ECO361: LABOR ECONOMICS

FINAL EXAMINATION

DECEMBER 15, 2008

Prof. Bill Even

DIRECTIONS.

The exam contains a mix of short answer and essay questions. Your answers to the 13 short answer portion of the exam (3 points each) should be listed on the first page of your bluebook, with answers to the essay questions following.

1. Based upon the economic model of migration, we would predict that a worker would be more likely to move to another location for a new job if:
   a. Interest rates are lower
   b. The worker has a longer expected work-life (i.e. plans to retire at a later age).
   c. There is not a second earner in the family.
   d. All of the above

2. The majority of legal immigrants into the U.S. over the past several years are granted admission based upon:
   a. Family sponsorship (i.e. a relative to a U.S. citizen)
   b. Employment based preferences (i.e. "special skills")
   c. Diversity based programs (i.e. admission because the person comes from an underrepresented group)
   d. Political refugees

3. Since 2000, the largest share of legal immigrants into the U.S. came from which region?
   a. Africa
   b. Asia
   c. Europe
   d. North America (excluding the U.S.)

4. Suppose that immigration into the U.S. is expanded. For workers that are gross substitutes to the immigrant labor, we should expect to see especially large decreases in wages for natives in
   a. labor intensive industries since labor demand will be elastic in those industries.
   b. labor intensive industries since labor demand will be inelastic in those industries.
   c. capital intensive industries since labor demand will be inelastic in those industries
   d. capital intensive industries since labor demand will be elastic in those industries

5. Suppose that immigration into the U.S. is expanded. For workers that are gross substitutes to the immigrant labor, we should expect to see especially large decreases in wages for natives in industries where:
   a. labor supply is very elastic or labor demand is very elastic
   b. labor supply is very elastic or labor demand is very inelastic
   c. labor supply is very inelastic or labor demand is very elastic
   d. labor supply is very inelastic or labor demand is very inelastic

6. Increased immigration will lead to:
   a. lower wages and employment for all native-born workers
   b. lower wages and employment for native-born workers who are gross complements to the immigrants, but higher wages and employment for native-born workers who are gross substitutes to the immigrants.
   c. higher wages and employment for native-born workers who are gross complements to the immigrants, but lower wages and employment for native-born workers who are gross substitutes to the immigrants.
   d. higher wages and employment for all native-born workers.

7. In a monopsonistic model of labor market discrimination, workers with a higher cost of moving have more
   a. elastic labor supply and are paid lower wages than workers with high moving costs.
   b. inelastic labor supply and are paid lower wages than workers with high moving costs.
   c. elastic labor supply and are paid higher wages than workers with high moving costs.
   d. inelastic labor supply and are paid higher wages than workers with high moving costs.

8. Suppose that a firm pays an efficiency wage. Other things being the same, we should expect that the size of the efficiency wage premiuim would fall if:
   a. the cost of monitoring workers rises
   b. the cost of monitoring workers falls.
   c. the value workers place on cheating (or shirking) rises.
   d. either a or c occurs
   e. either b or c occurs.

9. Based on the information presented in class, the ratio of female to male earnings in the U.S.
   a. has been rising over the past 40 years.
   b. is lower among full-time workers than among all workers.
   c. Was below .5 in the late 1990s for full-time workers.
   d. All of the above

10. Which of the following have contributed to <u>greater</u> wage differences between men and women over the past 20 years?
   a. Increases in the wage premium for education
   b. Increases in the wage premium for experience
   c. Increases in the wages paid in “male” jobs relative to those in “female” jobs
   d. All of of the above.
   e. None of the above.

11. Economists frequently argue that if a firm discriminates against minorities, the firm will pay for their discriminatory behavior by reduced profits. Which of the following sources of wage discrimination could actually increase the firm’s profits?
   a. Customer discrimination
   b. Statistical discrimination
   c. Monopsonistic discrimination
   d. All of the above
   e. None of the above.

