

Quarterly Home Price Update: Is Case-Shiller Index Better than the OFHEO Index?

Structured Products • Asset Backed Securities

Summary

Contributors

Rod Dubitsky
+1 212 325 4740
rod.dubitsky@credit-suisse.com

Jay Guo
+1 212 325 3565
jay.guo@credit-suisse.com

Rajat Bhu
+1 212 325 5410
rajat.bhu@credit-suisse.com

Sharon Greenberg
+1 212 325 0680
sharon.greenberg@credit-suisse.com

Ying Wang
+1 212 325 2331
ying.wang@credit-suisse.com

Larry Yang
+1 212 325 2952
larry.yang@credit-suisse.com

Xinhui Tang
+1 212 325 7780
xinhui.tang@credit-suisse.com

Wen Zhang
+1 212 325 0689
wen.zhang@credit-suisse.com

Thomas Suehr
+1 212 325 3663
thomas.suehr@credit-suisse.com

• Talking Points:

- Between OFHEO and Case-Shiller indices, we believe that the OFHEO index is more suitable to subprime mortgages.
- We also find that the inclusion of the refi transactions in the OFHEO all-in index is not the major reason causing the difference from the Case-Shiller index, since the OFHEO purchase-only index remains distant from the Case-Shiller index. We believe the inclusion of jumbo loans in Case-Shiller is a more important driver of the difference between OFHEO and Case-Shiller.
- We looked into the subprime concentration at the zip code level. The results show that the subprime loans are well distributed across the states, but in some areas, the clusters do exist. The riskier subprime loans are more likely in the subprime concentrated areas. The implication is that the subprime bond performance is directly tied with the local market.
- **Residential Real Estate Risk (R³) Score:** The national average R³ score dropped during the first quarter of 2007, highlighting the housing market risks. Northwest MSAs show limited downward risks, but California and the Midwest risks are increasing.
- **Chicago Mercantile Exchange (CME) CSI Housing Futures & Options:** The market views of future HPA have improved since April 2007. However, the market-implied HPA remains negative.
- **OFHEO Housing Price Summary:** The OFHEO national index showed a YOY HPA of 4.3%, down from a revised 6.1% in Q4 2006. The purchase index adjusted by the seasoning factor was about 3.0%, down from 4.3% in Q4 2006. The Foreclosure/REO rate at MI, IN, and OH increased significantly in the first quarter of 2007. Although the rate increases at CA and FL were much quicker, the overall levels were lower.

Table of Contents

Talking Points	3
Case-Shiller vs. OFHEO	3
Is there a subprime housing market?	9
R ³ Score Update	14
R ³ Performance.....	14
Overall risk continues to rise, with increasing risk remaining in California.....	14
CME CSI Housing Futures & Options Update	16
Futures trading volume thin.....	16
Outlook for the market – slight improvement.....	16
Quarterly Update	17
NAR median existing home sale prices remained negative	17
OFHEO & Case Shiller indices	17
State level HPA based on the OFHEO indices	18
Inventory approaching historical high.....	19
Homebuilder confidence is gloomy	20

Talking Points

Case-Shiller vs. OFHEO

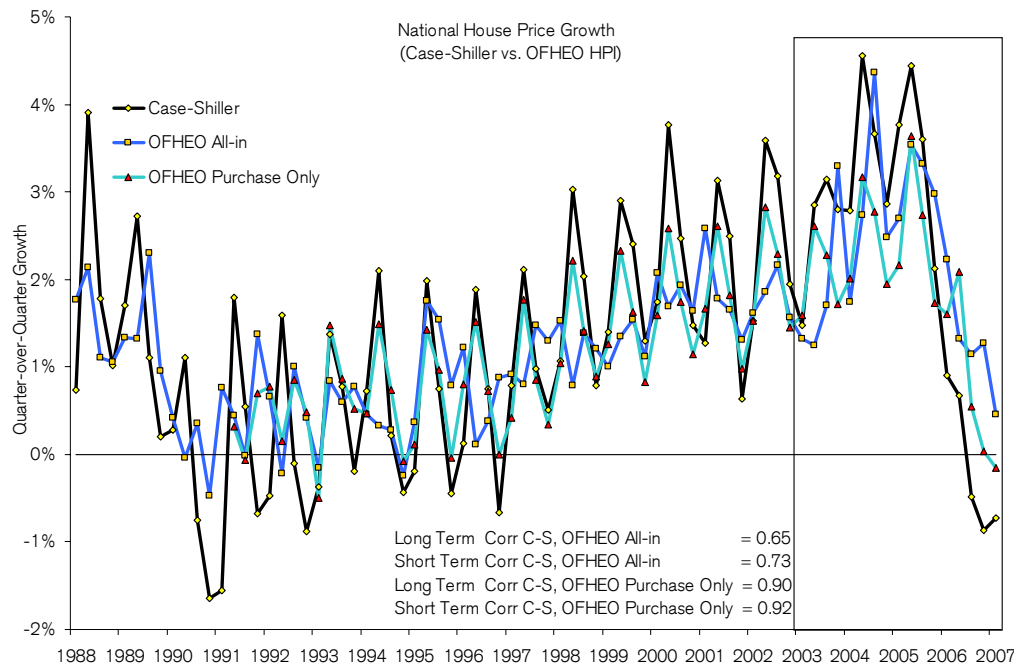
We view that

- 1) **the OFHEO index is better suited to the subprime housing market**
- 2) **the biases in the OFHEO index caused by the inclusion of refi transactions are outweighed by the inclusion of jumbo loans in the Case-Shiller index**

Our previous publications have detailed the biases in the OFHEO index resulting from the inclusion of refinanced loans, especially streamlined refinances. Following our publication, OFHEO introduced a purchase-only index. In recent quarters, the OFHEO all-in (including refinance and purchase transactions) index and Case-Shiller index have diverged greatly (Exhibit 1), raising concerns on the validity of both indices. In particular, the OFHEO index loses some credibility among some investors because the index portrays a less dire HPA environment (relative to Case-Shiller) when many are bearish on housing or the downturn in housing values seems indisputable. In this report, we show:

1. For the subprime housing market, the OFHEO index may be a more suitable index than the Case-Shiller. Even though subprime may be concentrated in weaker areas and is not represented well in GSE pools, we found that lower-tier Case-Shiller still has higher correlation than the aggregate Case-Shiller index with the OFHEO index.
2. Refinance transactions are not the only factor causing the difference between the two indices. In fact, in some MSAs, refinances are not a major factor causing the difference between the two indices.

Exhibit 1: National QoQ HPA



Source: Credit Suisse, Standard & Poor's, OFHEO

The OFHEO index is better suited to the subprime housing market than Case-Shiller

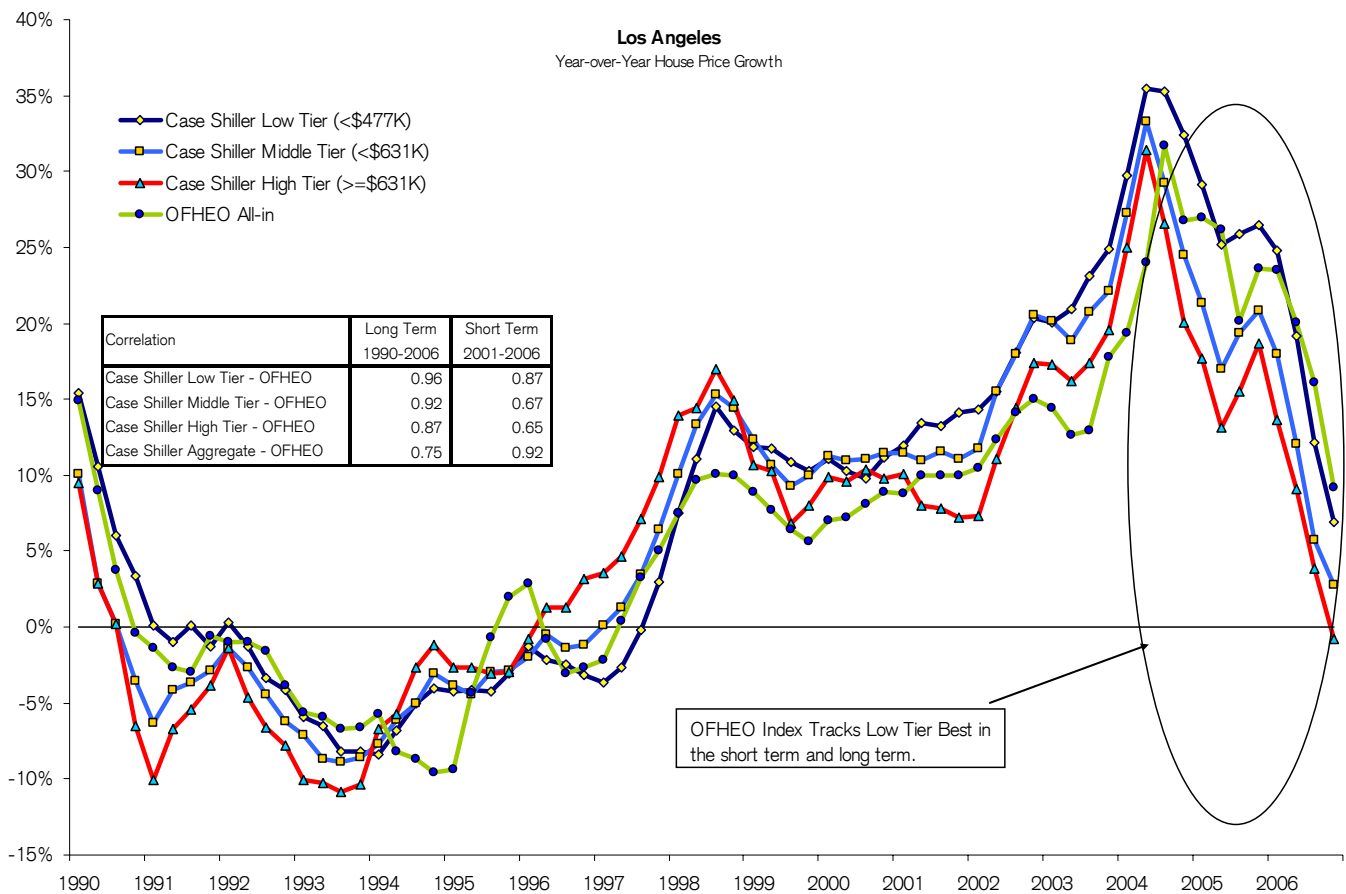
To illustrate this, Exhibit 2 compares Los Angeles MSA YoY HPA based on OFHEO vs Case-Shiller three-tier (high-medium-low) indices. The findings from this exhibit are interesting.

1. The declining housing market is more pronounced in the high tier housing sector than for the middle and low tiers. Therefore, the decline of the local market is more driven by the jumbo loans than the low-tier loans. It is noted that the cut-off dollar amounts for Los Angeles MSA tiering, \$477K and \$631K, are based on the 2006 transactions.

