

# Returning to the Nest: Debt and Parental Co-residence Among Young Adults



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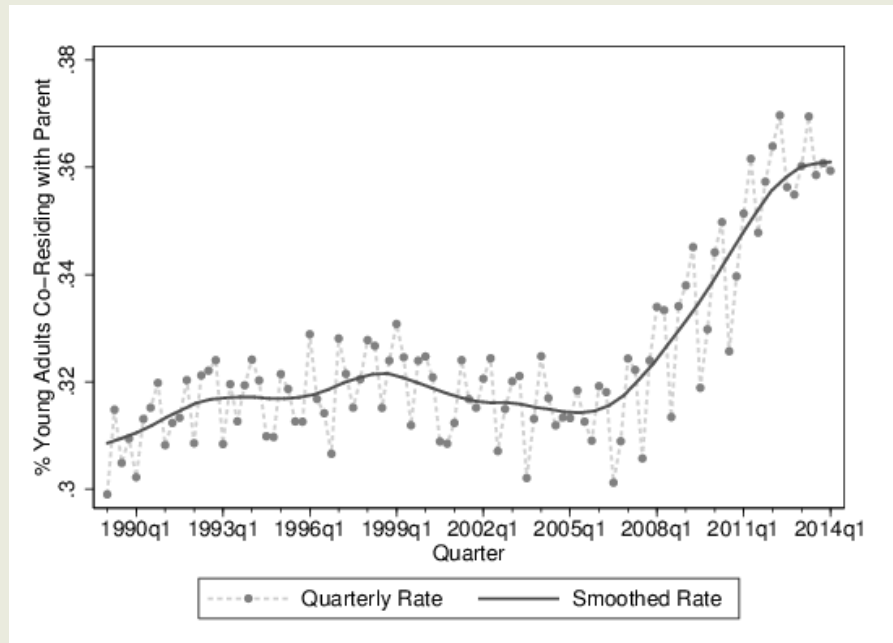
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The analysis and conclusions set forth are those of the authors and do not indicate concurrence with the other members of the research staff or the Board of Governors

# Motivation



- Young adults increasingly living at home
  - Recent interest in “boomerang” generation: why are they moving in?
  - Common explanations: weak labor markets, housing boom/bust
    - ✦ Yelowitz 2007, Winkler and Rogers 2010, 2012, Kaplan, 2012; Lee and Painter, 2013; Paciorek, 2013



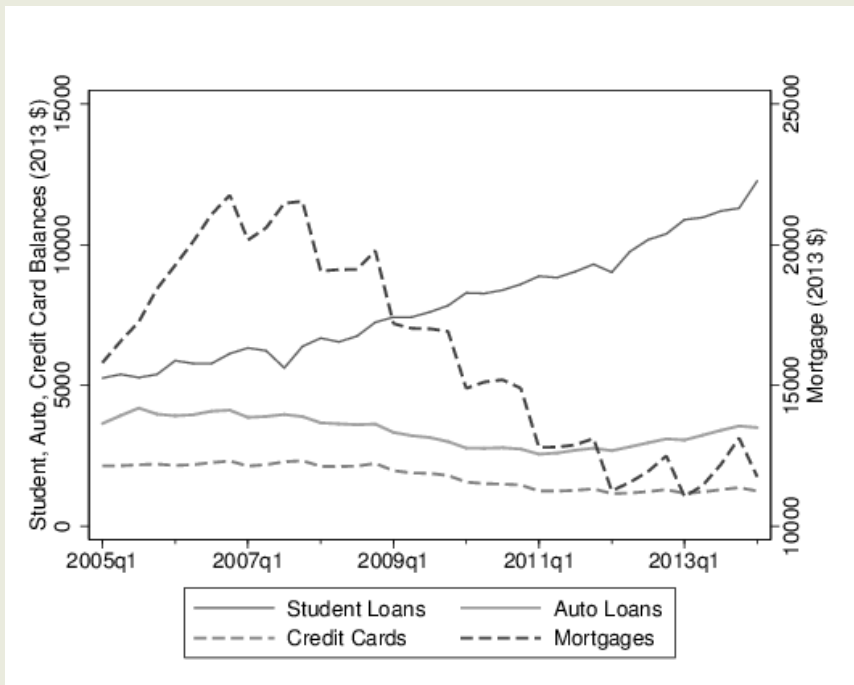
Fraction 18-31 year olds living at home, from CPS (quarterly)

