<u>AMERICAN HOUSING: A MARKETPLACE WEATHERVANE</u>

© Leo Haviland, 646-295-8385 December 4, 2018

"What You Own", a song from the musical "Rent" (by Jonathan Larson), declares: "You're living in America at the end of the millennium- you're living in America, where it's like the twilight zone."

****

<u>OVERVIEW AND CONCLUSION</u>

American home prices have enjoyed a joyous climb since their dismal lows following the global economic disaster of 2007-09. However, United States home prices "in general" ("overall") now probably are establishing an important peak. At least a modest reversal of the magnificent long-run bullish United States home price trend probably is near.

What is a high (too high), low (too low), expensive, cheap, average, good, bad, neutral, normal, typical, reasonable, commonsense, appropriate, fair value, overvalued, undervalued, natural, equilibrium, rational, irrational, or bubble level for prices or any other marketplace variable is a matter of opinion. Subjective perspectives differ. In any case, current US home price levels nevertheless appear quite high, particularly in comparison to the lofty heights of the amazing Goldilocks Era. As current American home price levels (even if only in nominal terms) hover around or float significantly above those of the Goldilocks Era, this hints that such prices probably are vulnerable to a noteworthy bearish move. Moreover, measures of global home prices and US commercial real estate also have surpassed their highs from about a decade ago and thus arguably likewise may suffer declines.

Many United States housing indicators in general currently appear fairly strong, particularly in relation to their weakness during or in the aftermath of the global economic crisis. Nevertheless, assorted American housing variables as well as other phenomena related to actual home price levels probably warn of upcoming declines in American home (and arguably other real estate) prices. A couple of US home price surveys have reported price declines for very recent months. US housing affordability has declined. New single-family home sales display signs of weakness, as do new privately-owned housing starts. American government interest rate yields, as well as US mortgage rates, have edged up. The Federal Reserve Board as of now likely will continue to tighten and raise rates for a while longer. Overall household debt, though not yet burdensome (at least for many), now exceeds the pinnacle reached ten years ago in 3Q08. The economic stimulus from America's December 2017 tax "reform" probably is fading. US consumer confidence dipped in November 2018.

Marketplace history of course does not necessarily repeat itself, either entirely or even partly. Convergence and divergence (lead/lag) relationships between marketplace trends and other variables can shift or transform, sometimes dramatically. Price and time trends for the American stock marketplace and US housing prices do not move precisely together. However, the international 2007-09 crisis experience (which in part strongly linked to US real estate issues) indicates that prices for US stocks and housing probably will peak around the same time, or at least "more or less together" (a lag of several months between the stock high and the home price pinnacle). The S+P 500 probably established a major high in autumn 2018 (9/21/18 at 2941, 10/3/18 at 2940; the broad S&P Goldman Sachs Commodity Index peaked 10/3/18 at 504). That autumn equity summit in the S+P 500 bordered 1/26/18's interim top at 2873. Ongoing weakness in US (and international) stock marketplaces will help to undermine American home prices.

****

Although regional American real estate statistics are important variables, this essay focuses on national data.

****

For additional marketplace analysis, see "Twists, Turns, and Turmoil: US and Other Government Note Trends" (11/12/18); "Japan: Financial Archery: Shooting Arrows" (10/5/18), "Stock Marketplace Maneuvers: Convergence and Divergence" (9/4/18), "China at a Crossroads: Economic and Political Danger Signs" (8/5/18), and other essays.

AMERICA'S CONSUMER BALANCE SHEET AND HOUSEHOLD REAL ESTATE

United States household net worth includes real estate, stocks, and various other assets. The strength, level, and trend for net worth (and its balance sheet components) influence consumer spending patterns, including home purchases and sales.

Consumers represent about 68.0 percent of America's GDP (2Q18 personal consumption expenditures of about $13.9 trillion relative to nominal GDP of $20.4 trillion (Federal Reserve Board, "Flow of Funds", Z.1, Table F.2).

The worldwide economic crisis badly damaged United States household net worth. Yet it has recovered dramatically. From 2009's $57.3 trillion, it soared to 69.5 percent to end 2017's $97.2 trillion (dollars in nominal terms; Federal Reserve Board, "Flow of Funds", Z.1, Table B.101.h; 9/20/18, next release 12/6/18). As of end 2Q18, household net worth probably rose about 3.4 percent versus end 2017 to reach around $100.5 trillion (based upon Fed Z.1's Table B.101, the balance sheet combining household and nonprofit organizations).

