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**

Year-End 2015 Foreign Exposure in the U.S. Insurance Industry

The U.S. insurance industry's foreign exposure has remained at 12% of total cash and invested assets since at least 2013. Canada and European Union (EU) countries accounted for 56% of the industry's total foreign investments at year-end 2015, unchanged from 2014, but down from 60% at year-end 2013. This report updates the NAIC Capital Markets Bureau's "Year-end 2014 Foreign Exposure in the U.S. Insurance Industry" special report that was published on Jan. 21, 2016.

Since the publication of the aforementioned report, Brexit came a step closer to reality with a "yes" vote on June 23, 2016. Additionally, oil prices collapsed from more than $100 per barrel in 2014, straining the budgets and economies of oil exporting emerging market countries. The International Monetary Fund (IMF) World Economic Outlook as of July 2016 estimates positive 2016 gross domestic product (GDP) growth of 3.1% worldwide, with 1.7% GDP growth in the United Kingdom (UK), and 1.4% GDP growth in Canada, the two countries with which the U.S. insurance industry has its largest total foreign exposure. Worldwide GDP growth was revised down from 3.2% to account for potential downside risk from Brexit. The Eurozone is also expected to experience positive GDP growth, while emerging market economies are estimated to grow 4.1% in 2016 according to IMF estimates.

As of year-end 2015, the U.S. insurance industry reported total foreign exposure with a book/adjusted carrying value (BACV) of about $674.6 billion, a 3% increase from year-end 2014. (See Table 1 and Table 2.) Foreign exposure includes investments in bonds, common stock (affiliated and unaffiliated) and preferred stock. For bonds, approximately $82.9 billion (or 13%) of foreign investments were denominated in a foreign currency, down from $89 billion in 2014. The Japanese yen accounted for the largest portion at about $45 billion, followed by the Canadian dollar-denominated investments at about $18.4 billion, the British pound ($9.1 billion) and the euro ($8 billion). Foreign currency exposure is translated and reported in U.S. dollars as per *Statement of Statutory Accounting Principles (SSAP) No. 23 — Foreign Currency Transactions and Translations.*

For purposes of this analysis, foreign exposure is defined as exposure to any entity domiciled outside of the U.S. It excludes structured securities that are technically domiciled in foreign countries (such as Bermuda, Cayman Islands and Ireland) for legal and tax reasons, but where there is no obvious exposure to the economy of the respective country. Other structured securities where the domicile is not so apparent are included.

Table 1: 2015 Foreign Holdings Summary ($ Mil. BACV)

Industry	Foreign Bonds	Foreign Bond Exposure as Pct of Total Bond Exposure	Foreign Stock	Foreign Stock Exposure as Pct of Total Stock Exposure	Industry Total	Foreign Bond and Foreign Stock Exposure as Pct of Total Bond and Total Stock Exposure
Life	533,243	19%	12,097	8%	545,339	19%
P/C	76,302	8%	31,121	6%	107,424	7%
Fraternal	13,670	14%	243	6%	13,913	14%
Health	6,312	6%	942	3%	7,254	5%
Title	561	11%	132	6%	693	10%
Total	**630,088**	**16%**	**44,535**	**6%**	**674,623**	**15%**

Table 2: 2014 Foreign Holdings Summary ($ Mil. BACV)

Industry	Foreign Bonds	Foreign Bond Exposure as Pct of Total Bond Exposure	Foreign Stock	Foreign Stock Exposure as Pct of Total Stock Exposure	Industry Total	Foreign Bond and Foreign Stock Exposure as Pct of Total Bond and Total Stock Exposure
Life	502,339	19%	12,856	8%	515,195	18%
P/C	87,706	9%	31,226	6%	118,932	8%
Fraternal	13,302	14%	260	7%	13,562	14%
Health	6,579	7%	935	3%	7,514	6%
Title	531	11%	36	2%	567	8%
Total	**610,457**	**16%**	**45,313**	**6%**	**655,770**	**14%**

In terms of industry type, property/casualty (P/C) companies reported the largest percentage decrease (10%) in BACV of foreign investments to $107.4 billion as of year-end 2015 from $118.9 billion at year-end 2014. Life companies increased foreign exposure by about 6% to $545.3 billion at year-end 2015 from $515.2 billion at year-end 2014. Life companies accounted for 81% of total industry foreign exposure at year-end 2015.

