

# Changes in Wealth Inequality between College and High-School Graduates: Life-Cycle Model and Reality

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## Abstract

This paper analyzes the changes in wealth inequality between college graduates and high-school graduates between 1989 and 2007. The college/high-school net worth gap first narrowed from 1989 to 1995 but then increased thereafter. The wealth gap between the two groups reflects the earnings gap as the evolution in the wealth gap follows the changes in the college premium in income during the sample period. Some “stylized facts” about earnings inequality are also found in the dynamics of wealth inequality ---- within-group inequality increased substantially, and an increase in residual dispersion accounts for a considerable fraction in widening wealth inequality. The pattern and timing of the increase in residual dispersion of wealth distribution seem to match those of the income distribution, indicating that the distributions of income and wealth move together.

A simple life-cycle model based on income differentials cannot account for the large swings of the wealth gap between the two groups. Although the life-cycle model with realistic parameterization may be able to match the wealth gap between the two groups in a particular year, year-to-year fluctuations in the wealth gap are too large to be explained by the changes in income differentials. The volatility of the wealth gap is closely related to different types of assets held by each group, prices of which appreciated differentially over the sample period.

The two groups differ substantially in terms of demographic characteristics and attitudes towards saving and risk, which account for a considerable part of the wealth gap. The differences of the two groups manifest in their portfolio compositions. Dynamics of the wealth gap reflect changing patterns of homeownership, housing wealth, and stockholding. The narrowing of the wealth gap between 1989 and 1995 coincided with rising homeownership of high-school graduates, while the widening of the gap thereafter corresponded to the stagnant growth of homeownership of this group versus college graduates whose stock investment and homeownership rate increased considerably. College graduates invested heavily in owner-occupied housing by taking on larger mortgages and shifted their asset composition from financial assets to housing in 2004, the pattern followed by high-school graduates in 2007. As a result, American households, although they have become wealthier than before, have become vulnerable to income shocks as they hold more wealth in illiquid forms and have a larger debt.

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