

## **S&P/Case-Shiller Home Price Indices 2009, A Year In Review**

The U.S. residential real estate market was a leading topic in the news throughout 2009. The year was particularly notable for the sign of a potential turnaround in the housing market for the first time in three years. Home sales, housing starts, and home price appreciation all hit, or were close to, record lows at the beginning of 2009, but all three indicators started to show some modest signs of recovery as we entered the summer. Inventories of unsold homes, as measured in both units and months' supply, have moderated since peaking in 2008. Mortgage delinquency rates and new foreclosures, however, continued to increase in both the prime and sub-prime loan markets and the national unemployment rate remains high, which creates some uncertainty about the strength or duration of any recovery.

The S&P/Case-Shiller Home Price Indices<sup>1</sup> remained a primary topic of discussion throughout the year. At both the national and regional levels, the indices clearly illustrate the historic declines in home prices beginning in mid-2006, and the modest recovery that began in the early spring of 2009.

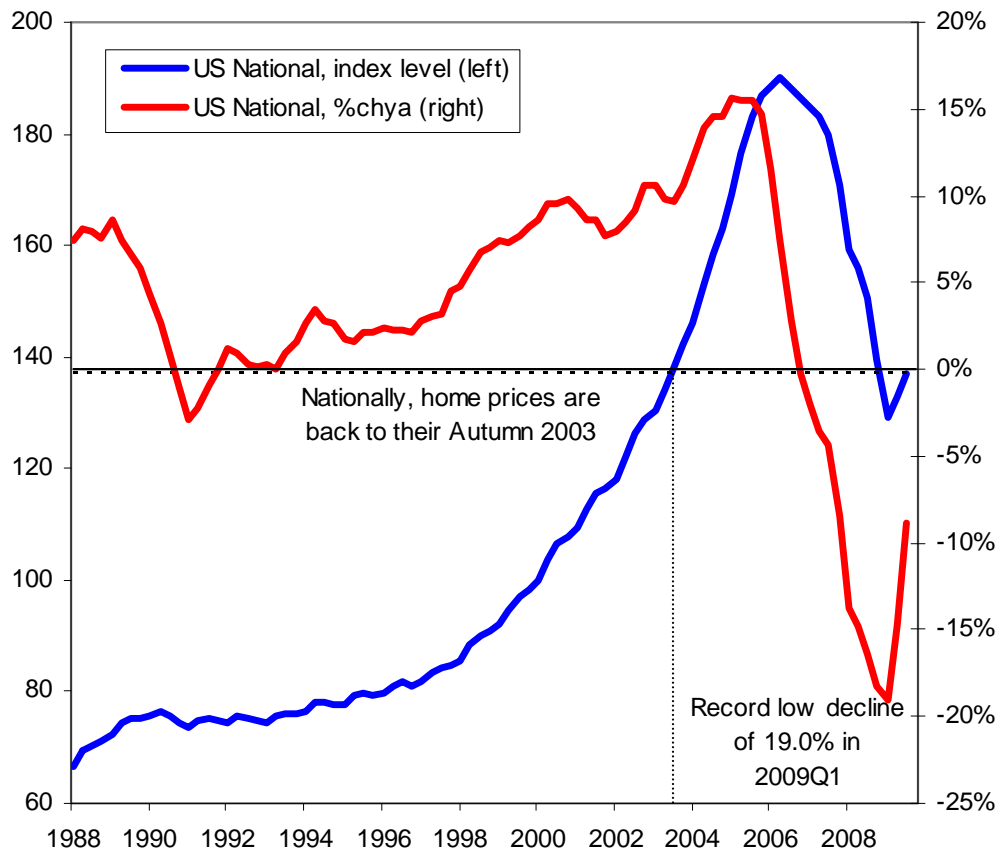
The S&P/Case-Shiller Home Price Indices seek to accurately track the price path of single-family homes located in 20 metropolitan areas and three aggregated composites. The S&P/Case-Shiller National U.S. Home Price Index is a quarterly composite of single-family home price indices for the nine U.S. Census divisions (see Chart 1). The S&P/Case-Shiller 10-City Composite is a value-weighted average of 10 metro area indices and the S&P/Case-Shiller 20-City Composite is a value-weighted average of 20 metro area indices. While the three composite indices cover different portions of the market, with the national being the broadest, they track each other very closely and tell the same story: nationally, home prices appreciated in value over the decade spanning 1996-2006 (often at double-digit rates), peaked in 2006, reached record rates of decline in early 2009, and have shown some modest recovery with data reported through October 2009.

<sup>1</sup> Case-Shiller® and Case-Shiller Indexes® are registered trademarks of Fiserv, Inc.

**Table 1**  
**S&P/Case-Shiller Home Price Indices**

	10-City	20-City	National
<b>Peak date</b>	June 2006	July 2006	2006Q2
<b>Peak level</b>	226.29	206.52	189.93
<b>Recent trough date</b>	April 2009	April 2009	2009Q1
<b>Peak-to-trough decline</b>	-33.5%	-32.6%	-32.0%
<b>Peak-to-latest data decline</b>	-29.8%	-29.0%	-27.8%
<b>Appreciation since trough</b>	+5.6%	+5.3%	+6.3%

