

## Unemployment

### Short Questions (250 words max)

1. What are the main differences between the 'natural rate of unemployment' and the 'NAIRU' hypotheses?

The main differences between the two concepts relate to the fact that they belong to different models; the Friedman's or the Neo-Classical model (the natural rate of unemployment) and the imperfect competition model developed by New Keynesian economists (NAIRU).

The existence of the differences between the NAIRU and the natural rate of unemployment, hence, depends on the theoretical perspective. For the Monetarist and Neo-Classical economists, the two concepts are identical because the economy is always at full employment. From the New Keynesian perspective, however, the equilibrium can settle at a level below the full employment; thus making the natural rate of unemployment a special case of NAIRU that occurs at full employment.

In both models, there is a point, at which the level of inflation is constant, that is it is possible to draw a vertical long run Philips curve in each model. The natural rate is the point of labour market clearing, where there is no voluntary unemployment and any temporary disequilibrium is quickly eliminated. The NAIRU, on the other hand, is the rate of unemployment at which the competing claims of labour and firms in the economy are consistent.

With NAIRU, the notion of market power and the effect of unemployment on the latter are significant. For example, the trade unions can bargain a higher real wage and the imperfectly competitive firms can mark-up marginal cost when setting the price. In the case of the natural rate of unemployment, the behaviour of workers and firms are central. The rate of inflation is constant due to competitive behaviour of agents in labour and product markets.

2. Identify at least three reasons why the real wage could be higher than the level that clears the labour market.

When the real wage is higher than the level that clears the market, there is excess supply of labour, which is caused either by the fact that firms are not free to choose the wage or if it is in the interest of the firm to pay a higher wage.

Firstly, firms can choose to pay a higher wage in order to maintain high morale and encourage effort of their employees, which is known as the efficiency wage. Moreover, higher wages may help the firm to retain and recruit workers and to maintain profits by reducing quits.

Secondly, unions play a significant role in setting wages, especially in Europe, where in some countries over three quarters of the workforce have wages that are covered by the collective bargaining. The insider-outsider model means that if the unions are

strong enough, the resulting real wage exceeds the price of the unemployed outsiders but the training embedded in the workforce makes this unprofitable in most cases.

Thirdly, linked to the idea of the power of the trade unions is the concept of corporatism. The ability of the unions to act as a monopsonistic supplier of labour is limited by the degree of industry centralization. A single-firm union can make its workers better off by raising their wage relative to other wages, but a national union is more likely to choose the level of full employment because the objective of a national union would be to maximize the expected income of each member of the labour force.

### 3. What is hysteresis?

Hysteresis is a hypothesized property of unemployment rates that predicts that the equilibrium rate of unemployment is path-dependent, which means the natural unemployment rate changes in response to the actual unemployment rate, rising if the actual rate is above the natural rate and falling if the actual rate is below the natural rate.

There are three theories that attempt to explain the origins of hysteresis:

- An insider/outsider model of decision-making about employment, where insiders such as the unionized workers push up wage rates beyond where it is profitable to hire the unemployed, and outsiders who are unemployed don't get to be part of the negotiation process.
- Behavioural and human capital changes among the unemployed, such as forgetting the details of work or work behaviour, or losing interest or skill in getting new jobs, could lead to declining chances of becoming employed, which leads to long-term unemployment.
- Moreover, a fall in aggregate demand has a negative effect on capacity utilisation and a consequent fall in investment. The fall in capacity of firms to expand production means that prices will increase and the equilibrium rate of unemployment will shift up.

Hysteresis is often referred to in discussions of European unemployment in the 1970s, when rising oil prices and other unfavourable factors increased the natural unemployment rate, which led to high actual unemployment rate. When the European countries returned to the long-run equilibrium with full employment, the actual unemployment was the new higher natural rate.

