Morelia Pena ECON 1101 Prof. S. Aalsberg



A) The market for unskilled labor is given and the minimum wage applies to this market.

The graphic illustrates a labor market with a required minimum wage. since the minimum wage set by the government is above the equilibrium wage rate, it becomes binding; the minimum wage itself is the market wage for the unskilled labor.

Number of employees: QD is the number of employees.

Number of workers supplied: QS is the number of workers employed.

Number of workers unemployed: The difference between the quantity supplied and quantity demanded (QS - QD) is the number of unemployed.

Wage Payment:

In the above figure, the shaded rectangle OwsQd indicates the total wages paid.

Total wage payment to unskilled workers:

- = Minimum wage rate x Number of workers employed
- = W x QD

Thus, the wage payment in the above figure is equal to the shaded area OwsQd or the value is equal to w X Qd.

B) If the minimum wage is increased, the number of employees will decrease. The change in employment depends on the elasticity of demand. If the demand curve is elastic, the number of people employed will decrease more as the wage rate increases. If the demand for labor is inelastic, the number of workers employed will decrease less as the wage rate increases. However, the elasticity of supply does not play an important role as the market is in surplus.

C)Increasing the minimum wage would further increase unemployment. Furthermore, the magnitude of the increase in unemployment depends on both the elasticity of supply and the elasticity of demand, since the elasticity of demand determines the quantity of labor demanded and the elasticity of supply determines the quantity of labor supplied. In fact, the displacement of these curves depends on their elasticity. The larger the changes, the greater the surplus and unemployment. Therefore, the difference between the quantity of labor demanded and the highest minimum wage equals the number of unemployed and also depends on the elasticity of the labor supply and demand curves.

D) If the demand for unskilled labor were inelastic:

Due to inelastic demand, the percentage decline in the quantity demanded of the labor of unemployment would be lower than the percentage increase in the wage rate. Therefore, the total wages paid to unskilled labor have increased.

If the demand for unskilled labor were elastic:

On the other hand, if the labor demand is elastic, the percentage decline in the quantity demanded of the labor employment would be higher than the percentage increase in wage rate. Therefore, the total wage payments to the unskilled labor would decline.