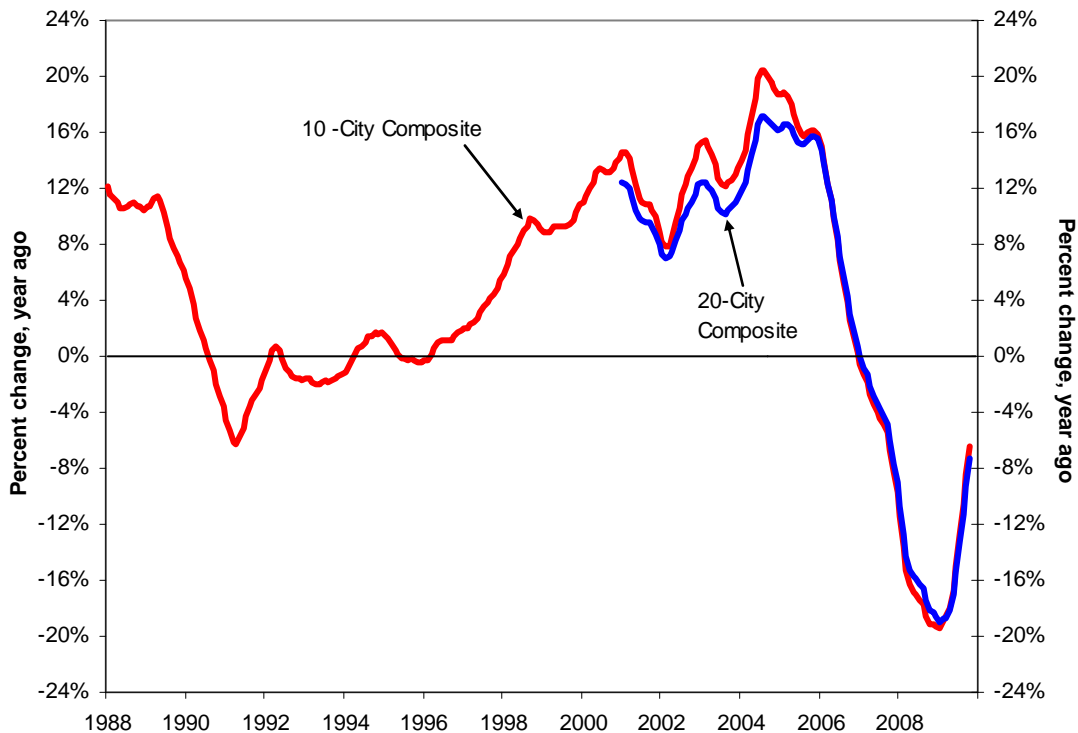
**Chart 1**  
**S&P/Case-Shiller U.S. National Home Price Index**



Sources: S&P Indices and Fiserv. Data through 2009Q3.

Chart 2 depicts the annual returns of the 10-City and 20-City Composite Home Price Indices. With data through October 2009, the 10-City and 20-City Composites reported annual declines of 6.4% and 7.3%, respectively. These are improvements from their record declines of 19.4% and 19.0%, respectively, set in January 2009.

**Chart 2**  
**S&P/Case-Shiller Home Price Indices**  
**(Annual percent change)**



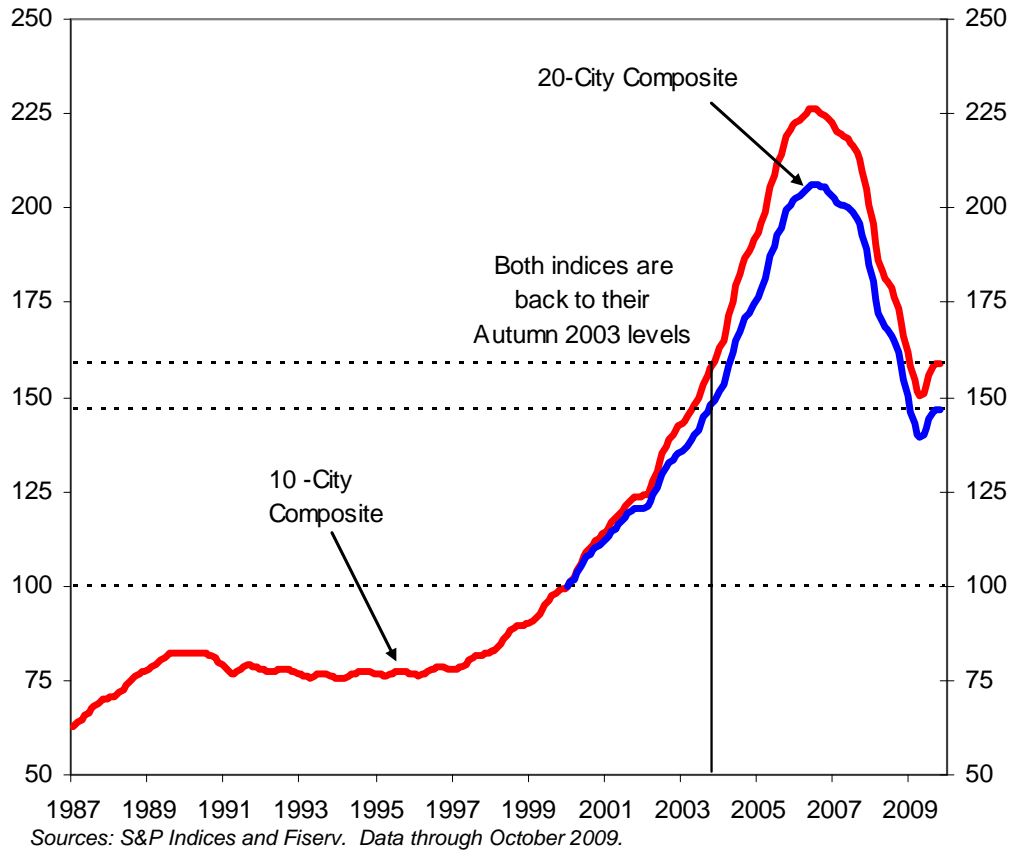
Sources: S&P Indices and Fiserv. Data through October 2009.

At the regional level, the downturn in home prices began in late 2005 when home prices peaked in the Boston, Detroit, and San Diego markets. At the national level, the peak did not occur until the summer of 2006. Beginning in January 2007, national home prices entered their current three-year decline, as measured by the percent change from the prior year. According to the S&P/Case-Shiller Indices, the rate of annual decline posted the record low in its 22-year history at the beginning of 2009. The S&P/Case-Shiller National Home Price Index posted a record low rate of -19.0% in the first quarter of 2009. As stated above, the 10-City and the 20-City Composites posted their record declines in January 2009 at -19.4% and -19.0%, respectively.

Chart 3 illustrates how the declines have affected the level of wealth of U.S. homeowners. As of October 2009, the index levels for both composites were back to their autumn 2003 levels. Any gains in home prices during the 2004-2006 run-up were given back in the following three years.

