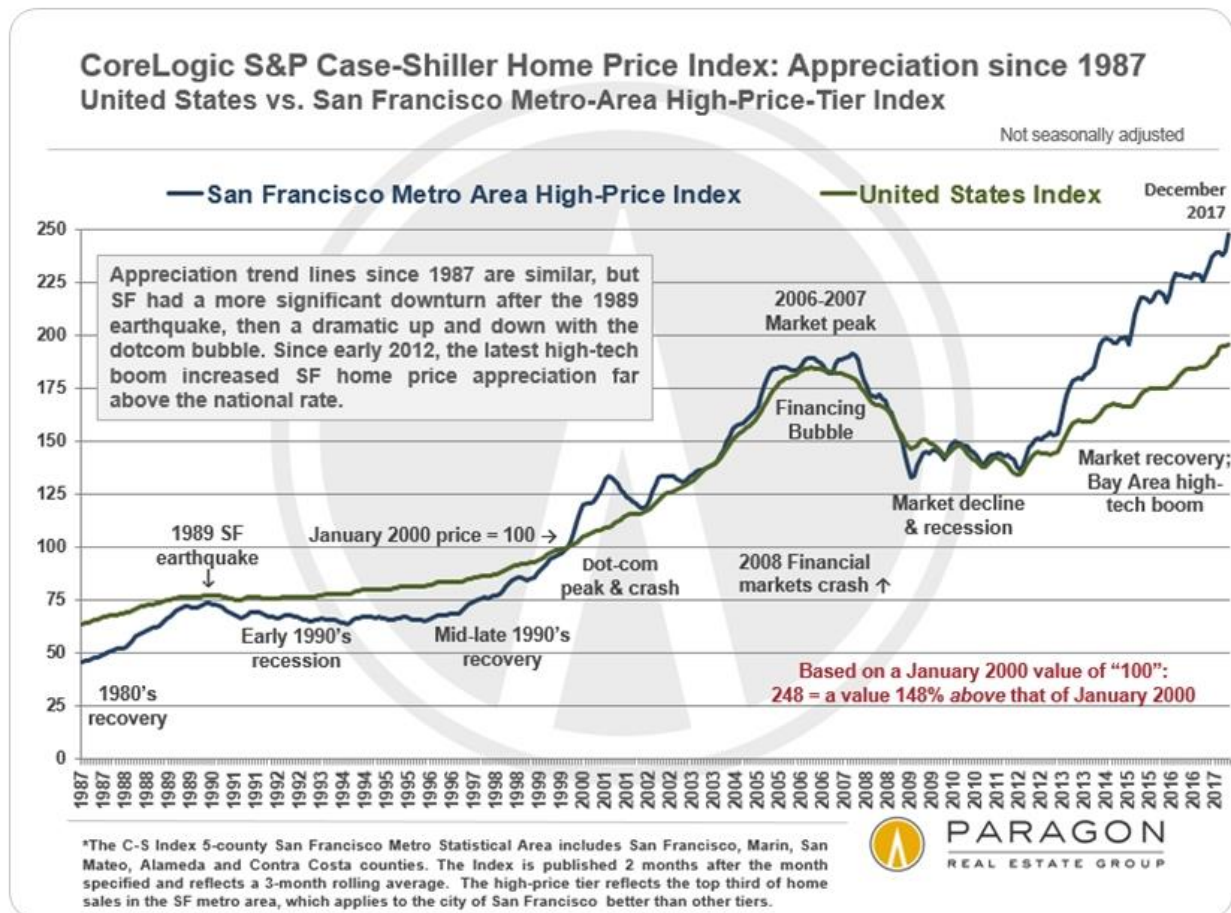


Bay Area Real Estate Market Cycles

by Paragon Real Estate Group



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.

Financial-market cycles have been around for hundreds of years, from the 1600's Dutch tulip mania through today's 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.

It is extremely difficult to predict when different parts of a cycle will begin or end in order to time one's purchase, especially since homeownership is so much more than just a financial investment. 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, 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 high-tech boom has poured fuel on our up-cycle during the current recovery.

All bubbles are ultimately based on irrational exuberance, criminal behavior or both, whether exemplified by junk bonds, stock market hysteria, untenable levels of debt, or incomprehensible or dishonest financial engineering. 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%. (However, prices are now *above* their 2007 peaks.)

Whatever the phase of the cycle, people think it will last forever. Going up: "The world is different now 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" (or even "in our lifetimes" as one Nobel-Prize-winning economist said in 2012). 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 "explodes" might be a better description – and home prices started to rise again.

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), tax benefits, the gradual pay-off of the mortgage (the "forced savings" effect), inflation and long-term 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, ideally using a long-term, fixed-rate loan.** 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."