### **Essay question**

*Explain the fact that European countries have relatively higher unemployment rates than other OECD countries. Do these higher unemployment rates reflect*

*constraints on labor market flexibility or have they emerged because Europe has been exposed to more shocks than some other OECD countries?*

Let us begin with the consideration of the dynamics of the European unemployment. Against the background of some fluctuations of until recently low unemployment in the US and Japan, the aggregate unemployment rate of the European economies has increased almost continuously since the 1970s. The European unemployment rate has indeed risen from 2.6% in 1970 to approximately 11% in 1996, with peaks in the 1970s, the early 1980s and the mid 1990s, which represents a clearly marked increase in unemployment. However, it should be noted that the unemployment rates are not homogeneous across the European economies: Spain is an 'unemployment disaster' reaching the unemployment of 20% and the Netherlands is an 'employment miracle' with unemployment of around 5%. Still, on average, the unemployment figures are much higher in Europe than in other OECDs, including the US. Some of the reasons for this lie in the labour market rigidities, others can be attributed to shocks that the economy has been subject to.

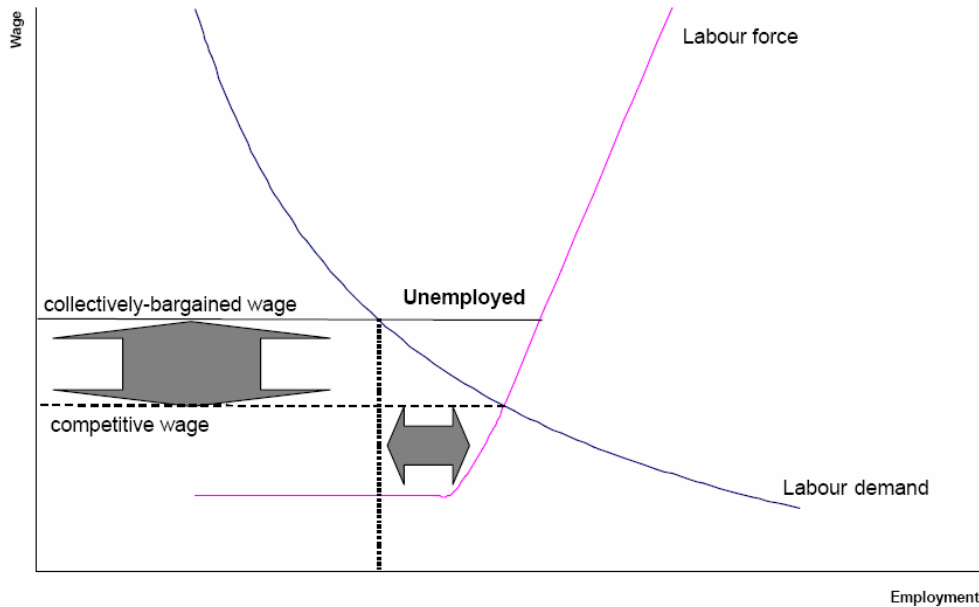
Consider the constraints on labour market flexibility first. In a rigid market, wages fail to adjust to demand fluctuations. The low employment is often the fault of misguided policies that discourage people from working, such as high payroll taxes; marginal income taxes that penalise the work of a lower-paid spouse; rules that make sacking workers expensive; and generous benefits that encourage the work-shy to be classed as disabled, to name but a few. Such structural problems play a huge role in the differences in the wealth of nations. The trouble is that fixing them can be politically fraught, for example in Germany, where Gerhard Schröder resigned as head of his party, because of resistance to a package of modest reforms.

One of the reasons behind the persistence of high rates of unemployment in Europe, especially compared to other countries are the institutional factors such as the welfare state: unemployment benefits, taxes, union wage-setting, bargaining, replacement ratio, and the existence of the minimum wage in many countries contribute to rigidities in the labour markets. Labour market flows can be represented as follows:  $fU = sE$  and the rigidities (unemployment protection, firing restrictions...) clearly have ambiguous impact on unemployment. It is reasonable to mention the NRU model that starts from a model of perfectly competitive markets and then considers what may cause deviations (increases in the NRU) from this ideal – in particular labour market rigidities creating an inflexible labour.

Another term that has come into use in relation to the European unemployment problem is Eurosclerosis, which refers to the structural problems in European labour markets – skills mismatch. This leads to a shifting equilibrium rate – the recent fall in the UK unemployment. Within a NRU framework: the (lagged) impact of the supply side reforms of the 1980s meant a more efficient labour market (lower union density, lower replacement ratio and so on) and a more efficient product market, thus reducing slower productivity growth.