U.S. Insurer Exposure to Foreign Bonds

The bulk of the U.S. insurance industry's foreign investments at year-end 2015 was in bonds at $630.1 billion (or 93% of total foreign exposure). The largest single sector exposure was to foreign financial institutions at $94.3 billion, or 15% of total foreign bond exposure. (See Table 3 and Table 4.) The BACV of foreign government bonds decreased 13% from $80.4 billion at year-end 2014 to $69.6 billion at year-end 2015, while exposure to "other" sectors (i.e., corporates) increased 21% to $527.9 billion.

Table 3: 2015 Total Foreign Bond Exposure by Sector ($ Mil. BACV)

Insurer Type	Financial	Government	Other	Insurer Type Total	Pct of Total
Life	67,908	80,615	384,719	533,243	85%
P/C	21,519	14,251	40,532	76,302	12%
Fraternal	1,864	985	10,821	13,670	2%
Health	2,876	348	3,088	6,312	1%
Title	132	256	173	561	0%
Sector Total	**94,300**	**69,592**	**527,930**	**630,088**	**100.0%**
Pct of Total	15%	11%	84%	100%	

Table 4: 2014 Total Foreign Bond Exposure by Sector ($ Mil. BACV)

Industry	Financial	Government	Other	Industry Total	Pct of Total
Life	66,838	56,661	378,839	502,339	82%
P/C	22,829	21,999	42,879	87,706	14%
Fraternal	1,840	1,084	10,377	13,302	2%
Health	2,728	472	3,379	6,579	1%
Title	115	223	194	531	0%
Sector Total	**94,350**	**80,439**	**435,668**	**610,457**	**100%**
Pct of Total	15%	13%	71%	100%	

U.S. insurers' exposure to below-investment grade foreign bonds increased at year-end 2015 from year-end 2014. Conversely, bonds designated NAIC 1 and NAIC 2 decreased to 92% of foreign bond exposure from 94% at year-end 2014. U.S. insurers reported exposure with a BACV of $321.3 billion in foreign bonds designated NAIC 1, and $260.8 billion were designated

NAIC 2. Exposure to foreign bonds designated NAIC 3 (below investment grade) increased (by 34%) to $36.2 billion at year-end 2015 from $27 billion in 2014.

Largest Foreign Country Bond Exposures

The 10 largest countries accounted for 74% of total foreign bond holdings as of year-end 2015, which was about four percentage points lower than 2014. (See Table 5.) Canada remains the largest single country exposure at about 19% of total foreign bond exposure, unchanged from 2014. (See Table 6.) The UK accounted for the second largest country exposure at 17% of total foreign bonds. Mexico, at $14.2 billion, was relatively unchanged from the year prior and was last of the 10 largest country exposures for U.S. insurers. Overall, corporate bonds accounted for about 2%, or $620 billion, of the top 10 foreign countries' bond exposure.

