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**

Financial Institutions Exposure of U.S. Insurance Company Investments

Systemic risk has been a concern for participants in the financial markets for some time. Although there are a number of ways that have been used to describe systemic risk, a definition used by some market participants is the potential that a single event, such as a financial institution's loss or failure, could trigger a broad-based dislocation (or a series of defaults) that poses a threat to the financial stability of the United States and its economy. In particular, insurance industry experts and participants are focused on the interconnectedness of insurance companies with other financial institutions, such as global and domestic banks, investment banks and finance companies. Insurance companies not only conduct business with these financial institutions on a daily basis, but they are also key investors in the debt of financial institutions.

Given the focus on the interconnectedness of insurance companies and other financial institutions — as well as the fact that financial institutions are significant issuers of U.S. corporate debt — the Capital Markets Bureau is analyzing the insurance industry's exposure to financial institutions. This special report will provide basic information on direct short-term and long-term exposure to the financial sector. In the near future, the Capital Markets Bureau also expects to provide further insight into this topic with special reports on other related issues, such as derivatives counterparty exposure and securities lending.

Interdependencies: Insurance Companies and Other Financial Institutions

Interdependencies exist between insurance companies and other financial institutions, as their paths cross in a variety of ways during the normal course of business. Insurance companies are key investors in the debt of financial institutions, such as global and domestic banks, regional banks, finance companies and investment brokers. Financial institutions are, and have historically been, significant issuers of U.S. dollar-denominated investment grade corporate bonds. For example, financial institutions represented 31% and 48% of total supply in 2009 and 2010, respectively. As such, financial bonds are attractive as insurance company investments because they are typically highly liquid and highly rated by nationally recognized statistical rating organizations (NRSROs). In addition, financial institutions typically issue bonds with various maturities across the curve, providing insurance companies the ability to better match asset and liability duration. Without insurance companies, financial institutions would lose a significant source of capital.

Insurance companies, in turn, rely on financial institutions on a daily basis in the normal course of their investment operations. One important role that global and domestic banks and investment banks play is in normal trading activities, providing liquidity by buying and selling bonds in the primary and secondary markets. Banks also serve as counterparties to derivatives transactions that insurance companies primarily use for hedging purposes. This includes interest rate swaps, currency swaps and credit default swaps (CDS). In addition, banks provide financing and capital to insurance companies in the form of commercial paper and loans.

So, an interconnection between insurance companies and other financial institutions does exist. However, the degree to which they are interconnected is generally less significant than among other financial institutions. Trading activity between asset managers and hedge funds with broker-dealers included within banking is significantly greater. Interbank lending also is a substantial activity that does not exist at insurance companies.

Insurance Industry Exposure to the Financial Sector

As illustrated in the following table, the insurance industry's total exposure, including short-term and long-term debt, to the financial sector as of Dec. 31, 2010, is approximately $457 billion. The table provides the exposure by type of insurance company and by type of financial institution (e.g., banking, finance or insurance). Life insurance companies account for the majority of the exposure, with total exposure of approximately $336 billion, or 73.6% of the industry's exposure. Banking — which includes domestic and foreign banks, as well as broker-dealers — represents the bulk of the exposure, with total exposure of approximately $235 billion, or 51.3% of the industry's exposure.

$ in millions	Life	P&C	Health	Fraternal	Title	Total	% of Total
Banking	$173,975	$50,197	$6,013	$3,889	$391	$234,465	51.3%
Finance	35,861	10,735	1,535	1,280	96	49,507	10.8%
Insurance	126,326	34,954	7,713	3,688	239	172,920	37.9%
Total	$336,162	$95,886	$15,261	$8,857	$726	$456,892	100.0%
% of Total	73.6%	21.0%	3.3%	1.9%	0.2%	100.0%	

The table below provides similar data as above, but represents statistics for long-term debt only. The composition of the insurance industry's exposure to long-term debt only is similar to that of exposure to short-term and long-term debt.

