

Investing in Elm Street: What Happens When Firms Buy Up Houses?

BY LAUREN LAMBIE-HANSON, WENLI LI, AND MICHAEL SLONKOSKY

Lauren Lambie-Hanson is a principal financial economist in the Supervision, Regulation, and Credit Department, **Wenli Li** is a senior economic advisor and economist in the Research Department, and **Michael Slonkosky** is a senior quantitative analyst in the Supervision, Regulation, and Credit Department at the Federal Reserve Bank of Philadelphia.

Since the onset of the mortgage crisis in 2007, a much larger than normal share of single-family houses listed for sale in the U.S. each year has been purchased by institutional investors—Wall Street firms, real estate trusts, international funds, and so on. This phenomenon has been easing since 2013, but investor activity remains widespread and is particularly prevalent in high-foreclosure areas such as Las Vegas and Atlanta, where prices had soared during the housing bubble and, after the crash, severe house price downturns occurred. This trend is also growing in areas of the country where real estate is highly priced such as Miami and New York City. In some cities, investors have bought more than a quarter of the houses sold since the early 2000s, far more than the less than 5 percent purchased by investors prior to the crisis. Meanwhile, the growing proportion of single-family houses being turned into rentals comes amid a steady decline in the nation's homeownership rate since the mortgage crisis. In 2004, 69 percent of the nation's households owned their primary residence. By 2016, this number had dropped to 63 percent. Although the homeownership rate recovered a bit in 2017, it remained below 64 percent (Figure 1).

What is behind this steep rise in institutional investment in the single-family housing market? Are these investors crowding out local homebuyers and contributing to the general decline in homeownership? What impact are investors having on house prices? Are they helping or hurting local housing markets and the financial welfare of households, particularly when it comes to wealth inequality? Does this phenomenon have implications for the overall U.S. economy? Although economists are still investigating the effects of this trend, some answers to these questions are starting to emerge.

The Rise of Institutional Investor-Owned Houses

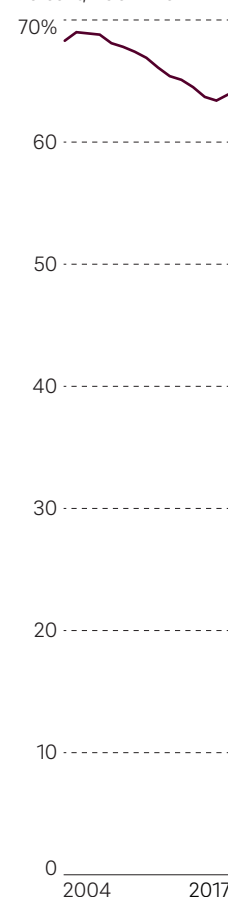
By *institutional investor*, we refer to any buyer or seller of residential real estate that is not an individual. These institutions include corporations, limited liability companies (LLCs), limited liability partnerships (LLPs), real estate investment trusts (REITs), nonprofit organizations, or other entities. Although individuals, for privacy or legal reasons, can also set up an LLC to purchase their primary residence, such occurrences are rare. It is, therefore, safe to regard virtually all institutional purchases of houses as being for the purpose of investment, either for renovating and flipping to another buyer for capital gains or for renting out to receive dividends in the form of rental income. Note that this definition excludes *individual* investors—people who buy a house under their own name as a personal investment.

In 2000, institutional investors made only 6 percent of total house purchases on average across 20 major U.S. metropolitan areas. But starting in 2007, as the mortgage crisis unfolded, the market share of institutional investors in single-family house sales shot up, reaching almost 14 percent in 2013 before easing somewhat to roughly 12 percent in 2014 (Figure 2A).¹ This jump in residential investment by institutions contrasts with the nation's experience during the housing-boom years leading up to the crisis. As a number of researchers have documented,² prior to 2007, it was noninstitutional investors—that is, individuals instead of companies—who accounted for the increase in the share of houses purchased as investments.

