



Turning Point Analytics utilizes a time-tested, real-world strategy that optimizes the client's entry and exit points and adds alpha. TPA defines each stock as Trend or Range to identify actionable inflection points.

"In the short run, the market is a voting machine, but in the long run, it is a weighing machine." - Benjamin Graham

WORLD SNAPSHOT – COMMENTS & CHARTS

Wednesday, April 28, 2021

General comments first and macro tables at the bottom. *Links for Explanations of Technical terms at the bottom of the report.*

THIS IS NOT A HOUSING "BUBBLE"

Pundits are continually warning about home prices and berating the FED for its role in setting up a bubble. In Barrons' Randall Forsyth's 4/28/21 article entitled [The Housing Market Looks Like a Bubble. It's Time for the Fed to Worry](#), he wrote, "In the case of housing, however, the Fed is helping to feed the buying frenzy in many markets, which has been supercharged by the effects of the pandemic and the desire to have room to work at home..... *Strong housing and mortgage activity argues against the Fed effectively subsidizing a sector that is near bubble territory.*" https://www.marketwatch.com/articles/the-housing-market-looks-like-a-bubble-its-time-for-the-fed-to-worry-51619524804?mod=mw_latestnews

TPA disagrees and has been telling clients since March 2020 that the housing market would remain strong and that the Pandemic would create a surge of demand for homes. In this article, TPA will show the following:

- 1. There is a long-term supply problem stemming from a decade of underbuilding during the financial recession.**
- 2. COVID-19 has permanently changed the living and working patterns of Americans**
- 3. Households are at the lowest levels of debt to disposable income in 40 years**
- 4. The very long-term pattern of home price appreciation is well-established**
- 5. Rents are very high, making the alternative to buying unattractive**
- 6. Homeownership is historically low already**

In March, just as the Pandemic was getting started and the stock market began to weaken, TPA stated that "house prices will remain stable for the long-term." TPA wrote:

"There will be an economic impact to countries, businesses and people from the current crisis, but it may be constructive, at this time, to take a historical perspective when it comes to housing. In recent history, it has been rare that a downturn in either the stock market or the economy has had a long-term detrimental impact on home prices. The one time in the past 30 years when the economy and stocks coincided with a

long term serious decline in house prices was 2008-2009. Of course, in that case, it was the housing market and the ramifications of its downfall that caused the economy and stocks to weaken; not the other way around.

In May 2020, TPA wrote:

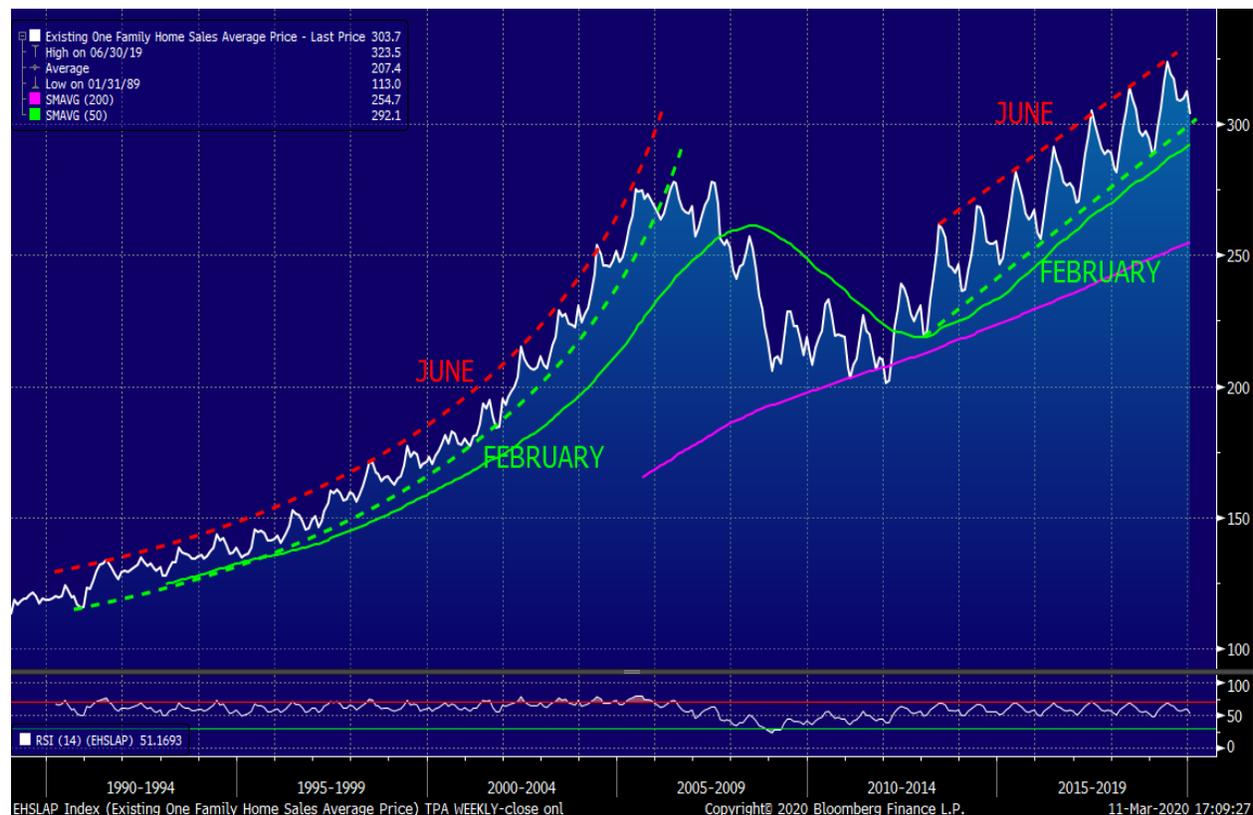
“TPA sees the multi-decade historical pattern for home prices repeating”

