

**Discussion of  
“Household Leverage  
Before and After  
the Great Recession”  
by Adelino and  
Schoar**



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65<sup>th</sup> Annual Economic Conference  
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# Background

There has been a boom in research on housing and mortgage issues over the past dozen years, including several important papers by these authors

Much of this research has focused on the experiences of the pre-crisis and crisis periods

A key theme has been the role of heterogeneity—and these findings have really helped us understand what happened in these periods

# **This paper explores heterogeneity in home prices, mortgages, and homeownership over the post-crisis period**

Some key results:

The annual cost of owning fell despite a rise in prices and mortgage sizes

Homeownership rates for low-income households appear to have bounced back more strongly than for higher-income households

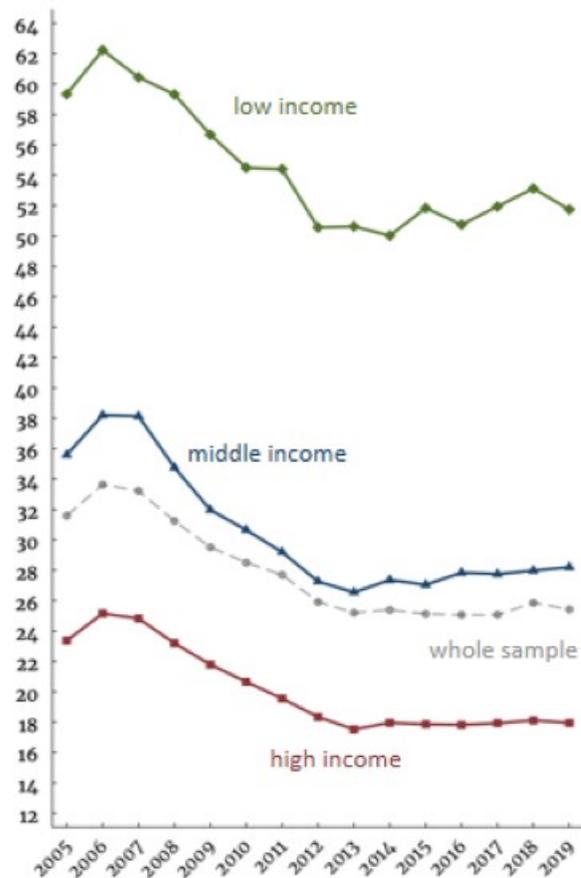
Purchases of homes by low-income households tilted toward always-boom areas just after the crisis but more recently have been more concentrated in non-booming areas

These results are interesting for what they may say about economic mobility (and, to some extent, financial risks) and they merit further exploration

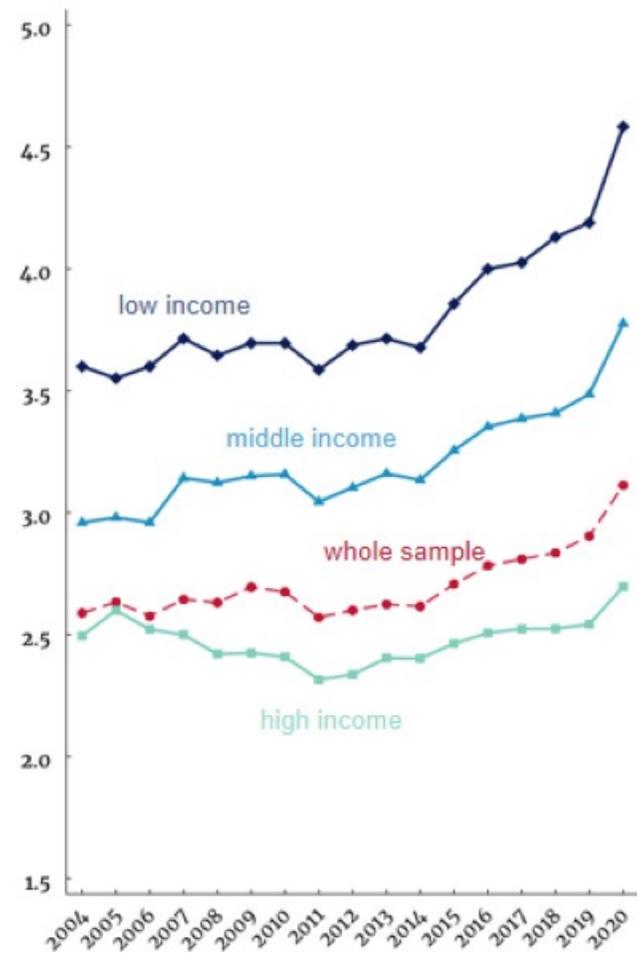
# Result 1: Lower annual costs despite higher mortgage amounts

