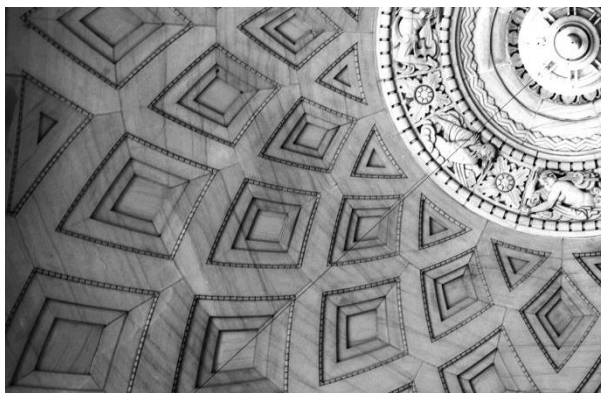




ARCHITECTS OF INVESTMENT SOLUTIONS



State of North Carolina

MAY 27, 2021

STATE OF NORTH CAROLINA

TABLE OF CONTENTS

SECTION I:	Galliard Capital Management Firm Update
SECTION II:	State of North Carolina Stable Value Portfolio Review
SECTION III:	Investment Manager Performance & Positioning

SECTION I

GALLIARD CAPITAL MANAGEMENT

WELLS FARGO ASSET MANAGEMENT SALE

GALLIARD AND PARENT COMPANY WELLS FARGO ASSET MANAGEMENT IN THE NEWS

- February 23rd – Wells Fargo announces it has reached an agreement to sell Wells Fargo Asset Management (WFAM) and all related legal entities (including Galliard)
- Buyers are 2 private equity firms: GTCR LLC and Reverence Capital Partners. Wells Fargo will also keep a 9.9% stake.
- Deal was valued at \$2.1 billion and scheduled to close in 2nd half of 2021.
- Galliard brand, investment team and process, executive management and client experience will stay the same.
- Wells Fargo collective funds trustee team and funds also part of the sale.

CLIENT IMPACT?

- Should be minimal – recently sent letters to clients to document a consent to the change in ownership.

GALLIARD CAPITAL MANAGEMENT

WHO WE ARE

\$94.2 B

TOTAL AUM

\$77.8 B

TOTAL STABLE VALUE AUM

84

STABLE VALUE SEPARATE ACCOUNTS

100

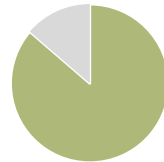
EMPLOYEES ON STAFF

Offer **separate account** and **collective fund** solutions for clients

210+

INSTITUTIONAL CLIENTS

CLIENT RELATIONSHIP TENURE



~86% of our clients have worked with Galliard for greater than **5 years**

45 of those relationships exceed **15 years** with Galliard

CLIENT TYPES

- Corporate
- Public Entities
- Taft-Hartley
- Operating Funds
- Healthcare
- Insurance Reserves
- Foundations / Endowments

FORTUNE 100 / 500

21 Fortune 100 clients; **57** Fortune 500 clients

25 YEARS

OF EXCLUSIVE FOCUS ON

FIXED INCOME & STABLE VALUE

Senior Professionals
Average Years of Experience:

Stable value strategy and contract – **23**
Stable value and contract – **23**
Fixed income portfolio management – **20**

Galliard is one of the **largest** managers of stable value assets¹

¹Pension & Investments June 2020 edition, data as of December 31, 2019; Total assets 'ranked' are managed by Galliard and reported under WFAM

SECTION II

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

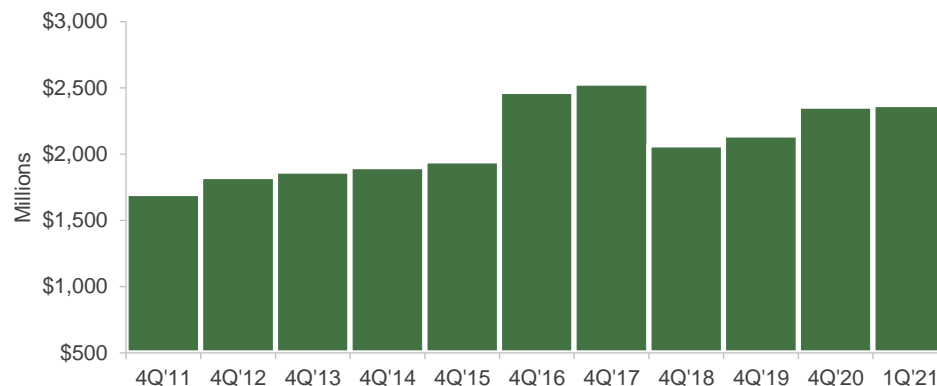
PORTFOLIO CHARACTERISTICS

STATE OF NORTH CAROLINA STABLE VALUE FUND

ACCOUNT SUMMARY

Benchmark	ICE BofAML US 3-Month Tsy Bill Index+150 bps, 3 Year Constant Maturity Treasury
Galliard Inception Date	December 1, 2010
Net Asset Value	\$2,373,645,550

HISTORICAL FUND ASSETS



PORTFOLIO CHARACTERISTICS

	Portfolio 12/31/20	Portfolio 3/31/21
Average Quality - Book Value¹	A+	A+
Average Quality - Market Value²	AA	AA
Number of Contract Issuers	5	5
Blended Yield (after all fees)³	2.24%	2.03%
Yield to Maturity	0.67%	1.01%
Effective Duration	2.95 years	3.25 years
Market/Book Value Ratio	104.87%	103.13%

PORTFOLIO DISTRIBUTION

	% Portfolio 12/31/20	% Portfolio 3/31/21
Liquidity Buffer: Cash & Equivalents⁴	2.0	2.0
Short Portfolio	33.0	33.2
Intermediate Portfolio	65.1	64.8
Total	100.0%⁵	100.0%⁵

1: Average holdings quality of the contracts and other book value assets in the portfolio. The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.

2: Average holdings quality of the underlying assets of the portfolio. The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.

3: Blended Yield is net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement.

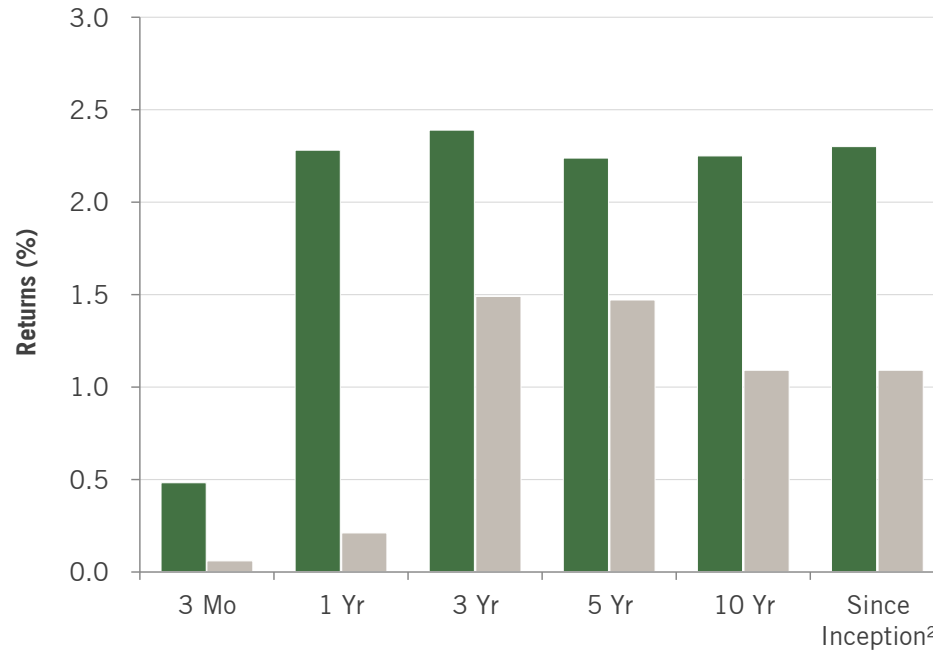
4: Includes Receivables and Payables.

5: Total % of portfolio may not add to 100% due to rounding.

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

ANNUALIZED INVESTMENT PERFORMANCE

ANNUALIZED INVESTMENT PERFORMANCE AS OF 3/31/21¹



	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception ²
State of North Carolina Stable Value Fund (net of all fees - NAV level) ³	0.48	2.28	2.39	2.24	2.25	2.30
3 Year Constant Maturity Treasury Yield	0.06	0.21	1.49	1.47	1.09	1.09
ICE BofA U.S. 3-Month Treasury Bill Index + 150 bps	0.40	1.63	3.02	2.72	2.15	2.14
Value Added (net of all fees - NAV level)⁴	0.42	2.07	0.90	0.76	1.16	1.21

1: Returns for periods of less than one year are not annualized.

2: Returns are net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external managers fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement

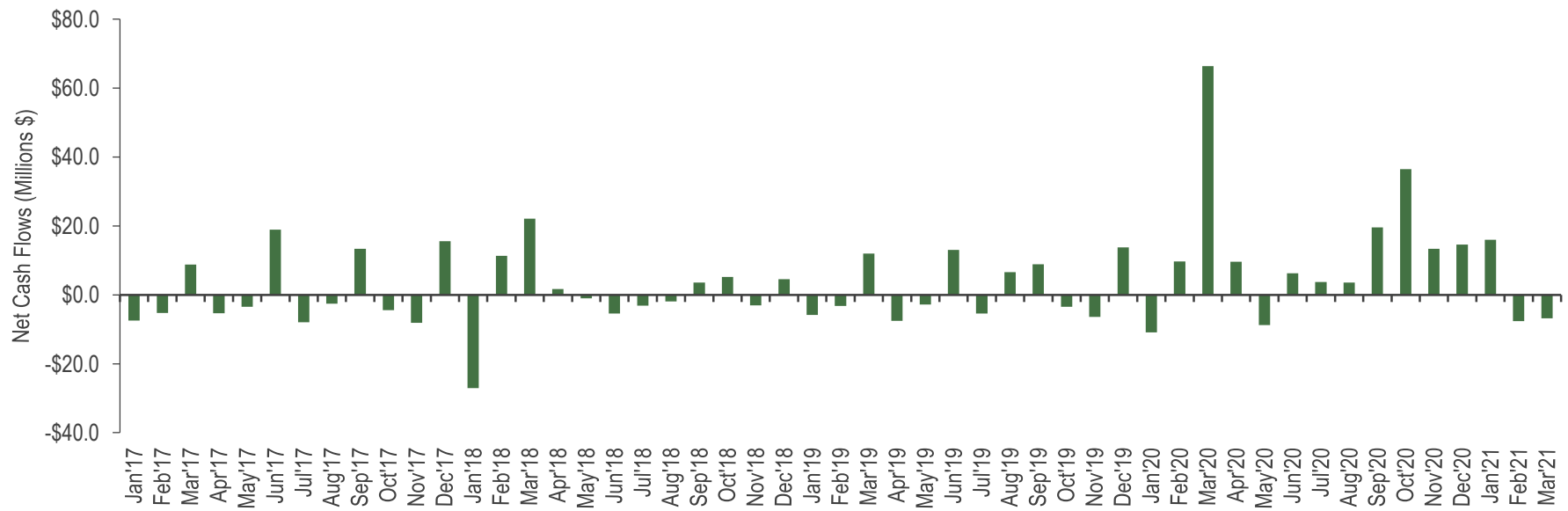
3: Galliard assumed management of this portfolio on December 1, 2010. Performance for periods referenced prior to this date include historical performance of another investment advisor.

