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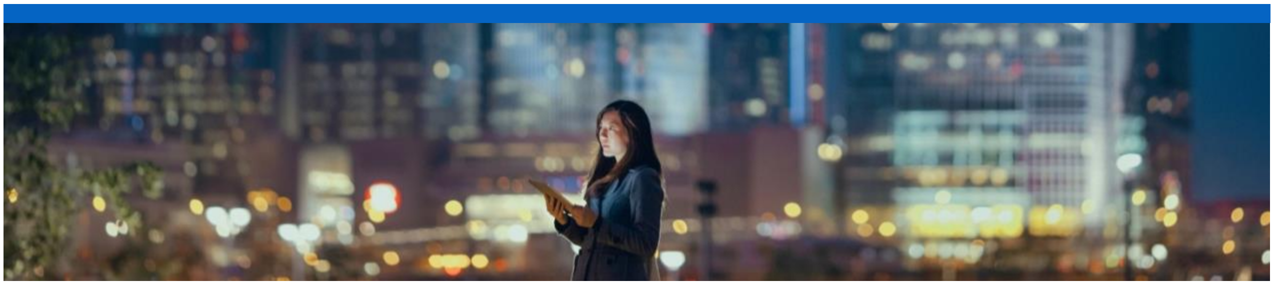

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CIO Strategy Bulletin

A Big Chill?: Housing, Inflation and the Fed

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SUMMARY

- After a housing boom during COVID, the Fed's focus on raising interest rates to "fight inflation" is having a direct, negative impact on housing and adjacent economic activity in the US. These areas represent a meaningful 16.7% of GDP.
- Housing provides excellent forward visibility on a critical segment of the economy. When people buy more property, they also buy goods and services associated with their homes. And the opposite is true as well.
- With shelter prices comprising about one-third of the headline CPI, the trajectory of the housing market will be a determining factor in the Fed's ability to achieve price stability. Housing prices feed through to the CPI with about a one-year lag, which means last year's 17.1% surge in national home prices will keep core inflation elevated throughout much of this year. Ironically, the rapid rise in rates is causing rents to rise as homebuyers are shut out of the market.
- The housing market is being "chilled" as new and existing home sales and construction have fallen at a double-digit pace in 2022. As new purchase mortgage applications fall, existing and new homes sales will fall further. We therefore expect meaningful decreases in both house closings and contract signings ahead, as well as much lower refinancing activity.
- While the US economy is far less "housing reliant" than it was at the peak of 2008, a drop in housing will nonetheless constrain overall US growth.
- The direct impact the Fed has on mortgage rates – where mortgage spreads relative to US Treasuries have jumped higher – is reinforcing the need for the Fed to be concerned with this data.

HOUSING MATTERS

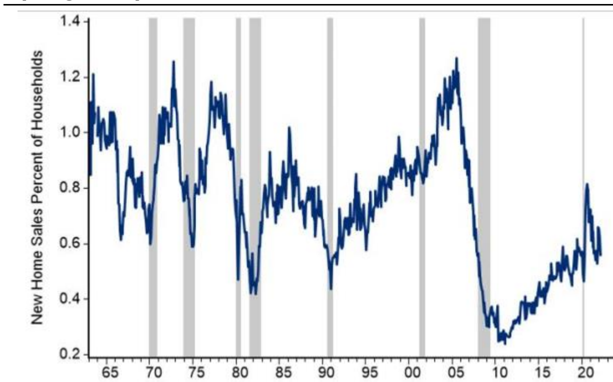
We have previously written that supplies of consumer goods have been replenished and that inventories are “full up” for many retailers. With inflation running high, consumer demand is abating as energy, food and residential housing are consuming more from wages that aren’t rising as quickly. This is why “keeping an eye on housing” matters. Housing provides excellent forward visibility on a critical segment of the economy. When people buy more property, they also buy goods and services associated with their homes. And the opposite is true as well.

COVID caused an unexpected boom for housing in the United States. New and existing home sales reached their highest levels since 2000 in units in and on a per-capita basis during the pandemic (see Figure 1). Unable to spend on travel and services, COVID also instigated a huge migration across the US. In short, consumers “went large” on real estate and its embellishment, with fuel provided by extremely low interest rates and stimulus payments.