# Motivation

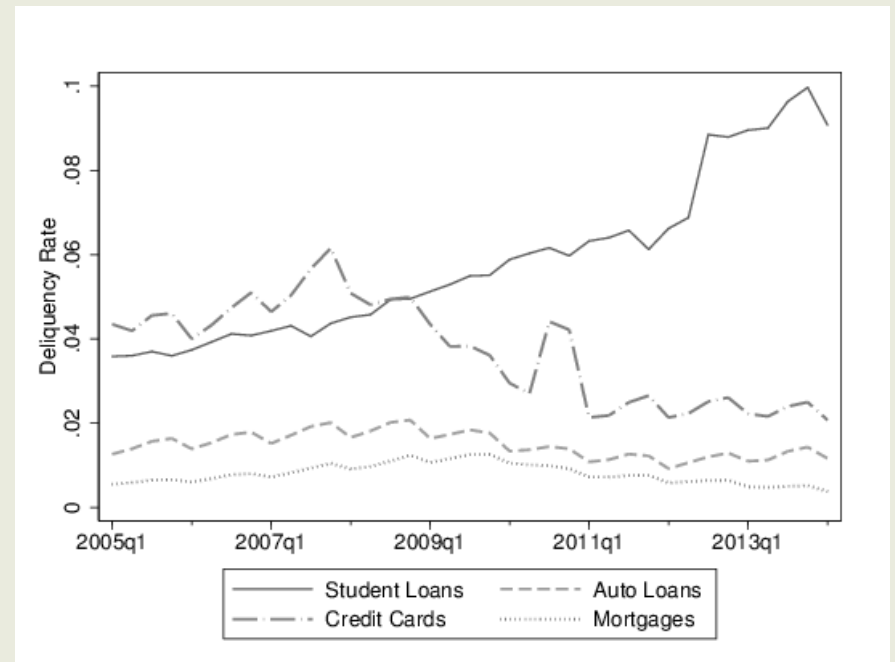


- Recent increase in debt balances and delinquency
- Changes in mix of debt held (student loans)

## Debt Balances by Type



## Delinquency Rates by Type



Calculated from FRBNY CCP/Equifax for all individuals 18-31

# Role of Debt



- **Conceptual framework: life-cycle models**
  - Borrowing is critical for marginal utility smoothing
  - Young adults on the steep section of the age-earnings profile
- **But high levels of debt can be problematic**
  - Mechanically difficult to rent apartment, obtain mortgage, etc.
- **Co-residence as insurance (e.g. Kaplan 2012)**
  - Option of co-residence could increase risk-taking (and borrowing): taking a riskier job, more education, etc.
  - Realization of downside risk could make debt burden unmanageable
- **This paper: explore relationship between current (and lagged) debt circumstances and subsequent decision to move in with parents**

# Data



- **FRBNY CCP/Equifax**
  - Unbalanced quarterly panel of credit reports of 18-31 year-olds who are in the sample continuously for at least 8 quarters
  - Includes information on loan accounts, amounts past due, credit score, age, and location of residence (Census block)
- **Match block-level demographics from 2000 Census**
  - education, race/ethnicity, sex, school enrollment
- **Match county-quarter-level economic conditions**
  - Median home price (FHFA and Census)
  - Unemployment rates (BLS)

