Office of the Comptroller of the Currency

ON POINT

ECONOMIC AND POLICY INSIGHT FROM THE OCC

Do Past Cycles Predict the Future of Home Prices?

Volatility in U.S. home price growth during the pandemic cycle (early 2020-present) is historically atypical. Although unprecedented volatility was present during the 2004-2014 housing boom/bust cycle that encompassed the global financial crisis (GFC boom/bust cycle), these two cycles are fundamentally quite different, as are the lessons they hold for the future. Most significantly, the pre-existing economic and credit conditions differed, as did the fiscal and monetary policy responses. Consequently, the dynamic between single-family home price changes and housing affordability levels, inventory of homes for sale, and mortgage credit performance of the recent past may not predict the future.

Housing Demand Surged During Both Cycles, For Different Reasons

During the pandemic cycle, surging housing demand was fueled by a desire by many households to find more space, often in markets with limited supply, and by mortgage rates achieving generational lows under 3 percent.[1] During the GFC boom/bust cycle,[2] the boom was fueled up front because the number of qualified home buyers increased when mortgage underwriting standards were relaxed through new, less restrictive mortgage products.[3]

[1] Federal Deposit Insurance Corporation, *"*Residential Lending During the Pandemic," *FDIC Quarterly* Volume 15, Number 2, 2021; Jerusalem Demsas, "Covid-19 Caused a Recession. So Why Did the Housing Market Boom?" *Vox*, February 5, 2021; Brenda Richardson, "Housing Market Gains More Value In 2020 Than In Any Year Since 2005," *Forbes*, January 6, 2021.

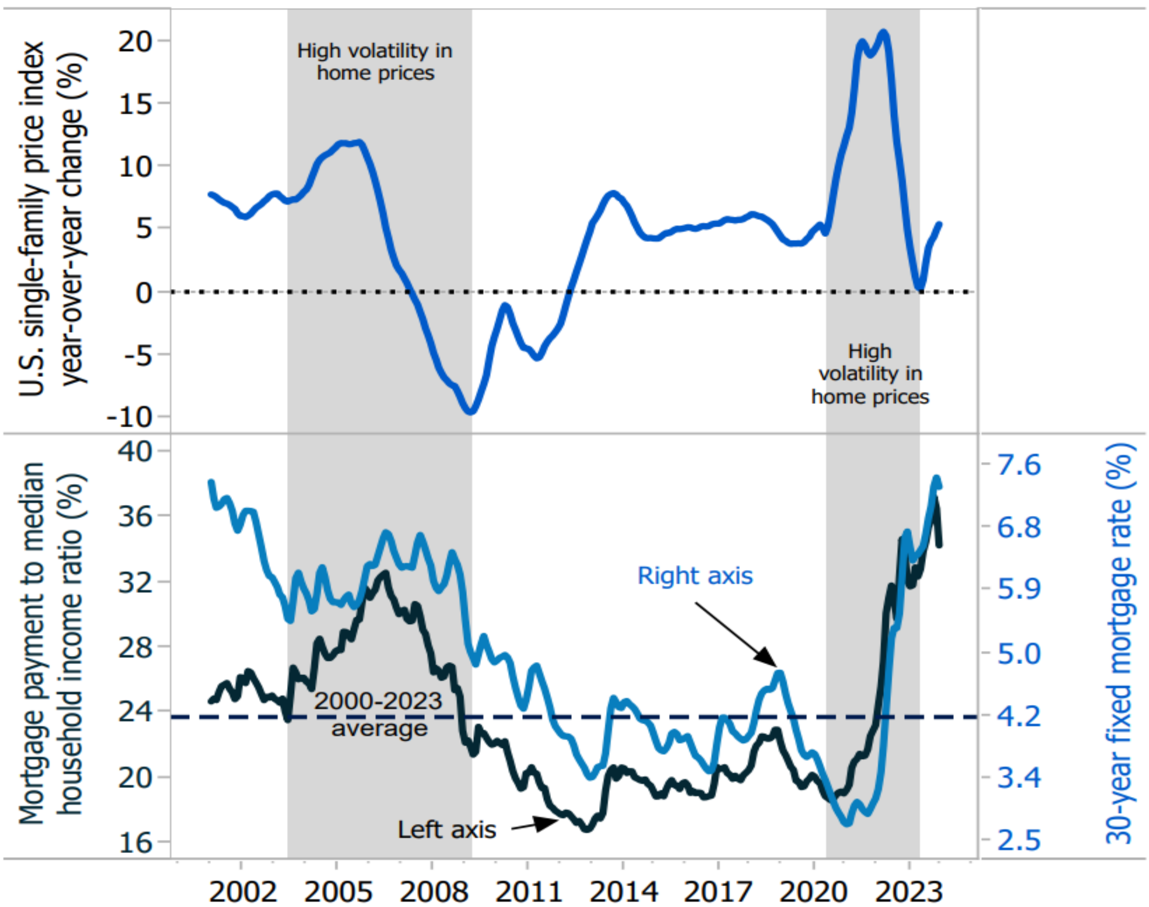
[2] Benjamin J. Keys, Tomasz Piskorski, Amit Seru, and Vikrant Vig, *Mortgage Financing in the Housing Boom and Bust*, National Bureau of Economic Research, December 2011; Colin McArthur and Sarah Edelman, "The 2008 Housing Crisis," Center for American Progress, April 13, 2017; Daniel E. Nolle, "Mortgage Lending Underwriting Standards During the Housing Market Boom: Examiners' and Bankers' Views," OCC Policy Analysis Staff Report #3, February 2008.

