

Executive Summary**We expect the housing market to remain resilient to the “Covid-19” recession**

- ▶ While economic damage from COVID-19 is often attributed to combination of government-enforced lockdowns and consumer risk aversion, research shows over 90% of the declines in economic activity has been driven by the public’s fear of infection.¹
- ▶ Consequently, we believe, “the pandemic is the economy”: No remission, no recovery.
- ▶ The “summer resurgence” proves the point, sharply slowing the speed of recovery from V-shaped to L-shaped.
- ▶ This resurgence has already prolonged the depth and duration of the economic damage from the pandemic, adding to the already catastrophic rates of unemployment and small business failure and thus further lowering the odds of a full recovery.
- ▶ That said, if it also helps bring about new social norms that help stop the rate of infection, it may ironically avoid the wave we might have otherwise gotten this fall, thus hastening the end of the crisis.
- ▶ The housing market has proved to be a bright spot in the pandemic economy with houses prices up 3.8% for 1H 2020² and double-digit year-over-year rent growth across some Midwest cities³.
- ▶ We expect *nominal* house prices to rise by 1.4% in 2020 before decelerating to roughly zero growth in 2021. Given severity of the unemployment shocks, this forecast is in sharp contrast to the 26% decline nationally during the Global Financial Crisis (“GFC”).

Five Reasons Why “This Time is Different” for Housing

- ▶ We expect housing market to demonstrate resilience to this recession for the following reasons:
 1. Housing valuations at the beginning of this crisis were only moderately above fair value.
 2. House price appreciation has been driven by supply scarcity (not demand exuberance).
 3. The Federal Reserve’s aggressive support of bond markets has avoided “crunching” the supply of mortgage credit to households.
 4. Job losses have fallen disproportionately on lower-income renters vs. higher-income owners.
 5. Housing demand is tilting towards the suburbs, and this shift may prove persistent.

Single Family Housing Will Likely be Island of Stability in a Sea of Uncertainty

- ▶ Despite a deep contraction and uneven road recovery, we believe US home prices will prove resilient to the fallout from the pandemic.
- ▶ Absent the many market imbalances that characterized housing during the GFC -- excessive leverage and dramatic pricing bubbles followed by widespread default, foreclosure, and mortgage market collapse -- the economic forces operating on home prices will likely be limited to affordability and price momentum.
- ▶ And while high unemployment rates will obviously weigh on affordability, we expect meaningful offsets from the stability of lending standards and the record low levels of mortgage rates.
- ▶ Home prices may also benefit from the fact that job losses have been less severe for the occupations, industries, and incomes that are more likely to buy homes relative to past recessions.
- ▶ Rent prices, by contrast, will likely reflect the fact that households who rent have suffered disproportionate job losses in this pandemic, especially at the lower end of the rental market.
- ▶ Due to this contrast in the fates of homeowners vs renters, it may look at times as if they’re marching to the beats of a different drummers.

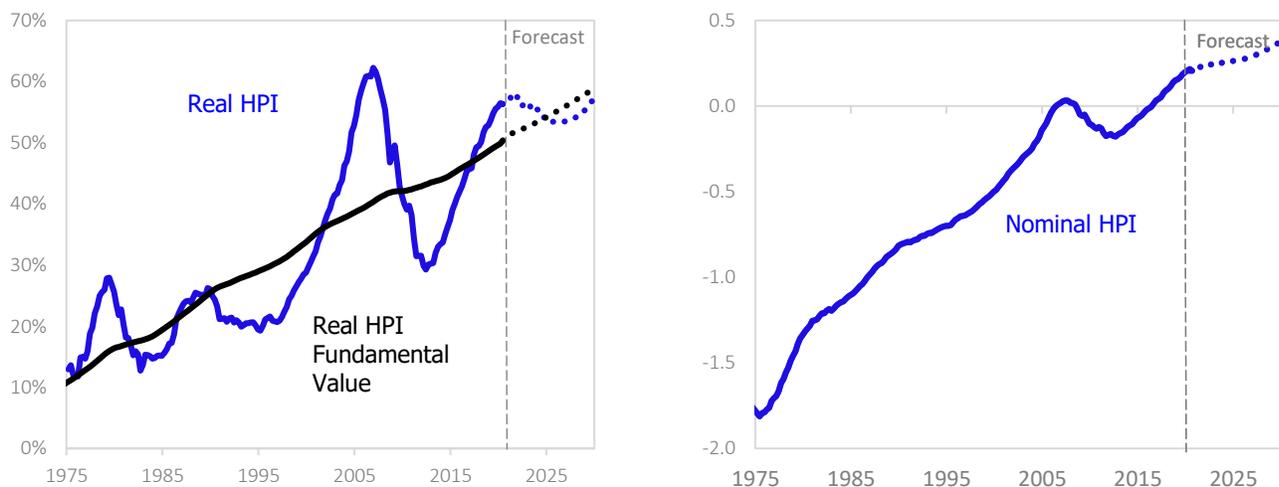
Why Housing Will Weather the Storm of COVID-19