In October 2020, TPA reiterated its positive stance on Home Builders:

Home Builders see gains as people started the exodus from cities to suburban and rural areas. This means a transition from renting to buying in an already tight housing market.

ANNUAL HOME PRICE CYCLE - TPA pointed out repeatedly that the really important pattern to pay attention to was the long-term cycle that showed that the house price annual cycle is a low in February and a high in June (chart below). In other words, March is not the time to be negative on house prices.

U.S. AVERAGE HOME PRICE – 1989-2020



RENTS AT HIGHS – in THE March 2020 report, TPA also pointed out that rents were at historic highs making owning a home very attractive. “The average increase in rent has been 58.58%, while the median household income has only increased by 39.32% in the same period [past decade]”

Rent, Home Price and Median Income Increases This Decade

City	Average Rent 2019	% Change Average Rent	Median Home Price 2019	% Change Median Home Price	Median Household Income 2019	% Change Median Household Income
Los Angeles	\$2,527	65%	\$774,000	96%	\$64,036	36%
Phoenix*	\$1,113	71%	\$256,148	144%	\$59,406	41%
San Diego	\$2,225	54%	\$610,000	79%	\$81,637	36%
San Jose	\$2,697	74%	\$975,000	124%	\$115,862	51%
Jacksonville*	\$1,098	46%	\$171,790	41%	\$55,626	22%
San Francisco	\$3,680	70%	\$1,300,000	95%	\$115,185	61%
Seattle*	\$2,124	77%	\$716,475	95%	\$95,818	59%
Denver*	\$1,660	85%	\$430,500	104%	\$70,086	55%
Washington, D.C.*	\$2,235	31%	\$663,175	60%	\$87,333	43%
Portland	\$1,536	59%	\$365,000	67%	\$74,924	59%
Las Vegas*	\$1,111	49%	\$267,818	93%	\$54,914	8%
Baltimore	\$1,266	32%	\$115,000	26%	\$52,275	36%
Tucson	\$893	40%	\$189,065	44%	\$44,768	23%
Sacramento	\$1,439	69%	\$347,000	128%	\$66,672	43%
Mesa*	\$1,085	76%	\$262,400	112%	\$59,703	33%
Long Beach*	\$2,103	57%	\$585,000	89%	\$63,150	23%
Atlanta*	\$1,474	65%	\$251,125	98%	\$66,979	61%
Virginia Beach*	\$1,221	21%	\$265,219	18%	\$78,985	23%
Colorado Springs*	\$1,187	72%	\$297,249	64%	\$66,964	34%