4: May not add due to rounding.

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

HISTORICAL CASHFLOWS

HISTORICAL CASHFLOWS



	2017	2018	2019	2020	1Q'21
Beginning Assets	\$2,472.8	\$2,535.1	\$2,069.8	\$2,143.4	\$2,360.5
Net Cash Flow (\$) ¹	\$12.2	\$6.9 ³	\$19.8	\$163.5	\$1.5
Net Cash Flow (%)	0.49%	0.27%	0.95%	7.63%	0.06%
Estimated Investment Earnings	\$50.1	\$51.6	\$53.9	\$53.5	\$11.6
Ending Assets ²	\$2,535.1	\$2,069.8	\$2,143.4	\$2,360.5	\$2,373.6

1: Contributions, Withdrawals and Investment Transfers

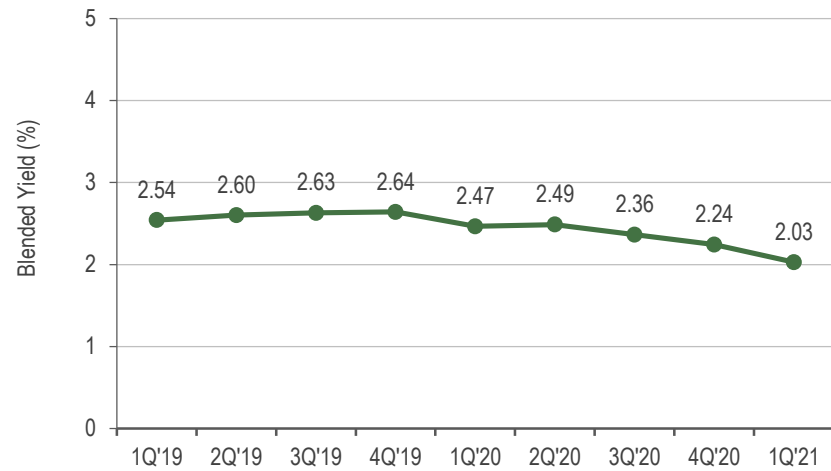
2: Cashflows may not net to final assets due to rounding.

3: Excludes Prudential GoalMaker withdrawal of approximately \$523.8 M on 6/8/18 for illustrative purposes.

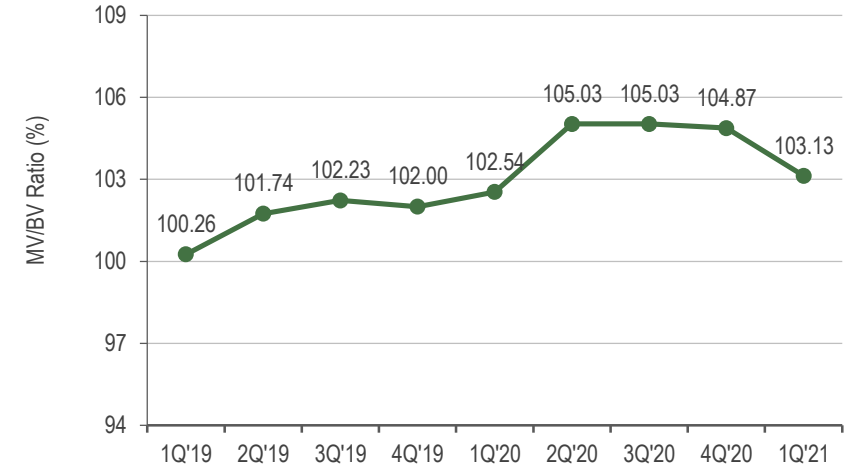
STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

