Econ 235: Labor Economics

James Green-Armytage, fall 2013

Review questions for final: chapters 9-16

New questions are marked with asterisks

Chapter 9 (questions 1-5 from reflection 5)

1. What does the present value of a payoff in five years depend on, aside from the dollar amount of the payoff?

2. What are some determinants of the decision to attend college?

3. Describe an empirical test that could estimate the average 'overtaking age'.

4. Why do the age/earning profiles of people with different levels of education 'fan out' from each other as age increases? Why are they typically concave in age?

5. Suppose that, at a particular job, the productivity of a low-ability worker is $\pi_L = 100$, and the productivity of a high-ability earner is $\pi_H = 370$. Suppose that the cost of education for a low-ability person is $c_L(e) = 3e$, and the cost of education for a high-ability person is $c_H(e) = 2e$, where e represents educational attainment. What values of e^* could firms require that would allow them to effectively distinguish the high-ability workers from the low-ability workers?

***6.** In words, how does a signaling model of education differ from a human capital model?

***7.** Explain the 'cobweb' model of labor market adjustment with the aid of a diagram, using the example of the supply and demand for workers with engineering degrees.

Chapter 10 (questions 1-4 from reflection 5.)

1. What personal characteristics are movers more likely to possess than non-movers?

2. How do immigrants to the US from countries with more-equal income distributions tend to differ from immigrants to the US from countries with less-equal income distributions? Why?

3. Describe two diametrically opposed 'naïve views' of immigration, and explain why neither is consistent with economic theory.

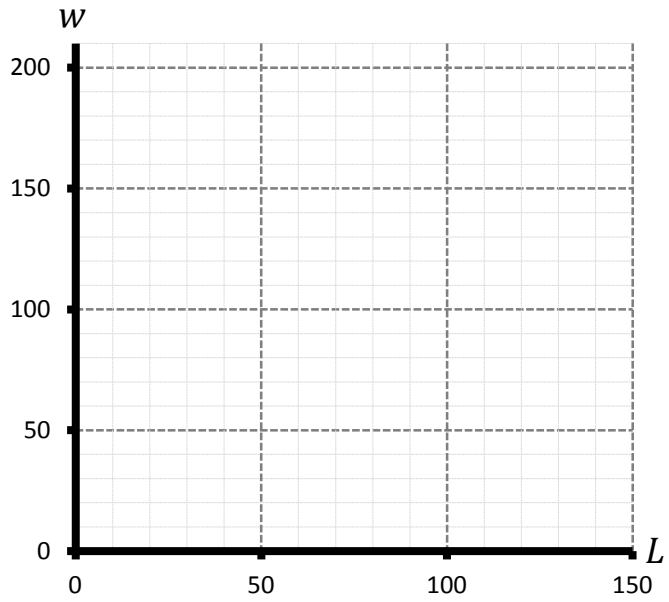
4. Who would be made worse-off by a change toward less-restrictive immigration policy? Who would be made better off? All in all, do the gainers gain more than the losers lose, or vice versa? Construct a clear argument in response to this question.

*__5.__ Consider a market for a particular type of labor, in a particular place. Demand for labor can be represented by the marginal revenue product of labor function $MRP_L = 210 - L$, where L is the quantity of labor. Domestic supply of labor, supply of labor from immigrants, and total supply of labor can be represented by the marginal cost of labor functions $MC_L^d = 10 + L$, $MC_L^i = 10 + 2L$, and $MC_L^t = 10 + \frac{2}{3}L$.

a) Find the equilibrium wage, employment, firm surplus, worker surplus, and total economic surplus if immigrants are not allowed to work.

b) Find the equilibrium wage, employment, firm surplus, domestic worker surplus, immigrant worker surplus, total domestic economic surplus (excluding immigrants' surplus), and total economic surplus (including immigrants' surplus) if immigrants are allowed to work.

c) On the blank graph below, draw MRP_L, MC_L^d, MC_L^t, firm surplus (FS), domestic worker surplus (WS^d), and immigrant worker surplus (WS^i). Draw a thick boundary around the area of the graph representing the change in domestic economic surplus.



d) Quantify the gains and losses by different groups that result from immigration. Does allowing immigration increase or decrease domestic economic surplus? Aside from the numbers, explain the intuition behind your answer as clearly as possible.

