Research Report

End of Housing and Economic Recovery from the Great Recession: How Good Did It Get by 2019?

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Executive Summary

2019 was the culmination of a 12-year-long recovery cycle since the onset of the Great Recession and its severe housing and economic setbacks. Now that the COVID-19 pandemic has brought a new recession, **how well did Los Angeles and California improve** by the final, peak year of the recovery cycle?

New data released September 17, 2020 from the American Community Survey (ACS), collected in 2019 by the U.S. Census Bureau, document the end of the decade and are historically significant for key questions:

> • How much did housing and economic conditions in Los Angeles and California recover from their recession depths in 2010? How did that compare to the U.S. as a whole?

> • Did this region ever match the prior high points in 2007, or is it possible, on some indicators, that we are still well short of recovery on a peak-to-peak basis?

We find that all our key economic indicators had fully recovered and even surpassed their 2007 peak before 2019: total employment (2014), unemployment rates (2017), household income (2017), and poverty rates (2018).

Despite that good economic news, the **housing well-being of Los Angeles and California residents leave much to be desired**. On a wide range of housing indicators there is evidence of a much weaker and incomplete recovery, including housing prices and rents, rental and homeownership affordability, overcrowding, and homeownership rates. If 2019 represents the end of recovery, as good as it gets prior to the COVID-19 recession, what could that imply for the years ahead? Is housing well-being destined to keep falling further behind?

Introduction

Every fall when new American Community Survey (ACS) data are released by the U.S. Census Bureau, we gain a broad statistical update on the year just completed. However, the 2019 ACS is unique as a report on end-of-decade and also end to the long housing and economic recovery now cut short by the COVID-19 pandemic. The value of the new ACS data is for looking backward and assessing progress made in the last decade and since 2007 or 2000.

Thus, the new data provide measurements on the "peak" or "end" of the housing and economic recovery from the Great Recession. Where does Los Angeles and California still need improvement? What perspective is gained from this long-term assessment of progress since the beginning of the 21st century?

We trace annual trends and key cyclical changes, both from the bottom of the Great Recession in 2010 to the peak of recovery in 2019, and also from the peak of the last recovery in 2006 or 2007 to 2019 (peak-to-peak), while also covering the two completed decades of the 21st century. A total of 12 indicators is repeated for 3 key geographies: United States, the whole of California, and Los Angeles county, although that is often referred to as simply "Los Angeles."

Graphic displays facilitate comparisons of the indicator data for the long time periods and different geographies. Most displays are also accompanied by a table summarizing the numerical change on each indicator between for key time periods. This includes both the last three years and also the cyclical periods of interest, trough-to-peak and peak-to-peak.

The topics covered include:

Economic Cycle of Boom, Bust, and Recovery

Total Employment

The backbone of economic prosperity is found in trends of employment growth. The annual count of employment is presented in Exhibit 1a. National count can be read by the left Y-axis while counts for California and LA county are seen on the right Y-axis (20 million to 180 million on the left Y-axis and 2 million to 18 million on the right Y-axis). Over the past four decades in the U.S., California, and LA county, employment has expanded steadily except for recession years. The sharp decline in the Great Recession is visible in 2009, as is the early 1990s recession in California, less so in the U.S. The employment peak before the Great Recession was in 2007, but those job numbers were fully recovered by 2014 in the nation and California and 2015 in LA county.

Exhibit 1a. Annual Count of Employment, 1977 to 2019, United States and California
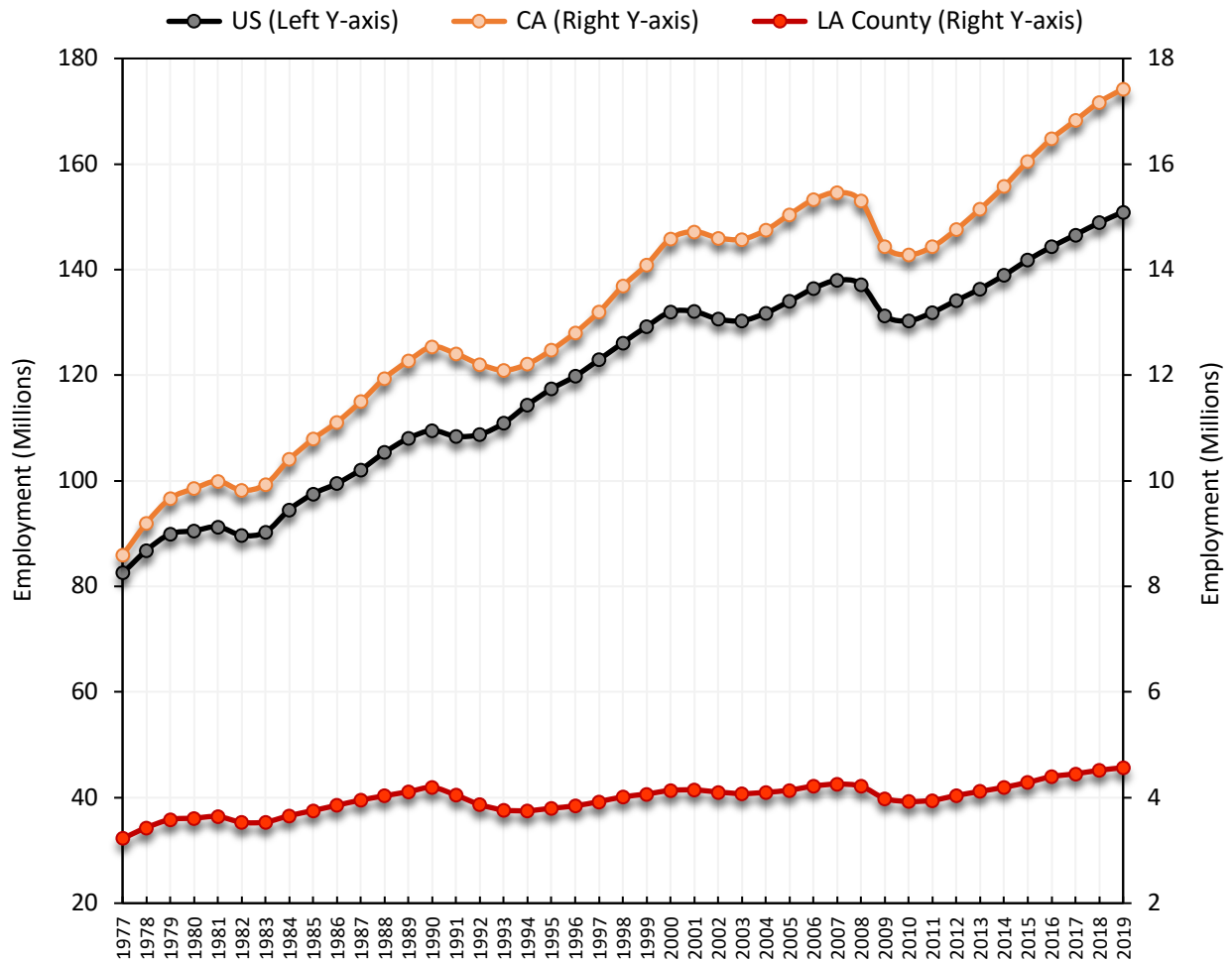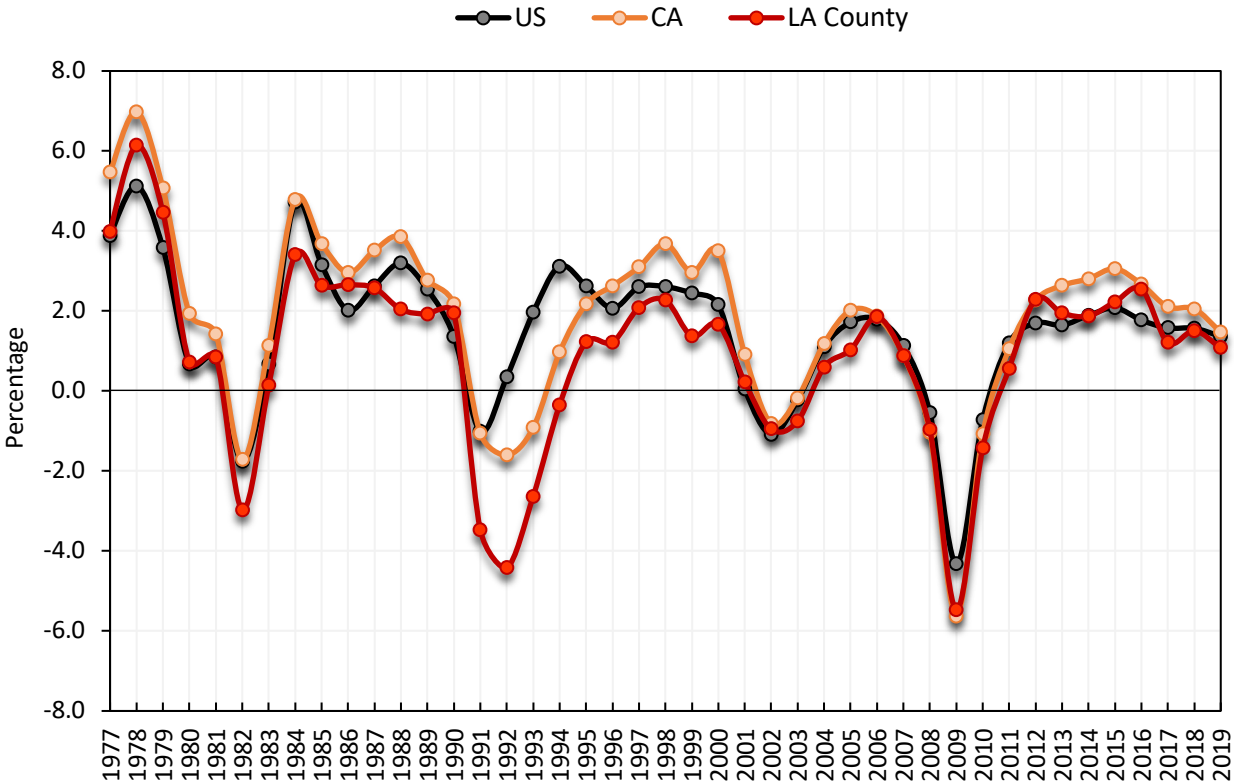

Sources: U.S. Bureau of Labor Statistics (BLS), 1977-2019, Current Employment Statistics.