12. Suppose that an economist uses wage data and estimates the following regression equation:

W = 6 + .2*EXP + .1*EDUC

Where EXP is a person's years of experience and EDUC is a person's years of education. If the average level of experience and education are 10 years and 14 years for men, and 6 years and 13 years for women, how much of the wage gap between men and women can be explained by differences in education and experience? (Give your answer to the nearest penny.)

13. According to the article discussed in class examining a particular firm, the turnover of women was (more, less) sensitive to wages than that of men. This implied that women had more (elastic, inelastic) labor supply and thus the firm would have an incentive to pay them (more, less) than men.

a. More; elastic; more.
b. More; inelastic; more
c. Less; elastic; less
d. Less; inelastic; less.
e. None of the above.

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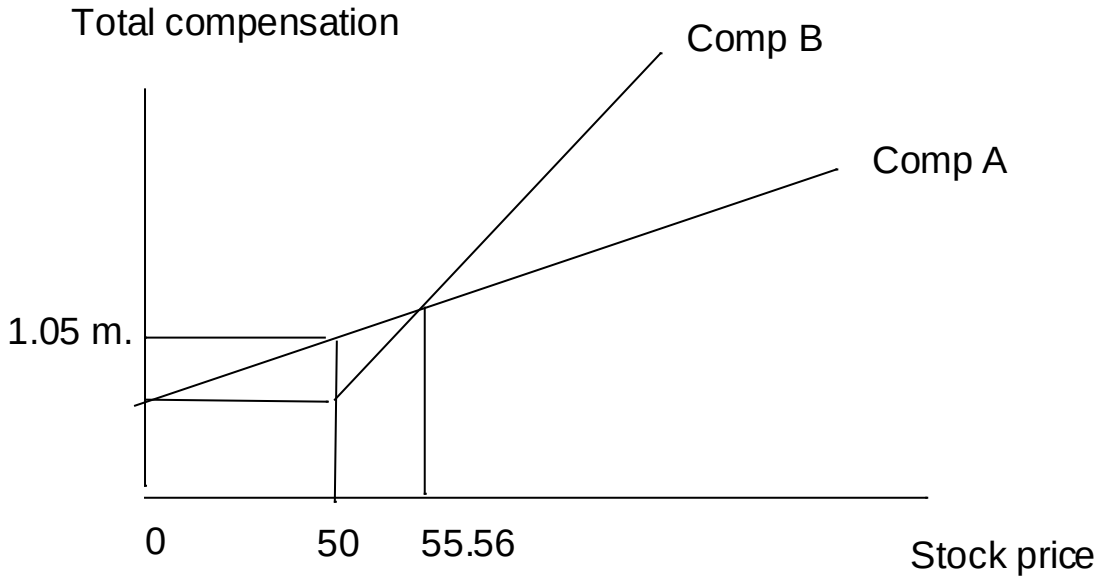
Final Examination

FOR ALL YOUR ANSWERS TO THE ESSAY QUESTIONS, BE SURE TO USE MAKE USE OF RELEVANT THEORIES/CONCEPTS DISCUSSED IN THE LABOR ECONOMICS COURSE. THE QUALITY OF YOUR ANSWER WILL BE DEPEND LARGELY ON YOUR ABILITY TO IDENTIFY THE RELEVANT CONCEPT(S) DISCUSSED IN THIS CLASS.

Answer 3 of the next 4 (10 points each).

1. Suppose the compensation committee for a corporation is preparing to hire a new CEO and debating which of two pay packages to offer. Package A includes an annual salary of $1 million plus 1000 shares of stock. Package B also has a salary of $1 million, but has 10,000 options to purchase the company at its current price of $50.
    a. Draw a graph showing the relationship between the CEO's total compensation (vertical axis) and the stock price (horizontal axis) for the two pay schemes. Clearly label the two compensation methods in your graph.



    b. Discuss how a switch from the stock to stock option plan would alter CEO behavior.

