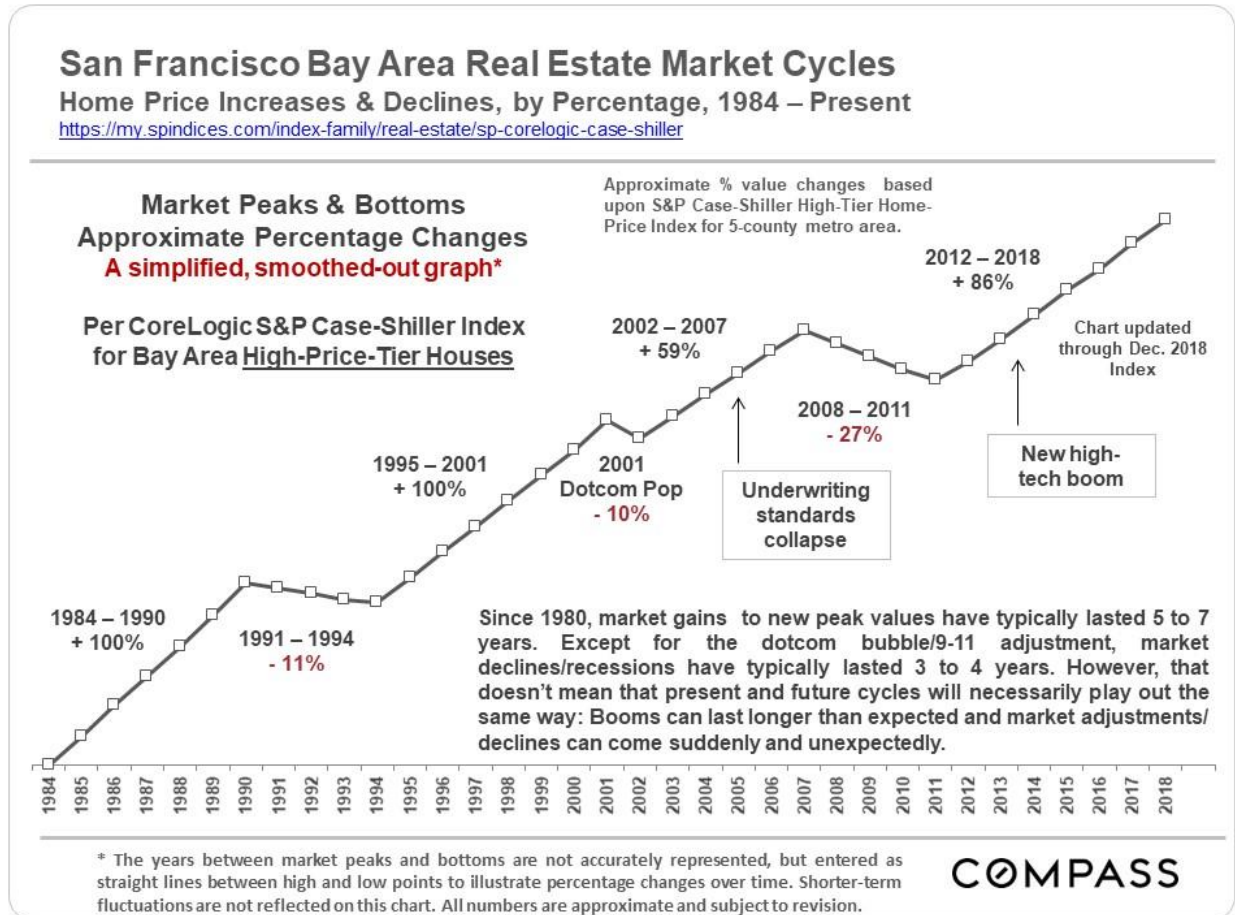


30+ Years of Bay Area Real Estate Cycles

Recessions, recoveries, booms, bubbles and corrections

by Patrick Carlisle, Bay Area Chief Market Analyst, Compass



Regarding the chart above: The CoreLogic S&P Case-Shiller high-price-tier Home Price Index for the 5-county San Francisco Metro Area, illustrated above by the blue line, applies best to more expensive Bay Area housing markets such as most of San Francisco, Marin, San Mateo and Diablo Valley/Lamorinda. The SF Metro low- and mid-price tiers had much more dramatic bubbles and crashes in 2005-2011, but as of December 2017, have ended up at points a bit higher than the high-price tier. The green line tracks home price appreciation for the United States as a whole. The Case-Shiller Index is predicated on a January 2000 price of 100. "250" signifies a price that has appreciated 150% since January 2000. <https://us.spindices.com/index-family/real-estate/sp-corelogic-case-shiller>

Financial-market cycles have been around for hundreds of years, from the 1600's Dutch tulip mania through our recent speculative frenzy in crypto-currencies. Though cycles vary in their details, their causes, effects and trend lines are often similar, providing more context as to how the market works over time.