Payments on Home-related Loans, Real Estate Taxes, Home Insurance, Fuels as a Percent of Income for New Owners

(more of an affordability than a “user cost” measure)



Home Purchase Loan Amount Relative to Income



for MSAs with above-median home prices in 2015

Screenshots from Adelino and Schoar (2021)

# Both trends likely to be connected, at least in part, to what has happened to interest rates

## Interest Rates

Percent



Data from Freddie Mac and Federal Reserve via FRED ([here](#) and [here](#))

A decline in interest rates should lower mortgage debt service burdens

A decline in interest rates should raise the price of assets that are alternatives to bonds => more expensive homes => higher purchase mortgage amounts (given constant CLTVs)

# Implications

“Affordability” of housing has increased on net since the pre-crisis period [can see this [in other measures](#) too]

We know that ability to make mortgage payments is a key underpinning of the sustainability of homeownership [e.g., [Amromin, Dokko, and Dynan](#), 2020]

But we want to think about risks as well as the most likely outcomes when evaluating the consequences for households and for financial stability

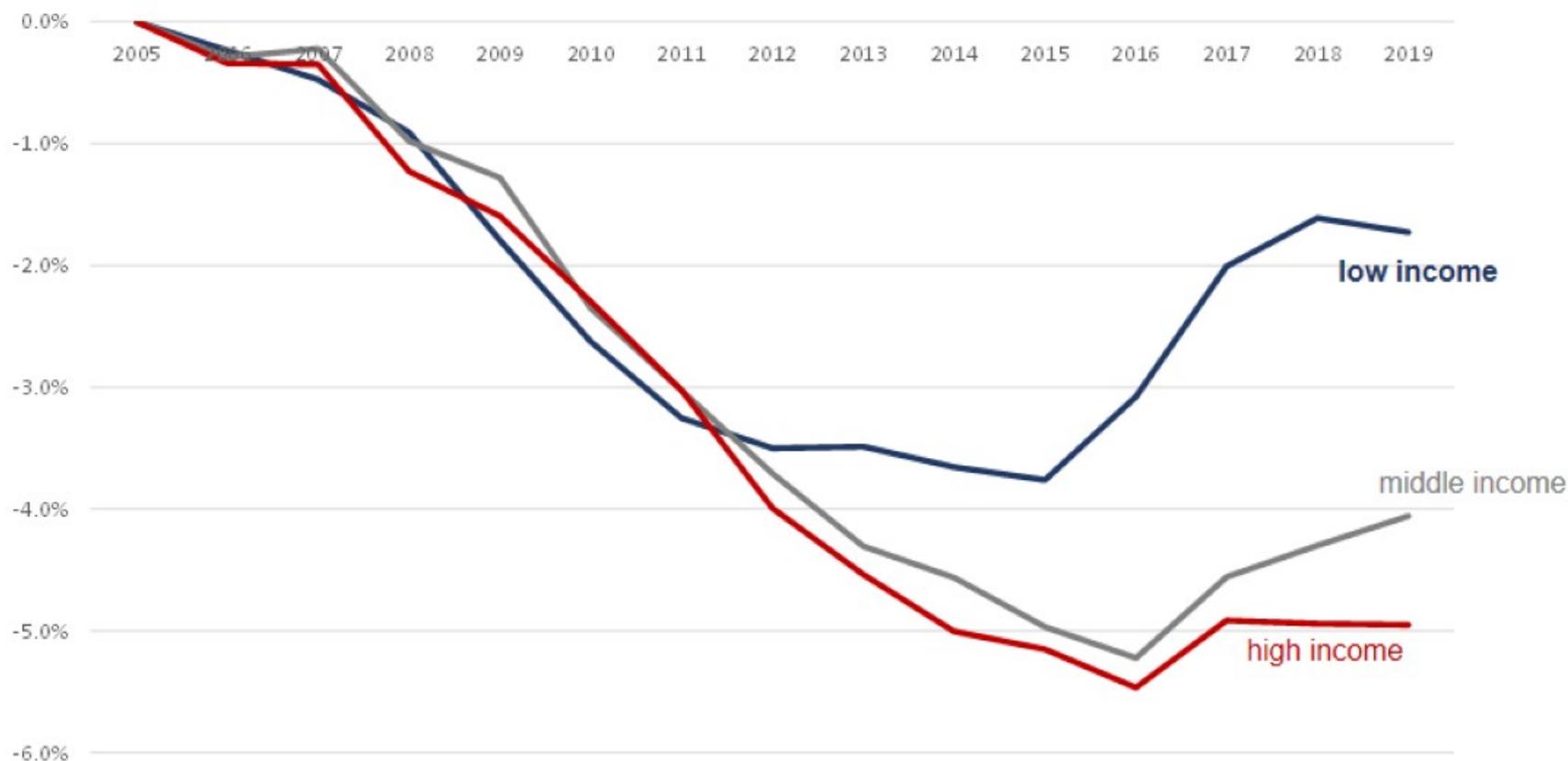
How many mortgages borrowers would go into negative equity if interest rates rise more than is currently expected?

