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Modeling of U.S. Insurance Industry's Holdings in Commercial Mortgage-Backed Securities

On June 1, 2012, the Capital Markets Bureau published its annual analysis of the "Modeling of U.S. Insurance Industry's Holdings in Residential Mortgage-Backed Securities." That Special Report discussed the differing results between the current process, which relies on modeling expected recovery values and comparing the results with book/adjusted carrying values (BACV), versus relying solely on ratings from nationally recognized statistical rating organizations (NRSROs). It went further to contrast the risk-based capital (RBC) requirements for the industry overall under each of the two processes on an absolute basis before the impact of covariance. This report will focus on the U.S. insurance industry's exposure to non-agency commercial mortgage-backed securities (CMBS). The Capital Markets Bureau produced a similar report dated April 14, 2011, focusing on year-end 2010 results.

For year-end 2011, the NAIC successfully completed the modeling of non-agency CMBS held by the U.S. insurance industry. As was the case for year-end 2010, to the extent data was available, each individual holding was modeled for expected losses using four different economic scenarios. The weighted average of those expected losses, assuming the bonds were held to maturity, was then translated into an expected recovery value. In lieu of using NRSRO ratings, U.S. insurance companies were required to compare their carrying values as of year-end to the expected recovery value to determine an NAIC designation, which was then mapped to an RBC factor.

As the Capital Markets Bureau did after the 2010 results, the purpose of this Special Report is to consider the results of the modeling and the impact on the U.S. insurance industry's RBC in comparison with the prior methodology, which relied solely on NRSRO ratings and assumed holdings were held at par for the purposes of assigning an NAIC designation. We will also briefly compare 2011 results with 2010.

2011 Modeling Results

As was the case for year-end 2010, after a public exposure and comment period, the NAIC's Valuation of Securities (E) Task Force formally adopted assumptions to be used in the modeling of the U.S. insurance industry's non-agency CMBS holdings in November 2011. Those assumptions for 2011 were as follows, alongside the assumptions used for year-end 2010:

Table 1: Assumptions for Year-End 2011 Modeling of CMBS

	Probability	2011 Timing to Trough	2011 Peak to Trough Property Prices	2010 Timing to Trough	2010 Peak to Trough Property Prices
Aggressive	20%	Q1 2010	(32%)	Q1 2010	(32%)
Base Case	55%	Q1 2010	(32%)	Q2 2011	(32%)
Conservative	20%	Q3 2013	(39%)	Q4 2012	(37%)
Most Conservative	5%	Q3 2014	(49%)	Q1 2014	(49%)

For year-end 2011, results for 4,627 unique CUSIPs were sent to U.S. insurers. The expected recovery values for these securities were used to determine the NAIC designation for a total exposure of \$161.9 billion in BACV across the entire industry. This was divided between Life and Fraternal (\$135.1 billion) and Property, Health and Title (\$26.8 billion). The total BACV exposure is also compared with \$171.6 billion at the end of 2010 and \$184.4 billion at the end of 2009. While there was some acquisition activity during 2011, the U.S. insurance industry's exposure to non-agency CMBS continued to decline, albeit modestly, for several reasons: 1) the lack of any significant new issuance in the market place; 2) amortizations on existing holdings; 3) selected sale activity; and 4) additional impairments taken during the year. Other-than-temporary-impairments (OTTI) and fair value revaluations taken during the year totaled \$740 million in 2011. This is compared with \$4.0 billion in 2010 and \$2.2 billion in 2009.

