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

**LISA J. DETTLING
(FEDERAL RESERVE BOARD)**

**JOANNE W. HSU
(FEDERAL RESERVE BOARD)**
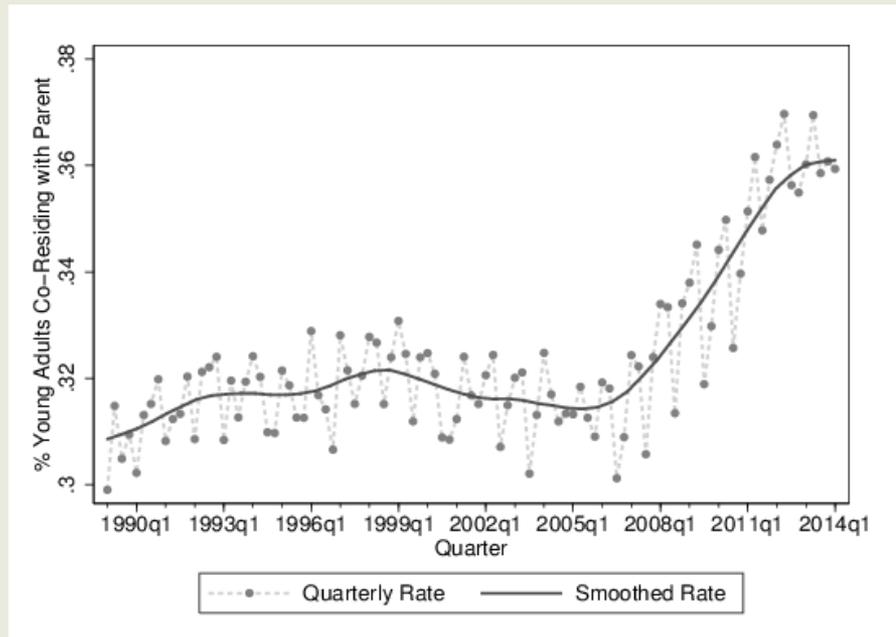
Motivation

- 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
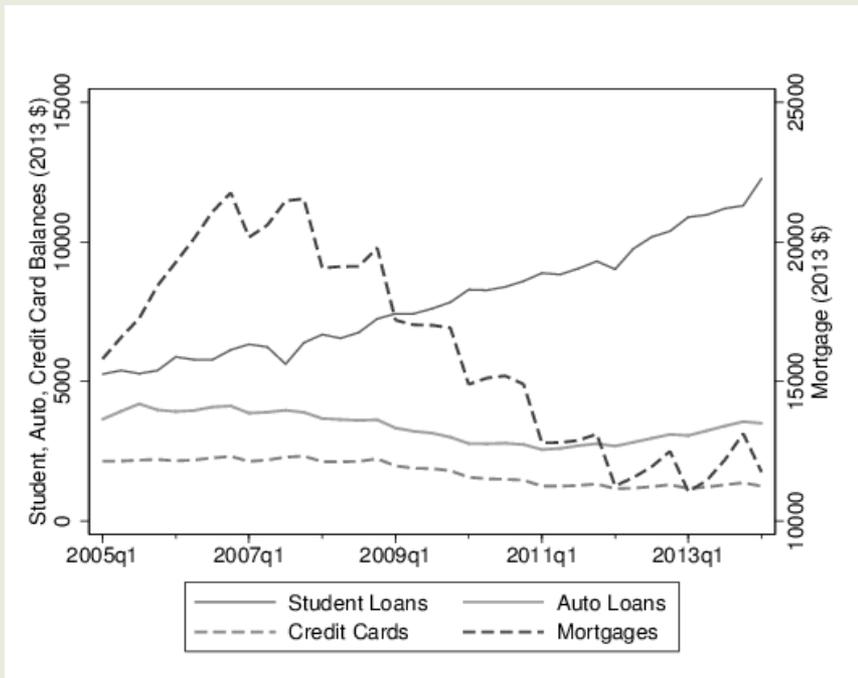