Housing is a meaningful part of the US economy, representing 16.7% of GDP (inclusive of construction, rents and utilities). And so, the impact of inflation and interest rates on homeowners gives us meaningful and timely trend data on future consumer behavior and buying patterns, information that (in our opinion) the Fed should pay close attention to (see Figure 2).

The Fed’s focus on raising interest rates to “fight inflation” is having a direct and immediate impact on housing. Mortgage rates mirror the Fed’s intended course for rates (see Figure 3).

Figure 1: New home sales as % households (long term)

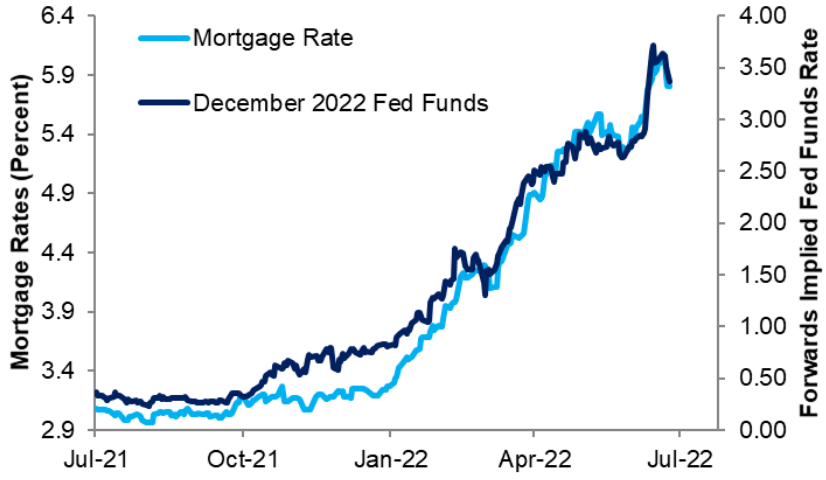


Source: Haver Analytics as of June 21, 2022. Shaded areas note recession.

Figure 2: Residential investment plus housing and utilities in GDP

Source: Haver Analytics as of June 24, 2022. Shaded areas note recession.

Figure 3: Mortgage rates and forwards implied December 2022 Fed Funds Rate

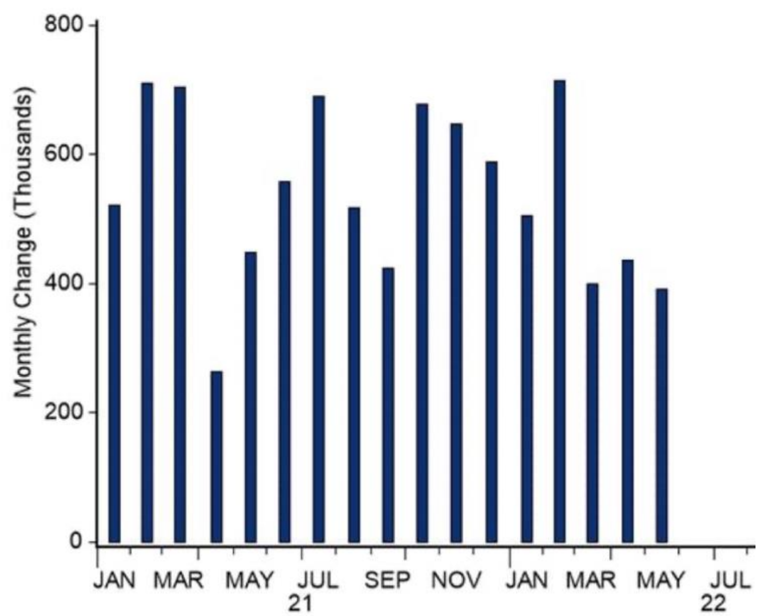


Source: Haver Analytics as of June 21, 2022.

The Big Chill?