A switch from stock to stock option increases the reward to pushing stock price beyond $50, but eliminates any penalty if the stock drops below $50. Consequently, with the stock options, the CEO has more incentive to take on high risk projects that would have a greater probability of generating a very high or very low stock price. The stock plan would lead to more conservative behavior on the part of the CEO. Moreover, if the stock price falls below $50, stock options increase the incentive to take on high risk projects because the CEO will experience no penalty for further declines in the stock price, but would be rewarded if the high risk project succeeds and the price rises above $50.

    c. Discuss how a switch from the stock to stock option plan would affect the type of CEO that would be willing to accept the job.

Switching from stocks to stock options will draw CEOs that are more confident about their ability to increae the price above $55.56. A risk averse CEO is likely to prefer the stock plan since the variation in their pay will be less with stock plan than with the stock option plan.

2. As discussed in class, some labor economists have argued that Henry Ford's $5/day jobs in the early 1900s represented efficiency wage premia.
    a. Precisely define what an efficiency wage premium is and discuss the kind of evidence that was used to support the contention that the $5/day was an efficiency wage.

        An efficiency wage is a wage payment that exceeds the worker's next best alternative wage.

    b. Explain how payment of an efficiency wage premium could actually increase Ford's profits.

        By paying workers an efficiency wage premium, they were willing to put forth more effort because they knew that if they were dismissed from their job, they could be immediately replaced by one of the many potential employees waiting outside the company gates. The increase in output from the additional effort could have a greater value than the increase in wages paid as a result of the efficiency wage premium.

    c. Describe the features of auto manufacturing that could make an efficiency wage policy more profitable than it might be in many businesses.

        The auto industry had assembly lines that would make output very sensitive to the effort of any individual on the assembly line. Consequently, an efficiency wage scheme that increases the effort of all the workers on the line could pay especially high dividends in terms of added output. Also, the training necessary for a worker on the line could make turnover costly which also increases the rewards to paying an efficiency wage premium.

3. Suppose the compensation committee for an automobile manufacturer is preparing to hire a new CEO and debating which of two pay packages to offer. The two compensation methods are described below:

    Comp-A = $1 million + (P-$50)*10,000
    Comp-B = $1 million + (P-Pindex)*10,000

    P is the corporation's stock price which is currently $50. Pindex is an index of stock prices for competing auto manufacturers. Its value is also currently 50.

    a. If CEOs are risk averse, which of the above compensation schemes would the CEO prefer? Why?

        If CEOs are risk averse, they are likely to prefer the second compensation package. The reason is that there are many shocks to the economy that will affect the price of the company's stock and the market as a whole. For example, during a recession, one would expect that both the car company's stock price and the price index for the automobile industry would drop. With Comp-B, the CEO is not penalized for this – nor is she rewarded for shocks that increase the price of all car company stocks. Overall, however, the CEO would prefer Comp-B because it reduces the riskiness of compensation by insulating her from any shocks that affect the stock prices of all auto companies.

    b. How could Comp-B potentially encourage the CEO to undertake activities that actually hurt the company's stock price?

        There are two ways to increase the CEO's compensation with Comp-B: (1) increase her car company's stock price; or (2) decrease the stock price of other car companies more than the stock price of her own car company. It is the second incentive that presents the problem. For example, the CEO of the car company could experience an increase in pay by lobbying for legislation that hurts the entire auto industry, so long as it hurts the competition more than her own company.

4. Suppose that a clothing retailer pays all of its sales people an hourly wage of $8 plus a 10% commission on all clothing sales. It has decided that it will change its commission structure so that workers will get $8 per hour, plus 5% of all sales by the worker. Another 5% of sales by all workers will be put in a pool and the pool will be split between all the workers at the end of the month in proportion to their hours worked. For simplicity, assume that all workers have the same number of work hours per month, so that everyone gets the same share of the common pool.
    a. Desccribe how this change in pay structure is likely to affect employee productivity (sales).

    It is unclear how this change will affect sales. On the one hand, the new system reduces incentives for employees to increase their own sales since the commission on own sales is reduced from 10% to 5% + 5%/n where n is the number of employees. On the other hand, employees have a greater incentive to improve total sales. This will encourage more cooperation among the sales staff and could enhance sales. Depending upon the relative importance of cooperation versus individual effort, sales could rise or fall.

    b. Are employees likely to prefer the old or new method of pay? Explain.