Table 5: 2015 Top 10 Foreign Bond Exposures by Country ($ Mil. BACV)

Country	Life	P/C	Fraternal	Health	Title	Country Total	Pct of Total
Canada	84,360	20,233	4,740	1,210	228	110,771	19%
United Kingdom	87,821	11,157	2,320	1,032	59	102,388	17%
Australia	49,337	5,966	1,686	593	24	57,605	10%
Netherlands	39,386	5,946	870	610	26	46,837	8%
Japan	43,362	1,278	78	204	8	44,929	8%
France	25,898	4,170	406	393	11	30,879	5%
Luxembourg	16,752	2,936	487	356	24	20,554	3%
Cayman Islands	16,833	2,909	490	240	19	20,492	3%
Ireland	12,297	1,650	465	190	5	14,608	2%
Mexico	11,202	2,464	352	129	10	14,157	2%
Top 10 Total	**387,249**	**58,708**	**11,893**	**4,958**	**413**	**463,221**	**74%**
Total	**533,243**	**76,302**	**13,670**	**6,312**	**561**	**630,088**	**100%**
Pct of Total	73%	77%	87%	79%	74%	74%	

Table 6: 2014 Top 10 Foreign Bond Exposures by Country ($ Mil. BACV)

Country	Life	P/C	Fraternal	Health	Title	Country Total	Pct of Total
Canada	90,413	29,218	4,852	1,443	257	126,182	21%
United Kingdom	85,890	10,805	2,314	1,117	54	100,180	16%
Australia	47,431	6,451	1,398	626	32	55,937	9%
Netherlands	39,413	5,735	843	557	30	46,578	8%
Japan	43,413	1,494	78	154	5	45,143	7%
France	26,250	4,688	416	403	10	31,768	5%
Cayman Islands	18,337	3,482	527	349	17	22,712	4%
Luxembourg	16,444	2,563	368	245	20	19,640	3%
Mexico	10,948	2,599	341	167	15	14,070	2%
Ireland	11,150	1,123	358	96	2	12,727	2%
Top 10 Total	**389,688**	**68,157**	**11,494**	**5,157**	**442**	**474,938**	**78%**
Total	**502,339**	**87,706**	**13,302**	**6,579**	**531**	**610,457**	**100%**
Pct of Total	78%	78%	86%	78%	83%	78%	

On July 30, 2014, Argentina, the third-largest Latin American economy, defaulted on $13 billion of interest payments on government bonds due 2033. (See the NAIC Capital Markets Bureau Hot Spot "U.S. Insurance Industry Exposure to Argentine Sovereign Debt Is Small as Default is Possible," published July 30, 2014, for greater detail.) As of year-end 2015, U.S. insurers had exposure with a BACV of $59 million to these government bonds, which was held at 98% of par value. Since the 2014 default, $16.5 billion in sovereign debt was issued by Argentina in April 2016, followed by an additional $2.8 billion on Oct. 5, 2016, despite an expected contraction of the Argentinian economy in 2016. Argentina's sovereign debt is currently rated B/B- (Standard & Poor's [S&P]/Fitch Ratings [Fitch]). As of year-end 2015, U.S. insurer overall bond exposure to Argentina was $195 million, up from $110 million at year-end 2014; government bonds accounted for about $114 million, and $82 million were in corporate bonds.

Oil Exporting Country Bond Exposure

Oil has been under price pressure since 2014. The initial catalyst for falling oil prices was declining worldwide demand (or at least the fear of it). Since then, the inability of oil exporting nations to implement and enforce production cuts, increases in U.S. oil production, and continued falling demand due to weak (or negative) economic growth led to downward price pressure. Oil prices, as measured by West Texas Intermediate Crude (WTI), fell from a high of $107.62 a barrel on July 23, 2014, to a low of $26.21 on February 11, 2016. Since the February 2016 low, the WTI has traded between $53 and $40 a barrel through September 2016.

In a research reported titled "2016 Mid-year Sovereign Review and Outlook," published July 2016, Fitch reported downgrades of 15 sovereign ratings (mainly in emerging market countries) with 22 on Negative Outlook. A Negative Outlook indicates the potential for a negative rating action (downgrade) within a two-year time frame if currently observed trends continue. Lower commodity prices were highlighted as the "single most important factor responsible for downward ratings momentum." The recovery of oil prices from its 2016 lows and continued strength in commodities are a credit positive for oil exporting countries, such as Brazil, Mexico, Russia or Venezuela, lessening the likelihood of default on government debt obligations.

