

# Economics 113: Second Midterm: Practice Exam

Spring 2005

**I. Identifications: do all ten: one sentence each defining the terms and giving their significance in the context of the course:**

Theodore Roosevelt

Franklin Roosevelt

Mass production

The Great Crash

Central and Union Pacific Railroads

AFL-CIO

Investment banking

Commercial banking

NIRA and NRA (National Industrial Recovery Act and National Recovery Administration)

1807

**II. Slavery: do (a), (b), and (c):**

(a) Suppose that an ex-slave household after the Civil War has the utility function:

$$U = C^{0.5}L^{0.5}$$

Where C is the amount that the household consumes and L is the amount of leisure time the household has per week. Suppose further that the relationship between hours worked in the cotton fields H and hours of leisure L per week is:

$$H + L = 160$$

And that we measure consumption in units such that:

$$C = H$$

How does the post-Civil War ex-slave household choose to allocate its time? (Hint: calculate utility for L equals 40, 60, 80, 100, and 120; and remember that raising things to the 0.5 power is the same as taking the square root.) How much leisure does it have? How much does it work? How much does it consume?

(b) Now let's consider the same household before the Civil War. Suppose that the slavemasters then provide the house with 40 units of consumption C, and force the members of the household to work 120 hours a week. How much extra in the way of consumption goods over and above the 40 units the slavemasters assign would you have

to provide the slave household to make it as well off before the Civil War as it is after the Civil War?

(c) Do you think your answer to (b) is a good or a bad answer to the question of how much slaves were exploited by their masters? Why?

### III. Great Depression: do (a), (b), and (c):

Suppose we have a simpler-than-simple macroeconomic model, with output  $Y$  equal to the sum of consumption spending  $C$ , investment spending  $I$ , and government purchases  $G$ ;

$$Y = C + I + G$$

And with:

$$C = .75(Y) - T$$

And with investment adversely affected by a government that runs a deficit—has purchases  $G$  in excess of taxes  $T$ —like this:

$$I = \max(0, 200 - 1.5(G-T))$$

(What does this mean? It means that  $I = 200 - 1.5(G-T)$ , unless that would produce a number less than zero: investment can't fall below zero. The function  $\max(x, y)$  is equal to  $x$  if  $x \geq y$  and to  $y$  if  $y \geq x$ .)

(a) If, initially, government purchases  $G$  equals taxes  $T$  equals 200, what is the equilibrium level of output  $Y$ ? What happens to the equilibrium level of output if the government keeps taxes the same and raises government purchases  $G$  to 300?

(b) Suppose that a confidence shock to investors changes the investment function to:

$$I = \max(0, 200 - 1.5(G-T))$$

Now what is the equilibrium level of output  $Y$ ? Now what happens to  $Y$  if taxes are left unchanged but if government purchases  $G$  are increased from 200 to 250 to 300 to 350?

© What lessons does this simpler-than-simple model suggest for the relevance of Hooveresque balance-the-budget-to-restore-confidence and Keynesian expand-government-purchases-to-boost-output policy prescriptions? Are the lessons this simpler-than-simple model teaches those that we should draw from the Great Depression? Why or why not?

(We'll test two of "Slavery," "Gilded Age and Progressive Era," "Great Depression," and "Labor and Capital" in problems on the exam.)