Stable Value Fund Review
North Carolina Supplemental Retirement Plans

August 2023

Elizabeth Hood, CFA
Atlanta Fund Sponsor Consulting

Weston Lewis, CFA, CAIA
Atlanta Fund Sponsor Consulting

Kyle Fekete, CFA
Global Manager Research Group
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Executive Summary
Callan maintains a positive opinion of Galliard’s stable value approach and the internally managed fixed income strategies that underlie stable value accounts. The firm has exhibited stability among leadership and investment personnel since the organizational changes that occurred in 2019.

Callan continues to monitor 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 remains supported by its parent company and has retained a consistent level of autonomy since its parent company’s acquisition.

The investment team has remained relatively stable, and displayed consistency in its investment process and performance since undergoing a leadership transition in 2019.

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.

In 2022, stable value crediting rates began increasing as the Federal Reserve began its interest rate hiking cycle. Crediting rates trend towards prevailing yields on a lagged basis which is a mechanic of stable value.
Galliard Stable Value
Galliard Stable Value
Organization Review

Galliard's leadership team has remained relatively stable since transitioning to its current regime in 2019. Callan continues to monitor the organizational transition of its parent company Allspring Global Investments. While there have been recent changes to Galliard's chief operating officer and chief compliance officer, Galliard’s investment teams and strategies have not been impacted by the parent company change.

➢ In 2019, Galliard transitioned to its current generation of leaders upon the retirement of Founding Partners Richard Merriam and Karl Tourveille, and Managing Partner Carrie Callahan. Michael Norman and Andrew Owen assumed the roles of co-President of Galliard. Galliard’s risk management, technology, and compliance teams began reporting to its parent company.

➢ In November 2021, parent company Wells Fargo Asset Management was acquired by private equity firms GTCR LLC and Reverence Capital Partners, L.P. 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 remains a wholly-owned subsidiary under Allspring Global Investments. The firm’s revenue sharing agreement and branding was retained.

➢ In 2022, the Allspring and Galliard began rationalization reporting lines. Co-President Mike Norman was named sole President of Galliard and Co-President Andrew Owen was named Allspring’s Head of Global Fund Governance. Chief Operating Officer Chad Foote left the firm; operational teams will report directly to Allspring. Paul Felsch was named the new Chief Compliance Officer of Allspring Funds Management and Galliard, replacing Brian Renelt who had been Galliard's CCO for three years.
Galliard Stable Value

Personnel Review

Galliard’s investment team is deep with strong experience among its senior professionals, and 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. Mirza joined the firm in 1995 and industry in 1993. Kanz joined the firm in 2005 and industry in 2002.

- 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. Gage joined the firm and industry in 2008 and 1999, respectively.

- Galliard continues to maintain a deep stable value team with dedicated professionals overseeing wrap contract management, 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. Its stable value and fixed income committees work in concert to ensure that portfolios are managed within guidelines and meet objectives, and wrap contracts are managed prudently.

- The Fund’s duration has been managed within an acceptable range through multiple market cycles.

- Galliard has been relatively consistent in its exposure to lower quality credit tiers and within an acceptable range.

- Galliard has effectively diversified risk utilizing subadvisors with complementing investing styles as exhibited on slides 11 and 12.

- External management oversight, led by Elizabeth Smithley and Peter Schmit, remains robust and requires monthly reviews for compliance.
Galliard Stable Value

Performance Review

➢ The Fund has generated a crediting rate above or in-line with 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 2022 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.
Galliard Stable Value

Performance Review

Returns
for Periods Ended June 30, 2023
Group: Callan Stable Value SA

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Last Quarter</th>
<th>Last Year</th>
<th>Last 3 Years</th>
<th>Last 5 Years</th>
<th>Last 7 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>10th</td>
<td>0.78</td>
<td>2.87</td>
<td>2.54</td>
<td>2.61</td>
<td>2.62</td>
</tr>
<tr>
<td>25th</td>
<td>0.70</td>
<td>2.49</td>
<td>2.29</td>
<td>2.52</td>
<td>2.50</td>
</tr>
<tr>
<td>Median</td>
<td>0.68</td>
<td>2.45</td>
<td>2.08</td>
<td>2.28</td>
<td>2.25</td>
</tr>
<tr>
<td>75th</td>
<td>0.67</td>
<td>2.31</td>
<td>1.91</td>
<td>2.11</td>
<td>2.05</td>
</tr>
<tr>
<td>90th</td>
<td>0.59</td>
<td>1.93</td>
<td>1.55</td>
<td>1.80</td>
<td>1.78</td>
</tr>
</tbody>
</table>