The US housing market is now being chilled, even though core US consumer demand for housing remains unsatisfied. New and existing home sales and construction have fallen at a double-digit pace in 2022, despite the fact that employment gains in the US year-to-date remain strong (see Figure 4).

Figure 4: Nonfarm employment continues to grow at a rapid pace



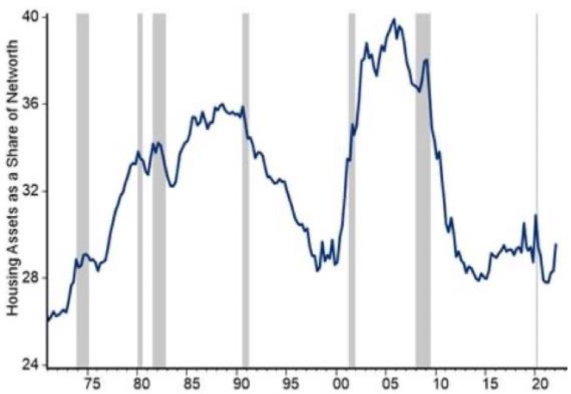
Source: Haver Analytics as of June 24, 2022

While one would expect that higher rates would have a major, immediate downward impact on housing prices, there are systemic reasons why that has not happened and is unlikely to do so. On a macro level, homeownership in the US remains significantly below the peak of the mid-2000s. And demographics suggest that latent demand will remain strong. The number of US households has risen 15% since 2006. In contrast, the number of "homeowner households" has risen by just 9% since then.

Many homeowners are financially "trapped" in their homes – they simply cannot sell their home and buy a new one because the new mortgage rate would be much higher than their current rate. Assuming a median US home price of about $420,000, the difference between a 3% mortgage rate and a 6% mortgage rate is a 30-year monthly payment that increases from about $1800/month to $2500/month, a 40% increase. This cost differential is untenable for most households and suggests both a further cooling in existing home sales and a decline in "mobility" that also negatively affects overall economic activity.

Overall, today's extremely low level of "for sale" US housing inventory, compounded by low levels of new home construction at a national level, are limiting housing price declines. This is very important, as a sizable level of household wealth is tied up in housing (see Figure 5). And it means we are unlikely to experience a severe housing recession, certainly nothing like the housing crash of 2007-2009 (see Figure 6).

Figure 5: Housing assets as a percent of household net worth



Source: Haver Analytics as of June 24, 2022. Shaded areas note recession

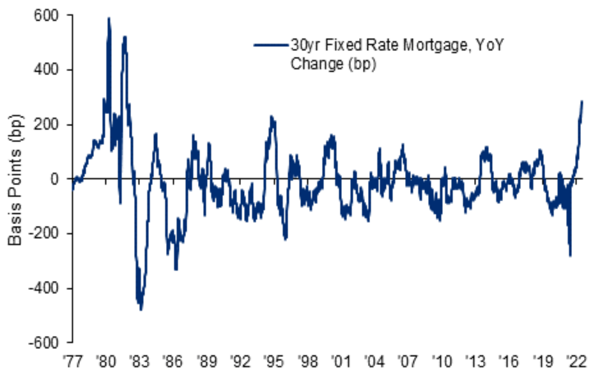
Figure 6: Vacant inventory and housing starts

Source: Haver Analytics as of June 21, 2022.

Compounding Negative Impacts of Unusually High Mortgage Rates

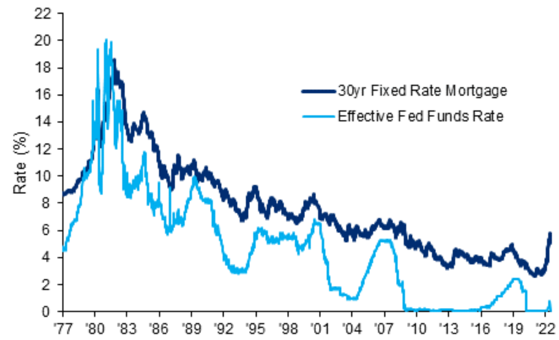
The rapid jump in 2022 mortgage rates has been anything but moderate. The increase in rates across various mortgage products has been the largest six-month change since 1981 (see Figures 7-8). The absolute rate levels for mortgages have not been this high since 2008.