The S&P/Case-Shiller Home Price Indices are based at January 2000 = 100. This base value can be used to easily illustrate the extent to which home values have appreciated since that time. At an average national level, home prices are still about 50-60% above where they were in 2000; the 10-City and 20-City levels were 158.82 and 146.58, respectively, as of October 2009 (see Chart 3).

**Chart 3**  
**S&P/Case-Shiller Home Price Indices**  
**(Index Levels)**

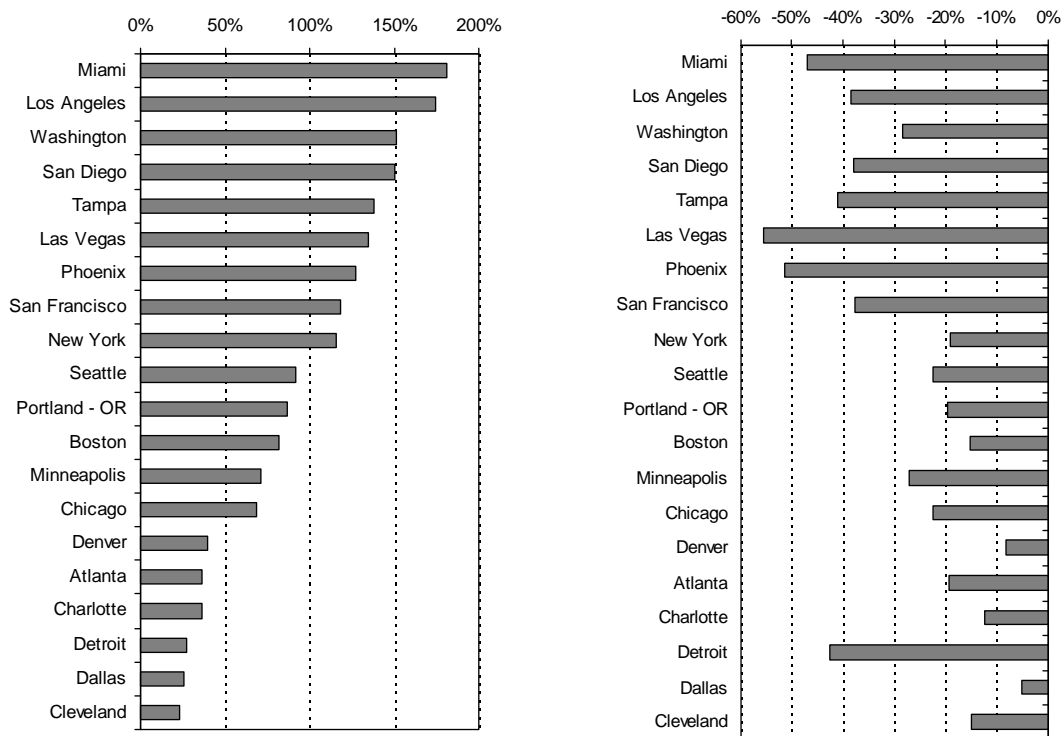


## Location Does Matter

There is no doubt that the three-year pullback in home prices has been a national trend. Indeed, every one of the 20 metro areas we follow in the S&P/Case-Shiller Home Price Indices is still declining on an annual basis. Since the markets began to fall in mid-2005, however, there have been some large differences in the magnitude of decline between the regions.

Chart 4 (below on the left) shows the gain in home prices from January 2000 to each respective MSA's peak (note: the peak dates differ by MSA). Chart 5 (on the right) shows the home price decline in each MSA from its relative peak through October 2009. The MSAs are listed in the same order on both charts.

**Charts 4 & 5**  
**S&P/Case-Shiller Home Price Indices**  
**(Percent Changes)**



Sources: S&P Indices and Fiserv. Data through October 2009.

Since 2000, the area traditionally defined as the Sun Belt – Arizona, California, Florida and Nevada – has experienced the largest run-up in prices and, subsequently, has been hit the hardest in the downturn. While the declines in these markets are quite large, the increases in prices during the 2004-2006 period were equally dramatic. In 2004, Las Vegas witnessed a peak annual growth rate of +53.2%; Phoenix was not far behind with +49.3%. Los Angeles, Miami, San Diego, San Francisco and Tampa all registered peak annual growth rates above +30% during that time as well. As of October 2009, Las Vegas has seen a decline of 55.4% from its peak. Phoenix is not far behind with -51.3%, followed by Miami's -46.9% and Tampa's -41.1%.

Although they never witnessed the extreme growth rates of the Sun Belt states, many of the mid-western markets have been severely impacted by the housing market recession. Detroit, in particular, is down 42.5% from its peak and Minneapolis has declined 27.2%.

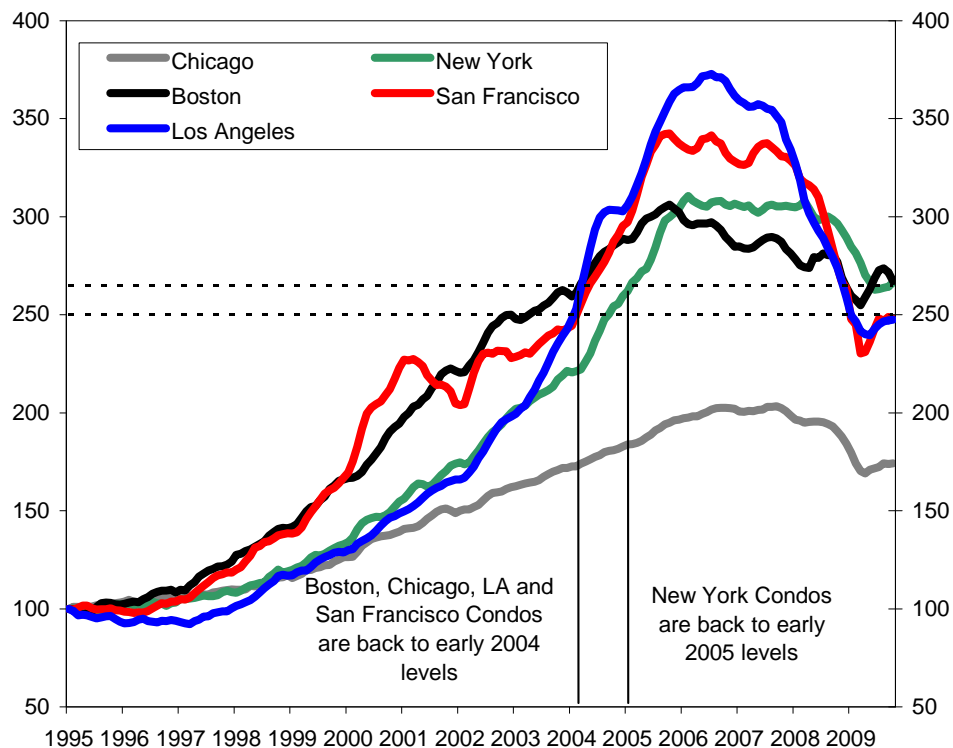
While also in annual decline, other regions have fared far better on a relative basis. Los Angeles, New York and Washington DC are three metro areas that, while having experienced fairly healthy growth patterns during the 2004-2006 period, have not given back nearly as much as the MSAs listed above. Washington DC's October 2009 index level was the highest at 179.71, indicating that home prices are still about 80% above their 2000 levels. New York's was not far behind at 175.01, or about 75% above 2000 levels; and Los Angeles posted an October 2009 value of 168.43, or +68.4% appreciation.