A substantial portion of the net worth descent after the end of the Goldilocks Era and its subsequent climb from the basement derived from stock and housing marketplace price adventures. The various churches of stock investors and homeowners (and their allies) loudly lamented the dreadful bear travels and vociferously praised the glorious bull moves.

During the awe-inspiring real estate boom during the Goldilocks Era, United States household owners' equity in home real estate (real estate value outstanding less home mortgage loans) peaked at end first quarter 2006 at about $13.4 trillion dollars (not seasonally adjusted; see Federal Reserve Board, Z.1, B.101.h, including footnote (2); St. Louis Federal Reserve Bank). The S+P 500 attained its pinnacle on 10/11/07 at 1576.

At the time of its 1Q09 bottom, owners' equity in home real estate (the S+P 500's major trough was 3/6/09 at 667) had cratered about 55.0 percent (nearly $7.4 trillion dollars) to a value of $6.0tr. After moving on a sideways path until its 2Q11 final bottom, owners' equity in real estate at end 2Q18 reached about $15.2 trillion. This leaps a colossal 151.6 percent from end 1Q09's trough and 13.2 percent above 1Q06's summit. The S+P 500 built a very important low at 1/20/16's 1812 and 2/11/16's 1810; from its 1Q16 $12.3tr total, household's owner's equity grew by about 23.2pc.

HOME ON THE RANGE

United States home prices no longer remain decrepit relative to the pinnacle achieved before the worldwide financial disaster. Yet despite currently strong prices, a wide-ranging appraisal of American real estate indicators in the context of some related marketplaces on balance reveals bearish warning flags for American home prices. Let's investigate an assortment of indicators.

****

The widely-watched S&P CoreLogic Case-Shiller's National Housing Index stood at 205.8 in September 2018, up a massive 53.6 percent from February 2012's 134.0 trough (not seasonally adjusted; 11/27/18). February 2012's trough slumped 27.4 percent from July 2006's 184.6 Goldilocks Era peak (which occurred about 15 months before the S+P 500's October 2007 major top). September 2018's NHI elevation surpassed July 2006's pinnacle by a hefty 11.5 percent. September 2018's annual gain is 5.5pc. Case-Shiller's 20-City Composite Housing Index's 213.8 level in September 2018 exceeded July 2006's 206.5 summit by 3.5 percent. The 20-City Index for September 2018 soared 59.4pc from March 2012's 134.1 bottom. The bottoms in the Case-Shiller indices attained their lows three years after the S+P 500's March 2009 major low. However, the S+P 500's rally accelerated from interim lows on 10/4/11 at 1075 and 6/4/12 at 1267.

The Federal Housing Finance Agency's purchase-only US House Price Index employs home price sales information from mortgages sold to or guaranteed by Fannie May and Freddie Mac. The 3Q18 HPI, 266.9, rose 6.3 percent versus 3Q17 (seasonally adjusted; 11/27/18); it bounded 17.8pc over 2Q07's glorious Goldilocks Era summit at 225.9. The recent HPI stands far above its depths achieved following the global economic disaster, 1Q11's 177.0 and 1Q12's 177.4.

Median asking sales prices for American vacant for sale homes show rising prices in recent years. (Census Bureau, "Housing Vacancies and Homeownership", Table 11B, Current Population Survey/Housing Vacancy Survey; 10/30/18). Third quarter 2018's $206,400 (current dollars) is a new high since 1Q12's $133,700, and a 54.4 percent leap from that trough. The current height edges over 2Q07's $201,500 top.

****

However, these Case-Shiller and FHFA indices and the Census Bureau sales price data do not include October and November 2018. Moreover, they precede the final high in the S+P 500, 10/3/18's 2940 (9/21/18 peak 2941), and its subsequent decline. Therefore observers should examine other house price indicators.

As a prelude, note two real estate price reviews reporting US home price declines for very recent months. National Association of Realtors ("NAR"; 11/21/18) data reveal that although September 2018's median price (not seasonally adjusted) for United States existing homes rose 4.6 percent year-on-year, September 2018's $260,500 price slides 5.8pc beneath June 2018's $276,500.