Given the average subprime loan amounts at Los Angeles are \$287K, clearly subprime loans are more likely in the low tier sector of the Case-Shiller index, and therefore suffered a more benign slowdown in HPA.

2. The HPA from OFHEO is highly correlated with the HPA from the low-tier Case-Shiller index in both the long term and short term (we define short term as the period since 2003, while long term refers to the entire data set). Given that the Los Angeles subprime loans are more likely in the low tier, the direct takeaway is that the OFHEO index is more suitable for low loan amount subprime borrowers than the aggregate Case-Shiller index. Some investors have recently switched to the Case-Shiller index in the hope that it would accurately capture the weakening housing market in Los Angeles. When looking at Exhibit 2, we note that using the Case-Shiller index can exaggerate market downturn, for subprime borrowers

Exhibit 2: Los Angeles Home Price Indices (YoY)



Source: Credit Suisse, Fiserv, OFHEO

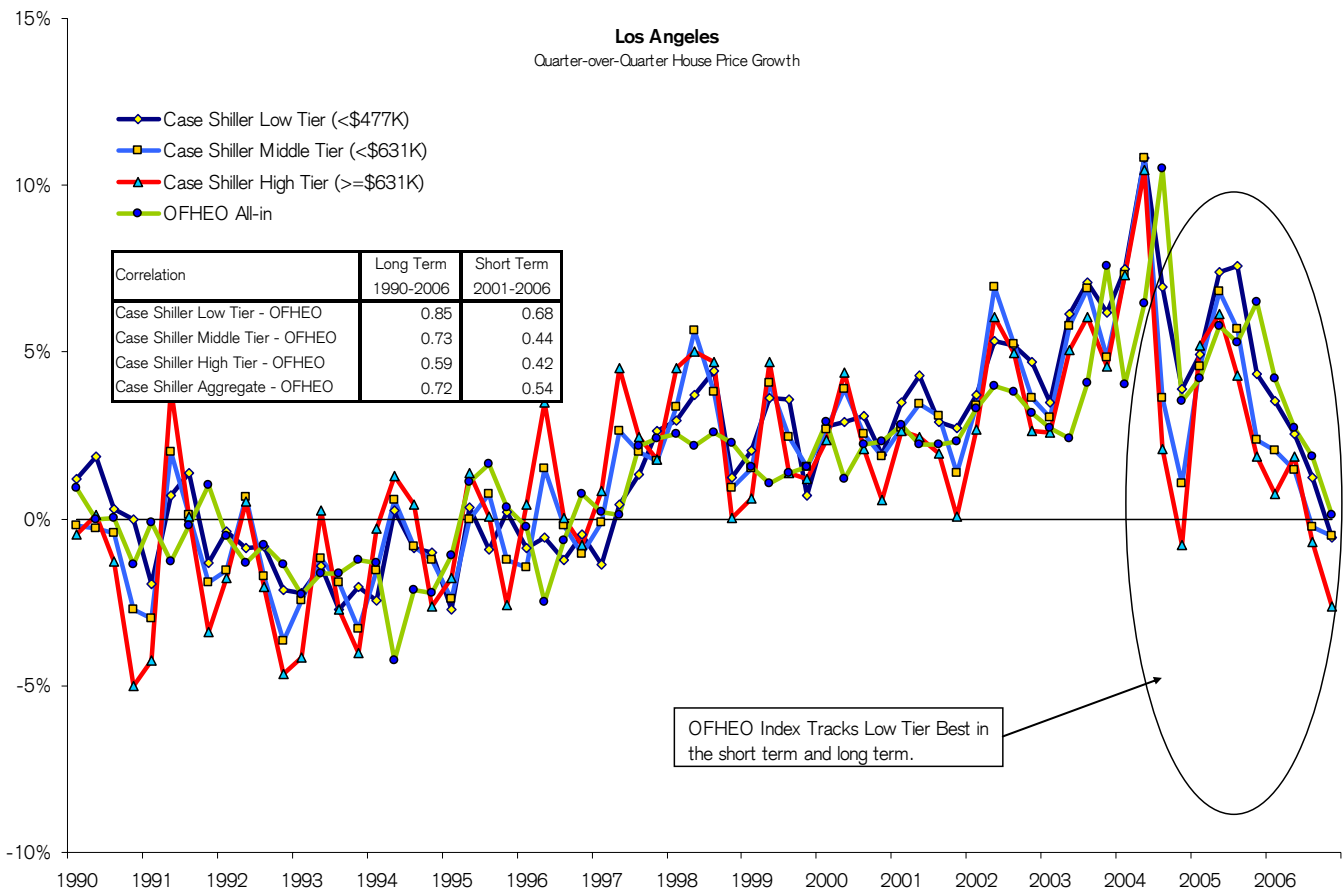
3. Because the OFHEO index contains refi transactions, which rely on an appraisal that can be based on lagged purchase transaction prices, the OFHEO index is viewed by some as a lagging index rather than the Case-Shiller index. However, the chart above doesn't appear that there is any noticeable leading advantage using the Case-Shiller index. Actually, all indices move in tandem over time with the exception of late 1994 and early 1996. However, it's possible in the very recent weakening market that the comparable sales used to arrive at a refi appraisal (which is what OFHEO uses in its index), may be lagged relative to historical levels. This risk is reduced since

appraisers are supposed to include the impact of market trends in deriving their appraised value. Another potential refi bias is that the cash-out loans, by their nature, may be concentrated in areas with more HPA. While this is possible, it's difficult to observe in the data.

The QoQ housing price movement is consistent with YoY findings

Some investors also consider that a comparison based on a year-over-year basis may not be the best method as it masks the sudden changes in the most recent quarters. Exhibit 3 shows the comparison based on a quarter-over-quarter basis. Again, our previous findings that the Case-Shiller aggregate index is biased downward due to the high tier housing price movement stands. Again, the OFHEO index seems more suitable to subprime loans than the Case-Shiller index.

Exhibit 3: Los Angeles Home Price Indices (QoQ)



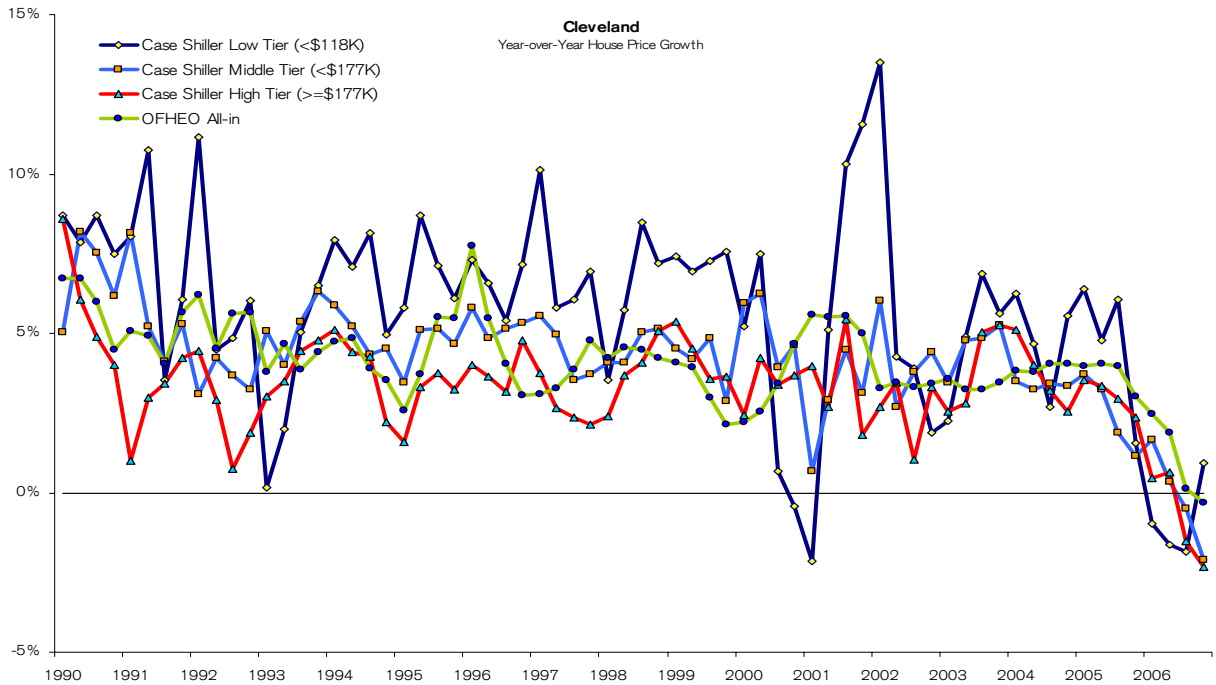
Source: Credit Suisse, Fiserv, OFHEO

A similar conclusion applies to weak housing market as well

Similar conclusions are shown in Exhibit 4 for Cleveland, OH, an area representing a longer-term sluggish housing market. The low tier of the housing price actually showed appreciation versus Q4 2006, which was completely different from the high tier of the local market.

The average outstanding loan amounts at Cleveland, OH are \$95k, \$152K, and \$512K for subprime, Alt-A, and non-agency prime (AKA jumbo) mortgages, respectively. The most subprime loans in Cleveland are at the low tier of the Case-Shiller index.

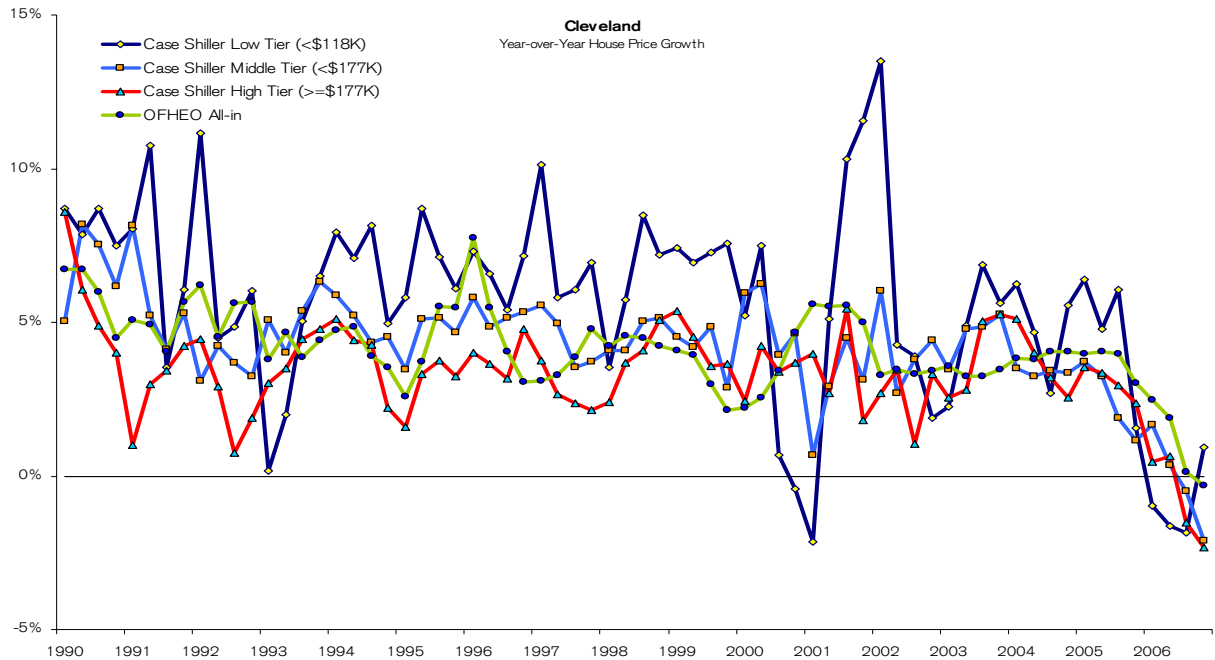
Exhibit 4: Cleveland Home Price Indices (YoY)



Source: Credit Suisse, Fiserv, OFHEO

Although we only discussed two different regions, we believe they do indicate that some amount of the difference between OFHEO and Case-Shiller could be related to a difference in housing tier performance. Again, using QoQ housing price changes as shown in Exhibit 5, we see a similar trend.

