



The <u>NAIC's Capital Markets Bureau</u> 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 <u>index</u>

#### U.S. Insurance Industry Exposure to the Financial Sector in 2014

Insurance companies are connected to other entities in the financial sector in many ways: as investors in their debt and equity securities, as short-term depositors, and as counterparties in financial transactions. The degree to which insurers are interconnected with other financial institutions is not as high as it is among banks and broker-dealers, but this exposure to so-called systemic risk—the risk that the failure of one financial institution could cause other interconnected institutions to fail and harm the economy as a whole—has been a concern for insurers and regulatory authorities since the 2008 financial crisis. With that concern in mind, since publishing its first special report on financial institutions exposure in May 2011 titled "Financial Institutions Exposure of U.S. Insurance Company Investments," the NAIC Capital Markets Bureau has continued to monitor the U.S. insurance industry's exposure to financial institutions, especially corporate debt holdings. This special report focuses on the U.S. insurance industry's long-term corporate bond investments in the financial sector as of year-end 2013 and mid-year 2014, and discusses recent fundamental and credit trends in the bank, non-bank financial and insurance industries.

# Financial Sector Exposure: A Big Part of the Investing Landscape

Financial institutions comprise a significant, albeit decreasing, portion of the U.S. corporate credit market. According to a report by Fitch Ratings, as of Sept. 30, 2014, the financial sector accounted for \$1.5 trillion, or 29%, of the \$5.1 trillion of total corporate bonds outstanding. Financial sector debt outstanding has fallen roughly 20% since year-end 2007, when it accounted for \$1.9 trillion, or 50.6%, of the \$3.8 trillion total for all sectors. Even so, financial institutions continue to account for a significant share of new corporate debt supply. According to the same Fitch Ratings report, new corporate debt issuance by financial institutions in the first nine months of 2014 totaled \$255 billion, or 35% of total supply. In 2013, financial companies issued \$276 billion of paper, accounting for 30% of the \$923 billion total corporate issuance for the year.

### **Corporate Bonds**

Table 1 illustrates the U.S. insurance industry's total exposure to the long-term debt of financial sector companies as of Dec. 31, 2013, and Table 2 illustrates the exposure as of June 30, 2014. For simplicity, we have divided the financial sector into three major categories: banks, insurance companies and other non-bank financial companies. Based on the data, in the first six months of 2014, the insurance industry increased its total exposure to the financial sector in terms of book/adjusted carrying value (BACV) by 1.9% to approximately \$329.1 billion. Among the insurance industry segments, property/casualty (P/C) insurers increased their financial sector holdings 3.9%, raising their share of total industry corporate bond exposure to the financial sector to 24.3%. Life and fraternal insurance companies' exposure grew a respective 1.7% and 1.9% in the first half of 2014, so their respective shares of total industry financial sector exposure were virtually unchanged at 69.6% and 2.7%. Health and title insurers reduced their financial institution exposure by 6.6% and 6.7%, respectively, so their share of total industry exposure to the sector declined slightly over the first six months of 2014.

Table 1: U.S. Insurance Industry Financial Sector Exposure: Long-Term Corporate Bonds as of Dec.31, 2013

as of Dec.31, 2013							% of	
							Insurance	
							Industry	% of
							Financial	Insurance
							Sector	Industry
							Corp.	Total
							Bond	Согр.
Year-end 2013 BACV (\$mil.)	Life	P/C	Health	Fraternal	Title	Total	Exposure	Bonds
Bank	108,354.7	42,739.1	5,916.3	3,423.6	355.5	160,789.3	49.8%	8.1%
Insurance	66,770.5	11,281.2	1,886.6	2,758.8	134.7	82,831.9	25.6%	4.2%
Non-bank Financial	50,666.9	22,338.5	3,713.9	2,419.2	309.3	79,447.2	24.6%	4.0%
Total Financial Sector	225,792.2	76,358.9	<b>11,516</b> .8	8,601.6	799.5	323,069.1	100.0%	16.3%
% of Insurance Industry Financial								
Sector Carp. Band Expasure	69.9%	23.6%	3.6%	2.7%	0.2%	100.0%		
% of Insurance Industry Total								
Corporate Bonds	14.3%	24.5%	33.1%	14.1%	29.5%	16.3%		
% of Insurance Industry Cash								
and Invested Assets	6.3%	4.6%	6.6%	7.5%	9.5%	5.8%		

Table 2: U.S. Insurance Industry Financial Sector Exposure: Long-Term Corporate Bonds at Jun. 30, 2014

							% of Insurance Industry Financial Sector Corp. Bond
Mid-year 2014 BACV (\$mil.)	Life	P/C	Health	Fraternal	Title	Total	Exposure
Bank	111,630.8	44,972.6	5,704.3	3,450.9	330.8	166,089.4	50.5%
Insurance	66,869.7	11,530.6	1,682.3	2,823.9	119.2	83,025.7	25.2%
Non-bank Financial	51,022.4	22,851.4	3,372.0	2,490.2	296.4	80,032.3	24.3%
Total Financial Sector	229,522.9	79,354.5	10,758.6	8,765.1	746.3	329,147.4	100.0%

*Note:* Aggregate Corporate Bond and Cash & Invested Assets data as of mid-year 2014 were not available as of the date of publication of this report.

