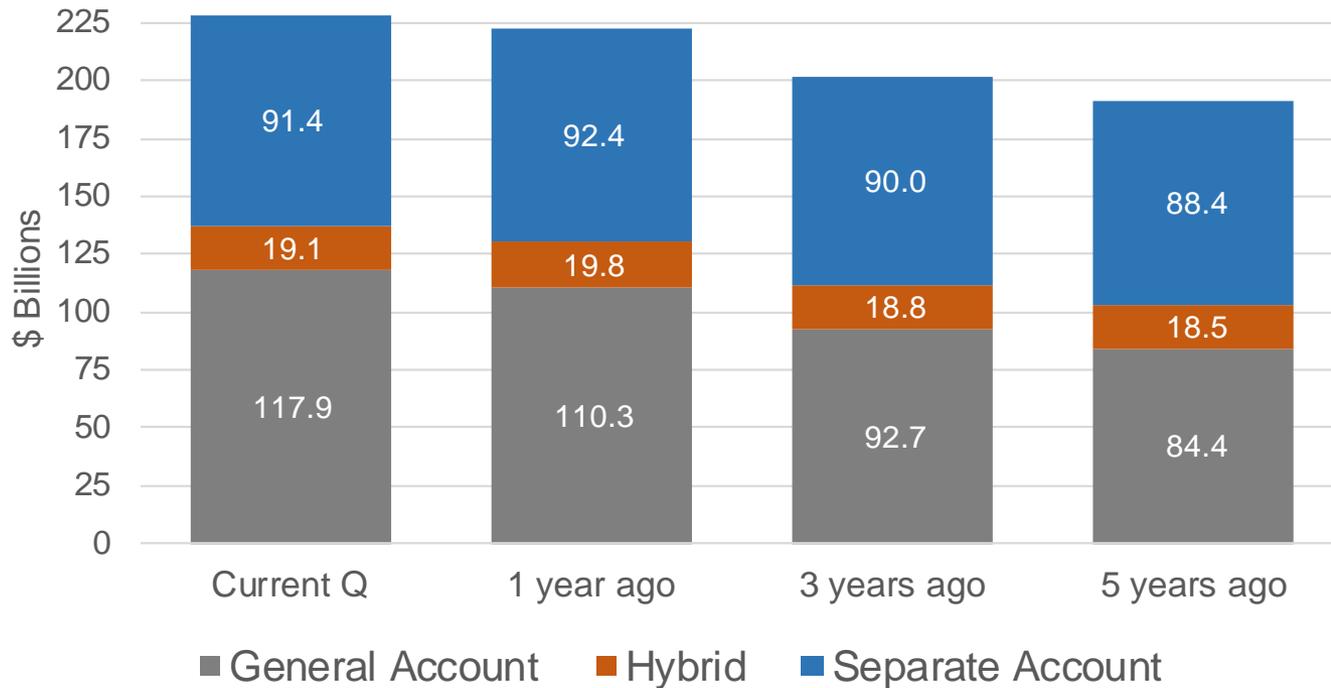


# BOLI INDUSTRY ALLOCATIONS & ANALYTICS

# BANK CALL REPORT BOLI BREAKDOWN

Banks reported \$228.5 billion of BOLI in 2023-Q1, of which \$91.4 billion was SA



# STUDY PURPOSE AND BACKGROUND

Our study attempts to track how SA BOLI is allocated over time

- Gathered SA BOLI AUM data is categorized into portfolio types
  - Capital Efficient / Multi-Sector / Target RW
  - High Yield
  - Credit
  - Core Fixed Income
  - MBS / Securitized (ABS / CMBS)
  - CLO / Bank Loan
  - Short Duration
  - Government
- Portfolio types represent full portfolio MVs and do not look through to the holdings sector weights

