NAIC National Association of Insurance Commissioners & The Center for Insurance Policy and Research

Capital Markets Special Report

The NAIC's Capital Markets Bureau monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of US insurance companies. A list of archived Capital Markets Bureau Special Reports is available via the index

Part 1 of 2: Mortgage Loan and MBS Market Trends and Relative Insurance Industry Exposure – Residential

As of early August, U.S. structured finance year-to-date total asset-backed securities (ABS), commercial mortgage-backed securities (CMBS), collateralized loan obligations (CLO) and residential mortgage-backed securities (RMBS) new issuance was $185 billion. The majority of this new issuance has been with ABS and CLOs. The private label RMBS market for the most part has been dormant since 2008, and due to paydowns and liquidations, the amount of private label RMBS has been shrinking in size. Currently, private label RMBS outstanding is less than $1 trillion — below its $2.2 trillion peak in 2007. Private label RMBS new issuance is not expected to exceed $4 billion in 2012, with new issuance likely limited to a small number of seasoned issuers.

The U.S. housing market continues to struggle for recovery, and recent upticks in housing prices have not helped in terms of affordability for existing homes. As a result of leniency relative to lending in the mortgage market — particularly in 2005 to 2007 for residential and commercial mortgages — underwriting standards have since tightened, and lending has become more stringent. Consequently, the RMBS and CMBS markets have been impacted, particularly in the non-agency, or private label, market. That is, bonds that are not guaranteed by the U.S. government (such as those backed by the Government National Mortgage Association, or GNMA) or do not have the support of a government-sponsored entity (GSEs) — such as the Federal National Mortgage Association (FNMA) or Federal Home Loan Mortgage Corp (FHLMC) — have been severely negatively impacted as a result of the crisis.

Understanding the status and trends within the private label RMBS and CMBS markets requires an understanding of the performance and trends related to the underlying mortgage loans that collateralize these securities. Given the current status of the housing market and a U.S. economy that is trying to avoid another recession, performance of the underlying mortgage loans for RMBS and CMBS has been impacted, especially with respect to the loans originated during the market boom between 2005 and 2007.

This week's special report focuses on residential mortgage loans and RMBS. Part 2 of this special report, which we expect to publish shortly, will focus on commercial mortgage loans and CMBS.

RMBS Background

The U.S. housing crisis can be characterized by significant delinquencies, defaults and foreclosures relative to borrowers of all types of mortgage loans, but initially and predominantly subprime (i.e., borrowers with poor credit history). In addition, besides standard mortgages, there were many mortgage loans originated to borrowers that were not required to provide income documentation; these were referred to as "no doc" loans. In turn, there was a boom in new issuance of RMBS between 2005 and 2007. It was most of these vintage transactions that experienced substantial defaults that were reflected by dramatic declines in market value and credit ratings once the housing crisis was in full force. As a result, there were severe and

multiple downgrades to the ratings on RMBS by the rating agencies, particularly for these vintage years.

Issuance of private label RMBS since 2008 for the most part has been nonexistent, compared to a peak issuance of $740 billion in 2005. Present day, the RMBS market continues to experience defaults and ratings downgrades. Market values of RMBS are at deeply discounted levels for the worst performing securities, and, therefore, there is nearly no liquidity in this market. According to S&P research, the GSEs have absorbed approximately 95% of total mortgage loan originations via acquisitions or guarantees, and they held 56% of $10.3 trillion total U.S. residential mortgage debt outstanding as of year-end 2011.

For the U.S. insurance industry, RMBS comprised approximately 3% of total investments as of year-end 2011. Within this amount, almost half were collateralized by prime mortgage loans, and about 35% were collateralized by subprime mortgage loans according to insurance industry reporting.

U.S. Insurance Industry RMBS Exposure ($000 BACV)

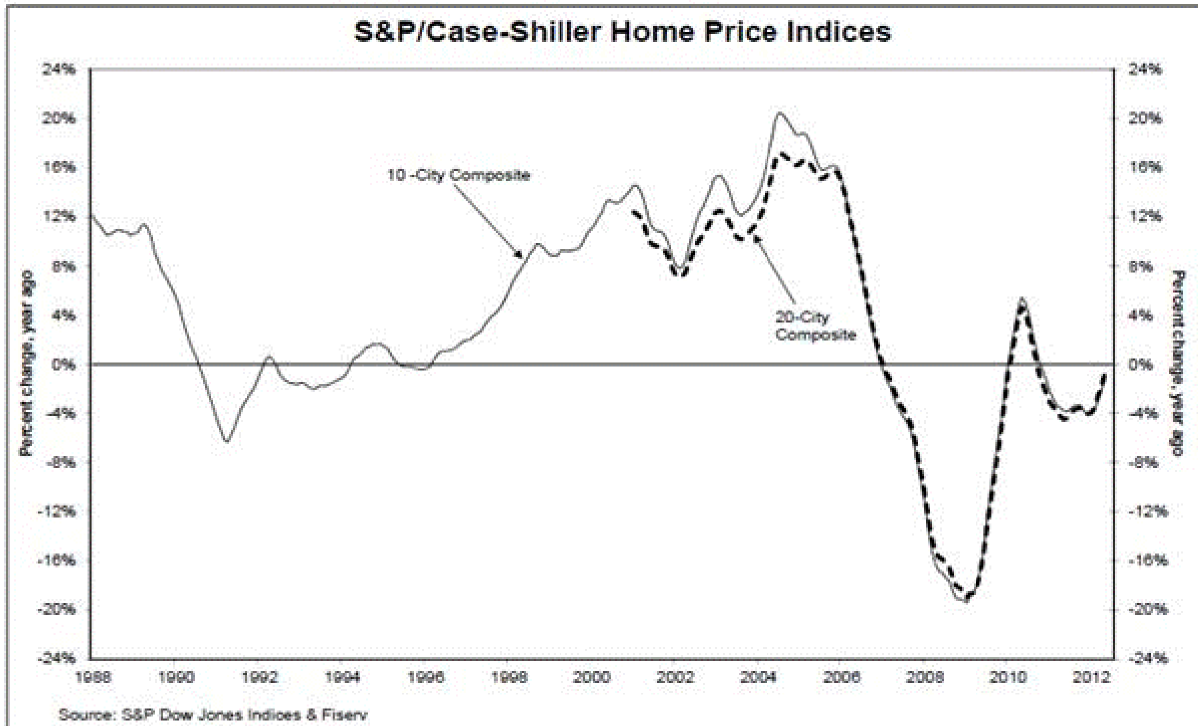
	2009	2010	2011
Private Label RMBS	150,501,333	128,977,034	123,169,862
Total Industry Investments	4,938,104,167	5,144,000,060	5,338,447,254