Banks make up the lion's share of financial sector exposure for the insurance industry, accounting for nearly 51% as of mid-year 2014, while insurance companies and other non-bank financials account for about 25% and 24%, respectively. Large financial institutions—especially banks—are among the most prolific issuers of investment-grade corporate debt, and they tend to issue bonds across the maturity spectrum, providing investors with an array of choices to meet their duration needs.

## **Geographic Distribution**

The insurance industry's financial sector corporate bond exposure remains highly concentrated in the U.S., which accounted for \$267.0 billion, or 81%, of total BACV as of Jun. 30, 2014. Aside from the U.S., Europe accounted for \$36.7 billion (11%), while Asia and Latin America accounted for only \$3.8 billion and \$2.4 billion, respectively, or 1.2% and 0.7%; the largest single-country exposures within the financial sector were the United Kingdom, with \$13.3 billion (4.1%), and Canada, with \$11.5 billion (3.5%).

#### **Credit Quality Distribution**

Overall, the credit quality of insurers' exposure to the financial sector is strong. As Table 3 shows, approximately 97% of total financial sector corporate bond BACV was deemed

investment grade (NAIC designation 1 or 2) as of June 30, 2014. That percentage is virtually unchanged from year-end 2013, as are the weights of NAIC 1- and NAIC 2-designated holdings, which were 65% and 32%, respectively. Approximately 96% of life companies' financial sector corporate bond holdings were investment grade as of June 30, 2014, virtually unchanged from Dec. 31, 2013. P/C companies had 97% of financial sector corporate bond holdings concentrated in investment-grade issues as of mid-year 2014, unchanged since the end of 2013. Health, fraternal and title companies' financial sector corporate holdings were even more heavily weighted in investment-grade credits. At the other end of the credit spectrum, the insurance industry's holdings of the lowest-rated bonds (NAIC designation 5 and 6) remained minimal, accounting for just 0.1% of total financial sector corporate bond BACV at mid-year 2014.

The credit quality distribution of the insurance industry's financial sector holdings is slightly stronger than the overall distribution for the industry's total bond holdings, which were 95% weighted in NAIC designation 1 or 2 as of Dec. 31, 2013.

Table 3: U.S. Insurance Industry Financial Sector Credit Distribution (Long-Term Corporate Bonds) at June 30, 2014

BACV (\$ mil.) as of Jun. 30, 2014	NAIC1	NAIC2	NAIC3- NAIC6 and N/A	Total	%
Life	14.102		and tyrr	10001	,,,
Bank	75,657	31,705	4,269	111,631	49%
Non-bank Financial	36,329	12,236	2,457	51,022	22%
Insurance	28,723	37,364	782	66,870	29%
Total Financial Sector - Life	140,709	81,305	7,509	229,523	100%
% of Financial Sector - Life	61%	35%	3%	100%	
P/C					
Bank	36,726	6,844	1,403	44,973	57%
Non-bank Financial	17,156	4,753	942	22,851	29%
Insurance	6,155	5,081	295	11,531	15%
Total Financial Sector - P/C	60,036	16,679	2,639	79,355	100%
% of Financial Sector - P/C	76%	21%	3%	100%	
Health					
Bank	4,694	944	66	5,704	53%
Non-bank Financial	2,445	820	106	3,372	31%
Insurance	855	796	31	1,682	16%
Total Financial Sector - Health	7,994	2,561	203	10,759	100%
% of Financial Sector - Health	74%	24%	2%	100%	
Fraternal					
Bank	2,506	882	63	3,451	39%
Non-bank Financial	1,838	559	93	2,490	28%
Insurance	1,138	1,621	66	2,824	32%
Total Financial Sector - Fraternal	5,482	3,061	222	8,765	100%
% of Financial Sector - Fraternal	63%	35%	3%	100%	
Title					
Bank	284	43	3	331	44%
Non-bank Financial	217	78	1	296	40%
Insurance	75	44	-	119	16%
Total Financial Sector - Title	576	166	4	746	100%
% of Financial Sector - Title	77%	22%	0%	100%	
Total					
Bank	119,867	40,418	5,804	166,089	50%
Non-bank Financial	57,986	18,447	3,599	80,032	24%
Insurance	36,945	44,907	1,174	83,026	25%
Total Financial Sector - Insurance Industry	214,798	103,773	10,577	329,147	100%
% of Financial - Insurance Industry	65%	32%	3%	100%	

The overall stability of the credit quality distribution for the first half of 2014 (i.e., compared to that as of year-end 2013) suggests that insurance companies did not take on additional credit risk in their financial sector corporate bond investments as some appeared to be doing to a

modest extent in 2012, when the Capital Markets Bureau last analyzed financial sector exposure for the industry. The data show that insurance industry portfolios' credit quality with respect to financial sector holdings changed little, on balance, over the first six months of 2014. However, while credit quality within the insurance industry's financial sector corporate bond holdings changed little in the first half of 2014 with respect to NAIC designation, there have been more subtle changes in credit rating migration within the financial sector, and differing credit rating trends between financial sector industry groups. Standard & Poor's (S&P) data show that, in aggregate for financial institutions around the globe (including insurance companies), the number of rating upgrades exceeded downgrades in each quarter of 2014, reversing the negative trend observed in 2011 – 2013. Credit rating trends within the financial sphere were mixed, however, as insurance company credit quality improved in each quarter of 2014 to date, more than offsetting ongoing credit deterioration in the banking sector through the third guarter of last year. Chart 1 shows the credit rating migration over the past five guarters for financial institutions (including insurers) by sector, based on S&P data.