Figure 7: 12-month change in mortgage rates



Source: Haver Analytics as of June 21, 2022.

Figure 8: Federal funds vs mortgage rate level



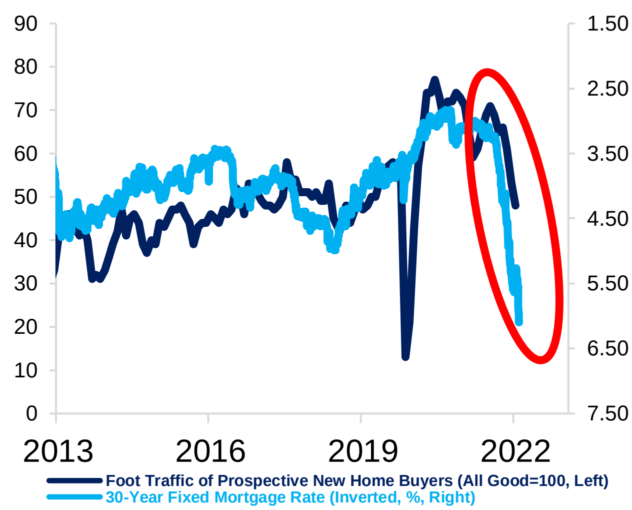
Source: Haver Analytics as of June 21, 2022. Past performance is no guarantee of future results. Real results may vary.

High mortgage rates will result in lower home buyer traffic and sales as affordability reduces the number of prospective buyers and high levels of inflation impacts their confidence (see Figure 9). For a buyer with a conventional 20% down payment, the increase in mortgage rates this year has raised the total cost of purchasing a home (if the house price was constant) by 33% in just the last six months; the change has been even larger for borrowers with less than stellar credit.

We expect meaningful decreases in both house closings and contract signings ahead. Data on mortgage originations for refinance have fallen off a cliff, dropping 70% in volume in the last six months, while purchase mortgage originations have fallen by 16%. As new purchase mortgage applications fall, we anticipate falling new home purchases as well as softening in the existing home sales market. In addition, this will cause a decline in construction-related employment in 2023.

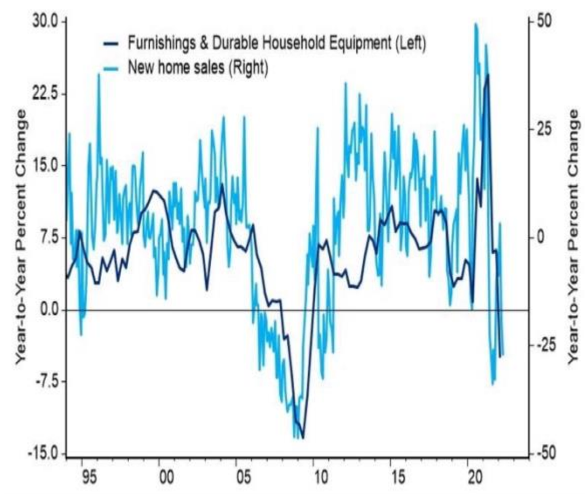
While the US economy is far less “housing reliant” than it was at the peak of 2008, a drop in housing will nonetheless constrain overall US economic growth. Notably, housing related merchandise – much of which is imported – is likely to fall more sharply than during prior periods. This is because such merchandise sales grew disproportionately over the past two pandemic years (see Figure 10).

Figure 9: National Association of Home Buyers foot traffic of prospective buyers for new homes vs. 30-year fixed mortgage rate (inverted)



Source: Haver Analytics and Citi Global Wealth Investments as of June 21, 2022.

Figure 10: Home sales and housing-related merchandise consumption



Source: Haver Analytics as of June 21, 2022.

Refinancing activity, which had been a major driver for US consumers seeking more cashflow for discretionary purchases during the pandemic, is going to decline greatly. As of June 17th, refinance loans were down 77% from the prior year. We see the inability for homeowners to access their home equity as putting more downward pressure on consumer spending.

