

August 2022



Stable Value Fund Review

North Carolina Supplemental
Retirement Plans

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Executive Summary

Stable Value Review – Executive Summary

- Callan held a conference call with Galliard on April 14th, 2022 and had a follow up call on August 10th, 2022. We maintain a positive opinion of Galliard's stable value approach and the internally managed fixed income strategies that underlie stable value accounts. Callan recommends removing Galliard from the watch list as the firm has exhibited stability among leadership and investment personnel since the organizational changes that occurred in 2019.
- Callan is monitoring Allspring Global Investments', formerly Wells Fargo Asset Management, organizational transition under new owners GTCR LLC and Reverence Capital Partners. The transaction was closed on November 1, 2021. Galliard continues to be supported by its parent company and has retained a consistent level of autonomy since its parent company's acquisition.
- Galliard's succession planning appears to have been effective since the firm's leadership transition in 2019. The investment team has remained relatively stable, and displayed consistency in its investment process and performance.
- A collaborative and structured process has aided in developing wrap contract solutions and maintaining a consistent investment approach. North Carolina's stable value fund has performed in line with expectations and has consistently generated a crediting rate in line with peers.
- Crediting rates trended downwards in 2021 due to the prevailing low interest rate environment, but the increase in rates during the first half of 2022 curtailed the downward trend.

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Galliard Stable Value

Galliard Stable Value

Organization Review

Galliard has exhibited stability among leadership since the founding partners' retirements in 2019. The recent acquisition of Allspring Global Investments, formerly Wells Fargo Asset Management ("WFAM"), will be monitored for any impacts to Galliard's ability to maintain consistency in their stable value strategy. Callan does not have immediate concerns related to the acquisition or recent leadership and reporting line updates.

- In 2019, Founding Partners Richard Merriam and Karl Tourveille, and Managing Partner Carrie Callahan retired, and Michael Norman (Chief Administrative Officer) and Andrew Owen (President of Wells Fargo Funds) assumed the roles of co-President of Galliard. Galliard's risk management, technology, and compliance teams began reporting to WFAM.
- In April 2019, Wells Fargo announced the sale of its record-keeping division to Principal Financial Group. The sale led to an increase in outflows from the firm's flagship Stable Return Fund. Asset flows within the Fund have stabilized.
- In November 2021, the acquisition of WFAM by private equity firms GTCR LLC and Reverence Capital Partners, L.P. was closed and the firm was rebranded as Allspring Global Investments. CEO Nico Marais retired and Executive Chair Joe Sullivan assumed the title of CEO. Approximately 20% of Allspring Global Investments equity is held by employees, providing an alignment of interest for those shareholders.
- Galliard retained its own branding and remains a wholly-owned subsidiary under Allspring Global Investments. The firm's revenue sharing agreement was also retained.
- Effective October 1st, 2022, Mike Norman will be named sole President of Galliard and Andrew Owen will be leaving Galliard and named Allspring's Head of Global Fund Governance. Additionally, Chief Operating Officer Chad Foote will be leaving the firm. Galliard's operational teams will report directly to Allspring.

Galliard Stable Value

Personnel Review

Galliard's investment team has experienced relatively low turnover in recent years.

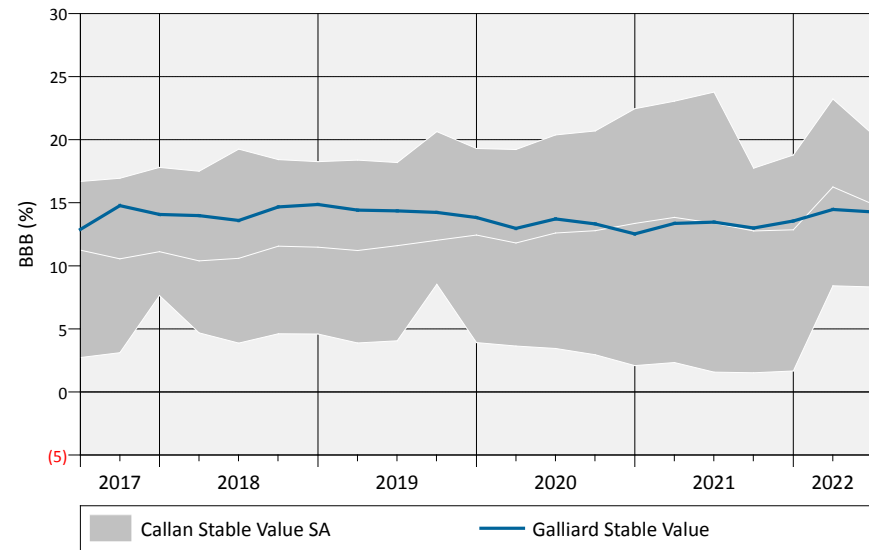
- Ajay Mirza and Brandon Kanz serve as Galliard's key fixed income investment professionals acting as Chair and Vice-Chair of the Investment Committee. They joined the firm in 1995 and 2005, respectively.
- Head of Stable Value Contract Strategy Nick Gage is a veteran of the stable value team and industry. He succeeded Leela Scattum, Partner and Chief Stable Value Strategist, who retired in 2020. As part of the firm's succession planning, Gage was co-leading Stable Value alongside Scattum before her retirement. Callan does not have concerns related to this transition in leadership.
- Laura Sell, Deputy Head of Client Portfolio Management and co-Chair of the Stable Value Strategy committee, departed the firm to pursue other opportunities in April 2021. She helped oversee client account implementation and also co-chaired the Stable Value Strategy committee alongside Nick Gage. Depth and experience among the remaining team members alleviates concerns related to interruptions to portfolio management.
- Galliard continues to maintain a deep stable value team with dedicated professionals overseeing wrap contract negotiation, external management oversight, contract administration and stable value accounting.

Galliard Stable Value

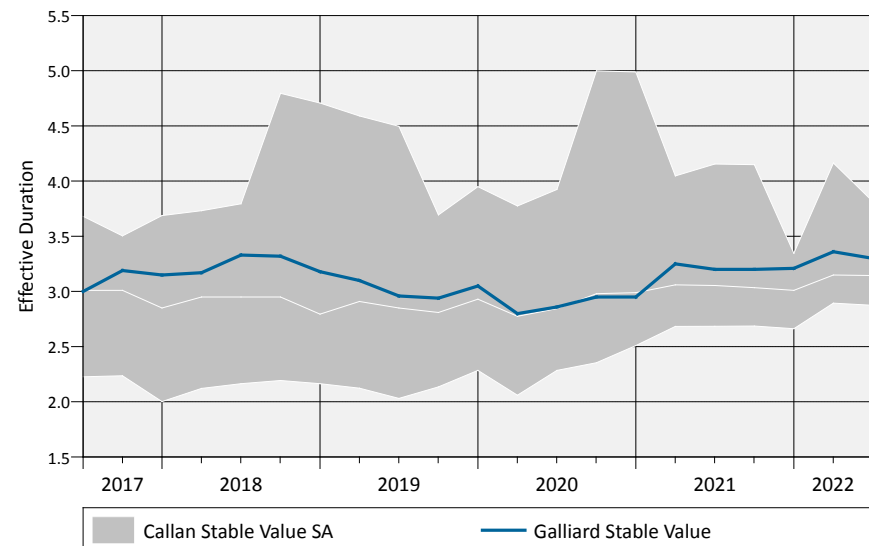
Strategy Review

- Galliard conducts a collaborative and repeatable process in implementing stable value portfolios.
- Wrap negotiation has benefitted from the firm's dedicated resources and experience in wrap contract management as well as asset size.
- While peers have increased their exposure to lower quality credit (as exhibited by the BBB rated bond exposure in the Callan Stable Value separate account peer group), Galliard has been relatively consistent in its exposure to lower quality tiers.
- The Fund's duration has been managed within an acceptable range through multiple market cycles.
- Galliard has effectively diversified risk utilizing subadvisors with complementing investing styles as exhibited on slide 12.
- External management oversight, led by Elizabeth Smithley and Peter Schmit, is robust and requires monthly reviews for compliance.

