COMMENT ON CHAPTERS 14 AND 15

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It is a pleasure for me to act as a discussant of the papers by L. Bloch and by J. Bradley. I read their papers with much interest. The authors present the results of simulations using respectively a large and a medium size model. They analyse the impact of various policy measures aimed at reducing unemployment. The size and structure of the models are different but more interestingly, the policy measures considered are distinct in spirit and nature. Laurence Bloch's model of the French economy consists of some 3000 equations and includes thirteen sectors. The policy measures considered in her paper are concerned with enlarging the flexibility of the labour market by adjusting real wages to reduce unemployment. I like to characterise this as a classical policy applied to a Keynesian regime. John Bradley analyses the effects for the Irish economy of an increase of employment in the public sector financed either by foreign borrowing or by increases in taxes. This policy is Keynesian in spirit. His model is rather small and includes only three production sectors: industry, agriculture and services.

Both models are annual and cover the period from 1959/60 to 1983. Although the model for Ireland is highly aggregated, it is more sophisticated in some respects than the model for the French economy. For instance the technology of the industry sector is of vintage putty-clay CES-type whereas in the model for France most sectors are assumed to have a clay-clay vintage production function. For Ireland, wages are endogenous. In the DMS-model, wages are treated as a policy instrument.

Although the models are not completely listed in the papers, the most important causal links can be inferred from the information provided by the authors. I shall comment on some of the assumptions underlying the models and briefly discuss the significance of the outcome of the simulations.

Let me begin with the DMS-model for the French economy. Bloch assumes a regime of Keynesian unemployment. This means that production is determined by demand and that firms are rationed on the goods market. This assumption is probably plausible at least for most of the estimation period. Evidence on this point is given by, for example, Artus, Laroque and Michel (1984) who show that from 1974
on the French economy is in a regime of Keynesian unemployment with probability larger than 0.8. It is not clear what is meant by this assumption in a multisector model. Are firms of all sectors rationed on the commodity market? More importantly, the behaviour of the model seems to be in contradiction with the implications of a Keynesian regime. If firms are rationed on the commodity market, a decrease of real wages administered by the policy-maker will lead to higher profits. According to the model, increased profits imply investment and additional supply. But which incentive do firms have to react in this way as long as there is idle capacity, a characteristic of a Keynesian regime? The wage policy leads to a contraction of domestic consumption. It is not obvious that the increase of exports as a result of the improved competitiveness will be sufficient to compensate for the decrease of domestic demand. In fact, Figure 15.2 indicates that the expansion of exports is insufficient to compensate for the decrease of household consumption in the first and second year. Inventories increase as a result of the decrease of wages. One is naturally led to ask what the incentives are for business firms to expand production capacity - at least in the short-run - and to increase their inventories when the domestic demand by consumers decreases and the size of foreign demand appears to be uncertain as it is very sensitive to the behavior of importing countries (terms of trade, exchange rate).

One can also raise the question of what happens to the effects of a wage policy if there is a regime switch. Does the model allow for this? Of course, one may answer that a decrease of real wages is not likely to lead into classical unemployment. The economy, however, may end up in a regime of repressed inflation as consumer prices and nominal wages (see Table 15.1) decrease. I realise that it is difficult to model regime switches appropriately in a multisector model. Some further qualification of the simulation results however would be useful to the reader. Finally one may question the extent to which the real wage is a policy variable.

Concerning the simulation results, I would like to make the following comments. On the whole, the results are plausible. Unfortunately no information is given about the impact of the wage policy on employment at a sectoral level. The numerical value of the elasticity of employment with respect to real wages under a regime of fixed exchange rates -0.3 is in line with empirical findings for other countries. For the Netherlands, Magnus (1979) finds an elasticity for the labour demand of -0.3 for a translog cost function and Driehuis
(1979) finds a value of $-0.33$. The assessment of the employment elasticity for Belgium by Drèze and Modigliani (1981) is $-0.2$. Bradley finds a value of approximately $-0.85$ for the elasticity of labour demand in Ireland, which is quite high in absolute terms compared with the figures just mentioned.

It is also not surprising that the precision of the estimated elasticity is low. The value of the elasticity is highly sensitive to changes in the exchange-rate regime or in the scrapping behaviour. The lack of robustness with respect to these key assumptions underlying the model, for which there is an obvious economic explanation should warn the reader from drawing strong conclusions about the exact impact of a wage policy on the employment level. It also illustrates that the success of an employment policy very much depends on the broader economic context, in particular on the economic autonomy of a country with respect to its trading partners. Bradley is probably right in concluding 'that the isolated study of the labour market is at best unnecessarily limiting and, at worst, can be very misleading'.

An interesting feature of his model is that decisions on plant location and therefore on production capacity directly depend on the competitiveness of the Irish economy compared with the 'rest of the world'. In addition, price arbitrage modelled along the lines of the so-called Scandinavian model takes place in the tradeable sector. The large absolute value of the labour-demand elasticity for Ireland results from the high dependence of the Irish economy on the economic conditions in the rest of the world. The presence of a time-trend in the Irish share of marginal industrial-capacity output relative to that of the rest of the world, in my opinion, can be interpreted only as a local approximation. An extrapolation of the model over a longer time-horizon is expected to lead to nonsensical results. A similar remark applies to the employment equation in agriculture where a negative time-trend is included.

The assumption that the component of gross agricultural output which is exported abroad is determined in the supply block as the residual when domestic absorption is subtracted from total output, is not proof against strategic optimising behaviour, given that output prices are assumed to be exogenous. It is not likely that, independently of relative prices (domestic relative to foreign prices), it is always profitable to export the residual (and not less than that leading to inventory formation or more than that by increasing production). The size of this residual ought to depend on relative prices. The level of aggregation of the model is at a maximum given the differences in the
behaviour of employment in the various sectors as illustrated in Figure 14.2.

The fixed exchange approach is somewhat questionable. As the balance of payments is negative (Figure 14.15) under any policy and in the light of the monetary financing of the part of the additional employment in the public sector, a change of the exchange rate might become necessary after some time.

The simulation results of the employment policy are fairly plausible. Basically there is a shift of jobs from the private to the public sector. The instability of the response over time is apparent but not very plausible. It is probably the result of a misspecification of the model. Unfortunately, Bradley does not give a rationale for this change in the pattern of the dynamics of the model.

To summarise, both authors are mainly concerned with the macroeconomic effects of the employment policies simulated in their papers. On the whole, the simulation results are plausible and in line with findings by other authors. The models themselves do not seem to be entirely proof against strategic behaviour and should therefore be interpreted as approximations that can be improved by refining their microeconomic foundations.

References


