



Washington State Department of  
**Labor & Industries**

**2018 Peer Analysis  
Year End 2017 Data**

**August 22, 2018**

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# *Overview*

# Peer Groups and Composites

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- For the year-end 2017 peer update, we created four groups, consisting of:
  - Nineteen AASCIF members, excluding the other exclusive funds (see the GAAP peer group).
  - Eighteen workers' compensation specialists.
  - The 10 largest writers of workers' compensation. Unless otherwise indicated, all data for these large multi-line insurers is for their total business, as opposed to just the workers' compensation portion.
  - Four funds (two Canadian and two U.S.) that are not subject to insurance regulations, and do not use insurance accounting.
- We also included the workers' compensation and property-casualty industry composites from A.M. Best.
- Data is from the A.M. Best® database and used with permission. Analysis is by Conning. Our license prohibits publishing proprietary data such as A.M. Best's financial strength ratings or Best Capital Adequacy Ratios.
- Data is as of year-end 2017. The North Dakota, Ohio and Washington state funds report fiscal years, so their data is as of June 30, 2017.
- The L&I data is adjusted to provide a better comparison to the peer groups. Please see the appendix for details.
- Groups are designated as such. Otherwise, all data is for individual insurance entities.
- Investment data includes only non-affiliated investments.
- A value of zero is indicated by a **black 0 or 0%**. A small, non-zero value is indicated by a **gray 0 or 0%**.

# Using the Peer Analysis

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- The analysis examines 1) underwriting and operating results, 2) capital adequacy and leverage and 3) investment strategy. Our primary focus is investment strategy.
- Key drivers of insurers' investment strategies are insurance operations, financial strength, business strategy, risk appetite and risk preferences.
  - Underwriting results influence the municipal bond allocation (for taxable entities), risk appetite and preference between income and price appreciation. Historically, workers' comp insurers have underwriting losses, and rely on investment income for their profits.
  - Lines of business affect the need for liquidity, the appropriate bond duration, volatility of insurance results and inflation risks. Workers' comp is a relatively long-tailed line of business; this typically results in longer duration bond portfolios, compared to personal lines insurers.
  - Capital adequacy primarily affects risk appetite. Higher levels of capital both allow more risk to be taken and require more income to be earned in order to generate a reasonable return on capital. State regulators, and rating agencies such as A.M. Best, monitor the capital adequacy of private insurers and some state funds.
- Peer analyses can provide useful insights. However, peer averages can be misleading. For example:
  - The peers may be following a flawed strategy.
  - Some values, such as the allocation to stocks, may not be evenly distributed within a peer group. For example, if half the peers hold 0% equity, and half hold 20% equity, the average allocation of 10% may not have much explanatory power.
  - Even the choice between simple and weighted averages affects the analysis by giving smaller insurers more or less weight, respectively.

## Comparing L&I to the Peer Groups

	Key Similarities to L&I	Key Differences from L&I
AASCIF	<ul style="list-style-type: none"> <li>▪ Created to provide in-state work comp insurance</li> <li>▪ Mono-line workers' comp insurers</li> <li>▪ Limited geographical diversification; typically write in just one state</li> <li>▪ Many are exempt from Federal income tax</li> </ul>	<ul style="list-style-type: none"> <li>▪ Most are subject to state insurance regs</li> <li>▪ Some are rated by A.M. Best</li> <li>▪ Operate in a competitive environment</li> <li>▪ Higher operating expenses</li> <li>▪ Higher levels of capital</li> </ul>
Specialists	<ul style="list-style-type: none"> <li>▪ Mono-line workers' comp insurers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Subject to state insurance regulations</li> <li>▪ Rated by A.M. Best</li> <li>▪ Operate in a competitive environment</li> <li>▪ Higher operating expenses</li> <li>▪ Higher levels of capital</li> </ul>
Largest Writers (the private insurers only)	<ul style="list-style-type: none"> <li>▪ Write large dollar amounts of workers' comp premiums</li> <li>▪ Large balance sheets (L&amp;I is at the low end of the range)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Subject to state insurance regulations</li> <li>▪ Rated by A.M. Best</li> <li>▪ Operate in a competitive environment</li> <li>▪ Higher operating expenses</li> <li>▪ Higher levels of capital</li> <li>▪ Geographic and line of business diversification</li> <li>▪ Most are stock companies</li> </ul>
GAAP	<ul style="list-style-type: none"> <li>▪ Created to provide in-state/in-province workers' comp insurance</li> <li>▪ Mono-line insurers</li> <li>▪ Limited geographical diversification</li> <li>▪ Exempt from income taxes</li> <li>▪ Large market shares, limited competition</li> <li>▪ Large size (Ohio)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Higher operating expenses</li> <li>▪ Higher levels of capital</li> <li>▪ Publish GAAP financial statements, which are materially different from SAP statements, especially in the treatment of investments</li> </ul>

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# *Peer Groups*

# AASCIF Peer Group

- The first peer group consists of 19 AASCIF members.
- In total, this peer analysis incorporates 22 of the 25 state funds. Missing are:
  - Pennsylvania. Its multi-year deficit distorts financial ratios.
  - South Carolina, due to lack of data.
  - Wyoming, due to lack of data.
  - Note that North Dakota and Ohio are included in the GAAP peer group.

	<b>Net Written Premium</b>	<b>Invested Assets</b>	<b>Statutory Surplus</b>	<b>Loss &amp; LAE Reserves</b>	<b>Total Liabilities</b>
<b>Washington L&amp;I</b>	<b>2,149,495</b>	<b>15,861,974</b>	<b>2,971,764</b>	<b>13,345,974</b>	<b>13,715,952</b>
<b>AASCIF</b>					
Beacon Mutual (RI)	122,766	360,444	152,992	163,596	250,535
Chesapeake Employers (MD)	220,102	2,213,486	695,270	1,240,320	1,622,524
CompSource Mutual (OK)	202,040	1,759,588	547,896	1,168,708	1,271,495
CopperPoint Mutual (AZ)	244,924	3,472,389	1,466,865	2,026,828	2,227,087
Hawaii Employers' Mutual	68,178	366,793	237,670	120,295	159,244
Idaho State Insurance Fund	243,934	775,230	268,239	470,370	555,893
Kentucky Employers' Mutual	154,658	911,642	206,746	601,885	787,227
Louisiana Workers' Comp	193,509	1,630,373	1,002,948	445,802	712,512
MEMIC Group (ME)	374,630	1,172,544	438,997	653,149	893,546
Missouri Employers Mutual	238,529	598,806	252,828	289,056	442,160
Montana State Fund	165,551	1,524,717	554,701	919,690	1,129,837
New Mexico Mutual	94,139	399,833	182,813	202,863	224,966
Pinnacol Assurance (CO)	627,984	2,735,518	1,276,308	923,095	1,557,403
SAIF Corp (OR)	525,538	4,896,288	1,889,500	2,733,729	3,404,694
SFM Mutual (MN)	170,153	524,952	147,727	342,849	464,364
SCIF (CA)	1,345,110	20,316,131	6,691,108	13,040,795	14,088,129
State Insurance Fund (NY)	2,277,778	17,037,619	5,943,619	10,069,869	12,686,206
Texas Mutual	1,035,215	6,650,902	3,533,426	2,874,059	3,528,224
Workers Comp Fund (UT)	204,748	1,723,758	934,925	804,265	860,340
<b>AASCIF Simple Average</b>	<b>447,868</b>	<b>3,635,316</b>	<b>1,390,767</b>	<b>2,057,433</b>	<b>2,466,652</b>
<b>AASCIF Total</b>	<b>8,509,486</b>	<b>69,071,013</b>	<b>26,424,578</b>	<b>39,091,223</b>	<b>46,866,386</b>



# Workers' Compensation Specialists Peer Group

- The second peer group consists of 18 workers' comp specialists meeting these criteria:

- Independent insurers. The two Berkshire Hathaway "(BH)" companies are the exception; Berkshire Hathaway is a major workers' comp insurer.
- Over \$100 million of Net Written Premium
- At least 40% of Net Written Premium is workers' compensation

- This peer group includes three privatized state funds: Accident Fund (Michigan), BrickStreet (West Virginia) and Employers Group (Nevada).

	<b>Net Written Premium</b>	<b>Invested Assets</b>	<b>Statutory Surplus</b>	<b>Loss &amp; LAE Reserves</b>	<b>Total Liabilities</b>
<b>Washington L&amp;I Specialists</b>	<b>2,149,495</b>	<b>15,861,974</b>	<b>2,971,764</b>	<b>13,345,974</b>	<b>13,715,952</b>
Accident Fund	1,319,137	2,865,107	994,709	1,607,931	2,669,827
Alaska National	226,847	883,381	480,316	382,227	524,384
Amerisafe Group	341,398	1,152,446	382,061	686,956	1,035,956
Amerisure Group	815,440	2,461,723	982,512	1,387,049	2,084,759
AmTrust Group (G)	2,509,134	4,807,972	2,092,318	3,288,671	6,525,222
AIM Mutual	142,199	566,217	237,022	280,602	388,139
BrickStreet Mutual	354,523	2,069,831	798,728	1,088,211	1,471,922
Builders Insurance Group	216,971	689,344	280,731	342,296	521,809
Builders Mutual	307,173	746,503	358,182	374,698	501,449
California Insurance (BH)	307,483	922,256	622,598	314,802	398,794
Employers Group	723,697	2,642,880	892,448	1,729,128	2,227,241
FFVA Mutual	111,970	284,183	164,263	125,631	171,907
GUARD Group (BH)	578,706	1,222,863	613,357	628,490	2,267,083
Insurance Co of the West	807,684	2,443,240	1,034,207	1,286,434	1,536,010
Lackawanna Group	115,324	258,975	93,084	144,669	215,900
Zenith Insurance	803,912	1,711,730	571,728	1,116,585	1,272,102
Old Republic Group	2,648,315	9,954,969	3,765,972	5,254,582	8,283,094
RetailFirst Group	131,023	330,881	173,777	159,396	196,303
<b>Specialists Simple Average</b>	<b>692,274</b>	<b>2,000,806</b>	<b>807,667</b>	<b>1,122,131</b>	<b>1,793,995</b>
<b>Specialists Total</b>	<b>12,460,936</b>	<b>36,014,501</b>	<b>14,538,013</b>	<b>20,198,358</b>	<b>32,291,901</b>

# Largest Writers of Workers' Compensation Peer Group

- The 10 largest workers' comp writers, as of year-end 2017.
- Conning's list of the largest writers excludes these three state funds, each writing approximately \$2 billion of workers' comp premiums:
  - New York (filed late)
  - Ohio (does not report to state regulators, no SAP financials)
  - Washington (does not report to state regulators)
- These companies wrote \$19.5 billion of workers' comp premiums in 2017, or 43% of the "total"\* market. This is down from 60% in 2004.
- Data is for all lines of business, unless otherwise specified.
- Ten of the top 50 workers' comp insurers are AASCIF members; this would increase to 13 with NY, OH and WA.

	<b>Net Written Premium</b>	<b>Invested Assets</b>	<b>Statutory Surplus</b>	<b>Loss &amp; LAE Reserves</b>	<b>Total Liabilities</b>
<b>Washington L&amp;I</b>	<b>2,149,495</b>	<b>15,861,974</b>	<b>2,971,764</b>	<b>13,345,974</b>	<b>13,715,952</b>
<b>Largest Writers</b>					
Travelers Group	24,464,954	65,472,481	19,903,068	38,765,686	57,821,213
Hartford Insurance Group	10,520,546	34,999,628	11,459,082	20,043,076	29,123,652
Homestate Group (BH)	1,527,163	6,818,146	3,290,373	2,984,134	4,151,626
Liberty Mutual Group	28,625,043	62,137,282	17,966,672	39,337,875	59,646,280
SCIF (CA)	1,345,110	20,316,131	6,691,108	13,040,795	14,088,129
Accident Fund Group	1,334,689	3,023,250	994,709	1,624,173	3,198,528
W. R. Berkley Group	5,594,506	16,401,721	5,481,806	9,493,082	14,292,842
ACE/Chubb Group	5,131,870	28,438,318	11,778,871	15,023,838	22,012,326
AmTrust Group (G)	2,509,134	4,807,972	2,092,318	3,288,671	6,525,222
Great American Group	4,229,043	9,823,285	2,730,953	6,083,740	9,279,812
<b>Largest Writers Simple Average</b>	<b>8,528,206</b>	<b>25,223,821</b>	<b>8,238,896</b>	<b>14,968,507</b>	<b>22,013,963</b>
<b>Largest Writers Total</b>	<b>85,282,058</b>	<b>252,238,214</b>	<b>82,388,960</b>	<b>149,685,070</b>	<b>220,139,630</b>

# GAAP/IFRS Insurers

- U.S. insurance regulations and accounting standards have a significant affect on insurers' investment strategies.
- This peer group includes four workers' comp funds that are not subject to U.S. insurance regulations, and that do not follow insurance accounting principles.
- Ohio and North Dakota are state agencies, and are not subject to their state insurance regulations. Both report on a GAAP basis.
- Alberta and British Columbia are Canadian provincial funds. They report using IFRS, the International Financial Reporting Standards. IFRS is roughly equivalent to GAAP.
- Under both GAAP and IFRS, all investments are reported at fair value. Investment income includes changes in realized and unrealized gains and losses.

	<b>Net Written Premium</b>	<b>Invested Assets</b>	<b>Statutory Surplus*</b>	<b>Loss &amp; LAE Reserves</b>	<b>Total Liabilities</b>
<b>Washington L&amp;I</b>	<b>2,149,495</b>	<b>15,861,974</b>	<b>2,971,764</b>	<b>13,345,974</b>	<b>13,715,952</b>
<b>GAAP/IFRS</b>					
Alberta WCB	1,039,544	11,309,243	2,448,555	8,381,700	8,968,562
WorkSafe BC	1,544,063	17,817,576	6,409,637	11,511,242	12,064,768
Ohio BWC **	1,574,212	27,049,823	9,758,071	16,866,610	19,250,420
North Dakota WSI	233,060	1,901,745	608,815	1,085,768	1,356,454
<b>GAAP/IFRS Simple Average</b>	<b>1,097,720</b>	<b>14,519,597</b>	<b>4,806,270</b>	<b>9,461,330</b>	<b>10,410,051</b>
<b>GAAP/IFRS Total</b>	<b>4,390,879</b>	<b>58,078,387</b>	<b>19,225,078</b>	<b>37,845,320</b>	<b>41,640,204</b>

\* L&I reports capital as Contingency Reserve. Insurers' reporting on a SAP basis report capital as Policyholders' Surplus, while Shareholders' Equity is used in GAAP financials.

\*\* Compared to L&I, the Ohio Bureau of Workers' Compensation writes less premiums, has about the same size reserves, a larger investment portfolio. and a much larger capital position (capital to liability ratio of 51% as of year-end 2017).

## Composites and Summary

- For a larger picture, we included two of A.M. Best's industry composites.

- The workers' comp composite consists of companies that meet A.M. Best's criteria as workers' compensation specialists. This composite includes the state funds that file regulatory statements. It does not include multi-line insurers.

	Net Written Premium	Invested Assets	Statutory Surplus	Loss & LAE Reserves	Total Liabilities
<b>Washington L&amp;I</b>	2,149,495	15,861,974	2,971,764	13,345,974	13,715,952
AASCIF Simple Average	447,868	3,635,316	1,390,767	2,057,433	2,466,652
AASCIF Total	8,509,486	69,071,013	26,424,578	39,091,223	46,866,386
Specialists Simple Average	692,274	2,000,806	807,667	1,122,131	1,793,995
Specialists Total	12,460,936	36,014,501	14,538,013	20,198,358	32,291,901
Largest Writers Simple Average	8,528,206	25,223,821	8,238,896	14,968,507	22,013,963
Largest Writers Total	85,282,058	252,238,214	82,388,960	149,685,070	220,139,630
GAAP/IFRS Simple Average	1,097,720	14,519,597	4,806,270	9,461,330	10,410,051
GAAP/IFRS Total	4,390,879	58,078,387	19,225,078	37,845,320	41,640,204
Workers Comp Composite	25,166,863	131,071,917	51,543,202	72,466,955	96,484,649
Total PC Composite	562,266,988	1,727,541,135	787,070,323	658,946,750	1,250,581,885

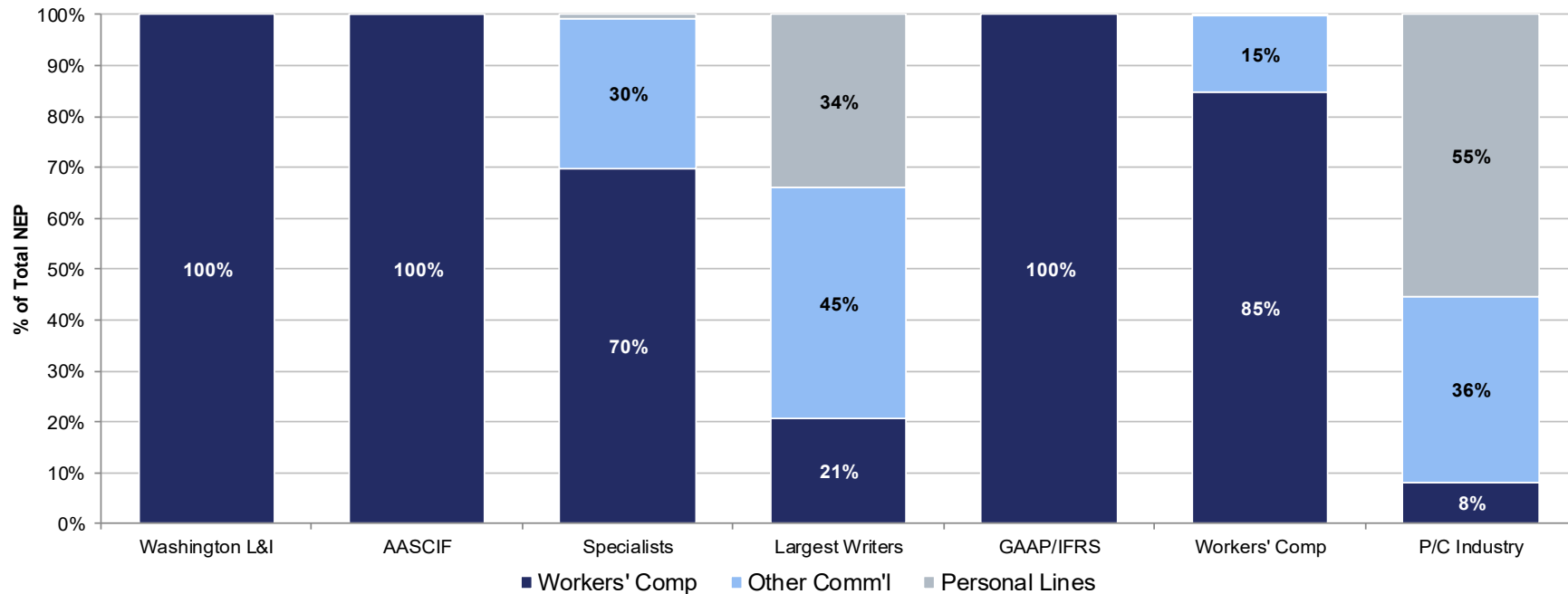
- The property-casualty composite consists of all U.S. p/c companies, including many state funds.
- Conning's *Line of Business Forecast 2<sup>nd</sup> Quarter 2018* estimates that workers' comp premiums totaled \$45.0 billion in 2017.
- The AASCIF members, specialists and largest writers peer groups wrote \$40.5 billion of workers' comp premiums in 2017, or 90% of the total.
- Conning's premium "total" excludes the NY, OH and WA state funds. At approximately \$2 billion in written premiums each, this increases the line's total premiums to approximately \$51 billion, and the peer group total to approximately \$46.5 billion, or 91% of the total.

# Net Earned Premium Distribution

	Workers' Comp	Other Comm'l	Personal Lines
Washington L&I	100%	0%	0%
AASCIF	100%	0%	0%
Specialists	70%	30% *	1%
Largest Writers	21%	45%	34%
GAAP/IFRS	100%	0%	0%
Workers' Comp	85%	15% *	0%
P/C Industry	8%	36%	55%

May not foot due to rounding

- Lines of business are one key driver of investment strategies. Compared to personal lines, workers' comp insurers historically have had:
  - Higher combined ratios,
  - Less capital,
  - Longer duration bond portfolios, and
  - Greater investment leverage.
- Some workers' comp insurers report Excess Work Comp premiums as General Liability\*

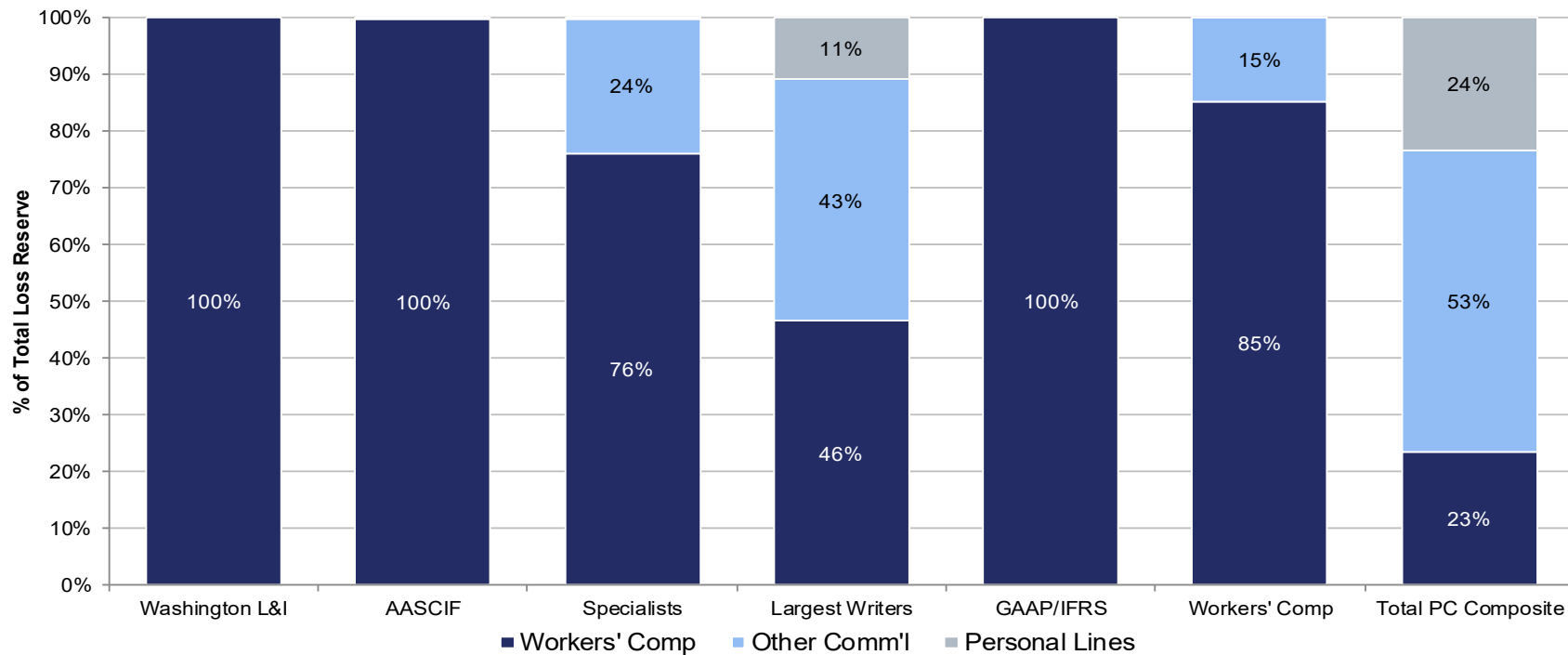


# Loss and LAE Reserve Distribution

	<b>Workers' Comp</b>	<b>Other Comm'l</b>	<b>Personal Lines</b>
<b>Washington L&amp;I</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>
AASCIF	100%	0%	0%
Specialists	76%	24%	0%
Largest Writers	46%	43%	11%
GAAP/IFRS	100%	0%	0%
Workers' Comp	85%	15%	0%
Total PC Composite	23%	53%	24%

■ As a long-tailed line, workers' comp generally makes up a higher percentage of reserves than it does of premiums.

- For the Largest Writers, workers' comp is 21% of premiums, but 46% of reserves.
- The Total P/C composite's figures are 8% of premiums, and 23% of reserves.



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# ***Underwriting and Operating Results***

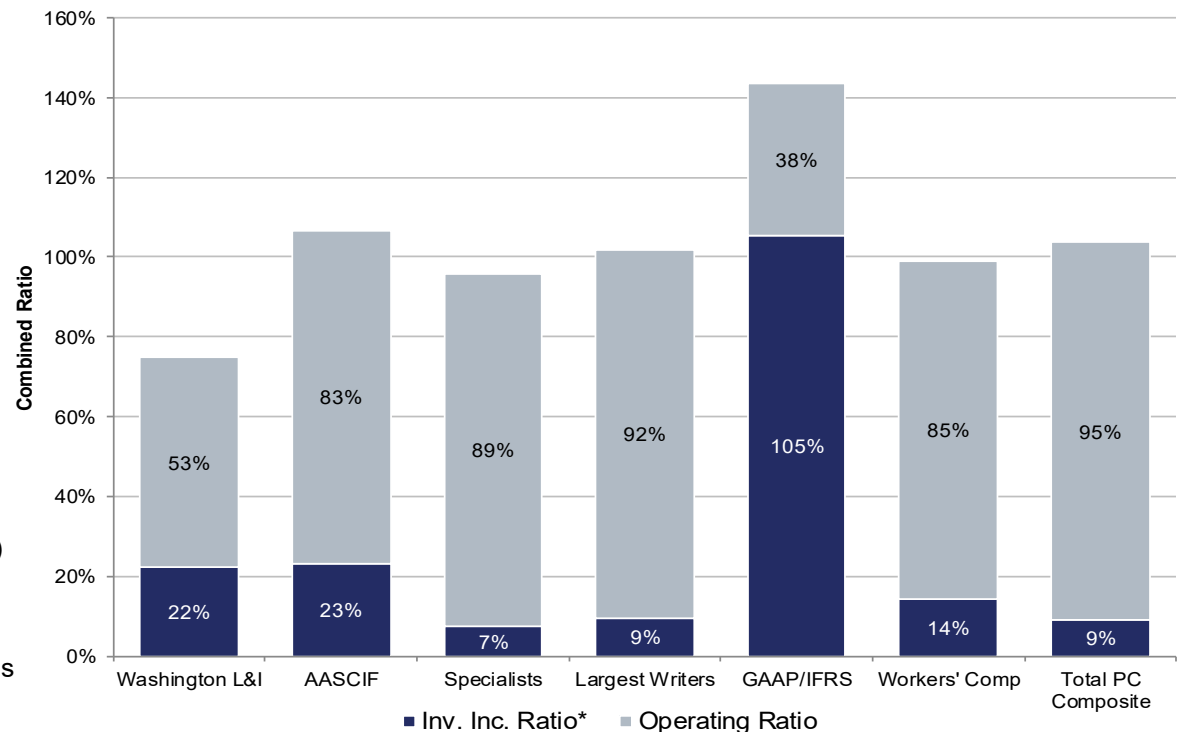
# Operating Results Relative to Premiums

- Combined ratios measure the profitability of insurance operations, with or without policyholder dividends.
- Combined ratios >100% (i.e., losses on insurance operations) are the historical norm for workers' comp insurers.
- Operating ratios take investment income into account for a measure of overall profitability.
- Operating ratios >100% are not sustainable over the long term, as they will eventually deplete capital.
- GAAP insurers report **all** investments at fair value, and report changes in fair value as investment income\*\*. As a result, their investment income ratios can be very volatile.