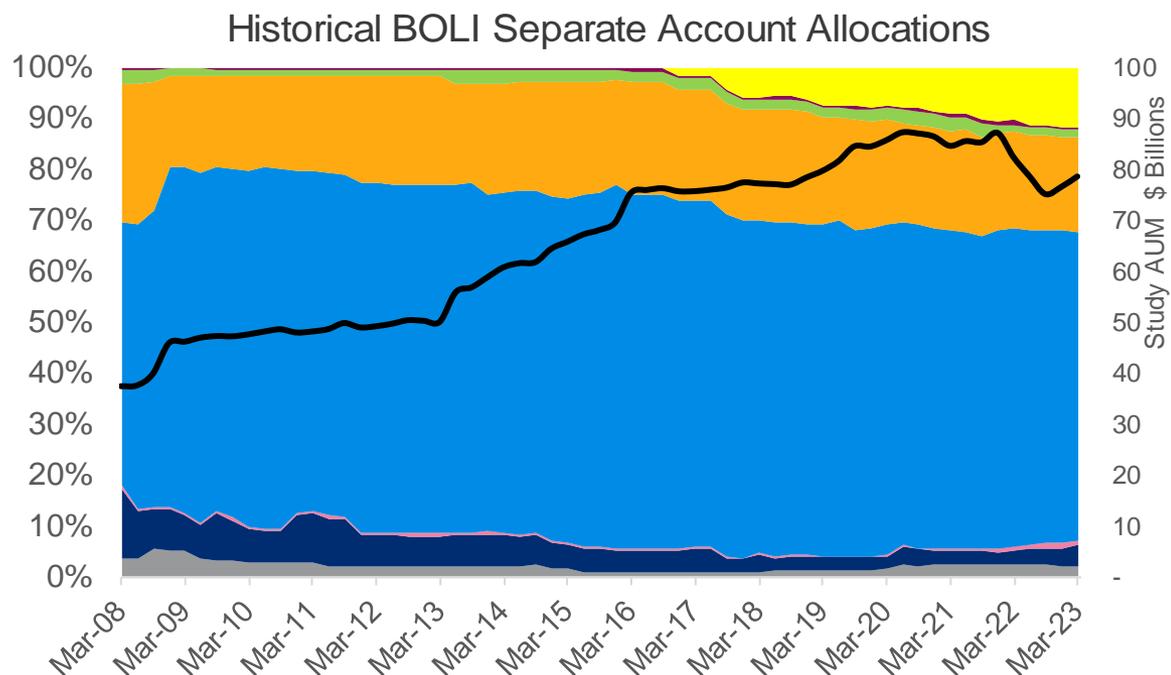
**The Study currently comprises \$79 billion** – a massive share of the industry<sup>1</sup>

- \$51 billion (65%) of the assets are actively managed

# HISTORICAL BOLI/COLI SEPARATE ACCOUNT ALLOCATIONS

Historically, allocations have been dominated by MBS / Securitized portfolios. More recently, capital efficient / multi-sector type portfolios have gained a solid share.

- The chart below shows the study's total AUM (black line), and portfolio type breakdown (colored areas) over time.