Fraction 18-31 year olds living at home, from CPS (quarterly)
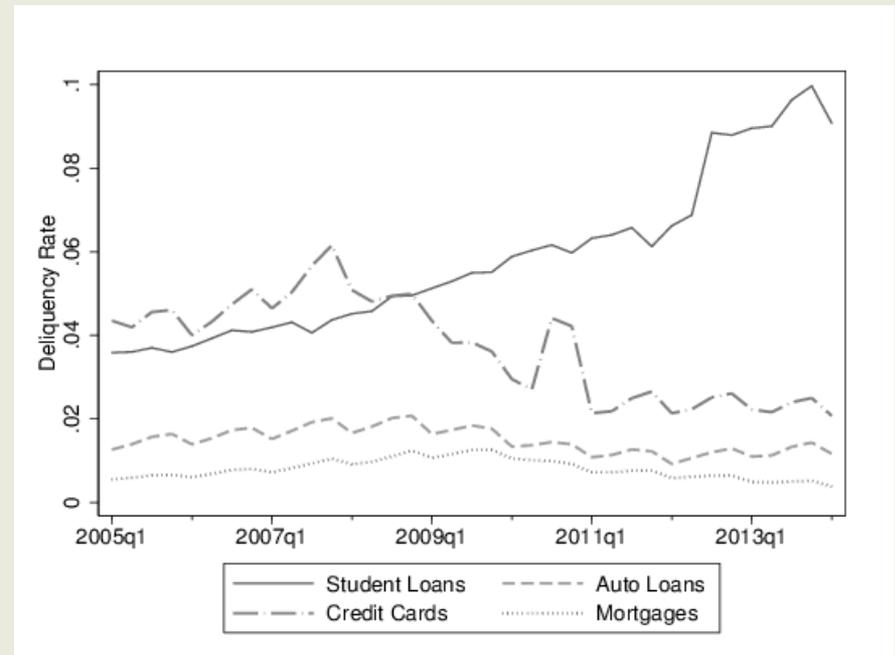
Motivation

- 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	
Student Loans			*Credit Cards*		
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				
Auto Loans			*Mortgages*		
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