The geographically granular information about home prices and mortgage amounts in the author’s data could allow for some interesting “stress-testing”

Note that a given percentage point change in interest rates implies a larger change in asset prices when interest rates are low

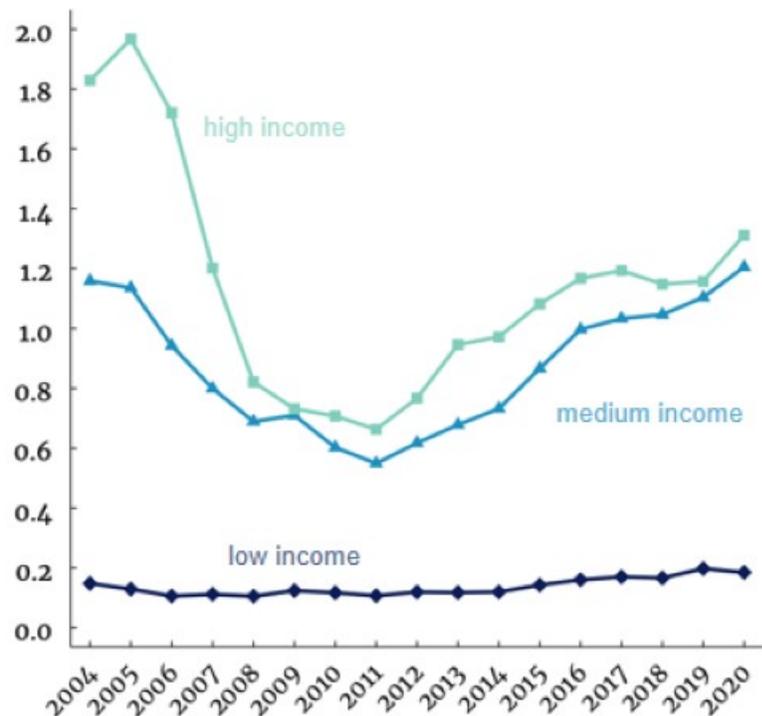
## Result 2: ACS data show low-income households saw less of a decline in homeownership and had more of a bounce back [relative to higher-income households]

Change in Homeownership Rates by Income Group since 2005 (through 2019)



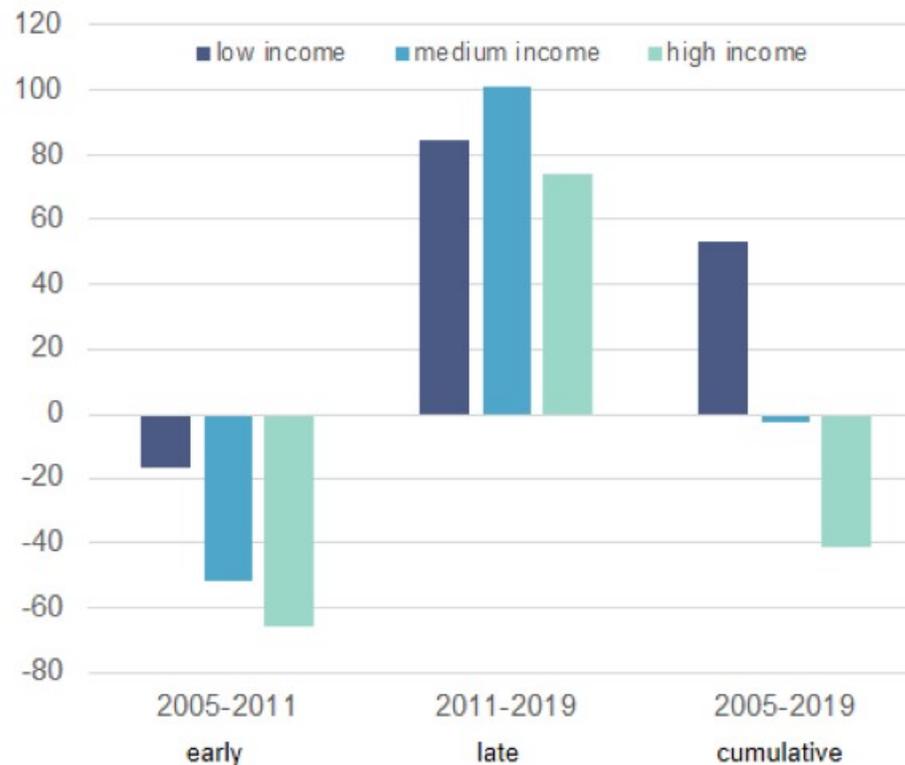
# This is consistent(-ish) with what A & S find in terms of mortgage flows