Markets such as Boston, Charlotte, Cleveland, Dallas and Denver never saw the large double-digit price increases in the 2004-2006 period, but their relative rates of decline have also remained comparatively benign. As of the October 2009 report, Denver's rate of decline is close to flat, at -0.1%, and Dallas is not far behind, down only 0.6% on an annual basis. At 73.07, Detroit is the only market currently below its 2000 level, down almost 27%.

## Condominium Prices

In November 2008, Standard & Poor's launched indices designed to track condominium prices in five major metropolitan areas – Boston, Chicago, Los Angeles, New York and San Francisco. Prices for condominiums often behave differently from those for single-family homes and, as in the case of home prices, also vary across markets.

**Chart 6**  
**S&P/Case-Shiller Condo Indices**



Sources: S&P Indices and Fiserv. Data through October 2009.

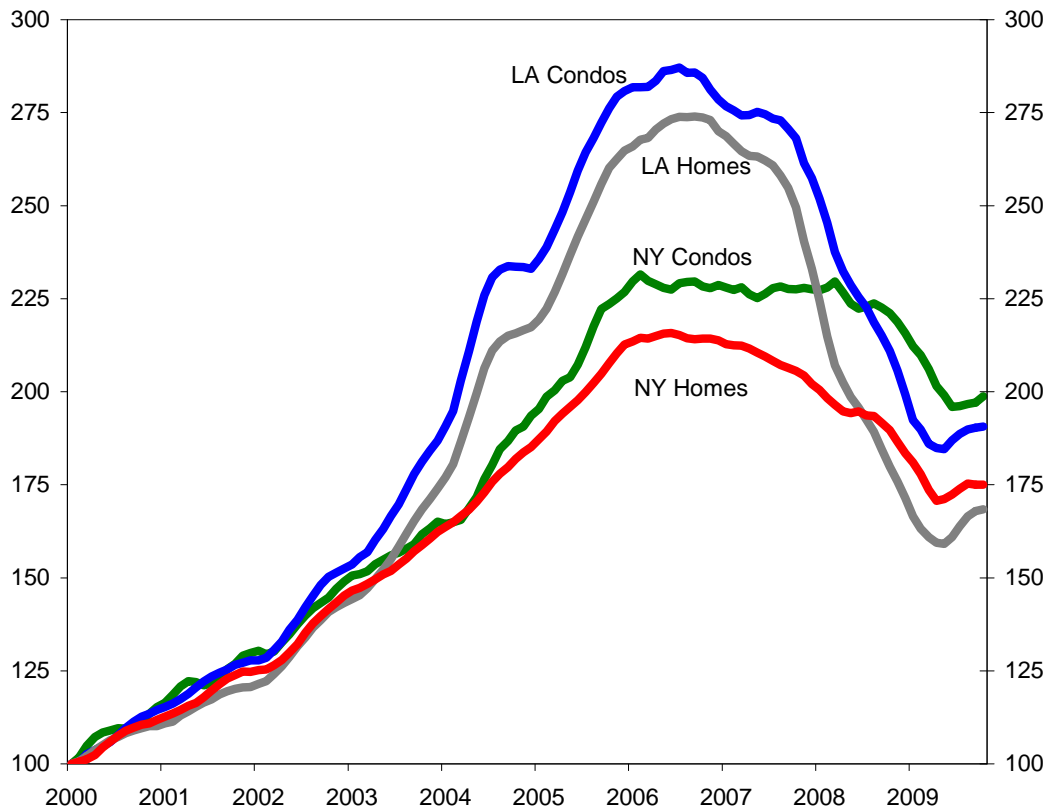
As Chart 6 shows, the New York condominium market has, so far, fared better in the housing downturn compared to Boston, Chicago, Los Angeles and San Francisco in terms of preserving price appreciation. The latter four are now back to their early-2004 levels, whereas New York is only back to early-2005 levels. However, as of October 2009, New York is the one market that is still close to its recent low in terms of annual rates of decline at -10.1%, which is currently the lowest rate of all the markets. The other four markets have shown improvement in this statistic since posting their relative lows in early 2009.

Table 2 illustrates some of the differences between the single-family home and condo markets. At this time last year, the annual declines in single-family homes dramatically outpaced condominiums in all five metro areas. Within the past 12 months, however, it appears that many condo markets are now seeing deterioration in values that are close to or outpacing those of single-family homes; the annual rates of decline for condos are larger than those of homes in all markets except Chicago.