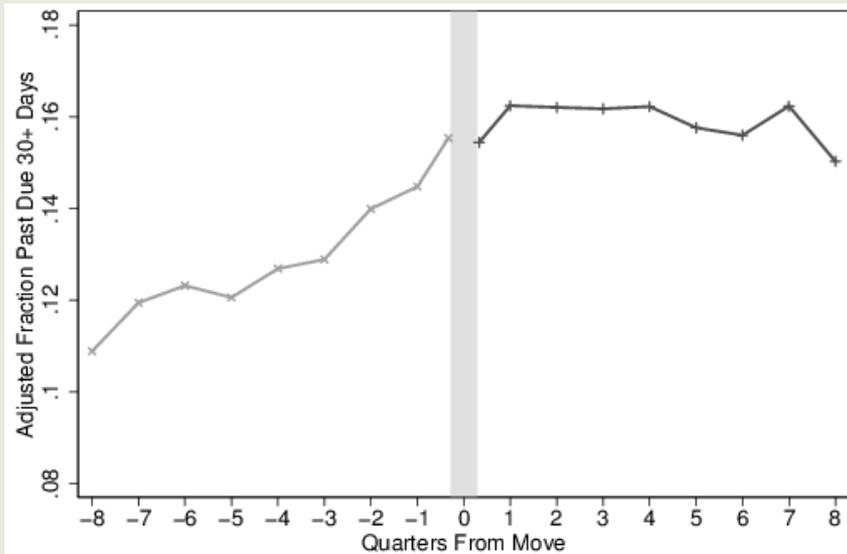- Mean credit score before and after "moving in":
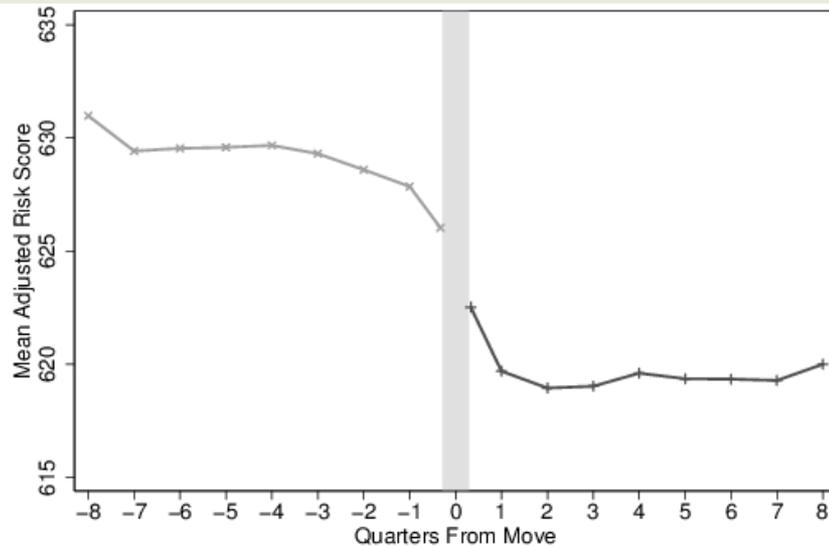
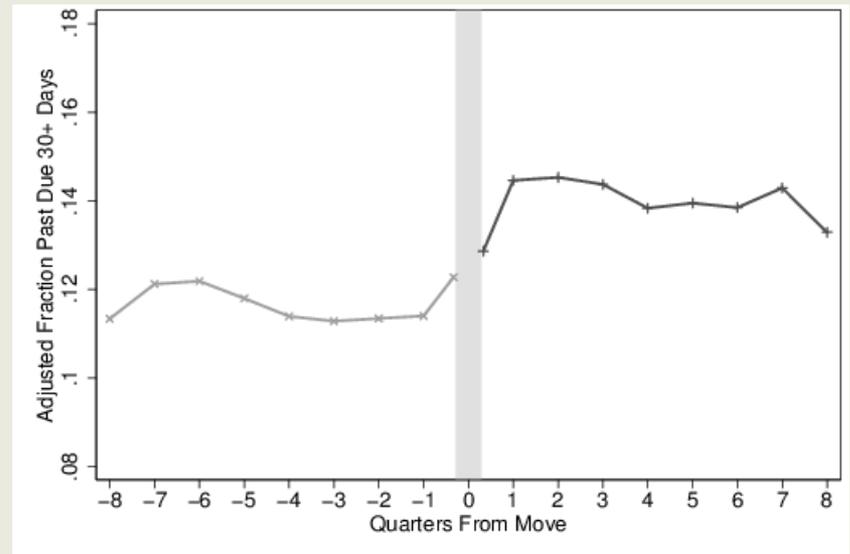- Mean credit score before and after typical move:
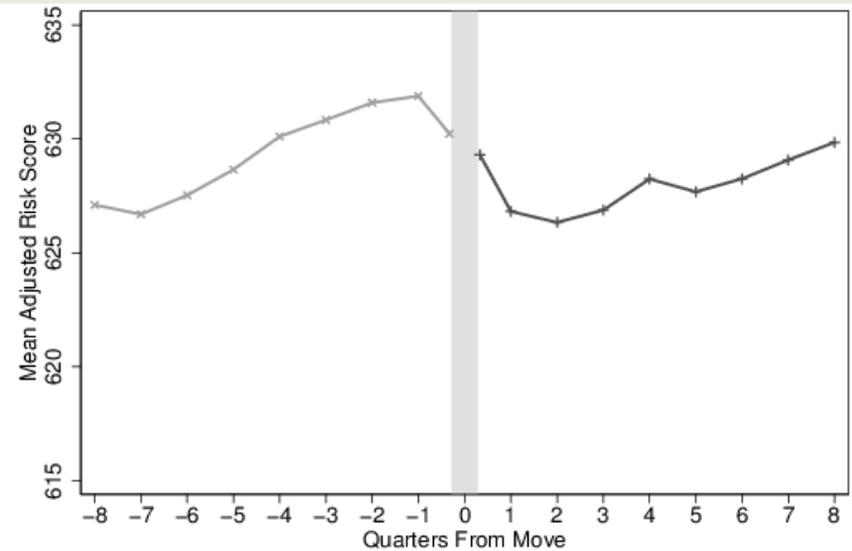
Evolution of delinquency around a move

