

# SOLUTIONS FOR INSURANCE PROFESSIONALS

Refine asset liability management, generate ideas, find action items, and streamline portfolio monitoring and reporting.

**FactSet Life and Annuity Company**

**C&E • Risk Position**

Symbol		Book Value	Book Yield	Price	YTM	Actual Spread	Average Life	Effective Duration	Effective Convexity
<b>Total</b>		<b>17,921,090.22</b>	<b>3.75</b>	<b>98.36</b>	<b>2.68</b>	<b>94.54</b>	<b>4.67</b>	<b>3.02</b>	<b>-0.12</b>
☑ <b>Callable Bond</b>		<b>12,358,758.73</b>	<b>3.39</b>	<b>101.89</b>	<b>2.38</b>	<b>66.43</b>	<b>3.77</b>	<b>2.87</b>	<b>0.15</b>
☑ <b>Mortgage Backed Security</b>		<b>2,552,997.61</b>	<b>4.23</b>	<b>108.34</b>	<b>3.52</b>	<b>129.51</b>	<b>7.87</b>	<b>4.94</b>	<b>-1.61</b>
12669BZM	Alternative Loan Trust 2005-1311	81,960.02	7.39	77.99	7.26	499.14	23.33	6.73	0.90
31120J8V	FEDERAL HOME LN MTO CORP	2,215,561.47	3.08	103.80	2.98	72.46	8.30	5.15	-1.92
48627MAF	Amgen Alternative Loan Trust	115,290.04	7.46	78.62	8.45	433.40	22.26	4.65	0.13
94904DAD	Wells Fargo Mortgage Backed Se...	138,198.08	16.22	93.07	8.69	480.25	3.10	1.00	-0.01
☑ <b>Other Negative Convexity</b>		<b>3,788,154.82</b>	<b>4.68</b>	<b>79.84</b>	<b>3.34</b>	<b>177.88</b>	<b>5.96</b>	<b>2.04</b>	<b>0.10</b>
☑ <b>Other Non-Classified Instruments</b>		<b>308,186.97</b>	<b>4.59</b>	<b>105.33</b>	<b>1.80</b>	<b>43.68</b>	<b>1.04</b>	<b>1.00</b>	<b>0.02</b>
201735AB	Commercial Mortgage Lease-bec...	308,186.97	4.59	105.33	1.80	43.68	1.04	1.00	0.02

**Contribution to Book Yield**

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**Convexity MBS**

	FactSet Life and Annuity Company					
	Investment	Market Value	Market Value Change	Eff. Duration	Convexity	
	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year
2016 S&P All Curves Shift down 202 bps	14,954,223	13,065,520	-3,416,886	1.70	-0.01	-0.01
2016 S&P All Curves Shift down 152 bps	15,015,087	13,506,062	-3,356,022	1.94	-0.73	-0.73
2016 S&P All Curves Shift down 102 bps	15,066,130	13,970,036	-3,304,979	1.99	-0.69	-0.69
2016 S&P All Curves Shift down 50 bps	15,117,874	14,028,275	-3,252,235	2.13	-0.32	-0.32
2016 S&P All Curves Shift down 50 bps	15,172,200	14,002,000	-3,186,910	2.25	-0.18	-0.18
2016 S&P All Curves Shift up 50 bps	15,009,352	13,918,487	-3,361,758	2.45	0.03	0.03
2016 S&P All Curves Shift up 165 bps	14,607,231	13,518,123	-3,753,879	2.48	0.14	0.14
2016 S&P All Curves Shift up 200 bps	14,479,693	13,388,558	-3,891,416	2.48	0.14	0.14
2016 S&P All Curves Shift up 225 bps	14,389,282	13,288,136	-3,891,827	2.47	0.16	0.16
2016 S&P All Curves Shift up 249 bps	14,303,400	13,212,244	-4,087,789	2.46	0.15	0.15
2016 S&P All Curves Shift up 280 bps	14,183,427	13,080,280	-4,187,893	2.45	0.15	0.15

**Projected Cashflows**

	Total	Interest	Principal	Puts	Calls	Sinks	Prepaid Prin.	Sched Prin	Rec. Losses	Maturity
9/30/2017 to 12/31/2017	698,591	190,134	508,457	--	--	--	494,473	13,984	--	--
12/31/2017 to 12/31/2018	3,366,194	559,039	2,807,155	--	775,000	--	963,594	53,562	--	1,015,000
12/31/2018 to 12/31/2019	5,842,252	437,565	5,204,687	--	750,000	--	1,564,620	50,067	--	2,840,000
12/31/2019 to 12/31/2020	2,490,225	340,156	2,150,069	--	320,000	--	328,057	47,012	--	1,455,000
12/31/2020 to 12/31/2021	2,243,193	237,999	2,005,193	--	460,000	--	265,893	44,300	--	1,235,000
12/31/2021 to 12/31/2022	1,221,291	195,207	1,026,084	--	--	--	209,201	41,863	--	775,000
12/31/2022 to 12/31/2023	385,567	156,734	188,832	--	--	--	159,898	39,725	--	--
12/31/2023 to 12/31/2024	1,115,214	161,596	953,618	--	--	--	110,026	37,790	--	805,000
12/31/2024 to 12/31/2025	242,355	119,048	123,306	--	--	--	87,268	36,030	--	--
12/31/2025 to 12/31/2026	638,121	107,438	530,683	--	300,000	--	71,555	34,428	--	125,000
<b>Total</b>	<b>18,022,991</b>	<b>2,514,616</b>	<b>15,508,375</b>	<b>--</b>	<b>2,605,000</b>	<b>--</b>	<b>4,254,567</b>	<b>390,799</b>	<b>--</b>	<b>8,250,000</b>

## HARNESS POWERFUL ANALYTICS

Generate cash flows, book and market data, and fixed income analytics under different scenarios for the general account using our robust, hosted cash flow testing and scenario analysis framework for ALM, regulatory reporting, and risk analysis. Power your workflow with comprehensive tools, including a single-security analytics calculator, OTC and private asset modeling, prepay and loss vector tuning, portfolio analysis, and asset cash flow projections.