**Table 2**  
**S&P/Case-Shiller Home Price vs. Condo Indices**

Metropolitan Area	Oct/Sept (%)	Oct/Sept (%)	1-Year Change (%)	1-Year Change (%)
	Homes	Condos	Homes	Condos
Boston	-0.6%	-1.7%	-2.8%	-3.5%
Chicago	-1.0%	0.2%	-10.1%	-8.5%
Los Angeles	0.3%	0.1%	-6.3%	-9.7%
New York	0.0%	0.9%	-7.7%	-10.1%
San Francisco	1.2%	-0.3%	-2.6%	-9.7%

**Chart 7**  
**S&P/Case-Shiller Home Prices and Condo Indices**  
**(Los Angeles vs. New York)**



Sources: S&P Indices and Fiserv. Data through October 2009.

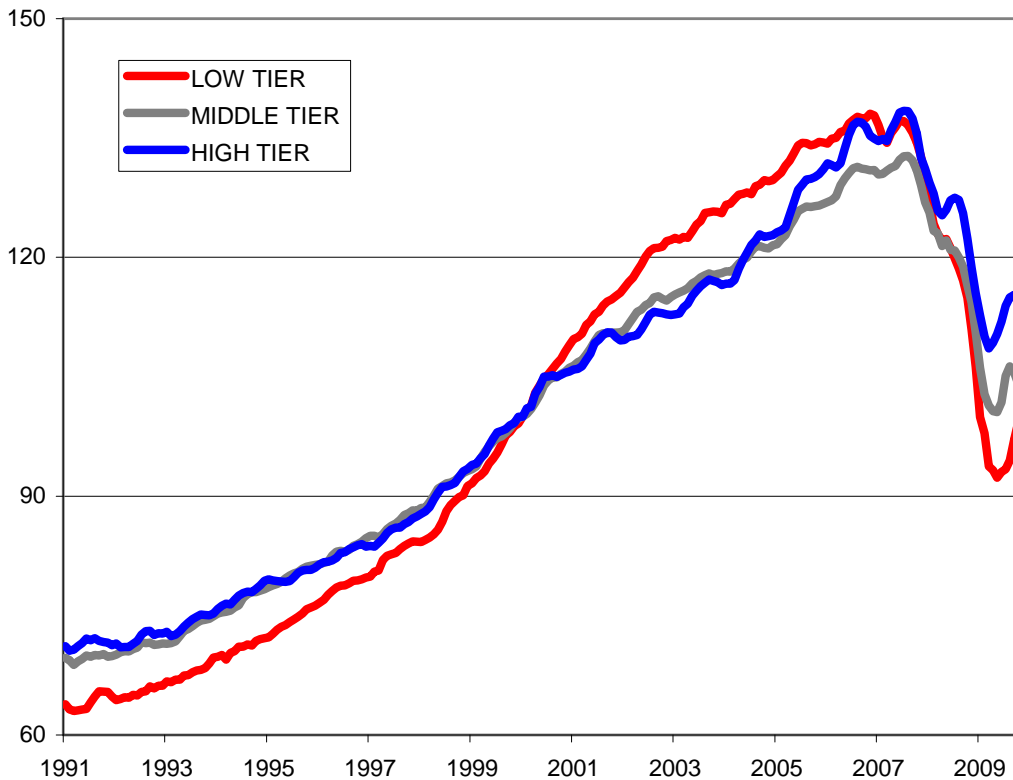
Chart 7 illustrates some of the regional differences across markets using Los Angeles and New York as examples. In Los Angeles, condominiums closely followed the downturn in single-family home prices. Both markets peaked in mid-2006 and registered some sharp annual declines, particularly in late-2008/early-2009. At their lows, home prices in LA were down 27.9% on an annual basis and condos were not far behind, down 23.6%. While New York's condo market also peaked in mid-2006, it remained relatively stable for the three following years (as illustrated by the relatively flat green line during the 2006-2009 period above). The NY condo market, however, has recently caught up to its single-family home counterpart, posting its lowest annual rate of decline at 12.1% in August 2009, versus the single-family home low of -12.4% in April 2009. As of October, NY condo prices are registering a 10.1% annual decline, which is lower than LA's condo market and both NY and LA's single-family home markets. In spite of this recent downturn, however, the NY condo market has so far retained more of its value since January 2000. The October 2009 index level was 198.77, close to twice the average value of condos in 2000. This can be seen by the rightmost level of the green line in Chart 7 versus those lines of the other three markets in the chart.

## Tiered Prices

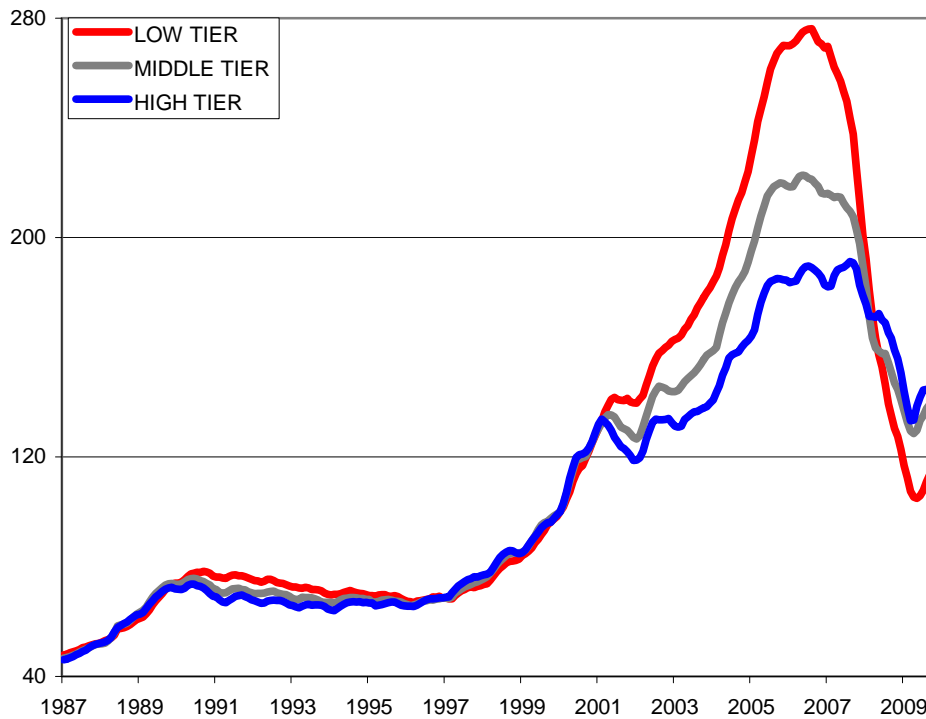
S&P Indices publishes supplemental tiered price data for 17 of the metro areas it covers. Tier breakpoints – price levels that divide recent sale prices in each market into thirds – are calculated for the period covered by the latest, most up-to-date index points. A closer look at these data shows, as was the case with aggregate home prices, that MSAs did not behave the same across and within tiers.