Exhibit 5: Cleveland Home Price Indices (QoQ)



Source: Credit Suisse, Fiserv, OFHEO

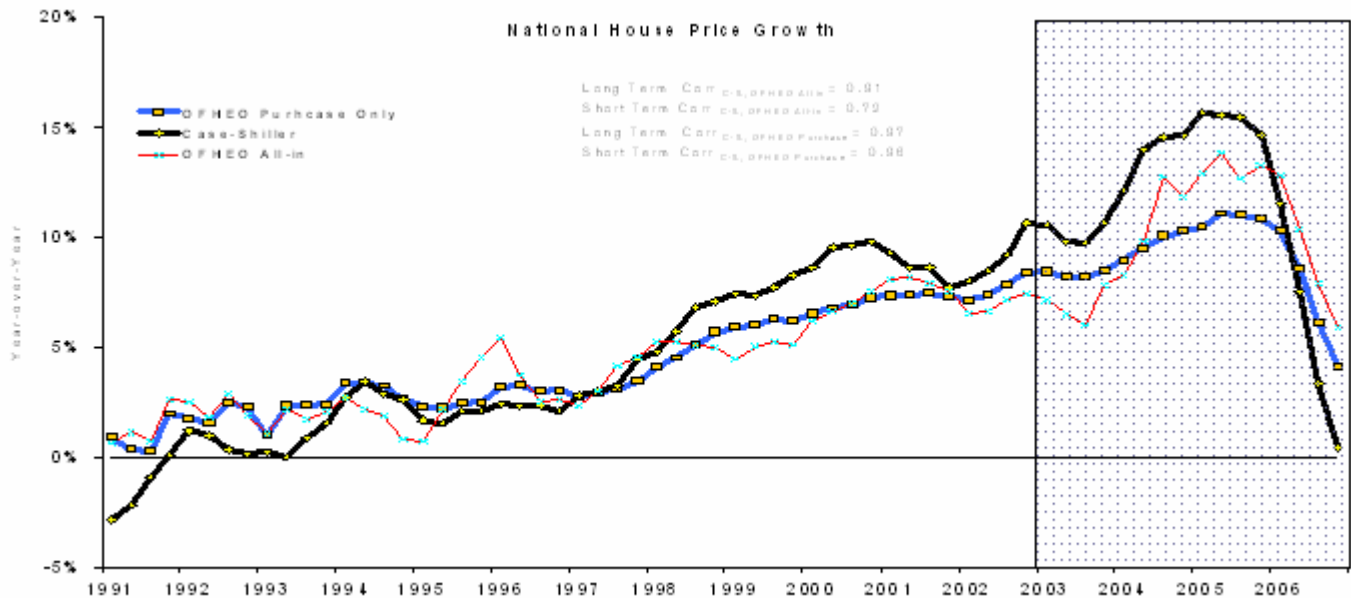
Is the cash-out refi the culprit for the overstatement of the OFHEO index?

While the OFHEO index is better suited to the subprime market than the aggregate Case-Shiller index, the OFHEO index is still subject to biases. We compare the OFHEO purchase only index, all-in index, and Case-Shiller aggregate index (Case-Shiller doesn't provide high-medium-low tier indices at the national level) in Exhibit 6 to see whether refi activities are a significant reason causing the divergence between the OFHEO all-in index and Case-Shiller. We highlight our findings, as follows:

1. The OFHEO purchase index has a higher correlation with the Case-Shiller index than the OFHEO all-in index. The correlation is especially different for the recent four years (long-term correlation 0.96 vs short-term 0.72 as shown in Exhibit 6. This, however, doesn't surprise us as the inclusion of refi involves more volatility and we were one of the first to have documented in detail the refi biases in OFHEO¹.
2. A high correlation between the OFHEO purchase index and Case-Shiller index doesn't imply that the levels of HPA from these two indices are close. As shown in Exhibit 6, a high correlation only implies that the direction of the movement is similar. The levels are divergent continuously in recent quarters, though historically, they have been very close.

¹ Please see Subprime HEAT Update, December 2003, and April 2004.

Exhibit 6: National Housing Price Comparison (YoY)



Source: Credit Suisse, OFHEO, Fiserve

- One common criticism of the OFHEO all-in index is the lagging feature due to the inclusion of refi transaction, which relies on an appraisal using historical purchase prices. In other words, investors are concerned that in the current market, the all-in index biases the actual index upward.

However, Exhibit 4 shows that for 2004 and 2005, during the housing boom period (an opposite period compared to the current market), the OFHEO all-in index still showed a higher level of appreciation rate than for the Case-Shiller index. Therefore, the mechanism for inclusion of refi is much more complex than initially thought. To blame the refi transactions for causing 'inflation' in HPA readings, is possible, but we don't believe it's clear from the data.

Further, appraisals used in cash-out refis generally include a market trend component so that older sales comparables could be adjusted for weakening markets (i.e., appraisals biases are less severe even in a market downturn). Though many are sceptical of appraisals for good reason, we would expect that appraisals done for GSE mortgages are somewhat better than appraisals for the run-of-the-mill lenders.

Another possible refi bias results from the fact that cash-out loans may be disproportionately located in strong HPA areas. Therefore, when rolling up the transaction level repeat sales into the index, it's possible that the OFHEO cash-out component of the index may include a higher proportion of strong HPA areas.

From another perspective, the comparison in Exhibit 6 should be interpreted with caution as the geographic coverage areas for OFHEO and Case-Shiller are different. The OFHEO covers 379 MSAs and Case-Shiller covers 115 MSAs. There are 13 states missing representation in the Case-Shiller national index² (while we are writing this report, a

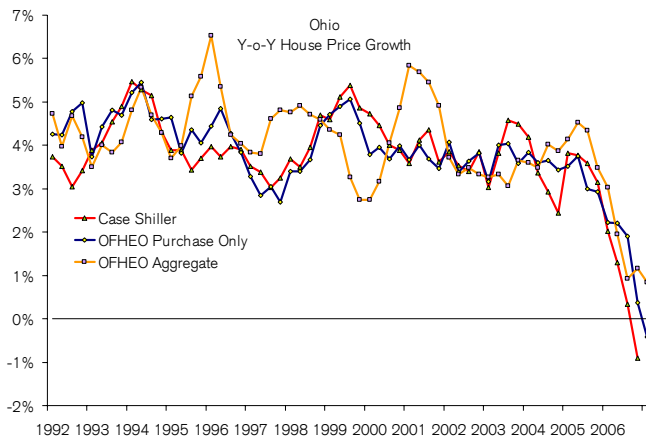
² The following states have no data present in Case-Shiller index - Maine, Indiana, Wisconsin, North Dakota, South Dakota, South Carolina, West Virginia, Alabama, Mississippi, Idaho, Montana, Wyoming, and Alaska.

research release³ confirms that those thirteen states, especial Idaho, Montana, and Wyoming, have, on average, stronger market conditions than in the remaining states in the nation). In other words, the geographic coverage contributes to the difference in the index readings. Therefore, to examine the difference between the indices, we look at a granular area. The charts below illustrate the difference at the state level for Ohio and Arizona:

1. Because the OFHEO purchase-only index is closer than OFHEO all-in index to the Case-Shiller index, it appears that *the refinance transactions cause the divergence between the two indices.*
2. However, *the refinance transaction is not the only reason causing the divergence.* As shown in Ohio, during Q2 and Q3 2006, the difference was more significant for the OFHEO purchase index than the all-in index from Case-Shiller. Specifically, in Q3 2006, the all-in index was about 100 bps lower than the purchase index.

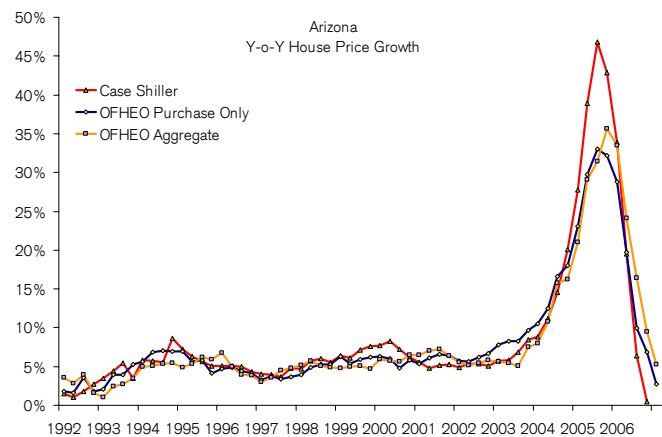
The refinance transaction may not be the most important factor causing the divergence. Even with the exclusion of refi loans, the purchase index is still far from the Case-Shiller index (i.e., the gap between OFHEO all-in and Case-Shiller was narrowed but in a small percentage). While we are hesitant to draw definitive conclusions from those charts, (we will highlight more states in the future), we think our readers should realize that subprime loan performance is very sensitive to HPA.

Exhibit 7: HPA comparison (YoY) – Ohio



Source: Credit Suisse, Fiserv, OFHEO

Exhibit 8: HPA comparison (YoY) - Arizona



Source: Credit Suisse, Fiserv, OFHEO

Is there a subprime housing market?

In our last quarterly report, we discussed the subprime loan concentration by MSAs. In this report, we drill down to the zip code level and answer a question - do subprime clusters exist?