According to the Census Bureau (11/28/18), the median US new home sales price in October 2018 (not seasonally adjusted) of $309,700 dropped 3.6 percent from September 2018 and fell 3.1pc from October 2017's $319,500.

The National Association of Home Builders/Wells Fargo Housing Market Index (single-family houses) assesses market conditions for the sale of new homes based upon current sales, estimates for sales in the next six months, and views on the traffic of prospective buyers. After the HMI attained its apex at 72 in June 2005 (1985-present; seasonally adjusted), the real estate marketplace crash eventually hammered it down, reaching 8 in January 2009 (shortly before the S+P 500's March 2009 major low). As America's economic recovery marched onward, the HMI increased steadily from April 2012's still-low 24 depth.

The NAHB's Housing Market Index summit thereafter is December 2017's 74. This was near in time to the S+P 500's important interim top on 1/26/18 at 2873. From the historical perspective, an HMI over 70 represents a high level. Recall not only June 2005. Remember summits in November 1993 (71) and December 1998 (78)/June 1999 (77; June 1999's was several months before the S+P 500's 3/24/00 plateau at 1553). The June 2005 and December 1998/June 1999 HMI tops were early signals for the peaks in American (and related) stock marketplaces. November 2018's 60 level declines only moderately from December 2017. However that retreat probably warns of both US house and stock marketplace price weakness (further HMI slumps would confirm such feebleness).

The National Association of Home Builders also provides a Housing Opportunity Index ("HOI"), which assesses affordability. During 3Q06, a relatively late stage of the magnificent Goldilocks Era, it was only 40.4 percent. During the housing downturn and the international financial crisis, affordability improved, with the HOI reaching 72.5 in 1Q09. It stayed over 70.0pc for several years, with its high 1Q12's 77.5pc. However, affordability has declined recently, with 3Q18's 56.4pc the lowest since 1Q12.

Rising US mortgage interest rates probably have helped to reduce affordability. The NAHB notes the (weighted) high yield for rate mortgage loans (for all major lenders, as reported to by FHFA) during the boom period preceding the economic crisis was 3Q06's 6.77 percent. The rate plummeted, reaching 3.57pc in 4Q12. The mortgage loan rate meandered sideways for the next few years. Its recent low was 3.76 percent in 3Q16. The major bottom in the yield of the US Treasury 10 year note was 7/6/16's 1.32 percent. Reflecting in part the US Federal Reserve's raising of the Federal Funds rate (normalization policy), the UST 10 year note yield increased, with its high to date 10/9/18's 3.26pc. The mortgage rate high thereafter, as well as since 4Q12, is 3Q18's 4.72pc.

According to NAR, there were 4.1 months of supply at end October 2018 (seasonally adjusted; compare September 2017's 4.2pc and November 2017's mere 3.6 months). The substantial reduction in overhanging distressed property inventory built up as a result of the 2007-09 housing crisis and its aftermath interrelates with the significant rally in US housing prices that began (depending on the price index) around 2012.

Supply tightness of course not only can boost home prices, but also eventually can help to propel prices high enough (in conjunction with other factors) to reduce demand. The NAR's composite Housing Affordability Index averaged 165.7 in 2015 and 167.1 in 2016. Over the last 12 months, the high was January 2018's 164.3 (compare this timing with the initial top in the S+P 500, 1/26/18's 2873). Affordability declined to June 2018's 137.7; September 2018's is 146.7. Although current affordability is quite a bit above the low achieved near 100 in July 2006 during the housing boom of a decade ago, it is far beneath 2012's high near 220. Incidentally, looking back to 1975 and comparing median home prices with median household income, the NAR underscores "Home prices have increased faster than incomes" ("Housing Affordability in the US: Trends and Solutions"; 11/2/18).

****

What enlightenment does the yardstick of US new single family home sales offer? Some weakness is emerging. The 544,000 in October 2018 tumbled 8.9 percent beneath September

2018's 597m and 12.0pc beneath October 2017's 618m (seasonally adjusted annual rate; US Census Bureau, 11/28/18). October 2018's selling rate also falls beneath November 2017's 712,000 and March 2018's 672m.