Chapter 11 (questions 1-3 from reflection 6)

1. What are the pros and cons of paying workers according to direct measures of their productive output, as opposed to the amount of time they work…

a) from the perspective of employers?

b) from the perspective of employees?

2. What are 'promotion tournaments'? What are their pros and cons?

3. From the perspective of an employer, what are the benefits of offering compensation schemes that systematically underpay workers (relative to their productivities) when they are relatively new to the job, but promise to overpay them when they have been there longer?

*__4.__ Explain how efficiency wages might differ from workers' reservation wages, even in a competitive market.

Chapter 12 (from reflection 6)

1. What are the earnings differences between male and female workers in the US, currently? What are the earnings differences between members of different ethnicities?

2. Should all differences between earnings according to race, gender, etc. be attributed to discrimination? If not, what are the other factors that might account for these differences?

3. To what extent can we expect competitive labor markets to prevent discrimination on the basis of gender, ethnicity, etc.? That is, what types discrimination should be reduced by market competition, and what types are likely to remain?

4. What forms of discrimination are currently illegal in the US? What forms of discrimination are legal?

Chapter 13

*__1.__ Suppose that in a particular labor market, emand for labor is defined by the marginal revenue product of labor curve $MRP_L = 14 - L$, and workers' reservation wages are given by the marginal cost of labor function $MC_L = 2 + L$, where L is the quantity of workers employed.

a) Suppose that firms behave in a perfectly competitive manner, but workers are controlled by a single union, which chooses a wage in order maximize the value of worker surplus, while being subject to the constraint that $MRP_L = w$. What wage should they choose, and what are the resulting values of L, worker surplus (WS), firm surplus (FS), and total economic surplus (TES)?

b) Why might maximizing worker surplus not be the precise goal of a union?

c) Find the efficient quantity of labor, L^o, and the resulting marginal revenue product of labor, w^o. How much would the firms be willing to pay to the union in exchange for allowing the wage to drop to w^o? If the union gives this money back to its workers, what are the new values of worker surplus (WS), firm surplus (FS), and total economic surplus (TES)?

Chapter 14

*__1.__ Construct a narrative by which each of the following might contribute to unemployment:

a) Minimum wages

b) Labor unions

c) Efficiency wages

d) Payments to low-income people, including unemployment insurance, food subsidies, Medicaid, TANF, etc.

*__2.__ Define and explain structural unemployment, aside from the narratives above.

*__3.__ Define and explain frictional unemployment.

Chapter 15

*__1.__ Name and explain a few different statistics that can be used to measure inequality.

*__2.__ Explain the ways in which technological growth can increase inequality, by making some worse off while others are made better off. Under what circumstances can technological growth be Pareto-improving?

Chapter 16

*__1.__ There are two neighboring countries: Florin and Guilder. In a day, a Florinese worker can produce either 20 loaves of bread or 4 bottles of wine, and a Guilderian worker can produce either 9 loaves of bread or 3 bottles of wine.

a) Which country has an absolute advantage in what?

b) Which country has a comparative advantage in what?

c) What trades of bread for wine might be mutually beneficial for both Florin and Guilder?

*__2.__ Suppose that a country with a high capital to labor ratio becomes increasingly open to trade with a country with a low capital to labor ratio. Discuss the likely effects of this. Who is most likely to be made better off, and who is most likely to be made worse off, in the short run?

*__3.__ What are some policies that can be used to ameliorate the effect of trade on those who are made worse off?