The Post-Foreclosure Experience of U.S. Households

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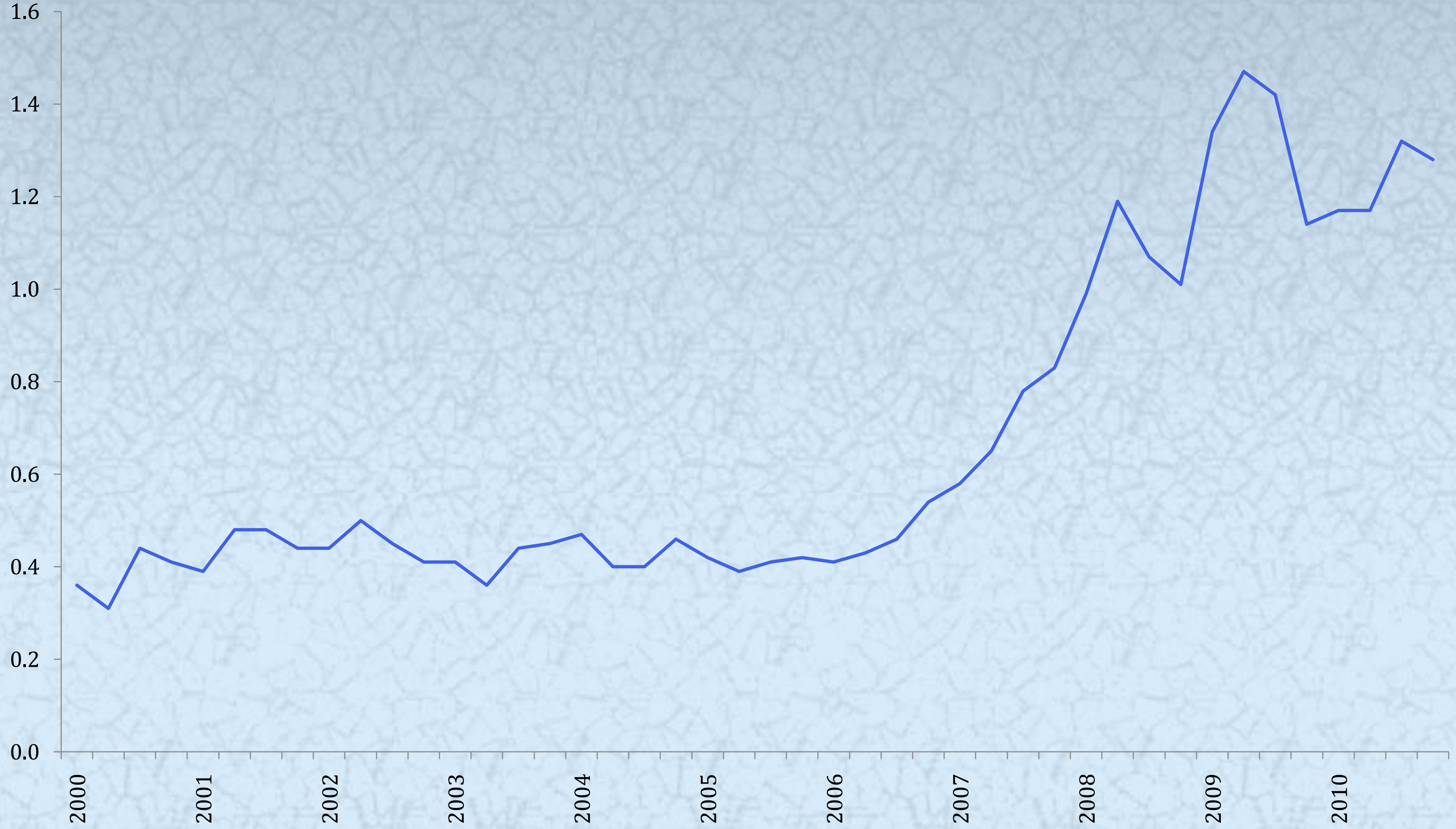
Foreclosure Starts

(Percent of Outstanding Mortgages)



Source: Mortgage Bankers' Association.