Annual Rates of Employment Growth

The distinctive history of Los Angeles and California is displayed by comparison with the annual growth trends for the nation as a whole. Annual percentage change in employment is presented in Exhibit 1b. Over the past four decades in the U.S., California, and Los Angeles, the rise and fall in employment growth has been fairly synchronized with recession-linked job growth, dipping negative in 1981, 1991, 2002 and 2009. The late 1970s boom, and its link to rising house prices and associated property taxes, is what spurred the initiative behind Prop 13, although growth since has never been as strong.

Exhibit 1b. Annual Percent Change in Employment, 1977 to 2019, United States, California, and Los Angeles County

Sources: U.S. Bureau of Labor Statistics (BLS), 1977-2019, Current Employment Statistics.

Most curious is the divergence between California and national trends in the early 1990s. What was a minor recession for the nation turned into a massive and prolonged downturn in Los Angeles (some said a depression), due to large cutbacks in defense spending that had built-up under the Reagan administration during the cold war and were concentrated in southern California. Los Angeles continued to lag behind state and national economic growth until 2001. During the 2000s boom, employment growth peaked in 2006 before a synchronized plunge into the Great Recession at the end of 2007. Three years of employment losses followed, with the most intense decline in 2009. Subsequently, California enjoyed 8 consecutive years of growth in excess of the national average, although Los Angeles still lagged behind the state some years.

By 2014, California's employment base of 15.6 million not only had recovered from the Great Recession low-point of 14.3 million jobs in 2010, but also had surpassed the previous high in 2006, ultimately reaching 17.4 million jobs in 2019.

Unemployment Rates Rise and Fall

The absence of adequate employment is commonly reported as unemployment rates, the percentage of people in the labor force (either holding a job or looking for work) who are currently unemployed. Trends in unemployment over time roughly correspond to the periods of greatest and least growth in employment. Exhibit 2a shows the annual trend in the unemployment rate for Los Angeles, California and the U.S. Note how LA and California both improved substantially from 2000 to 2007, because they were still working off lingering effects from the 1990s recession that was so much worse in this state compared to the U.S.

The year of lowest U.S. unemployment immediately before the Great Recession was 2007 (6.3 percent), with LA virtually the same and California slightly higher (6.6 percent). Onset of the Great Recession in 2009 is reflected by an upturn in unemployment in LA and California, followed in 2009 by a steep rise and then peak levels in 2010. In that year, unemployment reached highs in the U.S. of 10.8 percent, California, 12.8 percent, and LA, 12.4 percent.

Unemployment steadily improved, thereafter, returning to 2008 levels by 2015. The long span of continuous employment growth pushed unemployment rates still lower, in 2016 reaching or surpassing previous levels in the best year before the Great Recession. And then unemployment declined still further, arriving at record lows in 2019, the final year of the long recovery from the Great Recession. Exhibit 2b summarizes the amount of improvement in unemployment rates by 2019 compared to the 2010 depths of the Great Recession and also the best year (2007) of the boom preceding the Great Recession. The negative numbers report the percentage point reduction in unemployment rates since these benchmark years.

In 2020, unemployment rates shot sharply higher in the second quarter of the year, moderating slightly since, but we do not yet have an annual rate of unemployment to compare in 2020. Likely the 2020 rates will exceed the worst year of the Great Recession, slamming the recovery period to an abrupt close.

Exhibit 2a. Annual Trend in Unemployment Rates, 2000 to 2019, United States, California, and Los Angeles County
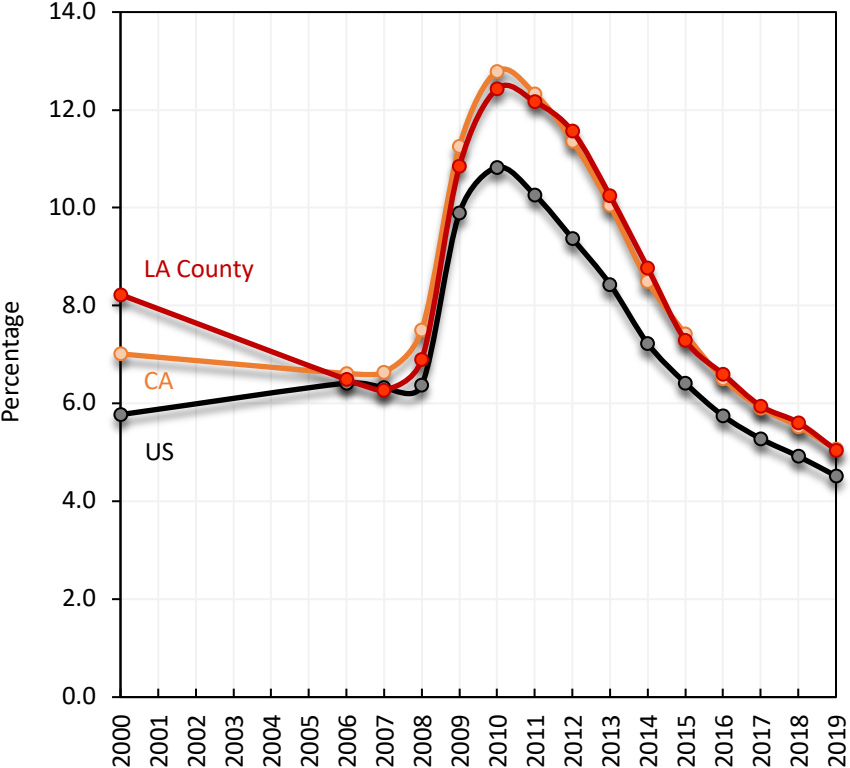
Notes: Unemployment rate = number of unemployed people / (employed people + unemployed people) × 100. (Unemployed includes only people who are looking for work, excluding retirees or others.)
Sources: 2000 Decennial Census SF3 P43; 2006 to 2019 American Community Survey 1-Year Estimates B23001.

Exhibit 2b. Key Changes in Unemployment Rates since the Peak of the Boom before the Great Recession (2007), United States, California, and Los Angeles County

	United States	California	LA County
% point change in the last year, 2018 to 2019	−0.4	−0.5	−0.6
% point change over the last 3 years, 2016 to 2019	−1.2	−1.4	−1.6
% point change since the trough, 2010 to 2019	−6.3	−7.7	−7.4
% point change since the former peak, 2007 to 2019	−1.8	−1.6	−1.2

*Notes and Sources: S*ee Exhibit 2a*.*

Household Income Trends

Consumer well-being during employment booms and recessions is reflected in household income trends (a sum of all income recipients living together). Exhibit 3 reports the trend in median household income, which had slumped badly during the Great Recession. Back in the 1990s and early 2000s, LA county incomes tracked well below the state and even below the nation. However, LA enjoyed an income boom for 5 years before the Great Recession pulled incomes back below $60,000. This was followed by a few years of sluggish income gains. After 2014, however, both LA and California as a whole enjoyed 5 years of unusually strong income gains, with LA's median reaching $72,800 and the state, $80,400. Well above the national median of $65,700, these income gains would mark the peak before the pandemic assault on the economy in 2020.

Exhibit 3. Annual Trend in Median Household Income (Inflation-adjusted to 2019$), 1989 to 2019, United States, California, and Los Angeles County
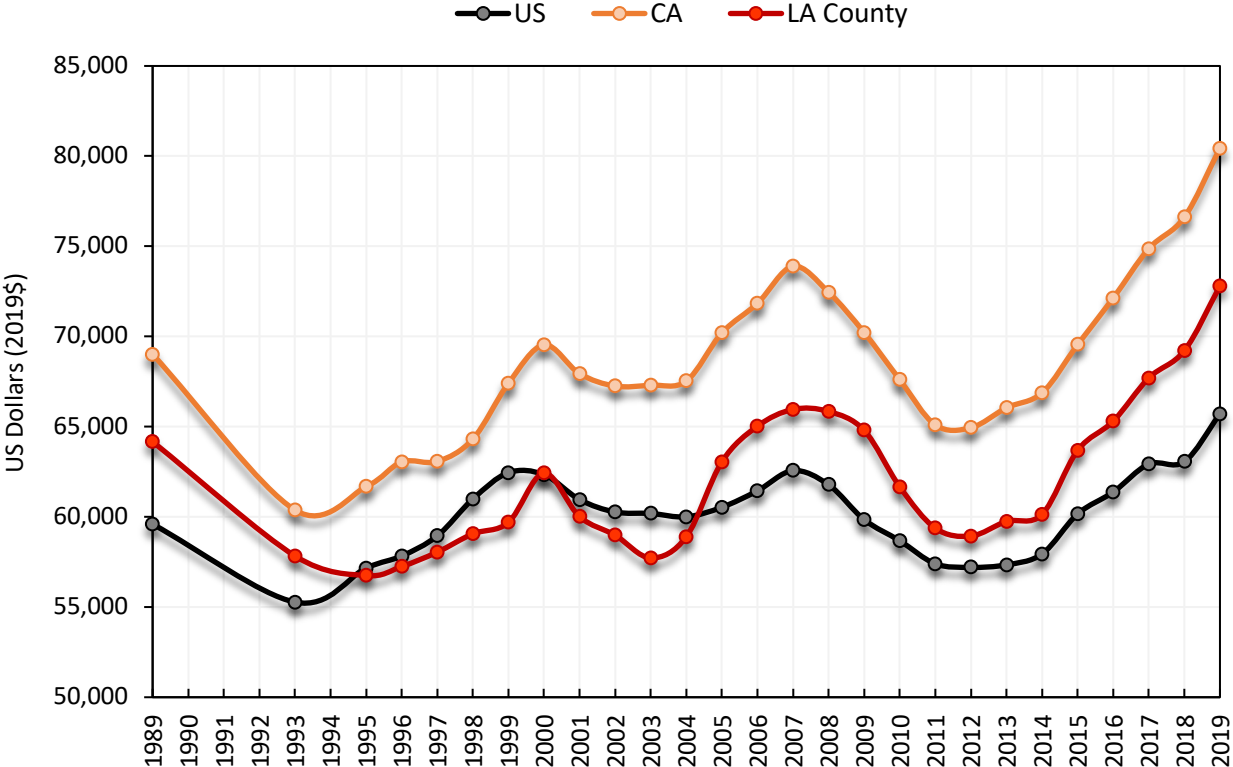
Notes: As of September 2020, SAIPE 2019 data is not released yet. 2019 ACS is used instead, which matches SAIPE in the U.S. and is nearly identical with SAIPE in California and LA county.
Sources: U.S. Census Bureau, Small Area Income and Poverty Estimates (SAIPE), 1989, 1993, and 1995-2018; U.S. Census Bureau, American Community Survey (ACS), 2019.