Charts 8 and 9 highlight some differences using Atlanta and San Francisco as examples. On a relative basis, all three tiers closely followed each other in Atlanta, at least through 2008; whereas in San Francisco, low-tiered homes were the most responsible for the run-up and subsequent contraction in home prices. It should be noted, however, that throughout much of 2009, the low-tiered homes underperformed the others in both markets. In Atlanta, low-tiered home prices are now below their January 2000 levels.

**Chart 8**  
**S&P/Case-Shiller Atlanta Tiered Price Indices**



**Chart 9**  
**S&P/Case-Shiller San Francisco Tiered Price Indices**



Sources: S&P Indices and Fiserv. Data through October 2009.

It has been frequently cited that the low-tiered markets are where many of the sub-prime loans were made. Table 3 and Charts 10 & 11 show mortgage delinquency and foreclosure rates. While all types of homes and mortgages have been affected by the recent housing crisis, the absolute percentage of homes that are either behind payment or have entered foreclosure is much higher for sub-prime loans. It has become apparent in 2009, however, that even homes with prime mortgages were not immune to the housing crisis. Within that sector, both the rate of delinquencies and the percentage of homes entering foreclosure hit new highs in 2009.

S&P CDS U.S. High-Yield Index

**Table 3**  
**Mortgage Delinquency and Foreclosure Rates (%)**

	2009			2008				2007	
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4	Q3
<b>Delinquency Rates</b>									
<b>All Loans</b>	9.64	9.24	9.12	7.88	6.99	6.41	6.35	5.82	5.59
<b>Prime</b>	6.84	6.41	6.06	5.06	4.34	3.93	3.71	3.24	3.12
<b>Sub-prime Loans</b>	26.42	25.35	24.95	21.88	20.03	18.67	18.79	17.31	16.31
<b>Foreclosures Started in Quarter</b>									
<b>All Loans</b>	1.42	1.47	1.34	1.01	1.07	1.19	0.99	0.83	0.78
<b>Prime Loans</b>	1.12	1.07	0.91	0.63	0.61	0.67	0.54	0.41	0.37
<b>Sub-prime Loans</b>	3.70	4.49	4.55	3.72	4.13	4.70	4.06	3.44	3.12

**Chart 10**

### Mortgage Delinquency Rates (%)

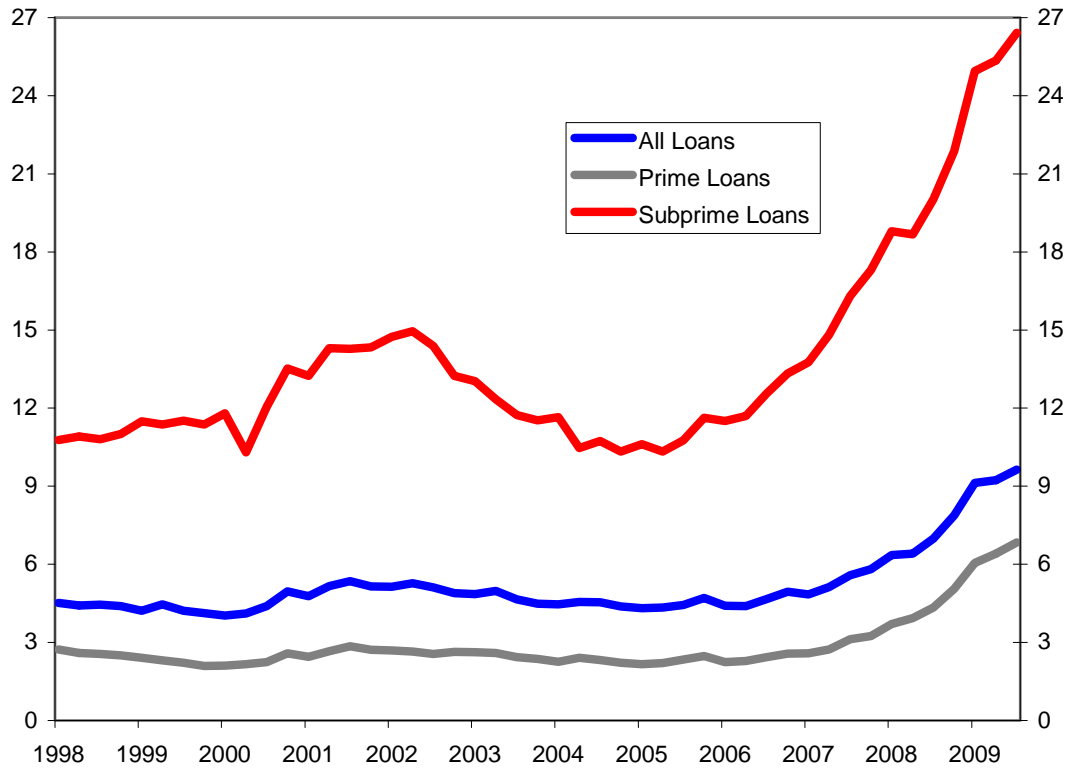
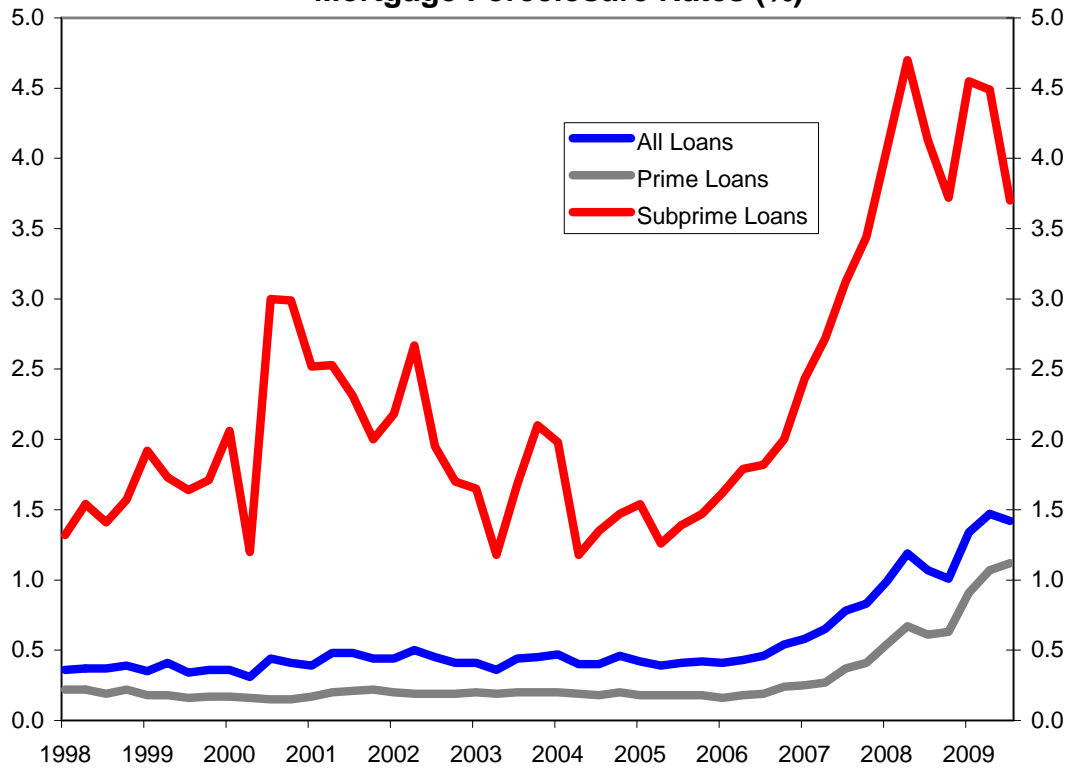