Millions of Purchase Mortgages Originated



Screenshot from Adelino and Schoar (2021)

Percent Change in Purchase Mortgage Originations



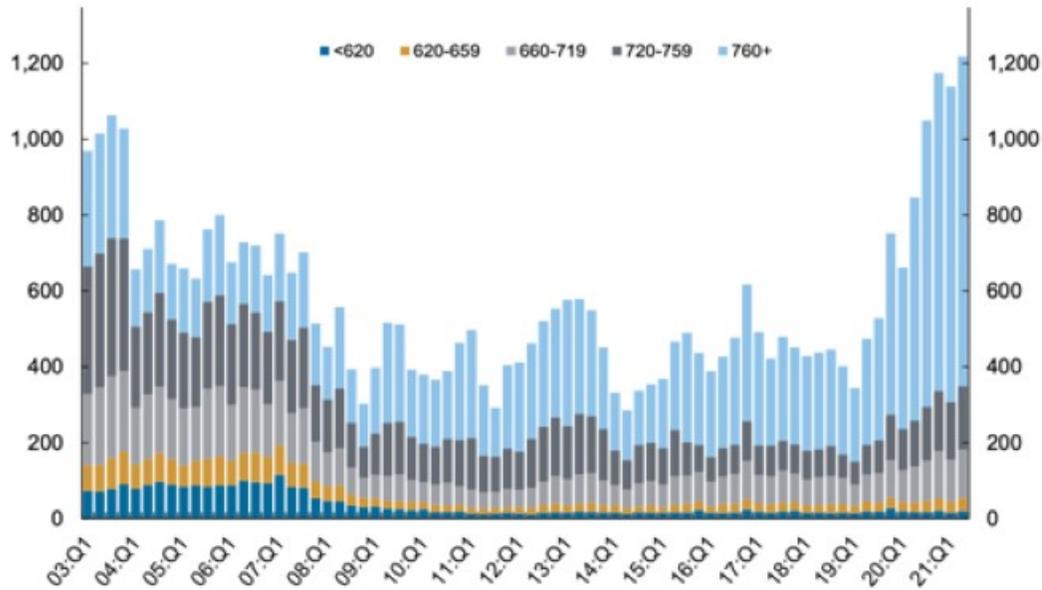
Author's calculations based on data from left panel