# Identifying Parent-Child Co-residence



- CCP/Equifax also includes credit reports for all individuals at the sample member's address each quarter
- Use CPS to identify age pairs where >90% of relationships between hh members are parent-child
  - Includes almost all pairs where age gap is 25-35 years
- Each quarter, determine if parent is also at the address listed on young adult's credit report
  - Define independence as living w/o parent, could be alone, with spouse/partner, roommate
- Main dependent variables:
  - **Move In:** At least 2 qtrs independent, followed by at least 2 qtrs at home
  - **Duration at home:** Conditional on move in, number of quarters home before observed independent 2 qtrs

# Measuring Debt-Holding



- *Issue:* Typical measures of indebtedness such as amount borrowed are not meaningful without income/asset information
  - E.g. same credit balance is reasonable for some, problematic for others
- *Solution 1:* Split by prime/subprime credit scores
  - Examine balances separately for student loans, credit cards, auto loans, and mortgages
- *Solution 2:* Credit score growth  $t-1$  to  $t$ 
  - Credit scores are a composite measure of borrower creditworthiness, a function of credit utilization, payment history, types of credit used
- *Solution 3:* Delinquencies
  - Mild (<90 days late) vs severe (90+ days late)
  - Separate out student loans under deferment

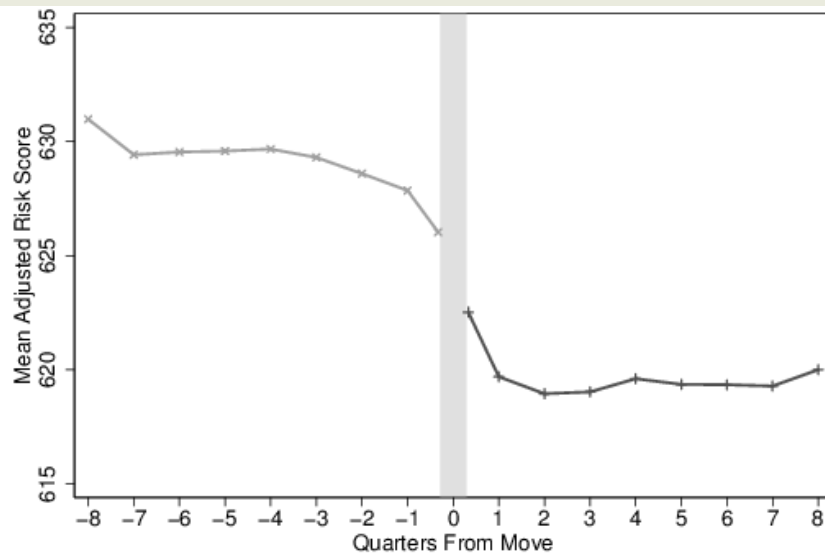
# Summary Statistics



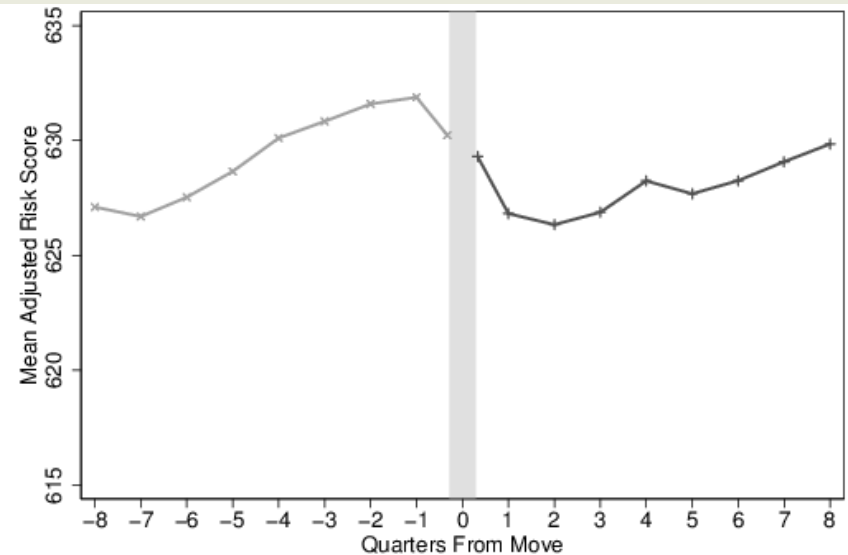
Variable	Mean		Variable	Mean	
Age	25.6		Credit Score	636	
Living with parent	0.360		Score Growth t-1,t	0.003	
Move In t,t+1	0.010		Delinquent 0-89 Days	0.046	
Median duration in co-res.	12 qtrs.		Delinquent 90+ Days	0.075	
<i>Student Loans</i>			<i>Credit Cards</i>		
Balance	\$7,820		Balance	\$1,770	
Have account	0.381		Have account	0.534	
Past Due	0.046		Past Due	0.038	
Deferment	0.115				
<i>Auto Loans</i>			<i>Mortgages</i>		
Balance	\$3,370		Balance	\$163,400	
Have Account	0.302		Have Account	0.135	
Past Due	0.015		Past Due	0.008	