Poverty Rates Plateau, then Fall

Poverty is a negative condition of income and, like unemployment, a rising poverty rate reflects a growing problem, the opposite of rising income. Exhibit 4a shows the annual trend in the poverty rate, reporting 13.0 percent in 2007 for the nation, immediately before the recession. California poverty rates were similar to the nation (12.4 percent in 2007), but Los Angeles was tracking two percentage points higher (14.7 percent). Thereafter, during the recession poverty rose more gradually and persistently than the abrupt rise and fall of unemployment. In fact, poverty did not reach its peak level until 2011 in the U.S. as a whole and 2012 in California and Los Angeles. Even worse, the poverty rate is distinguished by a sustained, high plateau until 2014. Throughout this lengthy period after the Great Recession, poverty rates remained even higher that what was recorded in 2010 in the depths of the recession.

This long persistence of elevated poverty is so very different from the sharper rise and fall of unemployment. Yet it is consistent with the sluggish growth in median household incomes that also did not substantially improve until after 2014. Eventually poverty rates declined to a level in 2019 that was finally lower than in 2007 prior to onset of the recession (Exhibit 4b). However, this prolonged period of poverty and stagnant income, persisting some 4 years beyond the official end of the recession, likely is what made the Great Recession feel so depressing in Los Angeles as well as in much of the nation.

In sum, of the above five economic indicators (total employment, annual rates of employment growth, unemployment rates, median household income, and poverty rates), the best take-away is the full achievement of economic recovery by 2019 in Los Angeles, as well as California and the nation as a whole. But this recovery came more slowly for some indicators than others. Compared to the previous high point in 2007, the quickest complete recovery was observed in total employment growth (2014), followed by the unemployment rate (2016), and next the median household income (2017), while the last was the poverty rate (2019).

Sadly, housing conditions have not improved in concert with these economic indicators. Nor have Los Angeles and California fared as well in housing as the nation as a whole. We turn to those housing indicators next.

Exhibit 4a. Annual Trend in Poverty Rates, 2000 to 2019, United States, California, and Los Angeles County
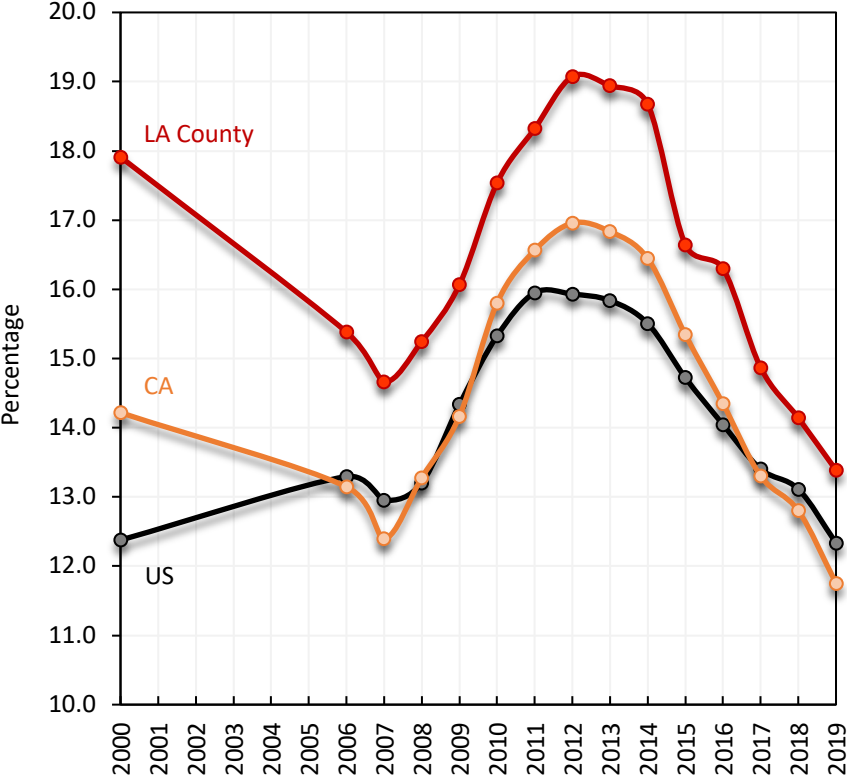
Notes: Poverty rate = number of people in living units whose ratio of income to poverty line is less than 1.0 / number of people for whom poverty status is determined × 100
Sources: 2000 Decennial Census SF3 P88; 2006 to 2019 American Community Survey 1-Year Estimates B17002.

Exhibit 4b. Key Changes in Poverty Rates since the Peak of the Boom (2007) before the Great Recession, United States, California, and Los Angeles County

	United States	California	LA County
% point change in the last year, 2018 to 2019	−0.8	−1.0	−0.8
% point change over the last 3 years, 2016 to 2019	−1.7	−2.6	−2.9
% point change since the trough, 2010 to 2019	−3.0	−4.0	−4.2
% point change since the former peak, 2007 to 2019	−0.6	−0.6	−1.3

*Notes and Sources: S*ee Exhibit 4a*.*

Housing Well-being

Within the previously observed economic time frame – peak of the boom (2007), trough of the Great Recession (2010), and subsequent recovery peaking at the end of 2019 – this section describes the trend in key housing indicators of well-being, including house values and rents, affordability ratios to income, overcrowding, and homeownership rates. Our focus is on comparing those indicators in the final years of the recovery to what they were in the depths of the Great Recession (trough-to-peak) and also at the top of the prior boom before the Great Recession (peak-to-peak). Now that the long recovery after the Great Recession has ended, how good did it get? And how much more still remains to be improved in housing conditions despite the new COVID-19 recession?

## House Values and Price Index Estimates

The most widely reported housing indicator is trends in sales prices or summaries of existing house values. The decennial census and annual American Community Survey (ACS), both collected by the Census Bureau, report current estimates of house values by their occupants. Exhibit 5a shows the annual trend in house prices (inflation-adjusted to 2019$) for two decades since 2000. The median house value in the U.S. increased in the early-2000s boom and reached a peak of $239,576 in 2007. With onset of the Great Recession, a sharp decline followed and resulted in a bottom house price of $190,845 in 2013, but that was followed by a steady rebound that ultimately reached $240,500 in 2019. In the same two decades, California and Los Angeles witnessed higher prices and a much more amplified trend of boom and bust house prices. Unlike the U.S., L.A. and the Golden State have not returned to their former, inflation-adjusted price peaks.

Before delving deeper, it should be acknowledged there are many other price series, each using a different method and reporting somewhat different levels of prices. These include the median sales price reported by the National Association of Realtors, and data reported by CoreLogic, Zillow, and others. Although the price levels may be somewhat different, the trends are similar. Here we compare the Census Bureau collected data on occupants' self-reports of house values to a major alternative, the quarterly purchase-only Housing Price Index prepared by the Federal Housing Finance Agency (FHFA) based on millions of records of repeat sales of single-family houses. Similar to the Case-Shiller index, this is used to construct a "constant quality" index of rates of change in selling prices for many specific geographic areas, including the ones that are the focus of this report. For this comparison we apply the FHFA index for years from 2000 to 2019 to the median house value reported in the 2000 census, adjust the values to 2019$, using CPI-U, and display the values estimated for the time series.

It might be surprising how closely these index-based values corresponded to annual reports from the ACS (Exhibit 5b). The one notable discrepancy is found in the depths of the downturn in house values, where estimates of values have failed to keep pace with true values revealed in actual sales. Self-reported house values of homeowners in 2012 are about $45 thousand more

optimistic in LA county than the FHFA estimates, and those for California as a whole are $62 thousand higher. In the U.S. as a whole, self-reports have a smaller discrepancy in 2012 ($17 thousand), which is proportionally smaller than in California.

Exhibit 5a. Annual Trend in Median House Price (Inflation-adjusted to 2019$), 2000 to 2019, United States, California, and Los Angeles County

(a) Census Bureau Self-reported Value

(b) FHFA-based Price Estimate
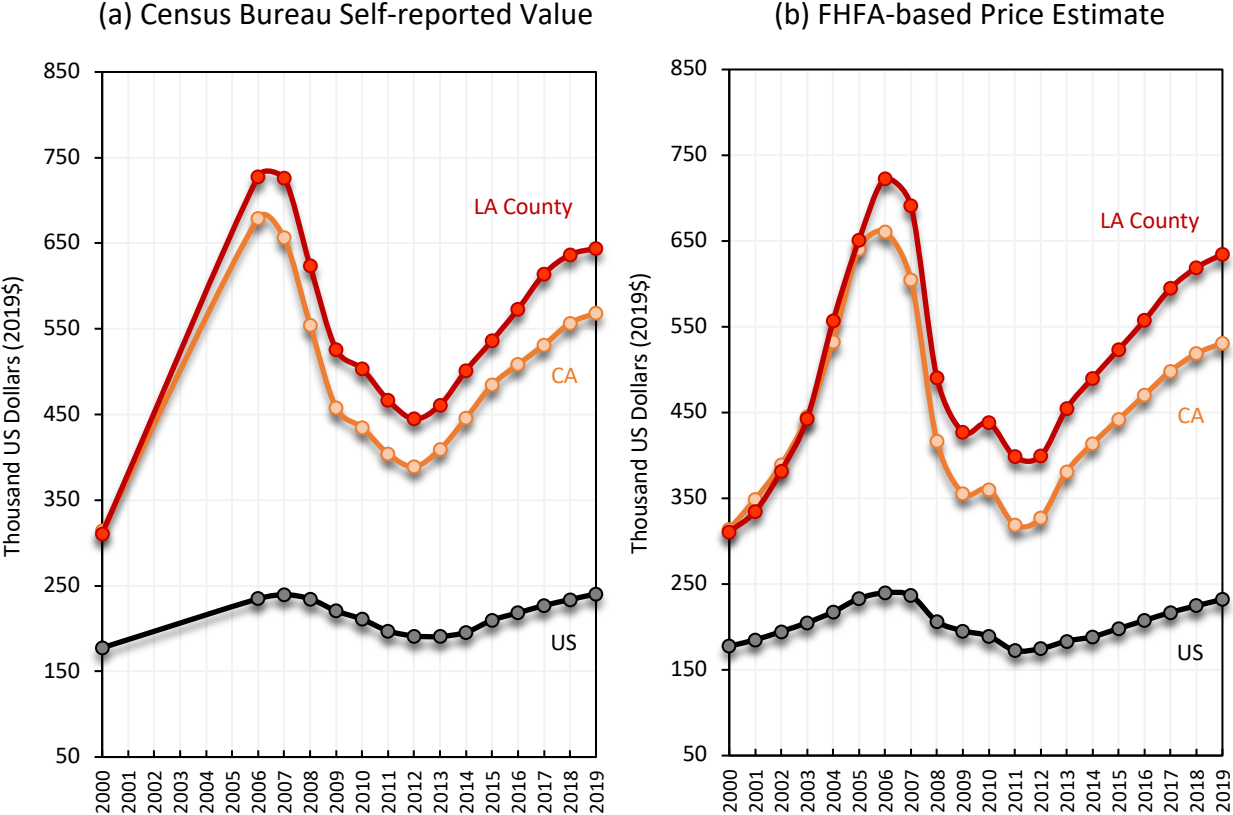
Notes: In panel a, median house value adjusted to 2019$ = median house value × BLS's CPI-U all items. In panel b, 2000 house values are the base for proportional FHFA purchase-only price trends (2019$).
Sources: 2000 Decennial Census SF3 H76; 2006 to 2019 ACS 1-Year Estimates B25077; FHFA.gov.