Not surprisingly, institutional investors have been particularly active since the crisis as buyers in the distressed market, accounting for 24 percent

FIGURE 1
Homeownership Rate Declines

Homeownership rate for the nation. Percent, 2004–2017



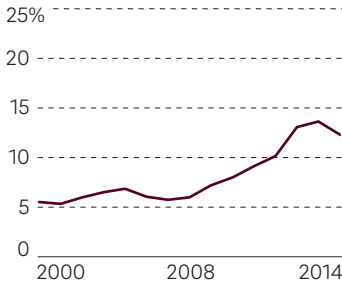
Source: Census Bureau/Haver Analytics.

FIGURES 2A–D

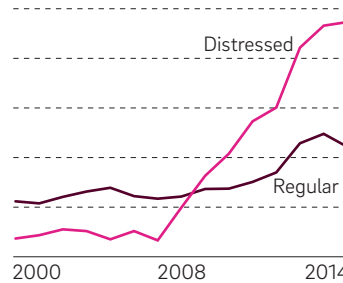
Institutional Investors Particularly Active in Distressed Markets

The share of purchases and sales by institutional investors in the 20 cities covered by the S&P/Case-Shiller 20-City Composite Home Price Index.
Percent, 2000–2014

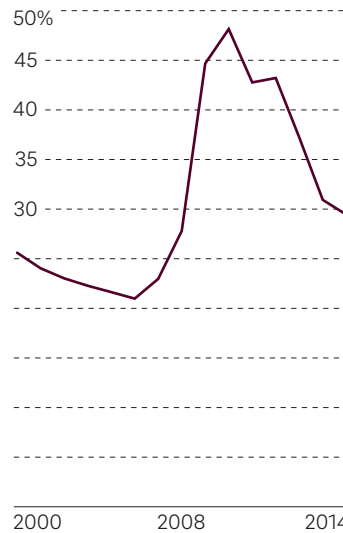
A. Institutional purchases



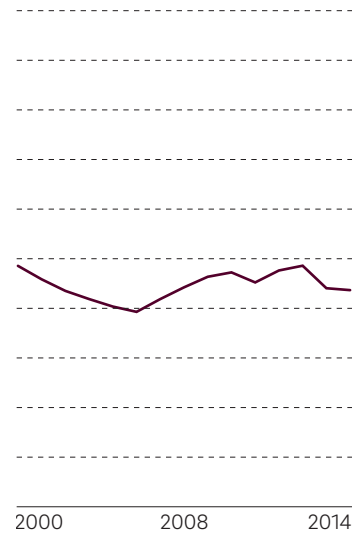
B. Institutional purchases by transaction type



C. Institutional sales (all trans.)



D. Institutional sales (regular trans.)



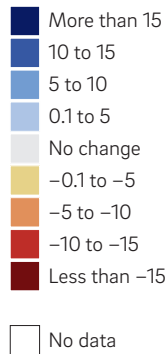
Sources: CoreLogic Solutions, authors' calculations, and Haver Analytics.

Notes: The 20 metropolitan statistical areas covered by the S&P/Case-Shiller index are Atlanta, Boston, Charlotte, Chicago, Cleveland, Dallas, Denver, Detroit, Las Vegas, Los Angeles, Miami, Minneapolis, New York, Phoenix, Portland, San Diego, San Francisco, Seattle, Tampa, and Washington, D.C. Regular refers to nonforeclosure sales. Distressed refers to foreclosure sales.

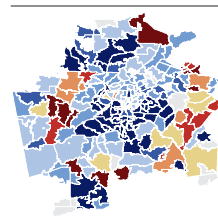
FIGURE 3

Share Growth of Institutional Buyers Varies by City

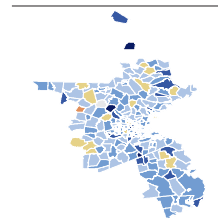
Change in percent of institutionally purchased properties by zip code in 20 selected metropolitan statistical areas.
Percentage points, 2000 vs. 2012



