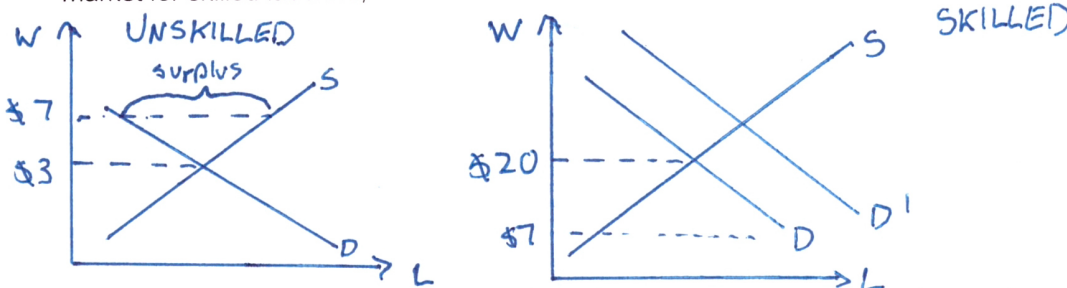


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 Econ 321

**HW#2** (Please type all answers)

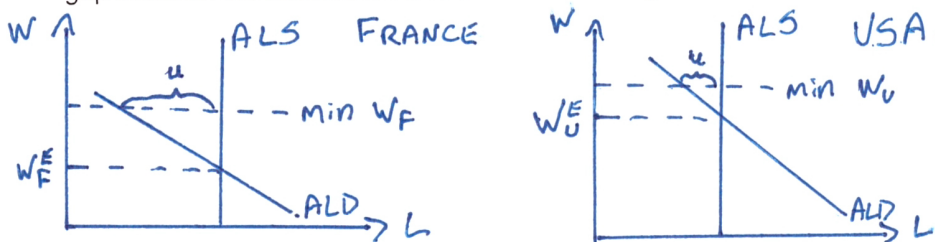
- I. Suppose there are equal quantities of two kinds of labor: skilled and unskilled. Demand for skilled labor is much higher: the market wage of skilled workers is \$20, the market wage of unskilled is \$3. Diagram the effect of a \$7 minimum wage on *both* markets.

The minimum wage raises the wage of unskilled labor, creating a labor surplus. And by raising the price of unskilled labor, it increases demand for skilled labor; since unskilled labor is now more expensive, employers buy more skilled labor instead. There is no surplus in the labor market for skilled laborers, because S and D intersect well above the minimum wage.



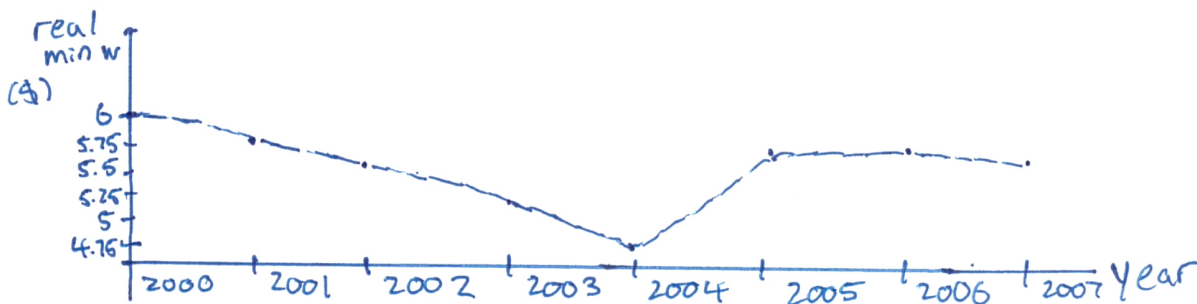
- II. In France, unemployment is higher but real wages are lower than in the U.S. Draw Aggregate Labor Demand and Aggregate Labor Supply for both countries showing how this is possible.

The French minimum wage is higher relative to the French equilibrium wage than the U.S. minimum wage is to the U.S. equilibrium wage. Just draw ALD lower in France, and make the gap between the intersection and the minimum larger in France than the U.S.



- III. Suppose that the nominal wage in 2000 is \$6.00/hour; in 2005 it rises to \$7.25/hour. Fill in the following table for the *real* minimum wage (in 2000 \$'s) for 2000-2007. Then graph the real minimum wage over time.

I calculated the Real Minimum Wage on January 1 of a given year, so I used the inflation rate for the previous year. I would also accept it if you calculated the R.M.W. on December 31, so you use the inflation rate for the current year.

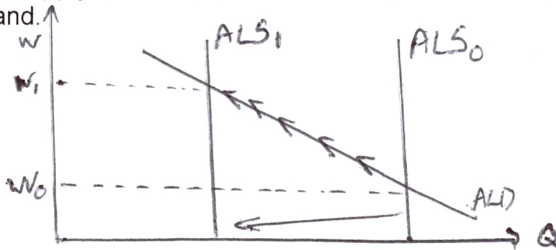


(iii.)

