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Labor Markets

Labor services are traded in many different labor markets. Examples are markets for bakery workers, van drivers, crane operators, computer support specialists, air traffic controllers, surgeons, and economists. Some of these markets, such as the market for bakery workers, are local. They operate in a given urban area. Some labor markets, such as the market for air traffic controllers, are national. Firms and workers search across the nation for the right match of worker and job. And some labor markets are global, such as the market for superstar hockey, basketball, and soccer players.

We'll look at a local market for bakery workers as an example. First, we'll look at a *competitive* labor market. Then, we'll see how monopoly elements can influence a labor market.

A Competitive Labor Market

A competitive labor market is one in which many firms demand labor and many households supply labor.

Market Demand for Labor Earlier in the chapter, you saw how an individual firm decides how much labor to hire. The market demand for labor is derived from the demand for labor by individual firms. We determine the market demand for labor by adding together the quantities of labor demanded by all the firms in the market at each wage rate. (The market demand for a good or service is derived in a similar way—see Chapter 5, p. 109.)

Because each firm's demand for labor curve slopes downward, the market demand for labor curve also slopes downward.

The Market Supply of Labor The market supply of labor is derived from the supply of labor decisions made by individual households.

Individual's Labor Supply Decision People can allocate their time to two broad activities: labor supply and leisure. (Leisure is a catch-all term. It includes all activities other than supplying labor.) For most people, leisure is more fun than work so to induce them to work they must be offered a wage.

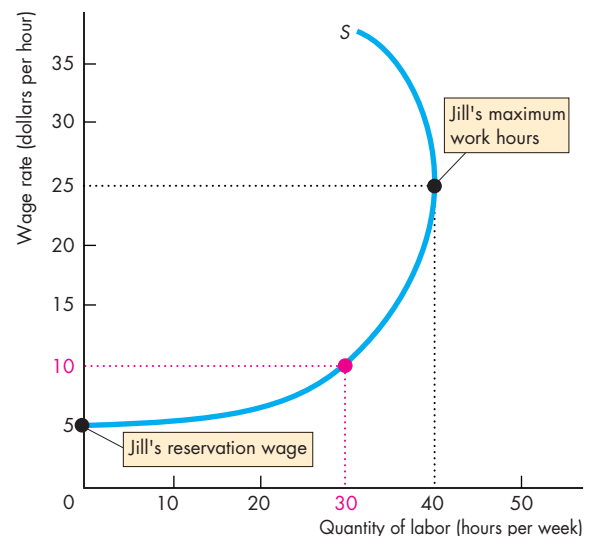
Think about the labor supply decision of Jill, one of the workers at Angelo's Bakery. Let's see how the wage rate influences the quantity of labor she is willing to supply.

Reservation Wage Rate Jill enjoys her leisure time, and she would be pleased if she didn't have to spend her time working at Angelo's Bakery. But Jill wants to earn an income, and as long as she can earn a wage rate of at least \$5 an hour, she's willing to work. This wage is called her *reservation wage*. At any wage rate above her reservation wage, Jill supplies some labor.

The wage rate at Angelo's is \$10 an hour, and at that wage rate, Jill chooses to work 30 hours a week. At a wage rate of \$10 an hour, Jill regards this use of her time as the best available. Figure 18.2 illustrates.

Backward-Bending Labor Supply Curve If Jill were offered a wage rate between \$5 and \$10 an hour, she would want to work fewer hours. If she were offered a wage rate above \$10 an hour, she would want to work more hours, but only up to a point. If Jill could

FIGURE 18.2 Jill's Labor Supply Curve



Jill's labor supply curve is *S*. Jill supplies no labor at wage rates below her reservation wage of \$5 an hour. As the wage rate rises above \$5 an hour, the quantity of labor that Jill supplies increases to a maximum of 40 hours a week at a wage rate of \$25 an hour. As the wage rate rises above \$25 an hour, Jill supplies a decreasing quantity of labor: her labor supply curve bends backward. The income effect on the demand for leisure dominates the substitution effect.

earn \$25 an hour, she would be willing to work 40 hours a week (and earn \$1,000 a week). But at a wage rate above \$25 an hour, with the goods and services that Jill can buy for \$1,000, her priority would be a bit more leisure time. So if the wage rate increased above \$25 an hour, Jill would cut back on her work hours and take more leisure. Jill's labor supply curve eventually bends backward.