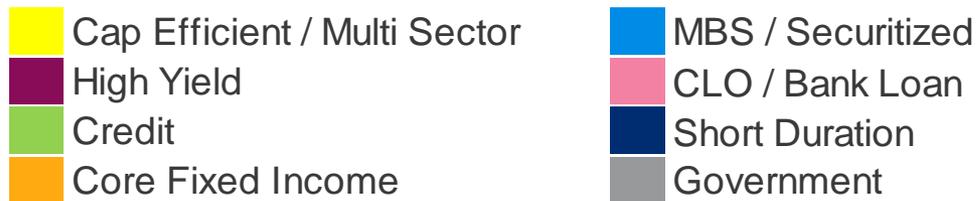
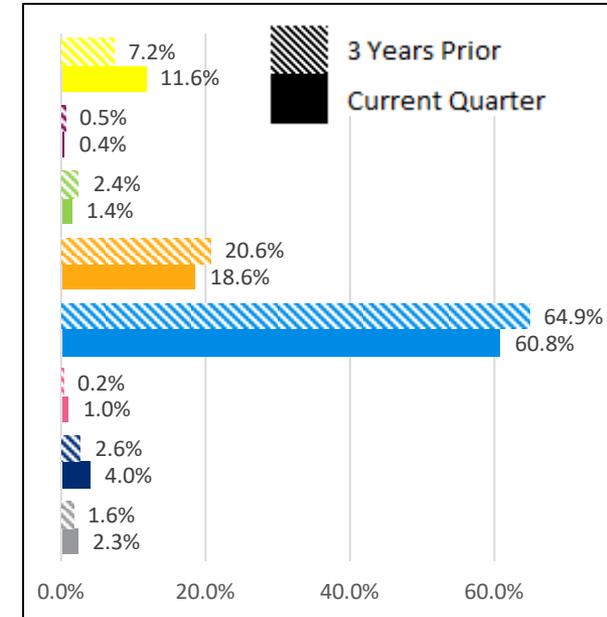
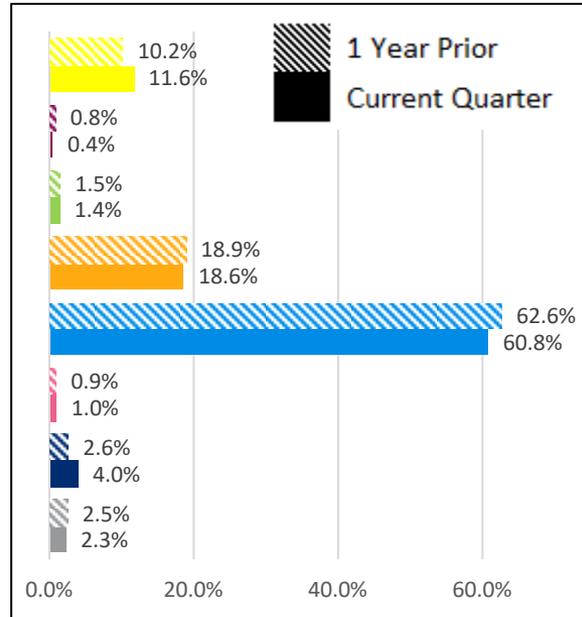
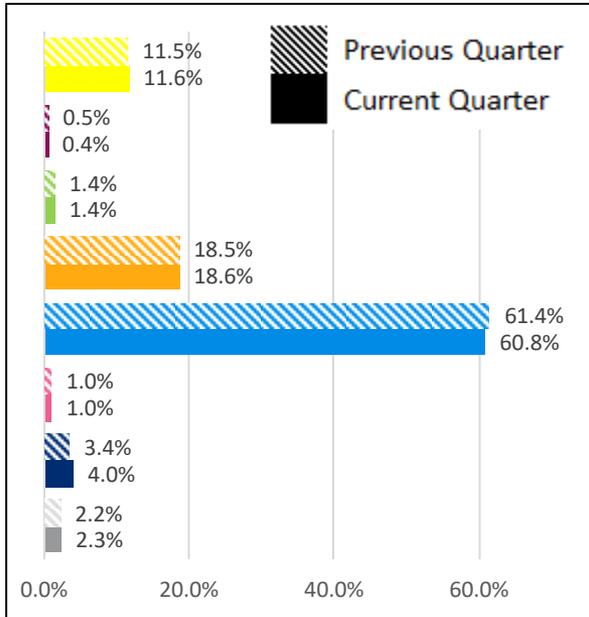


2023-Q1 Weights

Cap Efficient / Multi Sector	11.6%
High Yield	0.4%
Credit	1.4%
Core Fixed Income	18.6%
MBS / Securitized	60.8%
CLO / Bank Loan	1.0%
Short Duration	4.0%
Government	2.3%

