Lesson plan

Course Name: Economics II

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Topic: Factors markets, part II.
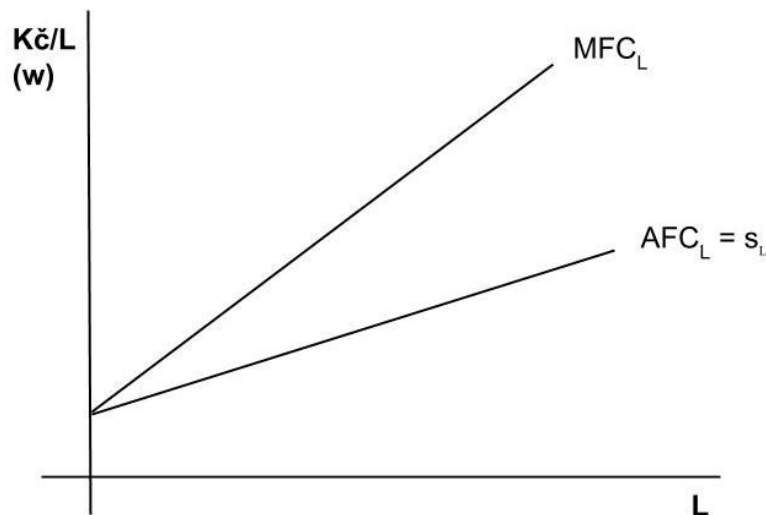
Course Objectives:

The aim of the second lecture is to analyze the choice of an optimal amount of hired labor in the imperfectly competitive market. The next goal will to clarify the formation of market labor supply and clarification of imperfections on the supply side of labor.

14. DEMAND IN IMPERFECTLY COMPETITIVE LABOR MARKET

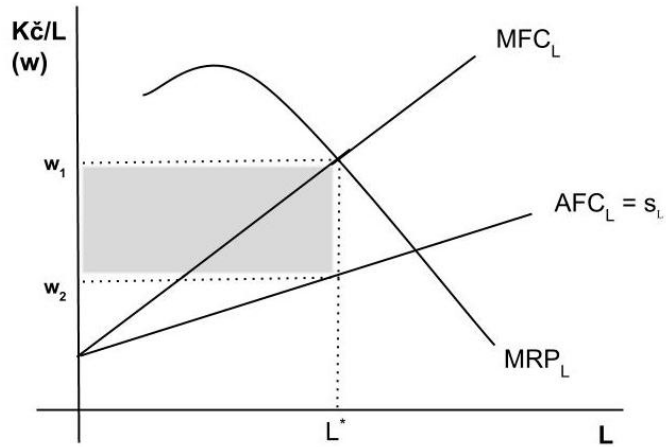There may be a limited number of companies buyers goods or services in any market. We can distinguish three cases:

a) **monopsony**: work is demanded only by one company,

b) **oligopsony**: there are several companies,

c) **monopsonistic competition**: many firms, each can at least marginally affected. wage rate

The basic feature of imperfectly competitive labor market is rising curve of individual labor supply. When the company wants to hire additional unit of work, it must pay a higher wage rate. Increasing function of individual labor supply is the same as an increasing function of the average cost factor of labor (AFCL).

14.1 Optimum Amount of Labor in a Short Run

The monopsony labor demand curve can not be constructed.
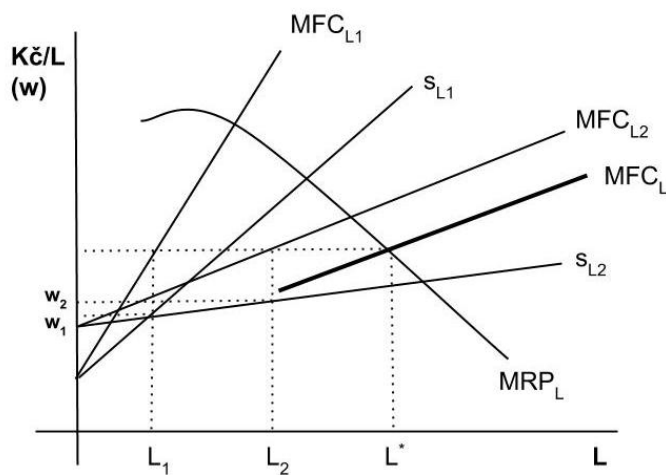

14.2 Optimum Amount of Labor in a Long Run

If there is a market inputs imperfect competition, individual curves are increasing.