What about inventory? The Census Bureau reports that new houses for sale at end October 2018 at the current sales rate were 7.4 months of supply at end October 2018, a boost from 5.6 months in October 2017 (and 4.9 months in November 2017). To what extent are America's tariffs (trade wars) slowing demand for new homes by making them relatively more costly to acquire?

New privately-owned housing starts in October 2018 rose 1.5 percent versus September 2018. However, they slipped 2.9pc relative to October 2017, and they dove about 7.9pc from the January 2018 high (seasonally adjusted annual rate; Census Bureau; 11/20/18).

GLOBAL HOUSE (AND US COMMERCIAL PROPERTY) PRICES

In "The House of the Seven Gables" (Chapter 1), Nathaniel Hawthorne stresses: "the influential classes, and those who take upon themselves to be leaders of the people, are fully liable to all the passionate error that has ever characterized the maddest mob."

****

Other international economic and political developments will influence US real estate and marketplaces related to it. For example, the US of course does not represent the only important patch of real estate. Substantial real estate problems could develop in countries other than the US (picture China), thereby influencing various financial marketplaces around the globe.

****

Both a noteworthy global home price index and a benchmark for United States commercial real estate prices are ominously elevated. Their heights, particularly in relation to those achieved during the majestic Goldilocks Era, warn of decline in them, and thus for United States home prices.

The International Monetary Fund's "Global Housing Watch" has a Global House Price Index, an average of house prices across various countries in real terms. The heavenly 1Q08 peak of 159.0 (compare 1Q03's 110.0) was achieved as the Goldilocks Era started to fade into the sunset. The 4Q17 160.1 level exceeds that pinnacle. Note that the overall global stock marketplace peaked in first quarter 2018. The high in the FTSE All-World Index, which includes developed and emerging stock marketplaces, was 1/29/18's 364.0.

Although the 4Q17 GHPI is the latest statistic available (8/30/18 release), the US home marketplace price trend through third quarter 2018 suggests that the GHPI index probably climbed up (or at least did not decline much) in the nine months since 4Q17. The GHPI for 4Q17 ascended 11.9 percent in real terms from 1Q12's 143.1 bottom; recall the similar timing of lows in US price benchmarks.

****

The United States of course is not the whole world and American consumers do not represent the country's entire economy. Yet because the US is a crucial player in the interconnected global economic (and political) theater, and because US consumer spending represents a majority of US GDP, the state of affairs for the US consumer and thus substantial US home price trends have international consequences.

The International Monetary Fund's "Global Financial Stability Report" (April 2018; Chapter 3, "House Price Synchronization: What Role for Financial Factors") analyzed "whether and how house price move in tandem across countries and major global cities." It concluded: "Strikingly, the chapter finds an increase in house price synchronization, on balance, for 40 countries and 44 major cities in advanced and emerging market economies. The chapter's analysis suggests that countries' and cities' exposure to global financial conditions may provide an explanation for the increase in house price synchronization…heightened synchronicity of house prices can signal a downside tail risk to real economic activity, especially when taking place in a buoyant credit environment."

****

The Bank for International Statistics publishes commercial property price indices (2010=100; all properties; not seasonally adjusted; 11/28/18). What about the BIS barometer for the United States? After peaking in 4Q07 at 152.6 (compare 4Q03's 89.9), it crashed 38.6 percent to 1Q10's 93.7. End 3Q18's towering 180.6 nearly doubles the 1Q10 trough, and it vaults about 18.3pc beyond the joyous Goldilocks Era elevation.

Are US commercial property prices in general floating in "bubble territory"? In any event, the current BIS commercial real elevation should make observers recall the American real estate component of 2007-09's global economic crisis, especially since American house prices generally exceed their Goldilocks Era peak.

RENTAL HOUSING: HEATING UP

Look through the window of America's rental housing situation. US rental prices look rather high from the historical perspective, thus mirroring high home prices. When interpreted alongside declines in home affordability, elevated and rising rents hint that US home prices recently became "somewhat too pricey" (expensive, costly).

The US national rental housing vacancy rate in 3Q18 was 7.1 percent, up slightly from 2Q18's 6.8pc (and 2Q16's 6.7pc low). Compare the 10.6pc in first and second quarter 2010 (Census Bureau, "Residential Vacancies and Homeownership", 10/30/18).