Based on the results for expected recovery values and the industry's year-end BACV prices, the breakdown of the industry's CMBS exposure by NAIC designation is as follows:

Table 2: NAIC Designations Based on Expected Recovery Values and BACV Prices

NAIC Designation	Average Expected Recovery %	BACV %	Total Carrying Value \$	% of Total BACV
1	97.33	95.58	\$153,416,082,484	94.8%
2	95.07	96.89	2,187,085,416	1.4%
3	88.14	92.08	2,264,738,275	1.4%
4	78.34	88.87	2,042,993,860	1.3%
5	66.32	82.50	1,347,067,919	0.8%
6	17.91	37.72	603,839,386	0.4%
Total	95.66	94.65	\$161,861,807,340	100.0%

As was the case last year, factoring the insurer's BACV price into the determination of an NAIC designation resulted in some differences in the profile of NAIC designations. Ignoring the different carrying values and relying solely on NRSRO ratings would have yielded the following breakdown:

Table 3: NAIC Designations Relying Solely on NRSRO Ratings

NAIC Designation	Average Expected Recovery %	BACV %	Total Carrying Value \$	% of Total BACV
1	99.90	99.52	\$144,507,850,299	89.3%
2	98.18	95.34	7,537,846,837	4.7%
3	92.84	89.68	4,210,019,813	2.6%
4	81.14	75.61	3,150,193,821	1.9%
5	50.93	44.79	2,176,568,648	1.3%
6	21.68	13.64	279,327,922	0.2%
Total	95.66	94.65	\$161,861,807,340	100.0%

As was the case in 2010, the shift in designations for CMBS was not as significant as it was for RMBS. Total exposure to bonds with an NAIC-1 designation under the current approach increased 5.5 percentage points when compared to the prior approach that relied solely on NRSRO ratings. For RMBS, it was an increase from 23.9% to 71.3%. Also notable is the fact that a significant amount of the overall shift to NAIC designations came from bonds that otherwise would have received an NAIC-2 or NAIC-3 designation. Those two categories declined by 4.5 percentage points. The exposure to bonds that would generally be deemed highest risk (NAIC-4, NAIC-5 and NAIC-6) declined modestly from 3.4% to 2.6%. In 2010, the change in approach actually resulted in a small increase in the number of bonds receiving a designation of NAIC-3 through NAIC-6 (from 1.0% to 3.8%). As one example of where taking BACV prices into account is demonstrated to be a reasonable approach, compare the results for the NAIC-6 category in Table 2 vs. Table 3. In Table 2, the modeling results indicate that insurers holding those bonds should reasonably expect to recover 17.91% of par value, whereas insurers are carrying those bonds at an average BACV price of 37.72%. Based on the modeling, the probability of losing more than half of their carrying value is high, justifying an NAIC-6. In Table 3, the average modeling results are 21.68% and the average BACV price is 13.64% for NAIC-6. That means the modeling suggests a very high probability of recovering full value as far as the insurer's current exposure. If that is the case, it does not seem reasonable to be treating those holdings as an NAIC-6. The NRSRO ratings, by their nature, assume that the bond is being held at par. However, the risk profile is very different when the bond is held at a significant discount to par. It is also worth noting that 87.9% of the industry's holdings experienced no change in the NAIC designation. In addition, a small percentage, or 3.0%, of the exposure was assigned an NAIC designation that was lower than would otherwise have been indicated by the NRSRO rating.

The broad results also translate into the narrower categories within each NAIC designation based on NRSRO ratings. For bonds that would have received an NAIC-1 designation based solely on the NRSRO rating, 99.0% also received an NAIC-1 designation using the modeling approach, but bonds with exposure of \$1.5 billion in BACV were assigned a lower designation. In the case of bonds that were rated in the BBB category by the NRSROs, or an NAIC-2 equivalent, 8.1% were also assigned an NAIC-2 under the modeling approach; 77.1% received an NAIC-1; and 14.7%, or \$1.1 billion, were assigned a lower designation requiring a higher RBC factor.