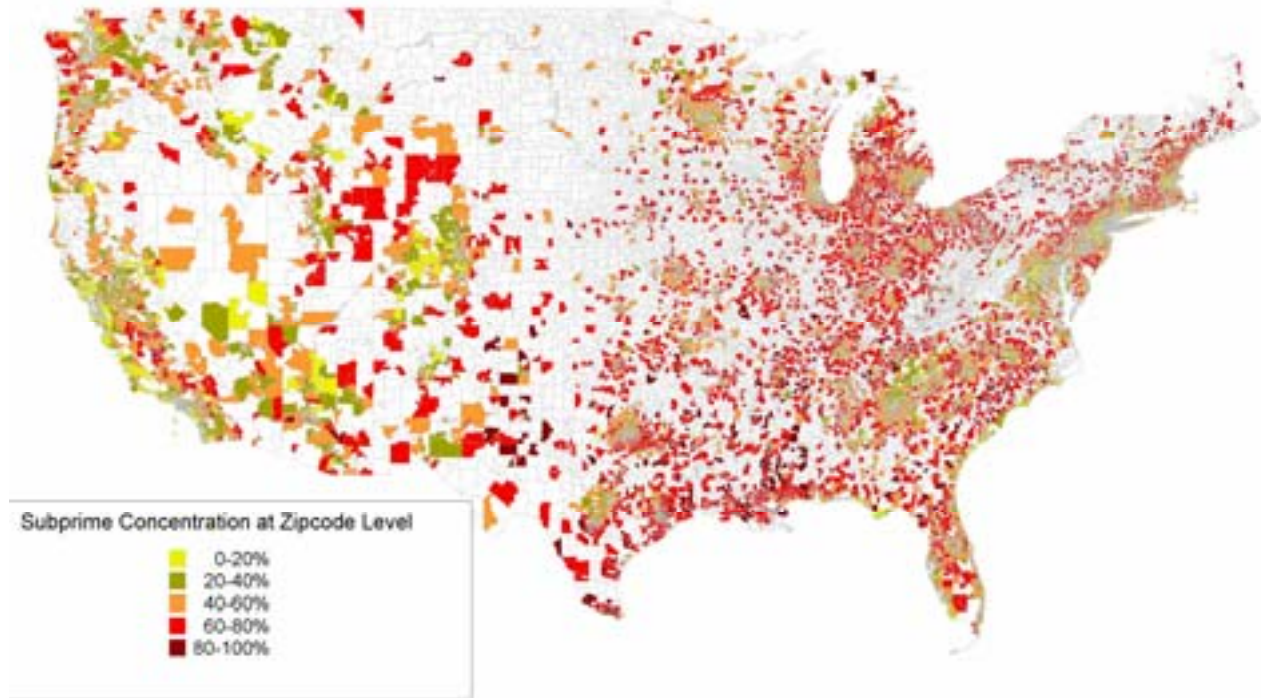
A dark dot in the maps below indicates a high concentration of subprime loans in the zip code area. The white space indicates that we don't have any loans in the area (likely desert, park, water or commercial). Please note, we use LoanPerformance securitization data and the chart excludes agency loans. That is, the subprime share is the ratio of subprime loans to all outstanding non-agency mortgages reported to LoanPerformance. We find:

1. Subprime loans seem well spread across the country (Exhibit 9), however,

³ A Note on the Differences between the OFHEO and S&P/Case-Shiller House Price Indexes, OFHEO, June 22, 2007.

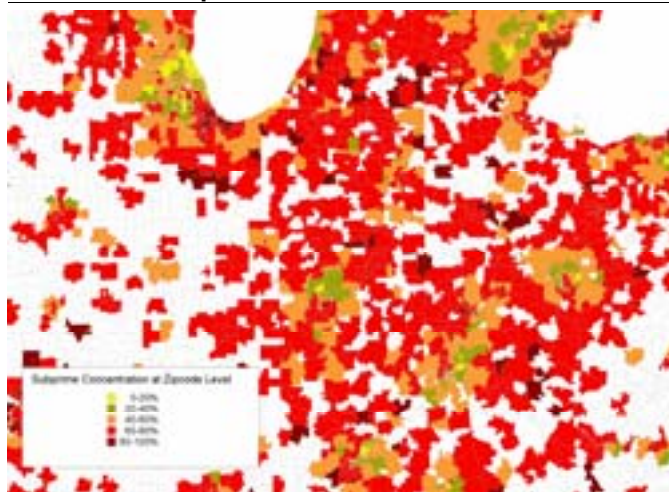
- Subprime clusters indeed exist in some areas (Exhibit 9-12). For example, as Exhibit 11 shows, subprime concentration is lower on the coasts of Florida than in the interior. Further, zip code area 11203 in Brooklyn (East Flatbush) has a high subprime concentration, while 11201 in Brooklyn (Brooklyn Heights), has limited subprime (Exhibit 12).

Exhibit 9: Subprime concentration by zip code (excluding agency MBS)



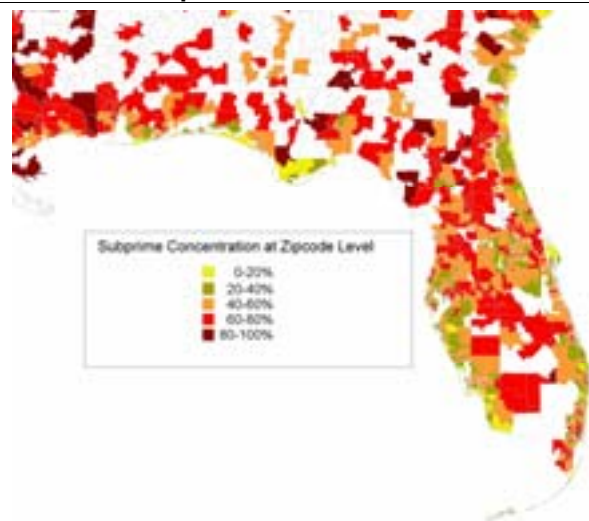
Source: Credit Suisse, LoanPerformance

Exhibit 10: Subprime concentration - Midwest



Source: Credit Suisse, LoanPerformance

Exhibit 11: Subprime concentration - Florida



Source: Credit Suisse, LoanPerformance

Exhibit 12 shows the highest subprime concentration for a zip code area with a total non-agency mortgage amount greater than \$750 million. Brooklyn zip code 11236, New York tops the list at 72.69%. Rialto at San Bernardino California follows closely at 66.78%. Clearly there is a high California concentration as 24 out of 32 zip codes (Exhibit 12) are in California where subprime originators were headquartered.

Exhibit 12: The highest subprime concentration for Zip Code level total mortgage size more than 750MM

Zip Code	State	City	County	CBSA/MSA	Subprime %
11236	NY	BROOKLYN	KINGS	New York-Newark-Edison, NY-NJ-PA	72.69%
92376	CA	RIALTO	SAN BERNARDINO	Riverside-San Bernardino-Ontario, CA	66.78%
92335	CA	FONTANA	SAN BERNARDINO	Riverside-San Bernardino-Ontario, CA	64.77%
92553	CA	MORENO VALLEY	RIVERSIDE	Riverside-San Bernardino-Ontario, CA	64.72%
93550	CA	PALMDALE	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	63.76%
92345	CA	HESPERIA	SAN BERNARDINO	Riverside-San Bernardino-Ontario, CA	62.77%
92557	CA	MORENO VALLEY	RIVERSIDE	Riverside-San Bernardino-Ontario, CA	61.94%
93535	CA	LANCASTER	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	61.06%
92392	CA	VICTORVILLE	SAN BERNARDINO	Riverside-San Bernardino-Ontario, CA	60.81%
34953	FL	PORT SAINT LUCIE	SAINT LUCIE	Port St. Lucie-Fort Pierce, FL	59.99%
92571	CA	PERRIS	RIVERSIDE	Riverside-San Bernardino-Ontario, CA	59.01%
91744	CA	LA PUENTE	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	58.60%
95823	CA	SACRAMENTO	SACRAMENTO	Sacramento-Arden-Arcade--Roseville, CA	57.99%
92337	CA	FONTANA	SAN BERNARDINO	Riverside-San Bernardino-Ontario, CA	57.52%
90044	CA	LOS ANGELES	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	56.97%
92509	CA	RIVERSIDE	RIVERSIDE	Riverside-San Bernardino-Ontario, CA	56.44%
91331	CA	PACOIMA	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	56.17%
95206	CA	STOCKTON	SAN JOAQUIN	Stockton, CA	55.39%
90805	CA	LONG BEACH	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	54.48%
20772	MD	UPPER MARLBORO	PRINCE GEORGES	Washington-Arlington-Alexandria, DC-VA-MD-WV	54.28%
89110	NV	LAS VEGAS	CLARK	Las Vegas-Paradise, NV	53.83%
20774	MD	UPPER MARLBORO	PRINCE GEORGES	Washington-Arlington-Alexandria, DC-VA-MD-WV	53.75%
90650	CA	NORWALK	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	53.54%
95828	CA	SACRAMENTO	SACRAMENTO	Sacramento-Arden-Arcade--Roseville, CA	53.09%
89108	NV	LAS VEGAS	CLARK	Las Vegas-Paradise, NV	52.46%
93722	CA	FRESNO	FRESNO	Fresno, CA	52.29%
92555	CA	MORENO VALLEY	RIVERSIDE	Riverside-San Bernardino-Ontario, CA	52.08%
93536	CA	LANCASTER	LOS ANGELES	Los Angeles-Long Beach-Santa Ana, CA	51.65%
92530	CA	LAKE ELSINORE	RIVERSIDE	Riverside-San Bernardino-Ontario, CA	51.64%
20744	MD	FORT WASHINGTON	PRINCE GEORGES	Washington-Arlington-Alexandria, DC-VA-MD-WV	51.02%
93635	CA	LOS BANOS	MERCED	Merced, CA	50.35%
11234	NY	BROOKLYN	KINGS	New York-Newark-Edison, NY-NJ-PA	50.05%

Source: Credit Suisse

Brooklyn NY Case Study

Given the diversification of housing value, household income and subprime concentration in Brooklyn, we use Brooklyn as an example to show the subprime cluster vs. risky loan (we use 80/20 loan as a proxy) concentration. We conclude

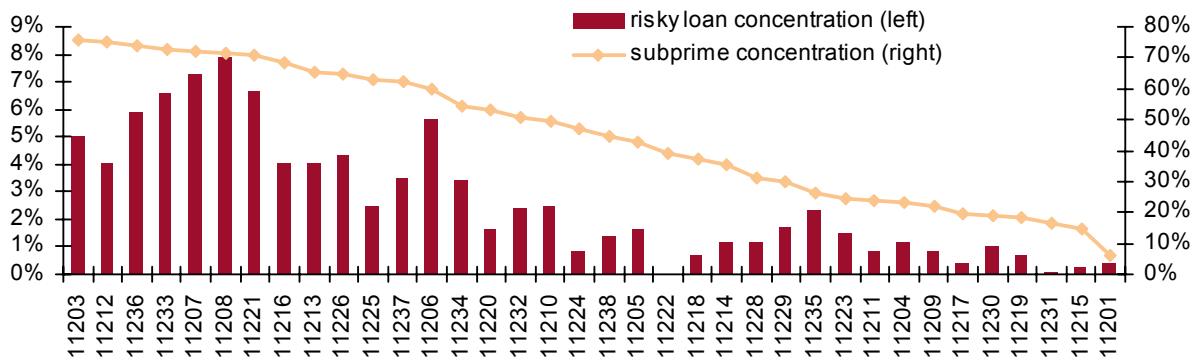
1. Subprime clusters indeed exist (the line in Exhibit 13)
2. The risky loan concentration is positively correlated with the subprime concentration and the correlation is strong (the correlation is 0.87 as shown in Exhibit 15). It is noted that risky loan concentration is the ratio of 80/20 loans to the total non-agency loans in

the same zip code area ; subprime concentration is the subprime share of non-agency mortgage in the zip code.

