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## U.S. Insurer Exposure to Schedule BA (Other Long-Term Invested Assets): Focus on Private Equity, Hedge Funds and Real Estate as of Year-End 2017

Analyst: Jean-Baptiste Carelus

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### Executive Summary

- Schedule BA exposure to unaffiliated private equity (PE), hedge funds (HF) and real estate (RE) rose 9.9% to \$105 billion as of year-end 2017 from \$96 billion as of year-end 2016.
  - PE accounted for \$69 billion, followed by HF (\$22 billion) and RE (\$14 billion).
  - Unaffiliated PE, HF and RE represented 1.7% of total cash and invested assets.
  - Life insurers accounted for 60% of unaffiliated PE, HF and RE exposure, while property/casualty insurers (P/C) accounted for 34%.
- The largest strategy type reported by U.S. insurers in 2017 was PE leveraged buyouts (\$39.8 billion).
- Liquidity, limited by restrictions on withdrawal, may be an issue for some U.S. insurers in asset-liability matching, particularly for small insurers, 15 of which reported new HF exposure in 2017, where these assets may be a significant percentage of capital and surplus.

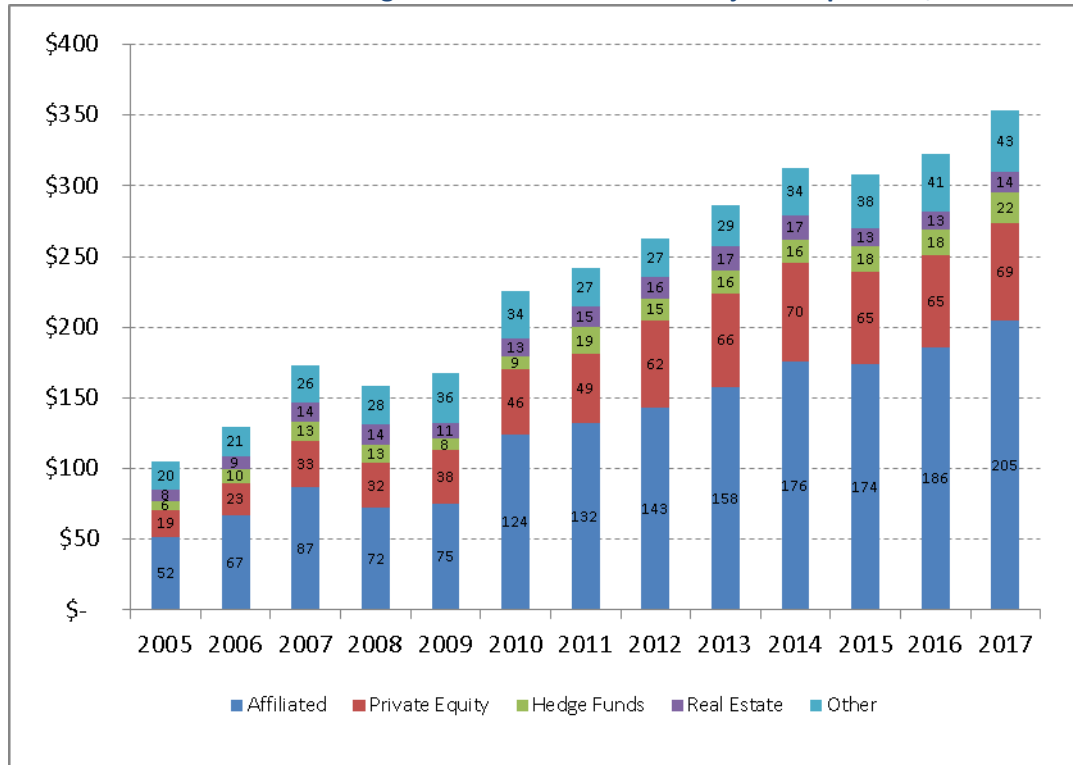
This special report analyzes U.S. insurer exposure to “other long-term invested assets,” as reported on Schedule BA, focusing on joint ventures, partnerships and limited liability companies (LLCs) that have the underlying characteristics of common stock (primarily PE funds), real estate (primarily RE funds, not including mortgages) or “other” (primarily HF), as they are a significant component of insurer investments in other long-term invested assets. It also serves as an update to a previously published NAIC Capital Markets Bureau report, dated July 25, 2017, on the same topic.

