

Home Prices: Many Measures, One Story

One of the most carefully watched economic trends these days is the direction of housing prices. The housing market cooled abruptly after several years of white-hot performance, and slowing sales and elevated inventories threaten to undermine property values and perhaps other sectors of the economy as well. In light of this broad potential impact, some analysts note that different indicators appear to paint an inconsistent picture of price trends. Each of these measures has its own advantages and disadvantages, though, and a deeper look into the numbers reveals a clear message: home price appreciation has weakened sharply, but with significant differences across regions and metro markets.

Some reports give a more timely gauge of near-term price trends. The first news on housing prices comes from the sales prices of new and existing homes, published a few weeks after the end of each month by the Census Bureau and the National Association of Realtors, respectively. The median sales price for a new home fell 0.9 percent in May from a year earlier, while the median price of an existing home was down 2.1 percent. A drawback to each of these reports, however, is that they are highly vulnerable to a shift in the mix of homes sold. In some months, for example, reported prices may rise or fall not because the values of any specific homes changed, but rather because there were a greater number of homes sold in higher-priced or lower-priced markets.

Other reports overcome this problem by focusing on repeated sales transactions for the same property, thus yielding a more apples-to-apples price comparison. Some include refinancing transactions, and thus may be slow to capture turning points, as appraisal prices tend to lag the market. Freddie Mac's purchase-only Conventional Mortgage Home Price Index (CMHPI) matches home-purchase transactions on the same properties over time using data from loans funded by either Freddie Mac or Fannie Mae; the Office of Federal Housing Enterprise Oversight (OFHEO) publishes a similar index based on the same underlying transactions. In contrast to the new and existing home sales measures, these repeat-sales indexes show prices in the first quarter up slightly from a year earlier, with the CMHPI posting a gain of 2.8 percent. While avoiding problems from shifts in the mix of home sales, these indexes exclude properties financed with mortgages above the loan-purchase limit for Freddie Mac and Fannie Mae, and like all measures based on prices of existing homes, do not capture changes in the value of new construction or the effect of additions and renovations.

The S&P/Case-Shiller® U.S. National Home Price Index is a repeat-sales index that expands coverage to homes purchased with jumbo loans, government-insured loans, or homes purchased without any mortgage financing. Its geographic coverage is a bit more limited, however, with a few states excluded due to lack of sales price data. In contrast to the CMHPI, this measure reported a 1.4 percent decline in national housing prices in the first quarter from a year earlier. The difference between the Case-Shiller index and the CMHPI may reflect, in part, trends in top-end housing markets that diverge from those financed with conventional conforming loans, as well as a heavier weighting of higher-priced regions in the Case-Shiller measure.

The differences between the various house price measures, though, should not overshadow the similarities. All show that national price growth has shifted down from the double-digit gains of 2004-2005 to something near zero, with several markets down from a year ago. Regional disparities have been magnified, with the higher-priced markets on the coasts that enjoyed the most rapid appreciation in the boom years now suffering declines. Despite the recent softening, however, property values in most areas still remain well above where they were two to three years ago. While a steady job market and growing national economy may help limit the downside risks to housing prices, several risks—the elevated levels of homes for sale, recent increases in mortgage rates, and rising foreclosures of subprime borrowers—point to continued weakness in the months ahead.