— for MSAs with above-median home prices in 2015 —

# But it's somewhat surprising given some things we know about how credit access has changed

Mortgage Originations by Credit Score

Billions of dollars

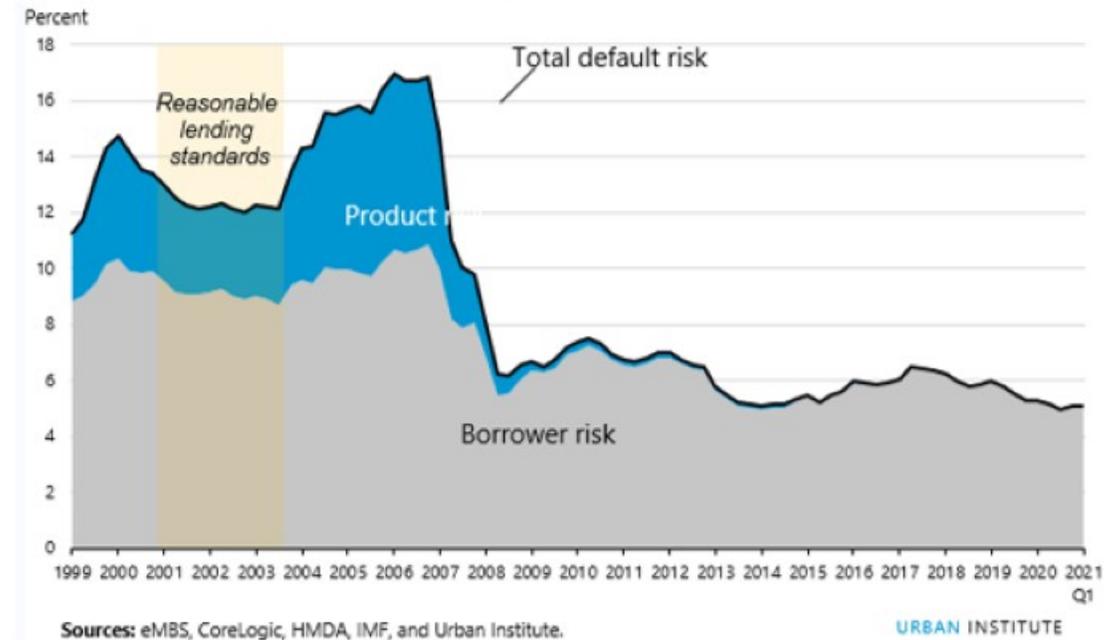


Source: New York Fed Consumer Credit Panel/Equifax  
\* Credit Score is Equifax Riskscore 3.0

Screenshot from [New York Fed](#)

↑  
originations never rebounded for the lowest groups

Urban Institute Housing Credit Availability Index



Sources: eMBS, CoreLogic, HMDA, IMF, and Urban Institute.

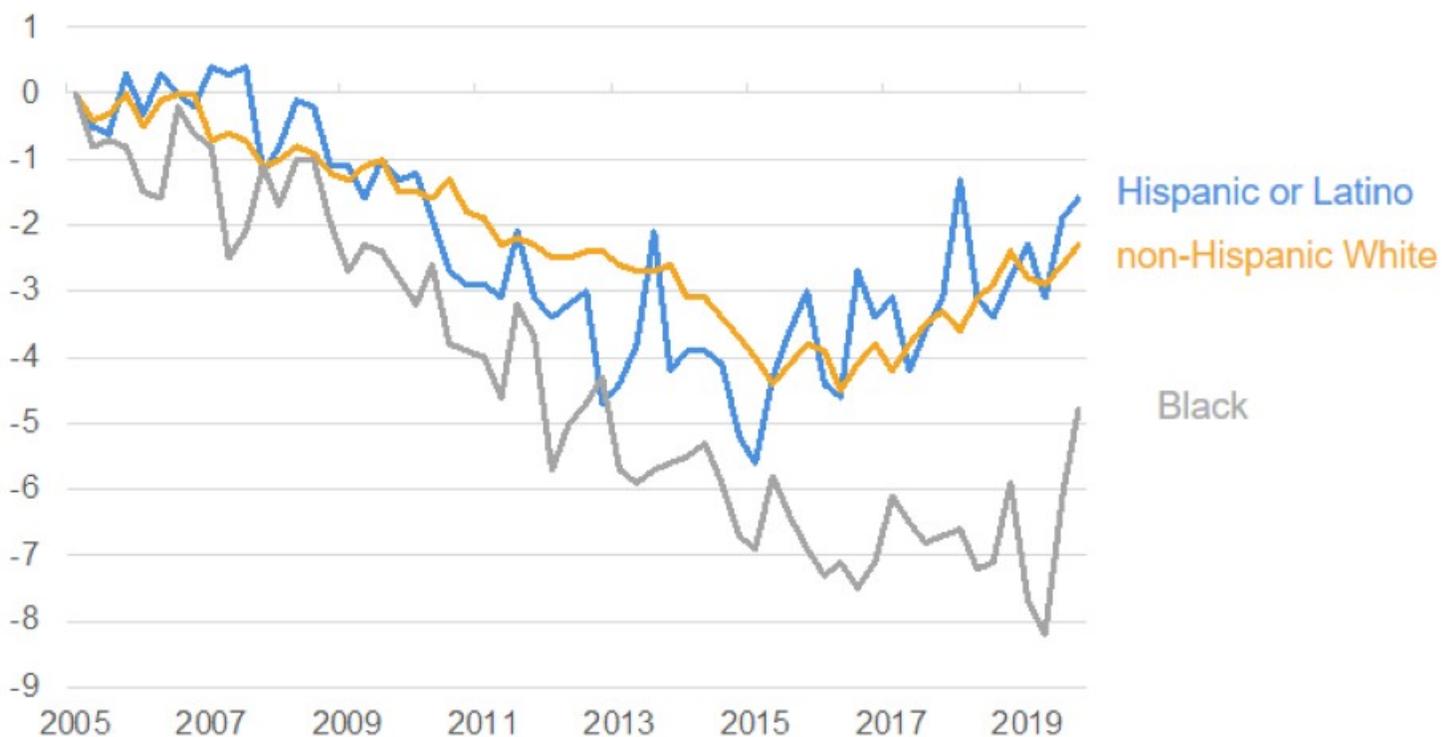
URBAN INSTITUTE

Screenshot from [Urban Institute](#)