On an annual basis, the expected recovery value of the industry's private label RMBS holdings are modeled for expected losses by the NAIC. The industry then compares these modeled recovery values to the RMBS carrying values (as a percentage of par) to determine appropriate NAIC designations, which are then mapped to a risk-based capital (RBC) factor. Based on this new process, approximately 71% in BACV of the industry's RMBS holdings carried NAIC 1 designations, while almost 8% were given an NAIC 2 designation. This translates into about 80% that are considered investment grade, with the remainder considered below investment grade.

Current Risks

Continued uncertainty regarding the U.S. housing market persists, and slow economic growth is expected to further dampen the U.S. housing market recovery. In addition, according to a Standard & Poor's weekly structured finance update, Professor Robert Shiller cites key reasons for slow growth in home prices over the next five years due to "rising student debt, tight mortgage standards and weak job growth." Only as the housing market rebounds will private label RMBS have a chance of any meaningful reappearance in the market — but not likely at levels seen in the mid-2000s.

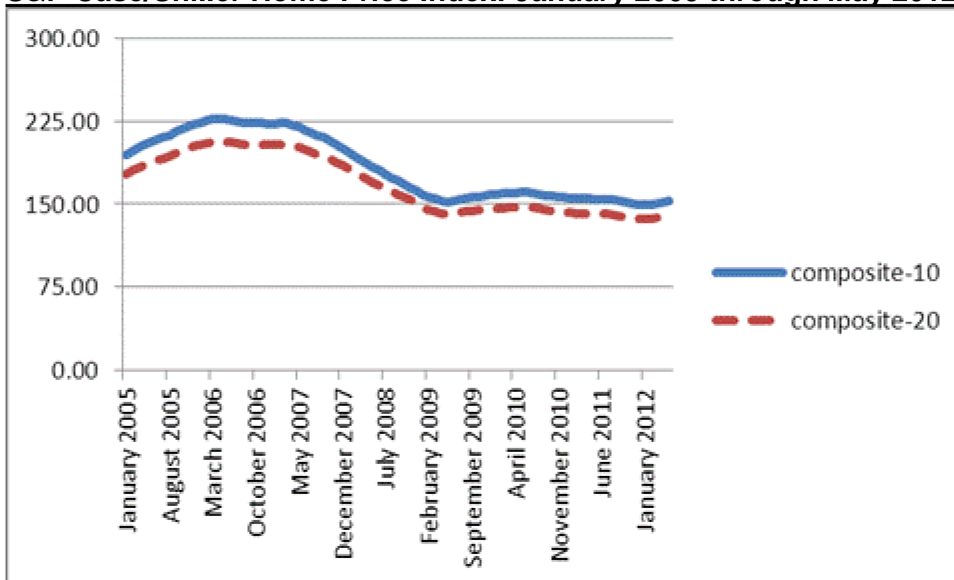
The S&P/Case Shiller Home Price Index is a benchmark of U.S. housing prices. The indices measure the average change in home prices in particular geographic regions. In particular, there are two indices: the 10-City Composite and the 20-City Composite, which calculate the average single family home prices for 10 and 20 major metropolitan cities, respectively. The graph below shows the seasonally adjusted S&P/Case Shiller Home Price Indices returns from 1988 through May 2012. Clearly, both composites experienced significant negative returns from 2006 through 2009. Data for May 2012 showed a 2.2% increase from the previous month, indicating a trend toward rising home prices for the spring, which is not surprising, given that spring and early summer tend to be seasonally strong home-buying months. Prior to April 2012, home prices had declined for seven consecutive months as measured by both indices.



The chart above depicts the annual returns of the 10-City and the 20-City Composite Home Price Indices. In May 2012, both Composites were up by 2.2% month-over-month, and posted annual returns of -1.0% and -0.7%, respectively.

The graph below shows the 10-City and 20-City Composite Indices from January 2005 through May 2012. Home prices for both composites moved in parallel paths, with prices beginning to fall mid-2007, and leveling off toward the end of 2009. From May 2007 to January 2009, both indices show prices dropping by approximately 27%.

