

1. Marginal rate of return on education:

- Costs of one more year of schooling = $D + Y$ (direct expenses + foregone earnings)
- Benefits on an annual basis are $\Delta Y + N$ (boost to annual earnings + non-wage benefits)
- Then the marginal rate of return to one more year of schooling is approximately

$$r = \frac{\Delta Y + N}{D + Y} \approx \frac{\Delta Y}{Y} \text{ if } N \text{ and } D \text{ are relatively small}$$

- $\Delta Y/Y$ is the percentage change in earnings due to one more year of schooling. This can be estimated as the slope of an earnings equation, where the natural log of earnings is the dependent variable and years of schooling is a regressor (independent variable).

2. Post-school investments in human capital: The return to work experience

- On-the-job learning as further investment in human capital
- Convexity of the age-earnings profile: earnings increase over the life cycle, but at a declining rate
- General and specific training:
General training results in skills that can be transferred to other employers.
Specific training results in skills that are only of value to a single (usually the current) employer.
- Workers must pay the costs of their general training: if the employer helped pay for it, the worker could move and the employer would lose all return on the training
- Workers and employers share the cost of specific training
- Implications for the time-path of wages and productivity
- Other reasons for increasing pay over the life cycle: incentives, information

3. Human capital and gender differences in pay: effects of education and experience

- The gender gap in earnings
- Theories of the gender gap: discrimination vs. alternatives
- Work experience: the impact of intermittent participation
- Schooling: choice of majors, etc.

4. Signaling model of education and earnings: introduction

- Idea of signaling: an individual's level of education provides information to employers about her productivity
- If education is overall less costly for more productive individuals, then more productive workers will be more educated and the signal will be effective

Reading for next week: Weiss, "Human Capital vs. Signalling Explanations of Wages" (web site).

Think carefully about the following questions:

- (1) What evidence does Weiss cite in favor of the signaling model as opposed to the human capital model?
- (2) From "society's" point of view, does it matter whether the monetary return to education is due to education's effect on human capital or to its screening effect? In what way?

No homework: Get started on those final projects!