*the last sales data available is from 2018; 2019 value is the 2018 value adjusted by the Consumer Price Index (CPI)
 **% Change* refers to the decade evolution between 2010 and 2019
 Median Household Income in 2019 is based on CPI-adjusted 2018 data

RENTCafé®

<https://www.rentcafe.com/blog/rental-market/market-snapshots/renting-america-housing-changed-past-decade/>

PANDEMIC CREATED A PERMANENT LONG-TERM CHANGE IN WORK AND LIVING PATTERNS – In the March 2020 report, TPA stated that the world has changed and that change would create huge demand for housing

*“The final reason why the current crisis will not stall prices has to do with the nature of housing in cities versus outside cities. ...**Since there are less rentals away from cities, that will also increase demand for buying single family houses. This unforeseen demand will keep demand for homes high and prices moving higher.**”*

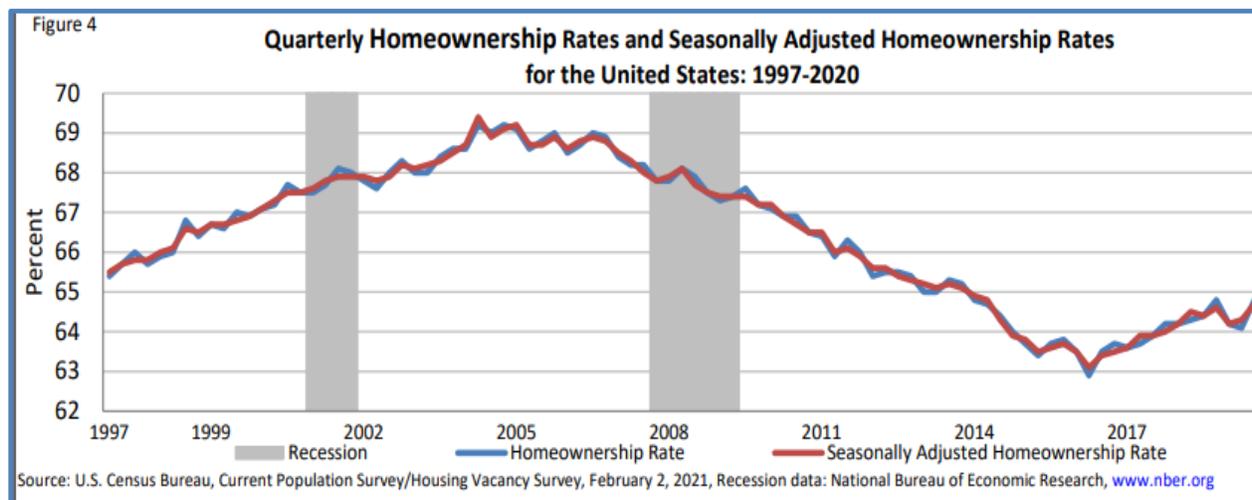
The current shortage in homes will be with us for many years. The table below shows U.S. housing starts and population for the 14 years from 2007 to 2020. In the 35 years before 2007, the average annual housing starts in the U.S. were 1.59 million. Using the annual housing starts from 2007 to 2020 and the 35 year average, the cumulative deficit was over 7.5 million homes. To compensate for this deficit, housing starts would have to average 3.1 million per year for the next 5 years. The highest annual housing starts, since 1970, was in 1972: 2,357,000. So, the odds of housing starts in any 1 year, let alone 5 years in a row, being over 3 million are very, very low. Using 2.357 million as the annual housing starts going forward, it would take until 2030 or 10 years to erase the deficit.

