Thinking Like an Economist: Applied Labor Economics for a Principles of Economics Course

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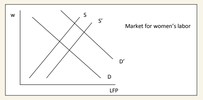
OBJECTIVES OF LESSON

1. Use economic theory to make predictions about labor market trends.
2. Use data to test hypotheses and draw conclusions.
3. Present work to peers for critique and discussion.

LESSON PLAN

1. Begin with a brief lecture on labor markets (i.e. Mankiw chapter 18).
2. Introduce the assignment and expectations. We recommend writing the objectives on the board along with the expected output (a 1-2 page handout or ppt slides) and grading criteria such as:
   - » Clear hypothesis
   - » Relevant data
   - » Appropriate theory (likely a S&D analysis)
3. Lead a class brainstorm around the question: "What trends would we expect to see in wages and employment from 1940 to 2010?" Likely responses include statements such as:
   - » Increase in women's labor force participation
   - » Decrease in the black-white wage gap
   - » Overall increase in real wages
   - » Increase in the wages of college educated workers relative only a HS diploma
   - » Decrease in manufacturing jobs/wages
4. Hand out packets of census data for students to browse (see data section).
5. Use the example of women's labor force participation to model how economists use theory to make predictions and data to test the veracity of those predictions. Specifically: A change in social expectations increases the supply of female workers which increases quantity and decrease wage. Observe that wages, particularly women's wages relative to men ,have not decreased as expected and revise the model by adding an increase in the demand as well.
6. Have students begin to work on their chosen labor market prediction. Support students as they start working and aim for each group to have the following by the end of class:
   - » A preliminary hypothesis
   - » A sketch of the theory behind their prediction
   - » An idea of what data they will need

STUDENT PRESENTATION EXAMPLES



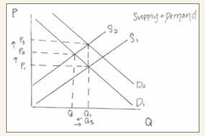
Changes in social expectations (a form of preferences) caused an increase in the number of women working outside of the home. This will shift the supply curve to the right.

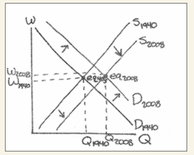
Changes in labor productivity (and hence the VMP) caused an increase in the number of firms looking to hire both male and female workers. This will shift the demand curve to the right.

Given that we see a rise in both price (wage) and quantity (participation), we conclude that the shift in demand must have been larger than the shift in supply.

Another possibility is that prior to 1970 the supply effect dominated and after 1970 the demand effect dominated.

Supply of minority labor increases when:
- » education becomes more accessible
- » cultural preferences for minority lawyers increase
- » minority lawyers are more integrated in legal system

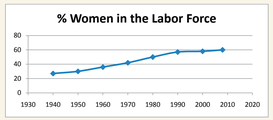




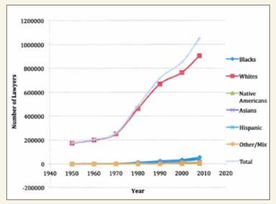
Market for female engineers
- S = supply of female engineers
- D = demand for female engineers
- W = wage earned by female engineers
- Q = quantity of female engineers in the market
- eq = equilibrium point

Example of Changes in Women's LFP and Wages

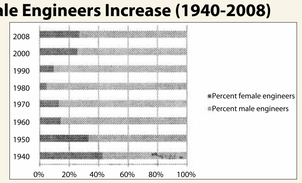
There are more women in the labor force now than in 1940



Number of Lawyers vs. Race (1950-2008)



Number of Female Engineers Increase (1940-2008)



LESSON TIMELINE

Day 1

30 minutes: **Lecture** on labor markets focusing on the basics of labor supply and demand.

5 minutes: Write lesson objectives on the board to introduce the assignment and **expectations.**

5 minutes: **Brainstorm** potential labor market trends and have groups select one or two to focus on.

5 minutes: Hand out some **data** and explain how/where to access additional information.

15 minutes: Use the **example** of women's labor force participation & wages to illustrate the assignment.

Remainder of class period: Allow students time to start **work** on projects and ask questions.

Homework

Groups prepare a 1-2 page handout or power point slides to present during the next class period

Day 2

Brief group presentations, the length of presentation will depend on class size/number of groups.

Recommendation: Allow approximately 5 minutes per group to present and 5-10 minutes after each group for class discussion/critique as this is often more valuable than the formal presentations!

Adaptations for larger classes:
- » Move presentations to your recitation/lab period
- » Use a "jigsaw" to have groups split up and present to each other

GETTING DATA

Obtain real public data for this exercise through:

1. Integrated Public Use Microdata Series (IPUMS)
   - » US Census Data from 1850-2010
   - » Microdata allows for the creation of specific tables by occupation, age, race, gender, industry, etc.
   - » Extract data from multiple years at once
   - » Custom syntax files for stats package, and online analysis system
   - » Data is free, easy to use, available online
   - » www.ipums.org
2. American FactFinder
   - » Published summary data from the US Census
   - » Separate tables for 1990, 2000, ACS
   - » www.factfinder.census.gov

COMMENTS FROM STUDENTS

"This was a good way to review supply and demand. I had to remember the difference between shifts vs movement along the curve."

"It helped that we had to come up with the theory on our own. It was great practice for the test."

"I wish we did more of these exercises. It was way better than lecture."

"I liked how we discussed each project and gave feedback. Now I want to take mine home and revise it! You should make this a bigger project rather than just a quick two day exercise."

"It was a bit of a challenge to have to use the vocabulary we have been studying in the presentations."

"I liked that we got to choose our own topics."