\* SAP Investment Income ratio  $\approx$  (coupons + dividends) to net written premiums. Changes in equity fair values go through capital.

\*\* GAAP Investment Income ratio  $\approx$  (coupons + dividends + **all** changes in fair values) to net written premiums.

	Operating Results							
	Loss Ratio	LAE Ratio	Expense Ratio	Comb. Ratio Pre-Dividend	PH Divd. Ratio	Combined Ratio	Inv. Inc. Ratio*	Operating Ratio
<b>Washington L&amp;I</b>	<b>63%</b>	<b>8%</b>	<b>4%</b>	<b>75%</b>	<b>0%</b>	<b>75%</b>	<b>22%</b>	<b>53%</b>
AASCIF	51%	21%	23%	95%	12%	107%	23%	83%
Specialists	55%	13%	27%	95%	1%	96%	7%	89%
Largest Writers	58%	14%	30%	102%	0%	102%	9%	92%
GAAP/IFRS	92%	17%	17%	125%	18%	144%	105%	38%
Workers' Comp	53%	16%	25%	94%	5%	99%	14%	85%
Total PC Composite	64%	12%	27%	103%	1%	104%	9%	95%





## 5-Year Underwriting and Operating Results Relative to Premiums

	Combined Ratio					Avg.
	2013	2014	2015	2016	2017	
<b>Washington L&amp;I</b>	<b>147%</b>	<b>138%</b>	<b>114%</b>	<b>108%</b>	<b>75%</b>	<b>116%</b>
AASCIF	86%	115%	105%	103%	107%	103%
Specialists	95%	93%	90%	91%	96%	93%
Largest Writers	96%	95%	93%	96%	102%	96%
GAAP/IFRS	167%	123%	139%	130%	144%	140%
Workers' Comp	95%	104%	97%	96%	99%	98%
Total PC Composite	96%	97%	98%	100%	104%	99%

	Investment Income Ratio					Avg.
	2013	2014	2015	2016	2017	
Washington L&I	29%	28%	26%	24%	22%	<b>26%</b>
AASCIF	25%	21%	21%	22%	23%	22%
Specialists	8%	7%	7%	7%	7%	8%
Largest Writers	11%	10%	9%	9%	9%	10%
GAAP/IFRS	80%	110%	51%	67%	105%	83%
Workers' Comp	16%	14%	14%	14%	14%	14%
Total PC Composite	10%	9%	9%	9%	9%	9%

	Operating Ratio					Avg.
	2013	2014	2015	2016	2017	
<b>Washington L&amp;I</b>	<b>118%</b>	<b>110%</b>	<b>88%</b>	<b>83%</b>	<b>53%</b>	<b>90%</b>
AASCIF	61%	93%	84%	81%	83%	81%
Specialists	87%	86%	82%	84%	89%	86%
Largest Writers	85%	84%	83%	87%	92%	87%
GAAP/IFRS	87%	12%	88%	63%	38%	58%
Workers' Comp	79%	90%	83%	82%	85%	84%
Total PC Composite	86%	88%	89%	92%	95%	90%

- Over the five years ended 2017, two of the six peer groups/composites had average combined ratios over 100%.
- On average, workers' comp insurers experienced insurance profits from 2015 to 2017; this is an unusual occurrence that we expect will continue through 2020.
- The volatility caused by GAAP reporting is evident in the investment income ratios for the GAAP peers.
  - Bonds and stocks had higher total returns in 2017 than in 2016. As a result, the GAAP peer group's investment income ratio jumped from 67% to 105%. (Bloomberg Barclays Corporate index returned 6.4% in 2017, versus 6.1% in 2016, while MSCI reports large- and mid-cap stocks returned 21.9% in 2017, versus 11.6% in 2016.)
- All of the peer groups and composites had five-year average operating ratios below 100%.

# Operating Results Relative to Earned Premiums

Components of Net Income - % of Earned Premiums

	Earned Premiums	Other Income	Invest Income	Change in Unreal Eqty Gain	Major Revenues	Loss & LAE	Und Exp	PH Dvd	Taxes	Major Expenses	Net Income
<b>Washington L&amp;I</b>	<b>100%</b>	<b>0%</b>	<b>22%</b>	<b>18%</b>	<b>140%</b>	<b>71%</b>	<b>4%</b>	<b>0%</b>	<b>0%</b>	<b>75%</b>	<b>52%</b>
AASCIF	100%	-2%	23%	9%	131%	72%	23%	12%	0%	107%	21%
Specialists	100%	1%	7%	3%	112%	68%	28%	1%	4%	101%	11%
Largest Writers	100%	0%	10%	-1%	109%	72%	30%	0%	2%	104%	8%
GAAP/IFRS	100%	0%	105%		205%	109%	17%	18%	0%	144%	53%
Workers' Comp	100%	0%	15%	6%	121%	69%	26%	5%	3%	103%	18%
Total PC Composite	100%	-1%	9%	10%	119%	76%	28%	1%	0%	104%	7%

- This table shows the major revenues and expenses for 2017, using earned premiums as the basis for all of the ratios. It can be thought of as showing how each dollar of earned premium is 1) used for benefits and expenses, and 2) supplemented by investment income. Note that written premiums, rather than earned premiums, are generally the basis for expense ratios and investment income ratios.
- Under SAP (insurance accounting), change in the unrealized gain/loss on stocks is not “revenue”, but it does affect capital.
- The revenues and expenses do not add up to net income, as we did not include several miscellaneous revenues and expenses.

## Expense Ratios as % of Benefits (Loss Expense)

	Ratios as a % of Loss (Benefits) Expense			
	LAE / Losses	Underwriting Expense / Losses	Total Expenses / Losses	Inv. Income / Losses
<b>Washington L&amp;I</b>	<b>12%</b>	<b>7%</b>	<b>19%</b>	<b>35%</b>
AASCIF	41%	45%	86%	46%
Specialists	24%	51%	75%	14%
Largest Writers	24%	52%	76%	17%
GAAP/IFRS	18%	18%	36%	114%
Workers' Comp	31%	49%	80%	28%
Total PC Composite	18%	43%	61%	14%

- The preceding tables used premiums (net and earned) as the basis for income and expense ratios. This is a useful approach for evaluating relative profitability of insurance operations and of the total company.
- This table uses loss (benefits) expense as the basis for the LAE, expense and investment income ratios. This is a useful approach for evaluating the relative costs of administering claims, as it removes potential distortions arising from different levels of premium rates.
- The table can show how much it costs to administer (LAE) and support (underwriting expenses) a dollar of benefits, and how much investment income is earned for each dollar of benefits.

# Expenses as a % Benefits (Loss Expense)

L&I 2017	% of Benefits	AASICF Average	% of Benefits	Diff From L&I	Specialists Average	% of Benefits	Diff From L&I	Largest Writers Average	% of Benefits	Diff From L&I
<b>Major expenses:</b>		<b>Major expenses:</b>			<b>Major expenses:</b>			<b>Major expenses:</b>		
Claim adjust. expense	12%	Claim adjust. expense	41%	+29 pts	Claim adjust. expense	24%	+12 pts	Claim adjust. expense	24%	+12 pts
Underwriting expense	7%	Underwriting expense	45%	+38 pts	Underwriting expense	51%	+45 pts	Underwriting expense	52%	+46 pts
Investment expense	0.4%	Investment expense	4%	+3 pts	Investment expense	1%	+1 pts	Investment expense	1%	+1 pts
Federal income tax	0%	Federal income tax	0.5%	+1 pts	Federal income tax	7%	+7 pts	Federal income tax	3%	+3 pts
<i>Total</i>	<i>19%</i>	<i>Total</i>	<i>90%</i>	<i>+71 pts</i>	<i>Total</i>	<i>84%</i>	<i>+65 pts</i>	<i>Total</i>	<i>80%</i>	<i>+61 pts</i>
<b>Specific line items:</b>		<b>Specific line items:</b>			<b>Specific line items:</b>			<b>Specific line items:</b>		
Commissions	0%	Commissions	14%	+14 pts	Commissions	19%	+19 pts	Commissions	19%	+19 pts
Advertising	0%	Advertising	0%	+0 pts	Advertising	0%	+0 pts	Advertising	1%	+1 pts
Taxes & fees (excl. FIT)	0%	Taxes & fees (excl. FIT)	5%	+5 pts	Taxes & fees (excl. FIT)	8%	+8 pts	Taxes & fees (excl. FIT)	5%	+5 pts
<i>Total</i>	<i>0%</i>	<i>Total</i>	<i>19%</i>	<i>+19 pts</i>	<i>Total</i>	<i>28%</i>	<i>+28 pts</i>	<i>Total</i>	<i>25%</i>	<i>+25 pts</i>
Invest. Mgt. fees, bps	3	Invest. Mgt. fees, bps	23	20	Invest. Mgt. fees, bps	22	19	Invest. Mgt. fees, bps	25	22