The classification and reporting of investments as having the characteristics of common stock, RE or “other” is determined by each insurer. Based on an analysis of the year-end Schedule BA filings, investments reported as having the characteristics of common stock and “other” are generally classified in this report as PE and HF, respectively. Furthermore, the analysis includes the book-adjusted carrying value (BACV) of exposure reported by all U.S. insurers, including captive insurers. Insurers’ other long-term invested assets are comprised of affiliated and unaffiliated investments; affiliated investments were 58% of the industry’s other long-term invested assets in 2017, same as in 2016, but up from 56% in 2015; they have ranged between 45% and 58% since 2005. The focus of the analysis in this special report is on the industry’s exposure to unaffiliated PE, HF and RE.

As of year-end 2017, U.S. insurer exposure to other long-term invested assets was \$353.4 billion in BACV, which was 5.6% of total cash and invested assets. Affiliated investments accounted for \$204.8 billion; therefore, \$148.8 billion were unaffiliated investments. Insurer exposure to unaffiliated investments that comprised PE, HF and RE

were \$69 billion, \$22 billion and \$14 billion, respectively, at year-end 2017 (totaling \$105 billion, or 1.7% of total cash and invested assets), as shown in Chart 1.

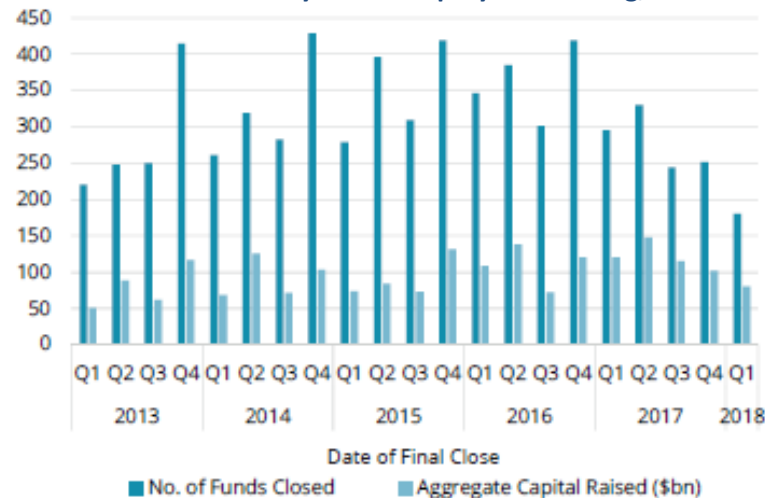
**Chart 1: U.S. Insurer Other Long-Term Invested Assets – Major Components, 2005–2017 (BACV, \$Bil.)**



**Total 2017 PE and HF Fundraising**

PE fundraising in 2017 reached about \$490 billion, according to Preqin (a provider of alternative assets data). Aggregate PE capital raised has decreased from \$150 billion in about 325 PE funds in the second quarter of 2017 to \$80 billion in 180 funds in the first quarter of 2018 (see Chart 2). Capital raised in the first quarter of 2018 was the lowest amount in the first quarter of any year since 2015. PE funds focused on leveraged buyouts raised the most capital at \$51.9 billion from 39 funds, followed by venture capital at \$10.5 billion from 92 funds.

**Chart 2: Global Quarterly Private Equity Fundraising, Q1 2013 – Q1 2018**



Source: Preqin.

There were 385 fewer HF launches in North America in 2017 compared to the downwardly revised 939 launches in 2016, according to Preqin. Liquidations fell to 669 in 2017 from 824 in 2016. Since 2008, only in 2017 did liquidations outnumber launches. In the first quarter of 2018, according to *Preqin Quarterly Update: Hedge Funds*, there were 74 HF launches, with North America accounting for 64% of total launches, followed by Europe at 27%.

HF had net inflows of \$16.9 billion in the first quarter of 2018, resulting in total assets under management reaching \$3.6 trillion (see Table 1), up from \$3.2 trillion in 2016. Notwithstanding high-profile announcements in recent years of HF divestitures, investors (including insurers) are slowly returning, but with greater focus on fund performance. Positive performance resulted in net inflows, with 46% of HF returning, 5% or more in 2017 experiencing net inflows. Sixty percent of HF with negative performance over the same time period had experienced net outflows, according to Preqin.