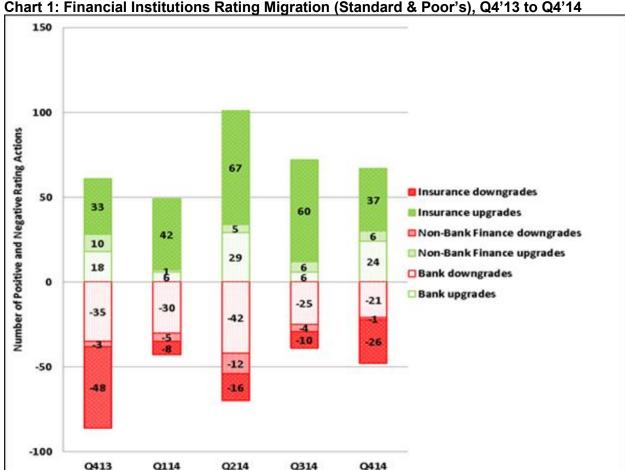


Chart 1: Financial Institutions Rating Migration (Standard & Poor's), Q4'13 to Q4'14

Source: Standard & Poor's **Key Sector Credit Trends** 

**Banks** 

Moody's Investors Service (Moody's) changed its outlook on the U.S. banking system to stable from negative in May 2013, reflecting "continued improvement in the operating environment and reduced downside risks to the banks from a faltering economy." The outlook had been negative since 2008. The outlook revision was based on their view that sustained GDP growth and an improving employment situation would help banks protect their balance sheets. Indeed, U.S.

economic growth accelerated in 2014 following the weather-depressed first quarter: Charge-offs and delinquencies fell during the year and remain low, banks' capital positions continued to improve during 2014 due to regulatory changes, and funding and liquidity remained strong. Moody's cited the low interest rate environment as the single most important driver of U.S. banks' performance through 2014, because low rates promote private-sector employment growth, and also helped banks improve their asset quality metrics such as net chargeoffs. The downside of low rates, however, is that they put pressure on banks' net interest margins, and also encourage looser loan underwriting standards as banks reach for yield by increasing risk. Combined with price competition, Moody's warns, this will result in greater credit costs, particularly in commercial and industrial loan books, that will weigh on earnings; a protracted slackening of underwriting standards would be the most likely factor that could lead them to revert to a negative outlook on U.S. banks.

In a Dec. 15, 2014, report on the U.S. banking outlook, S&P expects greater stability in bank ratings and outlooks in 2015. S&P cited several indicators that show improvement in U.S. banking industry fundamentals: Balance sheets are stronger; loan growth is accelerating, especially commercial and industrial; capital ratios are stabilizing at higher levels; deposit growth has remained steady; asset quality has held up well; and earnings are growing despite the headwinds created by the low interest-rate environment, thanks to expense management and reserve releases. Much of the regulatory framework is in place now, giving bank managements and investors greater certainty, and the macroeconomic outlook for U.S. consumers and business investment looks favorable. Hence, S&P sees consistent positive operating leverage for the U.S. banking industry in 2015, for the first time since 2008, although a few uncertainties remain. First, the Federal Reserve has yet to finalize detailed requirements concerning the proportion of long-term debt banks will have to maintain at the holding company level to absorb potential losses from operating subsidiaries. This concern is a key reason for the negative outlooks S&P has maintained on the eight U.S. bank holding companies that they deem as having high systemic importance. In addition, although a widely anticipated rise in short-term interest rates should benefit most banks, there could be adverse effects of a rate rise associated with longer-duration investments, slowing deposit growth and shifts in deposit mix, and possibly increased need for wholesale funding. Rising interest rates could also trigger adverse credit development in leveraged loan, construction loan and home equity loan portfolios as loans reprice.

In Europe, the credit outlook for banks is more negative. In April 2014, S&P issued broad actions on dozens of European banks, including a lowered outlook on 15 institutions, many of which are deemed systemically important by government regulators. S&P said it sees government support for banks diminishing as European authorities are taking steps to require creditors, rather than taxpayers, to bear the risk of bank failures by imposing new capital requirements on banks so that investors—including bondholders—will bear losses in the event of a failure. While in the near term, S&P expects governments will mostly remain supportive of senior unsecured creditors for the largest banks, beginning in 2016, the rating agency expects there will be changes to how financial support is structured. The Eurozone crisis raised concern about national governments' ability to pay their debts due to the great cost of bank bailouts, causing sovereign debt prices to fall. European banks, with large sovereign debt holdings, suffered. As European lawmakers and national governments try to reform and centralize the monitoring of banks, the links between weak banks and their governments are likely to be severed, with more risk falling on bank bondholders. European bank corporates accounted for approximately \$35.4 billion, which accounts for 1.8% of the insurance industry's total corporate bond exposure as of Dec. 31, 2013, and 10.3% of total financial sector corporate bond exposure.

#### **Non-Bank Financials**

This segment includes all non-bank and non-insurance financial services companies, so broad credit trends for the segment are difficult to isolate. That is, this segment includes broker-dealers, non-bank lenders, securities exchanges and investment companies whose credit profiles may vary.