HISTORICAL STATS

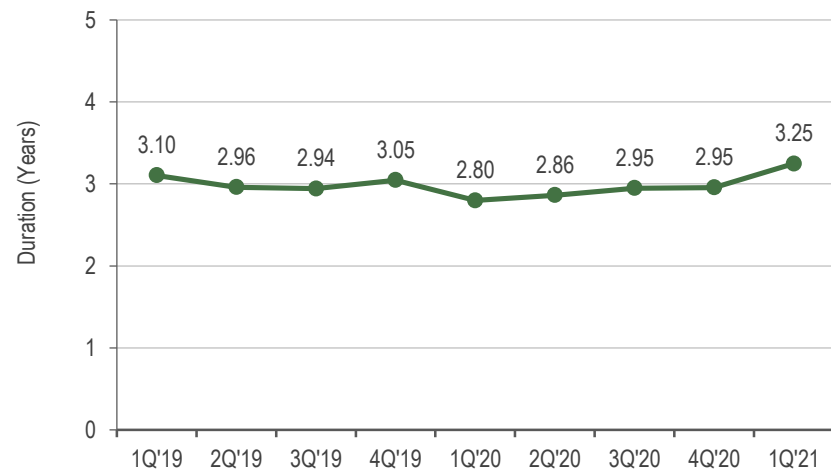
HISTORICAL BLENDED YIELD¹



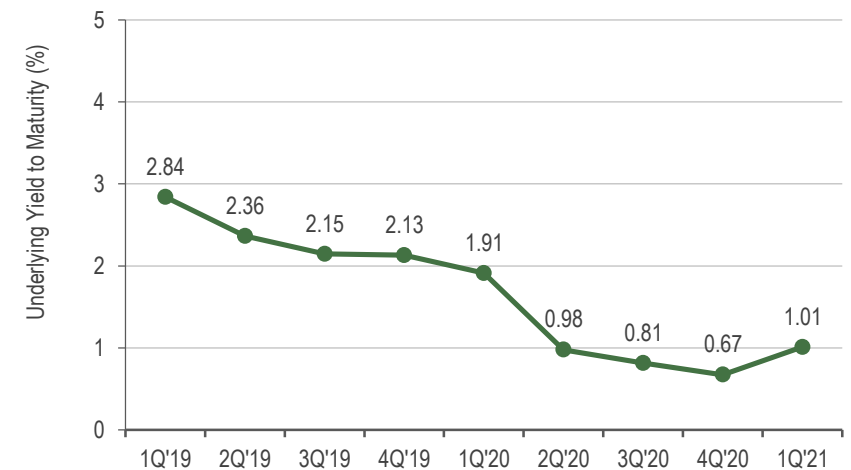
HISTORICAL MARKET VALUE TO BOOK VALUE RATIO



HISTORICAL DURATION



HISTORICAL UNDERLYING YIELD TO MATURITY



1: Blended Yield is net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement.

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

CONTRACT ISSUERS

CONTRACT ISSUER DISTRIBUTION & RATING SUMMARY¹

	Contract Type ²	% Portfolio 12/31/20	% Portfolio 3/31/21	Rating 12/31/20	Rating 3/31/21	Wrap fees (bps) 12/31/20	Wrap fees (bps) 3/31/21
American General Life Ins. Co.	SBIC	19.6	19.6	A+	A+	16	15
Metropolitan Life Ins. Co.	SAGIC	10.4	10.4	AA-	AA-	18	17
Nationwide Life Ins. Co.	SBIC	20.5	20.5	A+	A+	16	15
Prudential Ins. Co. of America	SBIC	24.5	24.5	AA-	AA-	16	16
Transamerica Life Ins. Co.	SBIC	23.1	23.1	A+	A+	15	15

1: The quality rating shown represents the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch. Ratings shown as NR/NA are not rated or not available security ratings.

2: SBIC = Security Backed Investment Contract. SAGIC = Separate Account GIC

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

CONTRACT ISSUER CREDIT REVIEW PROCESS

OVERSIGHT

Galliard Credit Working Group

- **MEMBERSHIP**: includes all analysts and traders from both the Credit Sector Team and Structured Sector Team
- Reports contract issuer credit oversight to Galliard's Stable Value Strategy Committee

CREDIT REVIEW PROCESS

Approved Issuer List

- The Credit Working Group maintains an approved list of contract issuers on an ongoing basis
- All contracts used in stable value accounts must be written by an approved issuer

Credit Working Group Review, Approval & Monitoring

- Meets monthly to review issuer credit quality and firm-wide exposure to approved contract issuers
- Oversees analysts' due diligence and formal credit reviews for each issuer
- Fundamental analysis of issuers includes:
 - Financial statements and ratios
 - Business model and product mix
 - Industry, economic, and regulatory environment
 - Regulatory ratios
 - Ratings agency analysis
 - Other third party research services (e.g. ALIRT, SNL)
 - Periodic due diligence calls and/or on-site visits

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

HOLDINGS

STATE OF NORTH CAROLINA STABLE VALUE FUND PORTFOLIO HOLDINGS

March 31, 2021

Asset ID	Security Description	Contract ¹ Type	Manager	Book Value (\$)	Market Value (\$)	Market/Book Value Ratio (%)	% of Portfolio	Crediting Rate (%) ²	UCA Yield (%)	Effective Duration (yrs)	Galliard Composite Rating	Wrap Fees (bps)
LIQUIDITY BUFFER												
	Cash Receivable / (Payable)			-1,368,801	-1,368,801	100.0	-0.1	0.11	0.11	0.10	AAA	
9983008\$P	WF/BlackRock Short Term Investment Fund S			48,195,766	48,195,766	100.0	2.0	0.11	0.11	0.10	AAA	
TOTAL LIQUIDITY BUFFER				46,826,965	46,826,965	100.0	2.0	0.11	0.11	0.10	AAA	
SHORT PORTFOLIO												
946996EE1	American General Life Ins. Co.	SBIC	Galliard	230,149,449	236,612,851	102.8	9.7	2.03	0.58	1.90	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	Galliard	211,692,323	216,461,003	102.3	8.9	2.01	0.58	1.90	A+	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	Galliard	115,339,156	120,157,722	104.2	4.9	2.44	0.58	1.90	AA-	16.0
600996QF2	Transamerica Life Ins. Co.	SBIC	Galliard	231,295,642	238,541,623	103.1	9.7	2.07	0.58	1.90	A+	15.0
TOTAL SHORT PORTFOLIO				788,476,570	811,773,198	103.0	33.2	2.10	0.58	1.90	A+	
INTERMEDIATE PORTFOLIO												
590994VM8	Metropolitan Life Ins. Co.	SAGIC	Dodge & Cox	246,329,354	255,175,895	103.6	10.4	2.62	1.40	3.80	AA-	17.0
946996EE1	American General Life Ins. Co.	SBIC	Payden & Rygel	234,972,387	241,571,234	102.8	9.9	2.03	1.23	4.00	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	Galliard	274,150,602	280,326,246	102.3	11.5	2.01	1.30	3.91	A+	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	Jennison Assoc.	226,567,271	236,032,653	104.2	9.5	2.44	1.00	4.01	AA-	16.0
744999CV3	Prudential Ins. Co. of America	SBIC	PGIM	240,455,223	250,500,808	104.2	10.1	2.44	1.47	4.40	AA-	16.0
600996QF2	Transamerica Life Ins. Co.	SBIC	TCW	234,327,778	241,668,749	103.1	9.9	2.07	1.10	4.10	A+	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	Galliard	81,539,401	84,093,850	103.1	3.4	2.07	1.30	3.91	A+	15.0
TOTAL INTERMEDIATE PORTFOLIO				1,538,342,016	1,589,369,435	103.3	64.8	2.25	1.26	4.03	A+	
TOTAL PORTFOLIO				2,373,645,550	2,447,969,597	103.1	100.0	2.16	1.01	3.25	A+	

1: SAGIC = Separate Account GIC. SBIC = Security Backed Investment Contract.