- Average household income is inversely correlated to subprime concentration (Exhibit 14). An area with high average household income, in general has high average house value and a lower subprime concentration (Exhibit 15). We would caveat this conclusion by noting that if we included conforming mortgages, the subprime share could be lower. Nevertheless, we think this observation is directionally accurate: subprime loans are more likely concentrated in lower income areas.

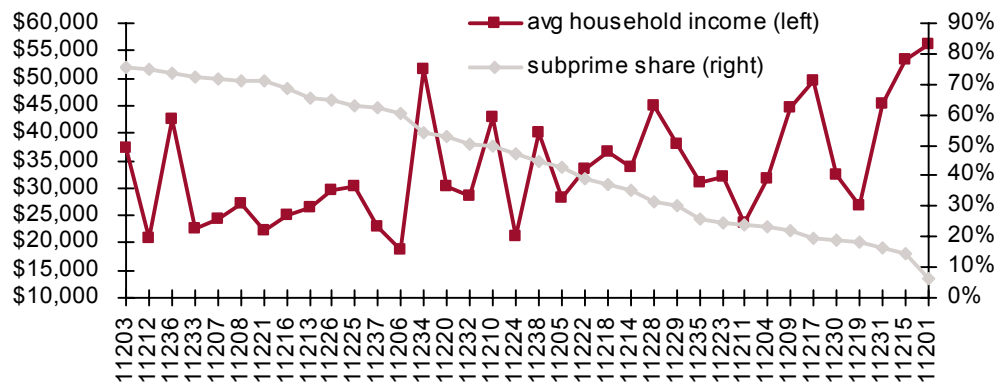
Bottom line, we believe that risky loans are more likely concentrated in areas with high subprime concentration, low home value.

Exhibit 13: Subprime concentration by Zip Code (excluding agency MBS) at Brooklyn, NY



Source: Credit Suisse, LoanPerformance

Exhibit 14: Average household income and subprime concentration is negatively correlated



Source: Credit Suisse, LoanPerformance

Exhibit 15: Correlations among variables in Brooklyn, NY

	average household income	average house value	risky loan concentration	subprime concentration
avg household income	1.00	0.66	-0.46	-0.52
avg house value	0.66	1.00	-0.60	-0.70
risky loan concentration	-0.46	-0.60	1.00	0.87
subprime concentration	-0.52	-0.70	0.87	1.00

Source: Credit Suisse, LoanPerformance, Economy.com

Florida Case Study

In the recent one or two year period, investors have been increasingly concerned regarding the Florida housing market, as the inventory rose quickly and pricing cuts from homebuilders were fierce. However, we think that most of those activities (inventory buildup and new home price cuts) happened in the coast area where subprime has less exposure. Indeed, Exhibit 11 shows that the most subprime-concentrated areas are in the inland.

To provide more information, we looked at zip code areas with total current mortgage balances (excluding agency loans) between 20 million and 500 million (in general, the coast areas are more populated, therefore, without controlling for the total mortgage size, the comparison may be biased). Exhibit 16 shows the top 15 zip code areas with highest subprime shares. It is interesting to note that other than four neighborhoods in Miami, all remaining 11 areas are located in the inland. Even for these four Miami areas, the average house value is far lower than the average of 130K for Miami city.

The observation seems to be consistent with our belief that the subprime loans in Florida are less exposed to the most troubled coast areas.

Exhibit 16: Top subprime concentrated zip code area with total non-agency mortgage market size between 20 million and 500 million

Zip Code	City	Subprime %	Population	Households per Zip Code	Average house value	Average household income
32641	Gainesville	85%	13,809	5,279	52,000	24,903
32351	Quincy	83%	23,721	9,147	57,200	30,602
33167	Miami	82%	18,203	5,534	80,900	30,671
33056	Opa Locka	81%	33,223	9,791	85,700	39,132
33054	Opa Locka	80%	28,177	9,238	70,500	23,598
33055	Opa Locka	78%	45,105	12,892	86,600	39,088
32209	Jacksonville	78%	39,653	17,526	48,700	22,202
33147	Miami	78%	50,500	16,600	73,500	22,072
33168	Miami	77%	25,151	6,858	84,500	31,850
32208	Jacksonville	77%	33,667	13,738	57,900	31,849
34479	Ocala	76%	12,654	5,448	67,200	34,459
34972	Okeechobee	76%	17,820	5,993	60,300	29,689
33169	Miami	76%	36,115	12,252	91,500	35,897
34266	Arcadia	76%	31,964	13,515	55,700	30,583
32254	Jacksonville	76%	14,969	6,094	47,000	25,807

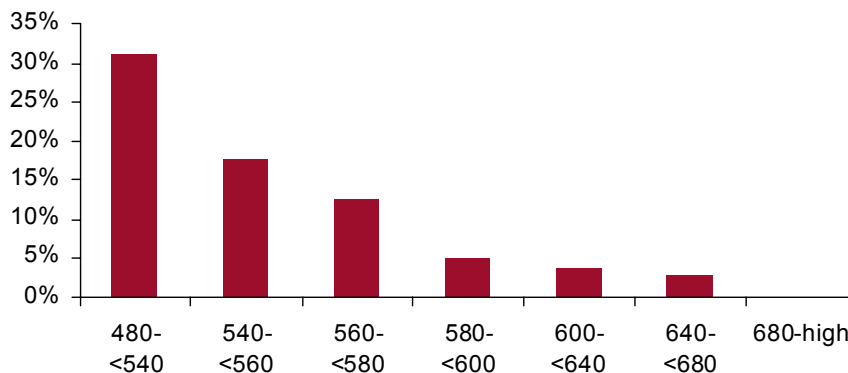
Source: Credit Suisse, LoanPerformance, Economy.com

R³ Score Update

R³ Performance

We have provided R³ scores for more than one year. It is the time to check for original predications based on R³ scores with actual housing market direction. Exhibit 17 shows the percentage of MSAs with an actual declining YoY HPA over the past year by original R³ score. The chart clearly shows that the R³ score is a good ranking tool to separate the MSAs with negative housing market performance.

Exhibit 17: Actual % of MSA with YoY (Q1 2006 to Q1 2007) HPA decline by R³



Source: Credit Suisse

Overall risk continues to rise, with increasing risk remaining in California

Our R³ score shows a continued drop this quarter to 572 from an updated 595 at Q4 2006, more than doubling the risk of a negative HPA for the year ahead.

Exhibit 18 shows MSAs with the highest and lowest R³ scores as of Q1 2007. The Northwest region remains the least risky market currently, though some MSAs have shown weakening. Most MSAs in California fell significantly, indicating weaker values forward.

Exhibit 18: The highest and lowest R³ scores as of Q1 2007

Best MSAs	Score at Q1 2007	Score at Q4 2006	Score change	% change	Worst MSAs	Score at Q1 2007	Score at Q4 2006	Score change	% change
Casper WY	656	665	-9	-1%	Fresno CA	476	502	-26	-5%
Huntsville AL	655	628	27	4%	Stockton CA	489	526	-37	-7%
Bismarck ND	653	648	5	1%	Salinas CA	490	506	-16	-3%
Great Falls MT	643	642	1	0%	St. Cloud MN	492	546	-54	-10%
Montgomery AL	636	630	6	1%	Visalia CA	494	538	-44	-8%
Longview TX	631	631	0	0%	Los Angeles CA	498	534	-36	-7%
Greenville NC	629	643	-14	-2%	Hanford CA	504	526	-22	-4%
Longview WA	629	672	-43	-6%	Modesto CA	504	517	-13	-3%
Cheyenne WY	628	627	1	0%	Redding CA	507	564	-57	-10%
Odessa TX	626	614	12	2%	Hinesville GA	508	520	-12	-2%

Source: Credit Suisse

Because housing affordability, income growth, job market, and foreclosure continue to intertwine and vary by market, the ultimate impact of R³ scores is mixed among MSAs. Exhibit 19 compares the top 100 subprime MSAs. However, there are five MSAs with scores lower than 500 (highlighted); we see four in California, and one in Illinois.