### **Maturity Distribution**

Chart 2 and Table 4 detail the maturity distribution of financial sector corporate bond holdings of the insurance industry, by industry segment. As one would expect, the maturity distribution for life companies is fairly spread out, but with 64% concentrated between the >1- to 5-year and >5to 10-year buckets (30% and 34%, respectively). This is consistent with the somewhat longer duration profile for their liabilities. In the first half of 2014, life companies extended their financial sector maturities, reducing their holdings in the shortest maturity buckets (0-1 and >1-5 years) by a respective three and one percentage point, while increasing exposure by one to three percentage points in the three longer-dated buckets (more than five years). P/C companies, conversely, have a shorter duration liability profile and, therefore, have two-thirds of their holdings maturing in five years or less, with 56% in the >1- to 5-year bucket. In the first six months of 2014, P/C insurers showed no change in maturity profile within their financial sector corporate bond holdings except for a three percentage point shift from the >1- to 5-year bucket to the 0-1 year segment, which could simply represent the roll-down of certain bonds into the shorter bucket. Health insurers—who also tend to have a shorter-duration liability stream and whose financial sector corporate bond exposure fell overall by \$758 million—reduced their short-dated (0-1 year) financial holdings by three percentage points, and increased the >1- to 5year and >20-year buckets by one percentage point each. Fraternal companies' maturity distribution of financial sector corporate bond holdings was little changed except for what appears to be some roll-down between maturity buckets, while title companies—whose financial institution corporate holdings declined by \$53 million—increased the portion of these holdings maturing in less than one year to 26% from 11% at year-end 2013.

Chart 2: U.S. Insurance Industry Financial Sector Maturity Distribution (Long-Term Corporate Bonds), By Company Type, as of June 30, 2014

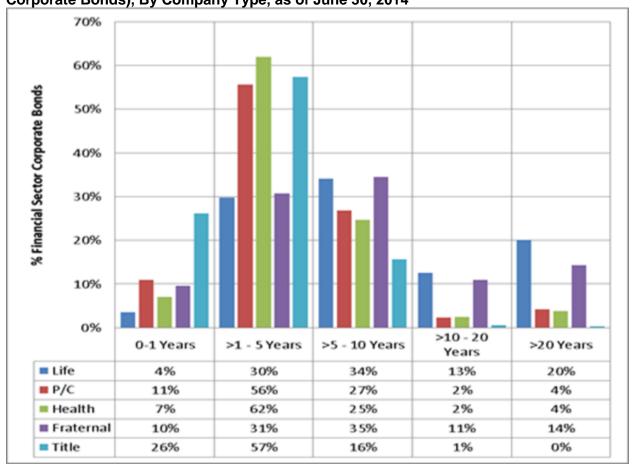


Table 4: U.S. Insurance Industry Financial Sector Maturity Distribution (Long-Term

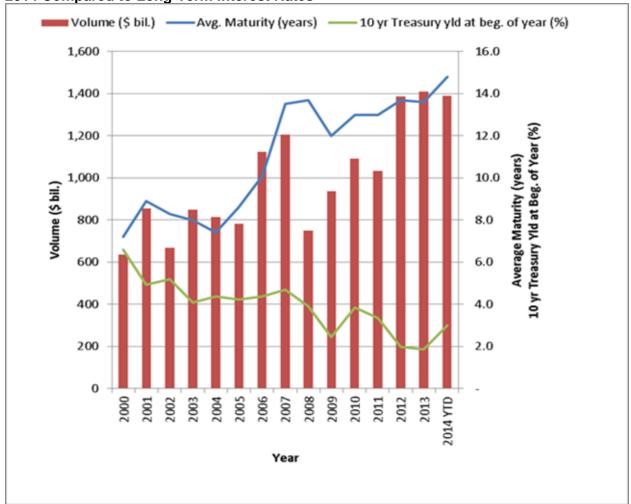
Corporate Bonds) at June 30, 2014

		Ma	turity Buck	cet			
			•				
		>1 - 5	>5 - 10	<b>≯10 - 20</b>			
Mid-year 2014 BACV (\$ mil.)	0-1 Years	Years	Years	Years	>20 Years	Total	%
Life							
Bank	4,723	40,355	36,278	13,879	16,397	111,631	49%
Non-bank Financial	1,740	17,025	20,033	5,831	6,394	51,022	22%
Insurance	1,783	10,848	21,977	9,073	23,188	66,870	29%
Financial Sector - Life	8,246	68,228	78,288	28,783	45,978	229,523	100%
% of Financial Sector - Life	4%	30%	34%	13%	20%	100%	
P/C							
Bank	5,945	25,641	10,963	882	1,541	44,973	57%
Non-bank Financial	1,994	13,194	6,282	648	734	22,851	29%
Insurance	795	5,322	4,080	263	1,071	11,531	15%
Financial Sector - P/C	8,734	44,157	21,325	1,793	3,346	79,355	100%
% of Financial Sector - P/C	11%	56%	27%	2%	4%	100%	
Health							
Bank	379	3,664	1,328	154	179	5,704	53%
Non-bank Financial	263	2,091	826	96	96	3,372	31%
Insurance	113	915	503	18	133	1,682	16%
Financial Sector - Health	755	6,670	2,657	268	408	10,759	100%
% of Financial Sector - Health	7%	62%	25%	2%	4%	100%	
Fraternal							
Bank	445	1,220	1,162	356	268	3,451	39%
Non-bank Financial	170	883	975	215	247	2,490	28%
Insurance	220	590	887	394	733	2,824	32%
Financial Sector - Fraternal	835	2,693	3,024	964	1,248	8,765	100%
% of Financial Sector - Fraternal	10%	31%	35%	11%	14%	100%	
Title							
Bank	89	191	51	(0)	0	331	44%
Non-bank Financial	84	177	35	1	0	296	40%
Insurance	22	60	31	4	2	119	16%
Financial Sector - Title	195	428	117	4	3	746	100%
% of Financial Sector - Title	26%	57%	16%	1%	0%	100%	