2: Crediting rates are net of wrap fees and any other fees being netted out of the rates.

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW EXPENSES

TOTAL ANNUAL FUND OPERATING EXPENSES

Total Annual Operating Expenses are deducted directly from the Fund's net asset value and reduce the investment option's rate of return.

Expense	Expense Ratio 3/31/21	Per \$1000	Est. Annual Revenue
Investment Management Fees paid to Galliard	0.059%	\$0.59	\$1,393,276
Investment Management fees paid to Non-Affiliated Investment Advisors	0.056%	\$0.56	\$1,320,575
Investment Contract Fees* ¹	0.152%	\$1.52	\$3,597,730
Acquired Fund Fees ²	0.002%	\$0.02	\$38,577
- Investment Contract Fees	None	None	None
- Other Acquired Fund Fees and Non-Affiliated Investment Management Fees paid to Non-Affiliated Investment Advisors ³	0.002%	\$0.02	\$38,577
12b-1 Distribution Fee	None	None	None
Other Expenses ⁴	0.027%	\$0.27	\$636,137
Total Annual Fund Operating Expenses⁵	0.294%	\$2.94	\$6,986,275

*Changes have occurred to the fee schedule structure since the prior period. Please contact your Galliard representative if you have additional questions.

- 1: These are fees paid to create and maintain the investments used by a stable value fund.
- 2: These are fees borne indirectly by the Fund when it acquires an interest in another fund which pays its own separate fees.
- 3: Includes audit fees for the cost of producing a report by a qualified auditor.
- 4: NC's administrative fee of 0.025% is included in Other Expenses, remaining fees are service fees.
- 5: Total Annual Fund Operating Expenses are reflected daily in the Fund's net asset value (NAV).

Excluding STIF or money market allocations, non-affiliated investment advisors include Dodge & Cox , Jennison Assoc., Payden & Rygel, PGIM, TCW.

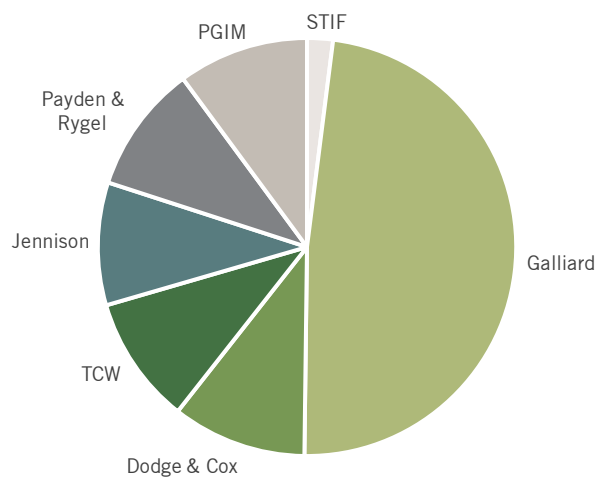
SECTION III

STATE OF NORTH CAROLINA STABLE VALUE FUND MANAGER STYLES

	Investment Approach	Sector Rotation	Active Duration/ Yield Curve Mgmt.	Issue Selection	SECTOR EMPHASIS
GALLIARD	 Bottom Up Top Down	 Low High	 Low High	 Less Important More Important	Diversified high quality spread sector emphasis, multi-sector relative value
DODGE & COX	 Bottom Up Top Down	 Low High	 Low High	 Less Important More Important	Corporate credit, Agency MBS
TCW	 Bottom Up Top Down	 Low High	 Low High	 Less Important More Important	Duration, multi-sector relative value
JENNISON	 Bottom Up Top Down	 Low High	 Low High	 Less Important More Important	Credit, yield-curve positioning
PAYDEN & RYGEL	 Bottom Up Top Down	 Low High	 Low High	 Less Important More Important	Corporate credit, structured credit, multi-sector relative value
PGIM	 Bottom Up Top Down	 Low High	 Low High	 Less Important More Important	Multi-sector relative value, Agency MBS, global focus