[3] Yulia Demyanyk and Otto Van Hemert, *Understanding the Subprime Mortgage Crisis,* New York University, December 5, 2008.

Housing Affordability Benefited From Monetary Policy During GFC Boom/Bust

The pandemic-induced surge in inflation was not a factor during the GFC boom/bust cycle, and thus the attendant policy responses were completely different. As the economy turned into recession in 2007, monetary policy focused on fighting unemployment by lowering interest rates. As a result, mortgage rate reductions after July 2006 initiated an expansion in housing affordability[4] that persisted until mid-2013. Despite tighter underwriting standards and some interest rate increases after 2013, the mortgage payment burden mostly stayed under its historical average during the 2010-2020 decade. Further, as mortgage credit performance began deteriorating in mid-2007, lenders limited mortgage credit, taming housing demand in the process. Home prices declined by more than 20 percent between the peak and trough of the GFC boom/bust cycle (figure 1).

Figure 1 Single-Family Home Price Index and Mortgage Payment-to-Income Ratio



Sources: Intercontinental Exchange (ICE), Freddie Mac, Census Bureau, and Moody's Analytics

Note: Prices are of non-distressed transactions. ICE computes discount-corrected real estate owned (REO) and short-sale prices to include with the data series for non-distressed sales prices. Mortgage payment is based on a 30-year fixed rate fully amortized mortgage with a 20 percent down payment. The mortgage payment only includes contributions toward mortgage principal and interest. The ICE Home Price Index (HPI) is used as the base price for the average market property. The Freddie Mac conventional mortgage rates are used to calculate the mortgage payment.

[4] The housing affordability measure, or "mortgage burden," is the ratio of the mortgage payment on the average-priced home (principal and interest only, and assuming a 30-year fixed rate mortgage with a 20 percent down payment) over median household income.