BBB Exposure
for 5 Years Ended June 30, 2022



Effective Duration
for 5 Years Ended June 30, 2022

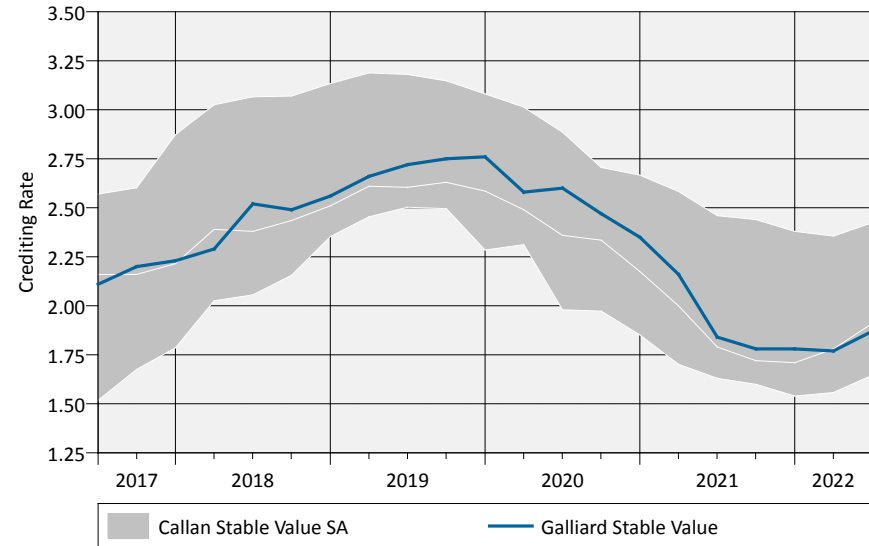


Galliard Stable Value

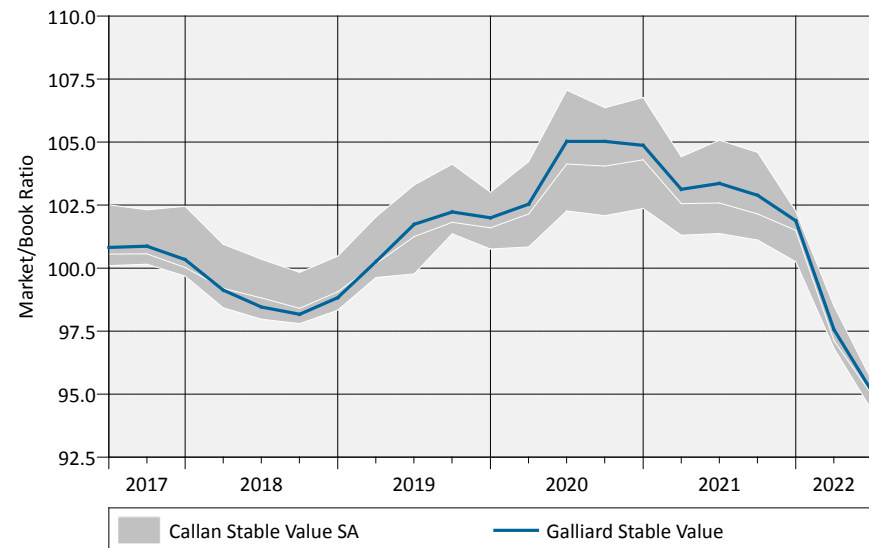
Performance Review

- The Fund has generated a crediting rate above the Callan Stable Value Separate Account peer median for most quarters over the trailing five-years.
- Market-to-book value ratios across the peer group decreased below par for the first time since 2018. The increase in interest rates in the first quarter resulted in a decline in market value, however, stable value wrap contracts are designed to amortize these market value declines over time.
- As outlined on the following slide, the NCSRP stable value fund has performed in line with expectations, producing strong short-term and long-term performance relative to peers.

Crediting Rate
for 5 Years Ended June 30, 2022



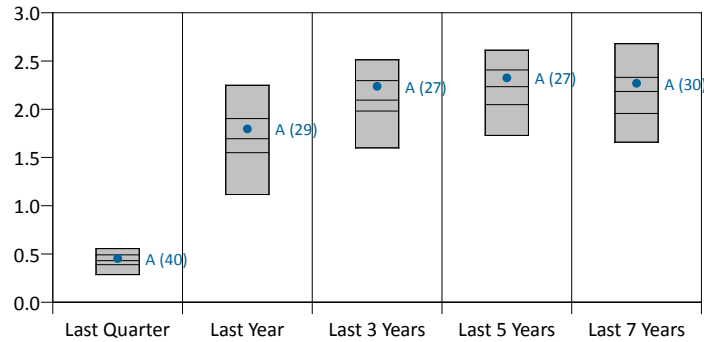
Market/Book Ratio
for 5 Years Ended June 30, 2022



Galliard Stable Value

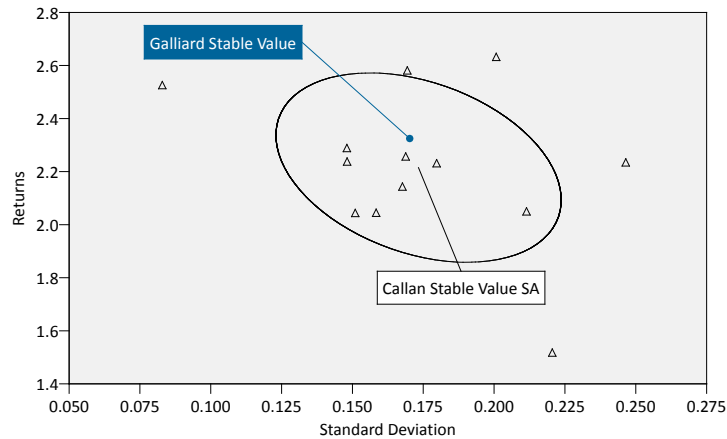
Performance Review

Returns
for Periods Ended June 30, 2022
Group: Callan Stable Value SA

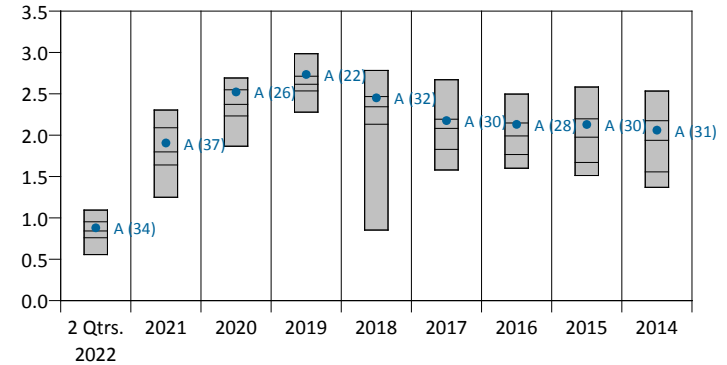


10th Percentile	0.56	2.25	2.51	2.61	2.68
25th Percentile	0.49	1.90	2.30	2.41	2.33
Median	0.43	1.70	2.10	2.24	2.18
75th Percentile	0.39	1.55	1.98	2.05	1.96
90th Percentile	0.29	1.12	1.60	1.73	1.66
Galliard Stable Value	0.45	1.80	2.24	2.33	2.27