As of year-end 2015, U.S. insurers reported a total exposure of $151.8 billion (or $126.7 billion, excluding sovereign bonds) to oil exporting countries. The exposure (excluding sovereign bonds) was comprised of $119.5 billion in bonds (mainly corporate bonds, $117.9 billion) and $7.3 billion of stock. While potential default on foreign government bonds is unlikely, it could affect corporate bond exposure. In addition, about 68% (or $16.9 billion) of the oil-exporting country exposure was to bonds issued by Canada (AAA, Fitch/S&P). The second largest exposure was to Mexico (BBB+, Fitch) at 10%, or $2.5 billion.

EU Bond Exposure

Table 7 and Table 8 show a category breakdown (i.e., financial, sovereign and "other" non-financial corporate) of the U.S. insurance industry's exposure to EU countries, particularly the Eurozone, as of year-end 2015 and year-end 2014, respectively. The percentage of foreign bond holdings concentrated in EU countries was about 40% total foreign bonds at year-end 2015, which was relatively consistent with year-end 2014. Total EU bond exposure (which includes Eurozone and other EU members) was $252.7 billion as of year-end 2015 versus $248.1 billion as of year-end 2014. From 2014 to 2015, U.S. insurers decreased exposure to EU sovereign bonds and those in the foreign financial sector. Most EU bond exposure was within the "other" bond category, at 83%. Furthermore, exposure to countries under the euro currency (Eurozone) increased slightly to $136.8 billion in 2015 from $133.6 billion in 2014. Overall, EU exposure increased only about 2% year-over-year (YOY) as of year-end 2015.

Table 7: 2015 Bond Exposure to Eurozone Countries by Sector ($ Mil. BACV)

Country	Financial	Government	Other	Country Total	Pct of Total
Netherlands	7,662	91	39,782	47,535	19%
France	5,379	132	25,368	30,879	12%
Luxembourg	670	139	20,129	20,937	8%
Ireland	4,242	33	12,217	16,491	7%
Germany	2,536	175	7,024	9,735	4%
Spain	400	92	2,627	3,118	1%
Italy	354	199	2,245	2,798	1%
Belgium	1	1	2,258	2,260	1%
Finland	18	77	1,522	1,617	1%
Austria	148	1	817	966	0%
Latvia	-	186	-	186	0%
Slovakia	-	107	-	107	0%
Slovenia	-	77	-	77	0%
Malta	-	-	76	76	0%
Greece	-	0	21	21	0%
Portugal	-	2	2	4	0%
Total Eurozone	**21,408**	**1,311**	**114,089**	**136,808**	**54%**
Other EU Members	22,245	4,323	89,357	115,925	46%
Total European Union	**43,653**	**5,634**	**203,446**	**252,733**	**100%**
Sector Total/Total (%)	16%	1%	83%	100%	

Table 8: 2014 Bond Exposure to Eurozone Countries by Sector ($ Mil. BACV)

Country Name	Financial	Government	Other	Country Total	Pct of Total
Netherlands	7,661	73	38,844	46,578	19%
France	5,367	132	26,269	31,768	13%
Luxembourg	600	153	18,887	19,640	8%
Ireland	1,729	48	10,950	12,727	5%
Germany	3,269	204	7,075	10,547	4%
Spain	468	106	3,121	3,695	1%
Belgium	1	9	2,921	2,930	1%
Italy	366	260	1,929	2,556	1%
Finland	19	104	1,465	1,588	1%
Austria	221	4	900	1,125	0%
Slovenia	-	130	-	130	0%
Latvia	-	115	1	117	0%
Slovakia	-	100	0	101	0%
Malta	-	-	66	66	0%
Greece	-	0	18	18	0%
Portugal	-	4	4	8	0%
Total Eurozone	**19,701**	**1,443**	**112,451**	**133,595**	**54%**
Other EU Members	21,764	4,386	88,329	114,478	46%
Total European Union	**41,464**	**5,829**	**200,780**	**248,073**	**100%**
Sector Total/Total (%)	17%	2%	81%	100%	

Note: The EU is comprised of 28 member states. The result of this analysis reflects only 25 member states as insurers did not have any exposure to Bulgaria, Cyprus and Estonia. The Eurozone consists of 19 member states that use the euro as their sole currency. The nine other EU members do not use the euro as their currency.