# SEPARATE ACCOUNT ALLOCATION CHANGES

While some changes can be attributed to asset growth, periodic comparisons can indicate potential reallocations or new purchases<sup>2</sup>



# ALLOCATION COMMON BENCHMARK PERFORMANCE

Using common benchmarks for the categories, a proxy for the industry's SA Q1 MV performance is estimated at 2.51% while the stable value proxy was 0.41%

- 1-Year MV performance is estimated at -3.93%, while the stable value proxy was 1.70%

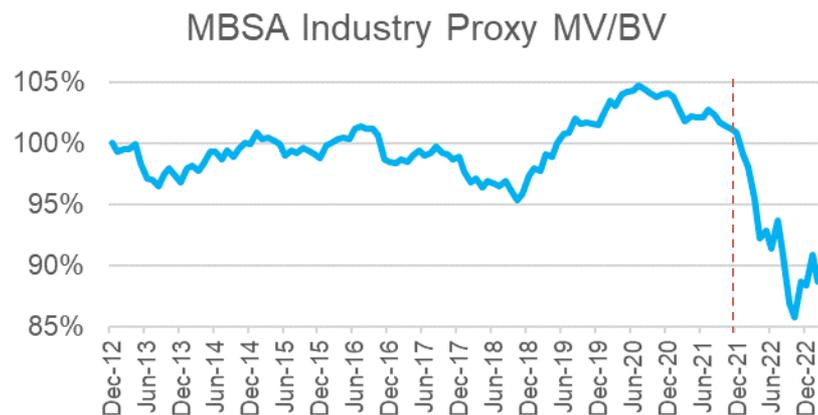
	Benchmark	Quarter	1-Year	3-Year	5-Year	Weights
Cap Efficient / Multi Sector	[Proxied By Blend of Below]	2.47%	-1.22%	0.46%	1.81%	11.63%
High Yield	<i>Bloomberg High Yield</i>	3.36%	-2.57%	4.73%	3.16%	0.45%
Credit	<i>Bloomberg US Credit</i>	3.45%	-5.31%	-0.70%	1.54%	1.39%
Core Fixed Income	<i>Bloomberg US Agg</i>	2.96%	-4.78%	-2.77%	0.91%	18.56%
MBS / Securitized	<i>Bloomberg US Securitized</i>	2.47%	-4.73%	-3.13%	0.30%	60.76%
CLO / Bank Loan	<i>Palmer CLOSE Index</i>	1.93%	2.91%	3.68%	2.52%	0.99%
Short Duration	<i>ICE BofA USD 3M DOR</i>	1.10%	2.44%	1.04%	1.59%	3.95%
Government	<i>BofA / ML 1-3Y Treasury</i>	1.55%	0.20%	-0.81%	1.10%	2.28%
Industry Proxy MV Performance using rolling weights:		<b>2.51%</b>	<b>-3.93%</b>	<b>-2.38%</b>	<b>0.73%</b>	
Industry Proxy Stable Value Performance:		<b>0.41%</b>	<b>1.70%</b>	<b>2.08%</b>	<b>2.24%</b>	

# INDUSTRY MV/BV RATIO DEVELOPMENTS

Ratios increased strongly in January but gave nearly all the gains back in February before rebounding again (although more mildly) in March. Overall, ratios increased ~2% from Q4 to Q1

- MBSA requested and compiled market value and book value data from carriers (each provided in the aggregate) to begin monitoring the overall MV/BV ratios of BOLI allocations
- Additionally, using our proxy MV and BV performance monitoring from the prior page, we calculate a proxy overall MV/BV ratio for the industry

	<b>Carrier Aggregate MV/BV</b>	<b>MBSA Industry Proxy MV/BV</b>
12/31/2021	<b>100.9%</b>	<b>100.9%</b>
3/31/2022	<b>95.1%</b>	<b>95.5%</b>
6/30/2022	<b>91.1%</b>	<b>91.2%</b>
9/30/2022	<b>86.5%</b>	<b>86.7%</b>
12/31/2022	<b>88.2%</b>	<b>88.2%</b>
3/31/2023	<b>89.9%</b>	<b>90.2%</b>