S&P Case/Shiller Home Price Index: January 2005 through May 2012



Delinquencies and Defaults

According to S&P structured finance research, U.S. RMBS delinquencies have been increasing over the past few months (after nine months of declines) but remain below peak levels. The

table below shows residential mortgage loan performance statistics since June 2011. While 90-day delinquencies and foreclosures for the most part have been on the rise, REO (or real estate owned, whereby the lender has assumed ownership) has decreased. And on a positive note, the balance of current loans has been increasing since year-end 2011.

Residential Mortgage Loan Performance Statistics

	6/1/2011	12/1/2011	6/1/2012	7/1/2012
Current	64.05%	63.62%	65.27%	65.08%
30 days	4.69%	4.97%	4.66%	4.95%
60 days	2.49%	2.63%	2.37%	2.40%
90 days	12.32%	11.21%	10.08%	10.18%
Foreclosure	13.61%	14.68%	15.22%	15.17%
REO	2.84%	2.90%	2.39%	2.22%
Grand Total	**100.00%**	**100.00%**	**100.00%**	**100.00%**

Source: CoreLogic, 1010Data, Amherst Securities.

The table below shows delinquency, foreclosure and REO rates for 2003 through 2007 vintage prime and subprime mortgage loans as of March 2012, according to research published by S&P. Note the double-digit delinquencies for subprime loans are significantly higher than their prime loan counterparts. In addition, subprime loans have much higher foreclosure rates.

PRIME - as of March 2012	Vintage:				
Delinquent (% of outstanding balance):	2003	2004	2005	2006	2007
30 days	1.18	1.50	1.77	2.35	1.95
60 days	0.42	0.59	0.84	1.18	1.14
90 days	1.25	1.75	3.04	4.43	3.76
Foreclosure	1.58	2.24	3.30	5.62	4.87
REO	0.18	0.03	0.05	0.83	0.68
Total:	**4.61**	**6.11**	**9.00**	**14.41**	**12.40**

SUBPRIME - as of March 2012	Vintage:				
Delinquent (% of outstanding balance):	2003	2004	2005	2006	2007
30 days	8.25	8.00	7.32	7.03	6.58
60 days	3.86	3.79	3.79	3.74	3.52
90 days	8.81	12.78	14.49	16.75	17.14
Foreclosure	11.52	15.42	20.19	24.04	22.31
REO	2.03	3.52	4.25	4.83	4.78
Total:	**34.47**	**43.51**	**50.04**	**56.39**	**54.33**

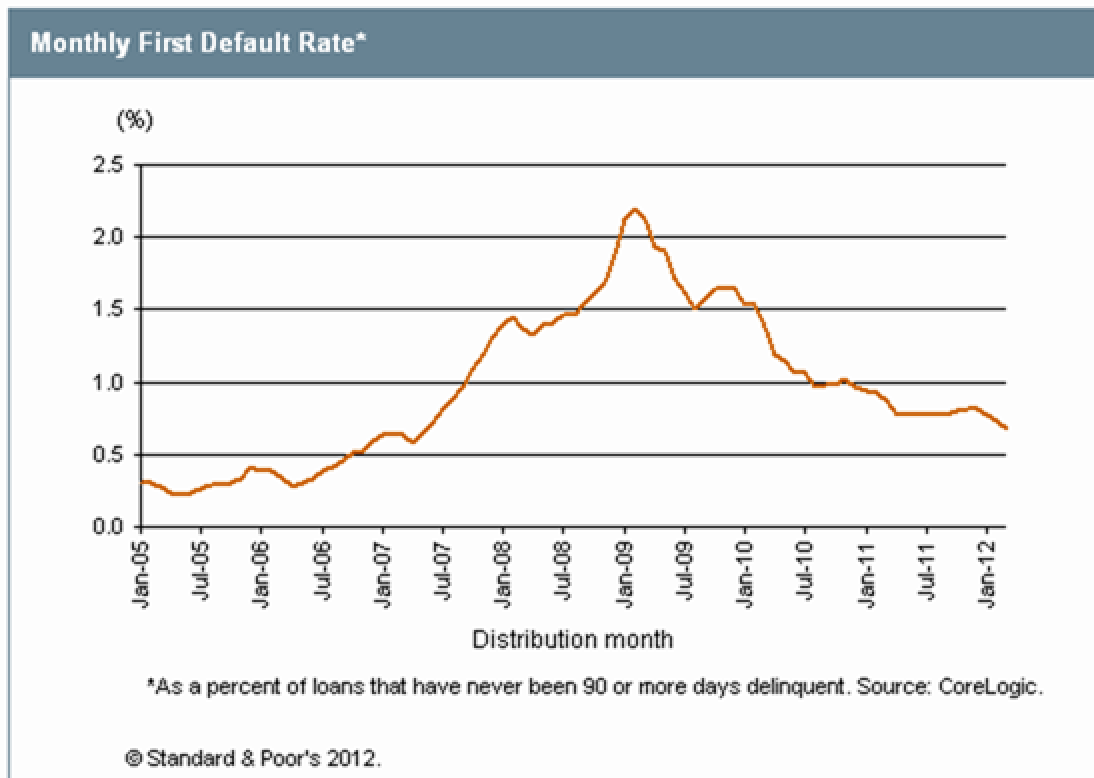
Source: Standard & Poor's

Delinquencies for all types of mortgage products and vintages remain elevated, and the cure rates (that is, the rates at which active mortgages that are 90-days or more delinquent return to performing status via loan modifications or making missed payments) remain low. From mid-2009 through the first quarter of 2012, for prime 2003 through 2007 vintages, the cure rate ranged generally between 3% and 5%. For subprime loans, cure rates generally ranged between 2% and 6% for the same vintages, for the same time period. Cure rates have been depressed, because not all borrowers qualify for the modifications proposed by banks and GSEs.