**Table 1: Hedge Fund Asset Flows by Core Strategy, 2015 – Q1 2018**

Strategy	2015 (\$bn)	2016 (\$bn)	H1 2017 (\$bn)	H2 2017 (\$bn)	2017 (\$bn)	Q1 2018 (\$bn)	Q1 2018 AUM (\$bn)	% Change in AUM from Dec-17
CTAs	24.6	25.5	17.6	7.6	25.2	13.2	290	2.1%
Credit Strategies	4.2	-28.2	-9.5	4.9	-4.7	7.8	261	4.2%
Niche Strategies	1.3	-0.8	3.8	0.0	3.8	4.9	28	13.6%
Event Driven Strategies	-1.8	-2.9	9.1	1.2	10.3	0.2	204	-0.1%
Relative Value Strategies	-18.8	-24.7	7.8	-11.9	-4.1	0.2	351	-0.5%
Multi-Strategy	27.5	-22.5	4.8	13.9	18.6	-0.5	489	1.6%
Macro Strategies	-25.8	-5.9	13.5	5.5	19.0	-1.3	1,071	0.9%
Equity Strategies	60.3	-50.3	-22.4	-1.4	-23.8	-7.6	914	-0.5%
<b>Total Industry</b>	<b>71.4</b>	<b>-109.8</b>	<b>24.7</b>	<b>19.7</b>	<b>44.4</b>	<b>16.9</b>	<b>3,607</b>	<b>0.84%</b>

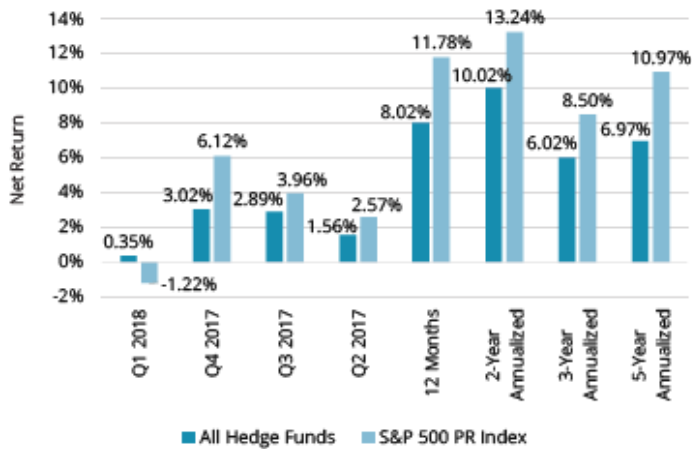
Source: Preqin.

Capital raised by RE reached \$124 billion in 2017 in 297 funds, according to Preqin, reversing the drop to \$100.5 billion in 2016 from \$142.5 billion in 2015. As of the first quarter of 2018, RE focused on opportunistic investing, which raised the most capital at \$20.6 billion (44% of total RE capital raised) from 16 funds. Funds focused on North America accounted for 62% of the total capital raised.

### **Performance of HF, PE and RE Universe**

HF performance, as measured by the Preqin All-Strategies Hedge Fund benchmark, underperformed the Standard & Poor's 500 Index (S&P 500) over each period, as shown in Chart 3, except in the first quarter of 2018 when the benchmark returned 0.35% compared to a loss of 1.22% for the S&P 500. However, Preqin and the Alternative Investment Management Association (AIMA) released a report titled, *Hedge Funds Have Outperformed Stocks and Bonds on Risk-adjusted Basis* in February 2018, showing that on a risk-adjusted basis, HF outperformed the S&P 500 over a one-, three-, five- and 10-year period. The Preqin/AIMA report was based on the reported returns of 2,300 hedge funds to Preqin's All-Strategies Hedge Fund benchmark.

