

State of North Carolina

FEBRUARY 23, 2023

STATE OF NORTH CAROLINA

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SECTION I

GALLIARD CAPITAL MANAGEMENT

WHO WE ARE

\$92.0 B

TOTAL AUM

\$75.7 B

TOTAL STABLE VALUE AUM

75+

STABLE VALUE SEPARATE ACCOUNTS

100

EMPLOYEES ON STAFF¹

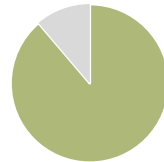
¹20 of which are Galliard-dedicated deferred professionals

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

~200

INSTITUTIONAL CLIENTS

CLIENT RELATIONSHIP TENURE



~89% of our clients have worked with Galliard for greater than **5 years**

72 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

18 Fortune 100 clients; **44** Fortune 500 clients²

²2022 Fortune 500 edition, data as of June 30, 2022

27 YEARS

OF EXCLUSIVE FOCUS ON

FIXED INCOME & STABLE VALUE

Senior Professionals
Average Years of Experience:

Stable value strategy and contract – **24**
Fixed income portfolio management – **22**

Galliard is one of the **largest** managers of stable value assets³

³Pensions & Investments May 31, 2022 edition, data as of December 31, 2021; Total assets 'ranked' are managed by Galliard and reported under Allspring Global Investments



Galliard is a subsidiary of Allspring Global Investments

GALLIARD CAPITAL MANAGEMENT

ORGANIZATION CHART AS OF 12/31/22

REPORT TO GALLIARD

EXECUTIVE MANAGEMENT TEAM:

Mike Norman
President & Senior Managing Principal

Ajay Mirza, CFA
Senior Managing Principal

FIXED INCOME INVESTMENT

Credit Brandon Kanz, CFA Senior Principal <i>Sector Head</i>	Structured Product Ajay Mirza, CFA Senior Managing Principal <i>Sector Head</i>
Rene Hoogmoed, CFA Senior Principal	Matt Robertson, CFA Senior Principal
Matt Bentley Principal	Mike Meerovich Director
Chad Callahan Principal	Tyler Wadsworth, CFA Associate Director
Robert Barrett, CFA Senior Director	Jimmie Wu, CFA Associate Director
John Kenley, CFA Senior Director	David Que, CFA Senior Associate
Will Moeller, CFA Director	Sanhakorn Rattanaheeworn Senior Associate

PORTFOLIO & RELATIONSHIP MANAGEMENT

Portfolio Andrea Johnson, CFA Senior Principal	Relationship Tami Pearse Principal	Conor Murphy, CFA Senior Director
Robert Crandall, CFA Senior Director	Paul Langanki, CFA Senior Director	Pete Schmit, CFA Senior Director
Michael Amundsen Director	Alesha McAdams Senior Director	Jordan Bewley Director
Elizabeth Smithley Associate Director	Steve Moen Senior Director	Ryan Olsen Director
	Jaime Morgan Senior Director	Linh Buoen Associate Director

CLIENT SUPPORT

Jennifer Lammers Senior Principal	Stable Value Timothy Noel Associate Director <i>Lead</i>	Fixed Income Steve Patterson Associate <i>Lead</i>
Jennifer Hopper, CFA Associate Director	David Ring, CFA Associate	Luke Olson Senior Associate
Shanna Ellefson Associate Director	Derek Schmidt Associate	

STABLE VALUE STRATEGY/CONTRACT

Nick Gage, CFA Senior Principal	Kathryn Taguinod Associate
Christina Burton Director	Kendra Marquez Associate

MARKETING & RFP

RFP Kelly Lassi Associate Director	Marketing Jacqueline Becker Senior Associate
Desiree Wright Associate	

INVESTMENT COMPLIANCE

Andrew McKessock Director	Brian Heruth Senior Associate
Matt Brown Associate Director	Leah Schermann Senior Associate