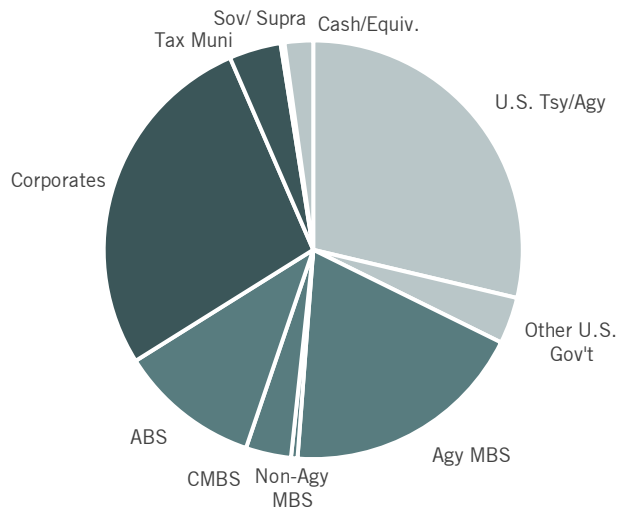
STATE OF NORTH CAROLINA STABLE VALUE FUND PORTFOLIO AS OF 3/31/21

MANAGER ALLOCATION



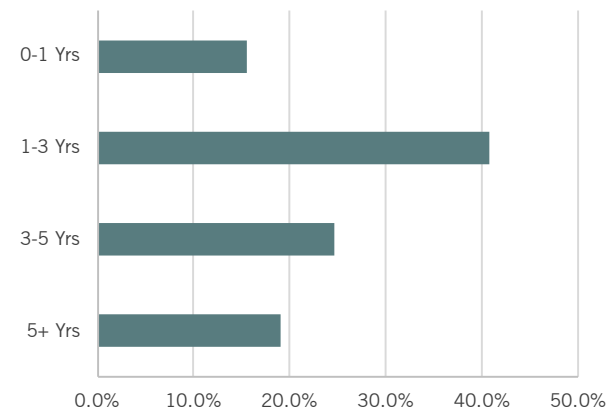
STIF	2.0%
Galliard	48.2%
Dodge & Cox	10.4%
TCW	9.9%
Jennison	9.5%
Payden & Rygel	9.9%
PGIM	10.1%
TOTAL EXT. MANAGER	49.8%
TOTAL PORTFOLIO	100%

UNDERLYING FIXED INCOME SECTOR ALLOCATION



U.S. Tsy/Agy	28.7%
Other U.S. Gov't	3.6%
Agy MBS	18.9%
Non-Agy MBS	0.5%
CMBS	3.5%
ABS	10.9%
Corporates	27.4%
Tax Muni	4.0%
Sov/Supra	0.3%
Cash/Equiv.	2.2%

UNDERLYING DURATION DISTRIBUTION



0-1 Yrs	15.5%
1-3 Yrs	40.8%
3-5 Yrs	24.7%
5+ Yrs	19.0%

STATE OF NORTH CAROLINA STABLE VALUE FUND

MARKET VALUE PERFORMANCE SUMMARY AS OF 3/31/21¹

	3 Month	1 Year	3 Year	5 Year	Since Inception	Inception Date
SHORT DURATION						
Galliard (before fees)	(0.20)	3.24	-	-	3.62	6/1/2018
Bloomberg Barclays U.S. 1-3 Yr. Government/Credit	(0.04)	1.57	-	-	3.12	
Value Added²	(0.16)	1.67	-	-	0.50	
INTERMEDIATE DURATION						
Dodge & Cox (before fees)	(1.57)	4.69	4.85	3.42	3.17	3/1/2015
Bloomberg Barclays U.S. Intermediate Aggregate	(1.61)	1.38	4.17	2.66	2.62	
Value Added²	0.04	3.31	0.67	0.77	0.55	
Galliard (before fees)	(1.46)	3.50	-	-	4.95	6/1/2018
Bloomberg Barclays U.S. Intermediate Aggregate	(1.61)	1.38	-	-	4.38	
Value Added²	0.15	2.12	-	-	0.57	
Jennison (before fees) ³	(1.95)	2.36	4.96	3.28	5.28	5/1/2018
Bloomberg Barclays U.S. Intermediate Govt/Credit	(1.86)	2.01	4.36	2.75	4.67	
Value Added²	(0.09)	0.35	0.60	0.53	0.61	
Payden & Rygel (before fees)	(1.48)	2.97	4.62	3.14	2.56	7/1/2009
Bloomberg Barclays U.S. Intermediate Aggregate ⁴	(1.61)	1.38	4.23	2.71	2.04	
Value Added²	0.13	1.59	0.40	0.43	0.52	
PGIM (before fees)	(1.76)	4.60	4.61	3.18	3.36	2/1/2016
Bloomberg Barclays U.S. Intermediate Aggregate	(1.61)	1.38	4.17	2.66	2.78	
Value Added²	(0.15)	3.22	0.44	0.52	0.58	
TCW (before fees)	(1.47)	3.72	-	-	5.32	6/1/2018
Bloomberg Barclays U.S. Intermediate Govt/Credit	(1.86)	2.01	-	-	4.59	
Value Added²	0.39	1.72	-	-	0.72	

1: Returns for periods of less than one year are not annualized.

2: May not add due to rounding.

3: Performance inception: May 1, 2018. Prior to May 1, 2018 returns are linked to Wells Fargo Fixed Income Fund N (Jennison)

4: Linked Benchmark: Bloomberg Barclays U.S. Intermediate Aggregate Bond Index. Prior to Jun 1, 2018 benchmark was Bloomberg Barclays U.S. 1-3 Year Government/Credit Bond Index.

STATE OF NORTH CAROLINA STABLE VALUE FUND PERFORMANCE COMMENTARY – EXCESS RETURN

GALLIARD SHORT -16 Q1 2021

- Overweight to 3-5 year part of the yield curve detracted, as the curve steepened over the quarter
- An allocation to Agency RMBS also hurt overall performance
- A higher quality bias in corporates security selection detracted as well
- Positioning in taxable municipals and Agency multi-family MBS proved beneficial

GALLIARD INTERMEDIATE +15 Q1 2021

- Overweight to spread sectors drove outperformance
- An allocation to taxable municipals proved particularly beneficial, as did security selection in Agency RMBS
- An overweight to the intermediate part of the curve was a drag on returns
- Security selection in corporates also detracted, as higher quality names underperformed