Focusing on those bonds rated below investment grade by the NRSROs, the ratings indicate that, assuming the bonds are held at par, these bonds are highly speculative. As was discussed extensively in 2009 when the NAIC first adopted the new procedures for non-agency RMBS, the size of the loss that leads to a lower rating could vary from a full impairment to a relatively nominal loss versus the bond's par value. The total exposure for these bonds was \$16.7 billion in BACV. Of that total, bonds with exposure of \$1.6 billion in BACV were assigned the same designation based on the modeling; 69.5% received a higher designation and 18.3% received a lower designation

Table 4: Bonds Rated Equivalent to NAIC 3 through 6 by NRSRO

	Average Expected Recovery %	BACV %	Total Carrying Value \$	% of Total BACV
NRSRO Assigned NAIC-3 to NAIC-6	65.83	60.38	\$16,688,546,701	100.0
Same Modeled Result	69.54	79.25	\$1,629,818,969	12.3
Higher Designation	67.66	53.25	\$5,868,070,160	69.5
To Investment Grade	68.39	52.01	\$5,188,564,836	63.2
To NAIC-1	66.85	49.18	\$4,548,923,061	59.0
Lower Designation	57.36	75.69	\$2,318,221,075	18.3

Of significance in the details above is that for those bonds deemed speculative grade by the NRSROs and receiving a higher NAIC designation from the modeling, the BACV price of 53.25% is significantly lower than the expected recovery value of 67.66%. That positive differential is on average greater for the group receiving an NAIC designation equivalent to investment grade (16.38%) and even more so for the group receiving an NAIC-1 (17.67%). On the other hand, for the group of bonds in this subset that received the same or lower NAIC designation based on the modeling approach, the average BACV price was higher than the expected recovery value, indicating a reasonable likelihood of loss of carrying value.

Risk-Based Capital Impact

The purpose of assigning an NAIC designation, whether relying solely on NRSRO-assigned ratings or through a more finely tuned modeling approach, is to map each insurer holding to an RBC factor. Under the current NAIC process for assigning designations for non-agency CMBS, total RBC is lower than it would have been if the NAIC had continued to rely solely on NRSRO ratings. In aggregate, the BACV price for the industry's exposure is 94.65%, which compares favorably to the average expected recovery value of 95.66%. Without accounting for the impact of the covariance component of the RBC formula, the RBC comparison using a breakdown of the industry's exposure based on the modeling approach is detailed in the table below:

Table 5: Differential in Risk-Based Capital

NAIC Designation Based on Modeling	BACV	RBC Based on Modeled Result	RBC Based on NRSRO Rating	Differential
1	\$153,416,082,484	\$594,787,380	\$1,094,400,742	\$(499,613,362)
2	2,187,085,416	28,263,687	75,641,881	(47,378,193)
3	2,264,738,275	103,283,329	101,441,403	1,841,926
4	2,042,993,860	202,473,996	170,850,971	31,623,026
5	1,347,067,919	311,150,629	150,735,021	160,415,607
6	603,839,386	181,032,872	123,519,746	57,513,126
Total	\$161,861,807,340	\$1,420,991,893	\$1,716,589,764	\$(295,597,871)

The \$153.4 billion in exposure assigned an NAIC-1 designation under the modeling approach have an average BACV price of 95.58%, slightly above the overall average of 94.65%. However, the positive differential to the modeled expected recovery value is wider, at 1.75 percentage points for the NAIC-1 category, versus 1.01 percentage points overall. With the discount to par and the favorable comparison to the modeled expected recovery value, there is a lower RBC requirement. The NRSRO rating would have resulted in a lower NAIC designation and a higher RBC factor. The reverse is true at the lower end of Table 5, where the modeled results drive a higher RBC requirement than would results that had relied solely on NRSRO ratings. These were holdings where the NRSRO rating would have resulted in a higher NAIC designation than what resulted from the modeling and comparison with carrying value. There

was a significant population that would have been an NAIC-4, relying solely on NRSRO ratings, but were assigned an NAIC-5 under the current modeling approach. The RBC impact is particularly noticeable because of the significantly higher RBC factor. This relationship is reversed when the table is based on NRSRO rating equivalents.