Exhibit 19: R³ scores as of Q1 2007 by MSAs

MSA name	State	Outstanding Volume (\$m)	R3 Score (Q1 2007)	R3 Score (Q4 2006)	Score change	MSA name	State	Outstanding Volume (\$m)	R3 Score (Q1 2007)	R3 Score (Q4 2006)	Score change
Los Angeles	CA	\$ 35,406	498	534	-6.7%	Cambridge	MA	\$ 2,563	511	540	-5.4%
Riverside	CA	\$ 26,423	524	544	-3.7%	Bridgeport	CT	\$ 2,533	544	563	-3.4%
New York	NY	\$ 20,366	548	561	-2.3%	Indianapolis	IN	\$ 2,484	597	605	-1.3%
Chicago	IL	\$ 19,153	563	553	1.8%	Tacoma	WA	\$ 2,458	574	618	-7.1%
Washington	DC	\$ 13,627	565	599	-5.7%	Cape Coral	FL	\$ 2,395	604	628	-3.8%
Phoenix	AZ	\$ 13,275	576	617	-6.6%	Charlotte	NC	\$ 2,354	569	610	-6.7%
Atlanta	GA	\$ 11,525	583	594	-1.9%	Columbus	OH	\$ 2,303	577	600	-3.8%
Nassau	NY	\$ 11,190	568	549	3.5%	Nashville	TN	\$ 2,287	566	585	-3.2%
San Diego	CA	\$ 11,029	510	536	-4.9%	Hartford	CT	\$ 2,236	553	585	-5.5%
Oakland	CA	\$ 10,771	549	562	-2.3%	Camden	NJ	\$ 2,175	571	602	-5.1%
Santa Ana	CA	\$ 10,578	513	541	-5.2%	Pittsburgh	PA	\$ 2,147	590	621	-5.0%
Miami	FL	\$ 10,437	564	588	-4.1%	Salt Lake City	UT	\$ 2,126	619	635	-2.5%
Sacramento	CA	\$ 10,073	549	564	-2.7%	New Haven	CT	\$ 2,104	532	598	-11.0%
Houston	TX	\$ 10,040	624	622	0.3%	San Antonio	TX	\$ 2,082	584	617	-5.3%
Las Vegas	NV	\$ 9,895	563	572	-1.6%	Austin	TX	\$ 2,005	592	603	-1.8%
Fort Lauderdale	FL	\$ 7,701	570	604	-5.6%	Milwaukee	WI	\$ 1,978	572	575	-0.5%
Minneapolis	MN	\$ 7,527	518	569	-9.0%	Worcester	MA	\$ 1,871	534	542	-1.5%
Denver	CO	\$ 7,457	564	579	-2.6%	Richmond	VA	\$ 1,834	598	632	-5.4%
Dallas	TX	\$ 7,173	612	619	-1.1%	Essex County	MA	\$ 1,726	575	577	-0.3%
Tampa	FL	\$ 6,762	577	605	-4.6%	Poughkeepsie	NY	\$ 1,681	568	624	-9.0%
Orlando	FL	\$ 6,490	581	623	-6.7%	Tucson	AZ	\$ 1,664	600	621	-3.4%
Seattle	WA	\$ 5,912	609	664	-8.3%	Sarasota	FL	\$ 1,618	565	576	-1.9%
Baltimore	MD	\$ 5,618	547	592	-7.6%	Lake County	IL	\$ 1,578	490	506	-3.2%
San Jose	CA	\$ 5,315	535	561	-4.6%	Salinas	CA	\$ 1,498	603	606	-0.5%
Philadelphia	PA	\$ 5,235	546	572	-4.5%	Birmingham	AL	\$ 1,471	611	617	-1.0%
Detroit	MI	\$ 5,233	521	529	-1.5%	New Orleans	LA	\$ 1,466	559	568	-1.6%
Warren	MI	\$ 4,893	538	542	-0.7%	Santa Rosa	CA	\$ 1,434	602	609	-1.1%
Newark	NJ	\$ 4,699	530	576	-8.0%	Louisville	KY	\$ 1,384	551	563	-2.1%
Portland	OR	\$ 4,636	602	645	-6.7%	Spring	CO	\$ 2,563	511	540	-5.4%
Boston	MA	\$ 4,486	517	523	-1.1%	Port St. Lucie	FL	\$ 1,347	572	603	-5.1%
West Palm Beach	FL	\$ 4,343	574	611	-6.1%	Wilmington	DE	\$ 1,281	592	618	-4.2%
Stockton	CA	\$ 4,190	489	526	-7.0%	Deltona	FL	\$ 1,262	577	614	-6.0%
Edison	NJ	\$ 4,147	551	576	-4.3%	Lakeland	FL	\$ 1,235	594	615	-3.4%
Providence	RI	\$ 4,018	528	539	-2.0%	Merced	CA	\$ 1,233	521	529	-1.5%
St. Louis MO	MO	\$ 3,966	550	590	-6.8%	Raleigh	NC	\$ 1,224	564	621	-9.2%
Cleveland	OH	\$ 3,581	588	599	-1.8%	Palm Bay	FL	\$ 1,221	580	614	-5.5%
San Francisco	CA	\$ 3,497	555	581	-4.5%	Oklahoma City	OK	\$ 1,186	595	613	-2.9%
Oxnard	CA	\$ 3,213	519	562	-7.7%	Allentown	PA	\$ 1,158	564	590	-4.4%
Kansas City	MO	\$ 3,097	579	594	-2.5%	Reno	NV	\$ 1,122	562	573	-1.9%
Bakersfield	CA	\$ 2,976	517	541	-4.4%	Gary	IN	\$ 1,111	572	603	-5.1%
Fort Worth	TX	\$ 2,940	603	601	0.3%	Visalia	CA	\$ 1,107	494	538	-8.2%
Honolulu	HI	\$ 2,930	570	617	-7.6%	Grand Rapids	MI	\$ 1,020	546	565	-3.4%
Jacksonville	FL	\$ 2,843	588	627	-6.2%	Akron	OH	\$ 1,008	567	607	-6.6%
Fresno	CA	\$ 2,838	476	502	-5.2%	Springfield	MA	\$ 991	524	549	-4.6%
Modesto	CA	\$ 2,727	504	517	-2.5%	Santa Barbara	CA	\$ 990	526	534	-1.5%
Vallejo	CA	\$ 2,708	521	556	-6.3%	Naples	FL	\$ 967	574	613	-6.4%
Bethesda	MD	\$ 2,708	566	622	-9.0%	Tulsa	OK	\$ 950	589	632	-6.8%
Virginia Beach	VA	\$ 2,678	548	586	-6.5%	Rockingham	NH	\$ 935	530	541	-2.0%
Cincinnati	OH	\$ 2,661	584	603	-3.2%	Albuquerque	NM	\$ 931	624	647	-3.6%
Memphis	TN	\$ 2,635	571	590	-3.2%	Baton Rouge	LA	\$ 910	544	529	2.8%

Source: Credit Suisse

CME CSI Housing Futures & Options Update

Futures trading volume thin

Exhibit 20 shows the open interests across different MSAs. The overall trading value remains thin with total open interest lower than 60 million. Given the recent sharp decline in CSI, the short-term volatilities have increased dramatically relative to the long-term volatilities.

Exhibit 20: As of 6/8/2007, open interest

	MAY 07	AUG 07	NOV 07	FEB 08	Long term Volatility (1/88-9/06)	Short term Volatility (1/04-3/07)
Boston	56	99	156	25	7%	6%
Chicago	34	35	11	2	4%	2%
Denver	71	20	33	0	5%	2%
Las Vegas	58	25	44	27	10%	18%
Los Angeles	260	68	162	15	11%	10%
Miami	300	168	75	35	8%	9%
New York	223	145	74	43	7%	5%
San Diego	150	36	66	18	10%	13%
San Francisco	228	131	29	33	9%	9%
D.C.	114	49	35	12	10%	18%
Composite	187	64	68	15	7%	7%
Total	1681	840	753	225		

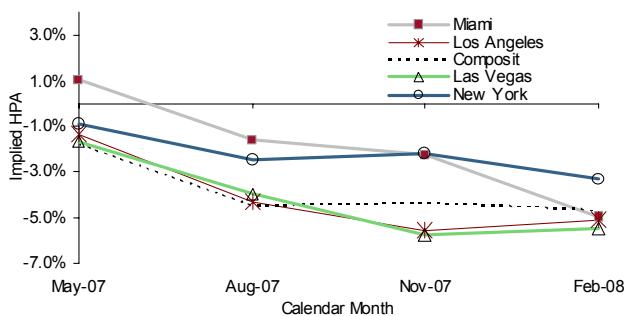
Source: Credit Suisse, CME

Outlook for the market – slight improvement

Based on the actual futures price, we infer investor views for the housing market through implied HPA of the housing futures. In Exhibit 21 and Exhibit 22, we compare the implied HPAs of the most actively traded MSAs and Composite going forward. For instance, the May 30, 2007 outlook of annual HPA for the FEB08 composite contract (reflecting December 07 housing index) was about -4.7%, which is about the same level as the AUG07 (reflecting June 07 housing index) contract (Exhibit 21), which indicates that the market projected (as of 5/30/2007) the composite HPA would bottom out in June 2007, then remain flat (note a flat but negative HPA indicates a declining value of housing value but at a stable declining speed).

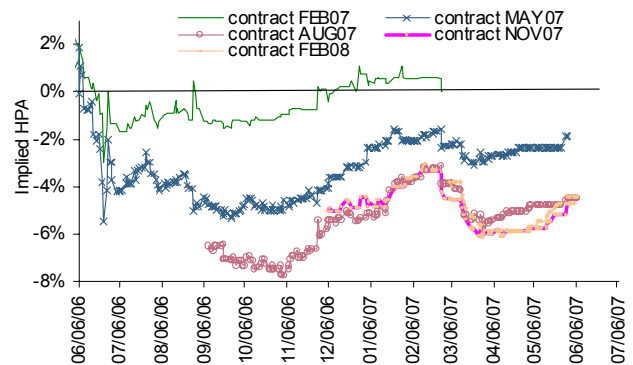
Exhibit 22 shows the evolution of investor views on the composite index for a specific contract. For instance, investor views on the December 07 HPA (FEB08 contract) have improved since April. Similar views exist for other contracts as well (Exhibit 22). The MAY07 contract expired in May at -1.8%, and was higher than the market consensus.

Exhibit 21: Implied annual HPA for MSAs from housing futures contracts as of 5/30/2007



Source: Credit Suisse, CME

Exhibit 22: Evolution of implied annual HPA for composite index from housing futures contracts



Source: Credit Suisse, CME

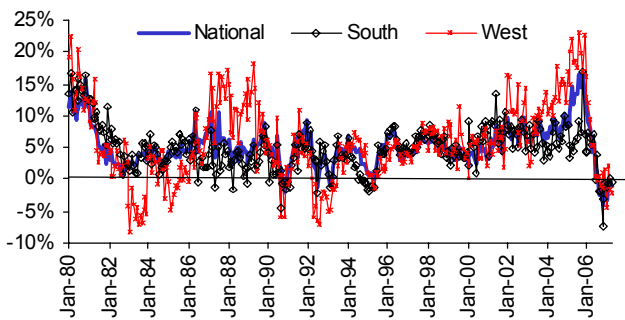
Quarterly Update

The U.S. housing market continued to slow during Q1 2007.

NAR median existing home sale prices remained negative

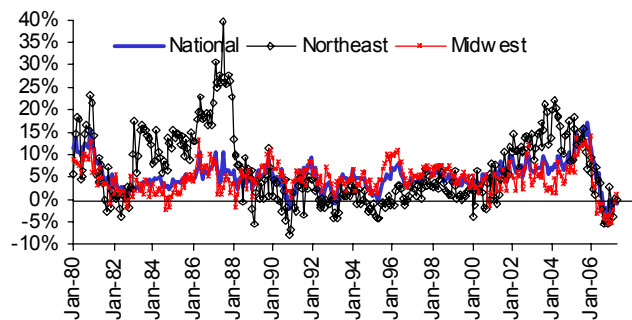
Exhibits 23- 24 below show the year-over-year growth rates of median sale prices from the NAR (National Association of Realtors) (seasonally adjusted; single family only). The existing home sales median prices fluctuated across all regions and at the national level in April 2007 compared with the same month a year earlier. The West region experienced the largest decrease, declining 2.3%, while the Midwest increased 1.2%. Nationwide, the YoY median price dropped 0.9%.

