## Household Debt and Inequality in the United States, 1950-2019

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#### Motivation

- U.S. household debt grew 4-fold relative to income since the end of WWII
- Ongoing debate about potential drivers of debt boom goes to the heart of theories on savings behavior and inequality
  - 1. Standard theory postulates positive relationship between permanent income and debt
  - 2. Debt boom explanations link stagnant incomes and rising inequality to indebtedness implying a negative relationship
  - 3. Debt increase reaction to asset markets and capital gains and independent of individual income growth
- What role does household debt accumulation play for consumption and savings decisions?

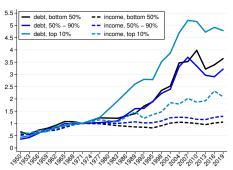


#### What we document

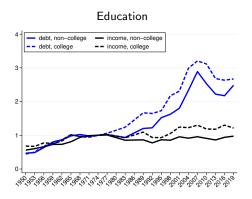
- Lockstep growth of income and debt until 1970s and broad-based decoupling since then
- Despite stagnant incomes, American middle class (50%-90%) main contributor to the debt increase since 1950
- After 1980, home equity extraction driver of debt accumulation but middle class was never wealthier than at peak of debt boom
- Debt accumulation and capital gains have become an integral part of household savings decisions in the 21<sup>st</sup> century

• Since 1970s diverging trends of debt and income by income

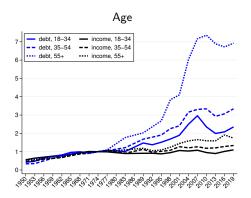




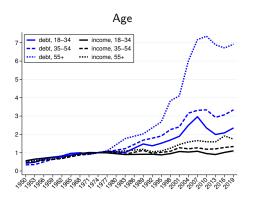
 Since 1970s diverging trends of debt and income by income, education



 Since 1970s diverging trends of debt and income by income, education, or age



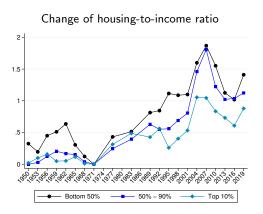
 Since 1970s diverging trends of debt and income by income, education, or age



General decoupling of debt from income growth over last 40 years

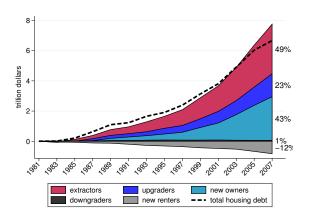
## Capital gains and debt dynamics

Large capital gains for bottom 90% in the housing market



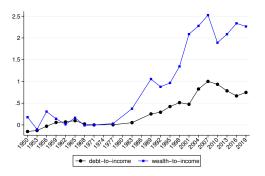
#### Contributions to the debt increase

• Borrowing against rising house prices (equity extraction) alone accounts  $\approx 50\%$  of debt increase



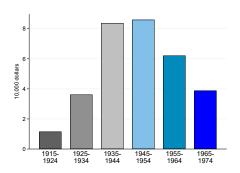
#### Wealth richer middle class despite higher debt

 Despite large equity extraction and rising debt levels, middle class was never wealthier than at peak of the debt boom



## Equity extraction across generations

- Babyboomer cohort (1945-1954) extracted on average most home equity over time
- About twice as much as their parents (1925-1934) or their children (1965-1974)



#### Conclusions

- Household debt accumulation has become integral part of household savings decisions in the 21<sup>st</sup> century
- U.S. middle class owe 50% of all household debt
- Half of the debt increase after 1980 from home equity extraction
- Babyboomers (1945-1954) extracted lion's share of home equity
- Driver of the debt boom are middle-class households borrowing against rising asset values

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