It is likely that the maturity extension in the life segment is consistent with the pattern that has been observed in recent years among life companies of increasing portfolio duration in pursuit of greater investment income. In addition, corporate new issuance has trended toward longer average maturities in recent years. As Chart 3 shows, corporations have been taking advantage of the multi-year decline in long-term interest rates by issuing longer maturities in order to lock in low rates. At this juncture, however, assuming the U.S. economy continues to strengthen, it will become increasingly likely that the Federal Reserve will begin to tighten monetary policy within the next 12 months and that long-term inflation expectations will increase, at least to a level

approaching the Fed's long-term target of 2%. As U.S. interest rates begin to rise, the behavior of corporate issuers and investors may change, both in terms of maturity preference and total supply and demand.

Chart 3: Average Maturity and Volume of New U.S. Corporate Bond Issuance From 2000-2014 Compared to Long-Term Interest Rates



Source: Securities Industry and Financial Markets Association (SIFMA), Federal Reserve **Equities and Equity-Like Investments** 

In addition to corporate bonds, insurance companies also invest in the equity securities of financial institutions, although equities as a whole comprise a relatively small portion of total cash and invested assets. Tables 6 and 7 illustrate the U.S. insurance industry's respective common and preferred equity holdings of financial institutions as of year-end 2013.

Table 5: U.S. Insurance Industry Financial Sector Exposure, Common Equity Holdings

(Unaffiliated)

(Onarmatea)								
							% of Total	
							Financial	
							Sector	% of Total
							Common	Common
							Equity	Equity
Year-end 2013 BACV (Smil.)	Life	P/C	Heal th	Fratemal	Title	Total	Exposure	Exposure
Bank	1,806	38,719	459	169	41	41,194	59.5%	6.2%
Insurance	1,480	7,464	453	81	6	9,483	13.7%	1.4%
Non-bank Financial	591	17,639	237	76	1	18,544	26.8%	2.8%
Total Financial Sector	3,877	63,821	1,149	326	48	69,221	100.0%	10.4%
% of Total Financial Sector	5.6%	92.2%	1.7%	0.5%	0.1%	100.0%		
% of Common Equity Exposure	2.5%	13.5%	3.1%	10.3%	2.9%	10.4%		
% of Cash and Invested Assets	0.1%	3.8%	1.0%	0.2%	0.6%	1.2%		

Table 6: U.S. Insurance Industry Financial Sector Exposure, Preferred Equity Holdings

(Unaffiliated)

(Onamilated)								
							% of Total	
							Financial	~ -6.T-1-I
							Sector	% of Total
							Preferred	Preferred
							Equity	Equity
Year-end 2013 BACV (\$mil.)	Life	P/C	Heal th	Fratemal	Title	Total	Exposure	Exposure
Bank	2,187	5,076	123	125	132	7,643	77.8%	36.6%
Insurance	592	540	21	32	8	1,192	12.1%	5.7%
Non-bank Financial	547	391	20	29	5	992	10.1%	4.7%
Total Financial Sector	3,325	6,007	164	186	145	9,827	100.0%	47.0%
% of Total Financial Sector	33.8%	61.1%	1.7%	1.9%	1.5%	100.0%		
% of Preferred Equity	40.0%	51.4%	41.0%	60.1%	73.0%	47.0%		
% of Cash and Invested Assets	0.1%	0.4%	0.1%	0.1%	1.7%	0.2%		

The U.S. insurance industry's total financial institutions equity exposure was \$79 billion as of Dec. 31, 2013, or 1.4% of total cash and invested assets. The industry's exposure was composed of \$69.2 billion of unaffiliated common stocks and \$9.8 billion of unaffiliated preferred shares. P/C companies held the bulk of the common equity positions, with \$63.8 billion (92% of the total for the industry), and also held a majority of the preferred investments, with \$6 billion (61% of the industry total). P/C companies tend to allocate a greater portion of their invested assets to equities than life companies because common stocks' superior liquidity better matches P/C insurers' shorter-duration liabilities, and because P/C company balance sheets tend to have a higher proportion of equity capital supporting their assets relative to reserves and other liabilities. Life companies, by contrast, tend to hold less common stock, as their yield- and spread-oriented product mix tends to fit better with fixed-income investments and allows for more financial leverage.

## **Significant Single-Name Exposures**

The insurance industry has significant investment exposure to certain large financial institutions, many of which have been deemed SIFIs by the Financial Stability Board or national regulators. New regulations under Dodd-Frank legislation mandate that SIFIs will have to meet higher capital standards and develop contingency plans for potential future failures. The 10 largest exposures (corporate bonds and equities) are listed below in Table 8. The list includes five banks designated as globally systemically important (G-SIB); two globally systemically important insurers (G-SII); two banks determined to be domestically systemically important (D-SIB); and

one globally systemically important non-bank, non-insurer (NBNI G-SIFI). It is not surprising that all of the industry's largest financial holdings are in systemically important names since size is a primary consideration in determining which institutions receive this designation.