Finally, the rise in rates is already leading to increased rental rates as would-be buyers are forced to rent instead of purchasing homes. This, too, dampens the available dollars for consumers to spend elsewhere.

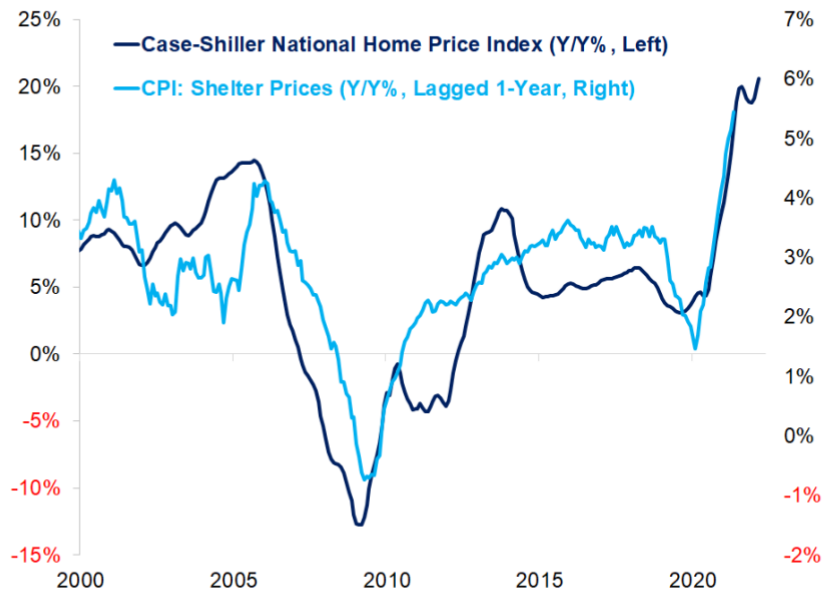
What Housing Data Suggests for the Economy as a Whole

Perhaps the largest impact that the housing sector is having on the economy is how it feeds through to inflation metrics with shelter prices up 5.5% year-on-year. Not only does this detract from consumer spending elsewhere, but it also plays a big role in how the consumer price index (or CPI) is calculated.

With shelter prices comprising about one-third of the headline CPI, the trajectory of the housing market will be a determining factor in the Fed's ability to achieve price stability. Unfortunately, housing prices feed through to the CPI with about a one-year lag. This means that last year's blistering 17.1% surge in national home prices (as measured by the S&P CoreLogic Case-Shiller Price Index) will keep core inflation elevated throughout much of this year (see Figure 11).

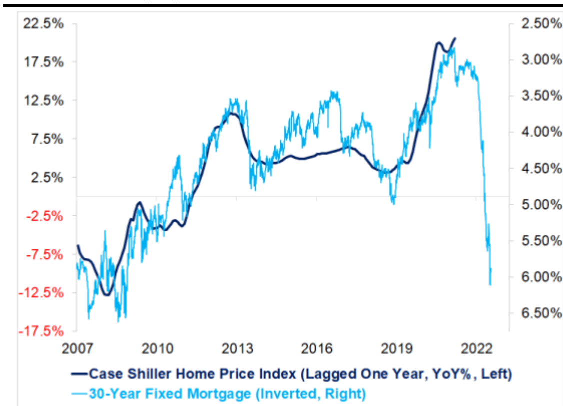
Importantly, there is some potential for mortgage rates to moderate a bit as investors consider the prospect of potential rate cuts from the Federal Reserve in late 2023 as they attempt to achieve a "soft" landing for the U.S. economy (Figure 13). In fact, we have already seen bond yields moderate some of late with the 10-year U.S. Treasury falling from 3.49% on June 14, 2022, to 3.09% on June 23, 2022, as investors weigh the prospects of a further cooling in consumer activity.