Table 6: Differential in Risk-Based Capital

NAIC Designation Based on NRSRO Ratings	BACV	RBC Based on Modeled Result	RBC Based on NRSRO Rating	Differential
1	\$144,507,850,299	\$583,788,149	\$552,374,922	\$31,413,227
2	7,537,846,837	103,757,895	96,206,467	7,551,428
3	4,210,019,813	231,513,485	186,568,309	44,945,175
4	3,150,193,821	245,982,245	302,131,774	(56,149,528)
5	2,176,568,648	224,052,444	495,509,915	(271,457,471)
6	279,327,922	31,897,675	83,798,377	(51,900,701)
Total	\$161,861,807,340	\$1,420,991,893	\$1,716,589,764	\$(295,597,871)

It is notable that this differential is a shift from the results at the end of 2010, when the RBC requirement for the non-agency CMBS exposure actually increased modestly, by \$245 million, between the NRSRO-driven approach to the modeled approach. Table 7 shows an estimate of the impact on RBC in both 2010 and 2011 between the current approach of modeling for expected recovery values and comparing to carrying values, versus the prior approach of solely relying on NRSRO ratings. The differentials do not take into account the impact of the covariance component of the RBC formula. Therefore, this is for illustrative purposes only. The covariance component is important because it serves to smooth significant changes in RBC charges, especially when those changes are reflected in smaller portions of an insurer's portfolio and are less correlated with other factors in the calculation.

Table 7: Risk-Based Capital, Before Covariance

	2010	2011
NRSRO driven RBC	1,652,665,303	1,716,589,764
Modeled driven RBC	1,897,910,050	1,420,991,893
% of BACV	1.11%	0.88%
Differential	245,244,747	(295,597,871)

Comparison over the Last Two Years

Overall the assumptions adopted by the Valuation of Securities (E) Task Force have not varied substantially. An additional factor depicted in Table 1 is the timing of the expected trough. This would have the most significant impact in the Most Conservative scenarios, as a longer wait to a recovery would be expected to result in a higher level of delinquencies over the time period. The troughs were first quarter 2014 and third quarter 2014, respectively. The changes in assumptions had an impact on the results for the industry's exposure from one year to the next. Focusing on the Life industry's exposure, the expected recovery value for the aggregate exposure was 95.17 in 2010 and 95.66 in 2011. These results were, however, likely skewed by acquisitions and dispositions during the period. It is possible to isolate the effect of the different assumptions by taking a simple average of expected recovery values for just those bonds that were modeled in each year. There were 4,439 bonds that fit into that analysis. As of year-end 2010, these bonds had an average expected recovery value of 86.18. This improved slightly to 86.73 at year-end 2011.

Table 8: Life Industry CMBS Exposure (\$000's) Designations Based Solely on NRSRO Ratings

NAIC Designation	2010		2011	
	BACV	% Total	BACV	% Total
1	127,557,463,862	87.8	118,851,370,677	88.0
2	7,991,039,987	5.5	6,942,666,364	5.1
3	5,147,677,354	3.5	3,937,227,419	2.9
4	2,860,847,879	2.0	2,915,873,667	2.2
5	1,443,736,060	1.0	2,137,331,156	1.6
6	288,935,994	0.2	272,554,915	0.2
Total	145,289,701,136	100.0	135,057,024,198	100.0

The decision to change the procedure for assigning NAIC designations for non-agency RMBS in 2009 and for non-agency CMBS in 2010 was in part driven by substantial downgrade activity by the NRSROs in RMBS in 2008 and 2009. While the downgrade by NRSROs was less-pronounced for non-agency CMBS as opposed to non-agency RMBS, it also had less of an impact on the U.S. insurance industry's exposure, which was largely skewed to senior and super-senior tranches that had and continue to have substantial credit support. The modeling results reflected the overall strength of the CMBS exposure. Of the total number of CUSIPs modeled, 1,502 (32.5%) reported no expected losses in any of the four scenarios. Another 429 CUSIPs modeled to a full expected recovery of principal in the Base Case, but there was some loss in at least one of the less optimistic scenarios.