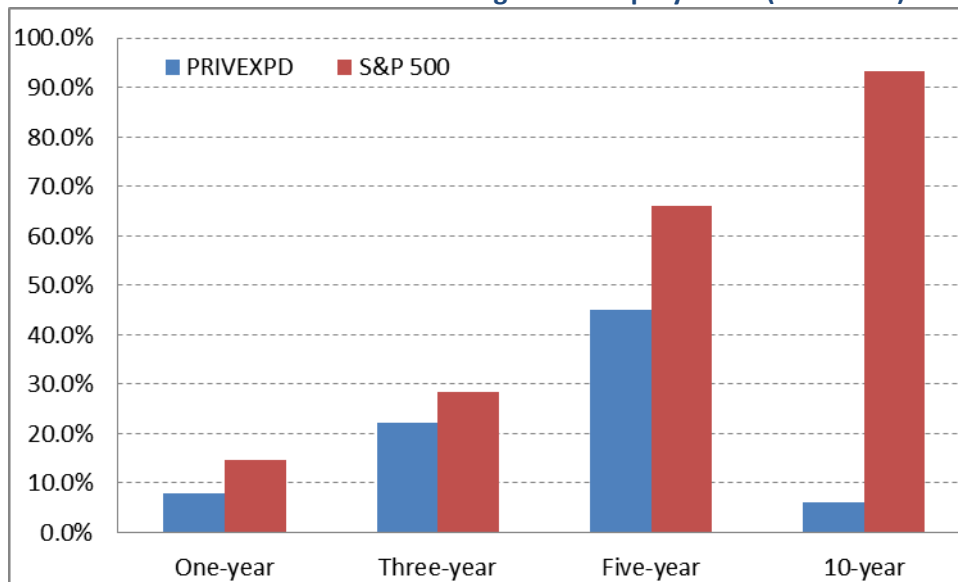
**Chart 3: Performance of Hedge Funds vs. S&P 500 Price Return Index (as of March 2018)**



Source: Preqin Hedge Fund Online, All-Strategies Hedge Fund Benchmark.

As of June 12, 2018, the Bloomberg Private Equity Index (PRIVEXPD)—a widely accepted index tracking the performance of globally listed PE stocks—had a year-to-date price return of -0.7% versus 4.1% for the S&P 500. A reverse in performance for the same time frame in 2017, 15.8% compared to 8.68%. As shown in Chart 4, the PRIVEXPD underperformed the S&P 500 in each of the one-, three-, five- and ten-year periods to June 12, 2018.

**Chart 4: Price Performance of Bloomberg Private Equity Index (PRIVEXPD) vs. S&P 500 (as of June 12, 2018)**



Source: Bloomberg data.

### U.S. Insurer Exposure to HF, PE and RE

As of year-end 2017, U.S. insurers reported exposure to unaffiliated HF, PE and RE with an aggregate BACV of \$105 billion (see Table 2), which was an increase of 9.9% from year-end 2016. The increase marks a turnaround from no increase from 2015 to 2016. Unaffiliated PE accounted for 66% of the total BACV (\$69.2 billion) at year-end 2017, with HF accounting for 21% (\$21.8 billion) at year-end 2017. RE remained at 14% (\$14.3 billion) for the same period. Unaffiliated HF, PE and RE remained at 30% of total Schedule BA investments at year-end 2017.

**Table 2: U.S. Insurer Historical Total Exposure to Unaffiliated HF, PE and RE (BACV, \$Bil.)**

Asset	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Private Equity (PE)	19	23	33	32	38	46	49	62	66	70	65	65	69
Hedge Fund (HF)	6	10	13	13	8	9	19	15	16	16	18	18	22
Real Estate	8	9	14	14	11	13	15	16	17	17	13	13	14
<b>Total</b>	<b>33</b>	<b>42</b>	<b>60</b>	<b>59</b>	<b>57</b>	<b>68</b>	<b>83</b>	<b>93</b>	<b>99</b>	<b>103</b>	<b>96</b>	<b>96</b>	<b>105</b>

Life and P/C companies together accounted for the largest investment in unaffiliated HF, PE and RE across the five industry types for an aggregate of \$99.5 billion at year-end 2017, or 94% of total unaffiliated other long-term investments (shown in Table 3), compared to about \$90.8 billion at year-end 2016 (also 94% of total unaffiliated other long-term investments, shown in Table 4). For life companies alone, exposure to unaffiliated PE, HF and RE was 60% of total unaffiliated other long-term investments as of year-end 2017, representing a decrease from 61% at year-end 2016 (and 62% at year-end 2015).