Housing markets look resilient to widespread economic fallout from Covid-19

The second-half outlook for US housing markets is looking surprisingly resilient considering the second-half onslaught from the “summer resurgence” of the Coronavirus pandemic. More than anything else, the summer resurgence in the US has shown how difficult it will be to exit this pandemic. It has also demonstrated that “no state is immune”, which may contain a silver lining if it helps strengthen political support for public health efforts to test, trace, inform, and ultimately vaccinate the public. But compliance remains imperfect, hence the outlook for the pandemic remains volatile, so we do not assume that the US economy is on a straight path to recovery. Or as we like to say, “the pandemic is the economy”: no remission, no recovery.

Housing prices have proven resilient in the face of extraordinary unemployment rates. In our view this resilience stems from many drivers, not least is the fact that the experience of sheltering in place and working from home appears to have increased household preferences for suburban homes. But this is not the only reason, nor even the most important reason, why home prices should remain resilient. In the section to follow we describe five reasons for why the housing sector will likely “outperform” in this recession. Based on the FHFA all-transactions index of national house prices (hereafter “HPI”), we forecast a 4% decline, peak-to-trough, in real national house prices (Exhibit 1), which implies a nominal trajectory (peak-to-trough) that is roughly “flat” (Exhibit 2). In nominal growth rates, we forecast nominal %YoY house price appreciation of 1.4% in 2020 and 0.0% in 2021.