Foreign Common Stock and Preferred Stock Exposure

Equity market volatility, as reflected by the STOXX 50 Volatility Index (which tracks volatility in the European local equity markets), experienced a mid-December 2015 spike to a reading of 30, followed by an immediate retreat to about 22 by Dec. 23, 2015; it has been on the rise again since the beginning of 2016, but as of Sept. 30, 2016, it was about 19.76. The market turbulence was mainly driven by diverging prospects for worldwide economic growth. While U.S. equity investors were anticipating a shift to rising rates from the Federal Reserve, the EU pronounced the continuation of zero or negative rate policies and continued quantitative easing in the form of sovereign bond purchases. Additionally, market concern was rising as many questioned the effectiveness of monetary policy given that EU asset prices were falling rather than rising. In fact, equity market performance was negative in the Eurozone, Switzerland and Japan following their respective negative interest rate policy announcements. (See Chart 1.)

Chart 1: Regional Equity Performance Since Negative Interest Rate Policy (NIRP) Announcement

Despite market concerns, the non-U.S. equity markets performed well as of year-end 2015. The worst performer (as measured in U.S. dollars) was the Shanghai Composite Index (a stock market index of all Chinese stocks traded on the Shanghai Stock Exchange), with a 6.7% return. The MSCI Emerging Market Index was the worst performer at negative 13.1%. The STOXX 600 (an index of stocks traded across the European stock markets) performed well in 2015 with 13.9% but fared poorly in 2016, returning negative 6.9% in Q1 2016 and negative 9.7% in Q2 2016.

In 2015, U.S. insurers increased their overall foreign stock exposure by 2%, YOY, to about $46 billion at year-end 2015. (See Table 9 and Table 10.) Unaffiliated foreign common stock for the U.S. insurance industry was $24.7 billion (or 65% of total foreign stock exposure) as of year-end 2015.The largest share of unaffiliated foreign common stock was held by property/casualty (P/C) insurers at 79%, or $19.6 billion of total unaffiliated foreign common stock. Life companies followed at about 16%, or $4 billion.

Table 9: 2015 Foreign Stock Exposures by Industry ($ Mil. BACV)

Regional equity performance since NIRP announcement

Region	NIRP announcement date	Current Deposit rate	Equity performance since NIRP announcement
Denmark	5-Sep-14	-0.65%	22.4%
Eurozone	4-Jun-14	-0.30%	-4.6%
Sweden	8-Jul-14	-1.25%	0.8%
Switzerland	17-Dec-14	-0.75%	-9.0%
Japan	28-Jan-16	-0.10%	-6.7%

Source: Datastream

Table 10: 2014 Foreign Stock Exposures by Industry ($ Mil. BACV)

Insurer Type	Common	Preferred	Insurer Type Total	Pct of Total
P/C	28,673	3,331	32,004	70%
Life	10,979	1,700	12,678	28%
Health	971	18	989	2%
Fraternal	206	38	243	1%
Title	132	0	132	0%
Stock Type Total	**40,961**	**5,087**	**46,047**	**100%**
Pct of Total	89%	11%	100%	

Unaffiliated foreign stock domiciled in Canada comprised 18% of total unaffiliated foreign stock exposure at year-end 2015, followed by UK-domiciled unaffiliated stock, which comprised 15%. (See Table 11.) The five largest exposures were to companies based in Canada, China, Ireland, Switzerland and the UK. The 10 largest countries' exposure to unaffiliated foreign stocks accounted for about 79% of total unaffiliated foreign stock exposure ($23.5 billion) held by U.S. insurers as of year-end 2015, down from 82% ($28.8 billion) in 2014.