Resilient Home Prices During Pandemic

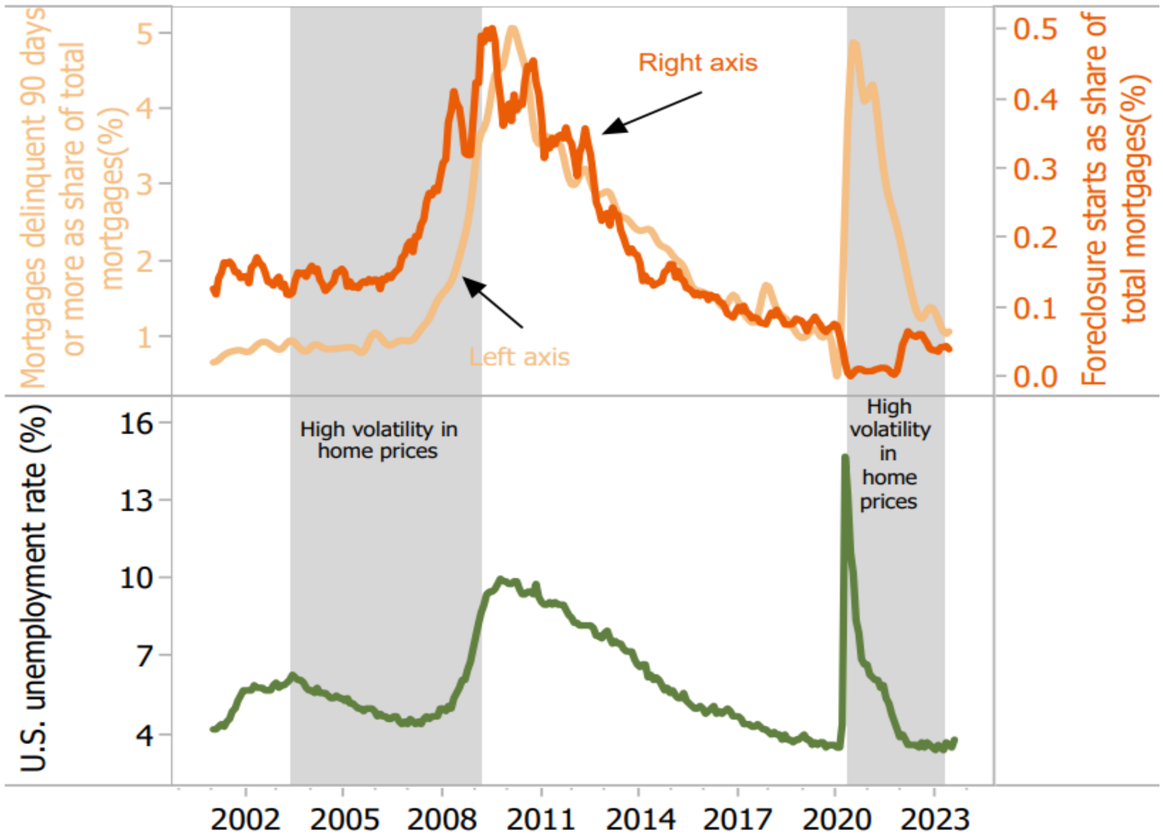
Home prices benefitted from pandemic concerns that triggered changes in consumer housing preferences (toward more space) and from monetary and fiscal policy responses to the pandemic. The national average 30-year fixed rate mortgage reached a generational low of 2.73 percent in January 2021. Along with the decline in mortgage rates, mortgage burden fell despite significant home price growth. Single-family home prices grew at a double-digit pace for almost two years (October 2020 through September 2022) as expanded housing demand reduced the inventory of homes for sale. But as monetary policy pivoted to address accelerating inflation, mortgage rates surged by nearly 400 basis points in just 14 months. Meanwhile, median household income grew more than 10 percent between September 2021 and December 2022, when Coronavirus Aid, Relief, and Economic Security Act (CARES Act) disbursements to cover pandemic-related expenses ended.[5] After 2022, the pace of median household income growth slowed consistently through 2023. These factors combined to trigger deceleration in home price growth starting in early 2022. However, by mid-2023 the inventory of homes for sale was so tight, mainly due to the "rate lock-in effect" on homeowners, that home prices began to inch up again, even though some potential home buyers were priced out of the market (figure 1).

Pandemic Fiscal Policies Limited Inventory Growth From Foreclosures

Both home price trends and cyclical mortgage foreclosures influence the level of existing home inventory for sale. In contrast to the latter portion of the GFC boom/bust cycle, the enactment of the CARES Act at the start of the pandemic strengthened housing demand and limited growth in the inventory of homes for sale by avoiding a mortgage foreclosure wave (figure 2). This disconnect between delinquencies and foreclosures was historically unprecedented and had major ramifications on housing supply and demand throughout the pandemic period of elevated economic stress.

[5] U.S. Department of the Treasury Coronavirus Relief Fund web page.

Figure 2: Mortgage Delinquencies and Unemployment Rate



Sources: Bureau of Labor Statistics, Mortgage Bankers Association, and Moody's Analytics

During the GFC boom/bust cycle, the share of seriously delinquent mortgages (delinquent 90 days or more) started increasing in early 2006 and peaked at more than double the historical average during the first quarter of 2010. Consequently, foreclosure starts surged, peaking at 0.50 percent of all active mortgages in the third quarter of 2009, also more than double the historical average. Unlike the enactment of the CARES Act at the onset of the pandemic, federal policies to address the economic downturn and the housing market bust occurred far later during the GFC boom/bust cycle[6]. When the Housing and Economic Recovery Act was enacted in July 2008, home prices had already declined by roughly 7 percent relative to 2007.