# Evolution of credit scores around a move

- Mean credit score before and after “moving in”:

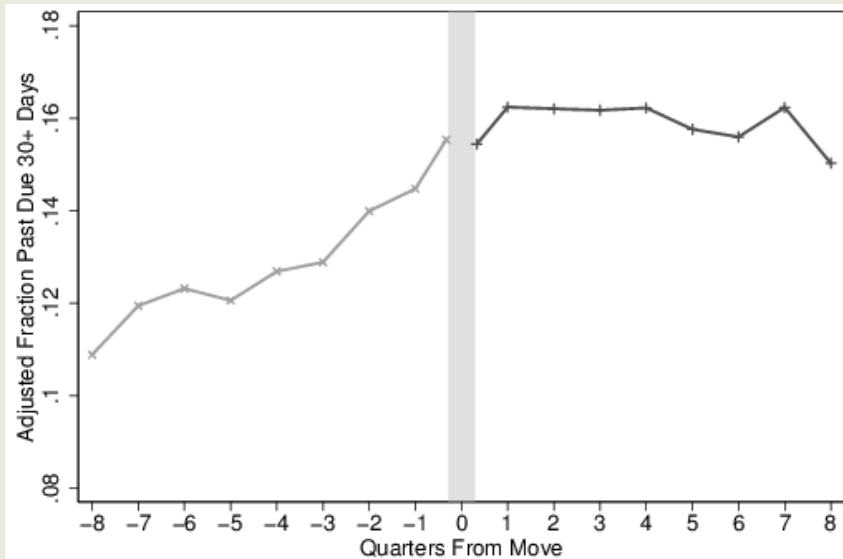


- Mean credit score before and after typical move:

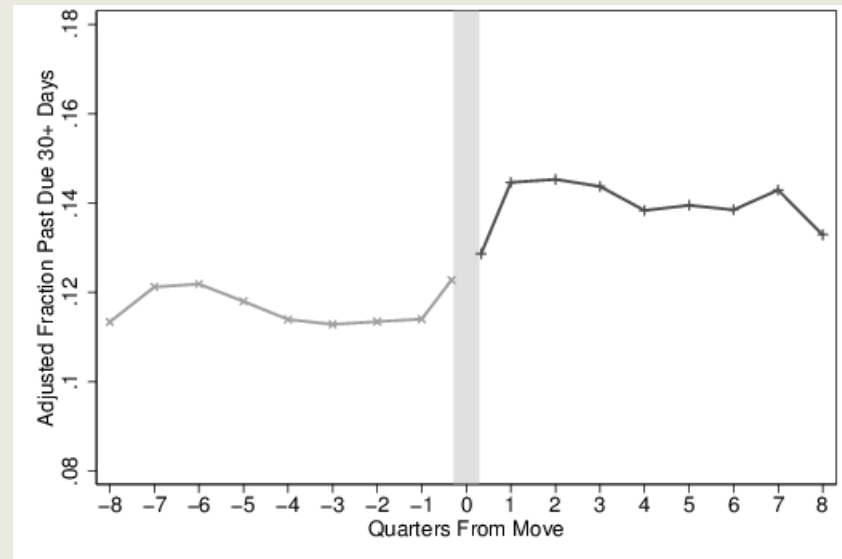


# Evolution of delinquency around a move

- Delinquency rates before and after “moving in”:



- Delinquency rates before and after typical move:



# Effect of $\text{Balance}_t$ on $\text{Pr}(\text{Move In})_{t,t+1}$



	(1) Student Loans	(2) Credit Cards	(3) Auto	(4) Mortgage
<i>Dependent Variable: <math>\text{Movein}_{it,t+1}</math></i>				
<b>Panel A</b>				
$\text{Balance}_{it}$	0.000473*** (0.000013)	0.000885*** (0.000123)	0.000643*** (0.000036)	-0.000164*** (0.000003)
$\text{Credit Score}_{it}$	-0.000346*** (0.000021)	-0.000347*** (0.000021)	-0.000370*** (0.000021)	-0.000122*** (0.000021)
$\text{Unemployment Rate}_{ct}$	0.000121*** (0.000020)	0.000118*** (0.000020)	0.000124*** (0.000020)	0.000122*** (0.000020)
$\text{Median Home Price}_{ct}$	0.000076*** (0.000008)	0.000077*** (0.000008)	0.000075*** (0.000008)	0.000092*** (0.000008)
Observations	28940309	28940309	28940309	28940309
Individuals	1814074	1814074	1814074	1814074
<b>Panel B</b>				
$\text{Balance}_{it} * \text{Subprime}_{it}$	0.000279*** (0.000024)	0.000963 (0.000317)	0.001175*** (0.000098)	0.000105*** (0.000006)
$\text{Balance}_{it}$	0.000369*** (0.000015)	0.000381*** (0.000047)	0.000096 (0.000029)	-0.000195*** (0.000004)
$\text{Credit Score}_{it}$	-0.000258*** (0.000021)	-0.000269*** (0.000032)	-0.000187*** (0.000024)	-0.000036 (0.000022)
$\text{Unemployment Rate}_{ct}$	0.000120*** (0.000020)	0.000119*** (0.000020)	0.000126*** (0.000020)	0.000123*** (0.000020)
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# Moving in: credit score growth and delinquency



- **Credit Scores:**

- Falling credit scores increase pr (move in):
  - ✦ Moving from 75<sup>th</sup> to 25<sup>th</sup> percentile credit score increases move-in rate 10 percent
- BUT only for sub-prime borrowers

- **Delinquency:**

- Delinquency increases pr(move in) 12 percent
  - ✦ For student loans, credit cards and auto loans only (not mortgages)
  - ✦ Note: consider student loan deferment separately from current/delinquent
- Mild delinquency (one quarter) increase pr(move-in), but severe delinquency (2+ quarters) reduces pr(move-in)
  - ✦ Young adults prefer to move in at earlier signs of trouble
  - ✦ Young adults are “picked off” – those who become severely delinquent don’t want to/can’t move in

# Duration of co-residence



- Effects may or may not be symmetric
    - Once at home, may or may not want to leave
  - Estimate duration models
    - For those who move in, see how long before they move out
    - Include all debt measures in model
    - Accelerated failure time regressions, using various distributional assns
  - Results
    - Low credit scores, delinquency on student loans, auto loans, *increase* time spent in co-res
    - Larger student loan/auto balances and being current on accounts *decrease* duration
- Suggests debt itself is not problematic, and borrowing prudently allows young adult to move out