 Table 7: Insurance Industry's Largest Single-Name Financial Institution Exposures

(Debt as of mid-year 2014, equity as of Dec. 31, 2013)

Name	Debt (BACV, \$ mil.)	Equity (BACV, \$ mil.)	Total
Wells Fargo (G-SIB)	8,189	24,844	33,034
Bank of America (G-SIB)	10,082	8,581	18,662
GE Capital (NBNI G-SIFI)	11,759	206	11,965
Goldman Sachs (G-SIB)	8,642	2,571	11,213
JP Morgan Chase (G-SIB)	12,274	1,467	13,741
Citigroup (G-SIB)	8,569	602	9,171
MetLife (G-SII)	5,702	335	6,037
US Bancorp (D-SIB)	4,058	5,218	9,277
PNC (D-SIB)	5,275	635	5,910
Prudential Financial (G-SII)	4,711	334	5,044

## **Counterparty Risk: Relatively Modest Exposure for Insurers**

Insurers also are exposed to financial institutions through counterparty risk, which arises as a result of the derivatives transactions insurers enter into from time to time for risk management or investment purposes. Counterparty risk is a sub-class of credit risk; it is the risk of failure by the counterparty to meet its obligations under the terms of a financial contract. Insurance companies face counterparty risk primarily when entering into derivatives contracts (such as swaps, forwards and options) that are traded over the counter (OTC). Counterparty risk became more of a concern in the wake of the global financial crisis, when some participants in OTC derivatives markets failed and others came under severe stress because of risk management failures relating to derivatives. The Group of Twenty (G-20) countries responded by agreeing to mandate central clearing of all standardized OTC derivatives and to increase capital requirements on non-cleared OTC derivatives. As a result, reporting, clearing and settlement functions are shifting to more tightly regulated Swap Execution Facilities (SEFs). As of Feb. 15, 2014, three categories of USD and Euro-denominated interest rate swaps are subject to central clearing mandates and must be traded by the parties on a SEF. Currently, there are 22 separate SEF entities registered (on a temporary basis) with the U.S. Commodity Futures Trading Commission (CFTC).

Systemic concerns aside, insurers' counterparty exposure via derivatives contracts is relatively small, even though the total notional value of the industry's counterparty exposure as of Dec. 31, 2013, was \$1.79 trillion, or 32.4% of total cash and invested assets. It is important to remember that although market participants typically refer to notional values when reporting on derivatives activities, the significance of notional value differs depending on the type of derivative contract. In the case of interest rate swaps, which are the largest derivatives exposure for the insurance industry, notional value is simply a reference figure representing the principal value of the underlying asset in a derivatives transaction upon which future payments are based. The notional value itself is never exchanged, and it far exceeds the total credit exposure in the event of a counterparty default. Currency swaps, however, do involve the exchange of notional amounts at both the inception and beginning of the contract, and thus entail greater counterparty risk. For other derivative contracts such as credit default swaps, total return swaps and options, the counterparty exposure depends on the specific contracts and positions involved.

Counterparty credit risk (CCR) for OTC derivatives has two components: current exposure and potential exposure. Current exposure, which is reported by insurers in their annual statutory financial statements, is for the most part shown as the net BACVs of all derivative contracts with each counterparty, less any acceptable collateral posted by that counterparty; hence, this tends to be a comparatively small number. Potential exposure is a statistically derived measure of the potential increase in the instrument's credit risk exposure, for instruments that generally do not have an initial cost paid or consideration received, resulting from future fluctuations in the underlying interests upon which the derivative instrument is based. Table 9 shows the insurance industry's current, potential and total CCR exposure to financial institutions, which amounted to \$35.1 billion as of Dec. 31, 2013.

Table 9: Insurance Industry Counterparty Credit Risk Exposure at Dec. 31, 2013 (\$ mil.)

Year-end 2013 CCR Exposure (5 mil.)	Current Exposure (Fair Value)	Potential Exposure	Total CCR (Current + Potential)	% of Total CCR	Total CCR as % of Cash & Invested Assets
Life	2,186	30,894	33,080	94.1%	
P/C	84	1,965	2,049	5.8%	0.1%
Health	4	3	7	0.0%	0.0%
Fratemal	3	5	8	0.0%	0.0%
Title	-	-	-	0.0%	0.0%
Total	2,276	32,867	35,143	100.0%	0.6%

The vast majority of the insurance industry's derivatives exposure—and, hence, CCR exposure—resides in the life insurance segment, which accounted for 94% of insurers' total counterparty credit exposure as of Dec. 31, 2013.

Large financial institutions are typically the most common counterparties in the derivatives market. Similar to the derivatives market in general, counterparty exposure in the insurance industry is concentrated in a small number of financial institutions. Table 10 illustrates the notional value of insurance industry exposure to the top 10 counterparties at the end of 2013. The 10 counterparties listed in the table represent 71.6% of the notional value outstanding in the insurance industry. Citigroup was the largest counterparty to the insurance industry, representing 13% of the industry's total notional value outstanding as of year-end 2013. Deutsche Bank and Goldman Sachs were the second- and third-largest counterparties, with 10% and 8%, respectively, of the notional value outstanding.