**Table 3: 2017 U.S. Insurer Exposure to Unaffiliated HF, PE and RE by Industry Type (BACV, \$Mil.)**

Asset	Fraternal	Life	P/C	Title	Health	Total	Pct of Total
Private Equity (PE)	482	50,779	16,827	0	1,130	69,218	66%
Hedge Fund (HF)	497	5,830	12,995	15	2,526	21,863	21%
Real Estate	351	6,780	6,245	2	941	14,318	14%
<b>Total</b>	<b>1,330</b>	<b>63,389</b>	<b>36,067</b>	<b>16</b>	<b>4,597</b>	<b>105,399</b>	<b>100%</b>
Pct of Total	1%	60%	34%	0%	4%	100%	

**Table 4: 2016 U.S. Insurer Exposure to Unaffiliated HF, PE and RE by Industry Type (BACV, \$Mil.)**

Asset	Fraternal	Life	P/C	Title	Health	Total	Pct of Total
Private Equity (PE)	500	47,940	15,507	-	885	64,831	68%
Hedge Fund (HF)	503	4,746	10,543	13	2,267	18,072	19%
Real Estate	225	6,246	5,838	4	826	13,140	14%
<b>Total</b>	<b>1,228</b>	<b>58,933</b>	<b>31,888</b>	<b>17</b>	<b>3,977</b>	<b>96,043</b>	<b>100%</b>
Pct of Total	1%	61%	33%	0%	4%	100%	

### **Notable HF Exposure Among U.S. Insurers**

Large insurers (those with total cash and invested assets greater than \$10 billion) increased unaffiliated HF exposure by 32% to \$13.9 billion by year-end 2017. Small insurers (those with less than \$250 million in total cash and invested assets) reported a 15% decrease in the BACV of unaffiliated HF exposure at year-end 2017 (see Table 5 and Table 6) following the 45% increase reported in 2016. Small insurers represented the largest number of new insurers reporting unaffiliated HF exposure at year-end 2017, at 15 with a BACV of \$39 million.

While \$39 million is a relatively small exposure as a percentage of the industry's total cash and invested assets, given asset-liability matching and liquidity considerations, the BACV as a percentage of capital and surplus may be significant. The BACV of HF exposure for four of 15 small insurers was greater than 10% of total capital and surplus at year-end 2017. Two small insurers reported a BACV of HF exposure representing more than 25% and 30% of total capital and surplus in 2017. As a group, small insurers had a weighted average HF exposure as a percentage of total capital and surplus of 22%.

One insurer with total cash and invested asset between \$250 million and \$500 million reported HF exposure representing about 37% of its total capital and surplus, the highest concentration reported by an insurer with new exposure in 2017.

**Table 5: 2017 U.S. Insurer Exposure to Unaffiliated HF, PE and RE by Total Cash and Invested Assets (BACV, \$Mil.)**

Asset	Less Than \$250mm	Between \$250mm and \$500mm	Between \$500mm and \$1B	Between \$1B and \$2.5B	Between \$2.5B and \$5B	Between \$5B and \$10B	Greater than \$10B	Total
Private Equity (PE)	225	437	607	1,900	2,228	4,733	59,088	69,218
Hedge Fund (HF)	240	552	733	3,361	1,260	1,845	13,872	21,863
Real Estate	127	84	221	1,150	954	1,884	9,899	14,318
<b>Total</b>	<b>592</b>	<b>1,073</b>	<b>1,561</b>	<b>6,411</b>	<b>4,442</b>	<b>8,462</b>	<b>82,859</b>	<b>105,399</b>
Pct of Total	1%	1%	1%	6%	4%	8%	79%	100%

**Table 6: 2016 U.S. Insurer Exposure to Unaffiliated HF, PE and RE by Total Cash and Invested Assets (BACV, \$Mil.)**

Asset	Less than \$250mm	Between \$250mm and \$500mm	Between \$500mm and \$1B	Between \$1B and \$2.5B	Between \$2.5B and \$5B	Between \$5B and \$10B	Greater than \$10B	Total
Private Equity (PE)	186	363	525	1,579	1,753	3,753	56,673	64,831
Hedge Fund (HF)	282	472	640	3,202	1,062	1,913	10,500	18,072
Real Estate	126	86	194	1,178	738	1,569	9,250	13,140
<b>Total</b>	<b>594</b>	<b>921</b>	<b>1,359</b>	<b>5,959</b>	<b>3,553</b>	<b>7,234</b>	<b>76,423</b>	<b>96,043</b>
Pct of Total	1%	1%	1%	6%	4%	8%	80%	100%

## Summary

As of year-end 2017, U.S. insurer exposure to other long-term invested assets, as reported in Schedule BA, reached about \$353.5 billion (including affiliated and unaffiliated exposure). Within the total \$148 billion of unaffiliated exposure (which was about 42% of the industry's other long-term invested assets), unaffiliated HF, PE and RE were the largest components at approximately \$105.4 billion, with PE being the largest at \$69.2 billion.