L&I's savings (mns), compared to:	GAAP/IFRS Average	% of Benefits	Diff From L&I	Workers' Comp Average	% of Benefits	Diff From L&I	Total PC Composite	% of Benefits	Diff From L&I
AASICF avg. expenses	\$956			Claim adjust. expense	31%	+18 pts	Claim adjust. expense	18%	+6 pts
Specialists	\$874			Underwriting expense	49%	+43 pts	Underwriting expense	43%	+36 pts
Largest Writers	\$831			Investment expense	2%	+2 pts	Investment expense	1%	+1 pts
GAAP/IFRS	\$282			Federal income tax	6%	+6 pts	Federal income tax	0%	-0 pts
Work Comp composite	\$941			<i>Total</i>	<i>89%</i>	<i>+69 pts</i>	<i>Total</i>	<i>62%</i>	<i>+43 pts</i>
P/C Industry composite	\$583			<b>Specific line items:</b>			<b>Specific line items:</b>		
				Commissions	17%	+17 pts	Commissions	16%	+17 pts
				Advertising	1%	+1 pts	Advertising	2%	+1 pts
				Taxes & fees (excl. FIT)	6%	+6 pts	Taxes & fees (excl. FIT)	4%	+6 pts
				<i>Total</i>	<i>24%</i>	<i>+24 pts</i>	<i>Total</i>	<i>22%</i>	<i>+22 pts</i>
				Invest. Mgt. fees, bps	24	21	Invest. Mgt. fees, bps	22	19

■ See notes on following page.

## Notes on Expenses as a % of Loss Expense (Benefits)

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- These notes refer to the table on the preceding page.
- This table shows the major categories of expenses as a percent of loss (claims, benefits) expense, to provide insights into the relative cost of managing claims, as well as other expenses.
- Specific types of expenses, such as commissions, advertising and taxes are fees, allocated across the major expense categories. We broke these specific expenses out to highlight key differences between L&I and the peer groups and composites. That is, these specific expenses are a subset of, not an addition to, the major expenses.
- The figures at the bottom left show the hypothetical additional costs, in millions of dollars, L&I would incur if its expense structure was the same as the peer averages.
- Investment expenses are shown both as a percentage of benefits expenses, and as a percentage of the investment portfolio. We added the latter, as it is potentially confusing to see investment expenses measured in percentage points. The investment expenses as a percentage of the investment portfolios are shown in basis points (100 bps = 1%). The peer groups have average fees of about 24 basis points, meaning they pay 0.24% of assets each year in fees. L&I's investment expenses total just three basis points, saving L&I tens of millions of dollars in fees each year (20 basis points savings on a \$15 billion portfolio is \$30 million). L&I's fees may increase marginally as the real estate allocation is funded.
- Note that investment expenses include the interest the insurer pays on any surplus note (a form of debt capital for insurers).

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# ***Capital Adequacy and Leverage***

# Capital Adequacy Measures

	Leverage Ratios						
	Insurance Leverage			Capital to Liabilities	RBC Ratio	Investment Leverage	
	NWP/ Surplus	Reserves/ Surplus	Total			Invest/ Surplus	Invest/ NWP
Washington L&I	0.7	4.5	5.2	22%	NA	5.3	7.4
AASCIF	0.3	1.5	1.8	56%	1026%	2.6	8.1
Specialists	0.9	1.4	2.2	45%	528%	2.4	2.8
Largest Writers	1.0	1.8	2.9	37%	520%	2.7	2.6
GAAP/IFRS	0.2	2.0	2.2	46%	NA	3.0	13.3
Workers' Comp	0.5	1.4	1.9	53%	NA	2.5	5.1
Total PC Composite	0.7	0.8	1.6	63%	624%	2.0	2.8

- The RBC ratio is a regulatory measure comparing actual capital to a formula-based required capital. Ratios below 200% trigger regulatory intervention (i.e., actual capital must be at least twice the calculated required capital).
- Average RBC ratios for the peer groups are calculated by dividing the sum of adjusted surplus for all peers by the sum of the Authorized Control Level (“ACL”) level RBC for all peers.
- RBC ratios are not shown in consolidated financials. We estimated RBC ratios for groups using the adjusted surplus and ACL level RBC for the largest company within the group. This is a reasonable approximation.
- The New York state fund does not report RBC.
- AM Best does not report RBC ratios for their composites. The 2017 property-casualty composite RBC ratio comes from the NAIC’s *Summary: Aggregate P/C RBC Results by Year*, dated June 29, 2018.
- Capital leverage ratios are 1) net written premiums to capital, 2) Loss and LAE reserves to capital and 3) the sum of 1) and 2).
- Investment leverage ratios are 1) invested assets to capital, and 2) invested assets to net written premiums.

## Leverage Ratio Trends

	Insurance Leverage					Avg.
	2013	2014	2015	2016	2017	
<b>Washington L&amp;I</b>	<b>22.5</b>	<b>15.4</b>	<b>12.4</b>	<b>10.5</b>	<b>5.2</b>	<b>13.2</b>
AASCIF	2.3	2.3	2.2	2.0	1.8	2.1
Specialists	2.2	2.3	2.3	2.2	2.2	2.3
Largest Writers	2.5	2.5	2.6	2.6	2.9	2.6
GAAP/IFRS	3.4	2.7	2.5	2.5	2.2	2.6
Workers' Comp	2.2	2.2	2.2	2.1	1.9	2.1
Total PC Composite	1.6	1.6	1.6	1.6	1.6	1.6

- Insurance leverage is the sum of 1) net written premiums to capital, and 2) loss + LAE reserves to capital.
  - These are simple calculations, based on the fact that premiums and reserves are two of the largest potential risks to p/c insurers. Premiums are a source of risk due to potential mispricing and excessive growth (possibly due to underpricing). Reserves carry the risk of adverse development in the future.
- Leverage ratios have generally been decreasing over time, as capital has grown more quickly than both premiums and reserves.
- Over the five years ended 2017, the average annual growth rates for the P/C industry are:
  - Premiums 3.8%,
  - Reserves 1.3%,
  - Investments 3.0%, and
  - Capital 5.2%.
- The Total PC Composite's ratios vary between 1.55 and 1.62 during this period.



## Ratios of Assets Reported at Fair Value to Capital

	Market Valued Assets as a % of Surplus				Investments to Capital
	Public Equity	High Yield Bonds	Sched. BA	Total	
<b>Washington L&amp;I</b>	<b>71%</b>	<b>11%</b>	<b>0%</b>	<b>82%</b>	<b>5.3</b>
AASCIF	27%	4%	5%	36%	2.6
Specialists	33%	5%	3%	41%	2.4
Largest Writers	9%	11%	10%	30%	2.7
GAAP/IFRS	114%	3%	20%	137%	3.0
Workers' Comp	31%	6%	4%	41%	2.5
Total PC Composite	42%	6%	6%	54%	2.0

- L&I's exposure to the stock market as a percentage of capital remains above industry norms, but has been declining as the contingency reserve has grown more quickly than the investment portfolio.
- "Schedule BA" is the page in the regulatory financial statements where insurers list investments in partnerships, joint ventures and LLCs. These are the common legal structures for investments in hedge funds, private equity, real estate and other alternatives. These investments are reported at fair value under SAP. This means unrealized gains and losses on these assets flows through capital, adding volatility.
- WSIB and L&I are currently assuming the structure of L&I's real estate investments will require reporting at fair value.