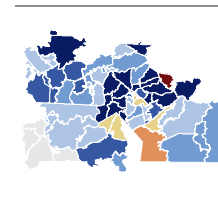
Atlanta



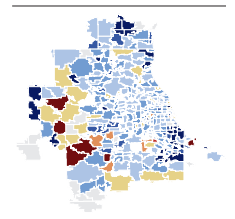
Boston



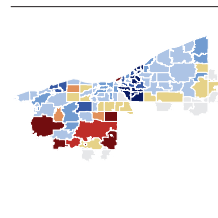
Charlotte



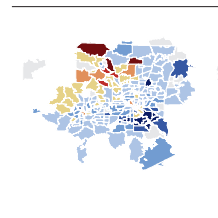
Chicago



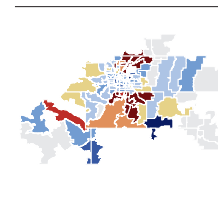
Cleveland



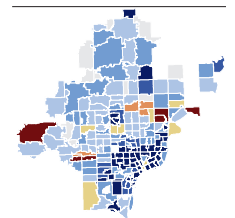
Dallas



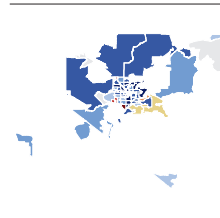
Denver



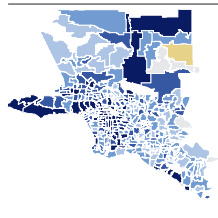
Detroit



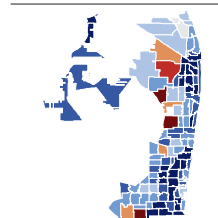
Las Vegas



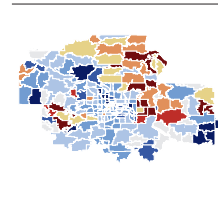
Los Angeles



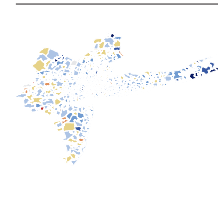
Miami



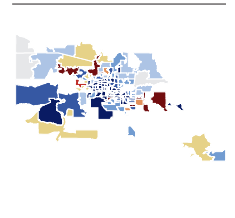
Minneapolis



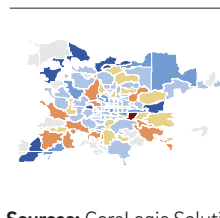
New York



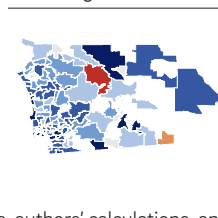
Phoenix



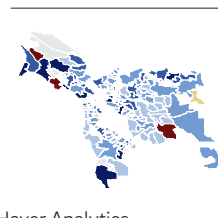
Portland



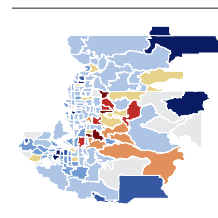
San Diego



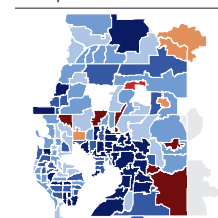
San Francisco



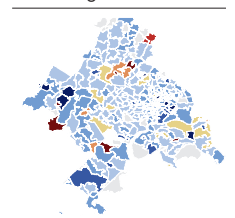
Seattle



Tampa



Washington



Sources: CoreLogic Solutions, authors' calculations, and Haver Analytics.

Notes: Not to scale. The 20 MSAs are those covered by the S&P/Case-Shiller 20-City Composite Home Price Index.

of the foreclosure sales in 2014. But their presence in the regular market is also prominent, reaching 11 percent of total sales in 2014 (Figures 2A and 2B). As sellers, institutions' share had been decreasing leading up to the boom and topped out at the peak of the crisis before declining (Figures 2C and 2D). By definition, all foreclosure sales are by institutions, banks in particular.

Considerable media attention has been devoted to the emergence of large-scale investors backed by Wall Street firms in the single-family housing market,³ raising concern that these large firms may exert market power and set the prices for ordinary buyers and sellers. But contrary to this general perception, the vast majority of institutional investors are not affiliated with large financial firms and do not purchase large numbers of houses. Interestingly, only a handful of large institutional investors affiliated with big financial firms are active in a few cities such as Atlanta and Miami, which have seen steady rent increases. Small LLCs are by far the most common type of institutional investor in the single-family housing market. In some cities, such as San Diego, trusts are also active.