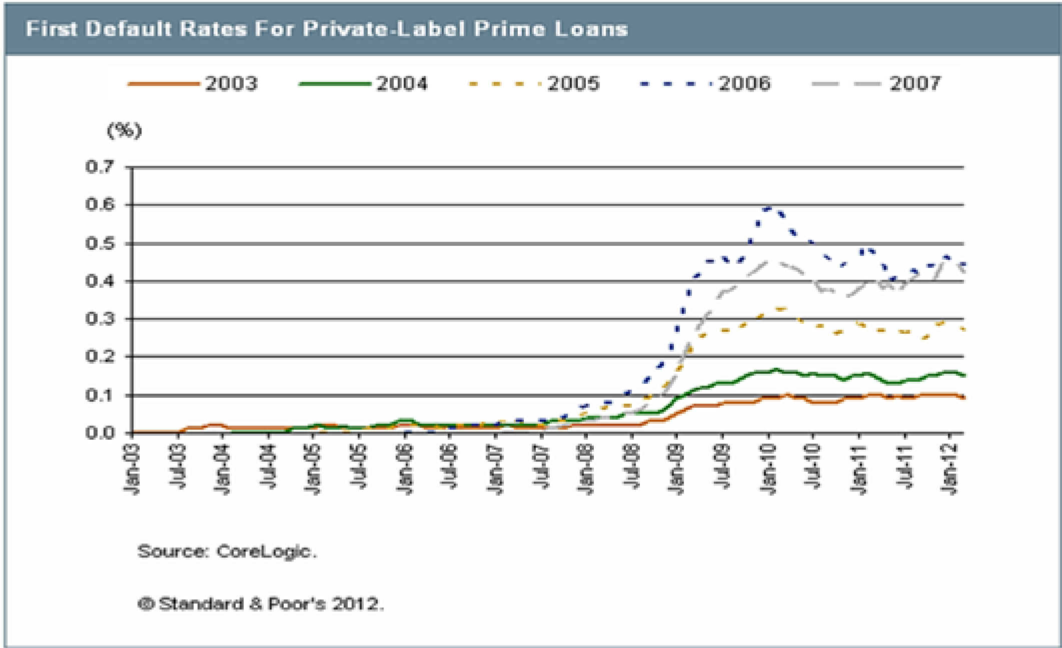
Stressed borrowers of 2006 and 2007 vintage loans are the most challenging to bring current, likely because of weaker underwriting standards at the time of origination and also because of declining home prices. For many of these borrowers, the decline in home prices means that the market value of their homes has also, consequently, declined. In turn, in the most challenging cases, the amount owed on the mortgage is more than the market value of the house, resulting in "negative equity" in the home. This is also known as the mortgage being "under water." There

is also evidence that approximately 25% to 30% of existing borrowers that are current (i.e., mortgage loans are not in default) also have negative equity.

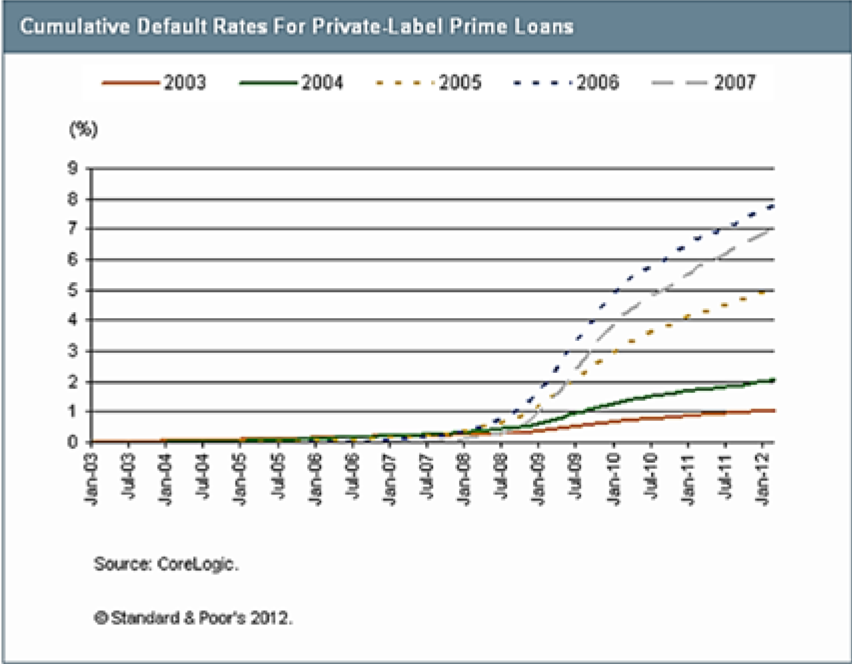
Despite the relatively high mortgage loan delinquency rates, private label RMBS default and re-default rates have decreased across all vintages. Re-default rates apply to those loans that emerged from delinquency (i.e., were made current) but subsequently defaulted again. The first monthly default rate is defined as the percentage of loans that have become more than 90 days delinquent in that particular month, and was 0.67% in March 2012 — the lowest rate since May 2007. Overall, default rates have been declining since the first quarter of 2009. New defaults have decreased as loans have become more seasoned, which has, in turn, decreased the flow into shadow inventory (that is, the supply of distressed loans). “Roll rates” (i.e., the rate at which currently paying loans become 30 days delinquent) have also slowed in recent months due to increased mortgage modifications and a growing economy, albeit slowly.



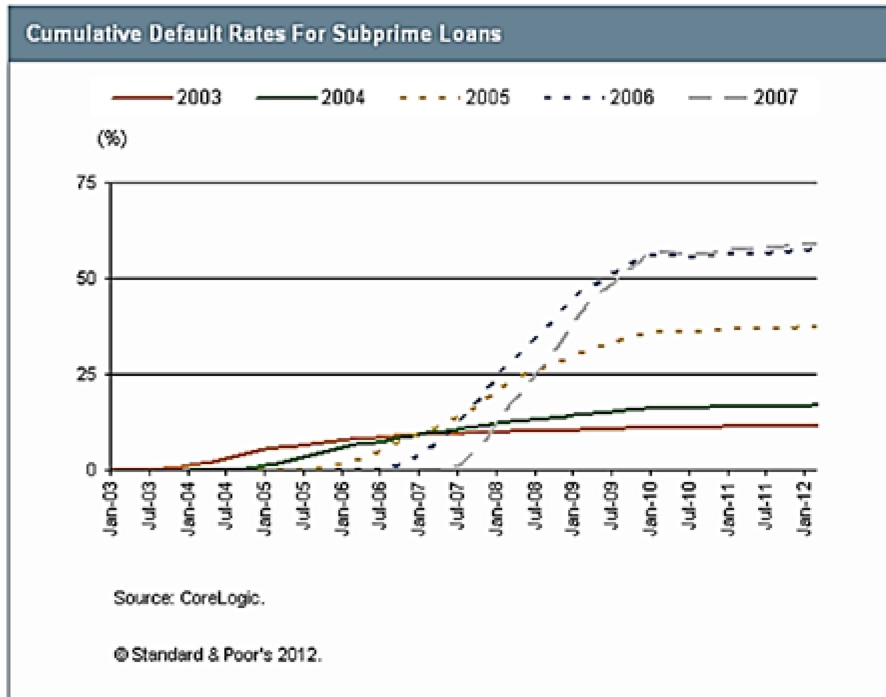
As shown in the chart below, new default rates for prime loans remain high, because unemployment rates have a high correlation with prime default rates in this economic and housing cycle. As of June 2012, the national unemployment rate was 8.3%, compared to 8.5% as of year-end 2011 and 9.1% as of June 2011.



In turn, the cumulative default rate for prime loans has increased since the beginning of 2009.



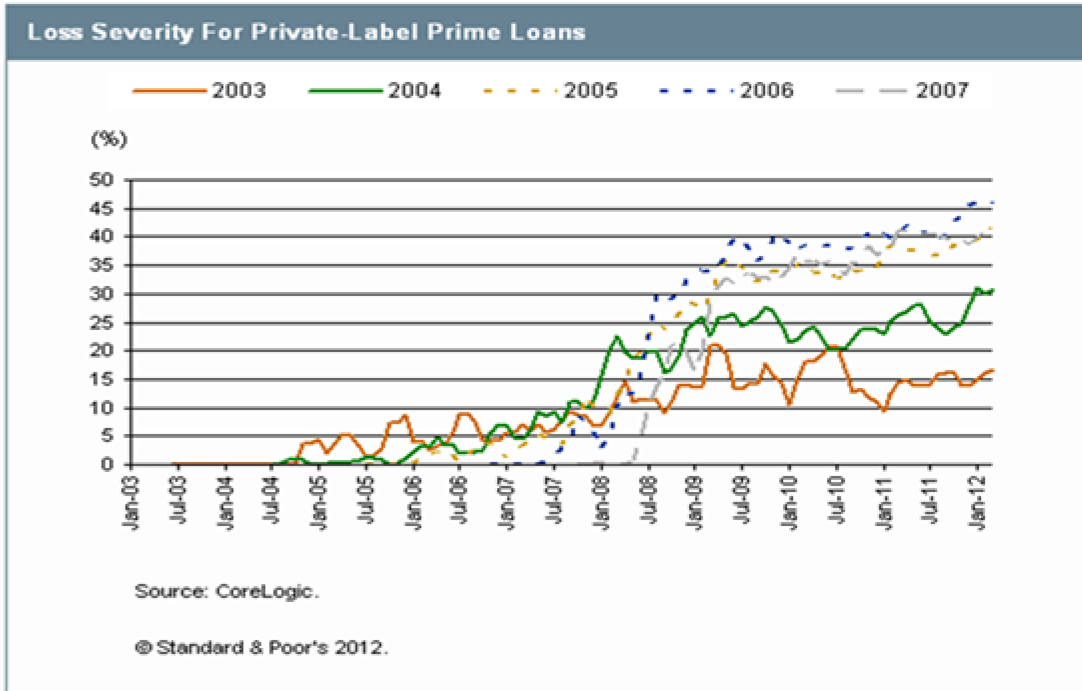
Not surprisingly, cumulative default rates for subprime loans are also high, particularly for the 2005 through 2007 vintages.