DODGE & COX +4 Q1 2021

- Although duration positioning did not significantly impact returns, yield curve positioning detracted over the quarter
- Security selection within Agency RMBS detracted from relative performance, but this was offset by a positive residual in the sector
- The impact of security selection within Corporates was slightly positive

JENNISON -9 Q1 2021

- Security selection within Corporates detracted due to the higher quality bias
- The out-of-benchmark allocation to Agency MBS and ABS contributed positively to performance
- Duration and yield curve positioning detracted due to a small duration overweight in the first half of the quarter

PAYDEN & RYGEL +13 Q1 2021

- The overweight to Corporates and Taxable Municipals added to performance, and the impact of security selection in Taxable Municipals also positive
- Although the underweight to Agency MBS detracted slightly from performance, the security selection within the sector benefitted performance
- Duration and curve positioning detracted slightly over the quarter

PGIM -15 Q1 2021

- Although the overweight to CMBS contributed positively to performance, this was mostly offset by the negative impact from security selection in the sector
- The underweight to Agency MBS detracted
- Duration and yield curve positioning also hurt relative performance over the quarter

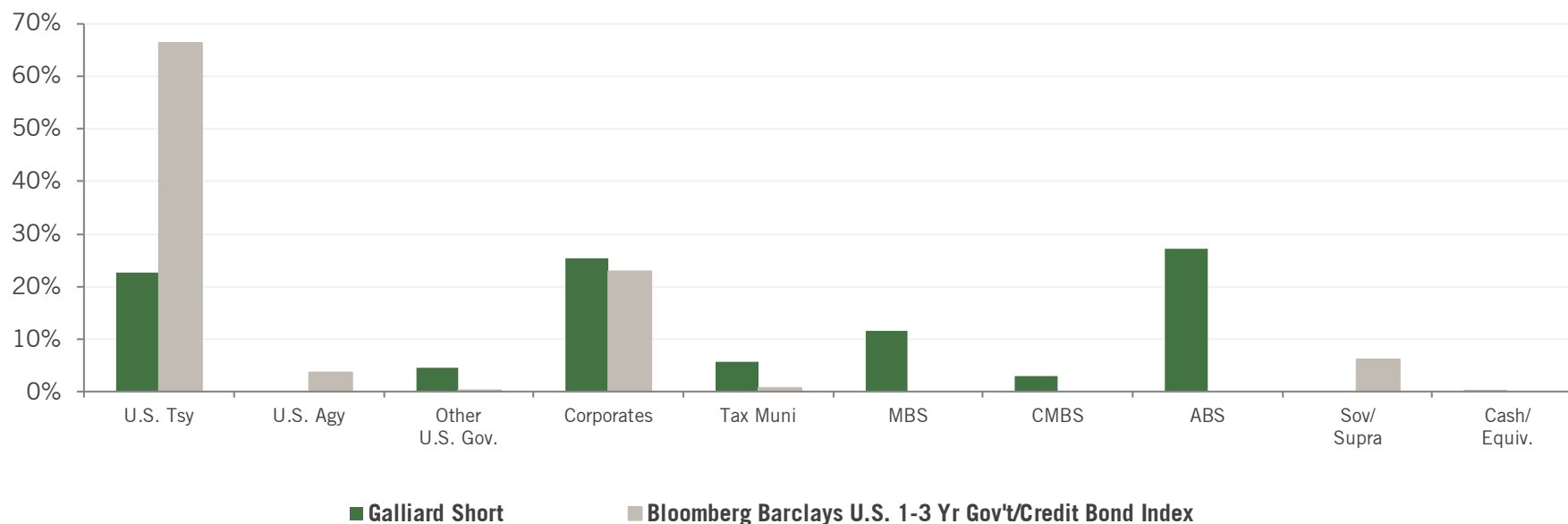
TCW +39 Q1 2021

- Short benchmark-relative duration positioning contributed positively to performance as the curve steepened over the quarter
- Security selection within Corporates and Municipals was also beneficial
- The out-of-benchmark allocation to ABS also had a slightly positive impact on relative performance

Before fees.

