

Hongyu (Eric) Chen

The Impact of College Financial Aid and Forgiveness Programs

My research investigates the impact of federal college financial aid programs and student loan forgiveness plans on schooling, work, borrowing, and saving decisions over the life cycle. My results have implications for the design of government financial aid policies, an especially relevant issue given the recent dramatic growth in college financial aid and student debt.

My job market paper, “The Impact of Student Loan Repayment Reform on Schooling, Work, and Borrowing Decisions of Men,” studies the effect of an important change in federal student loan repayment policy. Before the change in policy, student loan debts were not forgiven and borrowers were expected to repay the full amount of debt. After the change in policy, borrowers were given options to relieve a portion of their debt, with the portion being a function of income and sector of employment (public and non-profit vs. private). I develop and structurally estimate a life-cycle dynamic discrete choice model using data on males age 18 to 55 from the National Longitudinal Survey of Youth 1979 (NLSY79). My simulation results imply that the new student loan repayment plan will increase total years of postsecondary schooling by 10%, from 2.07 years to 2.28 years. Accompanying this change, student loan debt will increase by 14% between the ages of 23 and 30. In addition, 0.5% of the population who would have worked in the private sector will shift to the public sector, and 14% of student loan borrowers will be forgiven part of their debt. The net cost of the forgiveness plan is estimated to be \$7 billion in present discounted value (PDV). I then simulate alternative policy experiments holding constant cost to the government and comparing the effects on education, employment, consumption, and lifetime utility. The simulation results indicate that lifetime utility will be higher if the current student loan repayment plan is combined with an increase in the student loan borrowing limit. Lastly, I check the robustness of my structural model by comparing simulation results of the more recent NLSY97 cohort to that of the NLSY79 cohort. The comparison shows that the empirical implications of my structural model are robust to using alternative birth cohorts, but the increased student loan borrowing among the more recent cohort raises the cost of the forgiveness program to the government.

My second paper is titled “The Impact of Housing Wealth on College Outcomes in the Housing Boom and Bust.” In this paper, I examine the asymmetric impacts of housing wealth on college enrollment during the recent housing boom and bust. The data used in my study come from the Panel Study of Income Dynamics (PSID) Transition to Adulthood (TA) 2005-2013 sample. The TA 2005-2013 sample allows me to study both the recent housing boom and the housing bust. My results show that home equity has a larger impact on college enrollment during the housing bust than during the housing boom. The asymmetry is economically and statistically significant only for families with annual income less than \$70,000. According to my estimates, the decline in home equity during the housing bust would have caused a drop in college enrollment of 3.5 percentage points, or 9.6%, for families with annual income less than \$70,000, other things equal. My results show that home equity has an economically small and statistically insignificant impact on college enrollment in the housing boom for both lower-income and higher-income families. This implies that a negative shock in the price of housing has a much larger impact on college enrollment than does a comparable positive shock. I simulate alternative policy designs and compare their impacts on college enrollment, holding the present discounted value (PDV) of assistance constant. I find that a counter-cyclical financial aid policy has a larger impact on college enrollment compared to a policy of constant financial aid. If the goal of the government is to maximize the college enrollment impact of financial aid, a need-based counter-cyclical financial aid policy would be more effective than current policy.