Table 10: Industry Exposure to Top Ten Derivatives Counterparties at Dec. 31, 2013

(notional, \$ mil.)

notional, \$ mil.)										
						% of				
						Industry				
						Notional				
Counterparty	Fraternal	Health	Life	P/C	Total	Value				
Citigroup	21	75	159,927	77,296	237,319	13%				
Deutsche Bank AG	-	20	160,535	23,622	184,177	10%				
Goldman Sachs	-	1	147,797	1,521	149,318	8%				
Bank Of America Merrill	48		115,051	1,678	116,777	7%				
Credit Suisse		4	110,551	2,150	112,705	6%				
Barclays PLC	-	141	108,439	1,880	110,460	6%				
JP Morgan Chase	59		104,526	5,311	109,895	6%				
BNP Paribas		0	104,763	280	105,043	6%				
Morgan Stanley	-	4	100,934	1,275	102,212	6%				
HSBC	-		56,185	772	56,957	3%				
Total	128	244	1,168,707	115,787	1,284,866	72%				

#### **Summary**

The financial sector exposure of the insurance industry—which accounted for approximately 16% of the industry's corporate bond holdings, 10% of common equity investments and 47% of preferred stock holdings as of Dec. 31, 2013—appears to have remained relatively stable in the first half of 2014 with respect to corporate bonds, which comprise the lion's share of the industry's financial sector investments. In fact, the financial sector was under-represented in insurance company corporate bond portfolios relative to the U.S. corporate credit market's 29% financial sector share of total U.S. corporate bonds outstanding. Within insurer corporate bond holdings, banks continued to be the largest sub-sector at about 51% of total BACV, followed by insurers (25%) and other non-bank entities (24%). The credit-quality distribution of the industry's financial sector corporate bonds was 97% investment grade quality as of the first half of 2014. with 65% and 32%, respectively, concentrated among NAIC-1 and NAIC-2 designated holdings. Only a small extension of maturities among corporate bonds in the financial sector was apparent among life companies. Equity investments in financials comprise a small portion of total cash and invested assets (1.4% as of Dec. 31, 2013), and accounted for a respective 10% and 47% of total insurance company common and preferred equity investments. Counterparty exposures among insurers, which are heavily concentrated in the life segment, had a total counterparty credit risk for the industry amounting to approximately \$35 billion as of Dec. 31, 2013, or 0.6% of industry cash and invested assets.

The NAIC Capital Markets Bureau will continue to monitor financial sector exposure and publish additional research as deemed appropriate.

February 6	5,2015							
Major Inst	irer Share Prices	Γ	(	Change %			Prior	
_		Close	Week	QTQ	YTD	Week	Quarter	Year
Life	Aflac	\$61.28	7.4	0.3	0.3	\$57.08	\$61.09	\$61.09
	Ameriprise	134.79	7.9	1.9	1.9	124.94	132.25	132.25
	Genworth	7.76	11.2	(8.7)	(8.7)	6.98	8.50	8.50
	Lincoln	55.80	11.6	(3.2)	(3.2)	49.98	57.67	57.67
	MetLife	49.60	6.7	(8.3)	(8.3)	46.50	54.09	54.09
	Principal	49.65	5.8	(4.4)	(4.4)	46.93	51.94	51.94
	Protective	69.95	0.0	0.4	0.4	69.95	69.65	69.65
	Prudential	77.80	2.5	(14.0)	(14.0)	75.88	90.46	90.46
	UNUM	33.56	8.0	(3.8)	(3.8)	31.06	34.88	34.88
PC	ACE	\$112.88	4.6	(1.7)	(1.7)	\$107.96	\$114.88	\$114.88
	Axis Capital	50.74	(0.3)	(0.7)	(0.7)	50.90	51.09	51.09
	Allstate	70.93	1.6	1.0	1.0	69.79	70.25	70.25
	Arch Capital	60.01	3.5	1.5	1.5	57.97	59.10	59.10
	Cincinnati	51.94	2.8	0.2	0.2	50.51	51.83	51.83
	Chubb	100.82	3.0	(2.6)	(2.6)	97.90	103.47	103.47
	Everest Re	182.62	6.6	7.2	7.2	171.38	170.30	170.30
	Progressive	26.38	1.7	(2.3)	(2.3)	25.95	26.99	26.99
	Travelers	107.20	4.3	1.3	1.3	102.82	105.85	105.85
	WR Berkley	49.51	1.1	(3.4)	(3.4)	48.99	51.26	51.26
	XL	35.80	3.8	4.2	4.2	34.49	34.37	34.37
Other	AON	\$96.42	7.1	1.7	1.7	\$90.05	\$94.83	\$94.83
	AIG	52.10	6.6	(7.0)	(7.0)	48.87	56.01	56.01
	Assurant	66.35	4.5	(3.0)	(3.0)	63.51	68.43	68.43
	Fidelity National	35.77	1.9	3.8	3.8	35.10	34.45	34.45
	Hartford	40.28	3.5	(3.4)	(3.4)	38.90	41.69	41.69
	Marsh	55.43	3.1	(3.2)	(3.2)	53.77	57.24	57.24
Health	Aetna	\$94.54	3.0	6.4	6.4	\$91.82	\$88.83	\$88.83
	Cigna	111.70	4.6	8.5	8.5	106.83	102.91	102.91
	Humana	147.74	0.9	2.9	2.9	146.44	143.63	143.63
	United	107.60	1.3	6.4	6.4	106.25	101.09	101.09
Monoline	Assured	\$25.50	4.4	(1.9)	(1.9)	\$24.42	\$25.99	\$25.99
	MBIA	8.68	8.2	(9.0)	(9.0)	8.02	9.54	9.54
	MGIC	9.02	5.9	(3.2)	(3.2)	8.52	9.32	9.32
	Radian	16.96	7.6	1.4	1.4	15.76	16.72	16.72
	XL Capital	35.80	3.8	4.2	4.2	34.49	34.37	34.37