Exhibit 1 & 2: House prices are only modestly above their fundamental value⁴

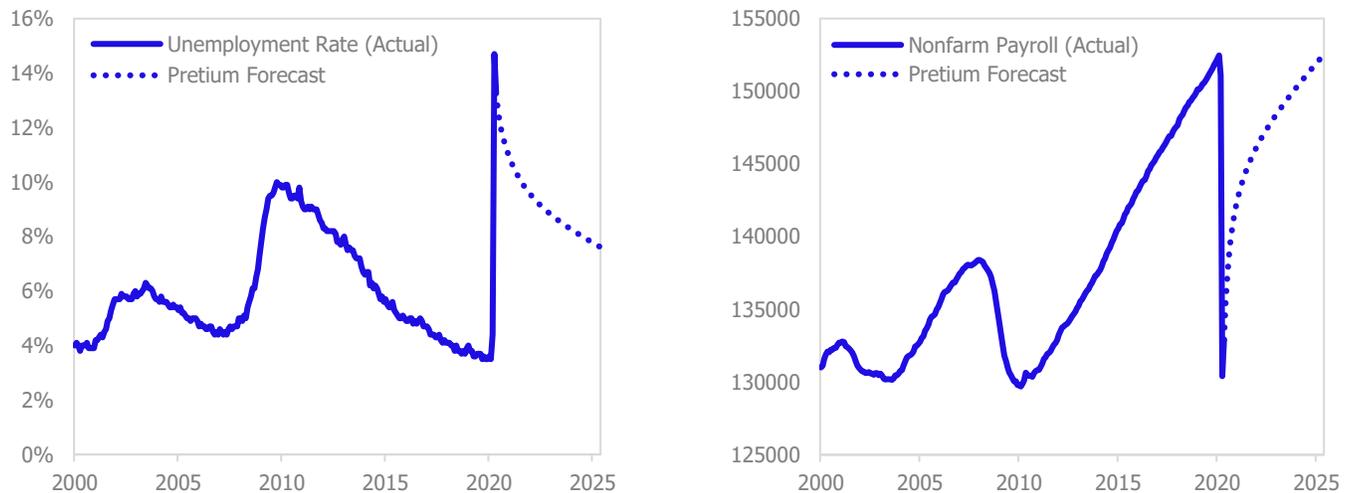


Beneath the relatively calm surface of our HPI forecast, we expect households will continue to confront tremendous financial turmoil arising from job loss and income uncertainty. The rollback of reopening plans has extended the longevity of the pandemic’s negative impact on the economy and hence increased the likelihood of its propagation into a slower recovery. In addition to what is already a mass extinction of small businesses, especially in the service sector, the summer resurgence makes it less likely that workers on temporary furloughs will ever be recalled. It also makes it less likely that larger companies will continue to hold off making difficult decisions on headcount reductions. Such prolonged spells of unemployment and income loss have obvious implications for the strength of housing demand.

Furthermore, the historic amounts of disruption across industries and occupations. At a micro level, some industries have benefitted impressively from the crisis, while others are in disastrous shape. Hardest hit are occupations on the “front lines” of the personal services industries, businesses like restaurants, hair salons and neighborhood gyms. At the same time, online businesses have benefitted, as have makers of many outdoor recreational goods like bicycles, boats, and recreational vehicles. The unemployment impact has therefore tended to fall hardest on households that were already at the low end (bottom quartile) of the income distribution.

For housing markets, the implications are twofold. First, since households at the bottom of the income distribution are more likely to rent than own, the weakening of housing demand due to lower incomes may be less than the scale of the unemployment might otherwise imply. Second, within rental markets, the bottom quartile of the income distribution tends to reside in affordable housing, which constitutes one-third of the US rental stock. At the other end of the income distribution (the top quartile starts at around \$75,000/year), households are more likely to own their own homes, and those that rent are more likely to rent single family homes. Hence, despite the obvious issues of payment enforcement stemming from eviction and foreclosure moratoriums, we see good reasons to think that much of the residential real estate market avoided a direct hit from the initial landfall of the Covid-19 storm.

Exhibit 3 & 4: A two-phase, two-speed recovery from record-high unemployment rates⁵



That said, there is still too much uncertainty to sound the “all clear”. The magnitude of the fiscal stimulus has made it harder to appreciate the full scope of the underlying devastation to household incomes and small businesses. From January to April of this year, personal wage and salary income fell by a record-breaking 11% (since 1960, the largest 3-month drop prior to this occurred during the spring of 2009, when wage and salary incomes fell by “just” 6%). Despite this potentially devastating collapse, disposable incomes unexpectedly *rose*, by the record-breaking amount of 13.4% (since 1960, the largest 3-month increase prior to this occurred in the spring of 1975, when disposable income jumped by 9%).

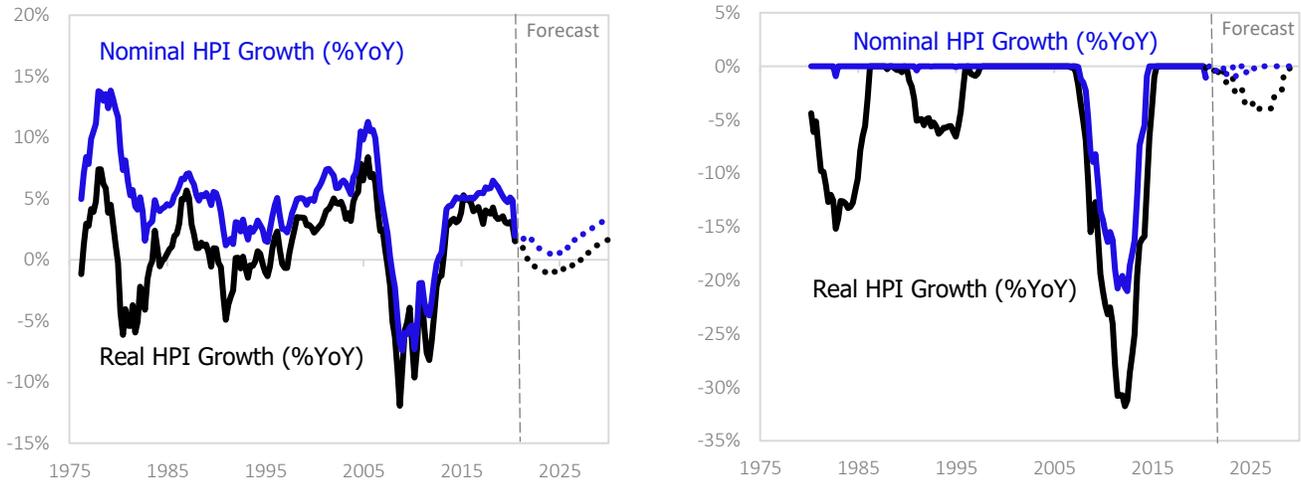
The good news is, the scale of the fiscal support to households has been commiserate to the record-breaking scale of the damage to household incomes. The bad news is that the extra \$600/week of unemployment assistance provided by the CARES Act expired in July. While most political observers expect some of these benefits will eventually be extended, they also expect their generosity will be reduced. Earned income is still 6.6% below its February level, comparable to the declined sustained during the depths of the Global Financial Crisis.