Exhibit 5b shows that the national house price increased by 2.8 percent in the last year and it is 14.0 percent higher than in the trough of the Great Recession (2010). In contrast, the trough-to-peak price increases in California and Los Angeles are roughly twice as great as in the nation as a whole. Nonetheless, California and LA have failed to rebound to price levels of 2007, falling short of the previous peak by 13.4 percent and 11.3 percent, respectively.

Exhibit 5b. Key Changes in Median House Price (Inflation-adjusted to 2019$) since the Peak of the Boom before the Great Recession (2007), United States, California, and Los Angeles County

|	United States	California	LA County
% change in the last year, 2018 to 2019	2.8	2.1	1.2
% change over the last 3 years, 2016 to 2019	10.1	11.8	12.4
% change since the trough, 2010 to 2019	14.0	30.7	27.9
% change since the former peak, 2007 to 2019	0.4	−13.4	−11.3

*Notes and Sources: S*ee Exhibit 5a*.*

House Price Affordability: Multiples of Income

How well can Angelenos and Californians afford such high prices compared to the national average? How much easier was it to afford home purchases during downturns than in the boom? One measure, the most straight-forward, is examined here—the ratio of median house price to median owner household income, effectively the price multiple of income required to match the house price. This housing affordability indicator implies the number of years of income that the average homeowner in a given location needs to allocate to a home purchase. In reality, of course, most buyers purchase with a mortgage that only requires a down payment of 20% of the value, and the remainder is paid monthly with interest, but often stretched over 30 years. It also bears mentioning that perceptions of affordability of ownership housing also incorporate anticipated appreciation and investment gains. Prices thus are based not only on consumption but also investment expectations, which increases willingness to spend but also adds to price volatility. Overall, the price multiple ratio is a standard comparison metric of relative affordability: the lower is the ratio, the easier it is to buy a house.

Exhibit 6a summarizes the annual trend in this measure of owner housing affordability. At the peak of the former boom (2007), the price multiple stood at 3.08 in the nation as whole, more than twice the ratio in California and LA county: 6.73 and 7.50, respectively. Both house values and incomes fell during the Great Recession, but the fact that the housing affordability ratio fell by only a third indicates that house values declined more than incomes, but not enough to cause affordability to converge on the national average. Indeed, after 2012, even as median incomes started rising, house values increased even more rapidly and the price multiple climbed higher again.

Exhibit 6a. Homeowner Affordability Price Multiples: Annual Trend in the Ratio of Median House Price to Median Owner Household Income, 2000 to 2019, United States, California, and Los Angeles County
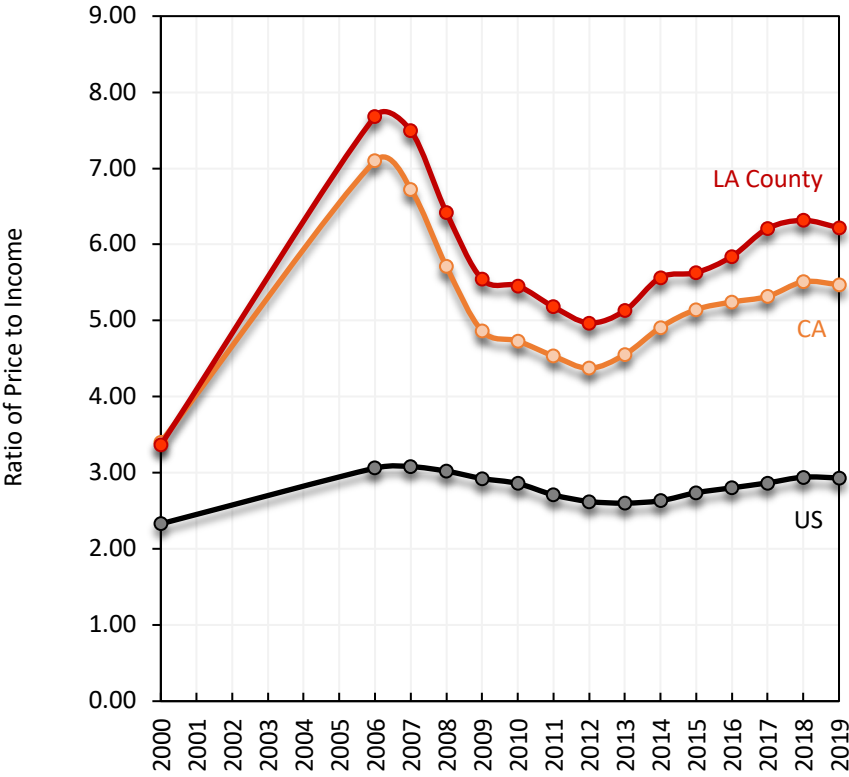
Notes: Ratio of price to income = median house price / median annual owner household income.
Sources: 2000 Decennial Census SF3 H76 and HCT12; 2006 to 2019 American Community Survey 1-Year Estimates B25077 and B25119.

Some highlights of the trends over time in this homeowner affordability ratio are summarized in Exhibit 6b. This shows that the national housing affordability ratio increased by 2.6 percent between 2010 and 2019. In the same trough-to-peak time frame, California and LA county saw increases of 15.7 percent and 14.0 percent, respectively, adding more to the cost burden of home purchase. From the peak-to-peak perspective, however, the 2019 housing affordability ratio is better than at the former peak (2007), not only in the nation (−4.8 percent) but also in California (−18.6 percent) and LA county (−17.0 percent). Despite this more favorable price-based situation, exhibits that follow will evidence a lagged recovery in homeownership and negative consequences in the rental market as well.

Exhibit 6b. Key Changes in the Ratio of Median House Price to Median Owner Household Income since the Peak of the Boom before the Great Recession (2007), United States, California, and Los Angeles County

	United States	California	LA County
% change in the last year, 2018 to 2019	−0.3	−0.7	−1.5
% change over the last 3 years, 2016 to 2019	4.6	4.4	6.5
% change since the trough, 2010 to 2019	2.6	15.7	14.0
% change since the former peak, 2007 to 2019	−4.8	−18.6	−17.0

*Notes and Sources: S*ee Exhibit 6a*.*

Rents and Ratios to Income

Rents have also been growing over time, but their increase has a very different pattern, one based on consumption and scarcity, not on speculative investment by their occupants. Exhibit 7a reports the annual trend in the median gross rent (inflation-adjusted to 2019$) for two decades since 2000. National median rents increased in the early-2000s boom and reached their peak of $1,003 in 2009. A moderate decline followed due to the Great Recession and reached a bottom of $984 in 2012. However, from that time forward median rents rebounded upward to $1,097 in 2019.

In the same time period, the rent increase in California and LA county experienced a similar but more amplified boom-bust-recovery. During the recession and aftermath, from 2009 to 2014, the upward trend since 2000 paused its advance, providing some respite for renters. However, after 2014, in the same time period as incomes began a concerted rise, rents escalated upward more rapidly.

Highlights of the trends are summarized in Exhibit 7b, showing that the national median rents grew 9.4 percent higher than in the trough of the Great Recession (2010). California and Los Angeles experienced rent rises since 2010 that were twice as fast as the national average, roughly 18 percent, the majority of which occurred in just the last 3 years. When national rents are compared peak-to-peak from the earlier boom, the median increased by 12.8 percent. California and LA county, however, again experienced nearly twice as rapid rent increases in the 12 years from 2007 to 2019, increases of 21.4 percent and 23.5 percent, respectively.

Exhibit 7a. Annual Trend in Median Gross Rent (Inflation-adjusted to 2019$), 2000 to 2019, United States, California, and Los Angeles County
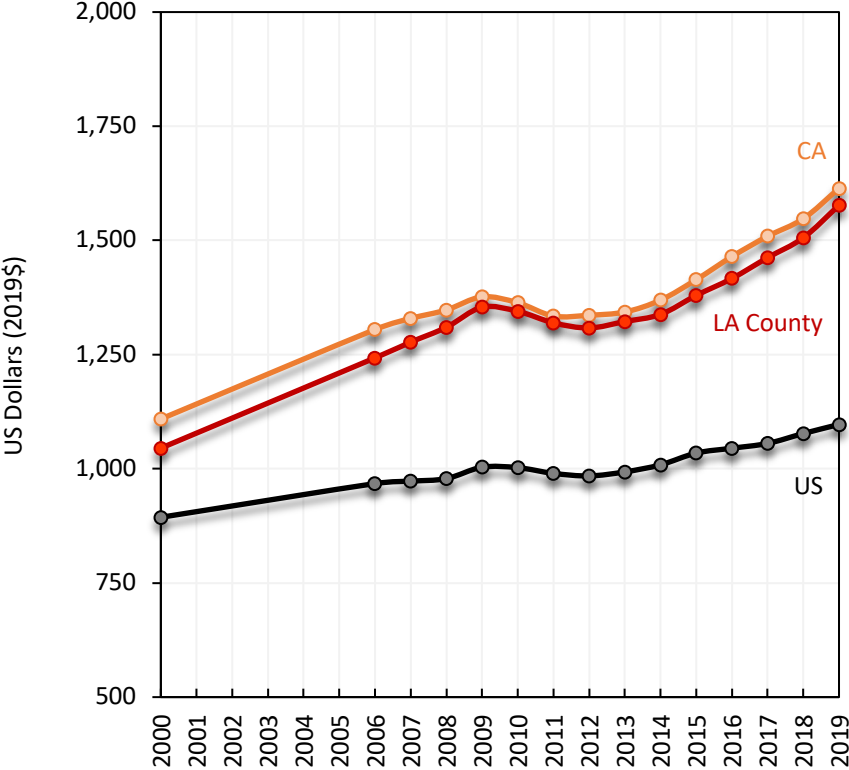
Notes: Median gross rent adjusted to 2019$ = median gross rent (including utilities) × BLS's CPI-U all items
Sources: 2000 Decennial Census SF3 H63; 2006 to 2019 American Community Survey 1-Year Estimates B25064.