## RELY ON SEAMLESS INTEGRATION

Leverage FactSet's seamless integration with all major custodians, accounting systems, and data warehouses to pull par amounts, book and market prices, and insurance portfolio cuts to support your firm's full general account. FactSet stores this information in multidimensional databases that are ideal for firms that manage large portfolios or maintain extensive historical proprietary databases. FactSet supports GAAP, PGAAP, and STAT book prices, allowing you to select the book price method of your choosing.

FactSet General Account Dashboard															
Last Run Time: 14-DEC-2017 1:47:24 PM															
	Valuation					Fixed Income Characteristics									
Portfolios	# Securities	Market Value	Book Value	Coupon Rate	S&P	Moody's	Average Life	Market Yield	Book Yield	Effective Duration	Modified Duration	Effective Convexity	OAS		
<b>FactSet Insurance Company General Account</b>	<b>1896.0</b>	<b>5,660,943,614</b>	<b>5,609,922,847</b>	<b>4.87</b>	<b>BBB</b>	<b>Baa1</b>	<b>9.16</b>	<b>4.38</b>	<b>4.36</b>	<b>6.47</b>	<b>6.46</b>	<b>0.71</b>	<b>220</b>		
FactSet Life Insurance Company	1605.0	3,909,547,650	3,872,952,304	4.93	BBB	Baa1	8.63	4.30	4.27	6.07	6.11	0.63	217		
FactSet Life and Annuity Company	52.0	14,313,391	14,209,525	3.32	BBB+	Baa1	3.58	2.56	2.55	3.18	3.13	0.18	107		
FactSet Variable Annuity Company	1050.0	1,737,082,573	1,722,761,018	4.75	BBB	Baa1	10.40	4.59	4.58	7.41	7.28	0.89	227		
<b>Policy Benchmarks</b>															
ICE BofA Merrill Lynch U.S. Treasuries 1-5 Yrs	157.0	5,306,871,905	5,283,835,518	1.96	AA+	Aaa	2.74	1.40	1.40	2.65	2.64	0.10	1		
ICE BofA Merrill Lynch Mortgage Master Index	449.0	339,881,733	338,880,939	3.85	AAA	Aaa	4.93	2.64	2.64	3.56	4.28	-1.24	32		
ICE BofA Merrill Lynch Asset-Backed Securities 3-5 Yrs Fixed Rate	226.0	31,936,766	31,900,631	2.58	AA	Aa2	3.71	2.86	2.86	3.48	3.47	0.15	117		

**CONNECTING THE ENTIRE GENERAL ACCOUNT WORKFLOW**

Gain access to FactSet’s industry-leading global fixed income attribution and risk solution. Leverage official index constituents, pricing and reference data, and enhanced derivatives coverage through FactSet’s integration of FINCAD. Model your liability book and expected cashflows as a series of caps, floor, swaps, and swaptions to derive Greeks and durations and review a streamlined key rate duration approach against the asset portfolio.

**LEVERAGE A FULLY HOSTED SOLUTION**

Reduce IT costs and shorten your quarterly reporting cycle with the support of our intuitive interface, modern technology, and dedicated 24/7 support professionals. Ensure hassle-free integration of the general account, thousands of portfolios, and OTC or private asset modeling with our flexible portfolio infrastructure. Easily upload your data, then submit a cash flow batch. FactSet will monitor the job to completion and automatically send results to your chosen destination via FTP or SFT.

**GAIN ACCESS TO ROUND-THE-CLOCK PORTFOLIO MODELING**

Rely on FactSet’s Portfolio Services team for turnkey integration, comprehensive and transparent reconciliation, and custom reporting options. Our specialists monitor and remediate issues as they occur in real time during all stages of your workflow, from data extraction to analytical enrichment and report generation and delivery. Reporting is timely and of the highest quality, so all members of your team can rest assured the data is consistent and reliable.

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Utilize FactSet’s cloud computing technology to run thousands of scenarios on multi-asset and multi-currency portfolios. FactSet integrates Intex, Moody’s, S&P, Markit and other industry leaders for security terms and conditions and supports the loading of scenarios and output format from the following providers, as well as externally projected asset files:

- Tillinghast Actuarial Software (TAS)
- Milliman’s MG-ALFA (ALFA)
- Sungard iWorks Prophet
- Tower Watson MoSes Financial Modeling Software (MoSes)
- Moody’s GGY-Axis
- FactSet Cashflows (SQL output for complete customization)

Generate outputs to meet A.M. Best Life, A.M. Best Property, and S&P’s RBC survey reporting requirements. Specify custom rate shifts and twists and choose the percentage increment of the shocks. Define whether all curves or a specific curve should be shocked, and choose the frequency of the horizon market value and duration calculations, all within the user interface.