	ry 6, 2015 Market Variables			Change %				Prior	
Major n	viai ket variables	Close	Week	QTD	YTD	Week	. (	) uarter	Year
Dow Jo	nes Ind	17,824.29	3.8	0.0	0.0	17,16	495	17,823.07	17,823.07
S&P 500		2,055.47		(0.2)	(0.2)	1,99		2,058.90	2,058.90
S&P Fir		324.93		(2.5)	(2.5)		0.01	333.32	333.32
	surance	294.73		(4.0)	(4.0)		0.42	307.04	307.0
US Doll	lar\$			Change %	1			Prior	
	/ Euro	\$1.13	0.3	(6.4)		\$	1.13	\$1.21	\$1.2
	/ Crude Oil bbl	52.13	9.1	(3.2)	(3.2)	4	7.76	53.83	53.8
	/ Gold oz	1,236.60	(3.7)	4.6	4.6	1,28	4.00	1,182.10	1,182.1
Treasur	ry Ylds %	%		Change bp		%		9⁄0	%
	1 Year	0.25	0.10	0.03	0.03	0	1.15	0.22	0.22
	10 Year	1.96	0.32	(0.21)	(0.21)	1	.65	2.17	2.17
	30 Year	2.53	0.31	(0.22)	(0.22)	2	2.23	2.75	2.75
Corp Cr	Corp Credit Spreads -bp			Change %	ı			Prior	
	CDX.IG	12.00	(7.7)	2.7	2.7	1:	3.00	11.69	11.69
	ry 6,2015								
Major b	nsurer Bond Yields					ekly Change			YTD
	C	C	W	C	Price	Yield	Sprea B.P.	d over UST	Spread Change
	Сонфану	Соцрон	Maturity	Ситтени	Change	riela	B.P.	Change	Слапде
Life	Aflac	8.500%	5/15/2019	\$125.91	(\$0.77)	2.11%	74	470	47
гле	Ameriprise	5.300%	3/15/2019		(\$1.09)	2.1176	74 65	(17) (16)	(17 (9
	Genworth	6.515%	5/15/2018		(\$0.38)	6.11%	495	(16)	58
	Lincoln National	8.750%	7/15/2019		(\$0.96)	2.53%	111	(10)	(3
	MassMutual	8.875%	6/15/2039		(\$4.72)	4.38%	195	(11)	1
	MetLife	4.750%	2/15/2021		(\$1.34)	2.42%	74		(2
	New York Life	6.750%	11/15/2039		(\$2.85)	3.89%	150		Ò
	Northwestern Mutual	6.063%	3/15/2040	\$136.74	\$0.66	3.78%	138	(33)	(ii
	Pacific Life	9.250%	6/15/2039	\$163.62	(\$1.76)	4.79%	236	(26)	(9
	Principal	6.050%	10/15/2036	\$127.55	(\$3.93)	4.12%	179	(7)	5
	Prudential	4.500%	11/15/2020		(\$0.90)	2.50%	83	(19)	(16
	TIAA	6.850%	12/15/2039	\$142.44	(\$0.44)	4.11%	171	(28)	5
P&C	ACE INA	5.900%	6/15/2019		(\$1.07)	2.10%	66		(18
	Allstate	7.450%	5/15/2019		(\$1.17)	2.17%	78		(6
	American Financial	9.875%	6/15/2019		(\$1.02)	2.82%	147	1.7	1
	Berkshire Hathaway	5.400%	5/15/2018		(\$0.49)	1.41%	28	2.7	(12
	Travelers XL Group	3.900% 6.250%	11/15/2020 5/15/2027		(\$1.32) (\$2.31)	2.31% 4.05%	67 180	(9) (13)	(3
0.1	•								
Other	AON	5.000%	9/15/2020		(\$1.51)	2.63%	100		4
	AIG	5.850%	1/15/2018		(\$0.50)	1.59%	57 m		(11
	Hartford Nationwide	5.500% 9.375%	3/15/2020 8/15/2039		(\$0.76) (\$0.39)	2.47% 4.75%	93 236		(7 (10
TT414.								ì	
Health	Aetna CIGNA	3.950% 5.125%	9/15/2020 6/15/2020		(\$1.22) (\$1.40)	2.45% 2.61%	83 104		(10 10
	United Healthcare	3.875%	10/15/2020		(\$1.34)	2.01%	50		(14
	COURSIA LISSULULGIS	2.01270	10/12/2020	■ Ψ107.00 ■	(Ψ1.J <del>1</del> )	4.1070		(10)	(15

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