Table 9: Life Industry Prices (Designations Based Solely on NRSRO Ratings)

NAIC Designation	2010			2011		
	Expected	BACV	Diff	Expected	BACV	Diff
1	99.75	98.61	1.14	99.88	99.24	0.64
2	94.94	95.34	(0.40)	98.23	95.91	2.32
3	85.30	84.73	0.57	92.99	91.78	1.21
4	65.76	62.08	3.68	80.76	76.43	4.33
5	45.63	36.94	8.69	51.10	45.16	5.94
6	28.79	19.40	9.39	21.84	13.80	8.04
Total	94.46	92.94	1.52	94.94	93.66	1.28

Table 9 details the difference between expected recovery value and BACV price for each of the two years, with groupings based on NAIC designations as determined by relying solely on NRSRO ratings. Of particular note is that in 2010 and 2011, for NAIC designations 5 and 6, the industry's holdings were held at values less than the modeled expected recovery values. Therefore, the modeling suggests that the probability of the insurers recovering their full value was high. In that case, a higher NAIC designation would seem appropriate, especially since the differentials for 2011 are comparable across all of the NAIC designation groups.

Table 10: Life Industry CMBS Exposure (\$000's) Designations Based on Modeling Approach

NAIC Designation	2010		2011	
	BACV	% Total	BACV	% Total
1	132,272,544,565	91.0	126,745,024,816	93.8
2	3,528,921,573	2.4	2,130,944,352	1.6
3	3,181,907,504	2.2	2,230,329,362	1.7
4	3,214,904,467	2.2	2,013,556,494	1.5
5	2,313,429,181	1.6	1,339,044,232	1.0
6	777,993,846	0.5	598,124,942	0.4
Total	145,289,701,136	100.0	135,057,024,198	100

NAIC designations—as determined by modeled expected recovery values in comparison with each insurer’s carrying value—display a very different profile. Investment grade issues, those assigned an NAIC-1 or NAIC-2, totaled 93.4% in 2010 and grew to 95.4% in 2011. The differentials between expected recovery value and carrying value for each successive NAIC designation also bear the expected relationship. For NAIC-1 in 2011, the expected recovery values are 2.18 points higher than the equivalent carrying values. It is a modestly negative relationship for the group of NAIC-2 bonds, and increasingly negative as one moves down the different designations.

Table 11: Life Industry Prices (Designations Based on Modeled Approach)

NAIC Designation	2010			2011		
	Expected	BACV	Diff	Expected	BACV	Diff
1	96.68	93.85	2.83	96.88	94.70	2.18
2	95.16	96.95	(1.79)	94.97	96.81	(1.84)
3	89.75	93.88	(4.13)	87.99	91.96	(3.97)
4	75.95	86.66	(10.72)	78.07	88.68	(10.61)
5	68.19	84.65	(16.46)	66.73	83.03	(16.30)
6	24.93	48.68	(23.75)	17.86	37.72	(20.86)
Total	94.46	92.94	1.52	94.94	93.66	1.28

Conclusion

As has been noted in previous Capital Markets Special Reports, the decision to change the process for assigning NAIC designations for non-agency RMBS and CMBS resulted in a number of benefits. Most significant of these is a calibration of NAIC designations, and the RBC factors that the holdings are mapped to, to a greater level of sophistication that goes beyond simple credit risk. Continuing to rely solely on NRSRO ratings would have been particularly problematic for bonds carried at a substantial discount to par, as well as in situations often cited where the potential loss of principal was small in comparison with the overall size of the holding. Furthermore, the current modeling approach resulted in improvements in transparency and regulatory oversight of the process, as well as more accurate valuations by insurers.