Human beings have always been worried about (or terrified of) the future, and going back many thousands of years, we have constantly attempted to predict what it holds. However, whether using priests, oracles, astrologers, economists, analysts or media pundits, we show no aptitude as a species for having the ability to do so with any accuracy. In 2012, a Nobel-Prize-winning economist, famous for housing market analysis, said that the U.S. real estate market might not recover "*in our lifetimes.*" In hindsight, we now know that the recovery had already begun in some markets such as San Francisco. In 2015, during a period of financial market fluctuations and a slowdown in our local high-tech boom, a well-respected Bay Area economist predicted that there would soon be "*blood in the streets of San Francisco.*" But *within* cycle phases, there are often shorter-term periods of economic, ecological and political volatility which then pass. In 2016-2018, housing and stock markets soared higher and the high-tech boom strengthened again. (The economist has since postponed the arrival of blood on the streets until 1919 or 1920.)

Our smartest experts can't get it right, much less the thousands of glib, confident forecasts by utterly unqualified individuals reported on in the media every month. We can't even remember the mistakes of the recent past – one reason why we don't seem to be able to escape the curse of recurring cycles – much less foretell what's going to happen tomorrow. Which leads to the next point.

It is extremely difficult to predict when different parts of a cycle will begin or end. There is no rule regarding how long the different parts of a market cycle will last. Boom times, even periods of "irrational exuberance," can go on much longer than expected, or get second winds, with huge jumps in values. On the other hand, negative shocks can appear with startling suddenness out of nowhere, often triggered by unexpected economic or political events that hammer confidence, adversely affect a wide variety of market dominos, and then balloon into periods of decline and stagnation. These negative adjustments can be in the nature of a bubble popping, the slow deflation of a punctured tire, or some combination of the two.

Going back many decades, all the major Bay Area recessions have been tied to national or international economic crises. Considering the fundamental strengths of the local economy, absent a major natural disaster, it is unlikely that a major downturn would occur due simply to local issues. However, local issues can exacerbate a cycle: The 1989 earthquake intensified the effects of the national recession in the early 1990's; our greater exposure to dotcom businesses produced a spike up and down with the NASDAQ bubble & 2000-2001 crash; and our current, raging high-tech boom has poured fuel on our up-cycle during the current recovery.

All bubbles are ultimately based on irrational exuberance, runaway greed, criminal behavior, or all three mashed up together. Whether exemplified by junk bonds, stock market

hysteria, gorging on debt, a corporate Ponzi-scheme mentality, an abandonment of reasonable risk assessment, and/or incomprehensible and dishonest financial engineering, the bubble is relentlessly pumped bigger and tighter.

However, it should be noted that the 2008 crash was abnormal in its scale, and much greater than other downturns going back to the Great Depression. The 2005-2007 bubble was fueled by home buying and refinancing with exorbitant, unaffordable levels of debt, promoted by predatory lending practices such as deceptive teaser rates, no-down-payment loans and an abysmal decline in underwriting standards. The market adjustments of the early 1990's and early-2000's saw declines in Bay Area home values in the range of 10% to 11%, as compared to the terrible 2008 - 2011 declines of 20% to 60%. (Bay Area prices are now above their 2007 peaks.)

