

Week 9: Labor Markets and Labor Regulation

- I. Labor Demand and Marginal Productivity
 - A. Labor demand just shows the quantity of labor-hours people want to buy at a given real wage. It is just the sum of all employers' labor demand curves.
 - B. Question: What determines an employer's willingness to pay for another hour of labor?
 - C. Define a worker's **marginal productivity** as the additional quantity of a good that he produces per hour times the market value of that good.
 - 1. Ex: If a worker produces 4 extra gallons of ice cream per hour of work, and ice cream sells for \$4.00/gallon, his marginal productivity is \$16.00/hour.
 - D. If the market wage of a worker is less than his marginal productivity, he will be hired. An employer will keep buying more labor until it is no longer profitable. It follows that *the market wage must equal a worker's marginal productivity*.
 - 1. If workers' marginal productivity is \$16.00/hour, the last employee hired will produce exactly \$16 worth of additional output, and receive his marginal productivity.
 - E. Amazing conclusion: Labor Demand is entirely determined by workers' **marginal productivity**. The more a worker can produce, and the greater the value of the product he produces, the more employers are willing to pay to employ him.
- II. Labor Supply, Choice of Occupation, and the Labor/Leisure Trade-off
 - A. People have to make two kinds of decisions about their time:
 - 1. Their occupation.
 - 2. How many hours to work, that is, how much of their labor to sell on the market. The rest economists call "leisure."
 - B. (While employers rarely let people "pick their own hours," people can choose their occupations and employers to try to match their desired labor/leisure mix).
 - C. For any one individual, it is unclear whether labor supply curves have much, if any, elasticity.
 - D. But people definitely choose occupations based partly on wages, which means that the labor supply curve for any one occupation will be fairly elastic.
 - E. As usual, the labor supply curve shows the total number of hours that will be sold at a given wage.
- III. Equilibrium in the Labor Market

- A. Many people balk at the application of S and D analysis to labor, but their objections are mostly SDB. As usual, just look at the intersection of S and D to figure out the wage (the "price of labor") and the employment level (the "quantity of labor").
 - B. If the wage is below the intersection of S and D, employers want to hire more workers than are willing to work. They accordingly bid up the wage.
 - C. If the wage is above the intersection of S and D, more workers are willing to work than employers want. People often call this "unemployment." Workers bid down the real wage.
 - D. At the intersection of S and D, the quantity of labor hours employers desire to buy and the quantity of labor hours employees desire to sell are equal.
- IV. Shifts in Labor Demand and Labor Supply
- A. What shifts labor D? The two components of marginal productivity: physical productiveness and the value of the product produced.
 - B. Thus, if workers get stronger, making them able to produce more stuff, and the price of the product sold stays the same, labor demand shifts up. This increases both wages and employment.
 - C. Similarly, if the value of the workers' product rises, labor demand shifts up, increasing both wages and employment.
 - D. This is a powerful analytical lens. For example, suppose that workers randomly vandalize company property. What happens to wages?
 - E. What shifts labor S? This is more complicated.
 - 1. Difficulty of acquiring the ability to do the job.
 - 2. Unpleasantness of the task. (Special term: When workers get paid extra for doing unpleasant work, this is called a "compensating differential").
 - 3. Other occupational options.
 - F. Important point: Recall that all markets are interconnected. This means that wages can rise even in occupations where productivity is stagnant.
 - 1. The barber example
- V. Involuntary Unemployment as a Product of Regulation
- A. At the equilibrium wage, there are neither labor shortages nor surpluses; unemployment is voluntary (not in the sense that it is cause for celebration, but in the sense that people do not want to work more **at the market wage**).
 - 1. Analogy: Voluntary datelessness.
 - B. Note: "Full employment" has NOT been "assumed." The *assumption* is that the wage is flexible; the conclusion of full employment follows.
 - C. How could involuntary unemployment be possible in this model? *Only if regulation keeps the real wage too high!*
 - D. There are three regions on the graph.

1. At wages above the equilibrium, there is a surplus of labor and wages are "too high."
 2. At wages below the equilibrium, there is a shortage of labor and wages are "too low."
 3. At the equilibrium wage, the labor market clears.
- E. Note: *There is no region where workers are underpaid AND underemployed!*

VI. How Labor Market Regulation Works

- A. Suppose for example that the equilibrium wage is \$10/hr. If the government imposes a minimum wage of \$15/hr., there will be unemployment. Employers will want to hire fewer people than want to be hired at the market wage.
 1. Why not \$1M per hour?
- B. Similarly, if the government mandates new benefits (job security, safety, health, family leave, etc.) and forbids real wages to fall, involuntary unemployment will be the result.
 1. Demand falls, supply rises, so the old equilibrium wage is now above the new intersection of supply and demand.
 2. The Bryan Caplan Protection Act
- C. What happens if the government mandates benefits but allows the real wage to change? Then instead of causing unemployment, wages fall by more than the value of the benefits!
- D. Interesting case: In the U.S. during the Great Depression, real wages for the employed actually rose!
- E. In Europe, labor market regulations are typically very strict. Countries' enormous and persistent unemployment rates of 8, 10, or even 15%, compared to 4% for the U.S., are an important warning of the dangers of labor market regulation.
- F. In the U.S., the minimum wage plays a small role – about .5% of the workforce earns the federal minimum wage. Many states have higher minimum wages, so 1-2% of all workers are paid the minimum wage in their states.
- G. The U.S. labor regulations that matter most are mandatory health insurance... and discrimination law.