Government data (Census Bureau, Table 11A) display a general rise in American rents. The US national median asking rent (current dollars) in 3Q18 was $1003 per month. This spiked up 5.5 percent from 2Q18's $951 per month. The average rent for the first three quarters of calendar 2018 was $969/month. This is a notable 8.2 percent jump (greater than overall consumer price inflation) relative to 2017's full year average of $896/month.

Current nominal rents significantly exceed those from a decade ago. Following 3Q08's $719/month high, the annual monthly average low after the global economic debacle was 2011's $694--compare the timing of the US house sales price bottom. The 3Q18 height skyrockets 44.5 percent above 2011's yearly average.

CONSUMER CONFIDENCE, HOMES, AND DEBT

"Home is the nicest word there is." Laura Ingalls Wilder, author of the "Little House" books, which inspired the famed television show, "Little House on the Prairie"

****

Home ownership is an important dimension of the American Dream culture. The US homeownership rate was 64.4 percent (seasonally adjusted) in 3Q18. The high from 1996 to the present is 2Q04 (and 4Q04)'s 69.2pc, with that level having eroded from 4Q06's 68.9pc. The recent low is 2Q16's 62.9pc (Census Bureau; "Residential Vacancies and Homeownership", Table 4; 10/30/18).

Rising home and increasing stock marketplace prices to some extent bolster faith that the American Dream "in general" (as a whole) is succeeding. What happens to American real estate still matters a great deal for the global economy.

****

Consumer confidence derives from and shifts due to assorted interrelated factors, including home and stock marketplace price levels and trends.

US consumer confidence (Conference Board) reached a floor at 25.3 in February 2009, adjacent to 3/6/09's S+P 500 major bottom at 667. Following the global economic crisis of 2007-09, US real GDP has risen for several years. America's October 2018 headline unemployment rate was 3.7pc, well under October 2009's 10.0pc plateau (Bureau of Labor Statistics).

Rising household net worth, including climbing home and stock marketplace prices, likely assisted the sustained gains in consumer confidence from the February 2009 low.

US household income levels in real terms declined significantly after the Goldilocks Era ceased (US Census Bureau, "Income and Poverty in the United States: 2017", Table A1; September 2018). Real median household income in 2007 was about $59,500. It fell to $54.6m in 2012 and remained about flat through 2014. However, 2015's advanced to $58.5m. Household income in 2016 ascended to $60.3m, beyond 2007's Goldilocks Era high, with 2017's reaching $61.4m (about three percent over 2007).

Consumer confidence advanced rapidly from May 2016's 92.4 and (following the US November 2016 election) January 2017's 111.6. The high since 2009's depth is October 2018's 137.9. Don't forget the timing of the S+P 500's recent top, 9/21/18 at 2941 and 10/3/18's 2940. The October 2018 consumer confidence level soars substantially above its summit during the Goldilocks Era, July 2007's 111.9 (which occurred not long before the S+P 500's October 2007 peak). October 2018's consumer confidence neighbors January 2000's astounding 144.7 peak (keep in mind the S+P 500's 3/24/00 March 2000 major high)

However, November 2018's US consumer confidence dipped lower, to 135.7. Compare the timing of the S+P 500's late September/early October 2018 pinnacle. This slight decline in confidence admittedly is only for one month. However, as the decrease occurred alongside highs established in equity prices, it warns of further declines in both, as well as for falls in American home prices. Falling home prices or declining stock prices (or both together) probably will help to weaken consumer confidence.

America's ongoing fierce debates about economic inequality and the rise and persistence of populism (both left and right wing) tell a story that interrelates with consumer confidence and other marketplace patterns. Not all American consumers shared equally in the current prosperity suggested by rising US household net worth statistics and bullish stock and real estate trends.

Currently high levels of consumer confidence consequently may be more vulnerable to substantial declines than many optimists assert.

America's ongoing substantial political divisions and other cultural conflicts enhance the risks for a notable decline in consumer confidence. America's 2018 election resulted in a Republican Senate and Democratic House of Representatives, increasing the likelihood of legislative conflict and gridlock (especially given widespread hostility to and lack of confidence in the President) as the 2020 election approaches.

****

Some signs of a growing debt burden on American consumers have appeared. Aggregate US household debt balances increased in 3Q18 for the seventeenth consecutive quarter (Federal Reserve Bank of New York, "Quarterly Report on Household Debt and Credit"; 11/16/18). At $13.5 trillion, they now are $837 billion higher than the previous peak, 3Q08's $12.7 trillion. Aggregate delinquency rates worsened in 3Q18. As of end-September, 4.7 percent of outstanding debt was in some delinquency stage, the largest in seven years.