AVERAGE HOUSING STARTS FOR 35 YEARS WAS 1,590,832 (1970-2006)						
	1,590,832					
YEAR	HOUSING STARTS	ANNUAL HOUSING	CUMULATIVE DEFICIT	POPULATION	POPULATION CHANGE PER	CUM POP CHANGE
2007	1,355,000	-235,832	-235,832	301,000,000	2,000,000	2,000,000
2008	905,500	-685,332	-921,165	304,000,000	3,000,000	5,000,000
2009	554,000	-1,036,832	-1,957,997	307,000,000	3,000,000	8,000,000
2010	586,900	-1,003,932	-2,961,930	308,000,000	1,000,000	9,000,000
2011	608,800	-982,032	-3,943,962	311,000,000	3,000,000	12,000,000
2012	780,600	-810,232	-4,754,195	313,000,000	2,000,000	14,000,000
2013	924,900	-665,932	-5,420,127	316,000,000	3,000,000	17,000,000
2014	1,003,300	-587,532	-6,007,659	318,000,000	2,000,000	19,000,000
2015	1,111,800	-479,032	-6,486,692	321,000,000	3,000,000	22,000,000
2016	1,173,800	-417,032	-6,903,724	323,000,000	2,000,000	24,000,000
2017	1,203,000	-387,832	-7,291,557	325,000,000	2,000,000	26,000,000
2018	1,249,900	-340,932	-7,632,489	327,000,000	2,000,000	28,000,000
2019	1,587,000	-3,832	-7,636,322	329,064,917	2,064,917	30,064,917
2020	1,670,000	79,168	-7,557,154	331,002,651	1,937,734	32,002,651
2021	3,102,263	1,511,431	-6,045,723			
2022	3,118,097	1,511,431	-4,534,292			
2023	3,118,097	1,511,431	-3,022,862			
2024	3,118,097	1,511,431	-1,511,431			
2025	3,118,097	1,511,431	0			

Source: Census Bureau

Homeownership is also still low, which adds to demand. The homeownership rate across the country has never fully recovered since the Great Recession. During the period between 2009 and 2014, the homeownership rate significantly decreased in the U.S. The level of homeownership has yet to return to the highs that occurred prior to the Great Recession (chart below). As of 2019, the homeownership rate was estimated to be 64.1%, roughly in line with its level over the past three years. It's an improvement from the recent low of 63% set in 2015, but it was still well below the record highs of over 69% in 2005-2006.

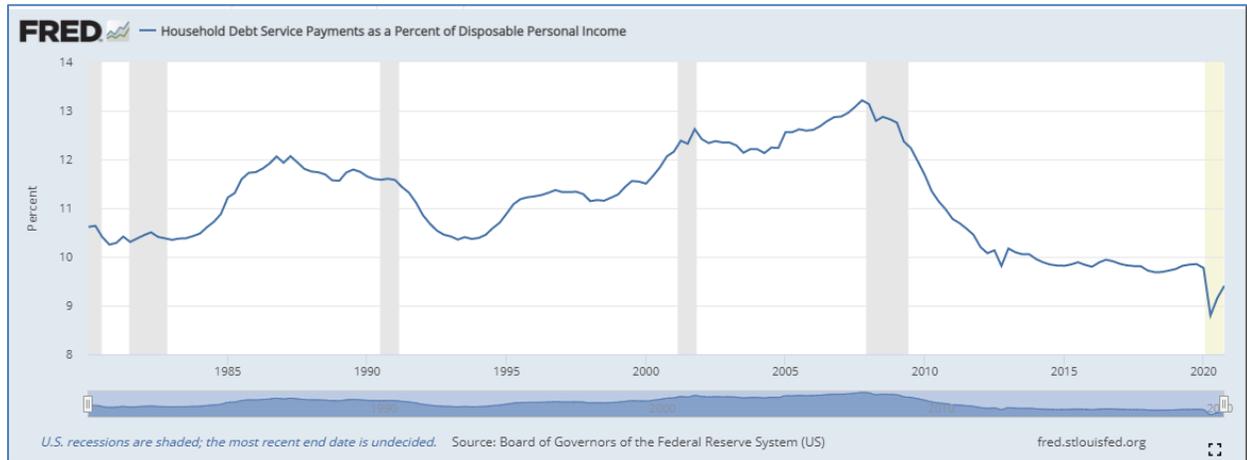
HOMEOWNERSHIP – 1997-2020



<https://www.census.gov/housing/hvs/files/currenthvspress.pdf>

Household debt levels are not only not high, they are at 40 year lows - Some argue the previous level of homeownership may have been unsustainable. People worry that high levels of ownership precede high levels of delinquencies and foreclosures. However, some of the regulations that followed the housing crisis, including the ability-to-repay rules, put the housing and mortgage industries on a much more stable foundation. In addition, consumers are in a far better debt load situation today than they were in 2007. The Household debt to disposable income measure in the 4th quarter of 2007 was 13.21%, whereas it fell to a 40-year low of 8.79% last year.