June 21, 2012								
Major Insurer Share Prices				Change %		Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	\$41.07	2.0	(11.4)	(5.1)	\$40.26	\$46.38	\$43.26
	Ameriprise	49.63	3.7	(14.0)	(0.0)	47.86	57.72	49.64
	Genworth	5.15	0.6	(38.6)	(21.4)	5.12	8.39	6.55
	Lincoln	20.64	0.8	(22.4)	6.3	20.47	26.60	19.42
	MetLife	29.71	0.1	(21.9)	(4.7)	29.69	38.05	31.18
	Principal	24.58	(0.4)	(17.7)	(0.1)	24.67	29.87	24.60
	Protective	27.60	3.3	(8.4)	22.3	26.73	30.12	22.56
	Prudential	46.82	(0.7)	(27.4)	(6.6)	47.17	64.47	50.12
	UNUM	19.17	(2.1)	(21.9)	(9.0)	19.58	24.55	21.07
PC	ACE	\$71.41	(0.4)	(3.9)	1.8	\$71.70	\$74.30	\$70.12
	Axis Capital	31.83	(1.5)	(4.4)	(0.4)	32.32	33.29	31.96
	Allstate	34.00	(0.2)	1.9	24.0	34.07	33.35	27.41
	Arch Capital	37.42	(1.9)	0.1	0.5	38.14	37.38	37.23
	Cincinnati	36.57	0.5	5.0	20.1	36.38	34.82	30.46
	Chubb	70.90	(0.1)	1.6	2.4	70.96	69.79	69.22
	Everest Re	102.76	0.3	9.9	22.2	102.49	93.53	84.09
	Progressive	20.61	(3.9)	(11.6)	5.6	21.45	23.31	19.51
	Travelers	62.58	1.4	5.4	5.8	61.71	59.37	59.17
	WR Berkley	37.02	(2.9)	1.6	7.6	38.12	36.44	34.39
	XL	20.03	(0.6)	(8.5)	1.3	20.16	21.88	19.77
Other	AON	\$46.08	(0.5)	(6.3)	(1.5)	\$46.29	\$49.19	\$46.80
	AIG	31.04	4.6	(0.5)	33.8	29.67	31.21	23.20
	Assurant	34.16	2.1	(15.8)	(16.8)	33.46	40.57	41.06
	Fidelity National	19.01	(1.1)	5.2	19.3	19.22	18.07	15.93
	Hartford	16.75	(0.2)	(23.6)	3.1	16.79	21.93	16.25
	Marsh	30.80	(2.7)	(6.2)	(2.6)	31.66	32.82	31.62
Health	Aetna	\$40.76	(4.9)	(18.7)	(3.4)	\$42.88	\$50.15	\$42.19
	Cigna	44.11	(1.0)	(10.7)	5.0	44.54	49.39	42.00
	Humana	78.48	(0.5)	(14.4)	(10.4)	78.87	91.73	87.61
	United	58.34	1.2	(1.2)	15.1	57.64	59.06	50.68
	WellPoint	69.46	0.4	(4.9)	4.8	69.17	73.01	66.25
Monoline	Assured	\$12.28	4.5	(25.4)	(6.5)	\$11.75	\$16.47	\$13.14
	MBLA	9.94	6.9	(1.4)	(14.2)	9.30	10.08	11.59
	MGIC	2.67	12.2	(47.3)	(28.4)	2.38	5.07	3.73
	Radian	2.75	12.7	(36.9)	17.5	2.44	4.36	2.34
	XL Capital	20.03	(0.6)	(8.5)	1.3	20.16	21.88	19.77

