Labor Market Equilibrium: First Lecture

LABOR ECONOMICS (ECON 385)

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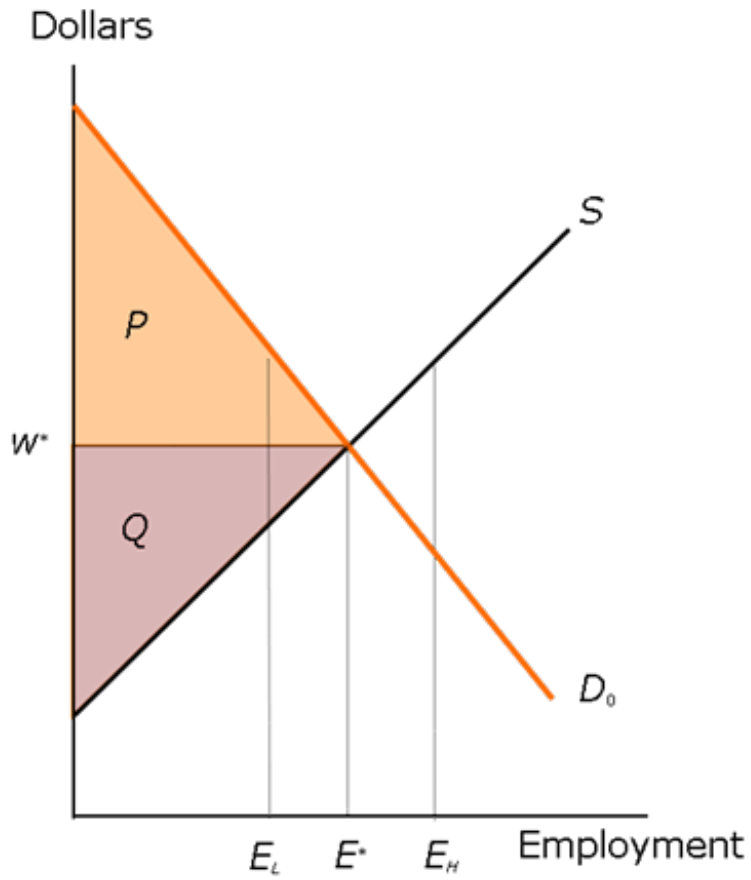
Introduction



So far it is understood that firms demand labor, paying a wage equal to the value of labor's marginal product. And individuals supply labor in exchange for that wage if it exceeds their reservation wage in an amount depending on their valuation of alternative time uses.

Labor demand is downward-sloping, and labor supply is upward-sloping. The intersection of the curves is an equilibrium.

The competitive equilibrium

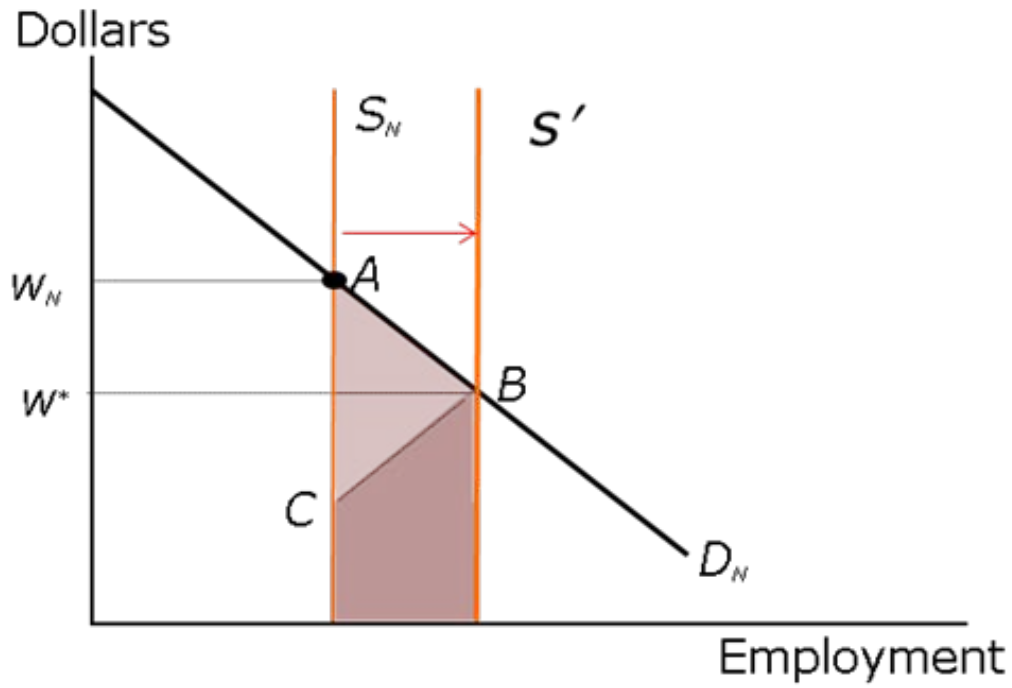
- No unemployment in the (competitive) equilibrium described above.
- The welfare properties follow the usual characterization from Principles of Micro; the area under the demand and above w* is the employers' gains from trade (“P”), and the area above the supply curve and below w* is the employees' gains from trade (“Q”). Finally the aggregate gains from trade (P+Q) is maximized at the competitive equilibrium.
  - No other wage level or employment level will yield as large a level of overall welfare in this market. This is the "invisible hand" described by Adam Smith leading firms and individuals to a socially optimal outcome.