- Delinquency rates before and after "moving in":

- Delinquency rates before and after typical move:

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

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

- **Credit Scores:**
  - Falling credit scores increase pr (move in):
    - Moving from 75th to 25th 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

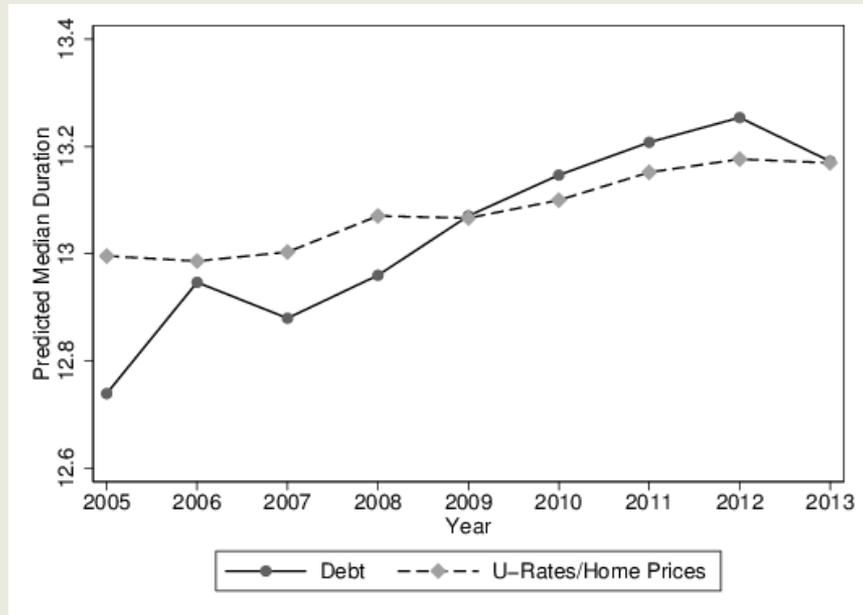# Comparing the Effects of Debt and Economic Conditions

- Effects on "moving in":
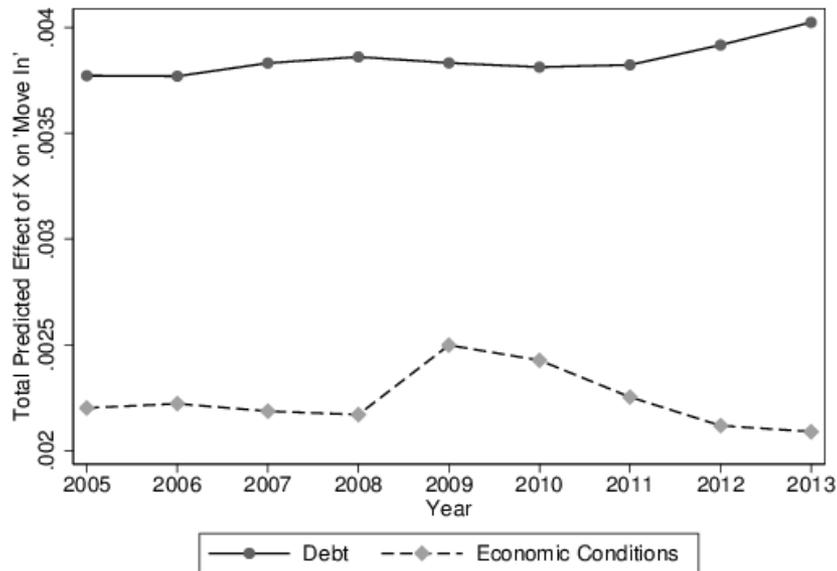
- Debt exerts greater effects
- Effect of debt increasing
- Effect of urates/hprices decreasing over time

- 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