Exhibit 7b. Key Changes in the Median Gross Rent (Inflation-adjusted to 2019$), United States, California, and Los Angeles County

	United States	California	LA County
% change in the last year, 2018 to 2019	1.8	4.3	4.7
% change over the last 3 years, 2016 to 2019	5.0	10.2	11.3
% change since the trough, 2010 to 2019	9.4	18.4	17.3
% change since the former peak, 2007 to 2019	12.8	21.4	23.5

*Notes and Sources: S*ee Exhibit 7a*.*

Affordability of the rental increases is judged in relation to income gains by renters. Exhibits 8a and 8b show annual trend and key changes in rental affordability, measured as the ratio of median gross rent to median renter household income, multiplied by 100. Median monthly gross rent was annualized and then compared against median annual income in the same geographic area. This roughly equates to the share of annual income devoted to rent, and given that rent is pure consumption, lacking the investment return of homeownership, this perspective is warranted. The lower the aggregate rent-to-income ratio in a location, the more affordable it is to local residents.

The rental affordability ratio started increasing even before the Great Recession, paused its upward climb only briefly at the beginning of the recession, and reached its peak in 2011. From there the rent-to-income ratio slowly decreased to 2019 except an uptick in 2018 or 2019.

Exhibit 8a. Renter Affordability Median Ratios: Annual Trend in the Ratio of Median Gross Rent to Median Renter Household Income, 2000 to 2019, United States, California, and Los Angeles County
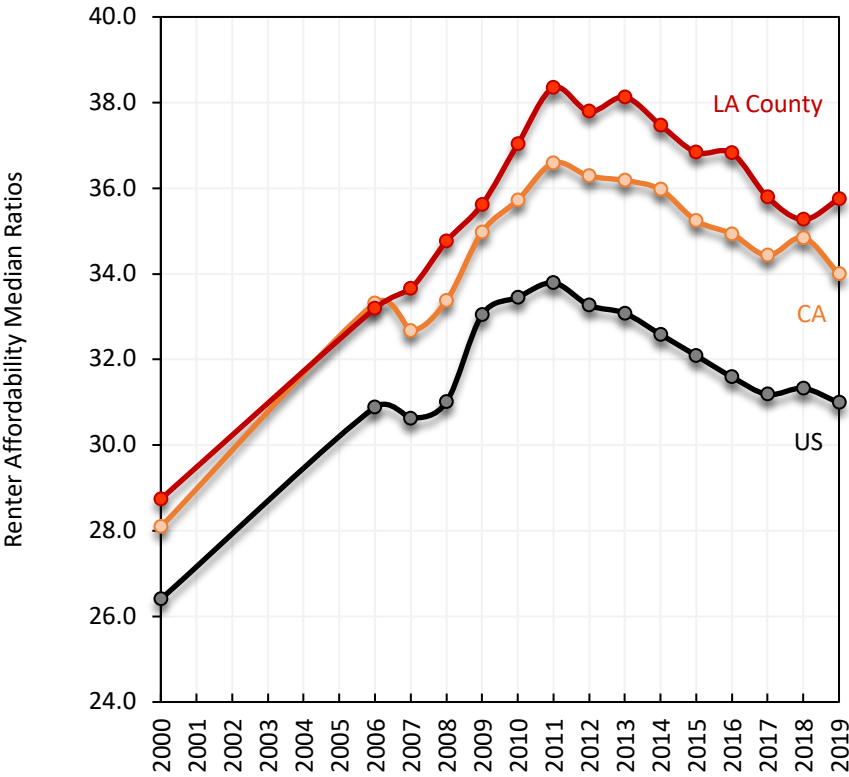
Notes: Renter affordability median ratios = median gross rent × 12 month / median annual renter household income × 100.
Sources: 2000 Decennial Census SF3 H63 and HCT12; 2006 to 2019 American Community Survey 1-Year Estimates B25064 and B25119.

Exhibit 8b. Key Changes in the Aggregate Ratio of Median Gross Rent to Median Renter Household Income since the Peak of the Boom before the Great Recession (2007), United States, California, and Los Angeles County

|	U.S.	California	LA County
Difference in Ratios in the last year, 2018 to 2019	−0.3	−0.8	0.5
Difference in Ratios over the last 3 years, 2016 to 2019	−0.6	−0.9	−1.1
Difference in Ratios since the trough, 2010 to 2019	−2.5	−1.7	−1.3
Difference in Ratios since the former peak, 2007 to 2019	0.4	1.3	2.1

*Notes and Sources: S*ee Exhibit 8a*.*

Excess Rent Burden

The foregoing has measured the aggregate ratio of median rent to median income. An alternative affordability measure is the individual household-based concept of *rent burden,* which is the most widely used to measure affordability. This traditional measure of rental affordability asks how much of each renter's household income is consumed by their rental payments. The affordability in a geographic area is measured by the proportion of renters who pay more than a prescribed share of income for housing. Renters paying more than 30 percent of income for housing are judged to have an affordability problem, and those paying more than 50 percent of income are said to have a severe affordability problem.

The annual trend in rent burden is compared for the U.S., California and Los Angeles in Exhibit 9a. Incidence of rent burden reached a peak level in 2011, with more than half (53.4 percent) of renters in the nation rent-burdened. Since that time, rent burden has gradually eased, not because rents have been reduced but because of the "strong demand from high-income renters" (Harvard JCHS, 2020: 1). Severe rent burden (more than 50% of income) accounts for half of the total incidences, following a similar trend over years. Excessive rent burden is consistently more common in Los Angeles and California than the U.S. (Fuller discussion of limitations of the traditional rent burden measure, as well as technical detail of some alternatives, is offered in HUD's *Cityscape* journal (Myers & Park, 2019) and summarized for California metros in the Myers-Park-Mendoza Housing Research Brief 3.)

Exhibit 9a. Annual Trend in Excess Rent Burden, 2000 to 2019, United States, California, and Los Angeles County
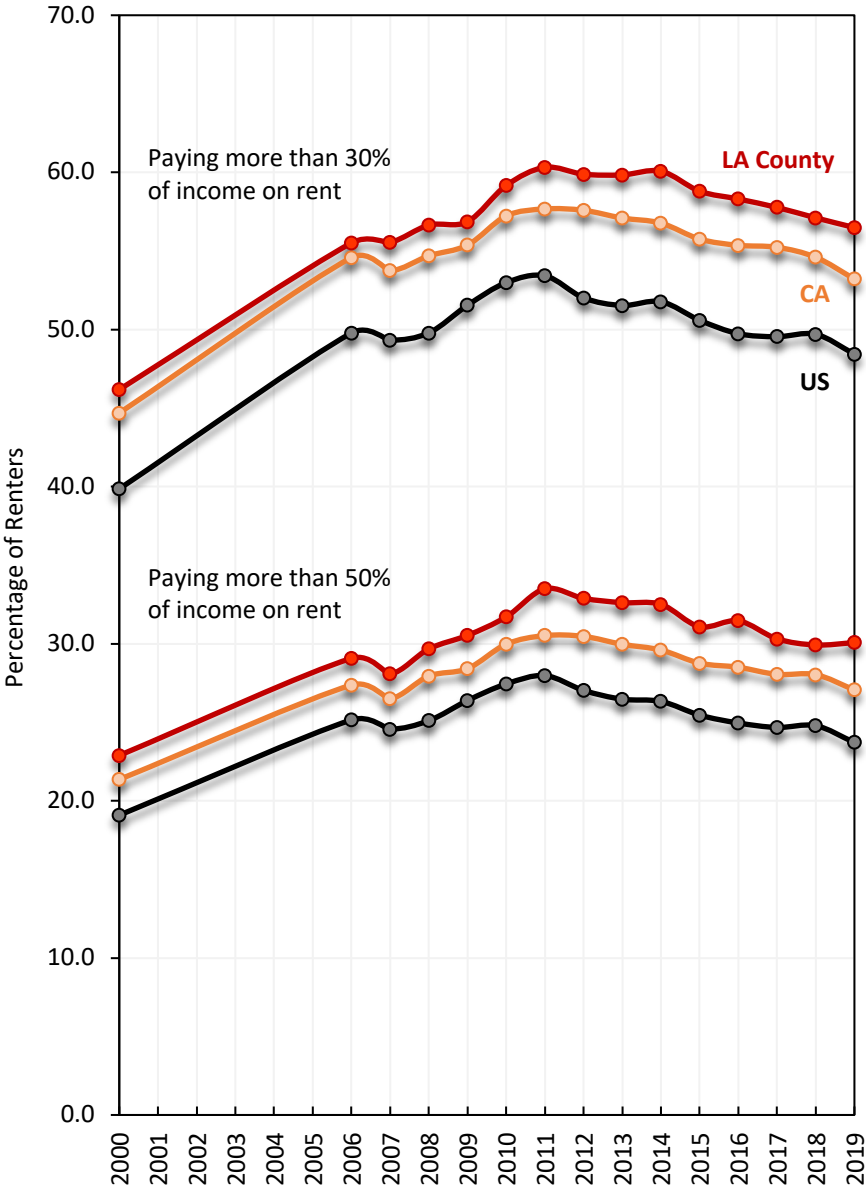
Notes: Renter is defined as burdened (severely burdened) when paying more than 30% (50%) of income on rent. Following U.S. Census Bureau's method, renters categorized 'Not Computed' who account for 4.7 to 5.4% of all renters are excluded.
Sources: 2000 Decennial Census SF3 H69; 2006 to 2019 American Community Survey 1-Year Estimates B25070.

As summarized in Exhibit 9b, the national incidence of rent burden declined by 1.3 percentage points in the last year. Since 2010, the trough of the Great Recession as well as one year before the peak of rent burden, the incidence of rent burden has eased by 4.5 percentage points. Peak-to-peak comparison shows a similar level of rent burden, with the 2019 incidence improved from the 2007 level by just 0.9 percentage point. In Los Angeles, the degree of

improvement is roughly half as much as in the nation, and, since the 2007 peak economic year, rent burden has actually increased slightly (0.9 percentage point).