Scatter Chart
for 5 Years Ended June 30, 2022

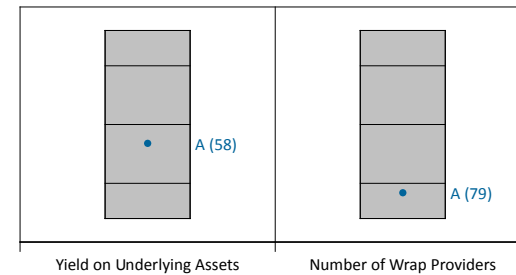


Calendar Year Returns
Group: Callan Stable Value SA



10th Percentile	1.09	2.30	2.69	2.99	2.78	2.67	2.50	2.58	2.53
25th Percentile	0.95	2.09	2.55	2.71	2.47	2.19	2.15	2.20	2.18
Median	0.84	1.80	2.37	2.62	2.34	2.08	1.99	1.98	1.94
75th Percentile	0.76	1.64	2.23	2.54	2.13	1.83	1.77	1.67	1.56
90th Percentile	0.56	1.25	1.87	2.28	0.85	1.58	1.60	1.51	1.37
Galliard Stable Value	0.88	1.91	2.52	2.74	2.45	2.18	2.13	2.13	2.06

Portfolio Characteristics For Periods Ended June 30, 2022
Group: Callan Stable Value SA

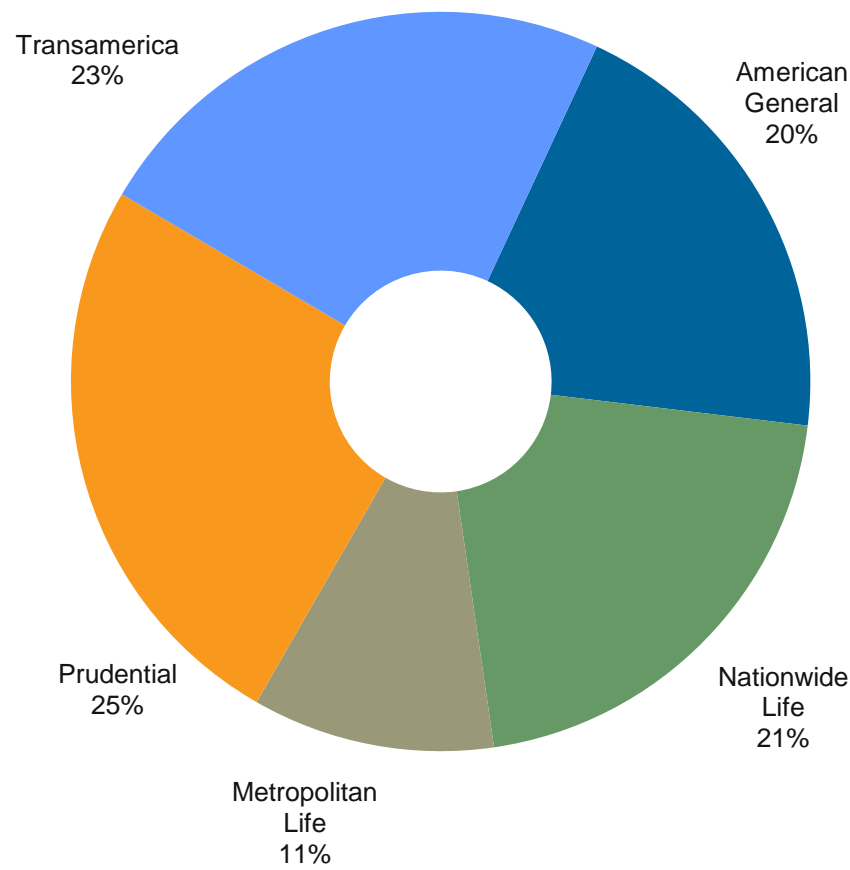


25th Percentile	3.98	10.00
Median	3.90	8.00
75th Percentile	3.58	6.00
90th Percentile	2.21	3.20
Galliard Stable Value	3.68	5.00

