## **TOPIC 12: LABOR MARKETS**

### I. The nature of labor

- a. Labor is just like any other good. It is less intuitive for us, however, because while we buy many different things, we don't buy labor. We sell labor.
- b. In the market for labor, the demand curve is made up of hiring firms. The supply curve is made up of potential employees.
- c. Firms hire people to get work done, which allows them to increase revenue. This is the main reason for the demand for labor.

#### II. Demand for labor

- a. The *marginal product of labor* (MPL) is the additional amount of revenue a firm gets by hiring one more person.
  - i. Note that from the firm's perspective, this is the same as describing what their marginal benefit is.
  - ii. For firms, revenue equals benefit.
- b. Thus, the demand for labor is the MPL. In the market for factory workers, the demand curve is the MPL for each additional worker that a firm hires.

Workers	Total	MPL	Workers	Total	MPL
	Revenue			Revenue	
0	0		5	\$200	
1	\$50		6	\$225	
2	\$95		7	\$245	
3	\$135		8	\$260	
4	\$170		9	\$270	

- c. As always, you produce (in this case hire) until marginal cost equals marginal benefit (or when the wage equals MPL).
  - i. If the wage is \$30, how many people do you hire?

# III. Compensating differentials

- a. Because high wages can induce people to enter a market, wages rise if there are few people willing to enter a market.
  - i. For example, consider malpractice suits. Doctors are regularly sued for alleged incompetence or poor care, even if these suits are frivolous.

- ii. To combat the threat of suits, doctors increasingly do a lot of paperwork and extra tests. They spend less time interacting with patients and more time doing rather dull work.
- iii. As a result, the cost of being a doctor has increased, or the supply curve shifts to the left. In order to keep up the same number of doctors, you have to pay them.
- b. Fun jobs are jobs with lots of people interested in doing them. Thus the wage for that job falls.
- c. And less fun jobs means there are few people willing to do them. Thus the wage for that job rises.
- d. A *compensating differential* is a difference in wages that offsets differences in working conditions.
  - i. Thus, dangerous jobs pay more than less dangerous jobs.
  - ii. Boring jobs pay more than exciting jobs.
  - iii. Jobs with lots of flexibility pay less than jobs with little flexibility.
- e. Professors, given our education level, don't get paid that much. But we have some of the best working conditions in the world.

## IV. The gender earnings gap

- a. According to Census data<sup>1</sup>:
  - i. The median earnings for full-time year-round male workers in 2022 was \$62,350. For all male workers, it was \$52,770.
  - ii. The median earnings for full-time year-round female workers in 2022 was \$52,790. For all female workers, it was \$41,320.
- b. This results in an earnings gap of about 84 cents (for full-time workers) or 78 cents (for all workers). Why does this roughly 80-cent gap exist?
- c. People often jump to discrimination is the culprit and while discrimination certainly occurs, the discrimination story has serious explanatory problems.
  - i. On empirical grounds, it doesn't explain other realities of the labor market including:
    - 1. The earnings gap is virtually non-existent between women without children and comparable men.
    - 2. The earnings gap is larger for college-educated men and women.
    - 3. The earnings gap expands as men and women age.

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<sup>&</sup>lt;sup>1</sup> https://www.census.gov/library/publications/2023/demo/p60-279.html Table A-7.

- 4. The earnings gap varies widely by occupation—it doesn't exist at all for pharmacists, for example.
- ii. On logic grounds, there's tension between discrimination and profit maximization. Labor is often a major cost so why would firms be willing pay 20 percent more to employees just because they're men? It makes sense if customers are strongly bigoted (indeed, discrimination was a major reason for the gender earnings gap over half a century ago), but that's a harder pill to swallow today.

# V. So why a gap?

- a. The problem with the gender earnings gap as often reported is that it doesn't account for the different kinds of choices men and women tend to make. Most obviously, men tend to work in more lucrative occupations, including engineering, economics, and finance.
- b. There are also significant intra-occupational<sup>2</sup> differences—even in the same industry, the jobs people take can be very different; hours worked, availability, stress levels, etc. can vary widely.
- c. In 2023, Claudia Goldin earned a Nobel Prize for her work on women in the labor force and she points to "greedy jobs" as a major culprit for the gender earnings gap.<sup>3</sup>
  - i. A "greedy job" is a job where the worker is highly specialized and thus there are few workers that can take their place. These jobs tend to have long and/or irregular hours, high levels of competition, strict deadlines, frequent contact with colleagues and clients, and novel problems.
- d. Why do people take greedy jobs? Compensating differentials! These jobs tend to pay very well and, because of increasing marginal cost (the opportunity cost of people's time goes up the more time you demand), they pay very well even adjusted per hour of work. A job that requires twice as much time will pay more than twice as much, all other things being equal.
- e. To understand the role of greedy jobs in the gender earnings gap, Goldin encourages us to not think in terms of gender. It's more accurate to think in terms of it as a **gap between mothers and non-mothers**, rather than between men and women.

<sup>&</sup>lt;sup>2</sup> "Intra" means within, as in intramural (within a school) or intravenous (within a vein). "Inter" means between, as in international (between nations) or interfaith (between faiths). Inter-occupational differences account for the different occupations men and women tend to work in. Intra-occupational differences account for the different kinds of work men and women do in the same kind of occupation.

<sup>&</sup>lt;sup>3</sup> Goldin's excellent book, *Career and Family*, goes into a great deal of detail on this and other topics. I posted a summary and highlights on Facebook <u>here</u>.

- f. Children are need machines and when a couple has a child (through birth or adoption), someone needs to have the time to take care of the kid. Women (for whatever reason) are more likely to step back from a greedy job. They might still work, but they will be paid less.
- g. Note how the greedy jobs framework answers many questions the discrimination story can't:
  - i. The earnings gap is virtually non-existent between women without children and comparable men. Without kids, there's no pressure for women to leave a greedy job.
  - ii. The earnings gap is larger for college-educated men and women. A greedy job often requires at least a college degree.
  - iii. The earnings gap expands as men and women age. For college-educated women, motherhood tends to begin in the late 20s and early 30s.
  - iv. The earnings gap varies widely by occupation—it doesn't exist at all for pharmacists, for example. Sales, management, and administration tend to have many greedy jobs and so the intra-occupational gap is large. Engineering, science, computers have few greedy jobs and so the intra-occupational gap is small.
- h. None of this should be taken as saying that discrimination does not exist—it most certainly does. But mere existence does not translate into being a major factor in explaining the gender earnings gap.
  - i. Roughly one-third of the gap is due to inter-occupational differences.
  - ii. Nearly two-thirds of the gap is due to intra-occupational differences (greedy jobs).
  - iii. The small part that's leftover is discrimination and perhaps also gender differences in negotiation skills.