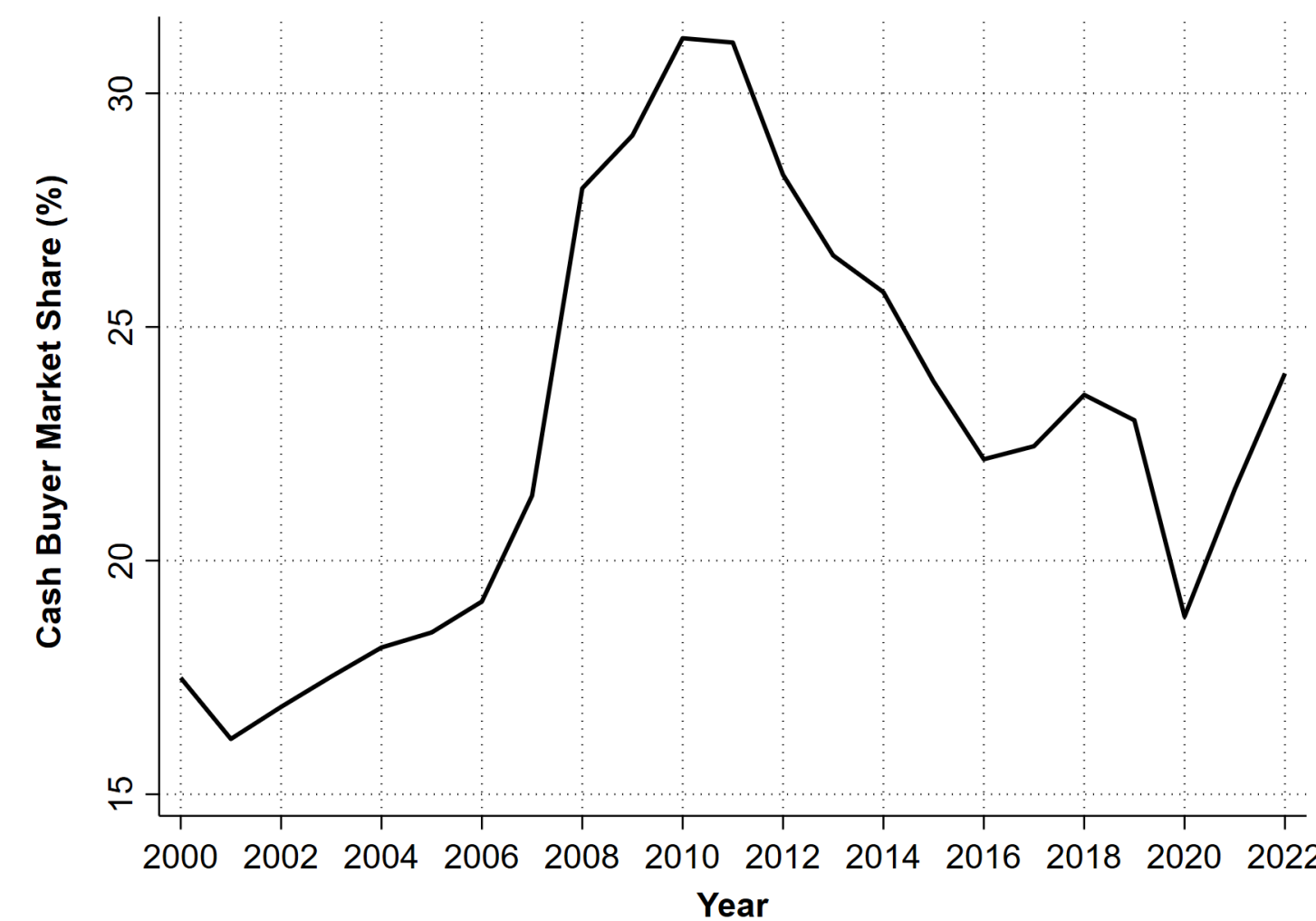


Navigating the Cash Tide: The Responses of Mortgage Lenders to Cash Buyers

Ernesto Aldana and Zipei Zhu

Introduction

Cash-only transactions comprise a large share of home purchases. Over 20% of USA home sales have been paid entirely with cash during almost every year since 2007.



