

SOLUTIONS TO TEXT PROBLEMS:

Quick Quizzes

1. A compensating differential is a difference in wages that arises to offset the nonmonetary characteristics of different jobs. Examples include coal miners who earn extra wages to compensate them for dangerous working conditions, workers on the night shift who get paid more than day-shift workers, and professors who are paid less than lawyers and doctors.

More educated workers earn more than less educated workers because they are more productive, so employers are willing to pay them more, and because more education may signal greater ability.

2. It is hard to establish whether a group of workers are being discriminated against because there are many reasons other than discrimination for wages to differ across workers, especially differences in human capital and job characteristics.

Profit-maximizing firms tend to eliminate discriminatory wage differentials because if some set of workers were being discriminated against, it would be in the interest of profit-maximizing firms to hire those workers with lower wages. But that, in turn, would raise the wages of those workers until the wages of all similar workers were equal.

A discriminatory wage differential might persist if customers discriminated between people, as may have been the case with old baseball cards, in which the prices of the baseballs cards differed depending on the race of the player depicted on the card.

Questions for Review

1. Coal miners get paid more than other workers with similar amounts of education because their higher wage compensates them for the dirty and dangerous nature of coal mining, as well as their long-term health problems. As a result, they earn a sizable compensating differential.
2. Education is a type of capital because it represents an expenditure of resources at one point in time to raise productivity in the future.
3. Education might raise a worker's wage without raising the worker's productivity if education provides a signal that the worker has high ability.

4. The conditions that lead to economic superstars are: (1) every customer wants to enjoy the good supplied by the best producer; and (2) the good is produced with a technology that makes it possible for the best producer to supply every customer at a low cost. Because one dentist could not supply every customer, you would not expect to see superstars in dentistry. But because copies of music can be made at low cost, you would expect to see superstars in music.
5. A worker's wage might be above the level that balances supply and demand because: (1) minimum-wage laws raise wages above the levels that some workers would earn in an unregulated labor market; (2) unions may have market power to raise wages above their equilibrium level; and (3) a firm may find it profitable to pay an efficiency wage, which exceeds the equilibrium wage, because doing so raises productivity.
6. Deciding whether a group of workers has a lower wage because of discrimination is difficult because people differ in other attributes, such as the amount of education they have, the amount of experience they have, and the possibility of compensating differentials.
7. The forces of economic competition tend to ameliorate discrimination on the basis of race, since business owners who care only about making profit are at an advantage when competing against those who also care about discriminating.
8. Discrimination can persist in a competitive market if customers have a preference for discrimination. For example, if customers prefer blonde waiters to brunettes, restaurants will prefer to hire blonde waiters and they will discriminate against brunettes.

Problems and Applications

1.
 - a. The opportunity cost of taking a job as a summer intern that pays little or nothing is the wage that the student could earn at an alternative job.
 - b. Despite the low wages, students are willing to take internships because an internship might help them land a permanent job with the firm or the government later. Also, the internship enhances the student's resume. Finally, the student may gain valuable on-the-job training.
 - c. You would expect that students who were interns make higher incomes later in life.
2. The single minimum wage might distort the labor market for teenage workers more than for adult workers because: (1) teenagers have a lower value of marginal product, so it is more likely that the minimum wage will be above their value of marginal product; and (2) the demand for teenage labor is more elastic than for adult

labor, so the minimum-wage law distorts the market more. The minimum wage affects those individuals who are least skilled and least experienced and these characteristics certainly apply to teenagers.

3. People with more experience usually have had more on-the-job training than others with the same formal education but less experience. Such training increases the value of the marginal product of their labor. Job tenure is also valuable, since people gain job-specific knowledge or a specialization in knowledge that is useful to the firm.
4.
 - a. Economics professors may receive higher salaries than professors in some other fields because they have better opportunities outside academia. For example, they could find jobs in the private sector or the government.
 - b. Differences in teaching loads can make up for lower pay. If professors in all fields are paid the same, the pay level is probably below what economics professors could earn elsewhere. To attract economics professors, the university would have to offer them some other compensation, such as a lower teaching load.
5. Sara should take the other job if Steve's attitude problem is worth \$10,000 or more to her. She should view the \$10,000 difference in salary as a compensating differential for putting up with Steve. The question Sara must answer is this: Is \$10,000 enough of a compensating differential? If so, she will stay in her current job. If not, she will take the new job.
6. Under the signaling theory, you would rather have the degree and not attend the university. But under the human-capital theory, you would rather attend, even though doing so would be a secret.
7. The development of recording devices led to a superstar phenomenon in which the best musicians were paid significantly more than average musicians. So the incomes of the best musicians rose and the income of the average musician fell.
8. Yes, his behavior is profit maximizing. He is hiring labor at a lower cost. You might claim that Alan is despicable because he is discriminating against men. Some might claim that Alan was admirable, though, since he is maximizing profit and giving women a better opportunity to find a job. If more employers were like Alan, the wage differential between men and women would shrink, as employers would be competing for women workers, so women would have as many job options as men. Ultimately, the wage differential could disappear. Other firms at the time may not have followed his strategy because their customers may have preferred male consultants.

9. It is pretty difficult to discriminate against people without seeing some characteristic of theirs that you do not like. It is possible to discriminate against the type of person who serves you a meal in a restaurant because you can see him or her. But you cannot discriminate against people who make manufactured goods that are sold in retail stores because you can't observe who has produced the goods.

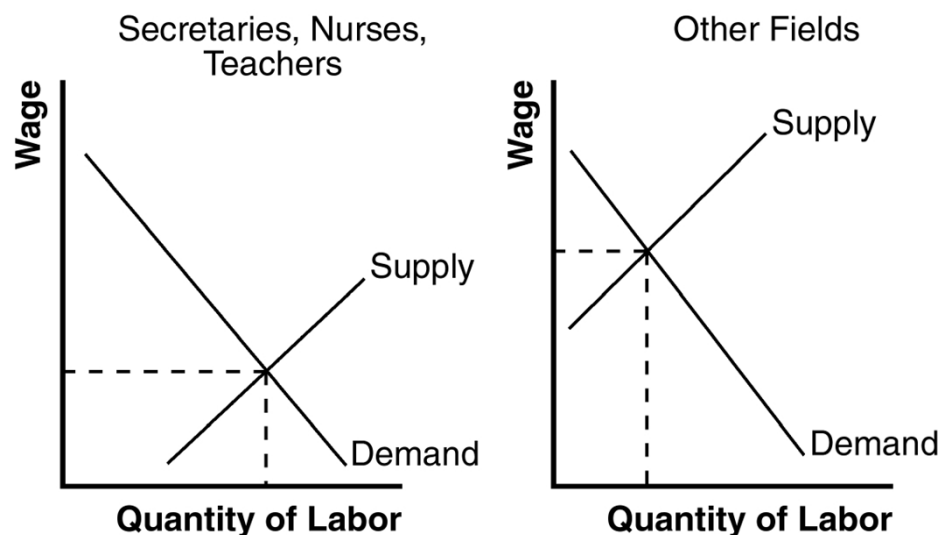


Figure 1

10. a. Figure 1 shows a situation in which young women are channeled into careers as secretaries, nurses, and teachers. The left panel shows the labor market for secretaries, nurses, and teachers, and the right panel shows the labor market for other fields. The large supply of people in the secretarial, nursing, and teaching fields depresses the wage in those fields. On the other hand, the smaller supply of labor in other fields raises the relative wage.
- b. Over time, if both men and women pursue more varied fields of work, the wages across fields should equalize. The supply of labor in the market for secretaries, nurses, and teachers will fall and the supply of labor in other fields will rise. Thus, the average wages of men should decline relative to the average wages of women.
11. By the "pattern" of market work, O'Neill means that many women drop out of the labor force for several years to start families and to care for their children when they are young. This means they have less experience and job tenure, on average, than men of the same age and education. Consequently, they are paid less.
12. If brunette workers do not like working with blonde workers, a blonde worker's marginal product of labor is likely to be lower, since the firm's output will not be as high compared to the case if the firm had a brunette worker instead. Thus firms might find that blonde workers are not worth as much and may reduce their wages

relative to brunette workers. A profit-maximizing entrepreneur could create a firm using all blonde workers, so there would be no frictions between brunette and blonde workers. If there were many such entrepreneurs, the wage differential between brunette and blonde workers would disappear over time.