™ C3 Harvard University • Economics 980b Junior Seminar № EDUCATION IN THE ECONOMY

Spring 2012 • Monday 2:00 to 4:00pm • Littauer M-17
Professors Claudia Goldin and Lawrence F. Katz • TF: Ms. Rebecca Diamond
Assignment: Higher Education Tuition and Student Debt

Due Feb. 6: Assignment on "Higher Education Tuition and Student Debt"

This assignment is motivated by President Obama's speech on January 27 at the University of Michigan that expanded upon some ideas he aired in the State of Union Address on January 24. Read the text of President Obama's speech posted on Ec980b Topical Articles.

In that speech President Obama noted that college graduates have half the unemployment rate of high school graduates and earn twice their annual income when each group is employed. But he also commented that in 2010, college graduates who took out loans owed \$24K on average. "Student loan debt has now surpassed credit card debt ... Higher education is not a luxury. It's an economic imperative that every family in America should be able to afford ... We can't just keep on subsidizing skyrocketing tuition. If tuition is going up faster than inflation ... no matter how much we subsidize it sooner or later, we're going to run out of money. And that means that others have to do their part. Colleges and universities need to do their part of keeping costs down as well."

The assignment concerns three topics: (1) college tuition, (2) student debt, and (3) policies concerning both. Write no more than a page on each major part (1, 2, 3).

1. College tuition:

- a. If most of university and college costs are in the form of salaries and wages, explain why, if there is economic growth with rising real wages, college tuition is likely to go up faster than the rate of inflation (given by the CPI = Consumer Price Index). Most people who work at universities and colleges also have college degrees, and college wages have been rising faster than average wages in recent decades. Should the rising relative wages of college graduates reinforce the case for expecting college tuition to rise faster than the rate of inflation? Explain why or why not.
- b. The graphs provided give a time series on tuition plus fees for private and public institutions deflated either by the CPI or by median family income. These are "sticker prices." Using any available (and reputable) source(s) on the web (e.g., U.S. Department of Education NCES; The College Board) provide evidence concerning the difference between "sticker" price and actual price for any recent year. (By "actual" price we mean "net" price = ["sticker price" tuition + fees institutional aid

- other grant aid from federal, state, and other sources].) If you can obtain data on actual prices from a more distant year, report those as well. Using whatever information you gathered, comment on whether actual tuition prices are as high as sticker prices and, if possible, answer whether actual prices have risen as fast as sticker prices.

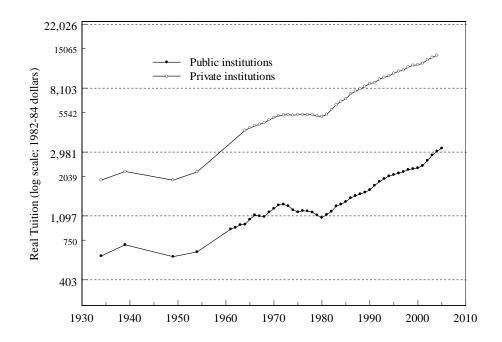
2. Student debt:

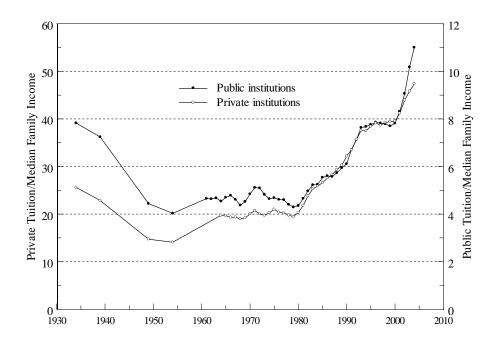
- a. Following what President Obama said, if going to college for four years doubles your income (e.g., \$30K to \$60K), explain why it would be worthwhile to take out \$24K in student loans at an interest rate of 6 percent average annually. Note that you do not have to do any complicated math or accounting. Just use the argument in the Borjas reading.
- b. Explain how a Friedman-like income contingent loan system would guard against the consequences of a negative shock to income. President Obama mentioned that he would ask for an expansion of the Income-Based Repayment (IBR) Plan. Explain what the IBR is and how it is related to an income contingent loan system.

3. Economic policies

- a. President Obama stated that he would like federal grants to universities and colleges to be determined by whether tuition at the institution was kept down. How might such a policy be achieved? (Note that there was no mention of that in the speech or in the administration's "talking points.")
- b. What might be the unintended consequences of such a plan?

Figure 7.10*
Public and Private College Tuition and as a Percentage of Median Family Income





Sources: Public and private tuition and fees 1934 to 1954: College Blue Book (1933), Conrad and Hollis (1955). Public tuition and fees 1961 to 1963: U.S. Office of Education (1961); D'Amico and Bokelman (1963); 1964 to 1971: Digest of Education Statistics 2005; 1972 to

2005: Washington Higher Education Coordinating Board (various years). Private tuition and fees 1964 to 2005: *Digest of Education Statistics 2005*. Median family income 1949 to 2005: Nominal median family income before taxes, *Historical Statistics, Millennial Edition*, tables Be67-84 and *Economic Report of the President 2005* translated from real terms into nominal values using the CPI; 1934, 1939: *Historical Statistics, Millennial Edition*, tables Ca20-27 for national income and tables Ae1-28 for the number of families (interpolated for 1934), approximations based on national income per family × 0.58, where the 0.58 figure is based on an average of (median income per family/national income per family) for selected years from 1949 to 1964.

Notes: Tuition includes required fees. In some years, certain states had no tuition but had required student fees. When possible only the state flagship universities are included in the tuition levels. Flagships and an average of all state tuitions (averaged at the state level) are almost identical from 1964 to 2005. Private institutions include only universities.

*Published as figure 7.10 in C. Goldin and L. Katz, *The Race between Education and Technology*, (Belknap Press, 2008).