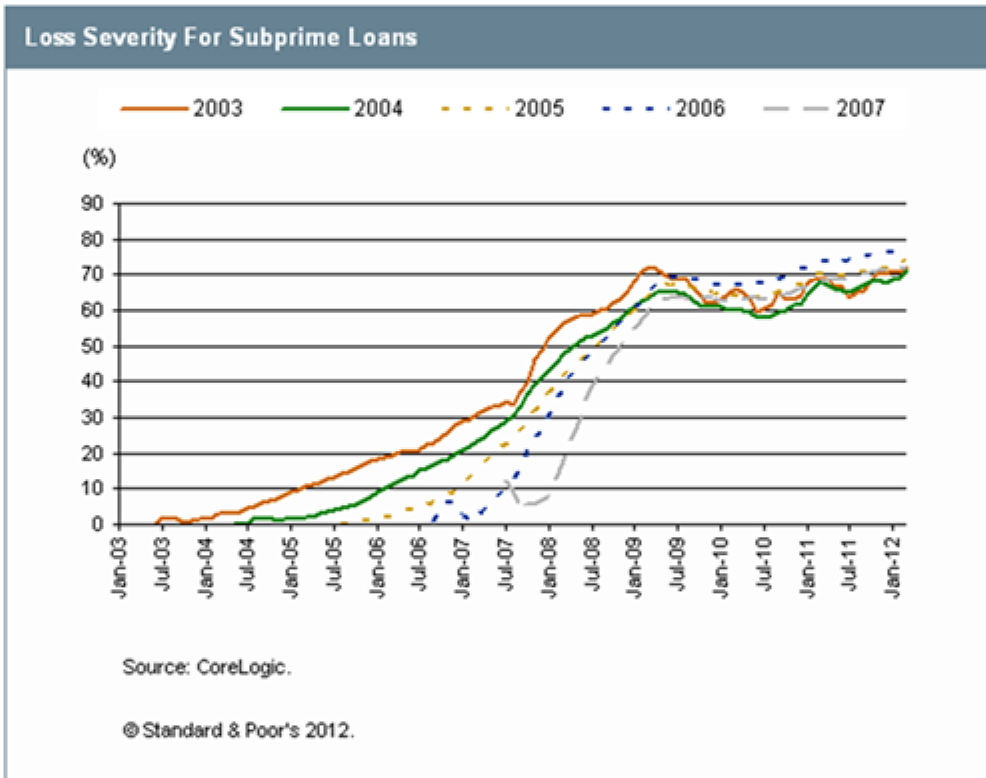
Loss Severities

Loss severities are increasing as home prices remain at or near recent lows. Home prices have declined by 35% nationwide since mid-2006. Loss severities for 2006 vintage closed defaults (that is, for properties that have already been liquidated) were almost 70% at the end of 2011. Loss severities, as defined by S&P, represent total losses as a percentage of unpaid principal remaining on the defaulted loans. Loss severities in general have increased for all vintages regardless of loan type (i.e., prime, subprime and Alt-A) since January 2007.

Beginning in 2008, loss severity for private label prime loans, as shown in the graph below, varied significantly depending on vintage — as low as approximately 16% as of January 2012 for 2003 vintage loans and as high as approximately 46% for 2006 vintage loans.



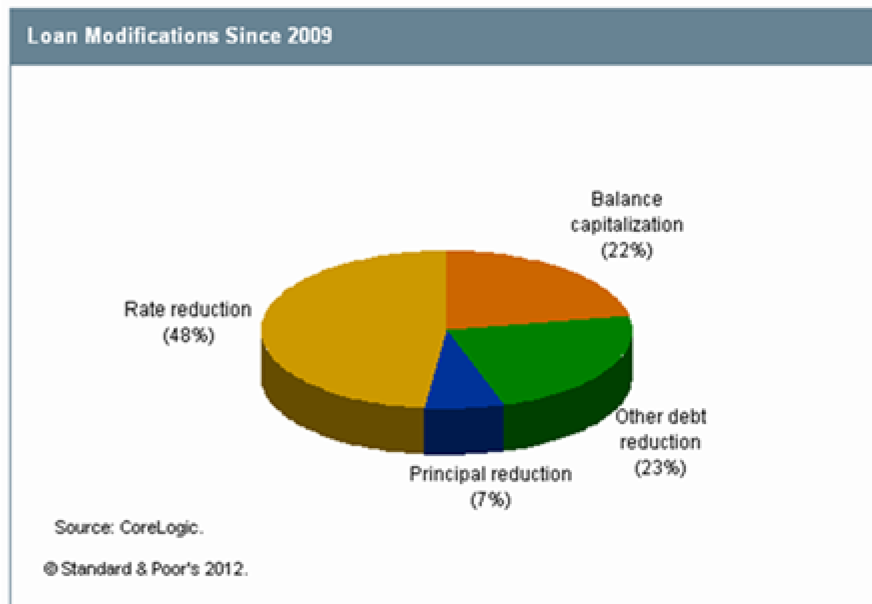
Loss severity for subprime loans, however, tended to trend together regardless of vintage, and was approximately 70% as of January 2012 for the 2003 through 2007 vintages — although the 2005 and 2006 vintages showed slightly higher loss severities, as shown in the graph below.



Loan Modifications

Loan modifications have increased since 2008. According to S&P research, there have been approximately 1.8 million modifications on more than $271 billion in outstanding mortgages.

This represents 3% of the total mortgage market. Re-default rates for modified loans have declined over time but remain high (in the 20% to 30% range) for all types of mortgage products. One out of every five borrowers that received a modification is expected to default. Loan modifications that reduce the amount of principal borrowers owe has increased for prime and Alt-A loans due, in part, to various government modification programs and a recent settlement among five residential mortgage servicers, the U.S. government and 49 state attorneys general (excluding Oklahoma) for faulty servicing and foreclosure practices. The settlement resulted in the forgiveness of up to $17 billion in borrowers' principal.



