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College tuition and household savings and consumption

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Abstract

Despite the high cost of college, there has been little study of the adequacy of household savings and other resources available to fund college. To gauge their adequacy this paper examines households' standard of living as they pay for college. Using the Consumer Expenditure Survey, the main finding is that households appear to do a relatively good job smoothing their consumption into the academic year, despite large expenses. This is consistent with the Life-Cycle Theory of saving and consumption. There is some evidence of a delayed decline in consumption, and of a decline for households with children first beginning college, but the magnitudes of these declines are rather small.

Keywords: Consumption-smoothing; Life-Cycle Theory; Excess sensitivity; Educational finance; College tuition

JEL classification: E21; I22

1. Introduction

Sending the kids to college is a central episode in the life-cycle of many households. Even so there has been surprisingly little study of the adequacy of household savings and other resources available to pay for college. In part this might be due to the difficulty of determining what would count as adequate

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resources for a given household. For instance, one cannot simply compare the level of assets on starting college to the cost of college. The optimal level of assets also depends on a host of other factors, such as expected future income and medical expenses, the strength of any bequest motive, etc., that the econometrician does not observe. Further, assets and other resources (especially informal resources like contributions from relatives) are often poorly measured. To gauge the adequacy of college resources this paper instead examines whether households are able to maintain their standard of living — that is, their consumption — as they pay for college. Such an examination does not require measurement of the assets available specifically for college. It also recognizes that, given the cost of college, what matters for household welfare is any distortion in the path of consumption that results from meeting the cost.

The data are drawn from the Consumer Expenditure Survey, which has comprehensive coverage of household expenditure, including educational expenditure. Specifically, this paper tests whether households' noneducational consumption decreases in the fall and following winter and spring in proportion to their college expenditures in the fall. The change in consumption is measured in relation to consumption in the previous summer, spring, and winter, to determine whether saving sharply accelerated just before the start of the academic year, or whether it was already fully underway by then. Of course households use other resources in addition to savings to pay for college, including current income, loans, and contributions from relatives. The test here considers the change in consumption given all the resources available to the household. This is the appropriate consideration as regards household welfare. Although it would be quite interesting to examine the response of consumption over longer horizons as well, the data do not permit this. Nonetheless, the periods examined here are of the greatest interest, since they cover the time when college costs are actually incurred.

The response of consumption at this time constitutes a salient test of the Life-Cycle Theory of saving and consumption, and more generally a test of any theory that requires forward-looking households to smooth their consumption.[1] In the high-frequency analysis of this paper, paying for college can be thought of as a predictable, predetermined decrease in a household's net income, that is income net of educational expenditures. Therefore, assuming separability between 'college services' and the rest of consumption, the response of noncollege consumption to college expenditures constitutes a test of whether consumption 'tracks' income. Forward-looking households should save in advance or borrow to meet the costs of college, in order to smooth their consumption during college. Since they can

[1] Economists looking at college savings have mostly focused on the substantial tax to saving resulting from means-testing in the financial aid system (Case and McPherson, 1986; Edlin, 1993; Feldstein, 1995; Kim, 1995; Dick and Edlin, 1997). In the context of the Life-Cycle Model, the focus can be said to have been on the intertemporal elasticity of substitution, not on the adequacy of resources, at issue here.