- As of 2023-Q1, the total MV in the carrier aggregate values above was ~50 billion
- The aggregate carrier ratios compare closely to our industry proxy MV and stable value performance values

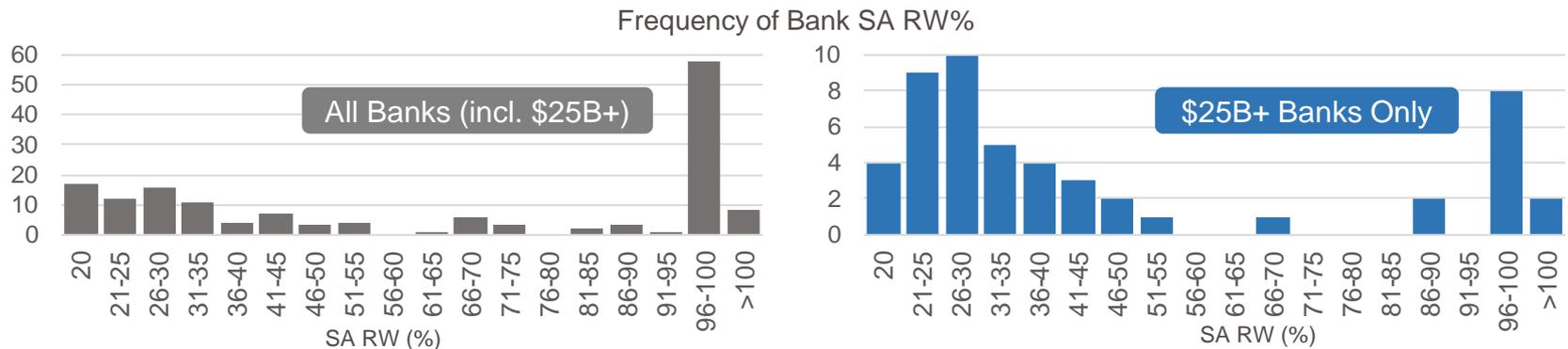
# SA BOLI RISK-WEIGHT

Large banks (\$25B+ Assets) own over 95% of SA BOLI, and achieve an average SA RWA% of ~29.9%. Meanwhile, many smaller banks default to 100%.

- Exposure and RWA data from call reports includes Hybrid BOLI. MBSA's process below attempts to calculate the value for SA BOLI only. Based on available parameters<sup>3</sup>, some banks are excluded.

	Total Banks	Own BOLI	Own SA BOLI	Parameters Available	SA BOLI (\$B)	SA BOLI Only RW %			
						Weighted Average	Average	Mode	Median
All Banks	4,672	3,180	365	163	\$ 89.3	30.4%	70.8%	100%	64%
\$25B+	87	72	59	54	\$ 86.8	29.9%	47.4%	100%	31%

- Using the Q1 category weights and proxy portfolios, MBSA estimates the industry average could be ~27% using the Basel III Standardized Approach.
- The histograms below demonstrate the large banks do mostly achieve RW% between 20%-40%



# FOOTNOTES / DISCLAIMERS

1. Regarding industry coverage;
  - Some of the data included in the study may include portfolios that are comingled with corporations or non-banking entities
  - Some of the missing assets may include equity portfolios, which are excluded from this study
  - Data included in the study is Market Value. In bank call reports, wrapped BOLI is reported at Book value.
2. “Reallocations” assumed by significant changes in categorical weights without a parallel change in total assets. May or may not reflect any actual reallocation activity.
3. MBSA’s SA RW% process excludes banks that report SA BOLI on Schedule RC-F line 5, but not on Schedule RC-R Part II line 8a.

\*Call Report Data may include BHC data from Y-9C Reports

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