Home sellers tend to prefer cash bids because they reduce the closing and resale risk involved in home purchases. If a cash-only bidder household buys a house by outcompeting mortgage-financed households, mortgage lenders lose an opportunity to originate a home purchase loan. In this research, we document this tension by analyzing the relationship between local changes in the number of cash-only transactions and mortgage loan origination.

Research Question

How do mortgage lenders react to changes in cash purchase activity in the local market?

Hypotheses and Theoretical Predictions

Hypothesis 1: Growth in local cash transactions is associated with lower growth or decline in local mortgage lending

- Heterogeneous responses of lender by type size, and other characteristics

Hypothesis 2: Lenders compensate lost business by promoting other loan sectors

- Home improvement and refinance loans
- CRE, credit cards, C&I loans

Data

- Deed transaction records from CoreLogic
 - Single family, town homes, and condos for all census tracts
- Loan-level information on mortgage originations from HMDA
 - Home purchase loans (first lien)
 - Home improvement and refinance loans
- Neighborhood characteristics from ACS

Drivers of Local Cash Buyer Activity

Which 2010 neighborhood characteristics are positively associated with growth in cash-only transactions from 2010 to 2022?

- Revealed preferences:
 - Property: share of single-family homes (+), house age (-), home size (-)
 - Demographics: Black/Hispanic (-)
 - Others: rent (-), vacancy (+), income (+), college (+), poverty (+), home ownership (+)

Tract-Year Level Results

We analyze how local mortgage originations respond to changes in cash buyer activity by estimating the following equation for all census tracts during 2003-2021:

$$\Delta M_{j,t} = \gamma \Delta CB_{j,t} + \beta * Controls_{j,t} + \varepsilon_{j,t}$$

- $\Delta M_{j,t}$: yearly percentage change in mortgage originations in census tract j between years t and $t-1$
- $\Delta CB_{j,t}$: yearly percentage change in cash-only transactions in census tract j between years t and $t-1$
- **Controls**: Neighborhood characteristics, local growth in house purchases, lagged growth in total mortgage originations, county FE, year FE

	(1) Δ Home Purchase (%)	(2) Δ Home Improvement (%)	(3) Δ Refinance (%)
Δ Cash Transaction (%)	-0.044*** (0.002)	-0.084*** (0.016)	-0.027*** (0.003)
Observations	1,244,116	1,183,242	1,244,514

At the census-tract level, growth in cash-only home purchases is negatively associated with the annual percentage change in home purchase originations. This suggests that activities of cash buyers may out-compete mortgage lenders over home transactions.

Heterogeneity across Lender Types

We study the heterogeneous responses to the changes in local cash buyer activity across different types of lenders :

$$\Delta M_{i,j,t} = \gamma \Delta CB_{j,t} * \psi_i + \beta * Controls_{j,t} + \varepsilon_{i,j,t}$$

- $\Delta M_{i,j,t}$: yearly percentage change in mortgage originations by lender i in census tract j between years t and $t-1$
- $\Delta CB_{j,t}$: yearly percentage change in cash-only transactions in census tract j between years t and $t-1$
- ψ_i : type of lender i (commercial bank, thrift, credit union, mortgage bank)
- **Controls**: Neighborhood characteristics, local growth in house purchases, lagged growth in total mortgage originations, county FE, year FE

	(1) Δ Home Purchase (%)	(2) Δ Home Improvement (%)	(3) Δ Refinance (%)
Δ Cash Transaction (%)	-0.453*** (0.0437)	-0.053*** (0.009)	-0.274*** (0.058)
thrift#Δ Cash Transaction (%)	0.019 (0.092)	0.038** (0.018)	-0.206*** (0.626)
credit#Δ Cash Transaction (%)	-0.149 (0.092)	0.042*** (0.015)	0.160** (0.074)
mortgage#Δ Cash Transaction (%)	-0.163*** (0.062)	0.053*** (0.010)	-0.633*** (0.063)

The total value of home purchase loans of a given lender is negatively associated with an increase in cash transactions. The negative effect is most pronounced for independent mortgage banks. However, all four categories of lenders experience decreases in home purchase loan originations.

Conclusion

- Negative responses from lenders to the growth in local cash transactions
- The responses vary by lender types
 - Independent mortgage lenders have the strongest reaction
 - Credit unions have the least pronounced responses
- Next steps:
 - Study heterogenous responses by other lender types (e.g., fintech) and size
 - Do lenders respond by promoting lending in other sectors (e.g., CRE, credit cards, C&I loans)?



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL