commissioned from researchers in the particular countries (Willet 1988, Battistelli and Paukert 1988, Gohrand and Gordus 1988).

3. THEORETICAL STRUCTURE

Any estimate of the impact of military expenditure on employment will be conditional on a particular analytical structure. The appropriate way to analyse the structure of the labour market is a matter of heated debate and controversy, which will not be reviewed at length here. However, it is clear that the adjustment processes specified by, for instance, New Classical, Keynesian or Radical–Marxist theories, would be quite different, and thus the hypothesised response of the economy to a change in military expenditure would be quite different in each case. Alternative approaches would also adopt different methods of inference and one would expect empirical analysis using real business cycle models, econometric methods or historical accounts, to give different results. Below we use econometric methods on long historical data for the UK and US and on pooled post-war time-series for a number of countries to examine the impact of military expenditure on unemployment.

The approach we adopt to the analysis of the relationship between the share of military expenditure and unemployment is to begin by assuming that the evolution of unemployment is described by a second-order autoregression. This can either be regarded as a parsimonious time-series description or as the reduced form of an insider–outsider model of the labour market, where workers face apartial adjustment labour demand schedule, derived by Alogoskoufis and Manning (1989, pp. 464–466). Although derived from a structural model of the labour market, this model will have some limitations in that the structure of the parameters may not be constant being affected by changes in the balance of class forces and in the structure of production. Bearing in mind such limitations the model takes the form:

$$u_t = p_1 u_{t-1} + p_2 u_{t-2} + e_t + v_t - b v_{t-1}$$

where p_1 and p_2 are functions of the structural parameters, one of which is b, the speed at which workers adjust to the equilibrium real wave, v_t is the labour demand shock. Allowing for a lagged effect on labour demand suppose that:

$$v_t = c m_{t-1}$$

where m_t is the share of military expenditure in GDP, we then get:

$$u_t = p_1 u_{t-1} + p_2 u_{t-2} + e_t + c m_{t-1} - b c m_{t-2}$$

which we can reparameterise as:

$$du_t = (p_1 + p_2 - 1) u_{t-1} + p_2 du_{t-1} + c m_{t-1} + (1 - bc) dm_{t-1}$$

where dm and du are first differences, and adding an intercept write:

$$du_t = a_0 + a_1 u_{t-1} + a_2 du_{t-1} + b_1 m_{t-1} + b_2 dm_{t-1} + e_t$$

This gives a number of interesting hypotheses.

If $a_1 = 0$, unemployment has a unit root, it shows infinite persistence, and employment and labour force, labour demand and labour supply, are not cointegrated (see Engle and Granger 1987). We should expect $a_1 < 0$, though the Dickey–Fuller critical value on the t-statistic is about -3.1 rather than -2. If $b_1 = b_2 = 0$, m is