OECD economies, by David S. Turner and Sylvie Rauffet (November 1994)**

This paper describes the calculation of the NAIRU for the economies of the USA, Japan, Germany, France and the United Kingdom using the new supply-side equations recently estimated for the OECD's multi-country INTERLINK model. Distinct long-run and short-run components of the NAIRU are constructed. The long-run component is dependent on the trend productivity growth rate and is smooth by construction. One explanation for such a relationship is that following a change in productivity growth unemployment must rise before workers revise downwards their aspirations of real wage growth. The short-run component takes account of factors which have a more transitory effect on the unemployment-inflation trade-off, including changes in 'wedge' variables and other variables designed to capture the impact of various temporary shocks. This component of the NAIRU is more important for understanding short-term movements in inflation and unemployment, although as a consequence it is quite volatile. The calculated NAIRUs suggest that much of the rise in unemployment, at least in the major European economies, can be attributed to the slowdown in trend productivity growth. Changes in the wedge, the difference between employers' real wage costs and workers' real consumption wages, have also had large, albeit temporary, effects in the USA, France and UK, but much less effect in Germany and particularly Japan, where real wage resistance is weaker.

Using this framework the possible unemployment effects of cuts in the wedge are assessed. The gains are significantly smaller than found in many other studies. In particular, it is argued that in the same way that most macro models are constrained to ensure that a change in the level of productivity does not have a permanent effect on the NAIRU, a once-for-all change in the wedge should not be expected to have a permanent effect either. Nevertheless, although 'temporary', the effects are in many cases quite large and therefore worth pursuing.