Exhibit 9b. Key Changes in 30%+ Rent Burden since the Peak of the Boom before the Great Recession (2007), United States, California, and Los Angeles County

|	United States	California	LA County
% point change in the last year, 2018 to 2019	−1.3	−1.4	−0.6
% point change over the last 3 years, 2016 to 2019	−1.3	−2.1	−1.8
% point change since the trough, 2010 to 2019	−4.5	−4.0	−2.7
% point change since the former peak, 2007 to 2019	−0.9	−0.5	0.9

*Notes and Sources: S*ee Exhibit 9a*.*

Overcrowded Rental Housing

Another indicator of housing well-being and substandard living conditions is overcrowding, measured as more than 1.0 persons per room. Because apartments are generally much smaller than single-family houses, overcrowding is far more often a problem among renters. Here we focus on rental overcrowding and spotlight how much greater is this problem in LA County than in the rest of the nation. Exhibit 10a shows the overcrowded share of renter-occupied housing units in 2019 across the 50 states, in addition to showing LA county and United States for comparison. This displays 2019 cross-state comparisons instead of the trend over time because state-level incidence of overcrowding has held fairly constant since the beginning of the ACS. More than 1.0 persons per room is judged overcrowding (more than 1.5 persons is extreme overcrowding), by convention of the U.S. Department of Housing and Urban Development (HUD).

In general, the acute housing shortages in Los Angeles, and resulting rental affordability problems, cause a great many people to overcrowd, especially those with the least income. In fact, LA county (16.0 percent) and California (13.2 percent) have a much greater prevalence of rental units that are overcrowded than other areas outside California, as shown in Exhibit 10a. (See the discussion of cultural differences and technical details on overcrowding measures in Myers, Baer and Choi, 1996.)

The annual trend in overcrowded rental housing has remained fairly constant in the U.S., with the exception that the Great Recession pushed the incidence of overcrowding upward everywhere. After 2012 overcrowding in rental housing plateaued in the nation and California. Los Angeles, however, witnessed a slow decline to 2017 before its plateau (Exhibit 10b and 10c). Unfortunately, overcrowding in Los Angeles is stubbornly lodged 170% above the U.S. level of overcrowding.

Exhibit 10a. Overcrowded Share of Renter-occupied Housing Units, 2019, United States, 50 States, and Los Angeles County

Ratio of Persons to Rooms, 2019

■ More than 1.50 Persons/Room   □ 1.01–1.50 Persons/Room
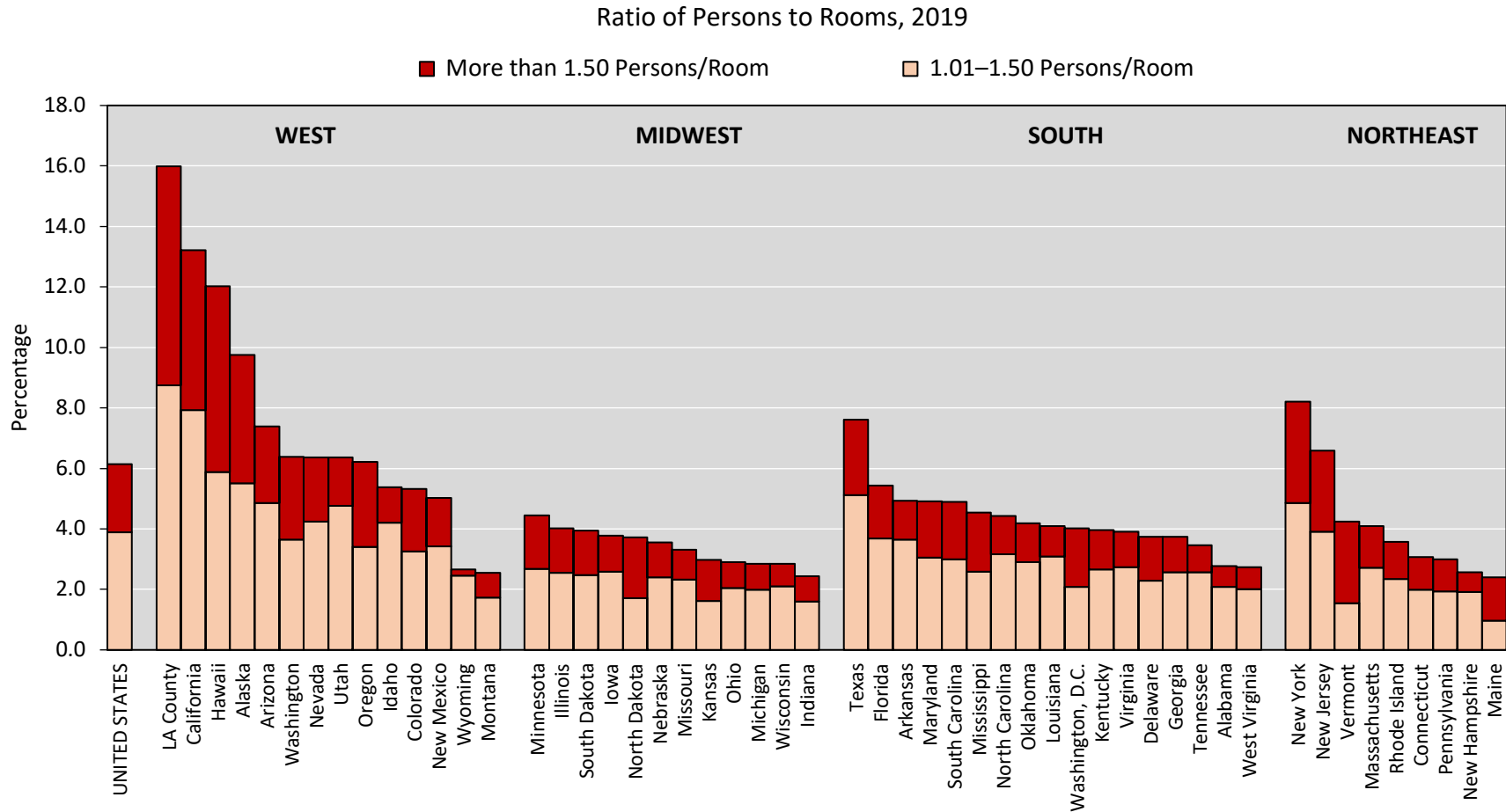
Notes: Households are defined as overcrowded (severely overcrowded) when there is more than 1 person per room (1.5 person per room).
Sources: 2000 Decennial Census SF3 H69; 2006 to 2019 American Community Survey 1-Year Estimates B25070.

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Exhibit 10b. Annual Trend in Overcrowded Share of Renter-occupied Housing Units, 2006 to 2019, United States, California, and Los Angeles County
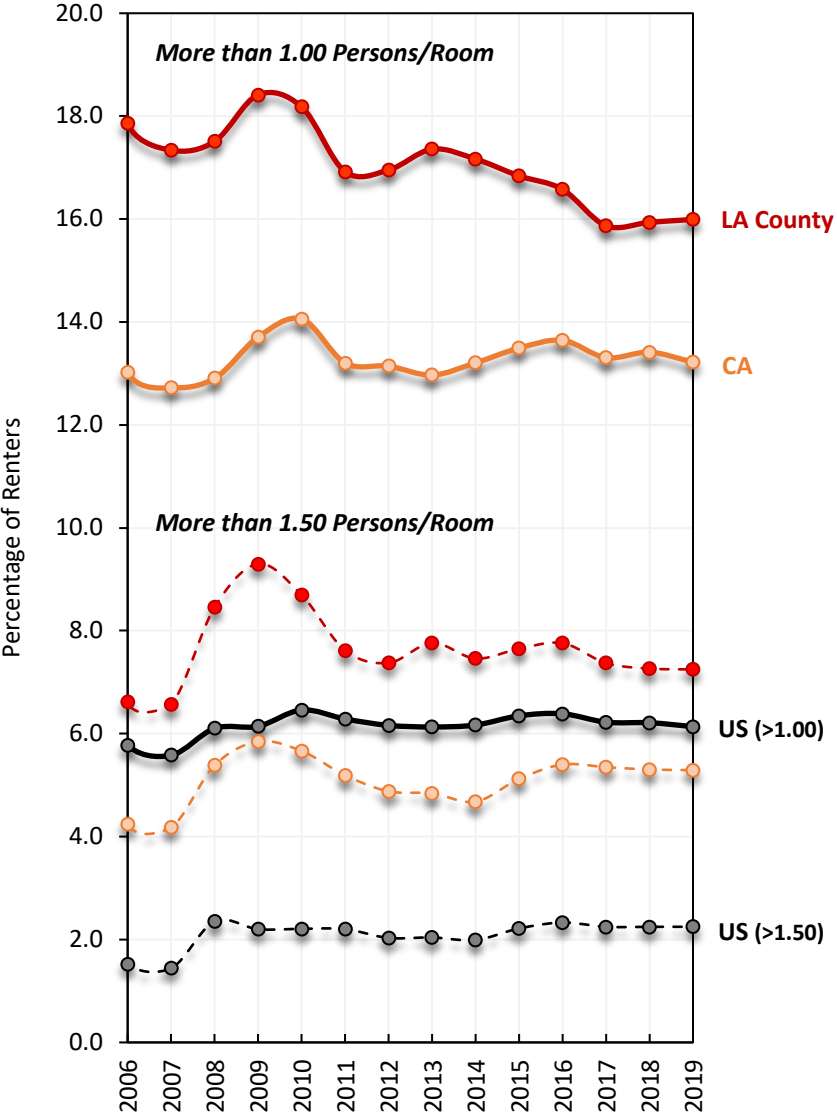
*Notes and Sources: S*ee Exhibit 10a.

Exhibit 10c. Key Changes in Overcrowding since the Peak of the Boom before the Great Recession (2007), United States, California, and Los Angeles County (more than 1.0 per room)

	United States	California	LA County
% point change in the last year, 2018 to 2019	−0.1	−0.2	0.1
% point change over the last 3 years, 2016 to 2019	−0.2	−0.4	−0.6
% point change since the trough, 2010 to 2019	−0.3	−0.8	−2.2
% point change since the former peak, 2007 to 2019	0.6	0.5	−1.4

*Notes and Sources: S*ee Exhibit 10a.

Homeownership

Homeownership is twice as common as renting in the U.S. (64.1 percent in 2019 vs. 35.9 percent renting). Homeownership is encouraged by federal housing policy and the tax code because of its benefits, and the great majority of Americans aspire to homeownership. Yet homeownership has declined for more than 10 years, not turning upward until 2017, long after economic recovery from the Great Recession.

Exhibit 11a shows the annual trend in the homeownership rate for two decades since 2000. From a peak of 67.3 percent in 2006, the national homeownership rate, total of all races combined, reached a bottom of 63.0 percent in 2015. By 2019, the homeownership rate recovered to 64.1 percent. Between the previous economic trough (2010) and 2019, homeownership declined by only 1.2 percentage points but an even greater decline of 3.1 percentage points occurred between the former economic peak (2007) and 2019. Although the homeownership rates in California and Los Angeles are much lower than in the nation, these areas experienced a similar cyclical change over the years. Homeownership improvement lagged behind the recovery of median household income (2012), median house price (2013), and ratio of price to income (2013). (Structural lags that delay homeownership change and the linkages to current home buying are described in Myers et al., 2020.)