VII. Competitive Labor Markets and Discrimination

- A. Economists have analyzed the economics of discrimination and anti-discrimination law in detail. There is a large gap between the analytically-informed interpretation and the emotional story people like to believe.
- B. Let's focus on discrimination by **employers**. If it means anything, it means that they are willing to pay higher wages to members of liked groups and lower wages to members of disliked groups *assuming their marginal productivity is the same*.
- C. The last point is crucial. You can't compare average wages of different groups, and assume the lower-paid group is the victim of

discrimination. You have to control for differences in training and ability.

- D. Now suppose that employers dislike the Irish even though they are just as productive as non-Irish. Irish wages are accordingly lower. But can this situation endure?
 - E. Under these conditions, the less prejudiced an employer is, the higher his profits. Greed provides a strong incentive to judge people based on their marginal productivity.
 - F. In the long-run, the least prejudiced employers come to dominate the market because they are consistently more profitable.
 - 1. The case of illegal immigrant workers
 - G. If this is right, then what do anti-discrimination laws do? If they identify discrimination correctly, almost nothing, because it so rarely happens.
 - H. But if they identify discrimination incorrectly, the laws reduce "protected" groups' expected marginal productivity! It's a standard incidence problem. If I know you could sue me if I hire you, my demand for your services falls.
 - I. Discrimination suits at the hiring stage are very rare. Almost all cases are brought against firms that *did* hire members of protected groups, then were disappointed with the worker's performance.
 - J. If discrimination laws make group-varying wages legally dangerous, then anti-discrimination laws function like price controls. Lucky workers get above-market wages, and the rest have trouble finding a job at all.
- VIII. Unions and Occupational Licensing
- A. Unions are basically labor cartels. The goal is to push up wages by restricting labor supply.
 - 1. The hope is that non-members bear all of the unemployment, though in practice union members also suffer.
 - B. In free markets, unions exist, but are very rare. In practice, they heavily depend on government support.
 - C. Even with government support, private sector unions barely matter in the modern U.S. economy. Their share of the workforce has been falling for many decades, and is now about 5%.
 - 1. Public sector unionization, in contrast, has held steady for decades at about 33% (also about 5% of the workforce).
 - D. Occupational licensing works like unionization: raise wages for insiders, disemploy outsiders. But in the modern economy, almost 30% of American workers need a license to legally do their jobs.
 - E. Licensing clearly raises the wages of licensed workers; they make about 15% more than you'd otherwise expect. (Roughly as big a bonus as unionized workers get).
 - F. People often claim that occupational licensing raises quality and protects the public, but:

1. For many licensed occupations – barber, interior decorator, athletic trainer – this argument fails the laugh test.
 2. The average study of the effect of licensing on quality finds a moderately *negative* effect on quality. (Not so surprising: Licensing inhibits innovation).
 3. Higher quality is often not worth the extra price. Markets (or government *certification*!) let consumers decide for themselves. Licensing makes everyone pay full price.
- G. Unregulated markets have simple mechanisms to ensure quality:
1. Reputation
 2. Guarantees
 3. Lawsuits (much less important, but a useful last resort)
- H. We already heavily rely on these mechanisms – see eBay and Amazon Marketplace. Why can't we rely on them in labor markets?
- IX. Why the Standard Story of Labor is Wrong
- A. Most history books tell a story something like this:
1. In the days before the minimum wage, unions, etc., life was terrible for workers because employers paid them whatever they felt like paying them.
 2. But then government became more progressive, and changed the laws.
 3. Life is now better for workers because employers' greed has been tamed.
- B. This makes little sense.
- C. Employers compete with other employers; they care about their own profits, not the profits of employers in general.
- D. Why then were workers paid less in the past? Their marginal productivity was lower! As technology progressed, the marginal productivity of workers increased, and labor demand accordingly went up.
- E. Suppose government had imposed strict regulations when productivity was low? The result would have been higher wages for the lucky, but permanent unemployment (and probably starvation) for the rest.
- F. The problem of workers in the Third World isn't lack of regulation, but low productivity. Of course, low productivity can be a product of a crummy political system, but you can't solve that problem with labor market regulation.