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# *Investments*

# Asset Allocation

	Asset Allocation												
	Cash & ST Investment	A-AAA Bonds	BBB Bonds	Collateral & Mtg Loans	Inv. Real Estate	Total	High Yield	Preferred Stock	Common Stock	Schedule BA	Sec Lending Assets	Misc. Invested Assets*	Total
Washington L&I	1%	64%	19%	0%	0%	85%	2%	0%	13%	0%	0%	0%	15%
AASCIF	2%	71%	11%	0%	0%	85%	1%	0%	10%	2%	1%	1%	15%
Specialists	3%	65%	14%	0%	0%	82%	2%	0%	14%	1%	0%	0%	18%
Largest Writers	1%	71%	13%	2%	0%	87%	4%	0%	3%	4%	1%	1%	13%
GAAP/IFRS**	3%	31%	7%	0%	13%	54%	1%	0%	38%	7%	0%	0%	46%
Workers' Comp	3%	67%	11%	1%	0%	83%	2%	0%	12%	2%	0%	1%	17%
Total PC Composite	3%	57%	10%	1%	0%	71%	3%	0%	21%	3%	0%	1%	29%

\* Contract Loans, Owner Occupied Real Estate, Derivatives

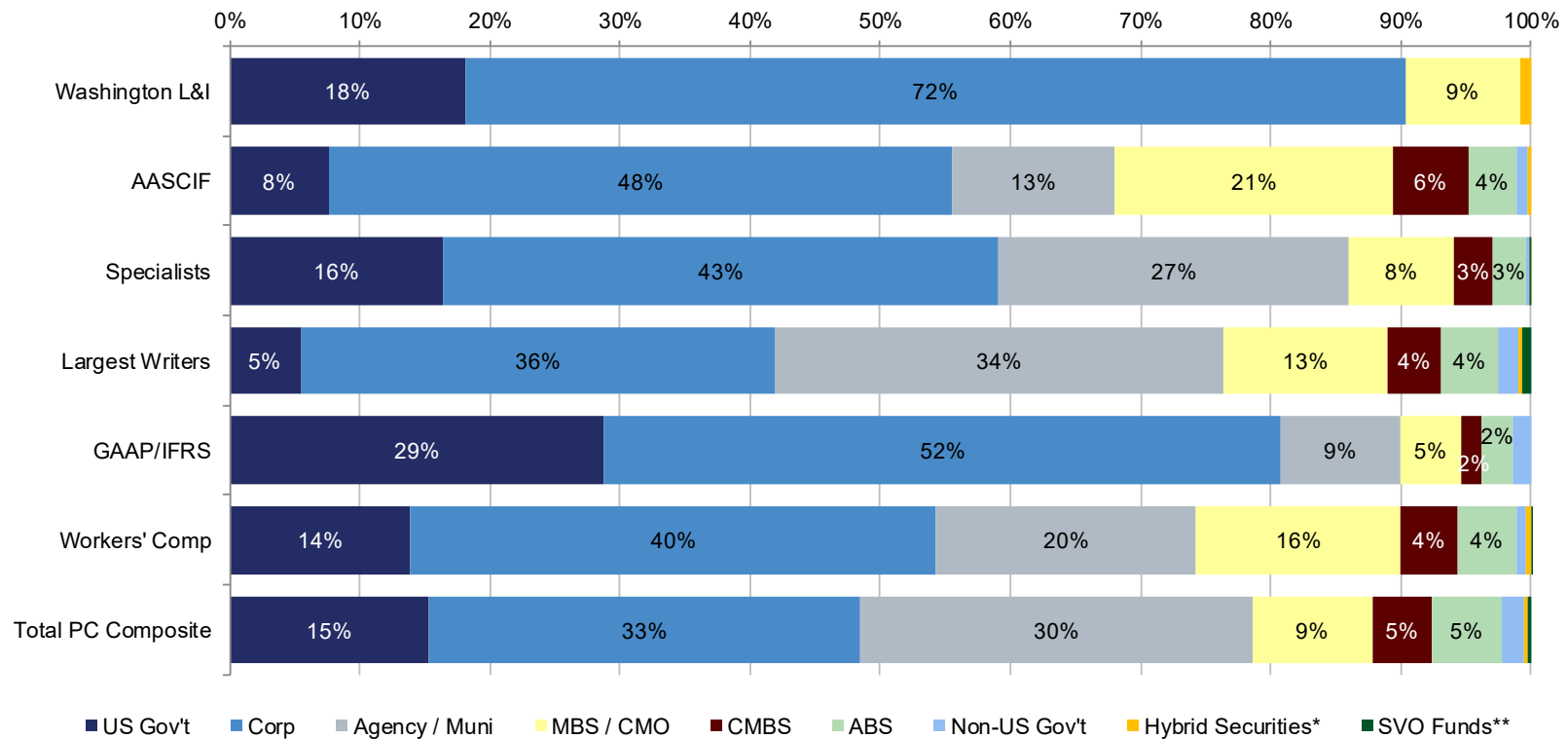
\*\*Alberta WCB, WorkSafe BC and North Dakota WSI's allocation to A-AAA Bonds reflect the total bonds of the company.

- Investments on the left (dark blue) are generally reported at cost, reducing the volatility of capital, although the possibility of impairment or forced sales mean this risk is not eliminated. (Investment real estate is reported at cost on regulatory Schedule A if it is 100% owned by the investor.)
- Schedule BA is where many non-core investments (e.g., private equity) are reported. Real estate is shown on BA and reported at fair value if the investor owns less than 100% of the property.
- Unlike the p/c industry, the life insurance industry has material investments in real estate and mortgage loans. This reflects life insurers' relatively larger portfolios (these investments benefit from scale), longer duration liabilities, more complex inflation risks and lower capital levels (real estate and mortgage loans typically have lower capital charges than stocks and high yield bonds)

# Bond Portfolio Allocation

Bond Sector Allocation

	US Gov't	Non-US Gov't	Corp	Agency / Muni	Total Credit	MBS / CMO	CMBS	ABS	Total Structured	Hybrid Securities*	SVO Funds**
<b>Washington L&amp;I</b>	<b>18%</b>	<b>0%</b>	<b>72%</b>	<b>0%</b>	<b>72%</b>	<b>9%</b>	<b>0%</b>	<b>0%</b>	<b>9%</b>	<b>1%</b>	<b>0%</b>
AASCIF	8%	1%	48%	13%	60%	21%	6%	4%	31%	0%	0%
Specialists	16%	0%	43%	27%	70%	8%	3%	3%	14%	0%	0%
Largest Writers	5%	2%	36%	34%	71%	13%	4%	4%	21%	0%	1%
GAAP/IFRS	29%	1%	52%	9%	61%	5%	2%	2%	9%	0%	0%
Workers' Comp	14%	1%	40%	20%	60%	16%	4%	4%	25%	0%	0%
Total PC Composite	15%	2%	33%	30%	63%	9%	5%	5%	19%	0%	0%

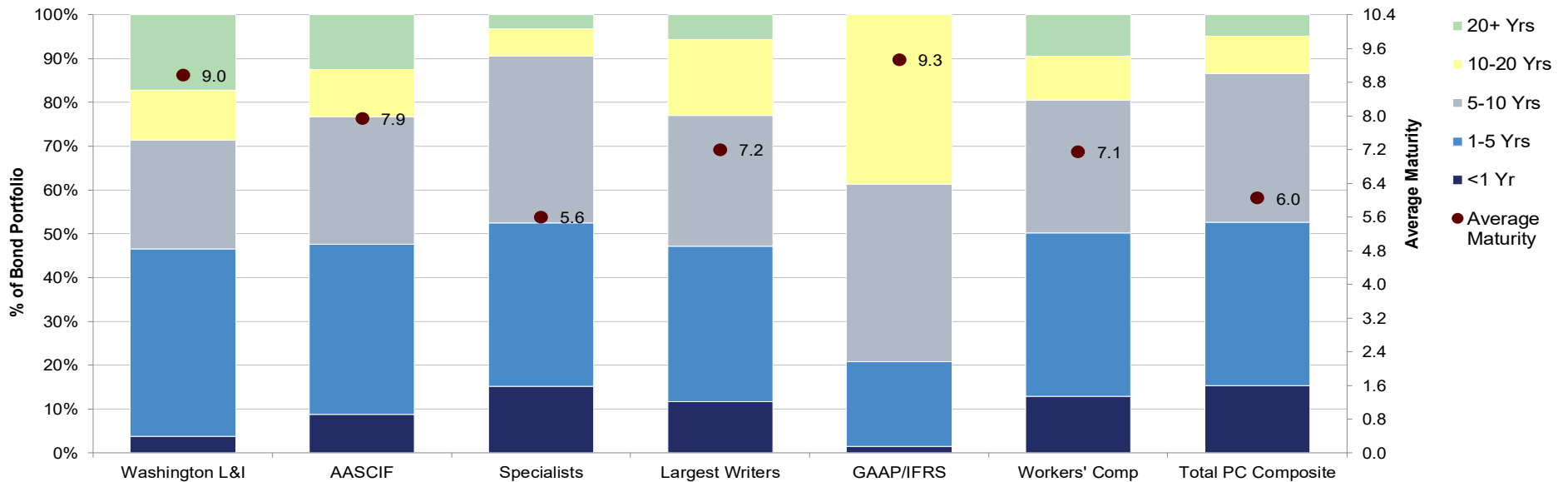


# Bond Maturity Distribution

	Bond Maturity Distribution*					Average Maturity	Average Duration
	<1 Yr	1-5 Yrs	5-10 Yrs	10-20 Yrs	20+ Yrs		
Washington L&I	4%	43%	25%	11%	17%	9.0	5.9
AASCIF	9%	39%	29%	11%	12%	7.9	5.3
Specialists	15%	37%	38%	6%	3%	5.6	4.7
Largest Writers	12%	35%	30%	17%	6%	7.2	5.3
GAAP/IFRS	1%	19%	41%	39%	NA	9.3	NA
Workers' Comp	13%	37%	30%	10%	9%	7.1	NA
Total PC Composite	15%	37%	34%	9%	5%	6.0	NA

- Maturities over 10 years are considered “long term” bonds.
- Some p/c insurers limit their exposures to long bonds.
- The GAAP insurers do not provide sufficient detail on their bond maturities.