In comparison, unaffiliated HF, PE and RE exposure for U.S. insurers was about \$96 billion at year-end 2016, with the largest year-over-year increases occurring with HF (about 16%). Within the U.S. insurance industry's unaffiliated PE investments, the largest strategy type reported by insurers in 2017 was leveraged buyouts (\$39.8 billion), consistent with year-end 2016 reported data. U.S. insurers reported multi-strategy as the largest HF exposure at \$6 billion as of year-end 2017. Note, however, that the reported strategies (i.e., leveraged buyout, multi-strategies) are subjective and based on insurer reporting.

Liquidity, limited by restrictions on withdrawal, may be an issue for some U.S. insurers in asset-liability matching. The issue is greatest for small insurers, 15 of which reported new HF exposure in 2017, where these assets may be a significant percentage of capital and surplus.

The Capital Markets Bureau will continue to monitor trends within the insurance industry and report on any developments as deemed appropriate.

August 9, 2018								
Major Insurer Share Prices			Change %			Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	\$46.72	0.4	6.8	6.4	\$46.55	\$43.76	\$43.89
	Ameriprise	139.64	(5.7)	(5.6)	(17.6)	148.04	147.94	169.47
	Genworth	4.42	(3.8)	56.2	42.1	4.60	2.83	3.11
	Lincoln	66.69	(2.0)	(8.7)	(13.2)	68.06	73.06	76.87
	MetLife	46.12	0.1	0.5	(8.8)	46.07	45.89	50.56
	Principal	55.58	(5.0)	(8.8)	(21.2)	58.52	60.91	70.56
	Prudential	99.89	(0.3)	(3.5)	(13.1)	100.19	103.55	114.98
	UNUM	36.04	(8.5)	(24.3)	(34.3)	39.39	47.61	54.89
PC	Axis Capital	54.31	(4.3)	(5.7)	8.1	56.76	57.57	50.26
	Allstate	99.42	4.5	4.9	(5.1)	95.14	94.80	104.71
	Arch Capital	30.33	(0.6)	(64.6)	(66.6)	30.52	85.59	90.77
	Cincinnati	74.93	(1.0)	0.9	(0.1)	75.68	74.26	74.97
	Chubb	137.18	(1.7)	0.3	(6.1)	139.52	136.77	146.13
	Everest Re	215.21	(5.1)	(16.2)	(2.7)	226.81	256.82	221.26
	Progressive	62.58	4.3	2.7	11.1	59.97	60.93	56.32
	Travelers	129.58	(1.6)	(6.7)	(4.5)	131.63	138.86	135.64
	WR Berkley	76.15	0.4	4.7	6.3	75.82	72.70	71.65
	XL	56.41	0.4	2.1	60.4	56.21	55.26	35.16
Other	AON	\$142.98	(1.2)	1.9	6.7	\$144.70	\$140.33	\$134.00
	AIG	52.03	(5.4)	(4.4)	(12.7)	54.99	54.42	59.58
	Assurant	105.90	(3.6)	15.9	5.0	109.87	91.41	100.84
	Fidelity National	39.87	(1.3)	(0.4)	1.6	40.39	40.02	39.24
	Hartford	52.18	(1.8)	1.3	(7.3)	53.11	51.52	56.28
	Marsh	84.02	(0.8)	1.7	3.2	84.66	82.59	81.39
Health	Aetna	\$194.00	2.4	14.8	7.5	\$189.52	\$169.00	\$180.39
	Cigna	185.19	4.8	10.4	(8.8)	176.63	167.74	203.09
	Humana	323.46	3.0	20.3	30.4	314.07	268.83	248.07
	United	261.58	2.5	22.2	18.7	255.11	214.00	220.46
Monoline	Assured	\$41.38	9.0	14.3	22.2	\$37.98	\$36.20	\$33.87
	MBIA	11.32	16.3	22.2	54.6	9.73	9.26	7.32
	MGIC	12.62	1.1	(3.0)	(10.6)	12.48	13.00	14.11
	Radian	19.71	4.3	3.5	(4.4)	18.89	19.04	20.61
	XL Capital	56.41	0.4	2.1	60.4	56.21	55.26	35.16