The scale of this economic hardship makes it hard to explain how equity markets have rallied to new highs. Just as the shock has fallen hardest on personal service occupations, these jobs tend to be working for small, privately owned businesses rather than on large, publicly owned corporations. In addition to this, we have argued elsewhere that the CARES Act generated a perfect storm for savings -- a windfall of income combined with restrictions on spending that together drove the personal savings rate to a record 33% of disposable income.⁶ This may have driven record amounts of new money into record numbers of newly opened retail brokerage accounts. This narrative points to more downside risk for markets, since it implies that current market pricing is leaning too heavily on non-repeatable factors like the initial surprise of monetary support for credit markets and the magnitude of fiscal stimulus for household savings.

After the storm clouds have dispersed, we see a reasonable chance that the pandemic will have meaningfully reshaped the demand for housing characteristics. Already the experience of sheltering in place, home schooling and working from home in crowded urban housing situations has increased demand for the indoor space and outdoor recreation offered by the suburbs. In addition to this, the relative quality of urban life is now lower due to the closure of so many restaurants, bars, and retailers that are the lifeblood of urban life. And the increased fiscal pressures on state and local governments will likely force budget cuts that will erode the quality of sanitation, schools and police enforcement. In short, while it’s easy to over-state this

narrative -- the amenities of urban life will still hold powerful appeal to urban workers – it nonetheless seems likely that a shift in demand toward suburban living will persist for years to come.

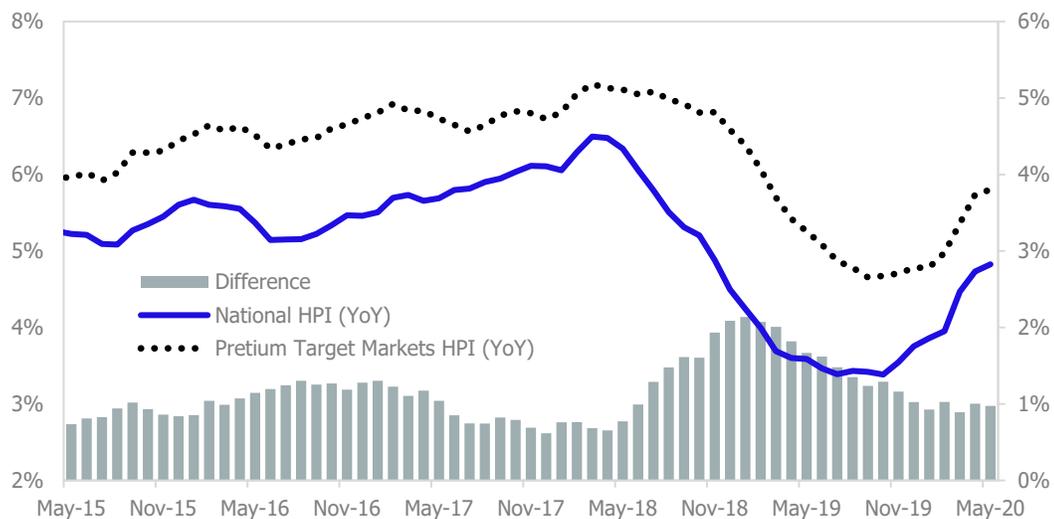
Exhibit 5 & 6: Nominal house price appreciation should be roughly “flat”⁷



Five Reasons Why “This Time is Different” for Housing

While it is sobering to contemplate unemployment rates still above the peaks of the GFC through the end of 2020, we think the housing sector is in dramatically better place to weather this recession. While it is generally prudent to avoid arguments suggesting that “this time is different”, we nonetheless list five reasons why we think house prices will show surprising resiliency to this recession, namely: 1) Housing valuations at the beginning of this crisis were only moderately above fair value; 2) House price appreciation has been driven by supply scarcity (as opposed to demand exuberance); 3) the Federal Reserve’s aggressive support of bond markets has avoided “crunching” the supply of mortgage credit to households; 4) Job losses have fallen disproportionately on lower-income renters vs owners; and 5) Housing demand has temporarily shifted to the suburbs, and this shift may prove persistent.