In terms of location, investors have been buying up houses in certain cities far more than in others. Overall, Miami had the largest increase in sales by institutional buyers, followed by Atlanta, Tampa, and San Diego. Excluding foreclosure sales, Miami, Atlanta, Los Angeles, Tampa, and Las Vegas had the greatest increase in the presence of institutional buyers, while Minneapolis, Denver, Boston, and Detroit had the least. In Figure 3, we chart changes in percent of institutionally purchased properties by zip code in 20 cities between 2000 and 2012. As can be seen, during this period, institutional investors became much more important in Las Vegas, Los Angeles, and parts of Miami, Phoenix, Seattle, and Tampa.

Another important observation is that, on average, institutional investors hold their properties for shorter periods than ordinary homeowners do. However, over time, institutions have been holding houses for longer periods. For example, among all housing market transactions from 2000 to 2014 in which the buyer ended up holding the property for one to three years,

the share accounted for by institutional owners rose from a little over 5 percent to close to 20 percent.

With more institutions buying up single-family houses, homeownership rates, not surprisingly, declined. In all 20 cities, between 2005 and 2014, homeownership rates fell between 0.2 percentage point, as in Boston, and over 10 percentage points, as in Miami (Figure 4).

What Is Driving Investment in Single-Family Houses?

While institutional investment in multi-family housing is the norm, the traditional culture of the single-family housing market has been one of an individual or couple buying a house in which to live and raise a family. What financial or other forces have converged to alter this longstanding ownership pattern?

Tighter standards for mortgage underwriting, stagnating household income, investors seeking higher returns in a low interest rate environment, and international capital inflows are all driving the surge in institutional investors in the U.S. single-family housing market.

Lenders tightened their mortgage qualification standards substantially after the crisis, especially in areas with high foreclosure rates, making it more difficult for individuals to purchase houses. According to the Federal Reserve Senior Loan Officer Opinion Survey, the net percentage of banks reporting tightening mortgage lending standards to households went from -9 percent in 2006 to almost 80 percent in 2008 (Figure 5). That is, the majority of banks surveyed reported that they had tightened their mortgage lending standards to households during the crisis. Research has associated these tighter standards with about a 16 percent decline in high interest rate loans, a proxy for risky borrowing.⁴

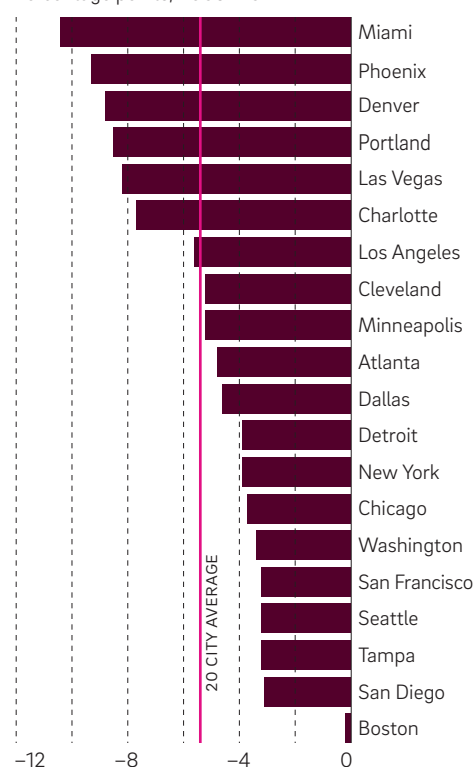
Furthermore, in 2010, the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act imposed additional regulatory constraints on U.S. banks, especially large ones, including heightened oversight as well as higher liquidity and capital requirements. These tighter regulations have driven up mortgage denial rates for nonconforming mortgages, making it harder, or more expensive, for households that borrow more than the

FIGURE 4

All 20 Cities Experienced Declines in Homeownership Rates

Changes in homeownership rates for 20 major cities.