U.S. HOUSEHOLD DEBT TO DISPOSABLE INCOME – 40 YEARS



<https://fred.stlouisfed.org/series/TDSP>

For all of the reasons mentioned above, home demand will continue to be very strong and house prices will not come down.

TO SUMMARIZE:

1. **There is a long-term supply problem stemming from a decade of underbuilding during the financial recession.**
2. **COVID-19 has permanently changed the living and working patterns of Americans**
3. **Households are at the lowest levels of debt to disposable income in 40 years**
4. **The very long-term pattern of home price appreciation is well-established**
5. **Rents are very high making the alternative to buying unattractive**
6. **Homeownership is historically low already**

TPA MARKETSCOPE EXPLAINED

Market timing is not a complete investment strategy in and of itself, but should be utilized as a tool for successful investing. Knowing when stocks are at extremes can present investors with opportunities and help them to avoid pitfalls. The TPA Marketscope uses a set of carefully watched indicators to assess if the market is at or near extremes. When the market is oversold, risk-return favors buying and not selling and when the market is overbought, risk-return favors selling and not buying.

The seven indicators below were developed after years of observation and the extreme limits used have historically been levels that mark short-term and medium-term inflection points.

Indicators explained:

- **Short term market score** – is a daily analysis of the S&P500 relative to the normal distribution using the 2 standard deviation Bollinger Band. TPA then adjusts the score by the amount of overbought or oversold as measured by RSI.
 - **Percent stocks above or below the 2 standard deviation Bollinger Band** – Bollinger Bands identify ranges using standard deviations away from a moving average. They, therefore, measure volatility (the width of the band) and extremes (using normal statistical distributions). In a normal distribution, 2 standard deviations identifies 96% of all occurrences. As a stock reaches the extreme of the 2 standard deviation Bollinger Band, it becomes more probable that the price will regress back to the mean. TPA has found that historically market reversions are very likely when 40% of stocks are above or 60% of stocks are below the 2 standard deviation Bollinger Band.
 - **Percent stocks above the 50DMA** – when a large number of stocks (85%) are trading above their 50DMA, the market is at an overbought extreme. When a small number of stocks (15%) are trading above the 50DMA, the market is oversold.
 - **Percent stocks RSI above 70 or below 30** – RSI is a measure of the speed and size of a recent move in a stock or index; the greater the price move and the quicker that move has taken place, the higher RSI. TPA has found that historically market extremes occur when 30% of stocks are trading above RSI 70 or when 55% of stocks are trading below RSI 30.
 - **Percent stocks 50DMA>200DMA** – This is a longer-term measure of extremes. An uptrend is defined when short term prices consistently trade above longer-term prices. An example of an uptrend is Last > 20DMA > 50DMA > 200DMA. Technically, a long-term uptrend is defined by the 50DMA trading above the 200DMA. TPA has found that historic oversold extremes occur when 22% or less stocks are trading 50DMA>200DMA. The overbought extreme has become trickier since it has been declining since 2010 as a small number of TECH stocks have garnered an increasingly large percentage weighting in the S&P500. Currently, the extreme is approximately 40% to 50% of stocks trading 50DMA > 200DMA.
- TPA notes that not all of these indicators are equally consistent. Clients should use the “Historical Importance” comments to determine the weight they will assign to each alert.**

CLICK ON LINKS BELOW FOR TECHNICAL INDICATOR EXPLANATIONS:

[**ASCENDING - DESCENDING TRIANGLE**](#)

[**BASING-TOPPING-CONSOLIDATION**](#)

[**BREAKOUT \(Breakdown\)**](#)

[**CHANNEL & RANGE**](#)

[**DIRECTIONAL MOVEMENT INDEX \(DMI\)**](#)

[**DOUBLE BOTTOM or DOUBLE TOP**](#)

[**MACD-MOVING AVERAGE CONVERGENCE-DIVERGENCE**](#)

[**MOVING AVERAGES**](#)

[**RELATIVE STRENGTH & PEER STOCK PERFORMANCE**](#)

[**REPEATING PATTERNS**](#)

[**RSI-RELATIVE STRENGTH**](#)

[**SUPPORT, RESISTANCE, BREAKOUT, BREAKDOWN**](#)

[**TREND**](#)

ALWAYS REMEMBER: No strategy exists in a vacuum – always evaluate the relevant sector & market.

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