STATE OF NORTH CAROLINA STABLE VALUE FUND SHORT DURATION PORTFOLIO AS OF 3/31/21

BLOOMBERG BARCLAYS U.S. 1-3 YEAR GOVERNMENT/CREDIT BOND INDEX

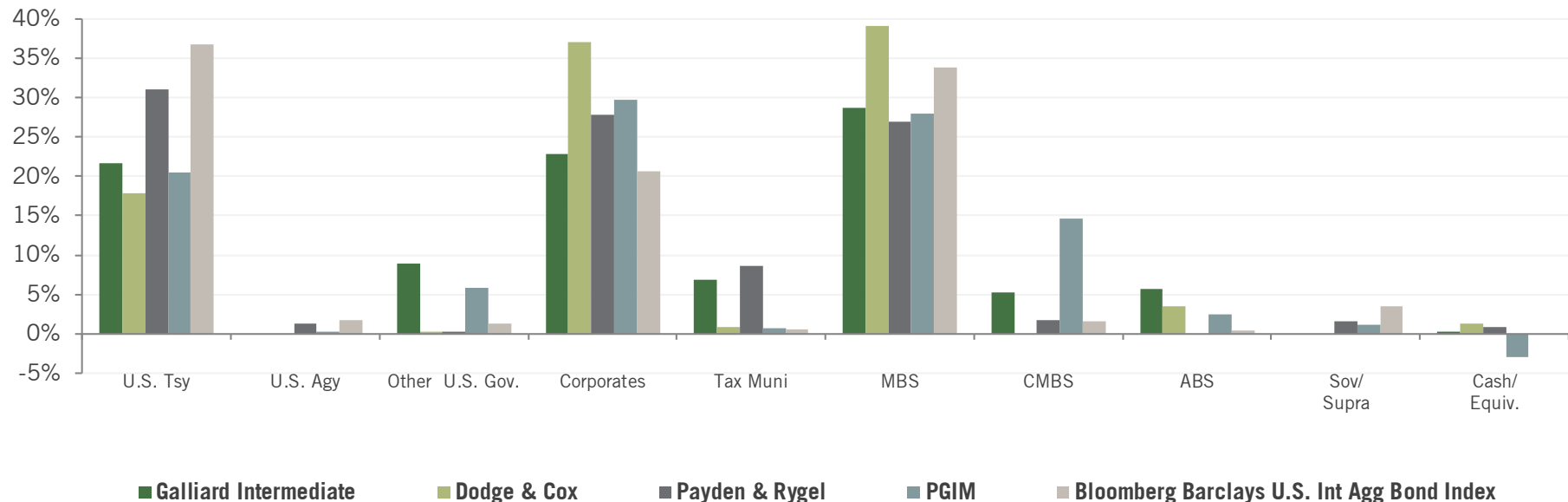


Characteristic	Galliard Short	Bloomberg Barclays U.S. 1-3 Yr Gov't/ Credit Bond Index
Weighted Average Quality ¹	AA+	AA+
Effective Duration	1.90 Yrs	1.86 Yrs
Yield to Maturity	0.58%	0.32%

1: The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.

STATE OF NORTH CAROLINA STABLE VALUE FUND INTERMEDIATE DURATION PORTFOLIOS AS OF 12/31/20

BLOOMBERG BARCLAYS U.S. INTERMEDIATE AGGREGATE BOND INDEX

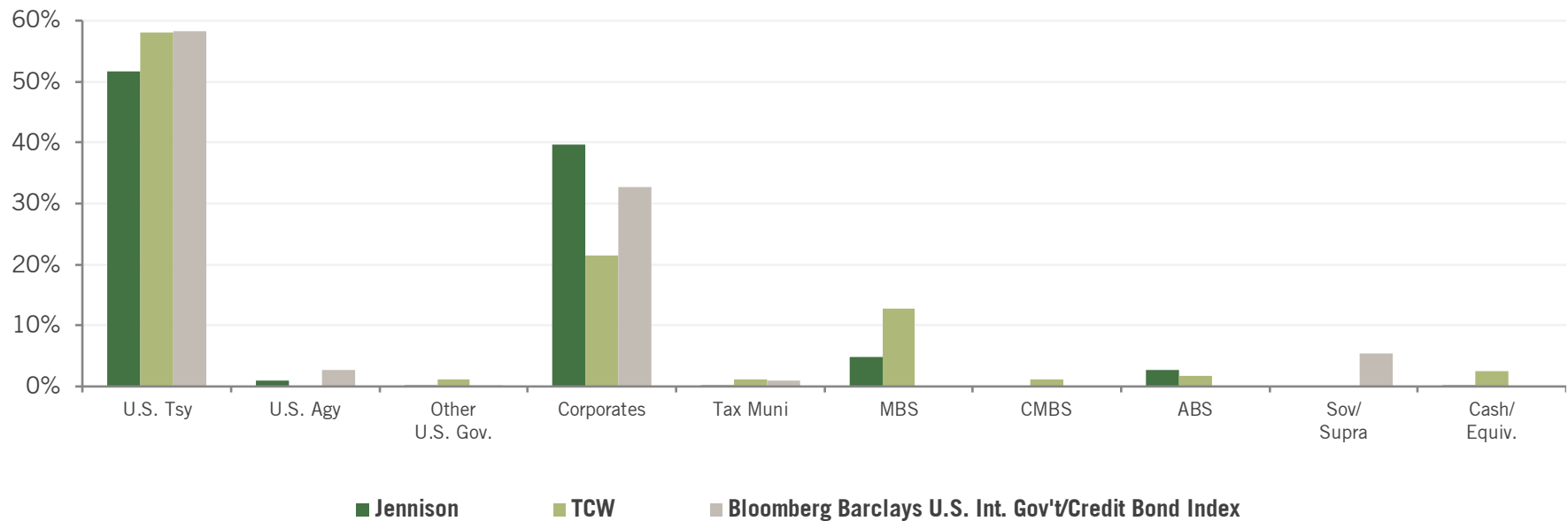


Characteristic	Galliard Intermediate	Dodge & Cox	Payden & Rygel	PGIM	Bloomberg Barclays U.S. Int Agg Bond Index
Weighted Average Quality ¹	AA+	AA-	AA	AA-	AA+
Effective Duration	3.91 Yrs	3.80 Yrs	4.00 Yrs	4.40 Yrs	4.09 Yrs
Yield to Maturity	1.30%	1.40%	1.23%	1.47%	1.29%

1: The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.

STATE OF NORTH CAROLINA STABLE VALUE FUND INTERMEDIATE DURATION PORTFOLIOS AS OF 12/31/20

BLOOMBERG BARCLAYS U.S. INTERMEDIATE GOVERNMENT/CREDIT BOND INDEX



Characteristic	Jennison	TCW	Bloomberg Barclays U.S. Int Gov't/Credit Bond Index
Weighted Average Quality ¹	AA	AA+	AA
Effective Duration	4.01 Yrs	4.10 Yrs	4.10 Yrs
Yield to Maturity	1.00%	1.10%	1.00%

1: The Weighted Average Quality of the portfolio has NOT been assessed by a nationally recognized statistical rating organization. The Weighted Average Quality shown represents an average quality of the individual holdings' Composite Ratings, as rated by S&P, Moody's and Fitch.