Income shocks play a major role in mortgage default incidence.[7] During both the pandemic and GFC boom/bust cycles, the share of seriously delinquent mortgages moved in tandem with the unemployment rate (figure 2). Before the pandemic began, the unemployment rate was 3.5 percent, and the share of seriously delinquent mortgages was under 1 percent. By April

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[6] The Housing and Economic Recovery Act was enacted in 2008. The Economic Recovery Act (ESA) was enacted in 2009. The Home Affordable Refinance Program (HARP) and HARP 2 were introduced in 2009 and 2011, respectively.

[7] Christopher L. Foote, Kristopher Gerardi, and Paul S. Willen, *Negative Equity and Foreclosure: Theory and Evidence*, Federal Reserve Bank of Boston, June 2008; Ronel Elul, Nicholas S. Souleles, Souphala Chomsisengphet, Dennis Glennon, and Robert Hunt, "What 'Triggers' Mortgage Default?" *American Economic Review*, May 2020.

2020, the unemployment rate had reached its peak at 14.7 percent, and three months later the share of seriously delinquent mortgages also peaked just short of 5 percent in July 2020, roughly matching the 2010 peak of the GFC boom/bust cycle.

Unlike during the GFC boom/bust cycle, however, during the pandemic period the inventory of homes for sale was limited by the low incidence of foreclosures and the surge in migration from more expensive markets to less expensive markets. Foreclosure starts stayed close to zero during the pandemic because the CARES Act forbearance program prevented seriously delinquent mortgages from transitioning into foreclosure[8]. Hence, forbearance limited distressed home sales and fueled home price growth despite the pandemic. The expiration of the foreclosure moratorium occurred when the share of seriously delinquent mortgages was low and declining. Once the foreclosure moratorium expired, the incidence of foreclosure starts remained low and well below those observed during the GFC boom/bust cycle.

During the pandemic cycle, the possibility of teleworking and the desire for larger housing units while facing housing affordability challenges triggered a surge in housing demand outside large housing markets.[9] Although population mobility slowed in 2021 and 2022, one quarter of these population shifts were from large metropolitan areas into midsize metros, creating a mismatch between housing supply and demand that further fueled home price growth despite the pandemic crisis. For example, the metropolitan areas of Riverside-San Bernardino-Ontario in California and Worcester, MA-CT experienced the largest net migration between March 2020 and February 2022. Home prices in these metropolitan areas grew more than 30 percent between March 2020 and February 2022.[10]

Home Inventory Uniquely Limited Since Pandemic

A large cohort[11] of historically low fixed rate mortgages during this pandemic cycle created a unique “block” on inventory listed as available for sale. This unusual support of home prices did not exist during the 2004-2014 GFC boom/bust cycle. During the pandemic cycle, financed home purchases and mortgage refinances spiked when rates declined between 2020 and 2021.[12] The subsequent late 2021 shift in monetary policy to address rising inflation triggered a

[8] General Accountability Office, “COVID-19 Housing Protections,” GAO-21-554, July 12, 2021; interagency CARES Act Forbearance fact sheet. The CARES Act forbearance provision allowed borrowers with loans insured, guaranteed, made directly, purchased, or securitized by federal entities to temporarily suspend their monthly mortgage payments. Forbearance dispositions allowed for a temporary postponement or reduction of mortgage payments. Under the CARES Act, borrowers were entitled to an initial forbearance period of up to 180 days, upon a borrower’s request.

[9] Freddie Mac, “In Pursuit of Affordable Housing,” Economic and Housing Research Note, June 2022.

[10] Based on the ICE HPI, single-family home prices in Riverside-San Bernardino-Ontario and Worcester, MA-CT grew 46.6 and 30.7 percent, respectively, between March 2020 and February 2022.