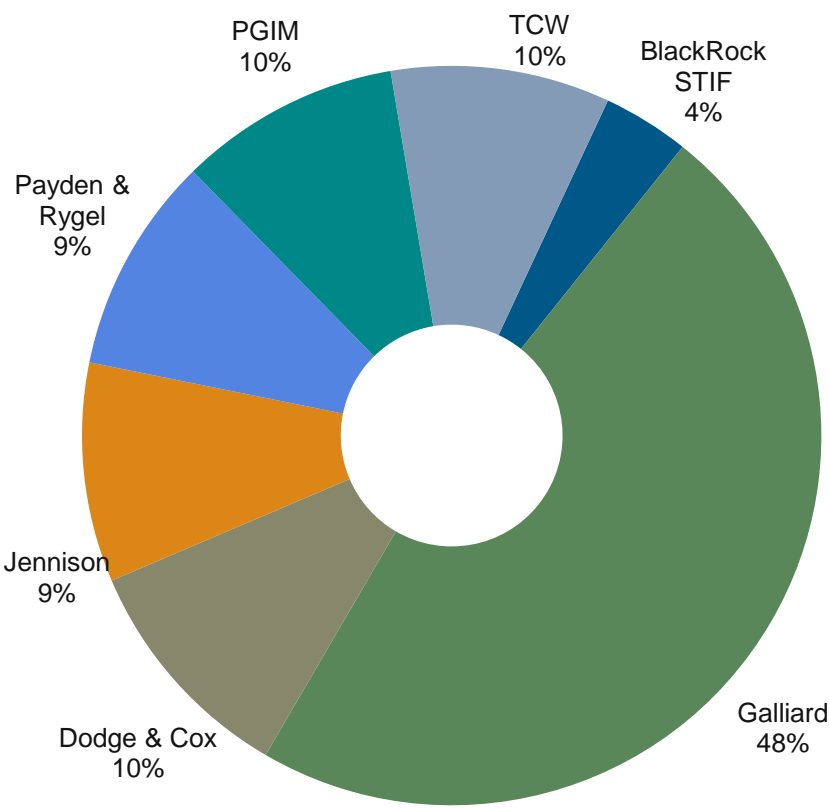
Galliard Stable Value – Performance

Diversification by Wrap Issuers and Subadvisors as of June 30, 2022

Wrap Issuer Exposure



Subadvisor Exposure



Galliard Stable Value – Performance

Subadvisor performance for periods ended June 30, 2022

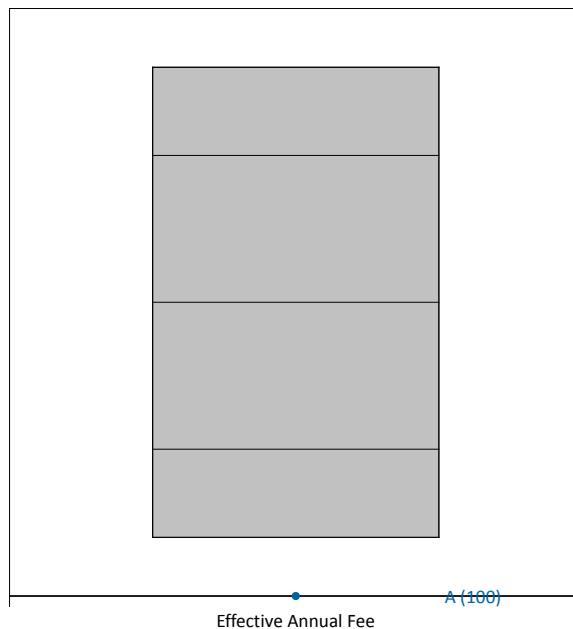
Manager	1 month	1-quarter	YTD	1-years	3-years	5-years	Since Inception	Inception Date
Galliard	-0.55	-0.84	-3.31	-3.72	0.60	-	1.61	June 1, 2018
<i>BB 1-3 yr Gov't/Credit Index</i>	-0.70	-0.63	-3.11	-3.56	0.31	-	1.26	-
Galliard	-1.04	-2.87	-7.41	-7.86	-0.13	-	1.62	June 1, 2018
Dodge & Cox	-1.38	-3.10	-7.79	-8.20	-0.04	1.35	1.57	Mar 1, 2015
PGIM Fixed Income	-1.40	-3.26	-7.93	-8.42	-0.45	1.14	1.46	Feb 1, 2016
<i>BB Intermediate Aggregate Index</i>	-1.27	-2.93	-7.48	-7.91	-0.60	0.88	1.16 / 1.14 / 1.05	-
Payden & Rygel	-1.26	-2.95	-7.29	-7.73	-0.11	1.35	1.75	July 1, 2009
¹ <i>Linked Benchmark</i>	-1.27	-2.93	-7.48	-7.91	-0.60	0.98	1.26	-
Jennison	-1.05	-2.37	-6.72	-7.30	0.36	1.55	2.02	¹ See Note
TCW	-1.26	-2.55	-6.66	-7.18	0.31	-	2.00	June 1, 2018
<i>BB Intermediate Gov't/Credit Index</i>	-1.11	-2.37	-6.77	-7.28	-0.16	1.13	1.13 / 1.52	-

¹Payden Linked BM: Bloomberg Barclays U.S. Intermediate Aggregate Bond Index. Prior to June 1, 2018 benchmark was Bloomberg Barclays U.S. 1-3 Year Government/Credit Bond Index. Performance inception: June 1, 2018. Prior to June 1, 2018 returns are linked to Wells Fargo Fixed Income Fund N (Jennison).