Table 11: 2015 Top 10 Unaffiliated Foreign Stock Exposures by Country ($ Mil. BACV)

Industry	Common	Preferred	Industry Total	Pct of Total
P/C	28,144	3,082	31,226	69%
Life	11,382	1,474	12,856	28%
Health	922	13	935	2%
Fraternal	217	43	260	1%
Title	-	36	36	0%
Stock Type Total	**40,665**	**4,648**	**45,313**	**100%**
Pct of Total	90%	10%	100%	

As of year-end 2015, EU unaffiliated stock exposure was 36% of total unaffiliated foreign stock exposure, with BACV of $10.6 billion, compared to $11 billion (or 38%) in 2014. (See Table 12.) The UK accounted for 42% of total EU exposure, followed by Ireland at 22%. As of year-end 2015, consumer noncyclical and financial comprised the largest two unaffiliated foreign stock sector exposures.

Table 12: 2015 Unaffiliated Foreign Stock Exposures by EU Country ($ Mil. BACV)

Country	P/C	Life	Health	Fraternal	Title	Country Total	Pct of Total
Canada	5,010	152	50	52	-	5,265	18%
United Kingdom	3,637	632	133	19	0	4,421	15%
Switzerland	1,959	286	86	8	-	2,339	8%
Ireland	1,791	344	99	69	-	2,303	8%
China	1,738	232	6	-	-	1,975	7%
Cayman Islands	281	1,323	14	26	-	1,644	6%
Japan	947	588	87	-	-	1,622	5%
St. Maarten	883	582	48	-	-	1,512	5%
Bermuda	1,158	245	37	22	-	1,463	5%
Netherlands	660	215	43	20	0	937	3%
Top 10 Total	**18,065**	**4,598**	**603**	**216**	**0**	**23,482**	**79%**
Total	**22,918**	**5,652**	**934**	**243**	**12**	**29,760**	**100%**
Pct of Total	77%	19%	3%	1%	0%	100%	

The low interest rate policies of central banks have benefited U.S. insurer foreign stock exposure as equity prices, especially those of dividend paying companies, were higher than they were at the start of the current policy regime. When rates begin rising, insurers will have to pay close attention to how that trend may affect the value of their foreign stock exposure. If the policy shift is to one of gradual rate increases, the negative impact may be modest. Overall, foreign stock exposure is 7% of U.S. insurers' total stock exposure, and about 1% of total cash and invested assets. At such low levels of exposure, the potential risk of large losses from falling stock prices is minimal to U.S. insurer portfolios.

Summary

As of year-end 2015, U.S. insurers' total foreign exposure increased $18.9 billion (from year-end 2014) to $674.6 billion but remained at 12% of the insurance industry's total cash and invested assets (as it was in 2014). Positive worldwide economic growth, a rebound in commodity prices and equity markets rebounding from Brexit losses should contribute to positive performance in U.S. insurers' cash and invested assets. A potential adversary to those positives is the ongoing geopolitical turmoil that exists in different parts of the world, which could, in turn, cause U.S. insurers to reduce foreign exposure in those particular countries.

The ultimate impact of Brexit is still not fully known. Central bank reaction (continuation of low rate policy and quantitative easing) suggests that central banks are cautious about the potential impact. However, given the size of the U.S. insurance industry's total foreign exposure (12% of total cash and invested assets) and that 56% of the exposure is to Canada and EU countries (with the UK being the largest EU exposure), any negative impact to insurer portfolios likely would be minimal. The NAIC Capital Markets Bureau will continue to monitor the insurance industry's foreign exposure, as well as developments within the aforementioned regions that could affect these exposures; we will provide updates as deemed appropriate.

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