Galliard Stable Value: A 0.70 2.42 2.15 2.35 2.31

Scatter Chart
for 5 Years Ended June 30, 2023

Calendar Year Returns
Group: Callan Stable Value SA

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10th</td>
<td>1.50</td>
<td>2.46</td>
<td>2.33</td>
<td>4.08</td>
<td>2.98</td>
<td>2.78</td>
<td>2.60</td>
<td>2.58</td>
<td>2.58</td>
<td></td>
</tr>
<tr>
<td>25th</td>
<td>1.35</td>
<td>2.17</td>
<td>2.12</td>
<td>2.62</td>
<td>2.70</td>
<td>2.47</td>
<td>2.21</td>
<td>2.12</td>
<td>2.13</td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>1.33</td>
<td>1.94</td>
<td>1.84</td>
<td>2.40</td>
<td>2.62</td>
<td>2.29</td>
<td>2.07</td>
<td>2.03</td>
<td>1.98</td>
<td></td>
</tr>
<tr>
<td>75th</td>
<td>1.29</td>
<td>1.77</td>
<td>1.62</td>
<td>2.23</td>
<td>2.49</td>
<td>2.13</td>
<td>1.85</td>
<td>1.75</td>
<td>1.67</td>
<td></td>
</tr>
<tr>
<td>90th</td>
<td>1.11</td>
<td>1.40</td>
<td>1.31</td>
<td>1.97</td>
<td>2.34</td>
<td>0.85</td>
<td>1.61</td>
<td>1.57</td>
<td>1.51</td>
<td></td>
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</tbody>
</table>

Galliard Stable Value: A 1.31 1.98 1.91 2.52 2.74 2.45 2.18 2.13 2.13

Portfolio Characteristics For Periods Ended June 30, 2023
Group: Callan Stable Value SA

<table>
<thead>
<tr>
<th>Standard Deviation</th>
<th>Yield on Underlying Assets</th>
<th>Number of Wrap Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.100</td>
<td>5.76</td>
<td>10.00</td>
</tr>
<tr>
<td>0.125</td>
<td>5.30</td>
<td>10.00</td>
</tr>
<tr>
<td>0.150</td>
<td>5.23</td>
<td>9.00</td>
</tr>
<tr>
<td>0.200</td>
<td>5.21</td>
<td>6.00</td>
</tr>
<tr>
<td>0.225</td>
<td>5.21</td>
<td>1.20</td>
</tr>
<tr>
<td>0.250</td>
<td>5.29</td>
<td>5.00</td>
</tr>
<tr>
<td>0.275</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Galliard Stable Value: A 5.29 5.00
Galliard Stable Value – Performance
Diversification by Wrap Issuers and Subadvisors as of June 30, 2023

Wrap Issuer Exposure
- Prudential 25%
- Nationwide Life 21%
- Metropolitan Tower 11%
- American General 20%
- Transamerica 23%

Subadvisor Exposure
- Galliard 49%
- Dodge & Cox 10%
- Jennison 10%
- TCW 10%
- Payden & Rygel 10%
- PGIM 10%
- BlackRock STIF 1%
## Galliard Stable Value – Performance