The Rule of the lowest cost is modified in the following forms:

$$\frac{MP_L}{MFC_L} = \frac{MP_K}{MFC_K}$$

14.3 Monopsony wage discrimination

15. LABOR SUPPLY

15.1 Individual labor supply

Every man has to choose between consumption (C) and free time (mark it as H). We assume that consumption can be realized only as a consequence of the work (L). The sum of the hours of work and leisure in one day can not be greater than 24 hours: **L + H = 24.**

Optimal time distribution between work and leisure time means a combination of work and leisure to maximize the utility:

$$U = f (C, H)$$

Day has 24 hours (L + H = 24, L = 24 finish - H);
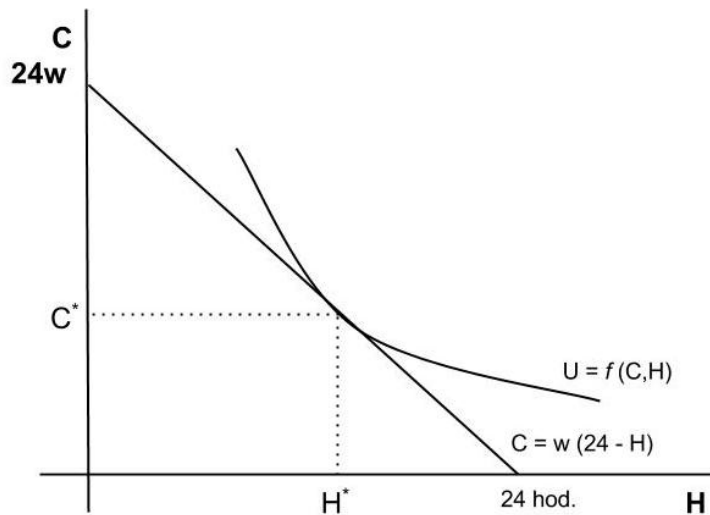
$$C = w. L$$

If we substitute for L 24 - H, we get

$$C = w. (24 - H)$$

$$C = 24th\ w - w. H$$

$$0 = 24th\ w - C - w. H$$

Condition of maximum benefit in this case is

$$w = \frac{\delta U / \delta H}{\delta U / \delta C} = MRS$$

The total effect (TE) of the growth in real wage rate is represented by the shift from point Q to point S. It can be decomposed into substitution and income effects.
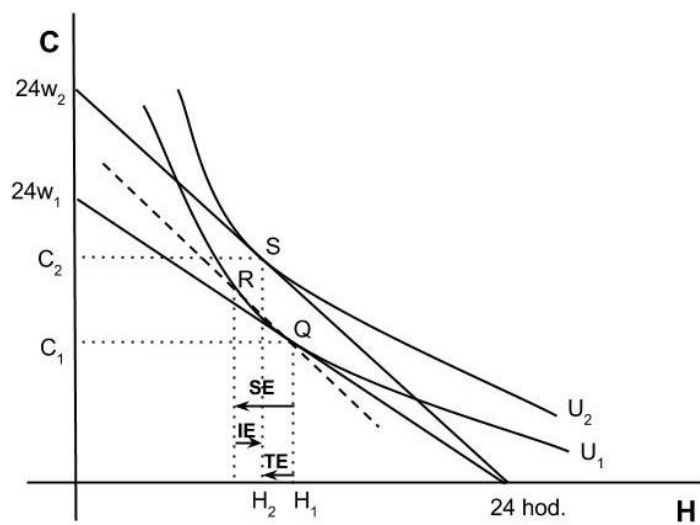
Substitution effect (SE) means the replacing of free time by work. Increase in the real wage rate stimulates individuals to increase the number of hours of work and reduced the number of hours of free time. Because of the increased price of leisure time leads to a decrease in the number of hours of free time, the substitution effect is negative.