Details

- *Real GDP growth.* The final reading for economic growth in the first quarter came in at 0.7%, a slight increase from the preliminary value reflecting less of a drag coming from net exports. Although we still expect the economy to be stronger in the second half of the year than in the first, we lowered our estimate for growth in real GDP in the second half to 2.9% from 3.1% in our June forecast.
- *Consumer price inflation.* Gasoline prices have moderated a bit recently, and as a result we lowered our estimate of inflation as measured by the CPI to 5% for the second quarter. Energy prices are expected to remain volatile through the summer, but with other inflation indicators contained, our forecast for CPI inflation in the second half of 2007 is 2.5%.
- *Unemployment rate.* Holding all else constant, economic growth of 3% will keep the unemployment rate steady. But over the year ended in March 2007 real GDP growth averaged just 2% while the unemployment rate fell to 4.5% from 4.7% due to falling labor force participation. Our prediction is that the unemployment rate will rise back to 4.7% by year's end due to slowing jobs growth (over the first 6 months of 2007, 40,000 fewer jobs per month have been added relative to 2006's monthly average).
- *Mortgage rates.* Yields on both long- and short-term Treasury securities rose sharply over the last half of the second quarter and mortgage rates rose accordingly. Thirty-year fixed mortgage rates ended the quarter at 6.7%, up 0.5 percentage points over the quarter, and 1-year Treasury-indexed adjustable-rate mortgages (ARMs) averaged 5.7%, gaining 0.25 percentage points. Our forecast calls for both fixed and adjustable mortgage rates to remain near current levels for the remainder of the year.
- *ARM Share.* With short-term Treasury rates staying close to or above long-term rates, ARMs offer few incentives to borrowers to give up the certainty of fixed-rate mortgages. The ARM share on home-purchase mortgages averaged 11% through May, and is forecast to average 12% over the year.
- *Housing starts.* The recent sharp increase in mortgage rates is tapping the brakes on the housing market just when we had expected to see the bottom of the cycle. As a result, we lowered our forecast of housing starts for the latter half of the year to 1.47 million units (SAAR), down from the 1.51 million units (SAAR) predicted in our June Outlook, and predict 2007's starts to be 19% lower than in 2006.
- *Home sales.* We also brought down our estimate of total house sales to 6.23 million units for the second half of 2007 and 6.28 million units for the year, or a 6.7% decline in sales relative to 2006.
- *Home value appreciation.* Higher mortgage rates will likely impact home prices as well as sales and construction activity, so we have lowered our estimate of national average home price appreciation for this year to 1%, down from the 1.5% we forecasted last month, and we lowered our estimate for 2008 home price growth to 1.8%, down from 2.5%.
- *Mortgage activity.* Fewer home sales, slower growth in home prices and rising interest rates that reduce refinance incentives all point to a lower estimate of mortgage activity. We now forecast total mortgage originations in 2007 to hit \$2.75 trillion, down from our previous estimate of \$2.79 trillion, representing an 8.5% decline from 2006 volume. The refinance share of mortgage originations is expected to hit 42% in 2007, the lowest level in seven years. Finally, mortgage debt outstanding, which rose an annualized 5.6% in the first quarter, is predicted to grow by 5.9% over 2007, the slowest growth rate in more than a decade.

Frank Nothaft
Chief Economist
July 9, 2007

Amy Crews Cutts
Deputy Chief Economist

Calvin Schnure
Economic Analysis Director



We make home possibleSM

Office of the Chief Economist

Economic and Housing Market Outlook

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Major Economic Indicators																			
Indicator	2006				2007				2008				Annual Totals						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2003	2004	2005	2006	2007	2008	2009
Real GDP (%)	5.6	2.6	2.0	2.5	0.7	2.6	2.8	3.0	3.0	3.0	3.0	3.0	3.7	3.4	3.1	3.1	2.3	3.0	3.5
Consumer Prices (%) a.	1.9	5.0	3.2	-2.1	3.8	5.0	2.5	2.5	2.5	2.5	2.5	2.5	1.9	3.4	3.7	1.9	3.5	2.5	2.5
Unemployment Rate (%) b.	4.7	4.6	4.7	4.5	4.5	4.5	4.6	4.7	4.8	4.8	4.8	4.8	6.0	5.5	5.1	4.6	4.6	4.8	4.8
30-Year Fixed Mtg. Rate (%) b.	6.3	6.6	6.6	6.2	6.2	6.4	6.7	6.6	6.7	6.7	6.7	6.8	5.8	5.8	5.9	6.4	6.5	6.7	6.8
1-Year Treas. Indexed ARM Rate (%) b.	5.3	5.7	5.7	5.5	5.5	5.5	5.7	5.7	5.7	5.8	5.8	5.8	3.8	3.9	4.5	5.5	5.6	5.8	5.8
10-Year Const. Mat. Treas. Rate (%) b.	4.6	5.1	4.9	4.6	4.7	4.8	5.1	5.1	5.1	5.1	5.2	5.2	4.0	4.3	4.3	4.8	4.9	5.2	5.2
1-Year Const. Mat. Treas. Rate (%) b.	4.6	5.0	5.1	5.0	5.0	4.9	5.0	5.0	5.0	5.1	5.1	5.1	1.2	1.9	3.6	4.9	5.0	5.1	5.1