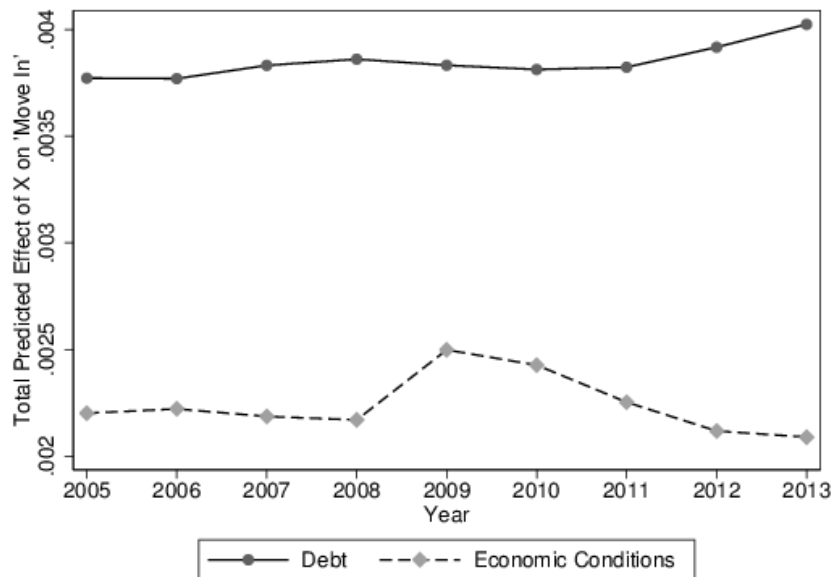
# Additional Specs



- **Interactions with Parental characteristics**
  - For those who we observe with a parent at some in the past, collect information on parent
    - ✦ Income, education, and child's current distance from parent
  - Delinquency exerts greater effect on move-ins for young adults with higher income parents (space, etc.)
- **Robustness checks**
  - Interactions with economic conditions: no differential effects
  - Youth-specific unemployment rates: reduces move-ins
  - Local co-residence rate (proxy for “acceptability”): reduces move-ins
  - Rental vacancy rates (proxy for rental prices): no effect

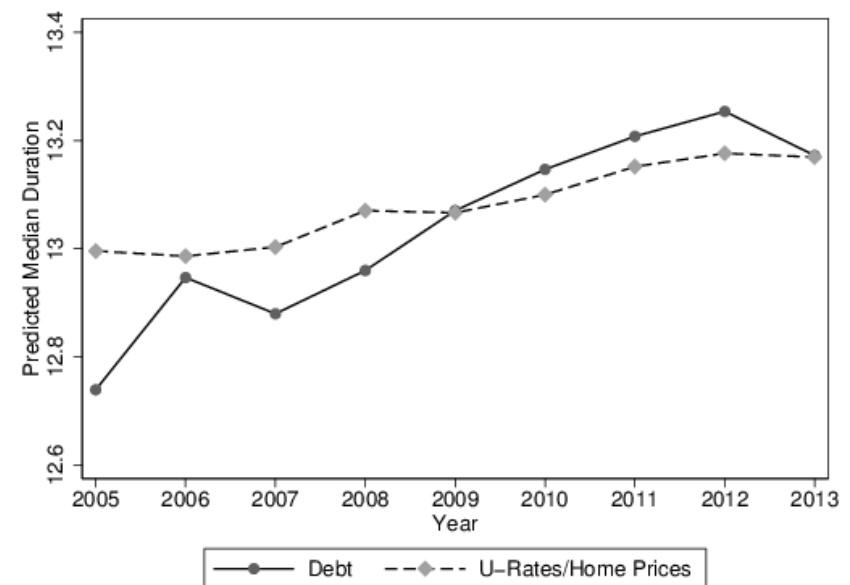
# Comparing the Effects of Debt and Economic Conditions

- Effects on “moving in”:



- Debt exerts greater effects
- Effect of debt increasing
- Effect of urates/hprices decreasing over time

- Effects on median duration in co-residence:



- Debt alone leads to large increase in median durations over time
- Urates/hprices alone increase durations too, but slower rate

# Conclusion



- Changing debt portfolios over this period – increase in student loans and declines in credit card, mortgage debt
  - Can predict 30 percent of the observed increase in flows into co-residence
  - Can predict 26 percent of the observed increase in time spent in co-residence
- Suggests co-residence is used to smooth consumption when willingness/ability to borrow is exhausted
- Macro and demographic effects
  - Effect of changing financial circumstances on household formation
  - Possible adverse effects on aggregate consumer spending, housing demand