Racial differences in homeownership rates are of particular interest. For the last 3 years there has been a noticeable upturn in homeownership among Hispanics and Blacks in the U.S., California and Los Angeles (Exhibit 11a). This recovery has been stronger than among non-Hispanic whites, but that does not make up for the losses in homeownership in the U.S. during the Great Recession. Asians have also participated in this upturn without as many losses since 2010. Nonetheless, in 2019 there remains a gap in homeownership rates in the U.S. between whites and Asians of 11.5 percentage points, between whites and Hispanics of 24.0, and between whites and blacks of 30.0 percentage points.

The racial disparities are smaller in California, and still smaller in Los Angeles. In California, the black-white gap is reduced to 26.0 percentage points, and in Los Angeles, 17.9 percentage points. Unfortunately, this gap reduction appears to be less due to black gains than to the steep declines among whites (see Exhibit 11a). Between 2010 and 2019, white homeownership in Los Angeles fell by –3.7 and black homeownership by –0.5. This compares to smaller declines in California as a whole (–1.3 for white and –0.2 for black). In the U.S. the white decline was even smaller, –0.4, while the black decline was greater, –2.2 (see Exhibit 11b).

Exhibit 11a. Annual Trend in Homeownership Rate, All Races Combined and by Race/Ethnicity, 2000 to 2019, United States, California, and Los Angeles County
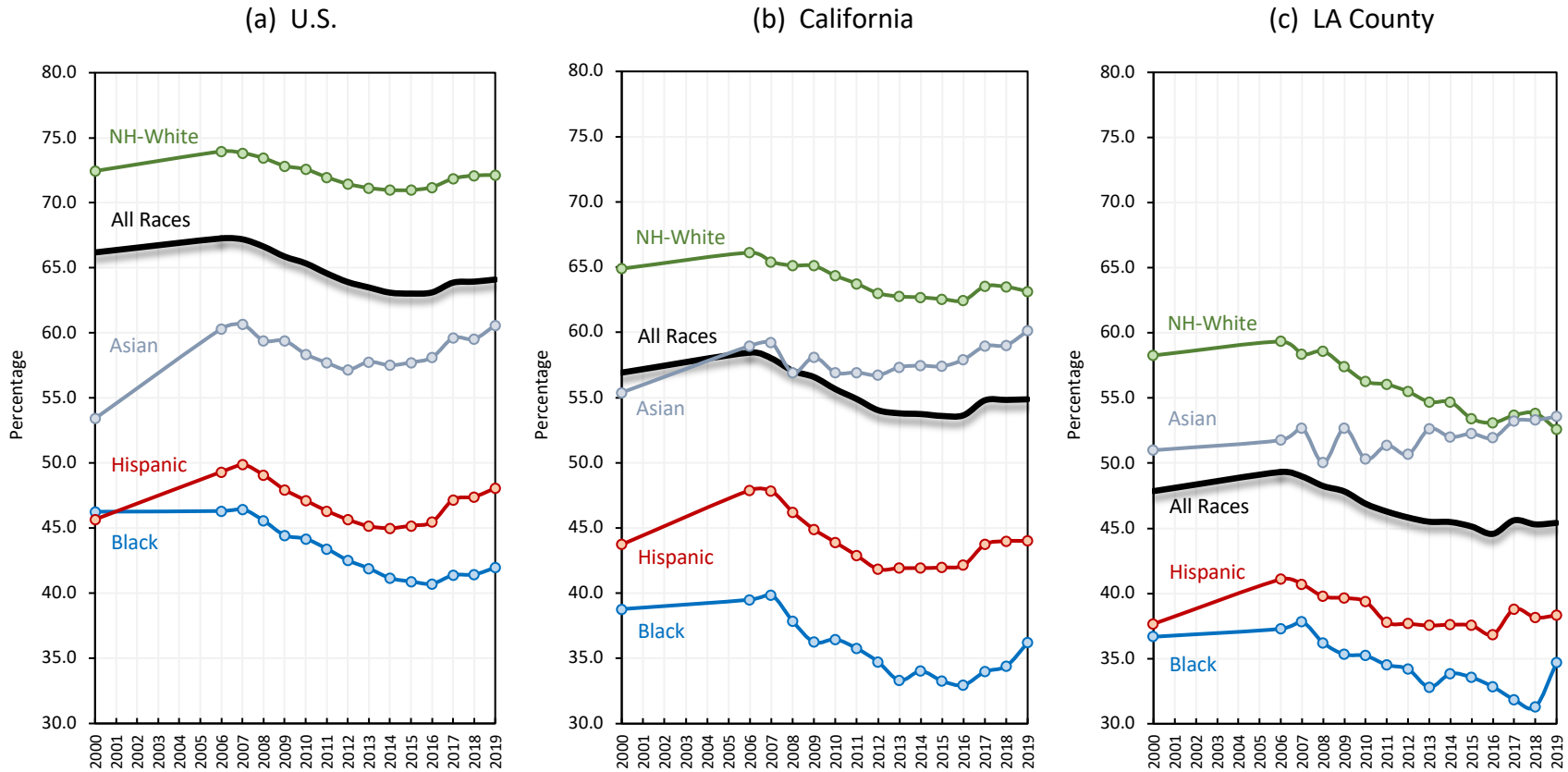
(a) U.S.   (b) California   (c) LA County

Notes: Homeownership rate is defined as the number of owner households divided by the number of households and multiplied by 100. NH-White means non-Hispanic whites. Black and Asian include both non-Hispanics and Hispanics respectively.
Sources: Decennial Census 2000 SF3 H14, H16B, H16D, H16H, and H16I; 2006 to 2019 American Community Survey 1-Year Estimates B25007, B25003B, B25003D, B25003H, and B25003I.

Asians are the only group that managed to avoid homeownership declines in the nation, state, and Los Angeles. Given the steeper losses of white homeownership in Los Angeles and the sustained trend among Asians, in 2019, for the first time Asians nudged ahead of white homeownership with the highest homeownership rate of any group, 53.6 percent. In fact, the Asian homeownership rate was 8.0 percentage points higher than the Los Angeles county average of 45.6 percent, while in California Asians enjoyed a 6.2 percentage point edge above the state average, but in the U.S. the Asian homeowner rate was 3.5 percentage points *lower* than the national average.

Exhibit 11b. Key Changes in Homeownership Rate since the Peak of the Boom before the Great Recession (2007), All Races Combined and by Race/Ethnicity, United States, California, and Los Angeles County

(a) U.S.

	All Races	NH-White	Black	Asian	Hispanic
% point change in the last year, 2018 to 2019	0.2	0.0	0.5	1.0	0.7
% point change over the last 3 years, 2016 to 2019	1.0	0.9	1.2	2.5	2.6
% point change since the trough, 2010 to 2019	−1.2	−0.4	−2.2	2.2	0.9
% point change since the former peak, 2007 to 2019	−3.1	−1.7	−4.5	−0.1	−1.8

(b) California

	All Races	NH-White	Black	Asian	Hispanic
% point change in the last year, 2018 to 2019	0.0	−0.3	1.8	1.1	0.0
% point change over the last 3 years, 2016 to 2019	1.2	0.7	3.2	2.2	1.9
% point change since the trough, 2010 to 2019	−0.8	−1.2	−0.3	3.2	0.1
% point change since the former peak, 2007 to 2019	−3.1	−2.3	−3.7	0.9	−3.8

(c) LA County

	All Races	NH-White	Black	Asian	Hispanic
% point change in the last year, 2018 to 2019	0.1	−1.3	3.4	0.3	0.2
% point change over the last 3 years, 2016 to 2019	0.8	−0.5	1.9	1.7	1.5
% point change since the trough, 2010 to 2019	−1.5	−3.7	−0.5	3.3	−1.0
% point change since the former peak, 2007 to 2019	−3.6	−5.8	−3.1	0.9	−2.4

*Notes and Sources: S*ee Exhibit 11a*.*

Larger declines in homeownership were experienced among age groups than among race groups. Older people are settled in long-term homes, for the most part, while young adults are struggling to launch their housing careers amid soaring house prices and other challenges. While the total homeownership rate fell 3.1 percentage points from 2007 to 2019 (U.S. and California) or 3.6 percentage points in Los Angeles, among people ages 25-34 and 35-44 the homeownership rate fell more than twice as much (Exhibit 12a and 12b).

Unlike the evidence of upturn in homeownership discovered among some race groups in the preceding exhibits, among age groups there is little increase between 2017 and 2019. Also unlike the race groups, there is a direct contagion between age groups, as the declines in one bracket get passed forward to the next bracket 10 years later because residents grow older. This effect is now dragging down the homeownership rate at age 45-54 in California and Los Angeles. Households who failed earlier to gain homeownership, or who lost their homes in the crash, are not able to fully rebound later in middle age. This effect of cohort momentum across age groups ultimately could erode homeownership among people age 65 and older (Myers and Lee, 2016).

Cohort momentum can also build homeownership rates from the youngest ages up, so it is good news to see a revival of homeownership rates in the last 3 years at ages 25-34 and 35-44. That upturn is much weaker in Los Angeles than in the nation as a whole, and that weak revival is possibly related also to the greater decline of white homeownership in Los Angeles than elsewhere. In any event, given the small share of the total population that is white in Los Angeles, any substantial revival of homeownership will require participation by young Latinos, Asians and blacks. Rising prices, as well as inventory shortages, however, create an obstacle blocking the homeownership revival in Los Angeles.

Stunted homeownership has harsh consequences for renters as well, because the failed would-be homeowners get thrown into competition with other renters. The diverted homeowners also command higher incomes and can pay higher rents, resulting in the escalating rents seen earlier in this report. Thus, the homeownership downturn compounds the difficulties of lower-income renters due to interconnections in housing markets.