However, as of now the household debt burden does not seem too troublesome. For example, the household financial obligations ratio (Federal Reserve Board; seasonally adjusted, data back to 1980) at end 2Q18 was only 15.3 percent of disposable personal income, near 4Q12's 14.9pc record low. Compare 4Q07's record high at about 18.2pc. Total household debt service payments (which include mortgages) as a percentage of disposable income at end 2Q18 were 9.8 percent (mortgages were 4.2pc, consumer debt 5.6pc), down from 4Q07's 13.2pc plateau (mortgage debt was 7.2pc).

According to the NY Fed, mortgage debt at end 3Q18 totaled about $9.1 trillion, about 68.0 percent of total household debt. However, mortgage delinquencies were about flat, with only 1.1 percent of mortgage balances 90 or more days delinquent in 3Q18. According to the Federal Reserve Board, the charge-off rate (seasonally adjusted) for residential real estate loans booked by commercial banks in domestic offices was negligible in 3Q18. Compare 4Q09's peak at 2.78pc. However, at the dawn of the global economic crisis, the level was merely .16pc. Thus an economic downturn, given the high arithmetic aggregate US consumer debt total, probably would boost mortgage delinquencies to some extent.

****

However, even if the US consumer debt burden is not overly burdensome yet, the American federal budget deficit and debt problems continue to worsen. The tax "reform" enacted at the close of 2017 magnified the problem.

FEDERAL RESERVE POLICY: US STOCK AND HOME PRICES

"Money beats soul, every time." "Roadhouse Blues", by the Doors, with John Lee Hooker

****

Although US household net worth is not an explicit part of the Federal Reserve Board's interpretation of its mandate (promoting maximum employment, stable prices, and moderate long-term interest rates) and related policy actions, it and related consumer spending levels and patterns as well as real GDP growth are very relevant to them. So therefore are stock marketplace and real estate values and trends.

As they did for the S+P 500, the pillars of sustained low interest rate (yield repression) and money printing (quantitative easing) built by the beloved Fed watchdog and other teams of trusty foreign central bankers (which were bolstered to some extent by deficit spending programs) supported a sharp rally in real estate prices. Recall that the blueprint for Fed's quantitative easing program included purchasing not only Treasury securities, but also mortgage-related securities. The Fed's ravenous buying spree helped to slash yields. The acquisition of stocks and buying of real estate in recent years partly reflected the ardent quest for yield (return) by congregations of investors (and speculators) responding to sustained central bank interest rate yield repression programs in the US and elsewhere.

****

The Federal Reserve gradually has been raising the Federal Funds rate. It also is normalizing (reducing the size of) its balance sheet. The Fed meets 12/18-19/18. That gathering will publish new economic projections.

The Federal Reserve and its allies of course want to avoid a major decline in the S+P 500 and housing prices. However, US household net worth (the consumer balance sheet) appears strong. Ten to fifteen percent declines in the S+P 500 from its autumn 2018 peak probably will produce soothing rhetoric from the Fed designed to rally stocks, but not a change in its policy of raising interest rates. The decline from 1/26/18's 2873 to 2/9/18's 2533 was 11.8 percent; the downturn from 9/21/18's 2941 to the low thereafter, 10/29/18's 2604, was 11.5pc. Despite these two declines, the Fed remains committed to its rate raising policy. All else equal, unless American stock benchmarks such as the S+P 500 fall roughly twenty percent or more (or appear likely to do so) from their September/October 2018 peak (and of course international financial marketplaces matter as well), the Fed probably will keep raising interest rates to some extent over the next several months.

American home prices currently are sufficiently high enough (compare their 2007 peaks) to encourage the Federal Reserve to maintain its yield-raising policy. However, suppose that United States house prices in general have (or threaten to have) a noteworthy decline (perhaps about ten percent) from their recent highs. That ten percent home price drop (or a substantial risk of such an event) increases the likelihood that the Fed will pause in its tightening program (not merely provide calming and optimistic wordplay), especially as that American home price slump probably will occur alongside a relatively weak US stock marketplace.

****