Subadvisor performance for periods ended June 30, 2023

<table>
<thead>
<tr>
<th>Manager</th>
<th>1 month</th>
<th>1-quarter</th>
<th>YTD</th>
<th>1-years</th>
<th>3-years</th>
<th>5-years</th>
<th>Since Inception</th>
<th>Inception Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galliard</td>
<td>-0.25</td>
<td>0.02</td>
<td>1.58</td>
<td>1.30</td>
<td>-0.54</td>
<td>1.56</td>
<td>1.55</td>
<td>June 1, 2018</td>
</tr>
<tr>
<td><em>BB 1-3 yr Gov't/Credit Index</em></td>
<td>-0.41</td>
<td>-0.37</td>
<td>1.13</td>
<td>0.52</td>
<td>-0.88</td>
<td>1.13</td>
<td>1.12</td>
<td>-</td>
</tr>
<tr>
<td>Galliard</td>
<td>-0.49</td>
<td>-0.55</td>
<td>1.87</td>
<td>-0.26</td>
<td>-2.41</td>
<td>1.27</td>
<td>1.25</td>
<td>June 1, 2018</td>
</tr>
<tr>
<td>Dodge &amp; Cox</td>
<td>-0.19</td>
<td>-0.05</td>
<td>2.39</td>
<td>0.25</td>
<td>-2.24</td>
<td>1.38</td>
<td>1.42</td>
<td>Mar 1, 2015</td>
</tr>
<tr>
<td>PGIM Fixed Income</td>
<td>-0.43</td>
<td>-0.51</td>
<td>1.86</td>
<td>0.28</td>
<td>-2.41</td>
<td>1.19</td>
<td>1.30</td>
<td>Feb 1, 2016</td>
</tr>
<tr>
<td><em>BB Intermediate Aggregate Index</em></td>
<td>-0.60</td>
<td>-0.75</td>
<td>1.62</td>
<td>-0.60</td>
<td>-2.89</td>
<td>0.83</td>
<td>0.81 / 0.93 / 0.82</td>
<td>-</td>
</tr>
<tr>
<td>Payden &amp; Rygel</td>
<td>-0.35</td>
<td>-0.41</td>
<td>1.95</td>
<td>-0.04</td>
<td>-2.33</td>
<td>1.22</td>
<td>1.62</td>
<td>July 1, 2009</td>
</tr>
<tr>
<td>¹Linked Benchmark</td>
<td>-0.60</td>
<td>-0.75</td>
<td>1.62</td>
<td>-0.60</td>
<td>-2.89</td>
<td>0.83</td>
<td>1.13</td>
<td>-</td>
</tr>
<tr>
<td>Jennison</td>
<td>-0.71</td>
<td>-0.79</td>
<td>1.58</td>
<td>0.13</td>
<td>-2.45</td>
<td>1.60</td>
<td>1.79</td>
<td>¹See Note</td>
</tr>
<tr>
<td>TCW</td>
<td>-0.84</td>
<td>-1.19</td>
<td>1.67</td>
<td>-0.29</td>
<td>-2.19</td>
<td>1.54</td>
<td>1.55</td>
<td>June 1, 2018</td>
</tr>
<tr>
<td><em>BB Intermediate Gov't/Credit Index</em></td>
<td>-0.68</td>
<td>-0.81</td>
<td>1.50</td>
<td>-0.10</td>
<td>-2.46</td>
<td>1.23</td>
<td>1.39 / 1.20</td>
<td>-</td>
</tr>
</tbody>
</table>

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

- 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.

Note(s): Peer group wrap fees and sub-advisor fees are provided as of year-end due to limited data.
Stable Value Trends
Factors Impacting Stable Value Environment

Current Rate Environment

- Stable value funds reflect changes in interest rates more slowly than money market funds. In 2022, money market funds began generating competitive yields as a result of the historic response by the Federal Reserve to stem inflation by hiking its benchmark interest rate to its highest level in 15-years.

- Market-to-book ratios have decreased below par which is expected 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.

- Stable value has underperformed money markets following rate hikes in the past. Relative underperformance is expected to continue in the near-term given how quickly rates have risen.

- Callan continues to favor stable value over money market funds given its long-term outperformance and pricing smoothing mechanics.

Wrap Capacity and Fees

- Insurance companies have become the dominant players within the wrap industry since the GFC.
  - Wrap fees now average 15 bps, down from the 25-30 bps range immediately after the GFC due to increase competition.
  - Investment guideline negotiation leverage has shifted back in favor of stable value managers, allowing some flexibility to position the fixed income portfolio with additional credit risk.
Stable Value Performance

Stable value is now underperforming money markets, but these periods have historically been brief.
Crediting rates have gradually increased following the rate environment.
Market-to-book ratios have declined due to rising rates, but within expectations.

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.
Duration has remained within range