# Chapter 28

1. Use the following information about Employment Country to answer question 1. Numbers are in millions.

	2004	2005
Population	223.6	226.5
Adult population	168.2	169.5
Number of unemployed	7.4	8.1
Number of employed	105.2	104.2

a. What is the labour force in 2004 and 2005?

Answer: 2004: 7.4 + 105.2 = 112.6 million 2005: 8.1 + 104.2 = 112.3 million

b. What is the labour force participation rate in 2004 and 2005?

Answer: 2004: (112.6/168.2) x 100 = 66.9% 2005: (112.3/169.5) x 100 = 66.3%

c. What is the unemployment rate in 2004 and 2005?

Answer: 2004: (7.4/112.6) x 100 = 6.6% 2005: (8.1/112.3) x 100 = 7.2%

d. From 2004 to 2005, the adult population went up while the labour force went down. Provide a number of explanations why this might have occurred.

Answer:

Earlier retirements, students staying in college longer, more parents staying at home with children, discouraged workers discontinuing their job search.

e. If the natural rate of unemployment in Employment Country is 6.6 percent, how much is cyclical unemployment in 2004 and 2005? Is Employment Country likely to be experiencing a recession in either of these years?

Answer:

2004: 6.6% - 6.6% = 0%2005: 7.2% - 6.6% = 0.6%In 2004, unemployment is "normal" for Employment Country; therefore, there is no recession. However, in 2005, unemployment is above normal (positive cyclical unemployment), so Employment Country may be in a recession.

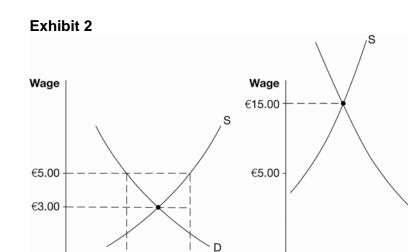
- Suppose the labour market is segmented into two distinct markets: the market for low-skill workers and the market for high-skill workers. Further, suppose the competitive equilibrium wage in the low-skill market is €3.00/hour while the competitive equilibrium wage in the high-skill market is €15.00/hour.
- a. If the minimum wage is set at €5.00/hour, which market will exhibit the greatest amount of unemployment? Demonstrate it graphically in Exhibit 1.



Exhibit 1

## Answer:

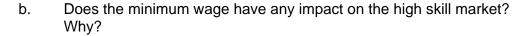
The low-skill market will experience unemployment because there will be an excess supply of labour. (See Exhibit 2.)



L<sup>s</sup> Quantity of Labour

LOW SKILL MARKET

Ld



## Answer: No, because the competitive equilibrium wage is above the wage floor.

D

**Quantity of Labour** 

HIGH SKILL MARKET

c. Do your results seem consistent with labour market statistics? Explain.

## Answer:

Yes. We observe a greater amount of unemployment among low-skill workers who are often young and inexperienced.

d. Suppose the high-skill market becomes unionised and the new negotiated wage is €18.00/hour. Will this have any affect on the low skill market? Explain.

## Answer:

Yes. There will now be excess supply of skilled workers, and this may cause some skilled workers to move to the unskilled market increasing the supply of labour in the unskilled market, further reducing the competitive equilibrium wage and causing even more unemployment there.

- 3. Answer the following questions about the composition of unemployment.
- a. What are some of the sources of unemployment?

## Answer:

Job search, minimum wage, unions, efficiency wages.

## b. Which type of unemployment is initiated by the firm?

## Answer:

Efficiency wages.

c. Why might a firm pay wages in excess of the competitive equilibrium?

### Answer:

To improve worker health, lower worker turnover, increase worker effort, improve worker quality.

d. Which type of efficiency wage is unlikely to be relevant in the west European economies? Why?

### Answer:

Worker health, because in western Europe workers' wages are significantly above subsistence.

e. How does frictional unemployment differ from the other sources of unemployment?

## Answer:

Frictional unemployment exists even when the wage is at a competitive equilibrium.