Motivation

- Rise in foreclosures has stimulated much research:
  - Causes of mortgage default
  - Mortgage modification
  - Effect of foreclosure on house prices
- Other potential effects have yet to be addressed:
  - Household size and composition
  - Employment and commuting
  - Schooling
  - Access to credit

Motivation

- Little is known about the post-foreclosure experience of borrowers:
  - Loan-level data do not collect information after loan termination
  - National survey data rarely have information on foreclosure and are too dated to study the current wave of foreclosures.
- We use credit bureau data to study the post-foreclosure experience of U.S. households:
  - Large, representative sample
  - Timely
  - Detailed data, including foreclosure flag

Motivation

Specifically, we examine:

- Household size and composition
  - Do people move in with parents or other adults to defray housing expenses?
- Tenure and structure type
  - Do post-foreclosure borrowers move to rental housing?
  - If so, does foreclosure cause people to move from single-family to multifamily structures?
- Migration
  - Do people tend to stay local or move far away?
  - Do people move to worse neighborhoods?
- Compare outcomes after the recent wave of foreclosures to outcomes earlier in the decade.

Data description

- 5% random sample of individual credit records from a national credit bureau (FRBNY/Equifax Consumer Credit Panel).
- Quarterly from 1999:Q1 to 2010:Q4
- Panel of individuals
- Rich information on each individual's credit history:
  - Types of loans: mortgages, credit cards, auto loans
  - Loan-specific information: loan balances, delinquency, foreclosure
- Birth year, credit score and detailed geography (Census block).
- Same information for other individuals residing at the same address.

Data description

- Limit sample to individuals with 1 large mortgage to reduce the likelihood that the foreclosed property is investor-owned.
- Exclude households where 5 or more adults live at the same address.
- Use Q4 data and focus on annual changes.

Empirical strategy

- Create a counterfactual: what would have happened to borrowers had they not defaulted?
- Borrowers who default are a very particular group, so don’t want to compare them to the general population.
- Construct a comparison group based on initial (i.e. year prior to foreclosure) characteristics:
  - Geography (same Census tract, ZIP code or county)
  - Age group (18-24, 25-34, 35-44, 45-54, 55-64, 65+)
  - Credit score group (50-point increments)
  - Mortgage balance (quintile)
  - Address type (single-family or high rise)

Summary statistics

	2000-2005		2006-2008	
	FC=0	FC=1	FC=0	FC=1
Number of individuals	282,855	62,323	239,379	65,308
Mean credit score	537	530	571	568
Median mortgage balance	$86,024	$86,198	$151,932	$152,901
Average household size	2.19	2.13	2.29	2.27
Fraction with a credit card	0.85	0.70	0.85	0.74
Mean credit card balance	$9,281	$7,124	$10,885	$8,769
Fraction 30-60 days late on mortgage	0.16	0.35	0.14	0.31
Fraction 90+ days late on mortgage	0.05	0.20	0.04	0.16