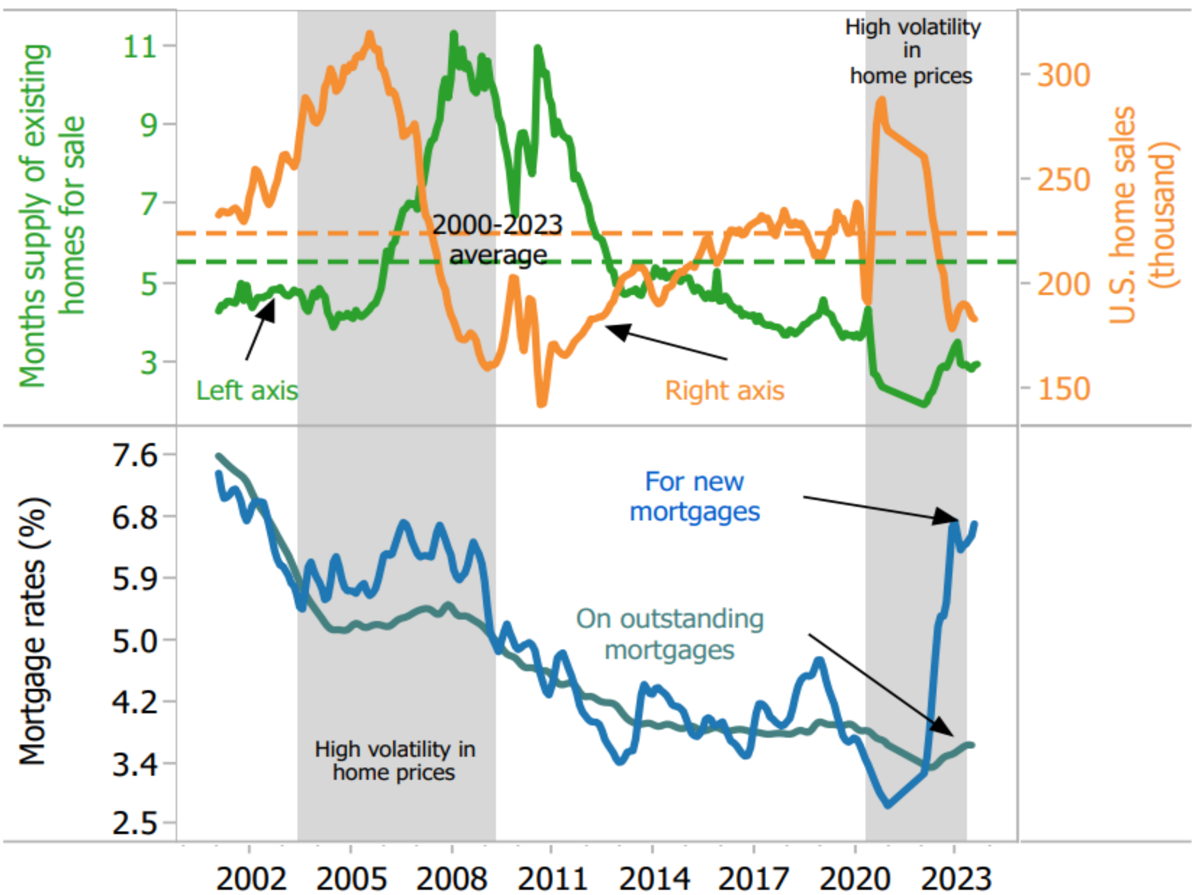
[11] According to data from the National Mortgage Database, more than 90 percent of all active owner-occupied mortgages have mortgage rates lower than 6.5 percent.

[12] At the beginning of the pandemic, low housing demand from changing preferences for more space coupled with improved affordability increased home sales by almost 25 percent in 2020 and more than 10 percent in 2021 relative to 2019 levels. The surge in mortgage refinances during this period was even more dramatic. The dollar volume of mortgage refinances during both 2020 and 2021 was 1.5 times the 2019 volume.

nearly 4 percentage point increase in mortgage rates, creating a “rate lock-in” effect for many homeowners. The mortgage rate spread between outstanding mortgages and new mortgage debt widened, diminishing homeowners’ incentives to list their homes for sale despite rising home prices. Even when housing needs change, a low interest rate on an existing mortgage can dissuade homeowners from selling and moving to another home. This “rate lock-in effect” on existing homeowners created by the widening mortgage rate spread between outstanding and new mortgages stymied growth in the existing homes for sale inventory (figure 3).

Consequently, the limited home inventory growth is stalling the usual downward pressure on home prices that occurs when mortgage rates rise.

Figure 3: Housing Supply and Mortgage Rates



Sources: Census Bureau, National Association of Realtors, Bureau of Economic Analysis, Mortgage Bankers Association, and Moody’s Analytics

The Point?

Home price trends since 2020 are heavily influenced by unprecedented pandemic-related behaviors and policies, limiting historical comparisons that otherwise might tell us something more about the future.