Foreclosures and Liquidations

A combination of complex and lengthy foreclosure procedures and the number of distressed borrowers is lengthening the time in which properties await foreclosure. In judicial states, where foreclosures are court proceedings, the amount of time to foreclose is longer than in non-judicial states, where there are no court proceedings and state law determines the foreclosure requirements.

According to S&P, as of May 2012, 49% of defaulted mortgages from non-judicial states and 64% of defaulted mortgages from judicial states were in default for more than two years. "Shadow inventory" refers to the supply of distressed homes that are 90 or more days delinquent on mortgage payments, are in foreclosure or are REO properties. Shadow inventory is currently jeopardizing the housing market's recovery in that they are taking an estimated 46 months to clear, and they will continue to do so until servicer liquidation times improve. Delays in "clearing" shadow inventory also increases loss severity. This timing, however, is an improvement from a peak of 57 months in 2008. Shadow inventory also includes 70% of loans that have been "cured" from 90-day delinquency (that is, they became current within the past 12 months), primarily because they are expected to default again.

Regulatory and Government-Related Trends

Recent S&P research noted that mortgage loan performance is affected by borrower behavior, regulation, legislation, interest rate changes and availability of mortgage credit. Regulatory uncertainty continues, particularly with respect to the federal Dodd-Frank Wall Street Reform and Consumer Protection Act's (Dodd-Frank Act) requirements for qualified residential mortgages (QRMs). The Dodd-Frank Act has, in part, caused many traditional issuers to delay plans because of concerns relative to retention requirements for QRMs (i.e., securities

collateralized by QRMs are exempt from the Dodd-Frank Act's proposed 5% risk retention requirement).

GSEs currently account for 95% of total mortgage loan originations via purchases or guarantees, which represents an increase from 50% a few years ago. GSEs also have generated almost 100% of RMBS new issuance since 2007, and they currently hold 56% of a total $10.3 trillion U.S. residential mortgage debt outstanding as of year-end 2011.

In May 2011, the federal Housing Finance Reform Act of 2011 (HFRA) was introduced by members of the U.S. House Committee on Financial Services, whereby FNMA and FHLMC would be wound down and simultaneously replaced with a new system of housing finance guaranty associations (HFGAs) that would, in turn, be authorized to purchase, hold, sell and deal in conventional mortgages. If enacted, the HFRA also would impose several requirements on the Federal Housing Finance Agency relative to supervisory and enforcement capabilities over the HFGAs. Depending on the final outcome, it could have an impact on mortgage refinancing and, ultimately, the performance of RMBS.

Summary

The housing market is showing some signs of recovery, with gains in employment and slowly improving sales and housing starts. There has been some interest in securitization of newly originated prime jumbo collateral — albeit with tighter underwriting standards.

The Capital Markets Bureau will continue to monitor trends in the residential mortgage market and report as deemed appropriate.

August 9, 2012								
Major Insurer Share Prices			Change %			Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	$45.42	6.7	6.1	5.0	$42.56	$42.81	$43.26
	Ameriprise	54.33	10.1	3.9	9.4	49.35	52.29	49.64
	Genworth	4.70	(2.4)	(17.8)	(28.3)	4.81	5.71	6.55
	Lincoln	23.11	16.3	8.1	19.0	19.87	21.38	19.42
	MetLife	34.43	17.7	12.5	10.4	29.25	30.60	31.18
	Principal	26.18	3.1	0.3	6.4	25.39	26.11	24.60
	Protective	29.17	4.1	(0.9)	29.3	28.01	29.43	22.56
	Prudential	53.65	16.8	11.3	7.0	45.92	48.21	50.12
	UNUM	19.16	2.0	(1.1)	(9.1)	18.79	19.37	21.07
PC	ACE	$72.98	4.3	(1.8)	4.1	$69.99	$74.35	$70.12
	Axis Capital	34.21	4.8	2.3	7.0	32.65	33.43	31.96
	Allstate	38.10	11.4	8.3	39.0	34.20	35.17	27.41
	Arch Capital	39.72	2.1	(0.7)	6.7	38.91	40.00	37.23
	Cincinnati	38.15	2.4	(0.5)	25.2	37.25	38.34	30.46
	Chubb	72.72	4.0	(0.5)	5.1	69.91	73.06	69.22
	Everest Re	104.61	3.0	(0.3)	24.4	101.61	104.94	84.09
	Progressive	19.85	(0.1)	(3.9)	1.7	19.86	20.66	19.51
	Travelers	64.01	3.6	0.1	8.2	61.80	63.95	59.17
	WR Berkley	37.32	(1.2)	(5.0)	8.5	37.78	39.30	34.39
	XL	23.06	12.4	9.7	16.7	20.52	21.03	19.77
Other	AON	$51.58	10.4	8.9	10.2	$46.71	$47.35	$46.80
	AIG	32.22	4.8	1.4	38.9	30.75	31.78	23.20
	Assurant	36.21	7.1	3.9	(11.8)	33.81	34.84	41.06
	Fidelity National	18.68	0.0	(3.3)	17.3	18.68	19.31	15.93
	Hartford	17.32	7.5	(0.5)	6.6	16.11	17.41	16.25
	Marsh	34.01	5.9	4.7	7.6	32.13	32.48	31.62
Health	Aetna	$37.66	1.0	(2.3)	(10.7)	$37.30	$38.53	$42.19
	Cigna	43.94	6.6	2.4	4.6	41.23	42.92	42.00
	Humana	67.95	(6.4)	(11.4)	(22.4)	72.61	76.66	87.61
	United	52.49	(3.8)	(6.6)	3.6	54.54	56.17	50.68
	WellPoint	57.27	(7.5)	(8.1)	(13.6)	61.94	62.31	66.25
Monoline	Assured	$12.04	2.4	(14.2)	(8.4)	$11.76	$14.03	$13.14
	MBIA	9.75	(5.2)	(10.5)	(15.9)	10.28	10.89	11.59
	MGIC	1.05	(53.7)	(64.2)	(71.8)	2.27	2.94	3.73
	Radian	2.98	9.0	(12.1)	27.4	2.74	3.39	2.34
	XL Capital	23.06	12.4	9.7	16.7	20.52	21.03	19.77

