

Labor II

11/18/2008

Today's Agenda

1. Nutrition, time and casual labor markets (13.4.2)
2. Permanent Labor (13.5)

Last time--

- We studied imperfections in labor markets in context of the capacity curve
1. Casual Labor Markets & Externalities
 - Lack of contracts neglects positive externalities e.g. on-the-job-training
 - Same argument can be made for nutritional status
 - Let's develop model of person-specific investments that have effect over time
 - A worker's current nutritional status (and thus ability to carry out sustained work), depends not only on current consumption but history of consumption
 - A and B are different curves because they are affected by nutritional history—which is better?

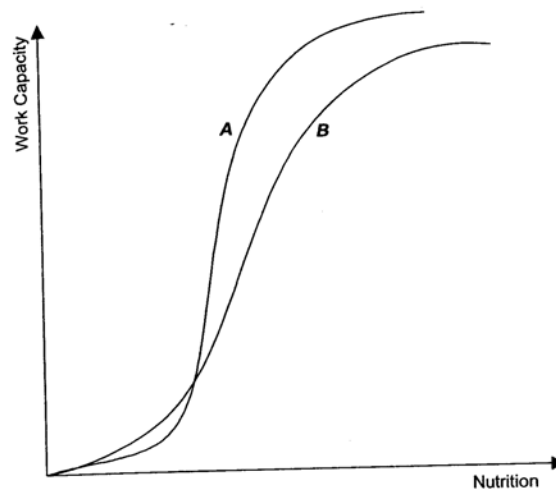


Figure 13.12. Nutritional history and the capacity curve.

- Let's think about features underlying capacity curve
- Two effects "capacity effect" and "resting metabolism effect"
- Employer has incentive to hire person with lower nutritional status
- Casual labor market with limited contracting fails to improve nutritional status of workers and employers also suffer in the process

2. Permanent Labor

- Think of permanent labor more broadly as attached labor
- Two broad types of attached labor
- First, those performing tasks that are hard to monitor
- Second, no special tasks, attached laborers may even perform tasks of casual laborers but still get long-term contracts. Why does this happen?

- Evidence from India

Table 13.2. Secular decline in the proportion of attached laborers in Thanjavur, India.

Village	Year	Percentage of laborers	
		Semi-attached	Casual
Kumbapettai	1952	52	48
	1976	21	79
Kirippur	1952	74	26
	1976	20	80

Source: Gough [1983].

A. Permanent Labor: Non-Monitored tasks

i.

Production

- Farm carries out production with the help of different techniques
- Each technique has different proportions of monitored (permanent labor) and non-monitored tasks (casual labor) that can be used to produce a given level of output

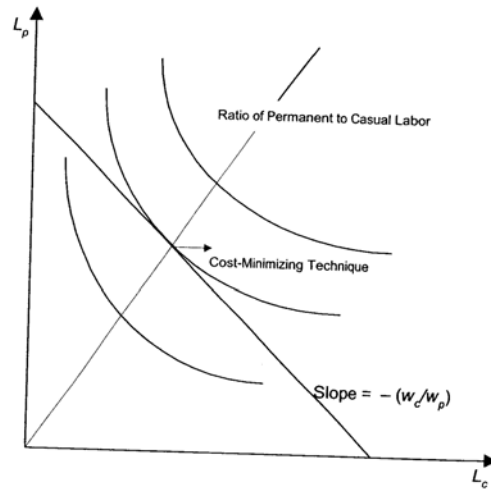


Figure 13.13. Combinations of permanent and casual labor needed for some fixed output level.

- Say there are two given market wages for each kind of labor w_c and w_p
- The total cost of inputs is $w_c L_c + w_p L_p$
- Given a level of output, employer will choose cost-minimizing level of labor combination
- What happens as ratio of wages changes, employers will choose different techniques

ii.

Wages

- Say casual wage labor is given in market

- What is the minimum wage rate that an employer must pay a permanent laborer, so that such a laborer will have the incentive to adequately carry out non-monitorable tasks?

- Incorporate the worker's future gains and losses—say the worker thinks N dates into the future

- If worker shirks, then he gets casual wage instead of permanent wage

- We want to write down an equation that sets the wage such that the worker will not shirk

$$G = N(w_p - w_c)$$

G is the gain from shirking

Thus, gain from shirking should not outweigh loss.

Rewrite in terms of wage ratio:

$$G/w_p = N(1 - w_c/w_p)$$

Thus w_p will be chosen such that above equation holds

iii.

Equilibrium

- For each conceivable casual wage, we can find the permanent wage
- This will give us the demand for labor
- Say the supply of labor in economy is fixed at \bar{L}

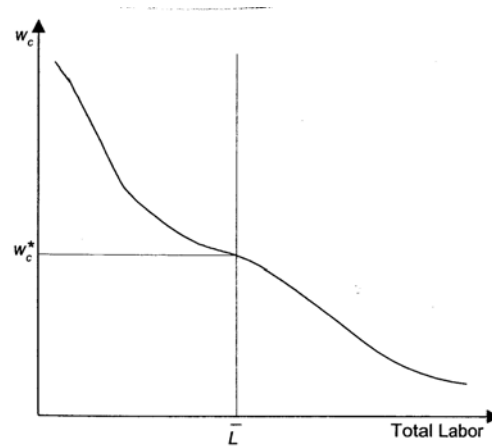


Figure 13.14. Equilibrium in the labor market.

- iv. Dynamics in this model
- What happens if w_c goes up? Depends on how G changes
 - If G does not change—as w_c increases, w_p needs to be raised by smaller percentage

If G does change-- as w_c increases, w_p needs to be raised in same proportion

- Labor supply goes down due to increase rural-urban migration?

- Labor demand increases due to higher demand for good?
- Use of non-monitorable tasks in production increases due to reduction in cost of capital that allows more advanced capital-intensive measures?

B. Permanent Labor: Casual Tasks

- Why do we see permanent labor doing tasks that casual labor could do?
- Rural wages have a built-in tendency to fluctuate over time due seasonality
- Recall risk-aversion, associated concept is fluctuation aversion

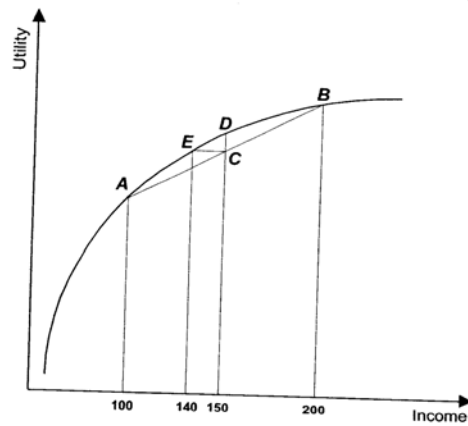


Figure 13.15. Fluctuation aversion.

- In this kind of environment, a risk-neutral employer may offer fluctuation-averse laborer an average annual wage

- Sounds like a great contract, but then why would you see pure casual laborers at all?
 - Uncertainty about how many people you will need

Table 13.3. Proportions of tied laborers in ICRISAT villages.

<i>Village</i>	<i>Type of farm</i>	<i>Percentage of farms employing farm servants</i>
Aurepalle	Small/medium ..	13
	Large	47
Shirapur	Small/medium	6
	Large	7
Kanzara	Small/medium	0
	Large	7

Source: Pal [1993].

- Seasonality has declined over time
- Laborers can just use credit to smooth incomes, don't need to do it through their labor contract
- Remember, this only works if worker willing to work for less than spot wage in peak season—may not be enforceable.

Next time: Chapter 14