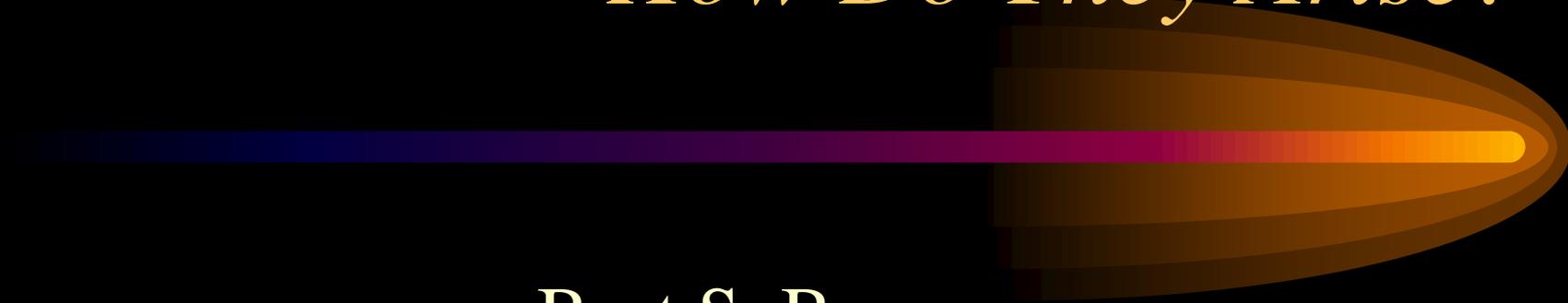


What Are Labor Shortages and How Do They Arise?



Burt S. Barnow
Johns Hopkins University

Prepared for the Symposium on Labor Shortages
and Comprehensive Immigration Reform

Washington, DC , May 20, 2009

What Is a Labor Shortage?

- No universal definition
- Economists generally view a shortage as a situation where $D > S$ at prevailing wage for a sustained period
 - This implies “excess” vacancies, but how many?
 - How long must the disequilibrium go on before considered a shortage?
 - Should time to fill vacancies be a criterion?
 - When is a market tight v. having a shortage?

What Is a Labor Shortage? (cont)

- “Social demand shortage”: less than we would like to have, but market clears; not a shortage in economic sense
- Some have argued that monopsonies can result in shortages
 - In monopsony employers hire all they want
 - Monopsony more of social demand case

What Is a Labor Shortage? (cont)

- “Skills shortage” sometimes has different meaning than “occupational labor shortage”:
 - Green et al. use survey in UK to show that many employers use skills shortage to mean less skills than desired, not lack of workers
 - Shah and Burke note that employers view a shortage as presence of high vacancies, difficulty filling vacancies, or decline in skill levels of workers

What Is a Labor Shortage? (cont)

- Blank-Stigler define shortage as when supply increases less rapidly than number demanded
- Arrow-Capron define dynamic shortage as when steady upward shift in demand curve resulting in unfilled vacancies
- The Blank-Stigler and Arrow-Capron definitions are too narrow—increasing demand is only one explanation why market does not clear

Why Might Labor Shortages Arise?

- Increase in demand for labor with inability for supply to increase sufficiently or quickly enough
- Decrease in supply of labor to the occupation, perhaps due to retirement or movement to a similar occupation that pays better
- Restrictions in prices, such as is common in health sector where payments are made by third parties such as government or an insurance company
- Time lags that cause adjustments to take place too slowly to alleviate the shortage

Dimensions of a Shortage

- *Geographic scope*: Can be local, regional, national, or international
- *Longevity*: Look at how long the shortage has existed and how long you might expect it to last
- *Severity*: How many vacancies are there? How much work is not being done?
- *Sub-specialty shortage*: Is it all IT workers or just certain specialties?

Why Might Markets Adjust too Slowly?

- Slow reaction time by employers
- Slow response time by employers
- Slow reaction time by potential entrants
- Slow response time by potential entrants
- Restrictions on occupational entry by government or unions
- Restrictions on wage increases
- Limited capacity to train entrants
- Continuous increases in demand

Adjustments to Shortages by Employers

- Increase recruiting efforts
 - increase advertising in usual outlets
 - advertise in other media
 - expand the recruiting area
 - use public or private employment agencies
 - pay bonuses to employees who bring in workers

Adjustments to Shortages by Employers (Continued)

- Increase use of overtime
- Reduce minimum qualifications for the job
- Restructure work to use less of “shortage” occupations
- Substitute machinery and equipment for labor
- Train workers for the jobs

Adjustments to Shortages by Employers *(Continued)*

- Improve working conditions
- Offer bonuses to new workers
- Offer stock options to workers
- Improve pay and fringe benefits
- Contract out work
- Turn down work

How Do You Know a Shortage When You See One?

- Look for an increase in the *number* and *duration* of vacancies--if you can find the data
- Ask employers, but also ask workers
- Look for evidence of the adjustments described above--if missing, ask employers why
- Look at changes in wages, especially relative wages
- For government actions on immigration, rules are needed, not detailed studies