REPORT TO ALLSPRING

TECHNOLOGY

George Jones* Senior Director	Christopher Smith* Senior Director
Charlie Head* Associate Director	Heather Goserud, CFA Associate Director
Will Ingle* Associate Director	Christian Asilo* Senior Associate
Ben Modica* Associate Director	Baber Khan Senior Associate
Mark Perzichilli* Senior Associate	Joe Ostrowski* Associate
Ahmed Taher* Senior Associate	
Scott Lackey* Associate	
Suresh Sankaranarayanan* Associate	

OPERATIONS

Jennifer Miller Senior Director	Jason Skull* Associate Director	Rath Chak Associate	Phil Nguyen* Associate
Carmen Rangel, CPA Senior Director	Trevor Fletcher Senior Associate	Olana Gameda Associate	Alex Ostrovksy Associate
Pete Anderson Director	Phil Kos* Senior Associate	Pam Helmueller* Associate	Jesse Perzichilli Associate
Brian Brooks Director	Christopher LaMere Senior Associate	Jin Heo Associate	Christina Peters Associate
Rasaan Ellison* Director	Matt Remington Senior Associate	Natalia Kolakowska Associate	Bre Richie Associate
Michelle Boss* Associate Director	Brent Thornton* Senior Associate	Pashia Lor Associate	Brad Sillanpa Associate
Michael Bouska Associate Director	Atu Akaa* Associate	Margo Monson Associate	Melaina Sachdeva Associate
Stephanie Ripley Associate Director	Dana Blomgren* Associate	Mike Myers Associate	

LEGAL/COMPLIANCE

Firm Compliance Brian Renelt Chief Compliance Officer	Chris Benedict Associate	Legal David Lui Principal
Laurie Kern Associate Director	Ellen Rivard Associate	Paula Novick Principal
PROJECT MANAGEMENT		
Lisa Anderson Director		
Emily Myers Senior Associate		

OTHER SERVICES PROVIDED BY ALLSPRING INCLUDE:

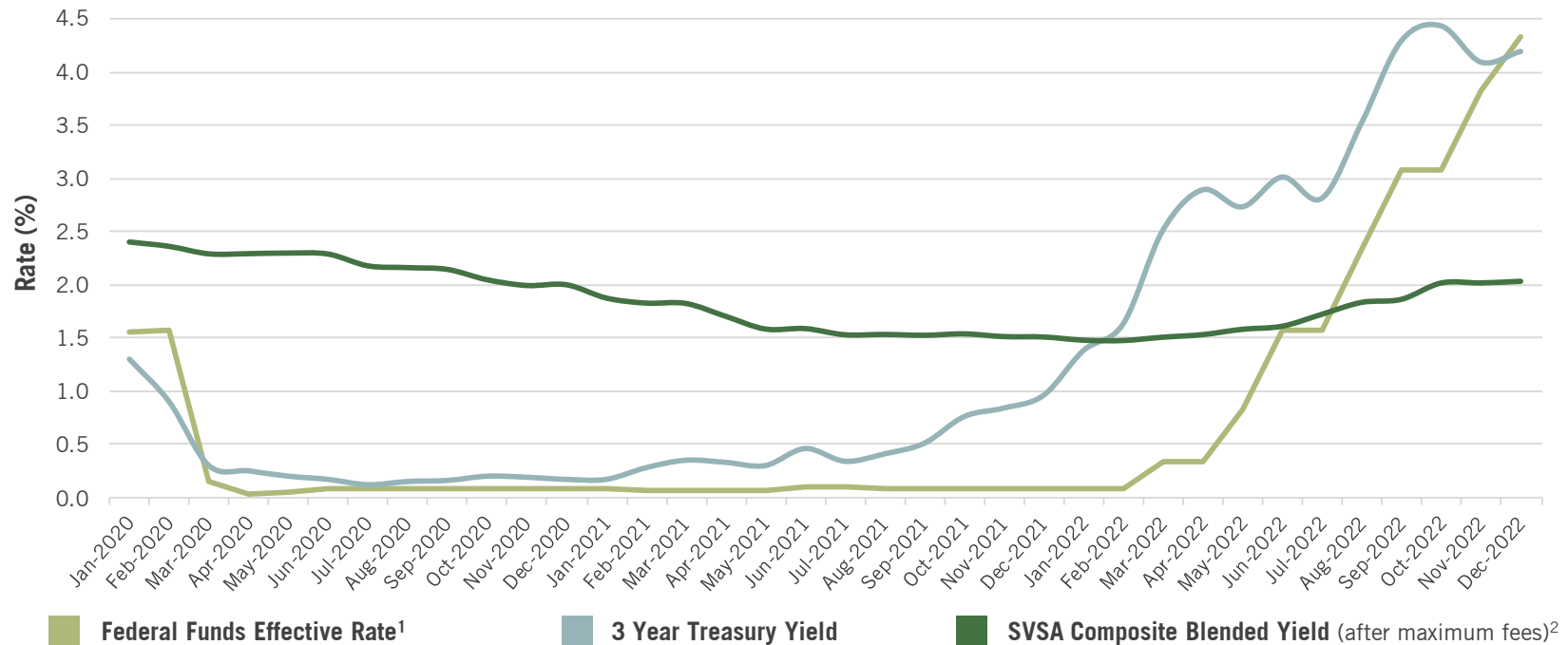
Human Resources Finances Technology Infrastructure Risk Management