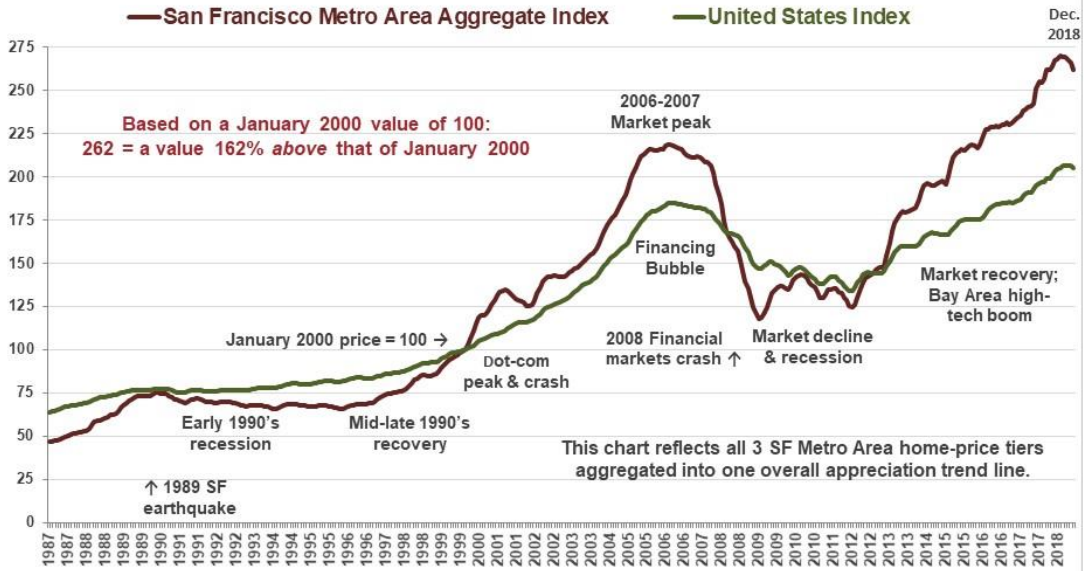
Whatever the phase of the cycle, many people think it will last forever. Going up: "The world is *different now*, profits don't matter, and there's no reason why the upward trend can't continue indefinitely." And when the market turns: "Homeownership has always been a terrible investment and the market will not recover for decades." But the economy mends, the population grows, people start families, inflation accumulates over the years, and the repressed demand of those who want to own their own homes builds up. In the early eighties, mid-nineties and in 2012, after about 4 years of a recessionary housing market, this repressed demand jumped back in – or "exploded" might be a better description – and home prices started to rise again. Then kept rising as consumer confidence returned; ultimately moving into over-confidence and irrational exuberance. The nature of cycles is to keep turning.

As long as one doesn't *have to* sell during a down cycle, Bay Area homeownership has almost always been a good or even spectacular investment (though admittedly if one *does* have to sell at the bottom of the market, the results can be painful). This is due to the ability to finance one's purchase (and refinance when rates drop), certain tax benefits, the gradual pay-off of the mortgage (the "forced savings" effect), inflation, and long-term demographic and appreciation trends.

The best way to overcome cycles is to buy a home *for the longer term*, one whose monthly cost is readily *affordable* for you now, ideally using a long-term, fixed-rate loan (refinancing to lower rates when that option opens), while keeping an adequate financial reserve for emergencies - and then resisting the urge to use your home as an ATM during times of significant appreciation. If one keeps to those rules, then it usually true, quoting a NYT editorial, "*Renting can make sense as a lifestyle choice... As a means to building wealth, however, there is no practical substitute for homeownership.*"

CoreLogic S&P Case-Shiller Home Price Index: Appreciation since 1987 United States vs. San Francisco Metro-Area (Overall, Aggregate Index)

Not seasonally adjusted

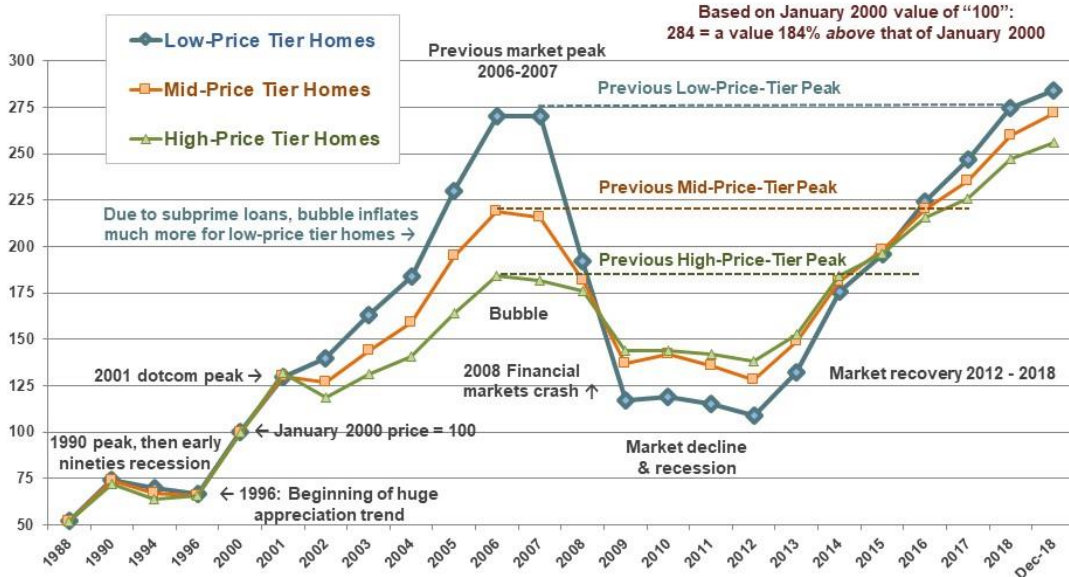


*The C-S Index 5-county San Francisco Metro Statistical Area includes San Francisco, Marin, San Mateo, Alameda and Contra Costa counties. The Index is published 2 months after the month specified and reflects a 3-month rolling average. The chart reflects all price segments in the metro area, and San Francisco County is only a small percentage of overall metro area house sales. <https://my.spindices.com/index-family/real-estate/sp-corelogic-case-shiller>

