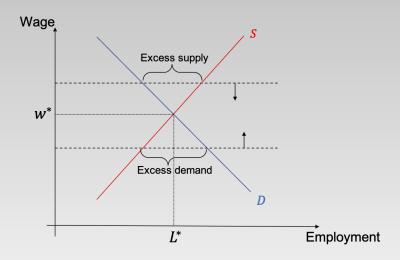
# Simple Demand and Supply Analysis

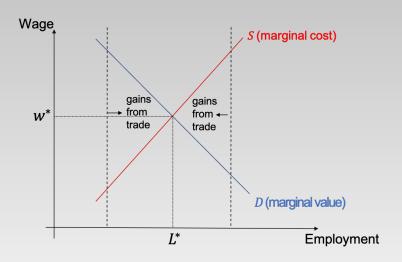
### Web Page Designers

- Lots of employers who want to have this service (either in-house or contract out)
- Lots of potential workers with this skill
- no market participant has significant market power—wage-taking behavior in a competitive labor market

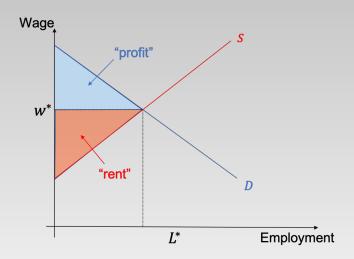
## Determination of Market-Clearing Wage



### Another Angle



### Labor-Market Rents

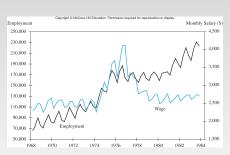


#### The Osaka-Driver Paradox

- Naomi vs. the school bus driver
- Robert Lucas and the dean(s)
- competition and ex post rent appropriation due to immobility of labor

## Application: The Alaskan Pipeline Project

- Construction of Alaskan Pipeline in 1974–1977 lead to very large increase in labor demand
- rightward shift in demand induced movement along the labor supply curve
   → wage increased and employment increased
- increase in employment comes from
  - higher LFPR among Alaskans
  - increased migration into Alaska



### Black Death in England

- the black death in 1348–1351 England killed 17–40 % of the English population
- leftward shift in supply induced movement along the labor demand curve to wage increased (by 50–100 %) and employment decreased
- can also think in terms of factor proportions: land-labor ratio increased substantially

### Application: Who is Underpaid/Overpaid?

- Management consultants have very elaborate systems of "job evaluation" to
  determine how important different jobs are in an organization and this is
  often used as a major input to determine pay (especially in the public sector),
  e.g., the Hay Guide Chart, but
  - marginal product is notoriously difficult to measure
  - scarcity and supply factors are ignored
- Competitive model suggests that there will be excess demand if workers are underpaid and excess supply if they are overpaid
- Why not look at
  - quit rates
  - vacancy application rates

### Application: Supply Elasticity of Military Officers

- Ending the draft (conscription) and relying on a voluntary armed force can be very expensive if supply of labor to military service is highly inelastic
- How can we estimate supply elasticity if every military officer (of the same rank) is paid the same?
- Although there is no variation in nominal wages, there are variations in relative wages
  - different locations have different costs of living
  - military wage is rigid but civilian wages are not, and it is the ratio between these wages that determine people's decision to join the armed forces or not
- Study finds that 10% increase in civilian pay reduces ROTC (Reserve Officers' Training Corps) enrollment by 20%

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