    Assuming that the change in the system has no impact on total sales, the employees with above average sales will see a cut in pay and be less happy. In fact, they may choose to go to a competing firm where pay is based more on individual performance. The people with below average sales would prefer the new system. At the same time, if cooperation among sales workers is especially important to sales and/or it improves the work environment, it's conceivable that all workers would prefer the new system. Nevertheless, even if total sales improve, the most productive sales workers will be the least happy with the new commission structure.

Answer 5 of the next 6 questions (6 points each)

5. Explain how increased immigration could potentially increase the wages of some workers. Use the relevant terminology developed in this class in your explanation.

   An increase in immigration will increase labor supply in some labor markets and reduce wages. At the same time, this could increase demand for any gross complement to the labor where wages fell. The theory is that if wages for one type of labor fall, this reduces the cost of production in the industry these workers are employed, increases product supply in these industries, and creates a scale effect driving up the demand for other kinds of labor – the gross complemenets to the immigrant labor.

6. Describe why a firm that pays an efficiency wage may have an incentive to discriminate against certain types of workers in order to maximize profits. Be sure to describe the types of workers that the firm would want to discriminate against.

   Efficiency wages create an incentive for workers to put for the more effort since the worker knows that he will lose the value of the efficiency wage premium if he shirks and is dismissed. The value of the efficiency wage premium is greatest when the worker has a long career ahead of him. If the worker is about to quit or retire, the efficiency wage premium will have little effect on behavior since the worker has little to lose from dismissal. Consequently, a firm that pays an efficiency wage premium to incentivize workers will want to hire workers who place a significant value on the premium. This means the employer will avoid workers who are likely to quit soon after hiring – for example, older workers or workers who are expected to have a high probability of quitting soon.

7. Describe why "peer effects" in the classroom are an important consideration in evaluating whether a voucher system would improve educational outcomes.

   Voucher systems could cause a sorting of students into "high" and "low" ability schools. Some have argued that asymmetric peer effects exist and that a sorting of students into separate ability groups would hurt overall performance. Asymmetric peer effects would exist if, for example, low ability students benefit from being with high ability students more than high ability students are harmed by being with low ability students.

8. Give a brief description of the research (discussed in class) that was used to determine whether employers in Chicago and Boston discriminated against African-American and Hispanic workers.

   This research was based upon an experiment where resume's were sent out with identical credentials but names that might be associated with different races. The results suggested that the resume's with names that might be associated with African Americans were less likely to receive a call back from the employer and suggested that some employers do discriminate on the basis of race.

9. Describe the Meijer pay scheme discussed in class and some of the negative consequences of the pay scheme.

   The Meijer pay scheme paid cashiers and hourly wage, but also had some part of the pay and merit review based upon the number of transactions registered per hour. This improved productivity, but caused some unhappiness among the workers as their productivity depended upon the types of products people were checking out. Also, some of the cashiers became unfriendly with customers as they became less willing to engage in conversations and became annoyed when customers were slow at retrieving credit cards or cash for payment. The unfriendliness toward customers could reduce subsequent visits by customers.

10. Explain why a firm may want to offer a deferred pay compensation method and why workers might be reluctant to accept such a payment scheme.

By offering a deferred pay system, workers agree to give up compensation today for a return of higher compensation in the future. If the worker leaves the firm prematurely, they lose the promise of the deferred pay. Firms may offer deferred pay to reduce turnover and to encourage workers to put forth more effort. Deferred pay helps increase employee effort and reduce shirking because the deferred pay increases the penalty from being fired. Also, because deferred pay makes it less likely that workers quit, firms who have substantial hiring or training investments may wish to offer such a pay scheme. Employees may be reluctant to accept such pay because if the firm may go bankrupt or renege on the promise. Also, employees may prefer to avoid making a long term commitment to the firm that is necessary to realize the promise of the deferred pay.

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Final Examination

Name _____

ANSWER SHEET

1D	10D
2A	11D
3 --- B OR D ACCEPTED	12 $.90
4C	13 D
5D	
6C	
7B	
8B	
9A	