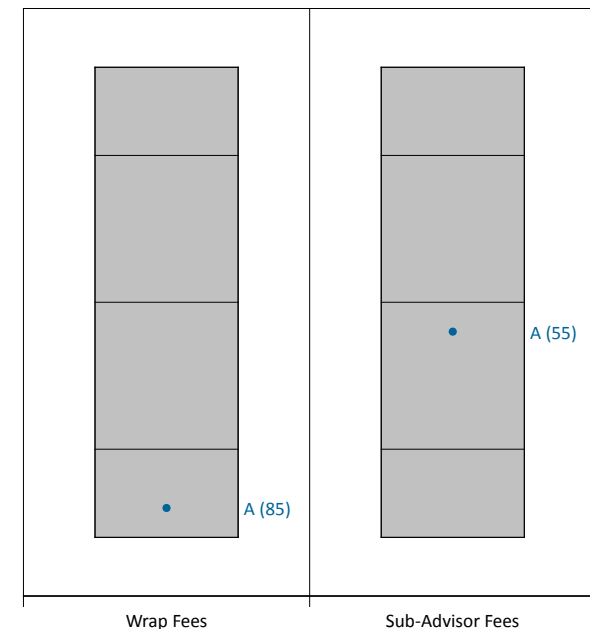
Galliard Stable Value - Fees

Wrap/Subadvisor and Management Fee Comparison

Management Fee Comparison
Ended June 30, 2022
Group: Callan Stable Value SA



Fee Comparison
Ended June 30, 2022
Group: Callan Stable Value SA



- Galliard's management fee of 5.3 bps remains competitive among reported management fee schedules.
- Galliard has also been assertive in negotiating wrap contract fees—they expect fees to remain at roughly 15 bps on average for the foreseeable future.

Callan

Stable Value Trends

Factors Impacting Stable Value Environment

Current Interest Rate Environment

- The recent increase in interest rates has curtailed the downward trend in crediting rates that began in early 2020.
- Market-to-book ratios have decreased below par which is not unexpected during a rising rate environment. Stable value wrap contracts protect investors from mark-to-market losses resulting from rising interest rates by smoothing the bond portfolio's returns over time via the crediting rate formula.

Wrap Capacity and Fees

- Insurance companies have become the dominant players within the wrap industry since the GFC.
 - Increased competition has helped wrap fees decline to 15 bps from the 25-30 bps range immediately after the GFC.
 - Investment guideline negotiation leverage has shifted back in favor of stable value managers.
- Wrap coverage has remained robust through the Covid-19 crisis, however, vigilance of the health of the wrap provider community is prudent.