$ in millions	Life	P&C	Health	Fraternal	Title	Total	% of Total
Banking	$171,209	$49,438	$5,751	$3,859	$391	$230,648	55.6%
Finance	31,591	10,695	1,474	1,271	96	45,127	10.9%
Insurance	109,887	22,899	2,288	3,423	206	138,683	33.5%
Total	$312,667	$83,032	$9,513	$8,553	$693	$414,458	100.0%
% of Total	75.4%	20.0%	2.3%	2.1%	0.2%	100.0%	
% of Cash & Invested Assets	9.6%	5.5%	6.7%	8.7%	9.2%	8.3%	

While not insignificant, the industry's holdings of short-term debt of other financial institutions, including commercial paper, is approximately $42 billion, or 0.8 % of cash and invested assets. This sector of the financial markets gained greater attention in 2008 when the commercial paper market completely froze, requiring support from the federal government. This resulted from the collapse of Lehman Brothers, a major issuer of commercial paper.

Overall, the credit quality for the financial sector exposure held by the life insurance industry is strong. Approximately 95.2% of the total exposure is investment grade, with a designation of NAIC 1 or NAIC 2. The table below provides greater detail and shows the financial sector exposure for life insurance companies on a more granular level.

$ in millions	NAIC 1	NAIC 2	NAIC 3	NAIC 4	NAIC 5	NAIC 6	Total
Banking	$133,785	$28,501	$6,438	$1,584	$319	$582	$171,209
Finance	21,760	7,909	1,417	452	44	9	31,591
Insurance	58,712	46,962	2,332	1,218	489	154	109,867
Total	$214,257	$83,372	$10,187	$3,254	$852	$745	$312,667
% of Total	68.5%	26.7%	3.3%	1.0%	0.3%	0.2%	100.0%

The following table provides the same granularity as above for property/casualty insurance companies. The credit quality for the financial sector exposure held by the property/casualty insurance industry is also strong. Approximately 97.1% of the total exposure has a designation of NAIC 1 or NAIC 2.

$ in millions	NAIC 1	NAIC 2	NAIC 3	NAIC 4	NAIC 5	NAIC 6	N/A	Total
Banking	$45,485	$2,746	$427	$746	$3	$28	$3	$49,438
Finance	8,790	1,388	338	153	16	9	1	10,695
Insurance	17,893	4,326	452	133	28	65	2	22,899
Total	$72,168	$8,460	$1,217	$1,032	$47	$102	$6	$83,032
% of Total	86.9%	10.2%	1.5%	1.2%	0.1%	0.1%	0.0%	100.0%

As detailed in the table below, the maturity profile of the life insurance industry's financial sector exposure is weighted toward three- to seven-year maturities. Although life insurance companies' liabilities are generally long-tailed, their investment options are subject to the availability of bonds in the market. Recently, the trend has been to issue on the short to intermediate end of the curve, balancing the significantly lower yields on the short end of the curve with the desire to lock in rates subject to inflation concerns. See the Capital Market Bureau's previously issued report titled, "The Treasury Curve and Its Impact on Insurance Company Investments" for a discussion on this topic. For example, in 2011, the average maturity for investment grade corporate bond issuance declined to six to seven years from 11 to 12 years in 2019. Needless to say, the life insurance industry does invest considerably in the long end of the curve, with almost 25% of its investments in bonds with maturities greater than 20 years.

$ in millions	0 – 2years	3 – 7 years	8 – 12 years	13 – 20 years	> 20 years	Total
Banking	$28,539	$64,946	$21,198	$14,262	$42,264	$171,209
Finance	7,606	11,117	5,867	1,091	5,910	31,591
Insurance	18,057	38,275	17,914	7,435	28,186	109,867
Total	$54,202	$114,338	$44,979	$22,788	$76,360	$312,667
% of Total	17.3%	36.6%	14.4%	7.3%	24.4%	100.0%

The following table illustrates the maturity profile of the financial sector exposure of the property/casualty insurance industry. In contrast to the life insurance industry, the maturity profile of the financial sector exposure is weighted toward the shorter maturities, as expected.

$ in millions	0 – 2years	3 – 7 years	8 – 12 years	13 – 20 years	> 20 years	Total
Banking	$17,715	$23,490	$4,826	$931	$2,476	$49,438
Finance	4,417	4,342	1,067	139	730	10,695
Insurance	12,191	6,593	2,361	390	1,364	22,899
Total	$34,323	$34,425	$8,254	$1,460	$4,570	$83,032
% of Total	41.3%	41.5%	9.9%	1.8%	5.5%	100.0%

Insurance Industry Exposure to Specific Financial Institutions

In addition to the financial sector exposure discussed above, it is important to focus on the exposure to specific financial institutions. The table below provides the insurance industry's exposure to five key financial institutions: Wells Fargo, Goldman Sachs, JP Morgan Chase, Bank of America and Citigroup. The exposure includes long-term debt, common stock and preferred stock.