Income effect (IE) is related to the fact that increased wage rate leads to the growth of real income. The income effect is positive.
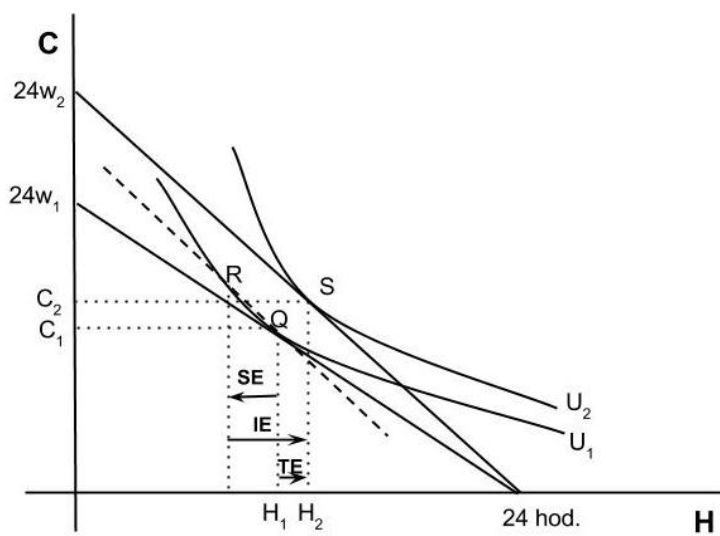
Since the substitution effect is negative and the income effect is positive, it can not determine in advance whether the wage growth rate will lead to the growth of free time or a decrease in leisure time. In principle, two cases may occur.

Backward curved shape of the individual labor supply curve can be seen especially in the long term. When analyzing the labor market in the short term generally assume only growing part of individual labor supply.
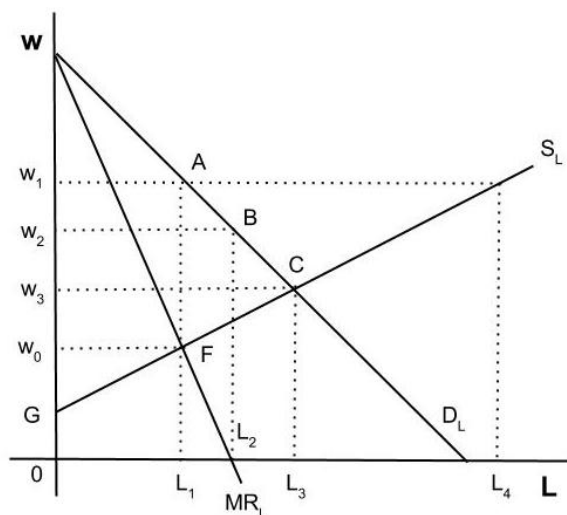
SE > IE

IE > SE

15.2 Market Labor Supply

Market supply curve can be constructed as a sum of all individual labor supply curves. The intersection of market labor supply and labor market demand determines the equilibrium wage rate and the equilibrium quantity of work.

15.3 Monopoly Power in the Labor Market

The objectives of labor unions may be:

• maximize economic rents realized by union members,

• maximize the total wage of union members,

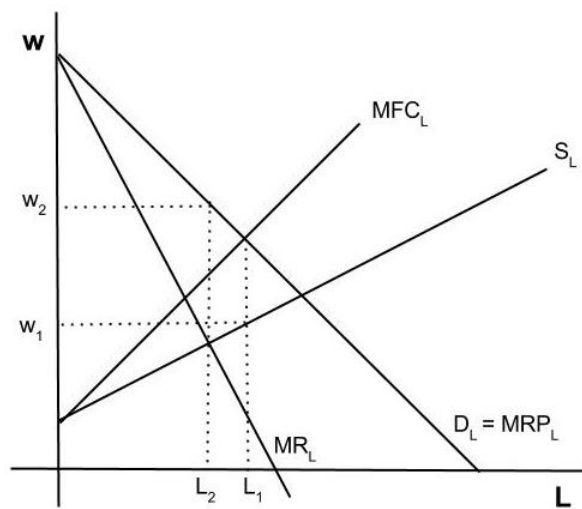• maximize of employment.

Marginal Revenue of Labor Union (MRL) represents the change in total wages caused by changing the volume of employment:

$$MR_L = \frac{d(w \cdot L)}{dL}$$

15.4 Bilateral monopoly in labor market

Monopsony and labor union are creating bilateral monopoly.

List of tasks for students:

1. **Explain the monopsony and give specific examples.**

2. **Explain the oligopsony and give specific examples.**

3. **Explain under what circumstances can company use a wage discrimination.**

4. **Define the individual labor supply.**

5. **Explain monopoly power of trade unions in the labor market.**