Exhibit 23: Existing home sale median prices (Year-over-Year Change)



Source: Credit Suisse, NAR

Exhibit 24: Existing home sale median prices (Year-over-Year Change)



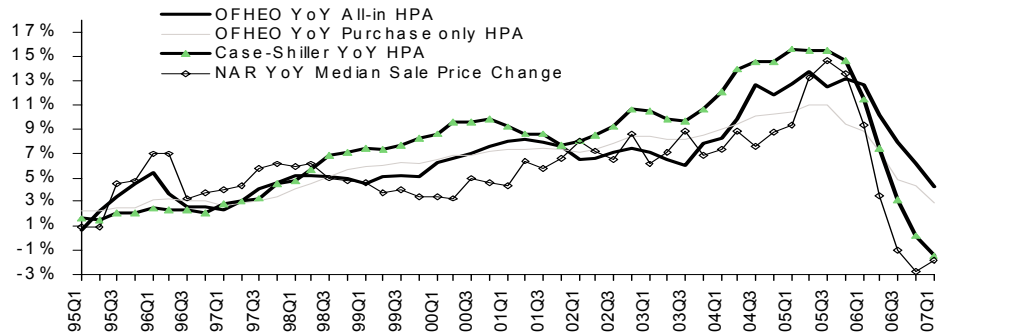
Source: Credit Suisse, NAR

OFHEO & Case Shiller indices

The OFHEO index shows a large divergence from the NAR median sale price and Case-Shiller index (Exhibit 25). During the quarter, according to the OFHEO national index, year-over-year HPA was 4.3%, down from 6.1% in Q4 2006. The purchase index adjusted by the seasoning factor was about 3.0%, down from 4.3% in Q4 2006.

The Case-Shiller index shows a much lower appreciation rate than the OFHEO and also a more rapid depreciation. At Q1 2007, the index had a -1.4% YoY HPA.

Exhibit 25: U.S. home prices decelerated sharply



Source: Credit Suisse, OFHEO, NAR

State level HPA based on the OFHEO indices

At the state level (Exhibit 26), Northwest states continued to show strong appreciation as Utah and Idaho dominated the top spots for YoY HPA performance. Midwest states and New England remained weak. For three consecutive quarters, Michigan showed negative YoY HPA. The HPA for California dropped to the bottom of the list among states.

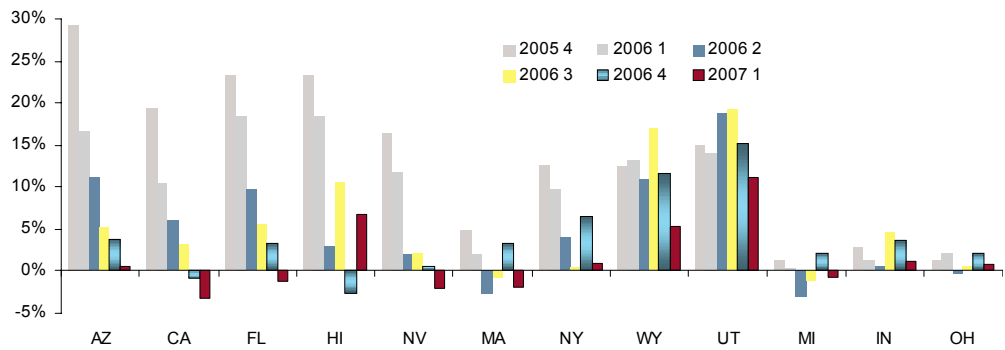
Exhibit 26: State YoY HPA (Q1 2006 – Q1 2007)

HPA: 10 Worst States		HPA: 10 Best States		HPA: Largest 10 Subprime States at Q4 06			
State	HPA (YOY)	State	HPA (YOY)	State	% of Volume	HPA (YOY)	HPA (YOY) Ranking
MI	-0.7%	UT	17.0%	CA	17.0%	1.2%	46
MA	-0.6%	ID	12.3%	FL	12.9%	4.3%	31
NV	0.6%	MT	11.7%	NY	6.6%	3.0%	41
OH	0.8%	WY	11.7%	NJ	5.5%	3.8%	35
NH	1.1%	WA	11.6%	IL	4.8%	4.9%	28
CA	1.2%	NM	11.2%	MD	4.6%	6.4%	18
RI	1.5%	OR	10.8%	TX	4.5%	6.9%	16
IN	2.5%	MS	9.5%	AZ	3.4%	5.2%	25
MN	2.5%	LA	8.1%	VA	3.2%	5.4%	24
NE	2.6%	NC	8.0%	GA	3.2%	5.0%	27

Source: Credit Suisse, OFHEO

Exhibit 27 shows quarter-over-quarter house price growth. In the first quarter, other than for Northwest states, all other states showed a significant drop in HPA.

Exhibit 27: States quarter-over-quarter house price growth



Source: Credit Suisse, OFHEO

The delinquency rate increased across states. The 60+ DPD in Michigan increased to 22% for the first quarter of 2007 from 19.2% for the 2006 fourth quarter. Ohio increased to 20%. Indiana increased to 17%. The delinquency rate is based on LoanPerformance for total securitization data. The foreclosure/REO rate also increased sharply in OH, MI, IN, and MN. The readings for OH increased from 8.3% last quarter to 14.5% for the current quarter.

Exhibit 28: Highest delinquency rate at state level in Q1 2007- all non-agency loans

30-59 Day Delinquency				60-Day Plus Delinquency*				Foreclosure/REO			
State	30-59	YOY HPA	UE	State	60+	YOY HPA	UE	State	F/R	YOY HPA	UE
MI	5.4%	-0.7%	6.7%	MI	22.0%	-0.7%	6.7%	OH	14.5%	0.8%	5.2%
MS	4.9%	9.5%	6.6%	OH	20.0%	0.8%	5.2%	MI	14.7%	-0.7%	6.7%
MO	5.1%	4.0%	4.8%	MS	18.0%	9.5%	6.6%	MN	12.8%	2.5%	4.4%
WV	5.2%	3.9%	4.2%	LA	16.0%	8.1%	3.9%	IN	11.3%	2.5%	4.8%
GA	5.1%	5.0%	4.3%	IN	17.0%	2.5%	4.8%	IA	10.8%	3.8%	3.3%
NC	4.6%	8.0%	4.5%	MN	18.0%	2.5%	4.4%	CO	10.6%	3.3%	3.8%
TN	4.5%	7.1%	4.8%	IA	15.0%	3.8%	3.3%	KY	9.5%	4.4%	5.6%
AL	4.5%	7.0%	3.3%	CO	15.0%	3.3%	3.8%	WI	9.4%	3.5%	4.9%
OH	4.3%	0.8%	5.2%	GA	15.0%	5.0%	4.3%	KS	8.4%	4.3%	4.2%
SC	4.5%	7.6%	6.1%	KY	14.0%	4.4%	5.6%	OK	8.1%	5.8%	3.9%

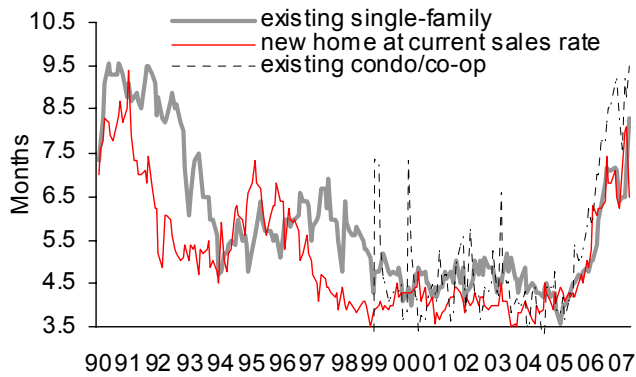
Source: Credit Suisse, OFHEO, LoanPerformance, BLS
 * including foreclosure and REO.

Inventory approaching historical high

The national inventory continues its upward trajectory. As of April 2007, the total single family supply is equivalent to about 9.5 months of the current sales rate; this is the highest level since August 1992. Similar findings are also observed for condo/co-op home sales (Exhibit 29). New home sales, however, experienced declining supply.

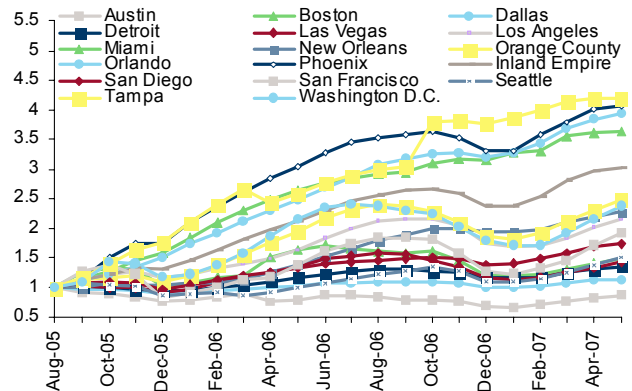
The inventory at the MSA varies. The inventory barely increases for most Texas MSAs, but increases greatly in Florida. Exhibit 30 shows that other major MSAs also experience rising inventory, but at a relatively modest level.

Exhibit 29: National inventory



Source: Credit Suisse, NAR, Bureau of Census

Exhibit 30: Local inventory (with Aug 05 level as base)

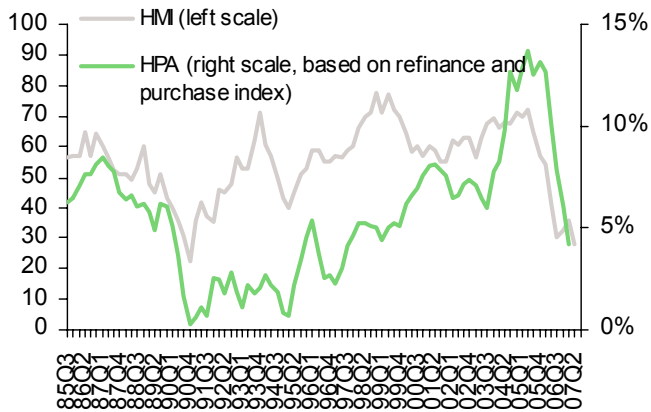


Source: Credit Suisse Equity Research, Local MLS

Homebuilder confidence is gloomy

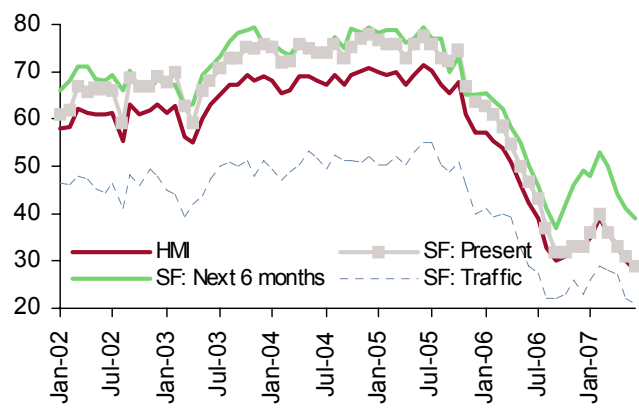
The NAHB housing market index (HMI), which measures homebuilder sentiment in the single-family housing market, fell to the lowest point since the beginning of 1991 (Exhibit 31) and was also below the consensus forecast of Wall Street economists surveyed by Thomson/IFR. All subcomponents reached the lowest points in the recent cycle (Exhibit 32).