Exhibit 7: Home prices have continued to accelerate through first half of 2020⁸



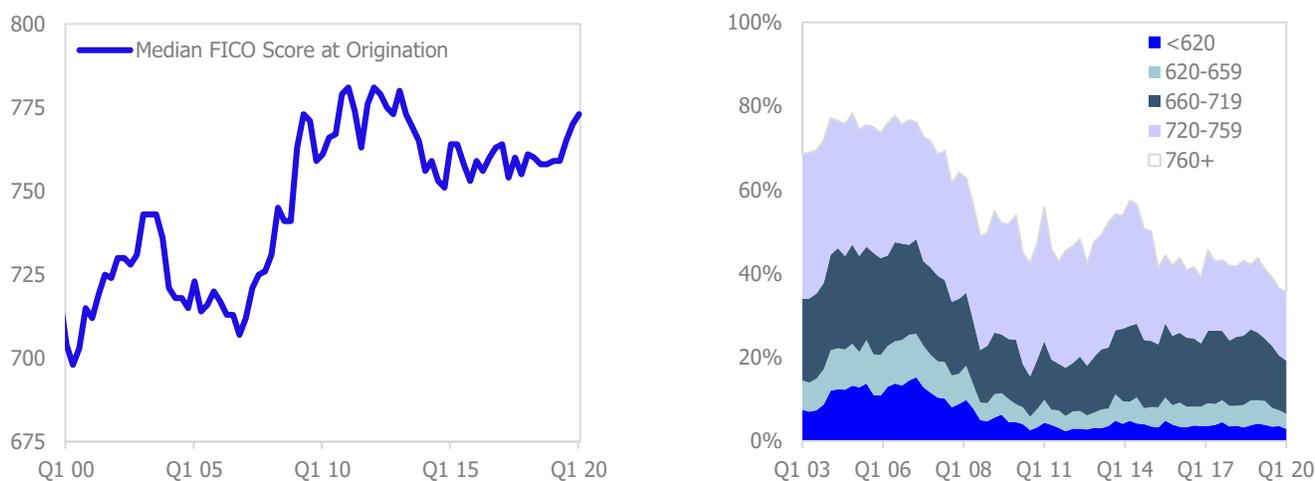
1. Housing valuations are only moderately above fair value.

In our models, a key determinant of the risk to house price declines in recession is over-valuation. The best example of this is the GFC, prior to which house valuations rose to record levels in many markets due to unsustainable increases in leverage, home prices, and new home construction. When that bubble finally burst, the financial fallout gave rise to the biggest collapse in house prices since the Great Depression. This was in sharp contrast to previous recessions, during which house prices had generally fallen, but only modestly. The lesson of the GFC, we believe, is that the magnitude of house price declines in recession is proportional to the excess of price growth in the preceding expansion.

Indeed, the impact of the GFC varied widely by market. Markets like Phoenix and Miami saw homes prices bubble to levels that were arguably 30% or more above fair value. When the recession hit in 2008, these bubbles deflated rapidly, and housing prices fell by amounts equal to the run-up in the bubble and often more. In contrast, housing markets like Denver and Dallas largely avoided the excesses of the boom years of the early 2000s, and thus subsequently experienced only modest peak-to-trough house price declines during the subsequent recession. We think the experience of such markets provides a sensible template for the current cycle.

Fortunately, there are fewer “housing market imbalances” to unwind in this recession. This is at least partly due to new financial regulations imposed after the GFC that greatly limited the supply of risky mortgages to highly indebted households. At the same time, they also led to more cautious behavior on the part of households, homebuilders and their lenders. This is clearly visible in households’ reduced reliance on mortgage debt (lower mortgage rates notwithstanding) and causing household debt-to-income ratios to fall by over 25% since 2007.⁹ Relative to past recoveries, the pace of new home building has been running below the rate household formation, and as a result, vacancy rates have been driven to multi-decade lows. In contrast to the GFC, US housing markets have been less over-bought than under-supplied.