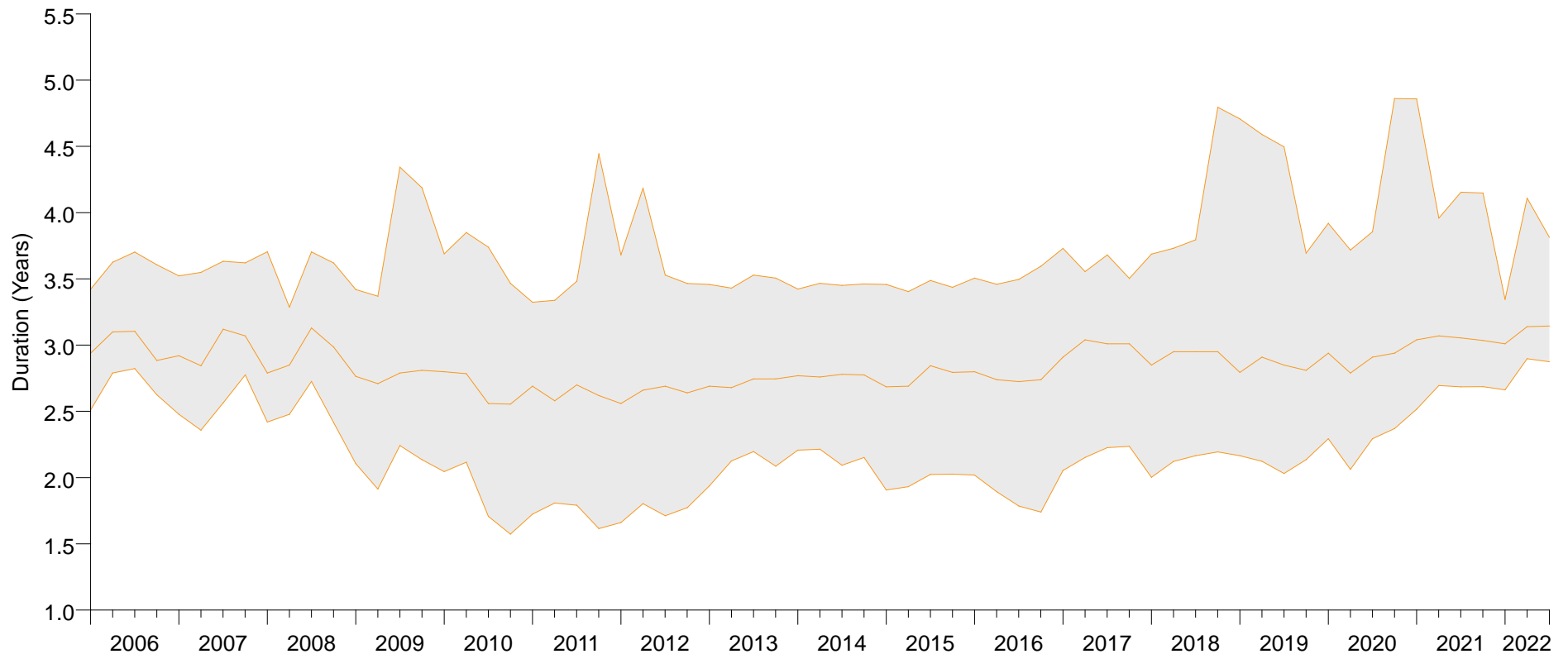
Financial Health of Wrap Issuers

Issuers	A.M. Best Ratings as of February 2022
American General Life	A
Jackson National Life	A
Lincoln Financial	A+
Mass Mutual	A++
Metropolitan Life	A+
Nationwide Life	A+
New York Life	A++
Pacific Life	A+
Principal Life	A+
Protective Life	A+
Prudential	A+
RGA	A+
Transamerica	A

	Insurance industry outlook - Stable value managers maintain a positive outlook on wrap providers' financial stability, and the major rating agencies maintain a stable outlook on the insurance sector as a whole.
Moody's	Stable – Life insurance sales will be supported by the global economic recovery. Continued shift to fee-based models should lower dependence on investment spreads. Lockdowns remain a key risk.
S&P	Stable - Insurance sector continues to demonstrate resilience, but faces disruption from new technologies, cyber security and low interest rate levels.
Fitch	Neutral – Improvement in macroeconomic environment in 2021 and strong industry balance sheet fundamentals are expected to persist in 2022. Sustained low interest rates, increased role of alternative investment managers, and regulatory accounting changes may have long-term credit implications.