\* Excluding SVO Funds which do not have a maturity date



# Bond Credit Rating Distribution

	Bond Quality Distribution							Total HY	Avg NAIC Rating
	NAIC 1 A-AAA	NAIC 2 BBB	Total IG	NAIC 3 BB	NAIC 4 B	NAIC 5 CCC	NAIC 6 CC & Lower		
<b>Washington L&amp;I</b>	<b>75%</b>	<b>23%</b>	<b>98%</b>	<b>2%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>2%</b>	<b>1.3</b>
AASCIF	85%	14%	98%	1%	1%	0%	0%	2%	1.2
Specialists	80%	17%	97%	2%	1%	0%	0%	3%	1.2
Largest Writers	81%	14%	95%	2%	2%	0%	0%	5%	1.3
GAAP/IFRS	68%	28%	96%	3%	1%	0%	0%	4%	1.4
Workers' Comp	84%	13%	97%	2%	1%	0%	0%	3%	1.2
Total PC Composite	81%	15%	96%	2%	2%	0%	0%	4%	1.3

IG = Investment Grade, rated BBB through AAA

HY = High Yield, rated BB and below

- Investment-grade bonds are generally reported at cost, reducing the volatility of capital.
- P/C insurers report high-yield bonds at the lower of cost or market value; from an accounting perspective, there is only downside risk to a high-yield bond's book value.

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# ***10-Year Underwriting and Operating Results***

# 10-Year Underwriting and Operating Results Relative to Premiums

	Loss Ratio											Avg.
	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	
Washington L&I	132%	161%	162%	162%	108%	127%	133%	124%	99%	93%	63%	124%
AASCIF	70%	71%	77%	79%	71%	77%	49%	70%	62%	57%	51%	67%
Specialists	52%	60%	64%	66%	70%	62%	55%	54%	51%	52%	55%	58%
Largest Writers	50%	53%	50%	53%	61%	58%	52%	51%	50%	52%	58%	54%
GAAP/IFRS*	99%	108%	90%	129%	113%	118%	94%	82%	75%	89%	92%	99%
Workers' Comp	58%	60%	64%	66%	64%	66%	54%	62%	55%	54%	53%	60%
Total PC Composite	56%	65%	59%	61%	67%	62%	55%	57%	57%	61%	64%	60%

\* GAAP/IFRS does not include 2010-2007 data for North Dakota WSI

	LAE Ratio											Avg.
	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	
Washington L&I	10%	11%	13%	12%	11%	12%	9%	10%	11%	10%	8%	11%
AASCIF	16%	18%	19%	19%	29%	11%	14%	14%	13%	14%	21%	17%
Specialists	11%	11%	14%	14%	15%	15%	13%	14%	13%	12%	13%	13%
Largest Writers	13%	13%	14%	14%	15%	13%	13%	13%	12%	13%	14%	13%
GAAP/IFRS*	21%	16%	17%	23%	18%	16%	17%	14%	15%	19%	17%	18%
Workers' Comp	14%	15%	17%	17%	21%	14%	15%	14%	14%	13%	16%	15%
Total PC Composite	12%	12%	13%	13%	13%	12%	12%	12%	12%	12%	12%	12%

\* GAAP/IFRS does not include 2010-2007 data for Alberta WCB & North Dakota WSI



# 10-Year Underwriting and Operating Results Relative to Premiums

## Expense Ratio

	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	Avg.
Washington L&I	4%	10%	10%	6%	5%	4%	5%	4%	5%	4%	4%	6%
AASCIF	20%	23%	26%	26%	25%	23%	13%	19%	20%	20%	23%	22%
Specialists	27%	28%	30%	30%	29%	28%	27%	25%	25%	27%	27%	28%
Largest Writers	30%	29%	31%	31%	31%	31%	31%	30%	30%	31%	30%	30%
GAAP/IFRS*	14%	15%	16%	20%	17%	17%	17%	15%	16%	18%	17%	17%
Workers' Comp	26%	28%	31%	31%	29%	28%	22%	23%	24%	24%	25%	26%
Total PC Composite	27%	27%	28%	28%	28%	28%	28%	28%	28%	28%	27%	28%

\* GAAP/IFRS does not include 2010-2007 data for North Dakota WSI

## PH Divd. Ratio

	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	Avg.
Washington L&I	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
AASCIF	9%	10%	6%	9%	10%	11%	9%	11%	10%	11%	12%	11%
Specialists	1%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Largest Writers	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GAAP/IFRS*	9%	0%	0%	7%	3%	5%	39%	12%	33%	4%	18%	21%
Workers' Comp	4%	4%	3%	4%	4%	4%	4%	5%	4%	4%	5%	5%
Total PC Composite	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%

\* GAAP/IFRS does not include 2010-2007 data for Ohio & North Dakota WSI, there is no data for WorkSafe BC.

# 10-Year Underwriting and Operating Results Relative to Premiums

## Combined Ratio

	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	Avg.
<b>Washington L&amp;I</b>	<b>146%</b>	<b>181%</b>	<b>184%</b>	<b>179%</b>	<b>124%</b>	<b>143%</b>	<b>147%</b>	<b>138%</b>	<b>114%</b>	<b>108%</b>	<b>75%</b>	<b>140%</b>
AASCIF	115%	121%	128%	132%	134%	123%	86%	115%	105%	103%	107%	115%
Specialists	91%	102%	109%	112%	114%	106%	95%	93%	90%	91%	96%	100%
Largest Writers	93%	96%	95%	98%	107%	103%	96%	95%	93%	96%	102%	98%
GAAP/IFRS*	143%	138%	123%	178%	151%	156%	167%	123%	139%	130%	144%	145%
Workers' Comp	102%	107%	114%	117%	118%	112%	95%	104%	97%	96%	99%	106%
Total PC Composite	95%	105%	101%	103%	108%	103%	96%	97%	98%	100%	104%	101%

\* GAAP/IFRS does not include 2010-2007 data for Alberta WCb and North Dakota WSI

## Investment Income Ratio

	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	Avg.
<b>Washington L&amp;I</b>	<b>40%</b>	<b>45%</b>	<b>36%</b>	<b>37%</b>	<b>33%</b>	<b>31%</b>	<b>29%</b>	<b>28%</b>	<b>26%</b>	<b>24%</b>	<b>22%</b>	<b>32%</b>
AASCIF	29%	34%	40%	41%	37%	31%	25%	21%	21%	22%	23%	30%
Specialists	11%	12%	13%	12%	11%	10%	8%	7%	7%	7%	7%	10%
Largest Writers	14%	14%	13%	13%	12%	12%	11%	10%	9%	9%	9%	12%
GAAP/IFRS*	66%	23%	-12%	98%	80%	95%	80%	110%	51%	67%	105%	69%
Workers' Comp	19%	20%	22%	22%	21%	18%	16%	14%	14%	14%	14%	18%
Total PC Composite	12%	12%	11%	11%	11%	10%	10%	9%	9%	9%	9%	10%

\* GAAP/IFRS does not include 2010-2007 data for Alberta WCb and North Dakota WSI

## Operating Ratio

	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	Avg.
<b>Washington L&amp;I</b>	<b>107%</b>	<b>136%</b>	<b>149%</b>	<b>142%</b>	<b>91%</b>	<b>112%</b>	<b>118%</b>	<b>110%</b>	<b>88%</b>	<b>83%</b>	<b>53%</b>	<b>108%</b>
AASCIF	86%	87%	89%	91%	97%	92%	61%	93%	84%	81%	83%	86%
Specialists	79%	90%	96%	100%	103%	96%	87%	86%	82%	84%	89%	90%
Largest Writers	79%	82%	82%	85%	94%	91%	85%	84%	83%	87%	92%	86%
GAAP/IFRS*	77%	116%	135%	80%	71%	62%	87%	12%	88%	63%	38%	75%
Workers' Comp	83%	87%	92%	96%	97%	95%	79%	90%	83%	82%	85%	88%
Total PC Composite	83%	94%	90%	92%	97%	93%	86%	88%	89%	92%	95%	91%

\* GAAP/IFRS does not include 2010-2007 data for Alberta WCb and North Dakota WSI

# Capital Adequacy Measures

	Surplus to Liability Ratio											Avg.
	2007*	2008*	2009*	2010*	2011	2012	2013	2014	2015	2016	2017	
Washington L&I	22%	16%	5%	2%	6%	5%	5%	7%	9%	11%	22%	11%
AASCIF	30%	28%	32%	35%	36%	39%	43%	45%	47%	50%	56%	48%
Specialists	40%	39%	43%	44%	41%	39%	42%	41%	44%	46%	45%	43%
Largest Writers	42%	37%	42%	42%	40%	40%	42%	44%	42%	41%	37%	41%
GAAP/IFRS	22%	13%	18%	24%	28%	32%	30%	39%	41%	42%	46%	40%
Workers' Comp	40%	37%	41%	42%	42%	42%	44%	45%	47%	49%	53%	48%
Total PC Composite	53%	46%	53%	57%	55%	57%	62%	62%	62%	62%	63%	62%

\* GAAP/IFRS does not include 2009-2007 data for North Dakota WSI

- At June 30, 2007, L&I reported a contingency reserve of \$2.09 billion and total liabilities of \$9.48 billion, for a ratio of 22%.
- At June 30, 2017, L&I reported a total contingency reserve (restricted and unrestricted) of \$2.97 billion and total liabilities of \$13.72 billion, for a ratio of 22%.