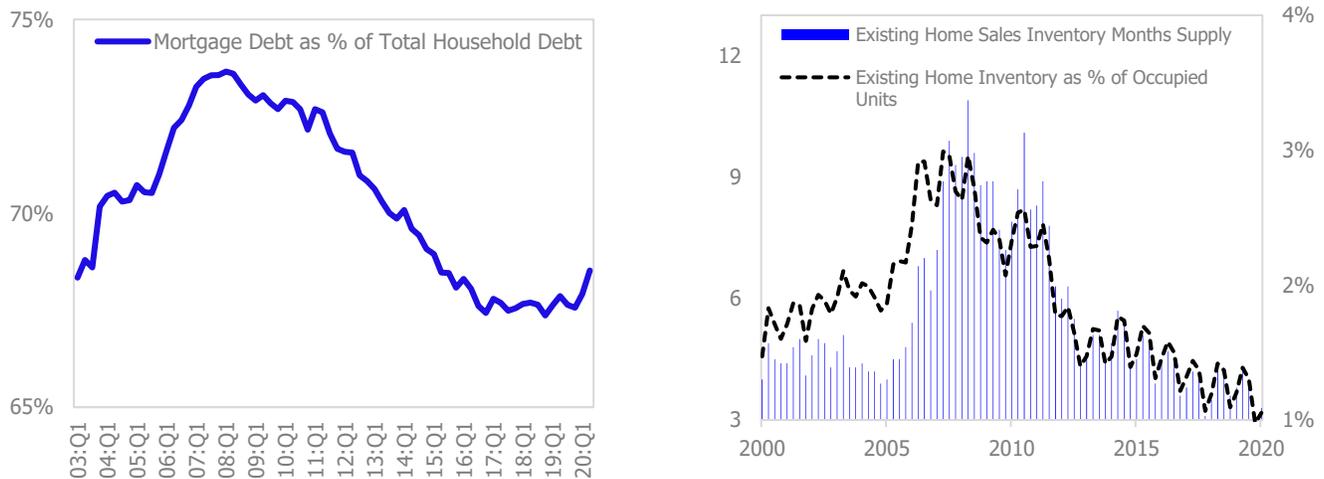
Exhibit 8 & 9: Underwriting standards have tightened significantly since the GFC¹⁰



2. House price appreciation has been driven by supply scarcity (not demand exuberance).

In our view, the “fragility” of over-valued house prices also depends in part on the extent to which recent price appreciation has been demand-driven vs. supply-driven. When high valuations are driven by unrealistic expectations of future house price appreciation alongside unsustainable levels of household leverage, house prices are obviously vulnerable to the inevitability of a “sudden stop”. When the bottom falls out of demand, the resulting large gap between supply and demand can obviously cause sharp declines in house prices.

In contrast, supply-constrained markets are less fragile. When housing demand is driven organically by new household formation and results in robust house price appreciation due to a lack of new supply, there is no sense in which demand is driven by unsustainable factors that can “suddenly stop” (and neither is there any sense in which the under-supply of new homes can “sudden start”). Thus, while recessions pose obvious risks to over-valued housing markets, there is far less scope for sharp house price declines when the recent increases have been driven by tight supply rather than exuberant demand.

Exhibit 10 & 11: Low debt burdens and the under-supply of houses are supportive fundamentals¹¹

3. The Federal Reserve’s aggressive support of bond markets has prevented a credit crunch.

One of the most important reasons for the “sudden stop” of housing prices during the GFC was the collapse in supply of mortgage finance. When Lehman Brothers failed, it set in motion a complex chain of events and created so much stress on the financial plumbing of markets that the supply of credit mortgages to home buyers came to a virtual halt. This “credit crunch” made the GFC worse by greatly reducing the demand for houses at the same time that a wave of foreclosures was pushing new supply onto the market. Eventually the Federal Reserve managed to launch an “alphabet soup” of new lending facilities that restored the flow of credit to the economy. But a lot of the damage had already been done that might have been avoided had the Fed been able to move more quickly.