Percentage points, 2005–2014

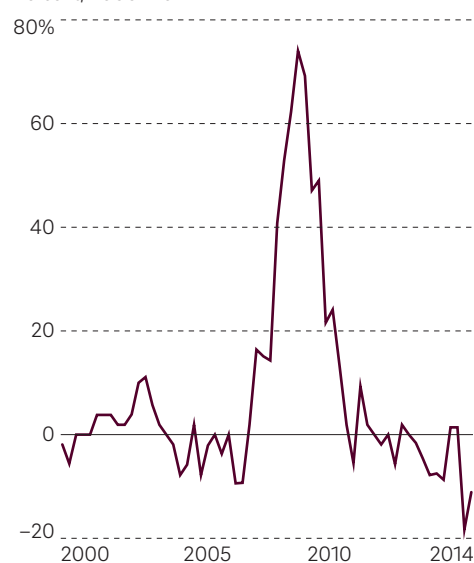


Source: Census Bureau/Haver Analytics.

FIGURE 5

Qualifying for a Mortgage Became Harder After the Crisis

Net percent of banks reporting tightening mortgage lending standards to households. Percent, 2000–2014



Source: Federal Reserve Senior Loan Officer Opinion Survey.

conforming mortgage limit and cannot afford a 20 percent down payment to get credit. As regulations on traditional banks have tightened since the crisis, more mortgage lending has shifted to so-called shadow banks—lenders that operate outside the regulatory framework. Their share of the mortgage market nearly tripled from 2007 to 2015, rising especially among less creditworthy borrowers and for mortgage refinancings and high interest rate mortgages, according to a 2017 study.⁵

To make things worse, personal income stagnated. Between 2007 and 2010, disposable income grew at a dismal 0.94 percent in real terms.

Another important development during this time was extremely accommodative monetary policy. In an effort to stimulate the economy following the crisis, the Federal Reserve brought down market interest rates by requiring banks to increase their reserves. As a result, as shown in Figure 6, the total corporate bond index fell sharply between 2004 and 2009. Although the total bond index did rebound after 2009, this development may have still prompted investors in fixed-income assets to search for higher returns in real estate investments. As can be seen in the same figure, rents generally held up well during the crisis and took off in 2010.⁶ Single-family housing rents have also risen strongly since 2009, especially for lower-rent homes (ones that rent for less than 75 percent of the median rent in the area).⁷

Finally, rising wealth in emerging economies such as China has been a factor in the growing presence of institutional investors. Attracted in part by the transparency and sound legal system of the U.S. housing market, most foreign buyers, especially non-resident buyers, set up companies with which to conduct their U.S. housing transactions, for liability and privacy reasons. The National Association of Realtors estimates that, from April 2013 through March 2014, sales to international buyers accounted for about 7 percent of the total sales of U.S. existing homes.⁸

Note that these sales included some by individuals buying personal vacation homes in the U.S. These international buyers of U.S. properties came from across the globe, but five countries—Canada, China, Mexico, India, and the United Kingdom—accounted for 54 percent of the reported transactions.⁹

A Good Thing or a Bad Thing?

Increased institutional-investor activity in the single-family housing market brings with it both benefits and costs for local housing markets and the overall U.S. economy.