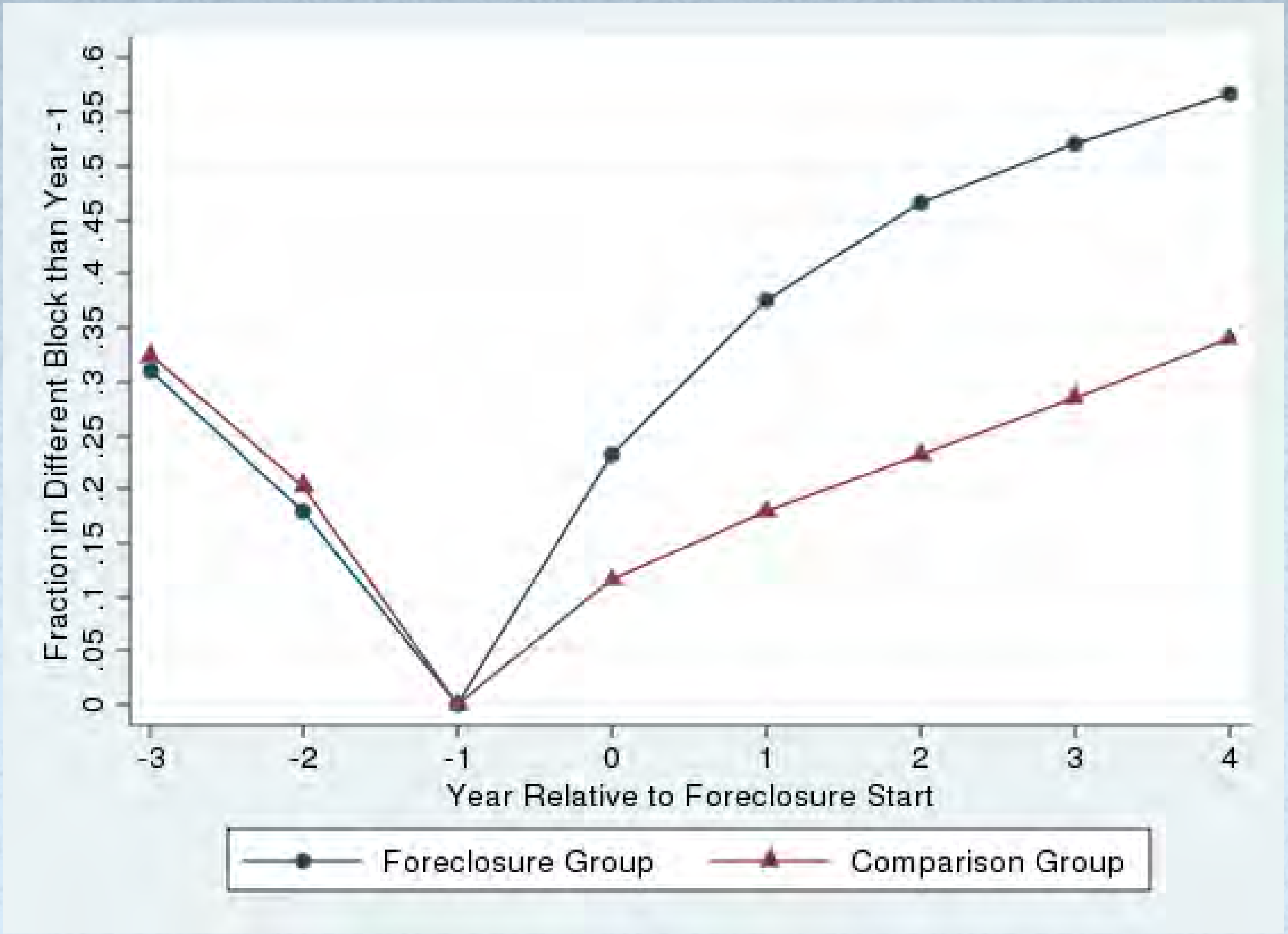
Note: Year in column heading refers to the year of foreclosure, but all statistics are measured in year prior to foreclosure . FC=0 is comparison group and FC=1 are individuals who experienced a foreclosure.

Source: FRBNY/Equifax Consumer Credit Panel.

Defining foreclosure

- We observe a foreclosure *start,* not whether the foreclosure is completed.
- We are interested in foreclosure completions because the household is much less likely to change if the borrower is able to stay in the home by refinancing or modifying the mortgage.
- Since we cannot observe whether a foreclosure is completed, we focus on individuals that move after the foreclosure start.

Fraction of Individuals Living in a Different Census Block than in Year Prior to Foreclosure



Source: FRBNY/Equifax Consumer Credit Panel.

Defining foreclosure

- Difference in mobility between foreclosure and comparison groups stops widening after year 2, suggesting that most foreclosures are completed by year 2.
- Examine changes in outcomes from year prior to foreclosure start to second year after foreclosure start.
- Use only individuals in the foreclosure group that moved, since the foreclosure process is not likely to have been completed for non-movers .

Household size and composition

	2000-2005		2006-2008	
	FC=0	FC=1	FC=0	FC=1
Average household size				
Before	2.18	2.14	2.28	2.24
After	2.30	2.23	2.31	2.27
Fraction that decrease household size	0.21	0.32	0.21	0.33
Fraction that increase household size	0.31	0.37	0.23	0.35
Fraction living with exact same household members	0.37	0.19	0.47	0.18
Fraction moved in with an adult more than 20 years older	0.05	0.12	0.05	0.12

Note: Year in column heading refers to the year of foreclosure. FC=0 is comparison group and FC=1 are individuals who experienced a foreclosure. Before = year prior to foreclosure and after = 2^{nd} year after foreclosure.

Source: FRBNY/Equifax Consumer Credit Panel.

Household size and composition

- Average household size does not change much.
- More turnover in the size and composition of households in the post-foreclosure group.
  - Changes in household size and composition are similar to movers in the comparison group.
- Post-foreclosure borrowers are modestly more likely to move in with adults who are 20+ years older (parents?) than the comparison group.