The contrast to the current crisis is striking. During the GFC, most of the unconventional policy tools that the Fed would eventually deploy had only barely been imagined much less implemented and deployed. In the current crisis, by contrast, tools from the GFC like TALF, QE and forward guidance were already “on the shelf” and thus could be deployed without delay (and they were). The experience of the GFC had also encouraged the Fed to develop contingency plans for a range of new facilities designed to support the functioning of credit markets. As a result, only weeks into the crisis (April 9), the Fed was able to launch new facilities supporting credit market access for small business, municipalities, and corporations. As result, by mid-April, credit market spreads had retraced over half of their dramatic late-March spike. And while many market spreads today remained elevated vs pre-crisis levels, the magnitude of credit flows to the private sector has been record-breaking in many markets.

In addition to preventing a shut-down of mortgage credit, the Fed’s actions have also lowered the cost of mortgage financing. The cost of a 30-year fixed rate mortgage fell started the year at 3.91% but has since fallen to a record low of 3.20% as of late June. This is a full 100bp lower than the lows of the GFC reached in Oct. 2008. In our view, such low borrowing rates are here to stay for the foreseeable future. The world is awash in capital searching for yield, and in our view the cost of mortgage financing is likely to remain low for many years to come.

4. Job losses have fallen disproportionately on lower-income renters vs owners.

Our research shows that the workers most affected by this pandemic were disproportionately in low-wage jobs that require “social density”. Service workers like hair stylists, fitness trainers and childcare workers were hit especially hard, with unemployment rates in the Personal Care and Service Occupations industry reaching 28.4% in June. Hotels and restaurant workers were hit similarly hard, with unemployment rate for Accommodation and Food Services hitting 26.6%.

This isn’t the usual pattern of job losses in recession. Service sector jobs are typically *less* cyclical, not more. During the GFC, for example, the unemployment rate for workers in the Leisure and Hospitality sector rose by just 6.3pp. In the current crisis it has risen by 33.6pp, peaking at 39.3% back in April before falling to its June level of 28.9%. More generally, the share of

unemployment for service sector jobs during the GFC fell from over 24% to under 18%. In this recession, by contrast, the service sector's share of unemployed workers has *rose* from roughly 20% back in February to almost 30% in April, and it currently stands at around 27%.

It turns out that service sector workers are also more likely to rent than to own. Microdata from the Current Population Survey (CPS) from March 2018 show that 47% of workers in Food Services and Drinking Places are renters, which is the third highest propensity to rent among 53 detailed industries covering the US economy. And more generally, half of the top 10 industries by rentership are in the service sector. This list includes Household Cleaners and Caretakers (50%), Administrative and Support Services (43%), and Hotel Accommodations (43%). These sectors have all been on the front lines of the economic fallout from this pandemic.

Rentership is also more common at the low end of the income distribution. Further analysis of the CPS microdata for March 2018 data, for example, shows that households with average annual incomes of \$20k-\$25k, \$50k-\$60k, and \$75-\$100k had rentership rates of 68%, 48%, and 32%, respectively. This inverse relationship is more generally true across all income buckets.

In sum, our research suggests that the economic burdens of this pandemic are falling disproportionately hard on workers in low-wage occupations in the service sector. Such workers are more likely to rent than own. We therefore think the implications are more bearish for rent prices than for home prices, and more bearish for the low end of the rental market vs the high end. Recessions always create cyclical headwinds for housing markets, but the burdens of this recession appear to have fallen on the most economically disadvantaged households.

5. Household demand is tilting towards the suburbs, and this shift may prove persistent.

Of the many media narratives about the future of US housing markets, one of the most popular is the idea that recent work-from-home ("WFH") trends will be a permanent feature of the post-pandemic landscape. According to this view, households will be reluctant to return to their offices when the pandemic is over, either because they harbor residual safety concerns, or because they have grown comfortable in their new work arrangements and simply prefer to keep them.¹² Doing away with commutes would presumably translate to a higher demand for suburbs, while adding a home office would presumably translate to a higher demand for square footage.

While this narrative simplistically overlooks a lot of countervailing factors, we think it contains a germ of truth. For one, WFH is now more of a "thing" than it was. The pandemic has forced companies and employees to adopt new technologies and develop new workflows to facilitate WFH. Since this knowledge cannot be "unlearned", and since these innovations will still be available in a post-pandemic world, they will likely result in at least a modest increase in WFH trends. On the margin, this will likely enable workers who were already looking for a way to expand their WFH hours to negotiate that change with their employers. And this in turn would likely be reflected in their demand for housing characteristics (namely suburbs and more space).

