



Chapter 8 Information, Signalling and Raiding

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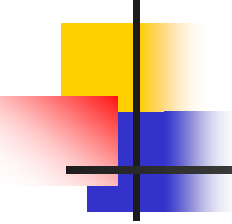
Note: Skip appendix



Main Questions

- 1) Does education increase productivity or merely signal ability to employers?
- 2) If education just a signal of ability, should firms pay more to workers with more education?
- 3) Which workers are likely to increase their productivity through education and training?
- 4) Does it make sense to raid other firms for workers?

1) Does education increase productivity or merely signal ability to employers?



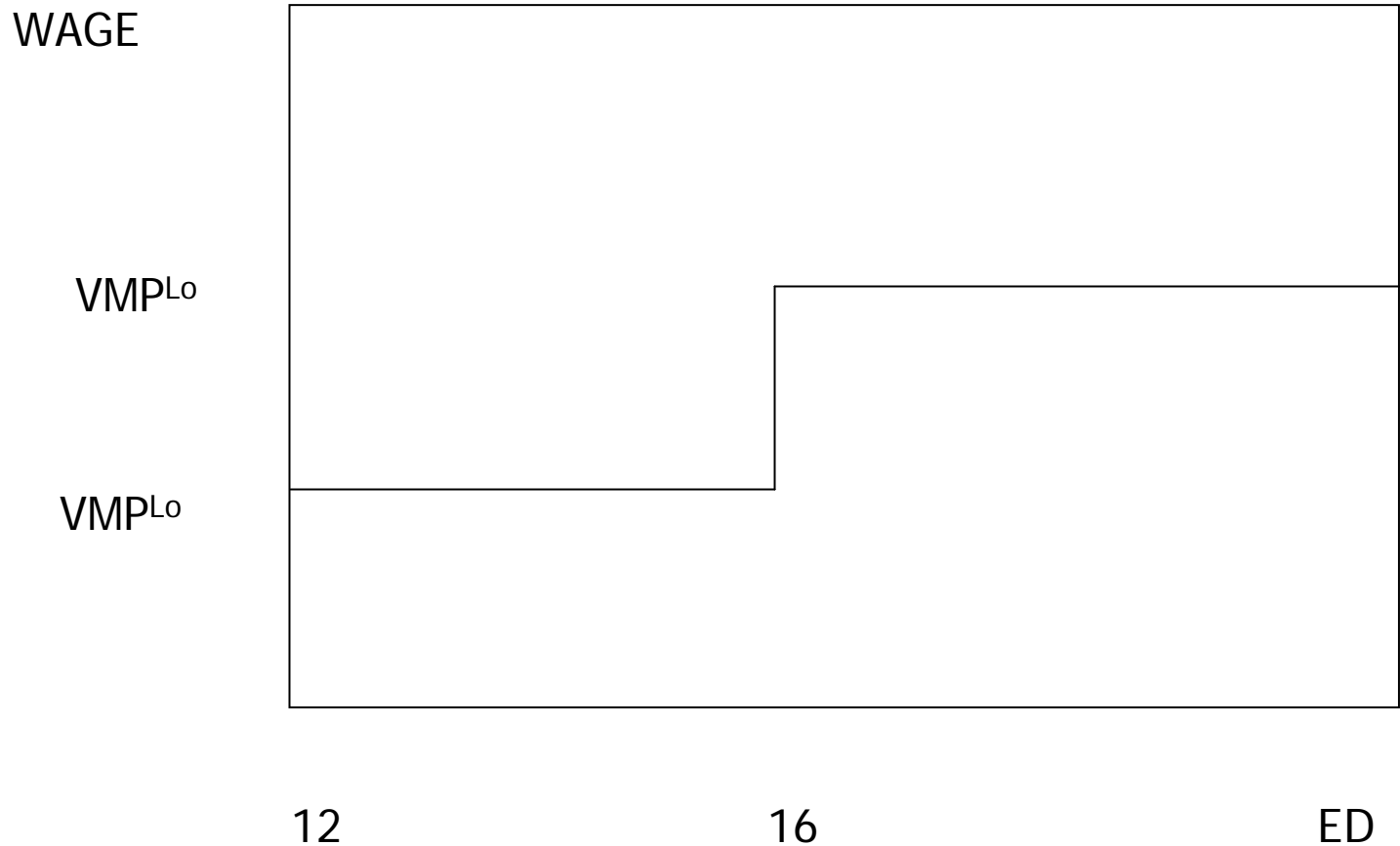
- Signaling theory of Spence:
 - Suppose 2 ability types, high and low.
 $VMP^{HI} > VMP^{Lo}$
 - Firms can't tell workers' productivity but workers know their productivity
 - More able workers have lower costs of schooling
 - Probably enjoy school more, and can get schoolwork done more easily



Spence Model: A Self-Fulfilling Prophecy

- Suppose firms believe that workers with years of education $ED=16$ have VMP^{Hi} and those with $ED=12$ have VMP^{Lo}
- It could be a self-fulfilling prophecy. How?
- Workers $\max(Wage(ED) - Cost(ED))$ with respect to ED

High Ability Choose $ED=16$;
Low Ability Choose $ED=12$





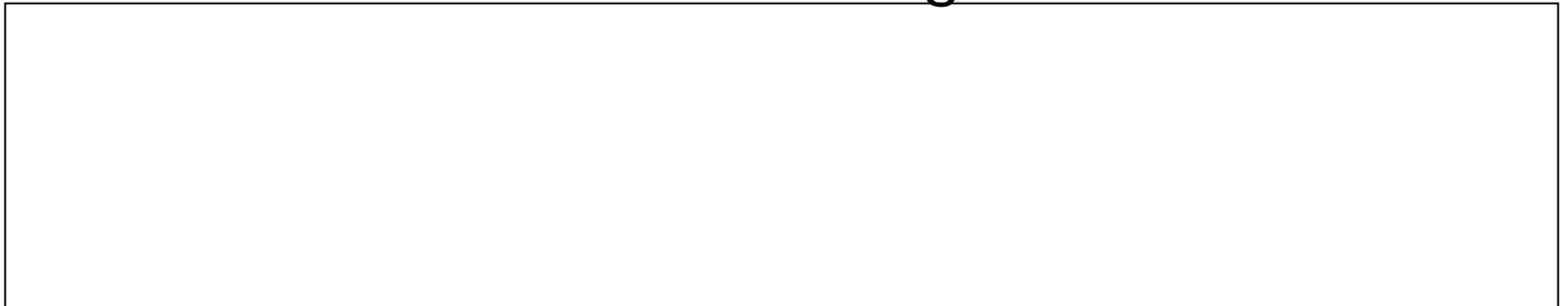
Consequences of Signaling Theory

- If true, education adds nothing to a worker's productivity; it merely provides a way for the more able workers to signal that ability to the labor market
 - Education IS very valuable, but only to the more able

Counterarguments to Signaling



- Vocational types of education (engineering, say,) clearly increases worker productivity
 - This is the human capital model we have already discussed
- If school only signals ability, wouldn't worker and firm be better off with contingent contract, where





Empirical Evidence

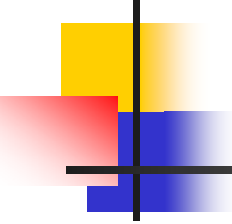
- Wolpin – Self-employed get just as much education as employees
 -
- Weiss – Studied one factory and found that dropouts and high school graduates equally productive, but latter had higher job attendance and lower quit rates
 -



Empirical Evidence (continued)

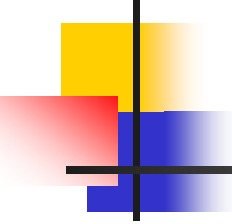
- Altonji – One additional year of high school increases wages about 7% but the impact of all the courses taken during the year (e.g. 2 math courses, 1 science course) increases earnings by only 1-2%
 - Is the rest signaling ability?
- Rose and Betts –





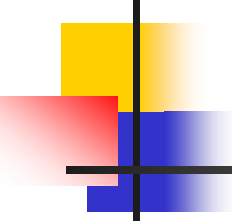
2) If education just a signal of ability, should firms pay more to workers with more education?

- If more educated are more productive, then yes.
- Firm doesn't care whether education increases production or merely sorts people by productivity
- Only time firm won't pay for more education is if education is only a signal, and firms can learn ability of workers quite quickly



3) What are the cases when education is most likely to increase productivity?

- When vocational skills are clearly imparted:
 - Engineering, science
 - Law
 - Medicine
 - MBA (?)

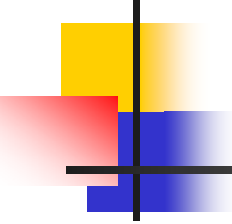


4) When should a firm raid other firms for workers?

- 1) If firm finds a worker with unusual skill set it thinks will be more valuable at firm than at current employer
- 2) Current employer must not overvalue the employee
 - Risk: Asymmetric info. Current employer knows more about worker than raider does. It can match raider's wage offer **if it wants to**
 - "Winner's curse"



Some factors that could increase the attractiveness of hiring a worker from another firm



- 1) Workers who recently completed education unlikely to find best job match in first job or two
- 2) Employees of declining firms or declining industries
- 3) Workers in industries with rapid technological change
- 4) If your firm is quite big it could offer better wage/job guarantees than a smaller firm could.
 - Could appeal to a risk averse worker

If your firm gets raided, should you as a manager always match outside offers, or never match?



- Depends on whether
 - a) Worker values non-monetary (“nonpecuniary”) aspects of current job
 - b) Worker is paid less than is worth
- If both a) and b) apply, then worker may seek outside offers with higher wage solely to increase wage at current firm.
 - Probably won’t accept because likes nonpecuniary aspects of current job
 - Firm in such case should not match in general
- If a) and b) don’t apply then firm should retain option to match offers, for cases where workers more productive than elsewhere