FOR INSTITUTIONAL INVESTOR USE ONLY.

*Deferred professional at Allspring close (11/1/21). Temporarily reporting to Wells Fargo under TSA.

SECTION II

GALLIARD CAPITAL MANAGEMENT HISTORICAL RATES AS OF 12/31/2022



- Having raised its policy rate by 425 bps since March, the Fed is currently in the fastest, most aggressive policy tightening environment since 1981.
- As the Fed increased its policy rate, 2-Year Treasuries also moved higher by 370 bps while 10-Year Treasuries sold off 237 bps - resulting in cumulative 133 bps of curve flattening which represents the most deeply inverted yield curve in 40 years.
- With a dramatic move higher in interest rates, fixed income total returns were dismal in historic proportions. Looking back to the inception (1976) of the Bloomberg U.S. Aggregate and Intermediate Aggregate Indices, the total return experience of 2022 was the worst annual return on record.
- With a tailwind of higher interest rates, fixed income portfolio yield to maturity has also moved substantially higher over this past year as we've been able to invest and reinvest at higher overall yields.
- Despite the volatility in the market over the past three years and a backdrop of higher interest rates, stable value crediting rates continue to deliver positive total returns to participants and blended yields continue to trend higher, as the contract crediting rates continue to follow the general direction of interest rates but with a lag as expected.

1: Effective Federal Funds Rate sourced from the Federal Reserve. Rates are not annualized.

2: Blended yield is after all fees including the current maximum investment management fee of 0.20% which may be charged by Galliard for management of a client's account. From April 1, 2017 to June 30, 2020 Galliard's maximum fee was 0.35%. Historical amounts reflect these fee deductions on their respective dates.

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STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

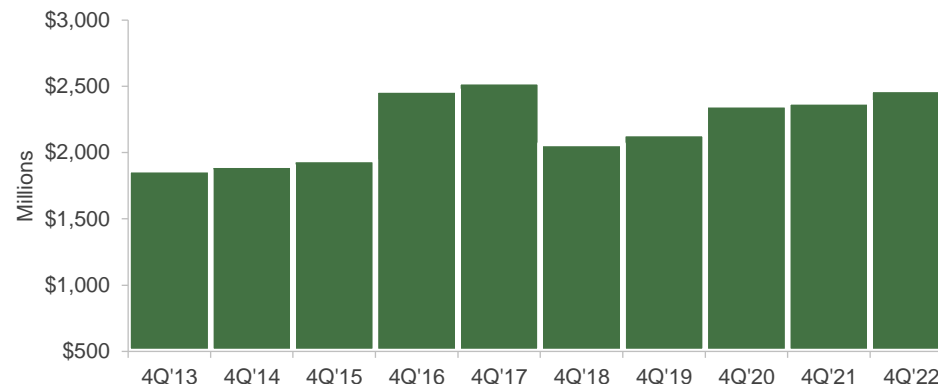
PORTFOLIO CHARACTERISTICS

STATE OF NORTH CAROLINA STABLE VALUE FUND

ACCOUNT SUMMARY

Benchmark	ICE BofA US 3-Month Tsy Bill Index+150 bps, 3 Year Constant Maturity Treasury
Galliard Inception Date	December 1, 2010
Net Asset Value	\$2,475,905,483