Year	Inflation	Real Minimum Wage
2000	3%	\$6.00
2001	4%	\$5.83
2002	5%	\$5.60
2003	10%	\$5.33
2004	3%	\$4.85
2005	0%	\$5.69
2006	3%	\$5.69
2007	5%	\$5.52

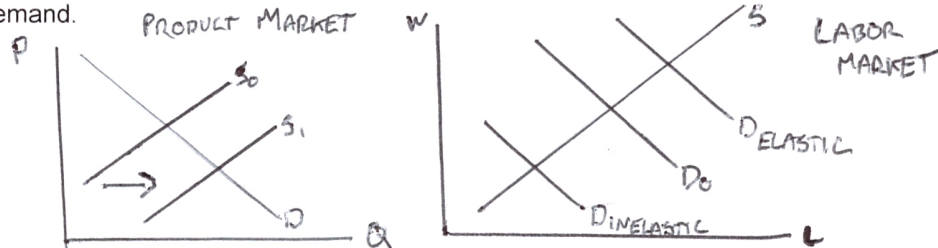
IV. Diagram the effect of (a) Abolishing the minimum wage **and** (b) Raising unemployment benefits at the same time.

Labor supply decreases, and the market clears at the new intersection of labor supply and labor demand.



V. Economists have occasionally argued that unionized workers are happier and therefore more productive. Assuming this claim is true, draw diagrams to illustrate the implications for the product and the labor market.

If so, unions raise workers' MPP. This increases  $S$  in the product market. If product demand is relatively elastic, it also increases labor demand; if product demand is relatively inelastic, it decreases labor demand.



VI. The Family Leave Act, passed in Clinton's first term in office, requires employers to give workers three months unpaid leave to care for a newborn infant. What happens in the labor market if wages are permitted to change? What happens if the government makes it illegal to change wages in response to the legislation?

Labor supply increases (jobs have more amenities at a given wage) and labor demand decreases (workers cost employers more at a given wage). If wages can change, they fall. If wages can't change,  $S$  still increases and  $D$  still falls, but the market can't clear. There is a price floor at the old equilibrium wage, and a surplus of labor.

- VII. Suppose that in 2012, workers earn a \$30,000 salary plus \$10,000 in health insurance benefits. The cost of health insurance always rises 10% per year in real terms. Assume (a) employers never cut *nominal* salaries, (b) employers always provide health insurance, and (c) labor demand does not rise. Complete the following table.

Year	0% Inflation				10% Inflation			
	Nominal Salary	Nominal Insurance Cost	Real Salary	Real Insurance Cost	Nominal Salary	Nominal Insurance Cost	Real Salary	Real Insurance Cost
2012	\$30,000	\$10,000	\$30,000	\$10,000	\$30,000	\$10,000	\$30,000	\$10,000
2013	\$30,000	\$11,000	\$30,000	\$11,000	\$31,900	\$12,100	\$29,000	\$11,000
2014	\$30,000	\$12,100	\$30,000	\$12,100	\$33,759	\$14,641	\$27,900	\$12,100
2015	\$30,000	\$13,310	\$30,000	\$13,310	\$35,524	\$17,716	\$26,690	\$13,310
2016	\$30,000	\$14,641	\$30,000	\$14,641	\$37,128	\$21,436	\$25,359	\$14,641

Does this mean that higher inflation is clearly worse for workers? Why or why not?

Higher inflation is *not* clearly worse for workers. With higher inflation, workers' real salaries fall year after year. But as an inevitable side effect, workers are also more likely to keep their jobs. With low inflation, stagnant productivity, and nominal rigidity, rising health care costs make workers more expensive to employ – reducing employment year after year.

- VIII. Suppose "yellow dog" contracts were legal. Draw two labor market diagrams: One for jobs with a "yellow dog" contract, one for jobs without.

Labor demand for workers who sign the "yellow dog" contract increases (they are less costly to hire), but labor supply decreases (workers lose their chance to join a union). Compared to other workers, the "yellow dog" workers will be paid more. If the costs of unions are high compared to the benefits, demand increases a lot, but supply decreases only a little.



- IX. What are the long-run side effects of plant closing laws? (1 paragraph)

Plant-closing laws may "save jobs" that already exist. But they also discourage firms from opening plants in the first place. They know that any decision to open a plant is essentially irreversible; even if the plant loses money, they will be unable to cut their losses and exit. The long-run effect, then, is lower labor demand and thus lower wages. If wages get low enough, employers will accept the risk of opening a money-losing plant. If wages are inflexible, the result is greater unemployment - employers won't open plants because given the level of wages and the plant-closing laws, on average they expect to lose money.

- X. Find a discussion of 19<sup>th</sup> century U.S. labor markets in the history textbook of your choice. Summarize what the historian says. Which of the historian's claims would Caplan be likely to dispute? To accept? (1 paragraph)

A standard treatment appears in Thomas Bailey, *The American Pageant*, (1966) pp.536-7. Bailey compares 19<sup>th</sup>-century U.S. workers to "Roman galley slaves," explains that "a glutted labor market, moreover, severely handicapped the wage earners," and says that the new railroad network "could shuttle unemployed workers, including Negroes and immigrants, into areas where wages were high, and thus beat standards down." Bailey does concede that mechanization created as well as destroyed jobs.

Caplan would agree that mechanization created as well as destroyed jobs, but would emphasize that mechanization also brought large increases in real wages due to increased productivity. Contrary to Bailey, wage-earners saw larger raises in the 19<sup>th</sup>-century than ever before; they were not "severe handicapped." But labor mobility did tend to equalize wages for workers of identical skills. What Bailey fails to mention is that railroads raised wages in low-wage areas as well as holding them down in high-wage areas. Overall, Bailey's "slavery" comparison is rather forced.