Chart 11

### Mortgage Foreclosure Rates (%)



Sources: Mortgage Bankers Association

## Seasonality

In November 2008, S&P Indices launched seasonally-adjusted versions of the S&P/Case-Shiller Indices. Single-family home prices (particularly the month-to-month percent changes) follow a seasonal pattern since they are largely occupied by families with children. Home buying patterns typically revolve around the school year, with the belief that new home buyers want to be settled in their homes when the school year begins each September, thus boosting relative demand for home purchases in the spring/summer months.

Table 4 breaks out the seasonal patterns of the 10-City and 20-City Composite Indices. There is seasonality to the data, which can be most readily seen in the difference in the monthly percent changes between the seasonally adjusted (SA) and the not-seasonally adjusted (NSA) data. For both Composites during the months of April, May, June, and July, the monthly percent changes for the NSA data are, on average, 0.5% higher (more positive) than their SA counterparts, meaning that in the buying season there is a natural increase of about 0.5% in prices versus the other months, likely due to the increase in relative demand. The opposite is true for the months of November through February, where the monthly percent changes for the NSA data are, on average, 0.5% lower (less positive) than their SA counterparts. It should be noted that this difference is larger than what we reported last year when the difference between the same months was about 0.4%. This could be the result of the shift in mix among sales of homes in foreclosure during the past year (versus the historic average). Such a shift in the mix of a traditionally non-seasonal variable could skew the pattern from its historic trend. In other words, since foreclosures are a market-driven rather than a seasonal issue, any increase/decrease in the relative mix of foreclosed homes in sales data could have magnified traditional seasonal patterns seen in home prices.

**Table 4**  
**S&P/Case-Shiller Home Price Indices**  
**Seasonal Comparison**

	Monthly Percent Change				Differences	
	Composite-10, SA	Composite-10, NSA	Composite-20, SA	Composite-20, NSA	Composite-10	Composite-20
Nov-08	-1.9%	-2.2%	-1.9%	-2.3%	-0.3%	-0.3%
Dec-08	-1.8%	-2.3%	-2.0%	-2.6%	-0.5%	-0.6%
Jan-09	-1.9%	-2.5%	-2.1%	-2.8%	-0.6%	-0.7%
Feb-09	-1.6%	-2.1%	-1.7%	-2.2%	-0.5%	-0.5%
Mar-09	-2.0%	-2.0%	-2.1%	-2.1%	0.0%	0.0%
Apr-09	-0.9%	-0.7%	-0.8%	-0.6%	0.3%	0.3%
May-09	-0.2%	0.5%	-0.1%	0.5%	0.6%	0.7%
Jun-09	0.7%	1.4%	0.7%	1.4%	0.7%	0.8%
Jul-09	1.1%	1.7%	1.0%	1.6%	0.6%	0.6%
Aug-09	1.3%	1.4%	1.2%	1.3%	0.1%	0.0%
Sep-09	0.3%	0.5%	0.2%	0.4%	0.2%	0.2%
Oct-09	0.4%	0.0%	0.4%	0.0%	-0.3%	-0.4%