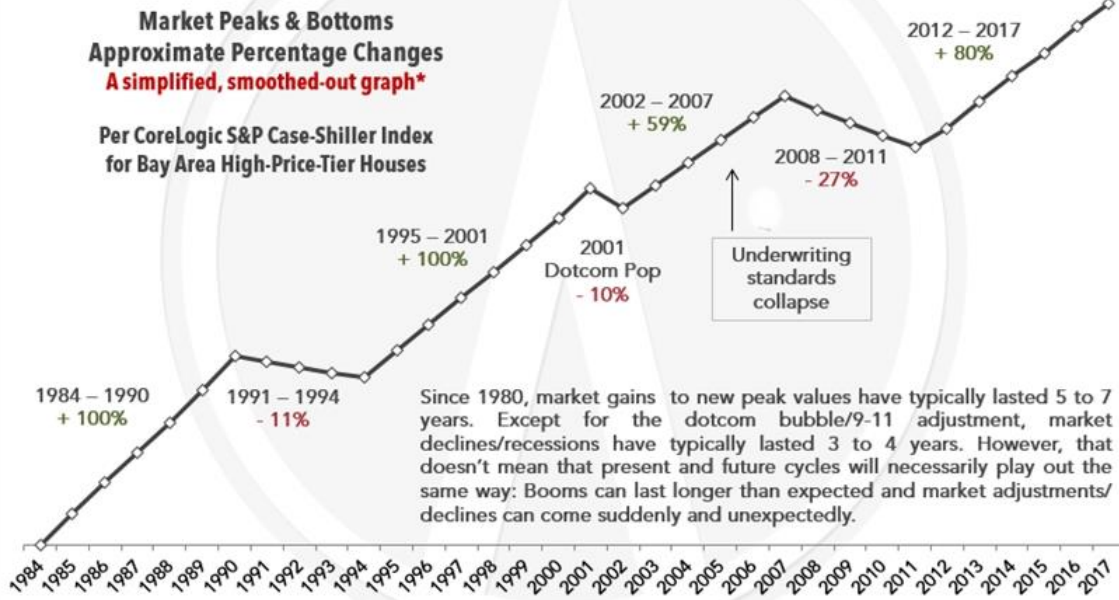
Greater detail is available in our full report on real estate cycles: <https://bit.ly/2JhBwy2>

All Paragon reports can be found at https://www.paragon-re.com/market_updates

San Francisco Bay Area Real Estate Market Cycles

Home Price Increases & Declines, by Percentage, 1984 - Present

Approximate % value changes based upon Case-Shiller High-Tier Home-Price Index for 5-county metro area.



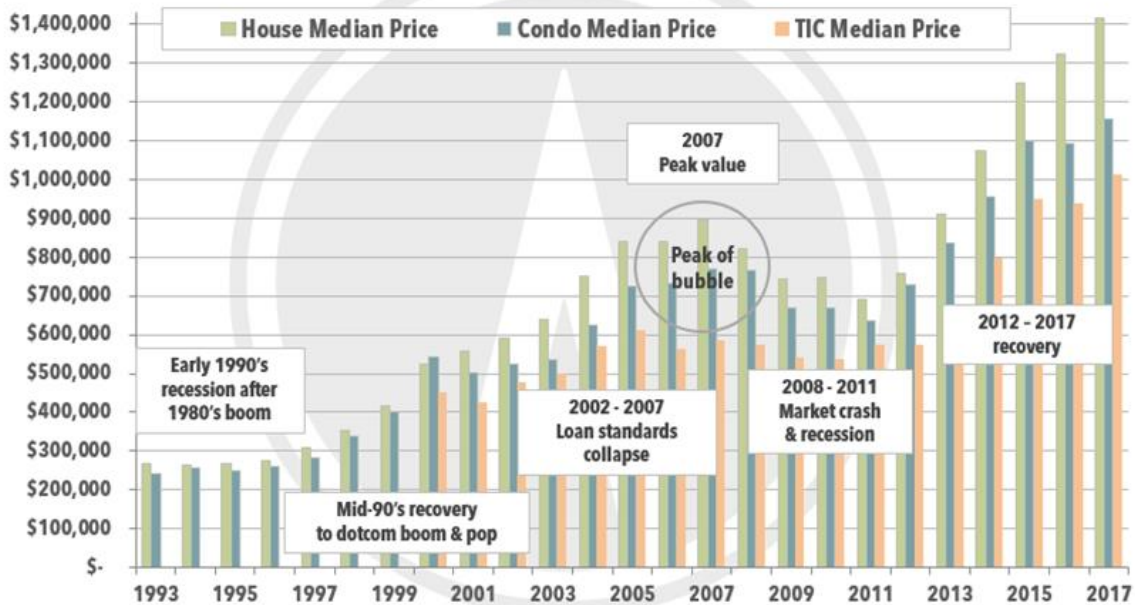
* The years between market peaks and bottoms are not accurately represented, but entered as straight lines between high and low points to illustrate percentage changes over time. Chart updated through December 2017 per Index report released at the end of February 2018.



San Francisco Home Price Appreciation

Median Sales Prices by Year, 1993 - Present

Sales reported to MLS



Median sales price is that price at which half the sales occurred for more and half for less. It can be and often is affected by other market factors besides changes in fair market value. Data from sources deemed reliable but may contain errors and subject to revision.