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# *Appendix*

# L&I Financial Adjustments

- At L&I's request, we adjust premiums and underwriting (general insurance) expenses to provide a better comparison to the peer groups.

- This table details the adjustments. Items in bold are the figures Conning uses in the peer analysis.

- The resulting financial ratios are shown on the following page.

Conversion of L&I Statutory Financial Statements to Peer Format

	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>
Net premiums earned	1,360,533	1,250,433	1,429,530	1,463,393	1,584,213	1,673,242	1,808,152	1,963,909	2,080,809
Self-insured 2nd injury pension reserve assessment	74,203	46,651	39,605	56,600	26,086	36,096	72,169	65,459	50,562
Self-insured cash funded & bonded pension reimb	17,109	21,423	19,755	21,516	15,830	15,503	21,881	23,086	18,124
<b>Adj. Net premiums earned</b>	<b>1,451,845</b>	<b>1,318,507</b>	<b>1,488,890</b>	<b>1,541,509</b>	<b>1,626,129</b>	<b>1,724,841</b>	<b>1,902,202</b>	<b>2,052,454</b>	<b>2,149,495</b>
<b>Net investment income</b>	517,863	486,996	491,654	481,892	465,868	479,774	493,408	498,499	478,130
<b>Net benefits incurred</b>	2,348,838	2,135,874	1,601,225	1,957,245	2,162,748	2,131,342	1,880,432	1,906,294	1,354,483
<b>Claims admin expense incurred</b>	185,980	152,309	159,641	184,878	149,818	166,031	205,310	212,754	165,397
Premium admin expense incurred	31,295	31,278	44,612	33,980	36,234	36,487	42,349	46,983	45,542
General insurance admin expense incurred (admin)	24,803	22,397	21,698	19,158	20,148	22,214	20,894	19,395	22,425
Other agency expense incurred (admin)		17,700	18,069	18,024	20,204	19,853	21,580	22,313	22,682
<b>Unadj. Underwriting expense</b>	<b>56,098</b>	<b>71,375</b>	<b>84,379</b>	<b>71,162</b>	<b>76,586</b>	<b>78,554</b>	<b>84,823</b>	<b>88,691</b>	<b>90,649</b>
Bad debt expense incurred	76,392								
Self-insured admin expense incurred	22,721	24,231	23,875	24,175	25,319	25,982	27,901	28,267	29,549
<b>Underwriting expenses before other income</b>	<b>155,211</b>	<b>95,606</b>	<b>108,254</b>	<b>95,337</b>	<b>101,905</b>	<b>104,536</b>	<b>112,724</b>	<b>116,958</b>	<b>120,198</b>
Self-insured admin expense assessments	(23,091)	(23,402)	(21,721)	(25,463)	(26,879)	(23,963)	(23,937)	(28,896)	(30,568)
Fines, penalties, interest	(39,791)	(35,001)	(42,994)	(40,674)	(39,332)	(45,504)	(46,645)	(43,973)	(49,752)
Other income	(14,823)	(8,039)	(9,632)	(9,656)	(9,566)	(9,310)	(8,208)	(9,461)	(9,221)
<b>Total other income (expense offset)</b>	<b>(77,705)</b>	<b>(66,442)</b>	<b>(74,347)</b>	<b>(75,793)</b>	<b>(75,777)</b>	<b>(78,777)</b>	<b>(78,790)</b>	<b>(82,330)</b>	<b>(89,541)</b>
<b>Adj. Insurance expense incurred</b>	<b>77,506</b>	<b>29,164</b>	<b>33,907</b>	<b>19,544</b>	<b>26,128</b>	<b>25,759</b>	<b>33,934</b>	<b>34,628</b>	<b>30,657</b>
Non-insurance expense incurred	65,049	46,124	46,236	46,034	51,822	49,378	56,433	55,597	57,830
<b>Adj Underwriting expense incurred</b>	<b>142,555</b>	<b>75,288</b>	<b>80,143</b>	<b>65,578</b>	<b>77,950</b>	<b>75,137</b>	<b>90,367</b>	<b>90,225</b>	<b>88,487</b>
<b>Total Expenses</b>	<b>2,677,373</b>	<b>2,363,471</b>	<b>1,841,009</b>	<b>2,207,701</b>	<b>2,390,516</b>	<b>2,372,510</b>	<b>2,176,109</b>	<b>2,209,273</b>	<b>1,608,367</b>
	2,755,078	2,429,913	1,915,356	2,283,494	2,466,293	2,451,287	2,254,899	2,291,603	1,697,908
Net fixed income realized gains (losses)	(34,280)	17,643	45,634	31,741	74,060	261,971	40,573	63,491	101,535
Net equity realized gains (losses)	(7,186)	82	23,134	516,030	13,345	41,213	18,087	74,497	1,005
<b>Net realized gains (losses)</b>	<b>(41,466)</b>	<b>17,725</b>	<b>68,768</b>	<b>547,771</b>	<b>87,405</b>	<b>303,184</b>	<b>58,660</b>	<b>137,988</b>	<b>102,540</b>
Equity unrealized gains (losses)	(350,312)	149,875	370,867	(583,099)	272,445	333,602	28,823	(105,243)	337,932
Fixed income unrealized gains (losses)	(11,337)	29,192	46,077	36,671	(6,316)	(136,291)	(5,132)	(76,587)	42,251
<b>Change in unrealized gains (losses)</b>	<b>(361,649)</b>	<b>179,067</b>	<b>416,944</b>	<b>(546,428)</b>	<b>266,129</b>	<b>197,311</b>	<b>23,691</b>	<b>(181,830)</b>	<b>380,183</b>
Net income (loss)	(749,131)	(540,243)	208,303	363,471	(211,114)	135,289	278,161	479,668	1,121,798
Information technology pool transfer	(2,770)	840							
<b>Net income (loss)</b>	<b>(751,901)</b>	<b>(539,403)</b>	<b>208,303</b>	<b>363,471</b>	<b>(211,114)</b>	<b>135,289</b>	<b>278,161</b>	<b>479,668</b>	<b>1,121,798</b>

# L&I Operating Ratios and Financial Adjustments

	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12</u>	<u>FY13</u>	<u>FY14</u>	<u>FY15</u>	<u>FY16</u>	<u>FY17</u>
<b>Adjusted ratios, used in peer analysis</b>									
Loss ratio	161.8%	162.0%	107.5%	127.0%	133.0%	123.6%	98.9%	92.9%	63.0%
LAE ratio	12.8%	11.6%	10.7%	12.0%	9.2%	9.6%	10.8%	10.4%	7.7%
Loss and LAE ratio	174.6%	173.5%	118.3%	139.0%	142.2%	133.2%	109.6%	103.2%	70.7%
Expense Ratio (incl. non-insurance)	9.8%	5.7%	5.4%	4.3%	4.8%	4.4%	4.8%	4.4%	4.1%
Combined ratio	184.4%	179.3%	123.6%	143.2%	147.0%	137.5%	114.4%	107.6%	74.8%
Investment income ratio	35.7%	36.9%	33.0%	31.3%	28.6%	27.8%	25.9%	24.3%	22.2%
Operating ratio	148.7%	142.3%	90.6%	112.0%	118.4%	109.7%	88.5%	83.4%	52.6%

<b>Unadjusted ratios, used in L&amp;I communications</b>									
Loss ratio	172.6%	170.8%	112.0%	133.7%	136.5%	127.4%	104.0%	97.1%	65.1%
LAE ratio	13.7%	12.2%	11.2%	12.6%	9.5%	9.9%	11.4%	10.8%	7.9%
Loss and LAE ratio	186.3%	183.0%	123.2%	146.4%	146.0%	137.3%	115.4%	107.9%	73.0%
Expense ratio	9.7%	5.7%	5.9%	4.9%	4.8%	4.7%	4.7%	4.5%	4.4%
Combined ratio	196.0%	188.7%	129.1%	151.2%	150.8%	142.0%	120.0%	112.4%	77.4%
Investment income ratio	38.1%	38.9%	34.4%	32.9%	29.4%	28.7%	27.3%	25.4%	23.0%
Operating ratio	158.0%	149.8%	94.7%	118.3%	121.4%	113.3%	92.8%	87.0%	54.4%

- The top table shows the operating ratios using the adjusted data. This is what is shown in the peer analyses. Note that the operating ratios are consistently several points higher than the ratios using unadjusted data.
- The bottom table shows the operating ratios using the unadjusted data from L&I's financial statements.