Homeownership and structure type

	2000-2005		2006-2008	
	FC=0	FC=1	FC=0	FC=1
Fraction with a mortgage				
Before	1	1	1	1
After	0.68	0.06	0.77	0.02
Fraction in a household with a mortgage				
Before	1	1	1	1
After	0.75	0.20	0.81	0.17
Fraction who move from single-family to multifamily	0.04	0.20	0.03	0.22
Fraction of movers who move from single-family to high rise	0.14	0.21	0.14	0.22

Note: Year in column heading refers to the year of foreclosure. FC=0 is comparison group and FC=1 are individuals who experienced a foreclosure. Before = year prior to foreclosure and after = 2nd year after foreclosure.

Source: FRBNY/Equifax Consumer Credit Panel.

Percentage of Individuals by Mortgage Status and Structure Type

	Post-Foreclosure Group	
	Single-family	Multifamily
No mortgage in the household	60	23
At least one mortgage in the household	16	1
	Comparison Group	
	Single-family	High Rise
No mortgage in the household	16	2
At least one mortgage in the household	77	4

Note: Statistics for the 2006-2008 period. Mortgage ownership and structure type are measured in the second year after foreclosure. FC=0 is comparison group and FC=1 are individuals who experienced a foreclosure.

Source: FRBNY/Equifax Consumer Credit Panel.

Homeownership and structure type

- Post-foreclosure borrowers are much less likely to have a mortgage or to live in a household with anyone else with a mortgage.
  - They are much more likely to live in rental housing.
- Post-foreclosure borrowers are much more likely to move to a high rise than the comparison group.
  - Still, about ¾ of post-foreclosure borrowers live in single-family dwellings.
- The majority of post-foreclosure individuals live in a single-family structure with no mortgage.

Fraction of migrants by distance of move

	2000-2005		2006-2008	
	FC=0	FC=1	FC=0	FC=1
Inter-State	0.18	0.16	0.18	0.14
Within State, Inter-County	0.22	0.21	0.21	0.20
Within County, Inter-Tract	0.52	0.56	0.50	0.57
Within-Tract	0.07	0.07	0.11	0.09
Inter-MSA	0.22	0.21	0.24	0.20
Inter-School District	0.60	0.58	0.60	0.58

Note: Year in column heading refers to the year of foreclosure. FC=0 is comparison group and FC=1 are individuals who experienced a foreclosure.

Source: FRBNY/Equifax Consumer Credit Panel.

Distance of move

- Most post-foreclosure borrowers move within the same county.

- Migration distances are similar for movers in the comparison group.

- Post-foreclosure borrowers are *slightly* less likely to move a far distance than movers in the comparison group.
  - This difference is even smaller in the 2000-2005 period.

Neighborhood characteristics

- Post-foreclosure borrowers tend to move to neighborhoods that are denser and have less owner-occupied housing.
  - Also, slightly fewer rooms per housing unit, more female-headed households, and lower commute time.

- Other measures of neighborhood affluence do not change substantially:
  - Racial and ethnic composition
  - Educational attainment
  - Median income
  - Median house value
  - Median rent

- Neighborhood choices are also similar to migrants in the comparison group.

Summary

- Many post-foreclosure borrowers move to a new residence
  - Propensity to move remains elevated for 2 years after the initial foreclosure start.
  - About half of borrowers still have not moved after 2 years, indicating that many foreclosure starts are never completed.

- Higher mobility raises churning in household size and composition, but these changes are no different than for migrants in the comparison group
  - Post-foreclosure migrants are only slightly more likely to move in with older adults.

Summary

- Post-foreclosure migrants are much less likely to live in owner-occupied housing and are much more likely to move to a high-rise building.
- They are also more likely to move to denser, more urban neighborhoods.
- Otherwise, the characteristics of the neighborhood do not change dramatically.
- Results are largely similar for foreclosures that are started pre-2006 and those started in the current housing market downturn.

Conclusions

- Foreclosure causes people to move, but on average they do not end up in substantially worse neighborhoods or more crowded living conditions.
- It is possible that people move to lower quality housing units, even though the neighborhood itself is not less affluent.
  - However, housing unit quality is positively correlated with neighborhood quality.
- Foreclosure may affect other aspects of people’s lives.
- It is possible that the effects of foreclosures during the recent economic recession have been different, but it is too early to evaluate these outcomes.