Exhibit 12a. Annual Trend in Homeownership Rate, All Ages Combined and by Age, 2000 to 2019, United States, California, and Los Angeles County
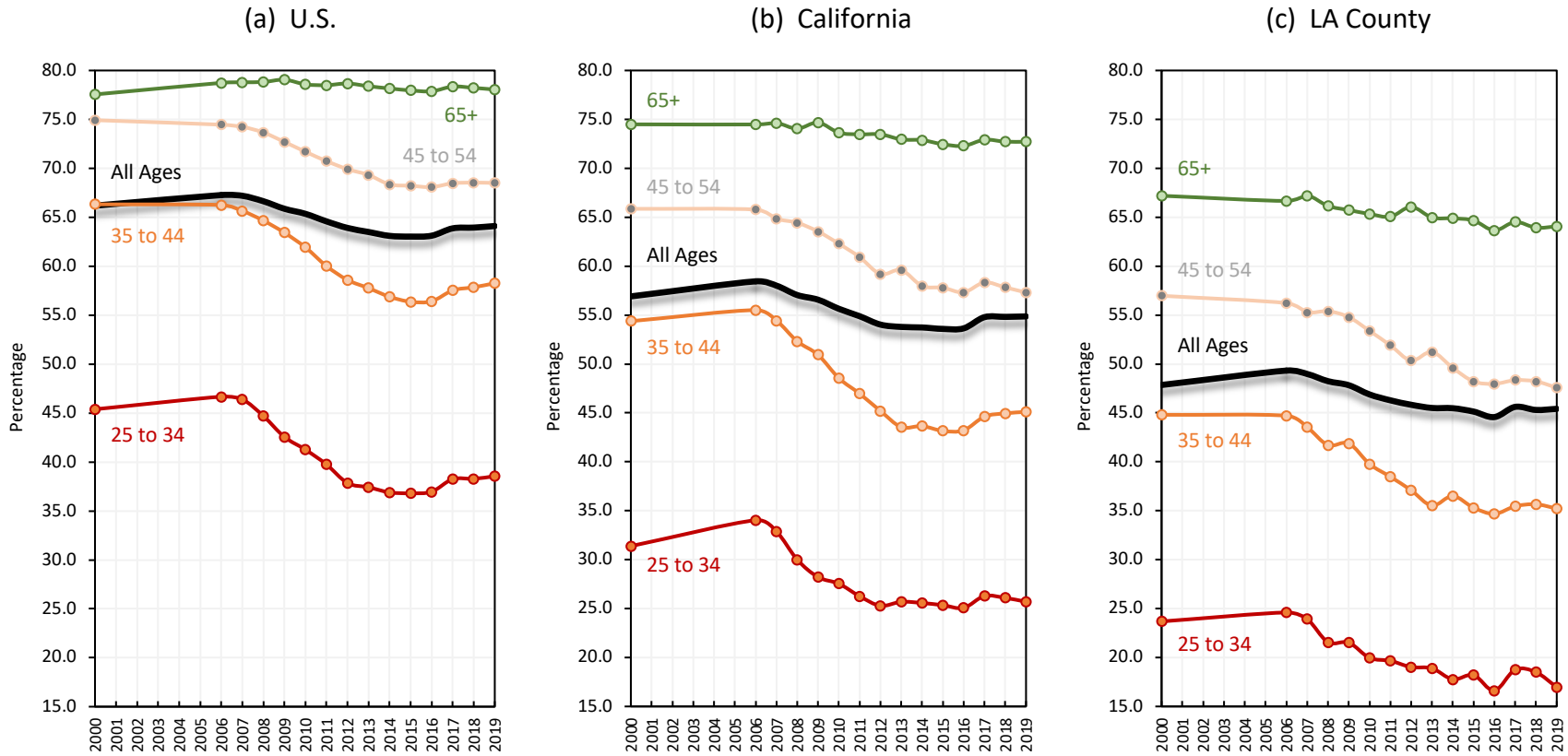
(a) U.S.   (b) California   (c) LA County

Notes: Homeownership rate is defined as the number of owner households divided by the number of households and multiplied by 100. NH-White means non-Hispanic whites. Black includes both non-Hispanics and Hispanics.

Sources: Decennial Census 2000 SF3 H14, H16B, H16H, and H16I; 2006 to 2019 American Community Survey 1-Year Estimates B25007, B25003B, B25003H, and B25003I.

Exhibit 12b. Key Changes in Homeownership Rate since the Peak of the Boom before the Great Recession (2007), All Ages Combined and by Age, United States, California, and Los Angeles County

(a) U.S.

	All Ages	25 to 34	35 to 44	45 to 54	65+
% point change in the last year, 2018 to 2019	0.2	0.3	0.4	0.0	−0.2
% point change over the last 3 years, 2016 to 2019	1.0	1.6	1.8	0.4	0.2
% point change since the trough, 2010 to 2019	−1.2	−2.7	−3.7	−3.2	−0.5
% point change since the former peak, 2007 to 2019	−3.1	−7.8	−7.4	−5.7	−0.7

(b) California

	All Ages	25 to 34	35 to 44	45 to 54	65+
% point change in the last year, 2018 to 2019	0.0	−0.4	0.2	−0.5	0.0
% point change over the last 3 years, 2016 to 2019	1.2	0.6	1.9	0.0	0.4
% point change since the trough, 2010 to 2019	−0.8	−1.8	−3.4	−5.0	−0.9
% point change since the former peak, 2007 to 2019	−3.1	−7.2	−9.3	−7.5	−1.9

(c) LA County

	All Ages	25 to 34	35 to 44	45 to 54	65+
% point change in the last year, 2018 to 2019	0.1	−1.5	−0.4	−0.6	0.1
% point change over the last 3 years, 2016 to 2019	0.8	0.4	0.5	−0.4	0.4
% point change since the trough, 2010 to 2019	−1.5	−3.0	−4.5	−5.8	−1.3
% point change since the former peak, 2007 to 2019	−3.6	−7.0	−8.3	−7.7	−3.2

*Notes and Sources: S*ee Exhibit 12a*.

Conclusion

The COVID-19 pandemic has disrupted life and economy throughout the U.S. Last year, 2019, stands as the culmination, the peak year, of a long economic expansion and a protracted recovery from setbacks of the Great Recession. This "check-up" report summarizes progress after the first two decade of the 21st century, employing a broad bank of indicators to answer the question: "how good did the recovery get in housing and economy after the Great Recession before progress was choked off by the COVID-19 recession?"

We find that by 2019 all of the key employment and income indicators had fully recovered in Los Angeles, California and the nation, even outperforming previous peaks last achieved in 2006 or 2007. In contrast, the record of progress in housing still falls well short of previous levels prior to the Great Recession. Poverty and unemployment may have sharply improved, and incomes risen to new heights, but many key housing conditions remain little improved from what they were during the Great Recession. The record shows a "very incomplete housing recovery."

House values have risen to levels matching their pre-recession peak (inflation adjusted), which is great for existing homeowners. However, rising home prices have out-paced incomes and the ratio of median house value to median owner income is now above 6.0, twice the national average. Meanwhile, homeownership rates have continued to fall, now 45.3% of all households in Los Angeles county. Homeownership rates are steadily declining in all age groups, especially for everyone younger than 55. White households also are suffering homeownership decline, while Asians are rising and now surpass whites for the highest homeownership.

On the rental side, rents certainly rebounded rapidly, soaring past their pre-recession peaks, but those gains have outpaced incomes and so affordability has suffered. Conditions are especially dire in Los Angeles and California, as median rents have risen at twice the national rate of increase, reaching levels more than 20 percent above their peak before the Great Recession (in real dollars). Given that incomes of renters also increased somewhat after 2014 the share of renters with moderate or extreme rent burden relented slightly In Los Angeles. Yet the share of Los Angeles renters carrying extreme rent burden (more than 50 percent of income devoted to rent) is nearly one-third (30.1 percent), still above its level in 2006.

When did each indicator recover to pre-Great Recession levels? The Appendix summarizes the pattern of failed recovery on many housing dimensions compared to the key economic indicators. Comparison of Los Angeles and California with the U.S. reveals how very incomplete has been the housing recovery. Shortages of housing are having deep corrosive effects and likely will keep undermining housing well-being even with economic recovery from the next recession.

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Appendix. When Did Economic and Housing Indicators Recover to Levels in the Boom before the Great Recession (2007), United States, California, and Los Angeles County

	United States		California		LA County	
	Year of Recovery	Worsened Condition Relative to 2007	Year of Recovery	Worsened Condition Relative to 2007	Year of Recovery	Worsened Condition Relative to 2007
Economic Cycle of Boom, Bust, and Recovery						
Total Employment	2014		2014		2014	
Annual Rates of Employment Growth	–		–		–	
Unemployment Rates	2016		2016		2017	
Household Income Trends	2017		2017		2017	
Poverty Rates	2019		2019		2018	
Indicators of Housing Well-being						
House Values	2019		Unrecovered	− $87,837	Unrecovered	− $82,273
House Price Index Estimates	Unrecovered	− $4,475	Unrecovered	− $73,714	Unrecovered	− $56,553
House Price Affordability Multiples of Income	Unrecovered	− 4.8%	Unrecovered	− 18.6%	Unrecovered	− 17.0%
Rents (Peak in 2009 instead of 2007)	2014		2015		2015	
Rental Affordability Ratios to Median Income	Unrecovered	+ 0.4 in Ratios	Unrecovered	+ 1.3 in Ratios	Unrecovered	+ 2.1 in Ratios
30%+ Excess Rent Burden	2019		2019		Unrecovered	+ 0.9 pp.
Overcrowded Rental Housing	Unrecovered	+ 0.6 pp.	Unrecovered	+ 0.5 pp.	2014	
Homeownership Rates	Unrecovered	− 3.1 pp.	Unrecovered	− 3.1 pp.	Unrecovered	− 3.6 pp.
Homeownership Rates by Race						
NH-White	Unrecovered	− 1.7 pp.	Unrecovered	− 2.3 pp.	Unrecovered	− 5.8 pp.
Black	Unrecovered	− 4.5 pp.	Unrecovered	− 3.7 pp.	Unrecovered	− 3.1 pp.
Asian	Unrecovered	− 0.1 pp.	2019		2017	
Hispanic	Unrecovered	− 1.8 pp.	Unrecovered	− 3.8 pp.	Unrecovered	− 2.4 pp.
Homeownership Rates by Age						
25 to 34	Unrecovered	− 7.8 pp.	Unrecovered	− 7.2 pp.	Unrecovered	− 7.0 pp.
35 to 44	Unrecovered	− 7.4 pp.	Unrecovered	− 9.3 pp.	Unrecovered	− 8.3 pp.
45 to 54	Unrecovered	− 5.7 pp.	Unrecovered	− 7.5 pp.	Unrecovered	− 7.7 pp.
65+	Unrecovered	− 0.7 pp.	Unrecovered	− 1.9 pp.	Unrecovered	− 3.2 pp.

Notes: US dollar values were adjusted to 2019$ by BLS's CPI-U all items. Percentage point(s) is shortened as pp. "−" means not applicable.