# And also somewhat surprising given what we know about homeownership patterns by race and ethnicity

## Homeownership Rates

Percentage point change since 2005



2019Q4 homeownership rates:

73.6% non-Hispanic white  
48.1% Hispanic or Latino  
42.9% Black

Author's calculations based on Census Bureau via [FRED](#)

# (And the SCF shows a somewhat different pattern)

## SCF Homeownership Rates

Percentage point change since 2004



Author's calculations based on terciles of the before-tax income distribution in each wave

A&S point out that their estimates are probably more reliable because the ACS is so much larger and because their calculations are in line with patterns from the also-large CPS/HVS

Still, it seems like some effort to reconcile would be worthwhile given that the SCF is the basis for so much distributional wealth analysis and housing is such an important component of middle-income wealth

# Interpreting the ACS homeownership results

When we think of "low-income" households, we often picture households who have low standards of living over their lifetimes

But the current income of some households may understate their standard of living because of:

- They live in areas with lower costs of living

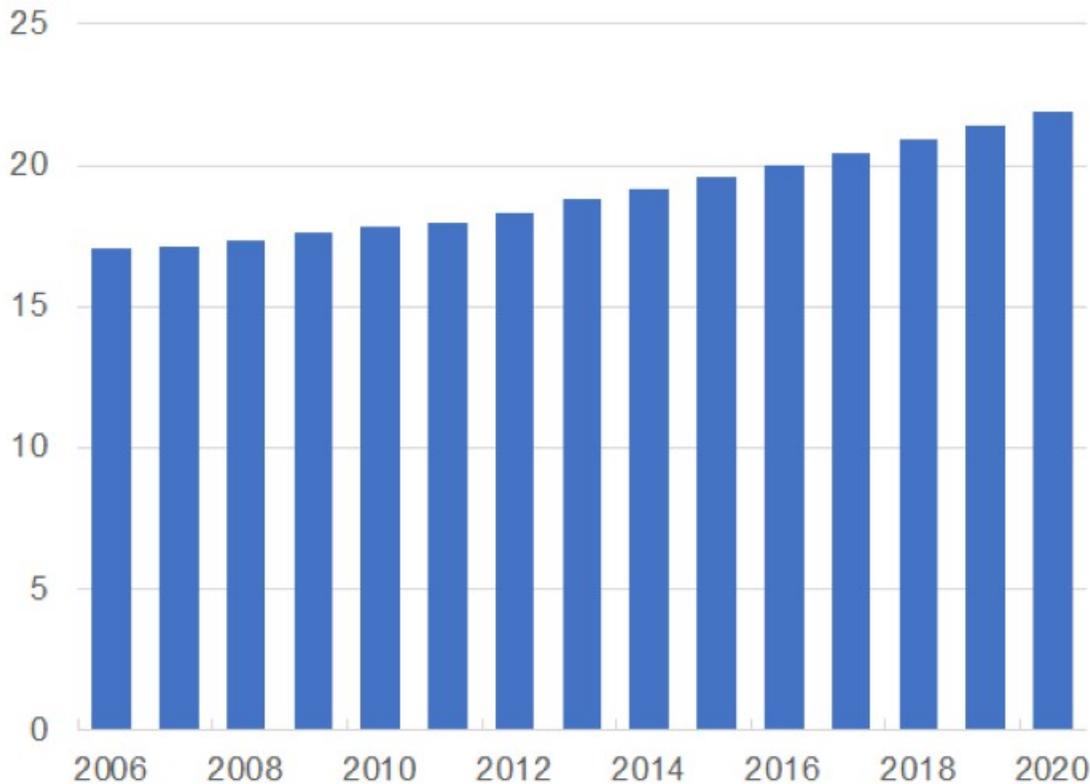
- They have experienced temporary job loss

- They are at a stage of the life-cycle where current income is lower

Exploring the role of these factors might be important to the interpretation of the results

