EC 151 Homework VII
Labor Markets
Due November 25th in class

1) Finding the No-Shirking Permanent Wage

As we discussed in class, one of the reasons we see permanent labor is to carry out tasks, tasks that cannot be easily monitored by the employer and thus create an incentive to shirk.

Say a employer hires permanent labor to carry out non-monitorable tasks over two seasons in a year. Shirking in the first season cannot be found out immediately, but suppose that there is evidence of this available by beginning of the second season. If the employee shirks, the only punishment power that the employer might have is firing her from the job.
Consider the following information:
The permanent wage is w_p and the casual wage is w_c
The cost of putting effort is c
If the employee does not put in c, she is fired and goes back into the labor market at the beginning of next season. With probability p, she will find a new permanent job otherwise she will get a casual job.
(The employee's mental time horizon is just over the two seasons)
Set up an equation that will allow you to solve for the non-shirking permanent wage w_p . Explain what happens to w_p as c, p and w_c increase and the intuition behind why this happens.

2) Technological Change & Permanent Labor

As in Figure 13.13, a farm uses two kinds of labor—permanent and casual. Permanent labor does the non-monitored tasks, these tasks are a composite of i) machinery use and ii) proper operation of this machinery. Machines can be rented out at interest rate r. Thus, the total permanent wage w_p is the sum of cost of machinery as well cost of effort.

Say credit markets improve and the cost of capital decreases. What happens to the permanent wage rate and proportion of permanent labor use on the farm. Show the dynamics in a figure like 13.13 and explain the intuition.

3) Permanent Labor & Fluctuation-Aversion

Chapter 13, Question 5 a-c