The Cost Side

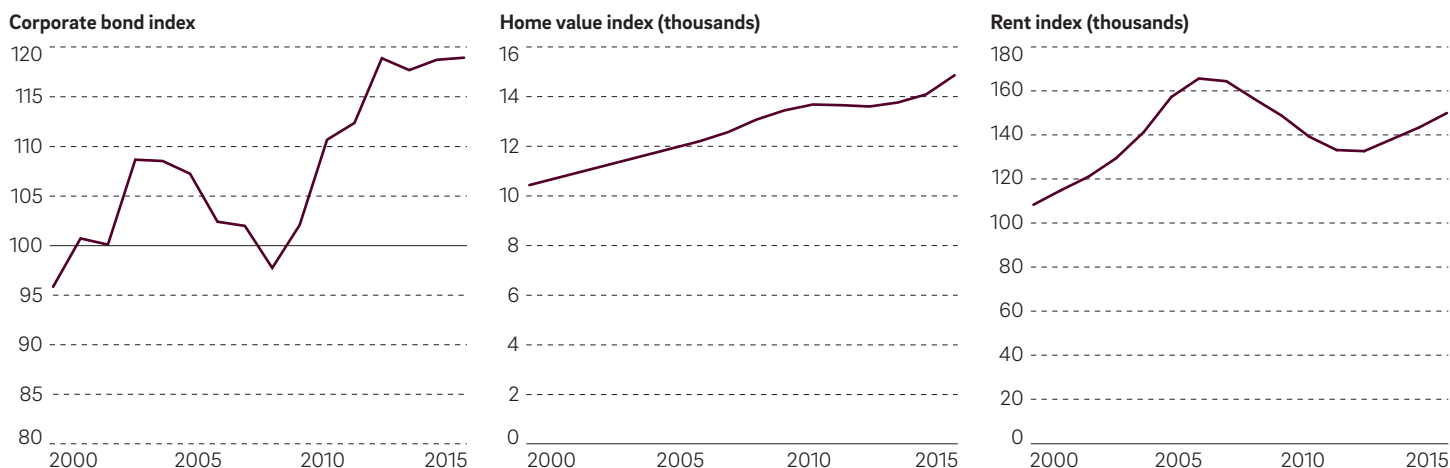
Institutional investors, because of their deep pockets and easy access to mortgage finance, can easily out-compete ordinary families looking to buy a home. Additionally, institutional investors may be better able to find and “snap up” houses on the market before individuals can. Such “crowding out” may exacerbate wealth inequality by robbing families of their chance to accumulate home equity, a form of wealth-building that historically has been a mainstay of middle-class well-being and financial security. When investor purchases raise local house prices, it benefits older and richer people because they are more likely to own their homes, while younger and poorer people get priced out.

The nation’s homeownership rates have been on a steady decline since the mortgage crisis, particularly in areas that experienced severe house price corrections that resulted in large numbers of foreclosures. In the short run, a large share of institutional investors in a market leads to a lower homeownership rate in that area.¹⁰ Additionally, while institutional investors on average tend to hold their properties for shorter periods than individual homeowners do, many institutional buyers hold their properties for longer than two years (an average homeowner stays in his or her home for about six years). This suggests that homeownership rates in those areas may remain depressed for several years.

FIGURE 6

Corporate Bond Index and House Prices Fell After the Crisis, While Rent Continued to Grow

Dow Jones Equal Weight U.S. Issued Corporate Bond Index and Zillow's Home Value Index and Rent Index. 2000–2015



Sources: Wall Street Journal and Dow Jones/Haver Analytics; data acquired from Zillow.com in 2017 and 2018. Aggregated data on this page is made freely available by Zillow for noncommercial use. **Note:** The corporate bond index is normalized to 100 for December 31, 1996.

Cities with large concentrations of institutional investors are more exposed to financial risk. Should these institutions suffer financial stress, they may be forced to sell their real estate holdings all at once or cut maintenance expenditures, which could severely lower house prices in the area. Additionally, cities with a large share of house sales to foreign nonresidents become exposed to the political and policy risks of the home countries of these foreign buyers.

From a national perspective, should foreign ownership of U.S. assets in general keep accelerating, it has been argued that the U.S. may have more to lose than its creditors do, as this trend may give creditors potential leverage over U.S. policy. The reason is that indebtedness limits America's ability to influence creditor countries' policies through, for example, sanctions and loans.¹¹

The Benefit Side

Institutional investors have helped local house prices recover from the housing crisis and the Great Recession. Analysis that we have conducted indicates that a 1 percentage point increase in the share of sales by institutional buyers led to a 20 basis point increase in the growth rate of real house prices. In addition, the magnitude of the increase was much larger in markets with large concentrations of distressed properties.¹²


Additionally, an increase in rental houses in a traditional single-family neighborhood means that people who lack the means to obtain a mortgage can nevertheless live in these neighborhoods and consume their typically superior local amenities, such as good schools. The higher house prices that result from the presence of institutional buyers also boost the revenue from a given tax rate for local governments and school districts, which rely heavily on property taxes.

Finally, as many others have argued,¹³ U.S. government policies such as the federal income tax deduction for mortgage interest payments have greatly encouraged homeownership, beyond perhaps what is optimal. As a result of such policies, home equity is the dominant form of wealth for the majority of households.