August 9, 2012								
Major Market Variables			Change %			Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Dow Jones Ind		13,194.56	3.7	2.5	8.0	12,721.46	12,871.39	12,217.56
S&P 500		1,402.14	3.6	2.8	11.5	1,352.81	1,363.98	1,257.60
S&P Financial		201.33	4.9	1.5	14.9	191.94	198.44	175.23
S&P Insurance		187.91	5.8	3.1	10.4	177.61	182.21	170.17
US Dollar $			Change %			Prior		
	/ Euro	$1.23	1.4	(2.2)	(5.1)	$1.21	$1.26	$1.30
	/ Crude Oil bbl	93.81	6.1	12.2	(5.1)	88.44	83.62	98.83
	/ Gold oz	1,613.90	2.4	0.9	3.0	1,576.80	1,598.90	1,566.80
Treasury Ylds %		%	Change bp			%	%	%
	1 Year	0.18	0.03	(0.02)	0.08	0.16	0.20	0.11
	10 Year	1.72	0.28	0.13	(0.16)	1.44	1.59	1.88
	30 Year	2.79	0.28	0.09	(0.11)	2.51	2.70	2.90
Corp Credit Spreads -bp			Change %			Prior		
	CDX.IG	74.85	(8.4)	(10.9)	(34.2)	81.75	83.99	113.83

August 9, 2012 Major Insurer Bond Yields				Weekly Change				
				Price			Spread	
	Company	Coupon	Maturity	Current	Change	Yield	B.P.	Change
Life	Aflac	8.500%	5/15/2019	$131.80	($1.22)	3.22%	201	(11)
	Ameriprise	5.300%	3/15/2020	$115.29	($0.96)	3.03%	168	(10)
	Genworth	6.515%	5/15/2018	$98.63	($0.44)	6.80%	581	(10)
	Lincoln National	8.750%	7/15/2019	$128.56	$0.26	3.96%	272	(32)
	MassMutual	8.875%	6/15/2039	$146.86	($4.03)	5.51%	280	(7)
	MetLife	4.750%	2/15/2021	$113.93	$0.37	2.89%	139	(26)
	Mutual of Omaha	6.800%	6/15/2036	$116.51	$0.66	5.54%	304	(31)
	New York Life	6.750%	11/15/2039	$137.35	($0.44)	4.39%	165	(28)
	Northwestern Mutual	6.063%	3/15/2040	$128.75	($0.79)	4.28%	156	(21)
	Pacific Life	9.250%	6/15/2039	$132.59	($1.66)	6.63%	395	(15)
	Principal	6.050%	10/15/2036	$115.70	($3.81)	4.93%	238	(4)
	Prudential	4.500%	11/15/2020	$108.45	$0.21	3.32%	183	(29)
	TIAA	6.850%	12/15/2039	$138.69	$0.15	4.40%	170	(27)
P&C	ACE INA	5.900%	6/15/2019	$124.77	$0.75	2.00%	81	(33)
	Allstate	7.450%	5/15/2019	$130.27	($0.15)	2.54%	137	(19)
	American Financial	9.875%	6/15/2019	$127.01	($1.38)	5.14%	389	(6)
	Berkshire Hathaway	5.400%	5/15/2018	$119.94	($0.75)	1.74%	75	(10)
	Travelers	3.900%	11/15/2020	$111.75	($1.25)	2.32%	84	(8)
	XL Group	6.250%	5/15/2027	$110.36	$0.62	5.23%	315	(38)
Other	AON	5.000%	9/15/2020	$113.55	($0.79)	3.10%	164	(15)
	AIG	5.850%	1/15/2018	$112.70	$0.49	3.27%	237	(31)
	Fidelity National	7.875%	7/15/2020	$113.38	$2.92	1.88%	92	(60)
	Hartford	5.500%	3/15/2020	$107.54	($0.03)	4.33%	299	(25)
	Marsh	9.250%	4/15/2019	$134.01	($0.86)	3.49%	230	(11)
	Nationwide	9.375%	8/15/1939	$136.13	$0.06	6.51%	382	(24)
Health	Aetna	3.950%	9/15/2020	$110.26	($1.34)	2.53%	112	(5)
	CIGNA	5.125%	6/15/2020	$113.37	($1.63)	3.18%	183	0
	United Healthcare	3.875%	10/15/2020	$108.98	($1.89)	2.65%	117	1
	Wellpoint	4.350%	8/15/2020	$109.59	($2.04)	2.99%	158	3

Questions and comments are always welcome. Please contact the Capital Markets Bureau at **CapitalMarkets@naic.org**.

The views expressed in this publication do not necessarily represent the views of NAIC, its officers or members. NO WARRANTY IS MADE, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY OPINION OR INFORMATION GIVEN OR MADE IN THIS PUBLICATION.

© 1990 – 2018 National Association of Insurance Commissioners. All rights reserved.