# Demographics seem particularly important to consider

Share of Adults Who are 65 or Older  
Percent



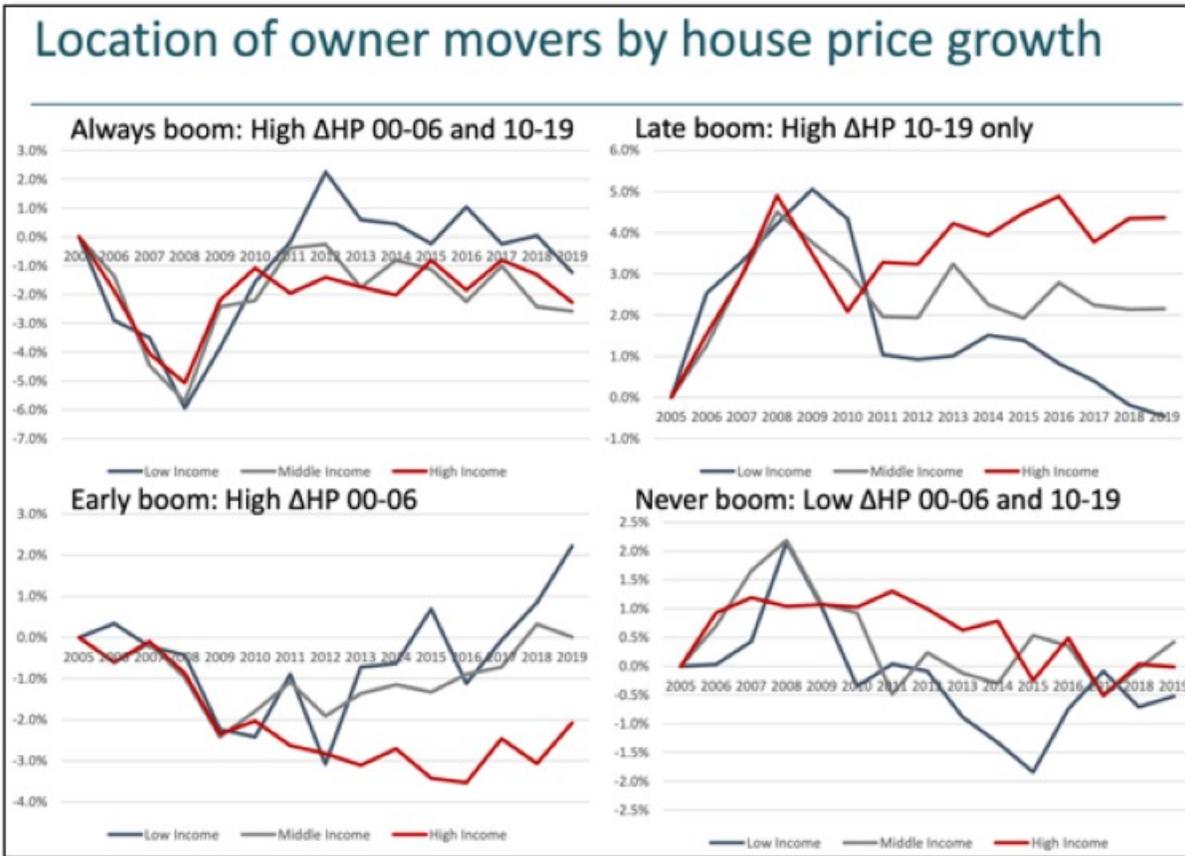
Author's calculation based on [data from CBO](#), with everyone 20+ counted as adults

The fraction of adults who are above the normal retirement age has increased by more than 4 percentage points since the mid-2000s

The current incomes of large numbers of adults likely fell substantially with retirement