August 9, 2018								
Major Market Variables			Change %			Prior		
		Close	Week	QTD	YTD	Week	Quarter	Year
Dow Jones Ind		25,509.23	0.5	5.8	3.2	25,384.15	24,103.11	24,719.22
S&P 500		2,852.94	1.6	8.0	6.7	2,807.32	2,640.87	2,673.61
S&P Financial		469.30	0.5	2.6	1.2	466.94	457.53	463.94
S&P Insurance		386.83	(0.9)	(0.9)	(3.8)	390.45	390.30	402.08
US Dollar \$			Change %			Prior		
/ Euro	\$1.15		(1.6)	(6.4)	(3.9)	\$1.17	\$1.23	\$1.20
/ Crude Oil bbl	66.72		(4.8)	2.7	11.0	70.12	64.94	60.11
/ Gold oz	1,211.70		(0.9)	(8.4)	(7.2)	1,222.60	1,322.80	1,305.20
Treasury Ylds %	%		Change bp			%	%	%
1 Year	2.42		0.01	0.32	0.67	2.41	2.10	1.75
10 Year	2.93		(0.05)	0.19	0.52	2.97	2.74	2.41
30 Year	3.07		(0.03)	0.09	0.33	3.10	2.98	2.74
Corp Credit Spreads -bp			Change %			Prior		
CDX.IG	59.28		0.5	(9.6)	20.9	59.01	65.56	49.02

August 9, 2018										
Major Insurer Bond Yields					Weekly Change					YTD
Company	Coupon	Maturity	Price			Spread over UST		Spread		
			Current	Change	Yield	B.P.	Change	Change		
Life	Ameriprise	AMP	3.700%	10/15/2024	\$100.10	\$0.15	3.68%	81	3	17
	Lincoln National	LNC	3.350%	3/9/2025	\$96.28	\$0.30	4.00%	109	(1)	25
	MassMutual	MASSMU	3.600%	4/9/2024	\$99.90	\$0.37	3.62%	76	(3)	20
	MetLife	MET	4.050%	3/1/2045	\$94.90	\$0.69	4.38%	131	(2)	28
	New York Life	NYL	2.350%	7/14/2026	\$91.05	\$0.29	3.66%	74	1	16
	Pacific Life	PACLIF	5.125%	1/30/2043	\$106.75	\$0.72	4.66%	160	(2)	5
	Principal	PRU	6.050%	10/15/2036	\$118.93	\$0.31	4.51%	149	(0)	26
Prudential	PRU	4.600%	5/15/2044	\$103.18	\$0.78	4.39%	134	(1)	27	
	Allstate	ALL	4.500%	6/15/2043	\$103.49	\$0.17	4.27%	119	1	20
	Berkshire Hathaway	BRK	4.300%	5/15/2043	\$102.10	\$0.46	4.16%	111	0	21
	Travelers	TRV	4.600%	8/1/2043	\$105.61	\$0.50	4.23%	118	2	21
	XL Group	XL	6.250%	5/15/2027	\$113.77	\$0.52	4.34%	137	(3)	(4)
Other	AON	AON	4.250%	12/12/2042	\$92.60	\$0.75	4.77%	171	(3)	32
	AIG	AIG	6.820%	11/15/2037	\$123.12	(\$0.06)	4.94%	191	4	32
	Hartford	HIG	4.300%	4/15/2043	\$95.99	\$0.15	4.57%	153	3	38
	Nationwide	NATMUT	5.300%	11/18/2044	\$106.70	\$0.43	4.85%	177	(1)	33
Health	Aetna	AET	6.750%	12/15/2037	\$126.37	\$0.42	4.66%	164	2	25
	CIGNA	CI	6.150%	11/15/2036	\$113.33	\$0.43	5.03%	198	0	62
	United Healthcare	UNH	4.750%	7/15/2045	\$108.75	\$0.01	4.20%	113	3	16

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