Figure 11: S&P CoreLogic Case-Shiller National Home Price Index vs. CPI: Shelter Prices



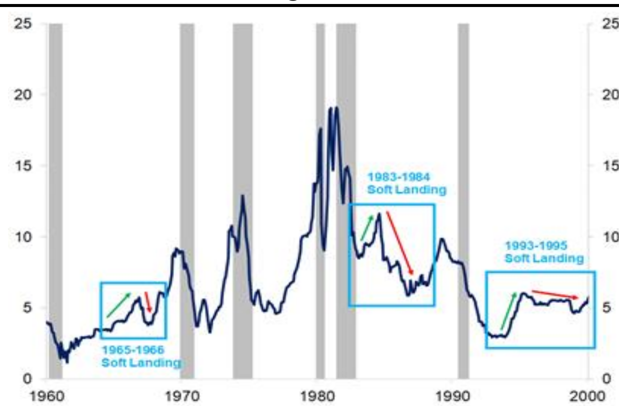
Source: Haver Analytics as of May 2022. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

Figure 12: National Home Prices vs 30-Year Fixed Mortgage Rate



Source: Haver Analytics as of June 23, 2022.

Figure 13: Effective Fed Funds Rate and Previous Economic "Soft" Landings



Source: Haver Analytics as of January 2020. Shaded areas note recession.

Will the Fed be Watching?

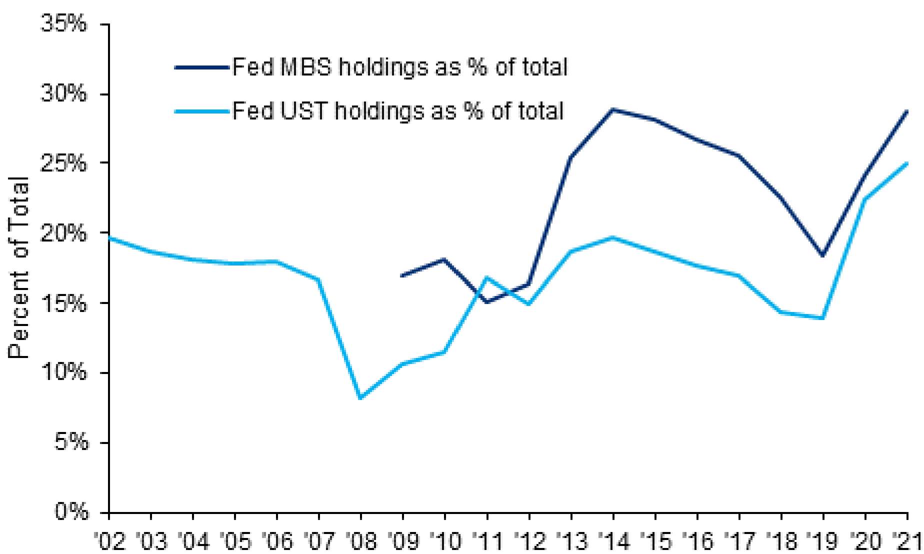
Housing's woes and the impact this will have on economic activity in the US will provide important signals to the Federal Reserve. Though one could argue that the absolute levels of nominal and real rates remain historically low, we believe it is the magnitude and speed of the shift upwards in interest rates that will impact the growth of the economy over a discrete period.

The transmission of the Fed's intentions directly to mortgage rates, where mortgage spreads relative to US Treasuries have jumped higher, is reinforcing the need for the Fed to be concerned with this data. Remember that the Federal Reserve is also tightening by eliminating its purchases in the bond market and allowing holding to mature. The Fed owns over $2.7 trillion -- or over 30% -- of the total outstanding mortgage-backed securities market ($8 trillion in Fannie Mae and Freddie Mac issued credit) (see Figure 14).

From the Federal Reserve's perspective, the upshot of higher mortgage rates is that it will dampen demand and likely cool inflationary pressures over time with national home price declines often lagging the rise in mortgage rates by about a year (see Figure 12).

Currently, the Atlanta Fed's widely followed GDP now tracker suggests a softening in residential investment will have a negative impact on second-quarter 2022 real GDP (potentially pulling it down by 0.4%). We expect that this trend will continue for several quarters. We hope that the Fed will be watching carefully as it does so.

Figure 14: Fed holdings of mortgage-backed securities as % of total vs. Fed holdings of UST



Source: Haver Analytics as of June 21, 2022.

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