The Paradox of Demand

Edmund Phelps, ***Structural Slumps: The Modern Equilibrium Theory of Unemployment, Interest and Assets,*** *Harvard University Press, Cambridge, Mass., 1994*

Reviewed by ***Martin Parkinson***

The diversity in the unemployment experience of OECD countries since the mid-1970s has become one of the most perplexing issues confronting economists. Whereas in some countries (especially the United States) unemployment has risen as activity has slowed and fallen during recovery, in much of OECD Europe unemployment has been persistently high and apparently intractable even in times of rapid economic growth. Moreover, each economic slowdown since the first OPEC oil shock in 1974 has resulted in higher unemployment that is not fully unwound when activity recovers.

Unemployment is often divided into two components. 'Cyclical' unemployment reflects short-term variations in activity. The 'natural' level of unemployment, which tends to be more permanent, is the level that would appear in the absence of outside interference: it reflects the economy's existing industry structure, education and skill level, wage-fixing arrangements, government spending and tax structures, and so on. (The 'natural' level of unemployment is closely related, but not identical, to the concept of the 'non-accelerating inflation rate of unemployment', or NAIRU, but for most purposes the two can be used interchangeably.) It is often suggested that whereas unemployment in the US consists predominantly of cyclical variations around a stable natural rate, in Europe the natural rate itself has ratcheted up over time.

Two kinds of explanation that use this framework have been advanced. The first assumes that the natural rate and cyclical unemployment evolve independently and that increases in the natural rate reflect structural factors such as excessive real wages, minimum wage laws, legislative restrictions on dismissal and high levels of unemployment benefits. The other explanation — the 'hysteresis' hypothesis[1] — holds that the two types of unemployment are interrelated and that an increase in cyclical unemployment (due to, say, a temporary slowdown in growth) may lead to an increase in the natural rate. The mechanisms that effect this are varied but basically involve either unemployment that leads to an erosion of skills and so a reduction in the employability of the long-term unemployed, or a failure of wage-bargaining institutions to take into account the interests of the unemployed.

Both classes of explanation virtually always find the cause of unemployment in the labour market. In *Structural Slumps,* however, Edmund Phelps, McVickar Professor of Political Economy at Columbia University, has shown how

[1] 'Hysteresis' means, loosely speaking, that where you get to is determined by how you get there. More formally, a variable exhibiting hysteresis is path dependent.

real factors outside the labour market can cause the natural rate to move. This lays the foundations of a coherent theory of how the natural rate is disturbed by real demand and supply shocks and how the adjustment process works.

Central to Phelps's approach is the argument that hiring and firing workers is costly and that firms attempt to reduce their employees' incentive to quit (or shirk) by paying above-market clearing wages. The novelty of his approach, though, comes from marrying this process with a capital market where interest rates are disturbed by non-monetary forces such as changes in productivity, saving, the rate of technological progress and population growth. So because training a new worker is costly, a decision to increase employment has some affinity with an investment decision. Other authors have shown how increases in firing costs (for example, increased redundancy entitlements) or higher wages affect this decision. Phelps's contribution is to show that changes in interest rates can also affect employment, because they change the potential profits that can be derived from an employee's output.

In the standard Keynesian model, a fiscal stimulus (and the associated increase in government debt) is inflationary but leads to an increase in employment by driving down the real wage. In Phelps's models, in contrast, a fiscal stimulus that results in increased (government or private) consumption reduces employment because the resulting rise in the rate of interest discourages firms from training new workers (that is to say, the marginal cost of training rises). Not only are no new workers hired, but existing workers are laid off because higher interest rates also reduce the value of the potential profits they can generate. This delivers what Phelps calls 'the paradox of demand': higher demand leads to higher unemployment.

However, even if we accept this conclusion, a number of points can be made. First, Phelps's result arises only when the economy reaches equilibrium. This may take a very long time; meanwhile, the fiscal stimulus may lead to an expansion through the traditional Keynesian channel. Second, Phelps's models show that increased government demand for capital goods (unlike an increase in demand for consumption goods) yields an increase in employment and a reduction in the rate of interest: an apparently Keynesian outcome. This arises because increased capital goods purchases by government crowd out not only some private investment but also some consumption-goods production; since consumption goods are assumed to be more capital-intensive than investment goods, interest rates fall, resulting in higher employment through the mechanism outlined above.

The theory leads to the testable proposition that high unemployment in Europe should be accompanied by high real interest rates. Phelps provides some evidence that seems to support this claim. Applying the model to Australia, he finds that increases in world interest rates (which are influenced by world public debt per worker, world public-sector expenditure, the transitory component of real oil prices, and world inflation — none of which can be influenced by Australian policymakers) result in increases in Australian unemployment. Increases in world oil prices (not just the transitory component), the proportion of youth in our population, and direct taxes as a share of household income also raise Australia's unemployment rate.

These results appear to support Phelps's hypothesis. But they should be treated with caution. For example, his empirical results do not justify his rejection of the hypothesis that a fiscal stimulus through public consumption has the same effects as a stimulus through investment. As well, his results show that Australian unemployment is highly correlated with world unemployment, which suggests that Australian unemployment is heavily influenced by overseas developments. This is hardly surprising: unemployment rates have to a large extent moved contemporaneously across OECD member countries, although individual, nation-specific shocks and unequal responses to common shocks are capable of differentiating unemployment performance. Indeed, it is this diversity in experience which is so interesting and which Phelps's empirical work does not adequately explain.

While the jury will remain out for some time on Phelps's claims, the ideas are challenging and the policy implications intriguing, particularly the suggestion that it is the composition rather than the amount of government outlays that matters. In Australia, the federal government has already embraced the hysteresis view in its *Working Nation* program, which aims to improve the job readiness of the unemployed and rebuild their attachment to the labour force without additional Keynesian fiscal stimulus or widespread nominal wage reductions. By improving the ability of the long-term unemployed to compete effectively for jobs, such programs can lower the natural unemployment rate for a given level of inflation.

Taken literally, Phelps's book implies that while raising skill levels will help reduce unemployment (by reducing the cost of training), Australia should be urging other countries to adopt fiscal consolidation programs in order to help reduce world interest rates. However, I suspect that even an adherent to Phelps's views would acknowledge that although the Australian government has committed itself to a deficit-reduction program, world public debt levels are unlikely to fall in the near future. Realists would also acknowledge that measures to improve the skill level of the unemployed and to increase the flexibility of the labour market will remain the main options for lowering unemployment in the foreseeable future. And while Phelps suggests that other factors may be important in addressing the unemployment problem, he is careful not to make excessive claims. He acknowledges that variables crucial to his explanations are important also in other theories; indeed, he submits that it would be naive to believe that he has found the one 'true' model of employment determination.

That said, this is an important book, presenting an alternative to the neoclassical and Keynesian paradigms. All theories tell us something about the effects of different shocks over some time-frame. Phelps's theory clearly adds to our understanding, even if it is unlikely to replace all other theories.

Martin Parkinson is an Assistant Secretary in the Commonwealth Treasury.