

Human Capital

1 Specific vs. General Human Capital

- A. Difference
- B. Who pays?
- C. Tenure effects (duration dependence)
- D. Effects on wage profile
- E. Layoffs
- F. Example: Army recruitment

2 Returns to Schooling

- A. 12% for college, white, urban males
- B. Lower for blacks, females, rural
- C. More for high school

3 Wage Profiles

Discuss Polacheck picture

4 Mincer's Schooling Model

Assume there exists a fixed working life T . Let Y_s be the yearly wage of a worker with s years of schooling and V_s be the present value of earnings before schooling for a worker with s years of schooling. Then

$$V_0 = Y_0 \int_0^T e^{-rt} dt = \frac{Y_0}{r} (1 - e^{-rT})$$

$$V_s = Y_s \int_s^{T+s} e^{-rt} dt = \frac{Y_s}{r} e^{-rs} (1 - e^{-rT}).$$

If all have the same ability and opportunities, then, in equilibrium, $V_s = V_0 \forall s$

$$\Rightarrow \frac{Y_0}{r} (1 - e^{-rT}) = \frac{Y_s}{r} e^{-rs} (1 - e^{-rT})$$

$$\Rightarrow Y_0 = e^{-rs} Y_s$$

$$\Rightarrow \ln Y_s = \ln Y_0 + rs.$$

What is wrong with this model?

Now add on-the-job training. Let C_t be the dollar expenditure on on-the-job training at time t , E_t be gross earnings at time t , and Y_{ts} be net earnings for someone with s years of schooling. Then

$$Y_{ts} = Y_s + r \int_0^t C_x dx - C_t.$$

Therefore

$$\frac{dY_{ts}}{dt} = rC_t - \frac{dC_t}{dt} \geq 0$$

because $\frac{dC_t}{dt} \leq 0$ (why?).

5 Selection Bias and Measuring the Return to Schooling

Repeat discussion

6 Changes in the Distribution of Income and the Effect of Education

Have discussion