**Would education or average income over several years be a better way to get at lifetime income?**

# Result 3: Differences in patterns of home purchase across geographies



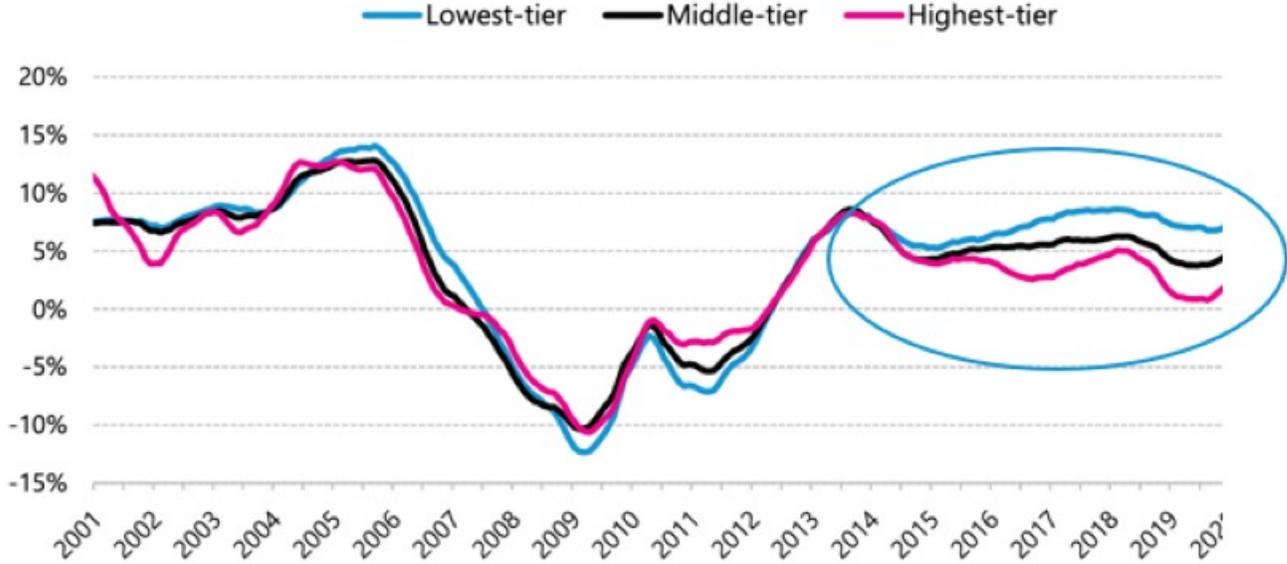
It seems quite interesting to group areas by differences in their housing cycles

There is a provocative potential narrative that low-income households bought into great (always boom) areas right after home prices collapsed and later were more likely to purchase in areas that didn't boom in the 2010s

# Some evidence of low-income households being priced out of “always boom” areas

## Home Price Growth by Market Tier

Percent change from previous year



*Credit has been tight for all borrowers with less-than-stellar credit scores—especially in MSAs with high housing prices*

[Urban Institute](#) (2021)

Sources: Black Knight and Urban Institute. Note: Black Knight modified the methodology behind their HPI in February changes to historic price estimates. Data as of May 2021.

Screenshot from [Urban Institute](#)

# Potential issue with the groupings—MSAs can be big with substantial heterogeneity within



MSA 47900



Washington, DC



Rappahannock, VA

# To interpret the different patterns of home purchases

I have the same issue as before about how to think about the income groups—e.g., how many of the low-income people purchasing homes in great MSAs post-crisis were laid-off bankers or well-heeled retirees taking advantage of discounted home prices?

I also want to know more about the home-price-cycle groupings and how they connect with household well-being:

Beyond growth in home prices, can we point to other common traits tying the groups together?

In particular, what can we say about whether home price growth is a good proxy for a thriving economy?

# To sum up

This is a great line of research, and I'm glad to see these authors tackling it

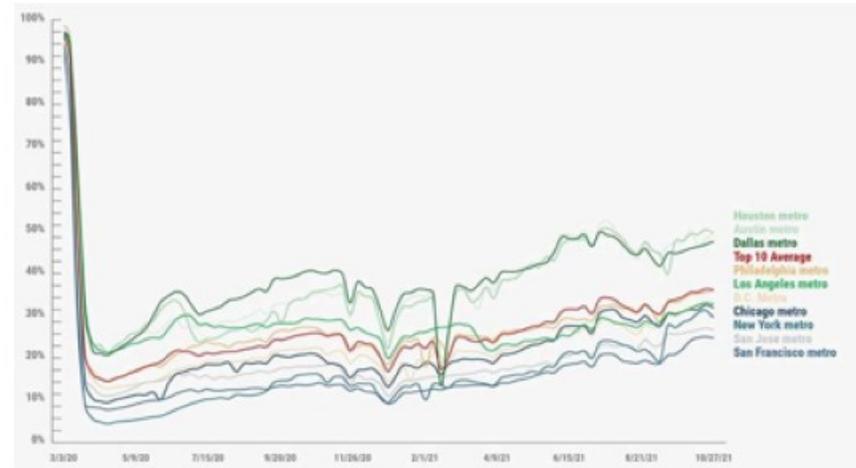
The findings are interesting, and I think more analysis will help illuminate the implications of their results

# Final thought

Wherever we come out on the 2010s, there will be lots more work to do on the 2020s

The last 20 months have seen dramatic changes in housing markets and how people think about their homes

Screenshot from [Kastle](#) and data from Case-Shiller via [FRED](#)



Kastle Back-to-Work Barometer

Year-over-Year Growth in US Home Prices