$ in thousands

Issuer	Debt	Stock	Total
Wells Fargo	$17,496,036	$12,520,702	$30,016,738
Goldman Sachs	8,410,511	7,465,274	15,875,785
JP Morgan Chase	9,760,373	889,038	10,649,411
Bank of America	3,917,572	1,599	3,919,171
Citigroup	1,618,770	1,320,157	2,938,927

Note that these entities are also counterparties to derivatives exposure, which will be the subject of an upcoming special report.

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Major Insurer Bond Yields

	Company	Coupon	Maturity	Price: Current	Price: Change	Yield	Spread: B.P.	Spread: Change
Life	Aflac	8.500%	5/15/2019	$124.14	($0.01)	4.82%	203	2
	Ameriprise	5.300%	3/15/2020	$109.03	($0.17)	4.07%	112	3
	Genworth	6.515%	5/15/2018	$102.90	$0.37	6.00%	342	(4)
	Lincoln National	8.750%	7/15/2019	$129.27	($0.26)	4.41%	159	4
	MassMutual	8.875%	6/15/2039	$141.92	$0.78	5.82%	154	(4)
	MetLife	4.750%	2/15/2021	$103.05	($0.28)	4.36%	122	6
	Mutual of Omaha	6.800%	6/15/2036	$104.47	($0.70)	6.44%	236	7
	New York Life	6.750%	11/15/2039	$117.59	$0.29	5.52%	122	(1)
	NLV Financial	7.500%	8/15/2033	$117.91	$0.04	6.03%	211	1
	Northwestern Mutual	6.063%	3/15/2040	$108.83	$0.21	5.45%	113	(2)
	Pacific Life	9.250%	6/15/2039	$134.58	($0.52)	6.54%	227	3
	Principal	6.050%	10/15/2036	$106.54	($0.17)	5.57%	139	1
	Prudential	4.500%	11/15/2020	$100.99	($0.09)	4.37%	129	5
	TIAA	6.850%	12/15/2039	$116.73	($0.02)	5.66%	137	0
P&C	ACE INA	5.900%	6/15/2019	$113.61	$0.05	3.91%	112	3
	Allstate	7.450%	5/15/2019	$121.15	($0.28)	4.29%	152	6
	American Financial	9.875%	6/15/2019	$125.50	($0.06)	5.86%	306	4
	Berkshire Hathaway	5.400%	5/15/2018	$112.30	$0.09	3.40%	87	1
	Travelers	3.900%	11/15/2020	$97.90	$0.10	4.17%	110	2
	XL Group	6.250%	5/15/2027	$100.99	($0.24)	6.15%	250	(2)
Other	AON	5.000%	9/15/2020	$104.11	$0.19	4.46%	139	1
	AIG	5.850%	1/15/2018	$106.57	$0.03	4.69%	223	2
	Fidelity National	7.875%	7/15/2020	$111.19	($0.31)	6.25%	447	19
	Hartford	5.500%	3/15/2020	$105.28	($0.01)	4.76%	181	3
	Marsh	9.250%	4/15/2019	$129.62	($0.77)	4.71%	182	10
	Nationwide	9.375%	8/15/1939	$127.90	$0.36	7.08%	282	(2)
Health	Aetna	3.950%	9/15/2020	$98.94	($0.29)	4.09%	104	5
	CIGNA	5.125%	6/15/2020	$106.85	$0.06	4.21%	118	1
	United Healthcare	3.875%	10/15/2020	$98.43	$0.12	4.08%	98	1
	Wellpoint	4.350%	8/15/2020	$102.29	($0.01)	4.05%	102	3