Structural unemployment occurs when people are made unemployed because of capital-labour substitution that reduces the demand for labour or when there is a decline for labour in a particular industry. In 1990-2000, one third of manufacturing jobs have been lost whilst there has been an increase of 34% in the service sector. UK

policies such as the New Deal have been used to counteract this. The mismatch between their skills and the requirements of new jobs, which in this case was caused by a fall in demand for unskilled workers that is technologically driven, so the countries who had more occupationally immobile workers faced particular difficulties.



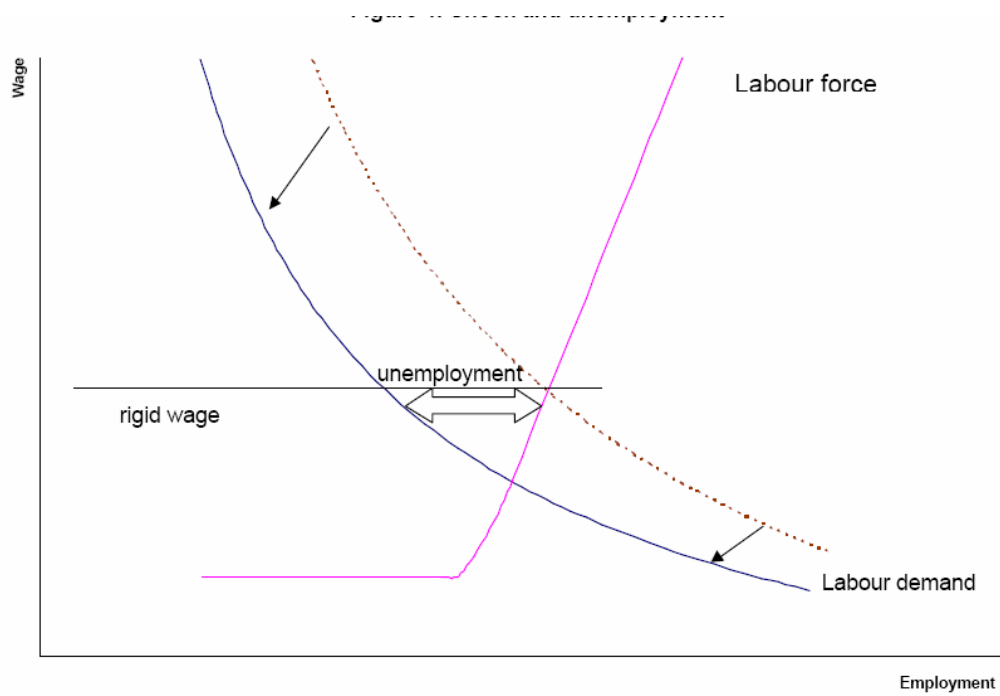
In terms of shocks, in the early 1970s, there has been the first oil shock that reduced the demand for labour, in the 1980s, the second oil shock produced a similar effect, and later, in the 1990s, the Maastricht Treaty fiscal and monetary policy had an unfavourable effect on the unemployment situation. However, it is true that the United States also experienced oil shocks, however it emerged with a lower equilibrium level of unemployment. High interest rates that reached 17% in 1980 in the UK, which contributed to severe recession in the UK manufacturing sector, with the loss of 23% of manufacturing jobs.

The NAIRU starts from a position of imperfectly competitive markets (product and labour markets with many agents in the economy 'price makers' rather than 'price takers': the NAIRU can be affected by similar factors that shift the NRU but by other factors as well, such as import prices of oil. The high interest rates that reached 17% in 1980 in the UK, which contributed to severe recession in the UK manufacturing sector, with the loss of 23% of manufacturing jobs.

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Europe has experienced a sequence of adverse shocks since the early 1970s in the form of oil price rises, the productivity slowdown and the rapid increases in tax rate,

each of which had a permanent effect on the unemployment rate, as a result the equilibrium unemployment rate increased substantially.



Overall, it seems that both the labour market rigidities, a number of shocks and factors peculiar to the European economies are responsible for the high levels of unemployment in certain countries. European economies vary quite significantly making it difficult to generalise.