Housing and Mortgage Markets																			
Indicator	2006				2007				2008				Annual Totals						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2003	2004	2005	2006	2007	2008	2009
Housing Starts c.	2.13	1.86	1.70	1.56	1.46	1.45	1.45	1.48	1.50	1.53	1.57	1.60	1.85	1.96	2.07	1.81	1.46	1.55	1.70
Total Home Sales d.	7.16	6.89	6.49	6.49	6.49	6.20	6.20	6.25	6.30	6.35	6.42	6.50	6.53	6.98	7.46	6.76	6.28	6.39	6.63
House Price Appreciation (%) e.	9.5	5.5	4.9	5.4	1.7	1.0	0.3	0.8	1.5	2.5	2.5	1.5	7.7	11.7	13.1	6.3	1.0	2.0	3.6
1-4 Family Mortgage Originations f.																			
Conventional	\$687	\$802	\$746	\$685	\$662	\$729	\$692	\$584	\$519	\$584	\$591	\$531	\$3,630	\$2,776	\$3,167	\$2,920	\$2,667	\$2,225	\$2,142
FHA & VA	\$19	\$20	\$22	\$19	\$18	\$20	\$22	\$19	\$22	\$25	\$25	\$23	\$220	\$130	\$90	\$80	\$80	\$95	\$113
Total	\$706	\$822	\$768	\$704	\$680	\$749	\$714	\$603	\$541	\$609	\$616	\$554	\$3,850	\$2,906	\$3,257	\$3,000	\$2,746	\$2,320	\$2,254
ARM Share (%) g.	28	25	19	14	11	11	13	13	14	14	15	15	19	34	31	21	11	15	15
Refinancing Share - Applications (%) h.	44	42	41	46	46	35	30	28	26	20	19	20	65	46	44	43	35	21	18
Refinancing Share - Originations (%) h.	50	48	47	52	52	42	37	35	32	29	28	29	70	52	50	49	42	29	27
Residential Mortgage Debt (%) i.	10.2	10.5	9.5	7.5	5.6	6.5	6.5	5.0	5.6	7.0	7.4	5.5	12.7	14.6	13.5	9.4	5.9	6.4	6.3

Note: Quarterly and annual forecasts (or estimates) are shown in shaded areas; totals may not add due to rounding; quarterly data expressed as annual rates.
 Annual forecast data are averages of quarterly values; annual historical data are reported as Q4 over Q4.

a. Calculations based on quarterly averages of monthly index levels; index levels based on the seasonally-adjusted, all-urban consumer price index.
 b. Quarterly average of monthly unemployment rates (seasonally-adjusted); Quarterly averages of monthly interest rates (not seasonally-adjusted).
 c. Millions of housing units; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).
 d. Millions of housing units; total sales are the sum of new and existing detached single-family homes quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).
 e. Annualized growth rate of Freddie Mac's Conventional Mortgage Home Price Index (CMHPI); not seasonally-adjusted.

f. Billions of dollars (not seasonally-adjusted).
 g. Federal Housing Finance Board (FHFB); quarterly averages of monthly shares of conventional, home-purchase mortgage closings (not seasonally-adjusted).
 h. Primary Mortgage Market Survey®; quarterly averages of monthly shares of all single-family mortgage application; (not seasonally-adjusted).
 i. Federal Reserve Board; growth rate of residential mortgage debt, the sum of single-family and multifamily mortgages (not seasonally-adjusted, annualized rate).

Prepared by Office of the Chief Economist (SWC 7/9/2007); Send comments and questions to chief_economist@freddiemac.com.

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