Source: Bloomberg, Moody's, S&P, Fitch

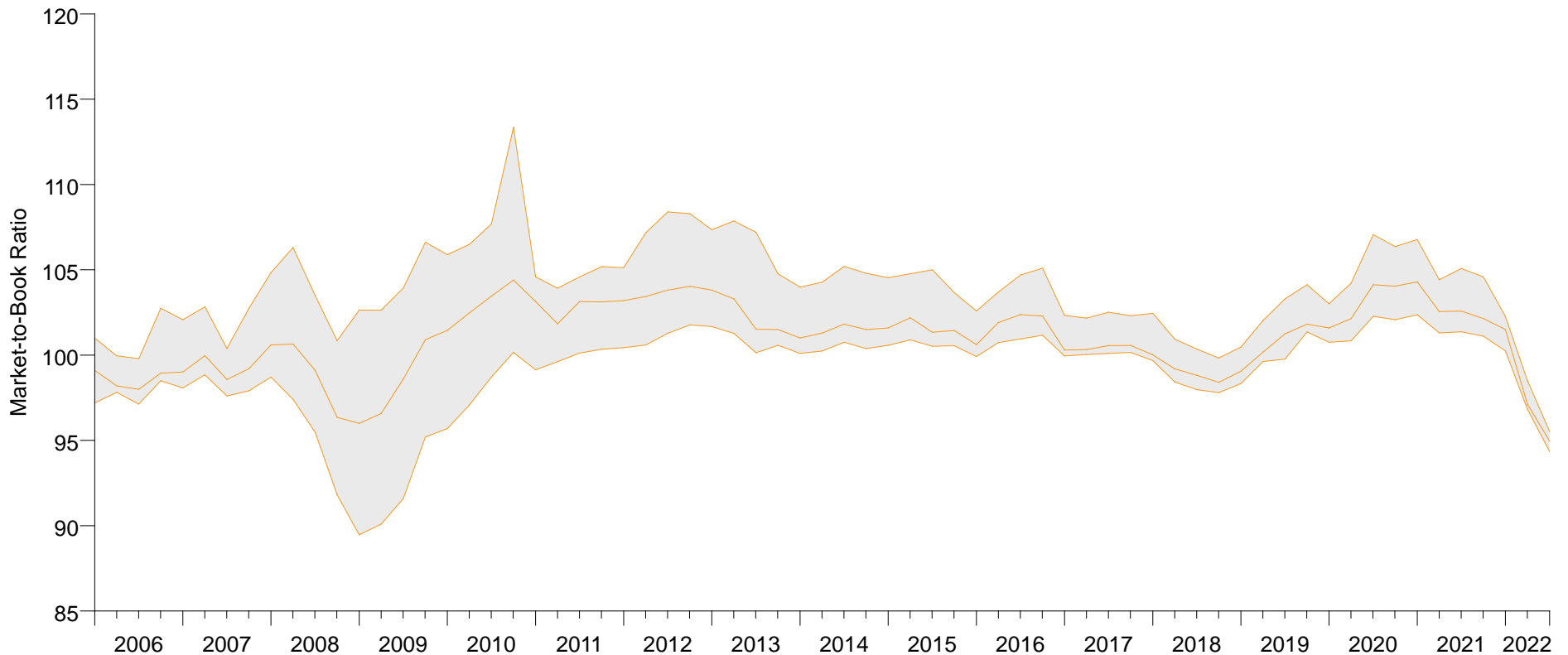
Duration is trending longer



Wrap issuers keep a close a eye on interest rate risk.

- After stable value funds experienced volatility in 2008, wrap providers pushed for tighter guidelines.
- More recently wrap providers have allowed more leeway on duration.

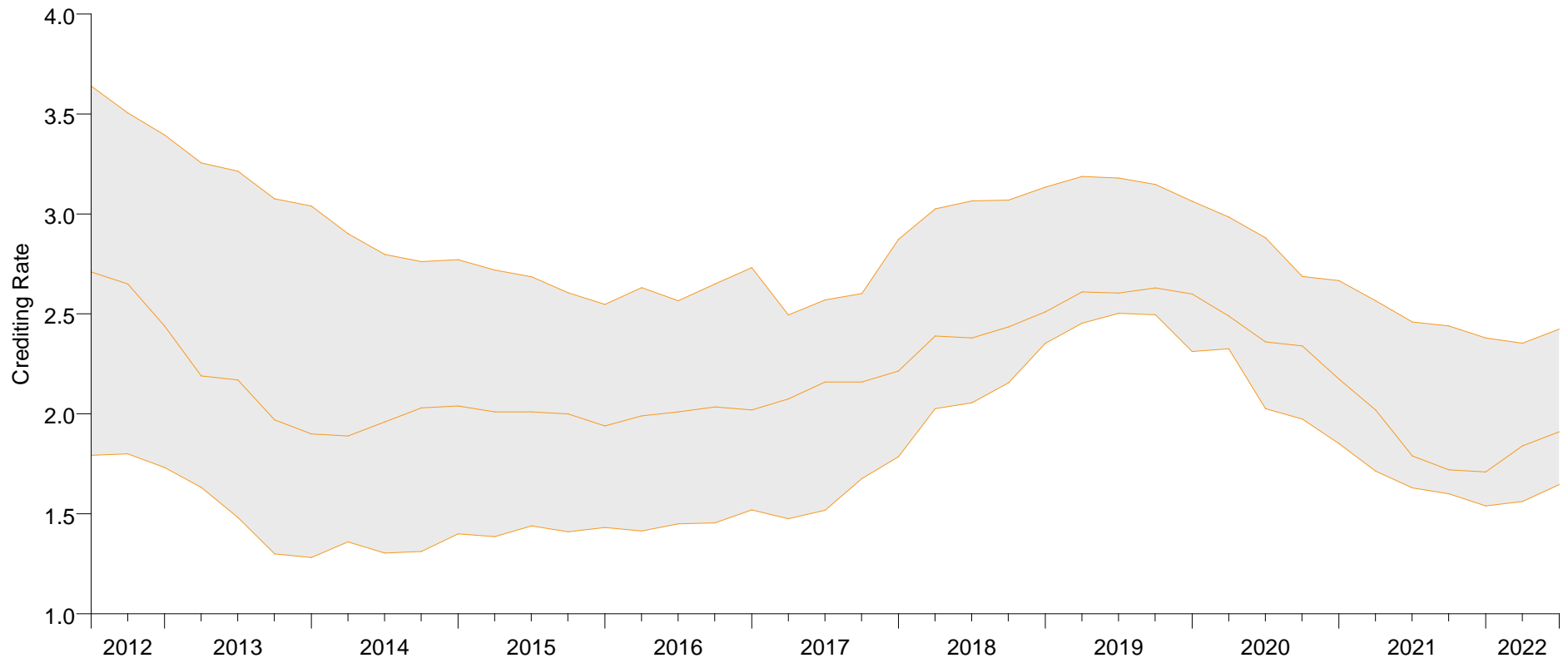
Market-to-book ratios have declined



Market-to-book value ratio is a measure of the overall health of a stable value fund.

- Market-to-book generally decreases below par (100) during a rising rate environment.
- Wrap contracts are designed to amortize the decline in market value.

Crediting rates increase after reaching historic lows



The recent increase in interest rates has stymied the downward trend in crediting rates.

- The low interest rate environment due to the Covid-19 crisis led to some of the lowest levels of crediting rates in 10-years.
- Some stable value managers have renegotiated broader investment guidelines, resulting in more crediting rate uniformity among peers.