Jill's labor supply decisions are influenced by a substitution effect and an income effect.

Substitution Effect At wage rates below \$25 an hour, the higher the wage rate Jill is offered, the greater is the quantity of labor that she supplies. Jill's wage rate is her *opportunity cost of leisure*. If she quits work an hour early to catch a movie, the cost of that extra hour of leisure is the wage rate that Jill forgoes. The higher the wage rate, the less willing Jill is to forgo the income and take the extra leisure time. This tendency for a higher wage rate to induce Jill to work longer hours is a *substitution effect*.

Income Effect The higher Jill's wage rate, the higher is her income. A higher income, other things remaining the same, induces Jill to increase her demand for most goods and services. Leisure is one of those goods. Because an increase in income creates an increase in the demand for leisure, it also creates a decrease in the quantity of labor supplied.

Market Supply Curve Jill's supply curve shows the quantity of labor supplied by Jill as her wage rate changes. Most people behave like Jill and have a backward bending labor supply curve, but they have different reservation wage rates and wage rates at which their labor supply curves bend backward.

A market supply curve shows the quantity of labor supplied by all households in a particular job market. It is found by adding together the quantities of labor supplied by all households to a given job market at each wage rate.

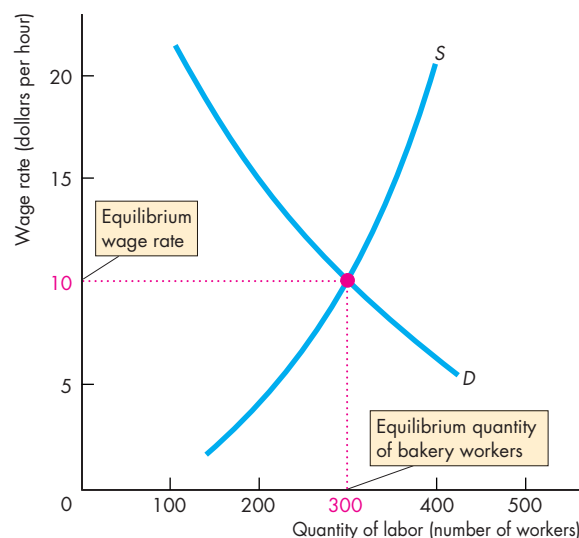
Also, along a supply curve in a particular job market, the wage rates available in other job markets remain the same. For example, along the supply curve of car-wash workers, the wage rates of car salespeople, mechanics, and all other labor are constant.

Despite the fact that an individual's labor supply curve eventually bends backward, the market supply curve of labor slopes upward. The higher the wage rate for car-wash workers, the greater is the quantity of labor supplied in that labor market.

Let's now look at labor market equilibrium.

Competitive Labor Market Equilibrium Labor market equilibrium determines the wage rate and employment. In Fig. 18.3, the market demand curve for bakery workers is D and the market supply curve of bakery workers is S . The equilibrium wage rate is \$10 an hour, and the equilibrium quantity is 300 bakery workers. If the wage rate exceeded \$10 an hour, there would be a surplus of bakery workers. More people would be looking for jobs in bakeries than firms were willing to hire. In such a situation, the wage rate would fall as firms found it easy to hire people at a lower wage rate. If the wage rate were less than \$10 an hour, there would be a shortage of bakery workers. Firms would not be able to fill all the positions they had available. In this situation, the wage rate would rise as firms found it necessary to offer higher wages to attract labor. Only at a wage rate of \$10 an hour are there no forces operating to change the wage rate.

FIGURE 18.3 The Market for Bakery Workers



A competitive labor market coordinates firms' and households' plans. The market is in equilibrium—the quantity of labor demanded equals the quantity supplied at a wage rate of \$10 an hour when 300 workers are employed. If the wage rate exceeds \$10 an hour, the quantity supplied exceeds the quantity demanded and the wage rate will fall. If the wage rate is below \$10 an hour, the quantity demanded exceeds the quantity supplied and the wage rate will rise.