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CoreLogic S&P Case-Shiller Home Price Index 1988 – Present, All Price Tiers, House Prices San Francisco 5-County Metro Area* – January Data Points

Case-Shiller divides market into thirds by price and number of sales: low, mid and high price



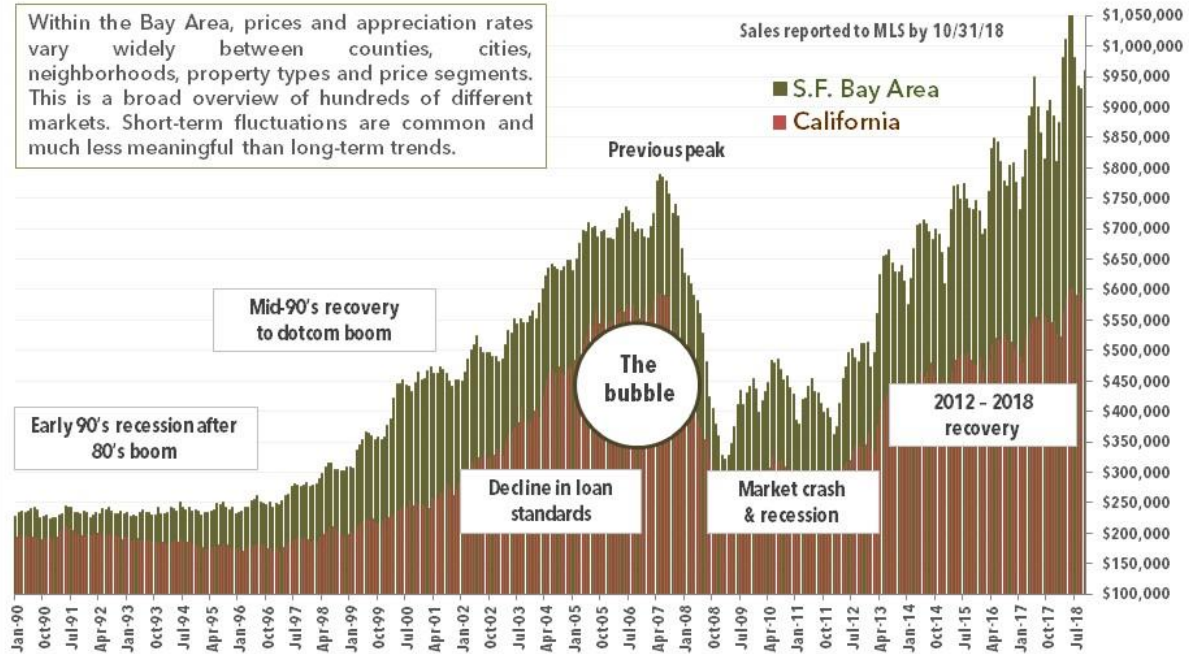
*The C-S Index 5-county San Francisco Metro Statistical Area includes San Francisco, Marin, San Mateo, Alameda and Contra Costa counties. The Index is published 2 months after the month specified and reflects a 3-month rolling average. Graph not proportional from 1988-2000. January data points except for last entry as noted. All numbers approximate and subject to revision. <https://my.spindices.com/index-family/real-estate/sp-corelogic-case-shiller>

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Bay Area Home Price Appreciation Median House Sales Prices, 1990 - Present

Median sales prices for existing houses, 9 Bay Area Counties, per CA Association of Realtors.

Within the Bay Area, prices and appreciation rates vary widely between counties, cities, neighborhoods, property types and price segments. This is a broad overview of hundreds of different markets. Short-term fluctuations are common and much less meaningful than long-term trends.



Monthly median sales prices for "existing" houses since 1990 by month, per CA Association of Realtors. May contain errors and subject to revision. All numbers are approximate.

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Further information on the CoreLogic S&P Case-Shiller Index referenced in this report:
<https://us.spindices.com/index-family/real-estate/sp-corelogic-case-shiller>

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