Yet, it is not clear that households are better able to bear house price risks than institutions are, as we have learned from the financial crisis. Put another way, from the perspective of individual household welfare, it is not clear that the current decline in the homeownership rate is entirely bad, especially in the current environment in which households have much easier access than they had in the past to other investment channels such as the stock market.¹⁴

Conclusions

Compared with recoveries from prior recessions, the U.S. housing market's recovery from the Great Recession has been marked by a unique feature: the rising share of institutional investors. This phenomenon was prompted by both tightened mortgage lending conditions in response to the mortgage crisis and additional regulatory constraints. Reaching for yield was also a motivation from the lenders' perspective. In the short run, although this rising share of institutional investors has dampened homeownership rates, it did help local housing markets recover from the worst decline in house prices since the 1930s.

Although investors have moderated their home-purchasing activities since 2013, it remains to be seen whether they will drop back to their level of participation prior to the crisis or even completely exit the market. If investors decide to remain in the single-family housing market, there will be much for future research to answer: What are the long-run implications for local house prices, rents, and economies? And if they exit the market, should we expect this phenomenon to recur in the next boom and bust? 

Notes

1 Also see Figure 1 in Raven Molloy and Rebecca Zarutskie's 2013 research note.

2 See the research by Andrew Haughwout, Donghoon Lee, Joseph Tracy, and Wilbert van der Klaauw (2011), Patrick Bayer, Kyle Magnum, and James Roberts (2016), Alex Chinco and Christopher Mayer (2016), Zhenyu Gao, Michael Sockin, and Wei Xiong (2017), as well as Wenli Li's work with Zhenyu Gao (2015).

3 See, for example, the articles by Antoine Gara (2017) and Ben Hallman (2017).

4 See the paper by Cindy Vojtech, Benjamin Kay, and John C. Driscoll (2016).

5 See the working paper by Greg Buchak, Gregor Matvos, Tomasz Piskorski, and Amit Seru (2017).

6 See also Figure 1 of the forthcoming article by Pedro Gete and Michael Reher.

7 See Stijn Van Nieuwerburgh's lecture notes.

8 See Lawrence Yun, Jed Smith, and Gay Cororaton's (2014) article. The association began conducting surveys on international home buying activity in 2007, after the start of the mortgage crisis.

9 Although in the many articles cited here, researchers have been able to demonstrate that these different channels played a role in the rise of institutional buying in the housing market, they have not been able to systematically quantify the relative importance of each factor.

10 See, among others, the article by Mills, Molloy, and Zarutskie and our manuscript, "Leaving Households Behind: Institutional Investors and the U.S. Housing Recovery."

11 Brad Setser makes this argument in his report on sovereign wealth and sovereign power.

12 Other researchers who have studied local housing markets have reached similar conclusions, including Alan Mallach (2013), Frank Ford and his coauthors (2013), Christopher Herbert and his coauthors (2013), and Dan Immergluck (2013).

13 See the *Business Review* articles by Satyajit Chatterjee and by Li and Yang.

14 Li and Yang (2010) compare the two investment strategies in their *Business Review* article.

References

Bayer, Patrick, Kyle Magnum, and James Roberts. "Speculative Fever: Investor Contagion in the Housing Bubble." NBER WP no. 22065 (2016).

Buchak, Greg, Gregor Matvos, Tomasz Piskorski, and Amit Seru. "Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks," Stanford Graduate School of Business Working Paper 3511 (2017).

Chatterjee, Satyajit. "Taxes, Home Ownership, and the Allocation of Residential Real Estate Risks," Federal Reserve Bank of Philadelphia *Business Review* (September/October 1996).

Chinco, Alex, Christopher Mayer. "Misinformed Speculators and Mispricing in the Housing Market," *Review of Financial Studies*, 29 (2), pp. 486-522 (2016).

Ford, Frank, April Hirsh, Kathryn Clover, Jeffrey A. Marks, Robin Dubin, Michael Schramm, Nina Lalich, Tsui Chan, Andrew Loucky, and Natalia Cabrera. "The Role of Investors in the One-to-Three-Family REO Market: The Case of Cleveland," What Works Collaborative (2013), www.urban.org/research/publication/role-investors-one-three-family-reo-market-case-cleveland.