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Major Insurer Share Prices			**Change %**			**Prior**		
		Close	**Week**	**QTD**	**YTD**	**Week**	**Quarter**	**Year**
Life	Aflac	$49.60	(8.2)	(6.0)	(12.1)	$54.02	$52.78	$56.43
	Ameriprise	62.29	(0.2)	2.0	8.2	62.41	61.08	57.55
	Genworth	11.11	(1.0)	(17.5)	(15.4)	11.22	13.46	13.14
	Lincoln	29.26	(1.8)	(2.6)	5.2	29.79	30.04	27.81
	MetLife	44.28	(0.3)	(1.0)	(0.4)	44.41	44.73	44.44
	Principal	31.68	2.1	(1.3)	(2.7)	31.02	32.11	32.56
	Protective	24.25	(1.4)	(8.7)	(9.0)	24.59	26.55	26.64
	Prudential	63.78	1.0	3.6	8.6	63.13	61.58	58.71
	UNUM	26.77	2.1	2.0	10.5	26.22	26.25	24.22
PC	ACE	$68.82	1.5	6.4	10.6	$67.81	$64.70	$62.25
	Axis Capital	33.36	(0.8)	(4.5)	(7.0)	33.62	34.92	35.88
	Allstate	32.00	(1.2)	0.7	0.4	32.38	31.78	31.88
	Arch Capital	34.56	0.9	(65.2)	(60.7)	34.24	99.19	88.05
	Cincinnati	30.66	(78.1)	(6.5)	(3.3)	140.24	32.79	31.69
	Chubb	65.74	(55.1)	7.2	10.2	146.32	61.31	59.64
	Everest Re	90.05	(40.9)	2.1	6.2	152.40	88.18	84.82
	Progressive	21.70	(86.3)	2.7	9.2	158.48	21.13	19.87
	Travelers	62.38	(62.1)	4.9	12.0	164.56	59.48	55.71
	WR Berkley	33.08	(80.6)	2.7	20.8	170.64	32.21	27.38
	XL	23.60	(86.6)	(4.1)	8.2	176.72	24.60	21.82
Other	AON	$52.33	(72.3)	(1.2)	13.7	$188.88	$52.96	$46.01
	AIG	30.76	(84.2)	(12.5)	(36.3)	194.96	35.14	48.27
	Assurant	37.96	(81.1)	(1.4)	(1.5)	201.04	38.51	38.52
	Fidelity National	15.55	(92.5)	10.0	13.7	207.12	14.13	13.68
	Hartford	27.06	(87.3)	0.5	2.2	213.20	26.93	26.49
	Marsh	30.49	(86.1)	2.3	11.5	219.28	29.81	27.34
Health	Aetna	$45.09	(80.5)	20.5	47.8	$231.44	$37.43	$30.51
	Cigna	49.22	(79.3)	11.2	34.3	237.52	44.28	36.66
	Humana	80.05	(67.1)	14.5	46.2	243.60	69.94	54.74
	United	49.89	(80.0)	10.4	38.2	249.68	45.20	36.11
	WellPoint	80.64	(68.5)	15.5	41.8	255.76	69.79	56.86
Monoline	Assured	$16.61	(93.8)	11.5	(6.2)	$267.92	$14.90	$17.70
	MBIA	8.73	(96.8)	(13.0)	(27.2)	274.00	10.04	11.99
	MGIC	7.49	(97.3)	(15.7)	(26.5)	280.08	8.89	10.19
	PMI	1.39	(99.5)	(48.5)	(57.9)	286.16	2.70	3.30
	Radian	4.42	(98.5)	(35.2)	(45.3)	292.24	6.81	8.07
	XL Capital	23.60	(92.1)	(4.1)	8.2	298.32	24.60	21.82

May 20, 2011 Major Market Variables	Close	Change % Week	QTD	YTD	Prior Week	Quarter	Year
Dow Jones Ind	12,512.04	3637.2	1.6	8.1	334.80	12,319.73	11,577.51
S&P 500	1,333.27	291.1	0.6	6.0	340.88	1,325.83	1,257.64
S&P Financial	211.36	(39.1)	(4.2)	(1.6)	346.96	220.71	214.77
S&P Insurance	191.45	(45.8)	(1.8)	1.7	353.04	194.96	188.22
US Dollar $		Change %			Prior		
/ Euro	$1.42	(99.6)	0.0	5.8	$371.28	$1.42	$1.34
/ Crude Oil bbl	99.49	(73.6)	(6.8)	7.9	377.36	106.72	92.22
/ Gold oz	1,513.50	294.7	5.2	6.5	383.44	1,438.90	1,420.78
Treasury Ylds %	%	Change			%	%	%
1 Year	0.17	0.00	(0.12)	(0.10)	0.17	0.28	0.27
10 Year	3.15	(0.01)	(0.33)	(0.15)	3.16	3.47	3.30
30 Year	4.30	0.01	(0.21)	(0.04)	4.29	4.51	4.34
Corp Credit Spreads -bp		Change %			Prior		
CDX.IG	76.27	38.4	(9.0)	(10.3)	55.12	83.81	85.00

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