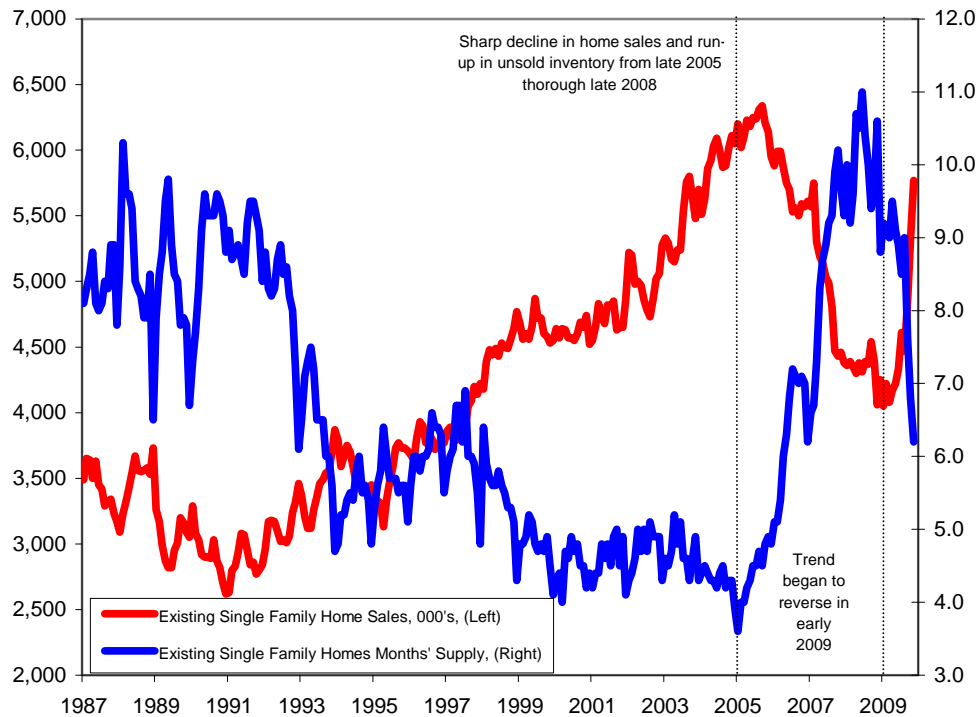
Sources: S&P Indices and Fiserv. Data through October 2009.

## What are the other data telling us?

The U.S. residential real estate market has been a major news item for most of the past three years, and will likely remain in focus in 2010, as homeowners, homebuyers and other market participants continue to wait for the definitive sign of a true recovery.

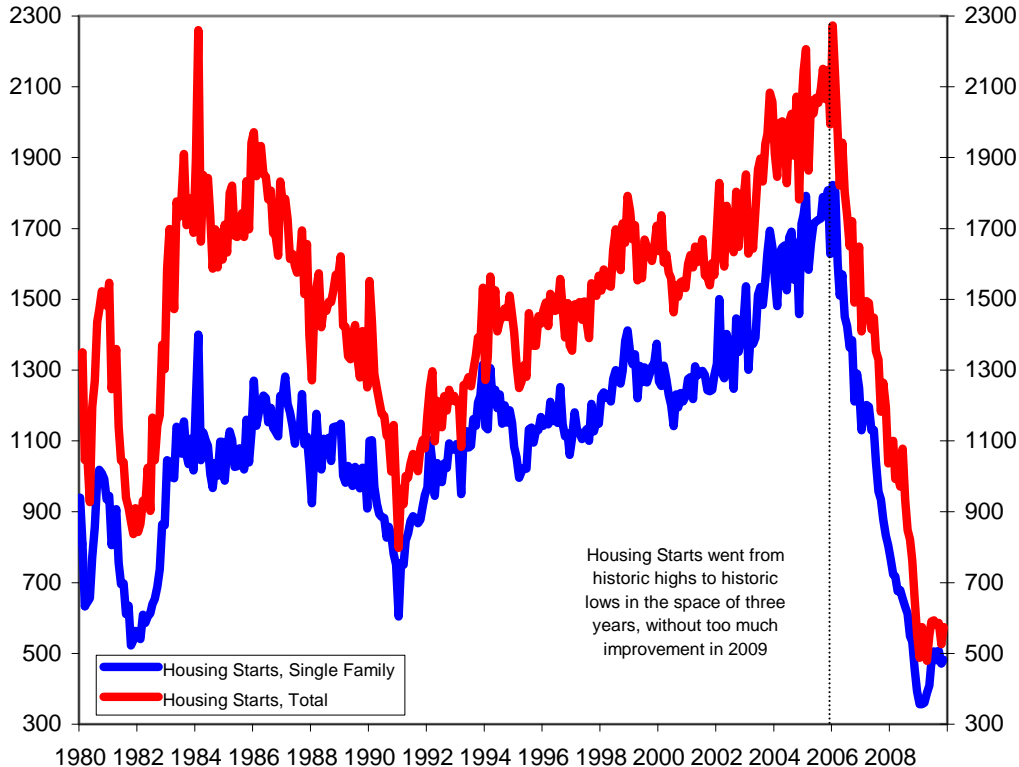
This paper summarized the 2009 housing market as seen through the eyes of the S&P/Case-Shiller Home Prices Indices. Charts 12 and 13 tell the story from the sales and construction perspective. The story is the same – the housing market has been in a three-year recession and the turnaround has not yet completely materialized although there were some signs of at least a bottoming in 2009. Existing home sales were at 10-year lows and the number of months needed to work off the current inventory was at a 20-year high at the beginning of 2009. During the course of the year, however, both numbers have shown some improvement, particularly in the autumn months. Housing starts, however, have not seen the same improvement. As of the end of 2009, they are still registering lower levels than they have in at least 30 years, below the lows of the early '80s and early '90s recessions.

**Chart 12**  
**Existing Home Sales**



Source: National Association of Realtors, SAAR. Data through November 2009.

**Chart 13**  
**Housing Starts**



Source: U.S. Census Bureau, SAAR. Data through November 2008.

This paper was produced and published by S&P Indices, which is in the business of producing and managing indices. We do not forecast our data.

Standard & Poor's chief economist, David Wyss, has provided us with his forecast for the residential housing market. His team expects housing sales and starts to drop over the winter, but to remain well above their early 2009 lows, and to recover in the spring. He expects 750,000 total housing starts this year, up from the postwar low of 560,000 in 2009. Starts are expected to rise to 1.18 million in 2011. Prices are expected to fall over the winter months by about 8%, bringing the peak-to-trough decline in the S&P/Case-Shiller 20-City Composite to 34%; the index is currently down 29% from its July 2006 peak. November data will be available with January's release on January 26, 2010, and full year 2009 data will be available with the February 23<sup>rd</sup> release.

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