June 21, 2012								
Major Market Variables				Change %		Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Dow Jones Ind		12,573.57	1.3	(5.2)	2.9	12,411.61	13,264.49	12,217.56
S&P 500		1,325.51	0.9	(6.6)	5.4	1,313.70	1,418.90	1,257.60
S&P Financial		191.46	2.9	(10.7)	9.3	186.12	214.51	175.23
S&P Insurance		176.39	0.8	(7.3)	3.7	174.99	190.38	170.17
US Dollar \$			Change %		Prior			
/ Euro		\$1.25	0.5	(5.9)	(3.2)	\$1.25	\$1.33	\$1.30
/ Crude Oil bbl		78.26	(4.1)	(25.6)	(20.8)	81.57	105.22	98.83
/ Gold oz		1,564.50	(2.1)	(6.7)	(0.1)	1,598.50	1,676.40	1,566.80
Treasury Ylds %		%	Change		%		%	%
1 Year		0.17	0.00	0.00	0.07	0.17	0.17	0.11
10 Year		1.62	0.02	(0.56)	(0.26)	1.60	2.18	1.88
30 Year		2.69	(0.03)	(0.64)	(0.21)	2.72	3.33	2.90
Corp Credit Spreads -bp			Change %		Prior			
CDX.IG		85.58	(10.0)	6.5	(24.8)	95.05	80.39	113.83

June 21, 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	\$131.21	(\$0.39)	3.38%	221	(2)
	Ameriprise	5.300%	3/15/2020	\$113.92	(\$0.56)	3.25%	197	(0)
	Genworth	6.515%	5/15/2018	\$97.78	\$1.69	6.98%	595	(39)
	Lincoln National	8.750%	7/15/2019	\$126.90	(\$0.62)	4.27%	308	2
	MassMutual	8.875%	6/15/2039	\$146.54	\$0.64	5.53%	293	(2)
	MetLife	4.750%	2/15/2021	\$111.27	\$0.75	3.24%	178	(16)
	Mutual of Omaha	6.800%	6/15/2036	\$111.98	(\$0.51)	5.86%	343	9
	New York Life	6.750%	11/15/2039	\$131.88	\$0.23	4.67%	204	(3)
	Northwestern Mutual	6.063%	3/15/2040	\$123.19	\$0.91	4.58%	195	(4)
	Pacific Life	9.250%	6/15/2039	\$130.58	\$0.82	6.77%	417	(5)
	Principal	6.050%	10/15/2036	\$114.46	\$1.01	5.01%	254	(5)
	Prudential	4.500%	11/15/2020	\$105.37	(\$0.09)	3.75%	236	(4)
	TIAA	6.850%	12/15/2039	\$130.85	\$1.11	4.81%	218	(5)
P&C	ACE INA	5.900%	6/15/2019	\$123.28	(\$0.40)	2.27%	109	(7)
	Allstate	7.450%	5/15/2019	\$128.22	\$0.05	2.90%	175	(6)
	American Financial	9.875%	6/15/2019	\$126.83	\$1.37	5.23%	396	(16)
	Berkshire Hathaway	5.400%	5/15/2018	\$117.85	(\$0.05)	2.15%	119	(2)
	Travelers	3.900%	11/15/2020	\$110.95	(\$0.50)	2.44%	100	1
	XL Group	6.250%	5/15/2027	\$108.16	\$0.37	5.44%	351	(5)
Other	AON	5.000%	9/15/2020	\$111.67	(\$1.37)	3.37%	198	8
	AIG	5.850%	1/15/2018	\$110.49	\$0.76	3.74%	282	(21)
	Fidelity National	7.875%	7/15/2020	\$110.12	(\$1.13)	2.46%	141	14
	Hartford	5.500%	3/15/2020	\$104.63	\$0.20	4.78%	347	(9)
	Marsh	9.250%	4/15/2019	\$133.89	(\$0.60)	3.59%	247	11
	Nationwide	9.375%	8/15/1939	\$130.56	\$0.89	6.87%	429	(3)
Health	Aetna	3.950%	9/15/2020	\$108.94	\$0.25	2.72%	134	(9)
	CIGNA	5.125%	6/15/2020	\$112.13	\$0.64	3.38%	198	(19)
	United Healthcare	3.875%	10/15/2020	\$108.50	\$0.40	2.72%	132	(9)
	Wellpoint	4.350%	8/15/2020	\$110.51	\$0.01	2.89%	155	(4)

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

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