Gao, Zhenyu, Michael Sockin, and Wei Xiong, "Economic Consequences of Housing Speculation."

Gao, Zhenyu, and Wenli Li. "Residential Real Estate Investment and House Price Dynamics," manuscript (2015).

Gara, Antoine. "Blackstone's \$9.6 Billion Bet on the U.S. Housing Recovery Files to Go Public," *Forbes*, January 6, 2017, <https://www.forbes.com/sites/antoinegara/2017/01/06/blackstones-big-bet-on-the-u-s-housing-recovery-files-to-go-public/#370934d53dba>.

Gete, Pedro, and Michael Reher. "Mortgage Supply and Housing Rents," *Review of Financial Studies*, forthcoming.

Hallman, Ben. "Here's What It's Like When Wall Street Is Your Landlord,"

Huffington Post, July 21, 2014 (updated December 6, 2017), https://www.huffingtonpost.com/2014/07/21/invitation-homes-problems_n_5606403.html.

Haughwout, Andrew, Donghoon Lee, Joseph Tracy, and Wilbert van der Klaauw. "Real Estate Investors, the Leverage Cycle, and the Housing Market Crisis," Federal Reserve Bank of New York Staff Report 514 (2011).

Herbert, Christopher E., Lauren Lambie-Hanson, Irene Lew, and Rocio Sanchez-Moyano. "The Role of Investors in Acquiring Foreclosed Properties in Boston," What Works Collaborative (2013), www.urban.org/research/publication/role-investors-acquiring-foreclosed-properties-boston.

Immergluck, Dan. "The Role of Investors in the Single-Family Market in Distressed Neighborhoods: The Case of Atlanta," What Works Collaborative (2013), <https://www.urban.org/sites/default/files/publication/23291/412743-The-Role-of-Investors-in-the-Single-Family-Market-in-Distressed-Neighborhoods-The-Case-of-Atlanta.pdf>.

Lambie-Hanson, Lauren, Wenli Li, and Michael Slonkosky. "Leaving Households Behind: Institutional Investors and the U.S. Housing Recovery," manuscript, Federal Reserve Bank of Philadelphia.

Li, Wenli, and Fang Yang. "American Dream or American Obsession? The Economic Benefits and Costs of Homeownership," Federal Reserve Bank of Philadelphia *Business Review* (Third Quarter 2010), pp. 20-30.

Mallach, Alan. "Investors and Housing Markets in Las Vegas: A Case Study," What Works Collaborative (2013), www.urban.org/research/publication/investors-and-housing-markets-las-vegas-case-study/view/full_report.

Mills, James, Raven Molloy, and Rebecca Zarutskie. "Large-Scale Buy-to-Rent Investors in the Single-Family Housing Market: The Emergence of a New Asset Class," *Real Estate Economics*, forthcoming.

Molloy, Raven, and Rebecca Zarutskie. "Business Investor Activity in the Single-Family-Housing Market," FEDS Notes, December 5, 2013, www.federalreserve.gov/econresdata/notes/feds-notes/2013/business-investor-activity-in-the-single-family-housing-market-20131205.html.

Setser, Brad W. *Sovereign Wealth and Sovereign Power: The Strategic Consequences of American Indebtedness*, Council on Foreign Relations Special Report 37 (2008).

Van Nieuwerburgh, Stijn. "Real Estate Investment Strategies," New York University Stern School of Business lecture notes (2017).

Vojtech, Cindy M., Benjamin Kay, and John C. Driscoll. "The Real Consequences of Bank Mortgage Lending Standards," Office of Financial Research Working Paper 16-05 (2016).

Yun, Lawrence, Jed Smith, and Gay Cororaton. "2014 Profile of International Home Buying Activity: Purchases of U.S. Real Estate by International Clients for the Twelve Month Period Ending March 2014," National Association of Realtors (June 2014), <https://www.nar.realtor/sites/default/files/reports/2017/2017-real-estate-in-a-digital-age-03-10-2017.pdf>.