Conclusion: An Island of Stability in Sea of Uncertainty

Despite the depth and increasing duration of this recession, US housing markets have already proven resilient, and we expect this resilience to persist over the remainder of what will likely be an uneven recovery. While the peak-to-trough declines in GDP and job losses have exceeded that of the GFC, we expect house prices to hold up surprisingly well. Our forecast expects nominal house prices to rise by 1.4% in 2020 before decelerating to roughly flat growth in 2021. Needless to say, this forecast is in sharp contrast to the 26% decline nationally during the Global Financial Crisis, notwithstanding the greater scale of the economic fallout on many workers and small businesses, especially in the personal services.

Compared to the GFC, this cycle has lacked the housing market imbalances that characterized the mid 2000s. Absent the excessive leverage and dramatic pricing bubbles that preceded that crisis, we're unlikely to see either widespread defaults and foreclosures on mortgages or a subsequent collapse in mortgage supply. As such, the negative economic forces operating on housing markets in our outlook are limited to affordability and price momentum. While high unemployment rates and income insecurity will obviously weigh on affordability, this will likely be offset by high levels of homeowner equity, record low mortgage rates, and high credit quality reflecting a decade of tighter lending standards.

Due to the unique burden this pandemic has imposed on front-line occupations in the service sector, we expect this recession will weigh heavier on rent prices than on home prices. This is especially true for rental markets serving lower-income households, which are tragically enduring the highest levels of unemployment and income loss. By contrast, higher-income households are less likely to be employed in the service sectors, which may imply less severe hits to both homeowners and the middle-to-upper tiers of rental markets. Indeed, this dichotomy between the economic losses born by some households and businesses but not others has already prompted to some economists to call this a "K-shaped" recovery. It's a description that will likely fit residential real estate markets, too.

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The ultimate impact of COVID-19 — and the resulting precipitous and near-simultaneous decline in economic and commercial activity across several of the world’s largest economies — on global economic conditions, and on the operations, financial condition and performance of any particular industry or business, is impossible to predict, although ongoing and potential additional materially adverse effects, including a further global or regional economic downturn (including a recession) of indeterminate duration and severity, are possible. The extent of COVID-19’s impact will depend on many factors, including the ultimate duration and scope of the public health emergency and the restrictive countermeasures being undertaken, as well as the effectiveness of other governmental, legislative and financial and monetary policy interventions designed to mitigate the crisis and address its negative externalities, all of which are evolving rapidly and may have unpredictable results. Even if and as the spread of the COVID-19 virus itself is substantially contained, it will be difficult to assess what the longer-term impacts of an extended period of unprecedented economic dislocation and disruption will be on future macro- and micro-economic developments, the health of certain industries and businesses, and commercial and consumer behavior.

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Footnotes

- ¹ “Fear, Lockdown, and Diversion: Comparing Drivers of Pandemic Economic Decline 2020”, NBER Working Paper 27431, June 2020.
- ² CoreLogic Home Price Index, data through June 2020 as of August 05, 2020
- ³ Goldman Sachs, The Post-Pandemic Economy, August 23, 2020
- ⁴ Pretium Internal using Current Population Survey, Annual Social and Economic Basic & Supplement Microdata, US Census Bureau. Updated May 2020.
- ⁵ Pretium Internal Forecast, U.S. Bureau of Labor Statistics – Data Through June 25, 2020.
- ⁶ “The Macro-Market Disconnect,” July 2020, Pretium Partners.
- ⁷ Pretium Internal Forecast, U.S. Bureau of Labor Statistics and Moody’s Analytics – Data Through June 25, 2020.
- ⁸ Pretium Internal Forecast using CoreLogic Home Price Index – Data Through June 2020.
- ⁹ Household debt-to-income retrieved from FRED via Federal Reserve Bank of St. Louis as of July 2020
- ¹⁰ New York Fed Consumer Credit Panel/Equifax as of Q1 2020.
- ¹¹ National Association of Realtors, Existing Home Sales, through March 2020.
- ¹² Emerging Themes in Life After Covid”, Morgan Stanley, June 21, 2020.