Exhibit 31: HMI trend



Source: Credit Suisse, OFHEO, NAHB

Exhibit 32: HMI component trend



Source: Credit Suisse, OFHEO, NAHB

STRUCTURED PRODUCTS RESEARCH

Gail Lee, Managing Director
Global Head of Structured Products Research
 +1 212 325 1214

Bunt Ghosh, Managing Director
Global Head of Fixed Income Research
 +44 20 7888 3042

NORTH AMERICA

Eleven Madison Avenue, New York, NY 10010

Asset-Backed Securities (ABS)

Rod Dubitsky, Managing Director Senior Strategist, Group Head +1 212 325 4740 rod.dubitsky@credit-suisse.com	Jay Guo, Director +1 212 325 3565 jay.guo@credit-suisse.com	Rajat Bhu, Vice President +1 212 325 5410 rajat.bhu@credit-suisse.com	Sharon Greenberg, Vice President +1 212 325 0680 sharon.greenberg@credit-suisse.com	Ying Wang, Vice President +1 212 325 2331 ying.wang@credit-suisse.com
Larry Yang, Vice President +1 212 325 2952 larry.yang@credit-suisse.com	Xinhui Tang, Asst. Vice President +1 212 325 7780 xinhui.tang@credit-suisse.com	Wen Zhang, Associate +1 212 325 0689 wen.zhang@credit-suisse.com	Thomas Suehr, Analyst +1 212 325 3663 thomas.suehr@credit-suisse.com	

Collateralized Debt Obligations (CDO)

David Yan, Director +1 212 325 5792 david.yan@credit-suisse.com	Serif Ustun, Vice President +1 212 538 4582 serif.ustun@credit-suisse.com	Willie Green +1 212 325 1287 willie.green@credit-suisse.com	Helena Jiang +1 212 325 1148 helena.jiang@credit-suisse.com
--	--	--	--

Commercial Mortgage Backed Securities (CMBS)

Gail Lee, Managing Director Senior Strategist, Group Head +1 212 325 1214 gail.lee@credit-suisse.com	Paul Fitzsimmons, Vice President +1 212 538 8567 paul.fitzsimmons@credit-suisse.com	Manish Rajguru, Vice President +1 212 325 4881 manish.rajguru@credit-suisse.com	Nga Nguyen, Analyst +1 212 325 1393 nga.nguyen@credit-suisse.com
--	--	--	---

Mortgage Backed Securities — Residential (MBS)

Satish Mansukhani, Managing Director Senior Strategist, Group Head +1 212 325 5985 satish.mansukhani@credit-suisse.com	Mahesh Swaminathan, Director +1 212 325 8789 mahesh.swaminathan@credit-suisse.com	Chandrajit Bhattacharya, Vice President +1 212 325 1546 chandrajit.bhattacharya@credit-suisse.com	Adama Kah, Vice President +1 212 325 0318 adama.kah@credit-suisse.com
Mutaz Qubbaj, Vice President +1 212 325 0172 mutaz.qubbaj@credit-suisse.com	Mary Ann Thomas, Vice President +1 212 325 5162 maryann.thomas@credit-suisse.com	Mukul Chhabra, Associate +1 212 325 0709 mukul.chhabra@credit-suisse.com	

EUROPE – Structured Products (All)

One Cabot Square, London E14 4QJ, United Kingdom

Carlos Diaz, Analyst
+44 20 7883 9099
carlos.diaz@credit-suisse.com

JAPAN – Structured Products (All)

Izumi Garden Tower, 1-6 Roppongi 1-Chome, Minato-ku, Tokyo 106-6024

Kenji Toukaku, Director Japan Head + 81 3 4550 7172 kenji.toukaku@credit-suisse.com	Kaoru Kondo, Associate kaoru.kondo@credit-suisse.com +81 3 4550 7171
---	---

For general inquiries or to be added to a distribution list, please contact:

Werner Pauliks (werner.pauliks@credit-suisse.com)

Disclosure Appendix

Analyst Certification

The analysts identified in this report each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

Important Disclosures

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail, please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: http://www.csfb.com/research-and-analytics/disclaimer/managing_conflicts_disclaimer.html

Credit Suisse's policy is to publish research reports as it deems appropriate, based on developments with the subject issuer, the sector or the market that may have a material impact on the research views or opinions stated herein.

The analyst(s) involved in the preparation of this research report received compensation that is based upon various factors, including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's Investment Banking and Fixed Income Divisions.

Credit Suisse may trade as principal in the securities or derivatives of the issuers that are the subject of this report.

At any point in time, Credit Suisse is likely to have significant holdings in the securities mentioned in this report.

As at the date of this report, Credit Suisse acts as a market maker or liquidity provider in the debt securities of the subject issuer(s) mentioned in this report. For important disclosure information on securities recommended in this report, please visit the website at <https://firesearchdisclosure.credit-suisse.com> or call +1-212-538-7625.

For the history of any relative value trade ideas suggested by the Fixed Income research department as well as fundamental recommendations provided by the Emerging Markets Sovereign Strategy Group over the previous 12 months, please view the document at <http://research-and-analytics.csfb.com/docpopup.asp?docid=35321113&type=pdf>. Credit Suisse clients with access to the Locus website may refer to <http://www.credit-suisse.com/locus>.

For the history of recommendations provided by Technical Analysis, please visit the website at <http://www.credit-suisse.com/techanalysis>.

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

Emerging Markets Bond Recommendation Definitions

Buy: Indicates a recommended buy on our expectation that the issue will deliver a return higher than the risk-free rate.

Sell: Indicates a recommended sell on our expectation that the issue will deliver a return lower than the risk-free rate.

Corporate Bond Fundamental Recommendation Definitions

Buy: Indicates a recommended buy on our expectation that the issue will be a top performer in its sector.

Outperform: Indicates an above-average total return performer within its sector. Bonds in this category have stable or improving credit profiles and are undervalued, or they may be weaker credits that, we believe, are cheap relative to the sector and are expected to outperform on a total-return basis. These bonds may possess price risk in a volatile environment.

Market Perform: Indicates a bond that is expected to return average performance in its sector.

Underperform: Indicates a below-average total-return performer within its sector. Bonds in this category have weak or worsening credit trends, or they may be stable credits that, we believe, are overvalued or rich relative to the sector.

Sell: Indicates a recommended sell on the expectation that the issue will be among the poor performers in its sector.

Restricted: In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

Not Rated: Credit Suisse Global Credit Research or Global Leveraged Finance Research covers the issuer but currently does not offer an investment view on the subject issue.

Not Covered: Neither Credit Suisse Global Credit Research nor Global Leveraged Finance Research covers the issuer or offers an investment view on the issuer or any securities related to it. Any communication from Research on securities or companies that Credit Suisse does not cover is a reasonable, non-material deduction based on an analysis of publicly available information.

Corporate Bond Risk Category Definitions

In addition to the recommendation, each issue may have a risk category indicating that it is an appropriate holding for an "average" high yield investor, designated as **Market**, or that it has a higher or lower risk profile, designated as **Speculative** and **Conservative**, respectively.

Credit Suisse Credit Rating Definitions

Credit Suisse may assign rating opinions to investment-grade and crossover issuers. Ratings are based on our assessment of a company's creditworthiness and are not recommendations to buy or sell a security. The ratings scale (AAA, AA, A, BBB, BB, B) is dependent on our assessment of an issuer's ability to meet its financial commitments in a timely manner. Within each category, creditworthiness is further detailed with a scale of High, Mid, or Low – with High being the strongest sub-category rating: **High AAA, Mid AAA, Low AAA** – obligor's capacity to meet its financial commitments is extremely strong; **High AA, Mid AA, Low AA** – obligor's capacity to meet its financial commitments is very strong; **High A, Mid A, Low A** – obligor's capacity to meet its financial commitments is strong; **High BBB, Mid BBB, Low BBB** – obligor's capacity to meet its financial commitments is adequate, but adverse economic/operating/financial circumstances are more likely to lead to a weakened capacity to meet its obligations; **High BB, Mid BB, Low BB** – obligations have speculative characteristics and are subject to substantial credit risk; **High B, Mid B, Low B** – obligor's capacity to meet its financial commitments is very weak and highly vulnerable to adverse economic, operating, and financial circumstances; **High CCC, Mid CCC, Low CCC** – obligor's capacity to meet its financial commitments is extremely weak and is dependent on favorable economic, operating, and financial circumstances. Credit Suisse's rating opinions do not necessarily correlate with those of the rating agencies.

Credit Suisse's Distribution of Global Credit Research Recommendations* (and Banking Clients)

Global Recommendation Distribution**

Buy	6%	(of which 96% are banking clients)
Outperform	10%	(of which 87% are banking clients)
Market Perform	37%	(of which 90% are banking clients)
Underperform	13%	(of which 92% are banking clients)
Sell	1%	(of which 100% are banking clients)

*Data are as at the end of the previous calendar quarter.

**Percentages do not include securities on the firm's Restricted List.

References in this report to Credit Suisse include all of the subsidiaries and affiliates of Credit Suisse operating under its investment banking division. For more information on our structure, please use the following link: http://www.credit-suisse.com/en/who_we_are/ourstructure.html.

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates.

The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change.

Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report.

CS may, to the extent permitted by law, participate or invest in financing transactions with the issuer(s) of the securities referred to in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. CS may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment. Additional information is, subject to duties of confidentiality, available on request. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgement at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk.

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase.

Some investments discussed in this report may have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed.

This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in Europe (except Switzerland) by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is regulated in the United Kingdom by The Financial Services Authority ("FSA"). This report is being distributed in Germany by Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). This report is being distributed in the United States and Canada by Credit Suisse Securities (USA) LLC; in Switzerland by Credit Suisse; in Brazil by Banco de Investimentos Credit Suisse (Brasil) S.A; in Japan by Credit Suisse Securities (Japan) Limited; elsewhere in Asia/ Pacific by whichever of the following is the appropriately authorised entity in the relevant jurisdiction: Credit Suisse (Hong Kong) Limited, Credit Suisse Equities (Australia) Limited, Credit Suisse Securities (Thailand) Limited, Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse Singapore Branch, and elsewhere in the world by the relevant authorised affiliate of the above. Research on Taiwanese securities produced by Credit Suisse, Taipei Branch has been prepared by a registered Senior Business Person. Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020. This research may not conform to Canadian disclosure requirements.

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-U.S. customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. U.S. customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the U.S.

Please note that this research was originally prepared and issued by CS for distribution to their market professional and institutional investor customers. Recipients who are not market professional or institutional investor customers of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA or in respect of which the protections of the FSA for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report.

Copyright © 2007 CREDIT SUISSE GROUP and/or its affiliates. All rights reserved.