Equilibrium and disequilibrium

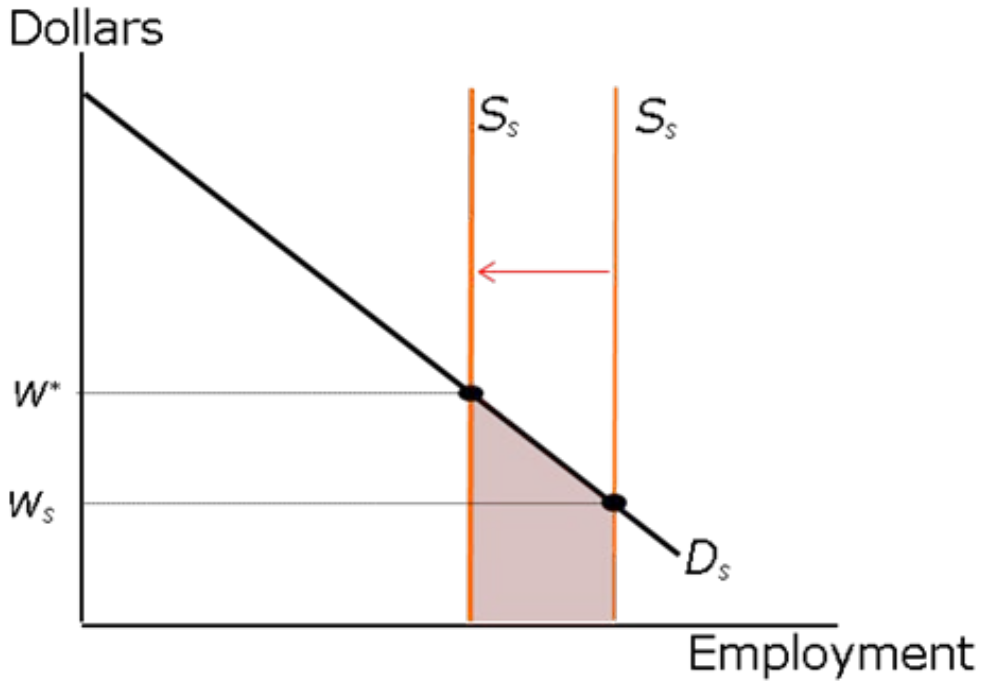
Wage adjusts readily to eliminate disequilibrium (surpluses and shortages).

- Also supply and demand adjust to eliminate price (wage) discrepancies in arbitrarily divided markets for an identical good.
  - Geographic and inter-industry differences in wage should be gradually eroded by labor and firm mobility.
  - Consider two regions in the same country (graph on next slide)—where demand for labor is the same in each. However the supply curves are different, resulting in higher wages for the region with lower supply.

Wage differences in arbitrarily divided markets



(*a*) The Northern Labor Market



(*b*) The Southern Labor Market

Migration links divided labor markets

- Workers in the low wage region will not take long to realize that they can earn a higher wage in the neighboring region. This provides them an incentive to move to the high wage region.
- When they do this, it increases supply in the high wage region and decreases supply in the low wage region. This tends to decrease wage in the former place and increase it in the latter.
- The migration of workers in this fashion continues until the incentive (wage discrepancy) is eliminated and both regions have the same wage, (w*).

Migration is efficient

- The migration of workers according to where wage is highest is efficient. Wages reflect the value of the marginal product, and when laborers migrate (seeking high wages) they are seeking their most valuable use.
  - Even though migration decreases the wage for workers already in the high wage region, it increases the wage for the migrants and the people who remain in the low wage region. Together these increases outweigh the decrease for the first group. On balance the effect on social welfare is positive.
  - The post-migration equilibria represent a more efficient allocation of resources (labor) than pre-migration did.
    - Note: the same thing could be accomplished by the migration of capital; demand would shift to equalize wages instead of supply. Capital is typically considered less mobile than labor, though, so I consider the migration of labor here. Plus this is a labor economics course—not a capital economics course.

How migration erodes wage differences

- If there is immigration from an external ("third") source, movement between the two regions is unnecessary. Borjas* and Cadena & Novak** show that incoming immigrants locate in regions with relatively high wages, bidding them down to parity with lower wage regions.
  - Enrico Morretti explains how the same would apply to high skill and low skill labor markets if the U.S. would allow more skilled immigrants in.

*"Does Immigration Grease the Wheels of the Labor Market?" 2001. Brookings Papers on Economic Activity. Accessed from: http://www.hks.harvard.edu/fs/gborjas/publications/journal/Greasing_the_Wheels.pdf.

**"Immigrants Equilibrate Local Labor markets: Evidence from the Great Recession." Cadena, Brian and Brian Kovak. 2013. NBER Working Paper. Accessed from: http://www.nber.org/papers/w19272.

Conclusion

- Examining migration foreshadows the path of the rest of this course. Dividing labor markets according to *meaningful* differences exposes some of their most interesting features.
  - Jobs differ. How do employees decide between jobs with different attributes?
  - Employees differ. How do employees differentiate themselves, e.g., according to skills and "migrate" from one market to another?
  - Each geographical area has its own labor market. This is the next lecture, focused on immigration.
- Then—before we start dissecting the other ways of differentiating labor markets—there are a few loose ends to tie up when it comes to equilibrium: the 3rd and 4th lectures about this chapter.
  - How government policies affect the equilibrium.
  - What happens when you relax the assumption of perfectly competitive:
    - Output markets?
    - Labor markets?