HISTORICAL FUND ASSETS



PORTFOLIO CHARACTERISTICS

	Portfolio 9/30/22	Portfolio 12/31/22
Average Quality - Book Value¹	A+	A+
Average Quality - Market Value²	AA	AA
Number of Contract Issuers	5	5
Blended Yield (after all fees)³	1.94%	2.20%
Yield to Maturity	4.92%	5.03%
Effective Duration	3.39 years	3.32 years
Market/Book Value Ratio	92.00%	92.87%

PORTFOLIO DISTRIBUTION

	% Portfolio 9/30/22	% Portfolio 12/31/22
Liquidity Buffer: Cash & Equivalents⁴	1.8	2.1
Short Portfolio	34.7	34.4
Intermediate Portfolio	63.5	63.4
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, collective fund administrative fees, and plan administrative reimbursement.

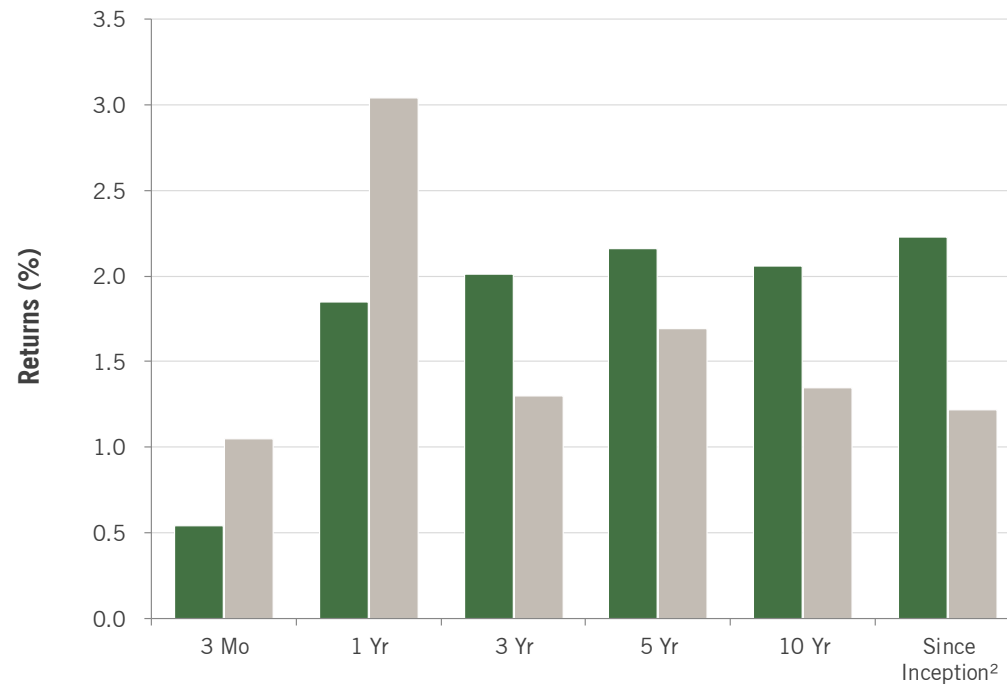
4: Includes Receivables and Payables.

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 12/31/22¹



	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	0.54	1.85	2.01	2.16	2.06	2.23
3 Year Constant Maturity Treasury Yield	1.05	3.04	1.30	1.69	1.35	1.22
ICE BofA U.S. 3-Month Treasury Bill Index + 150 bps	1.22	2.99	2.24	2.79	2.28	2.17
Value Added (net of all fees - NAV level)⁴	(0.51)	(1.19)	0.70	0.47	0.71	1.01

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

2: 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.

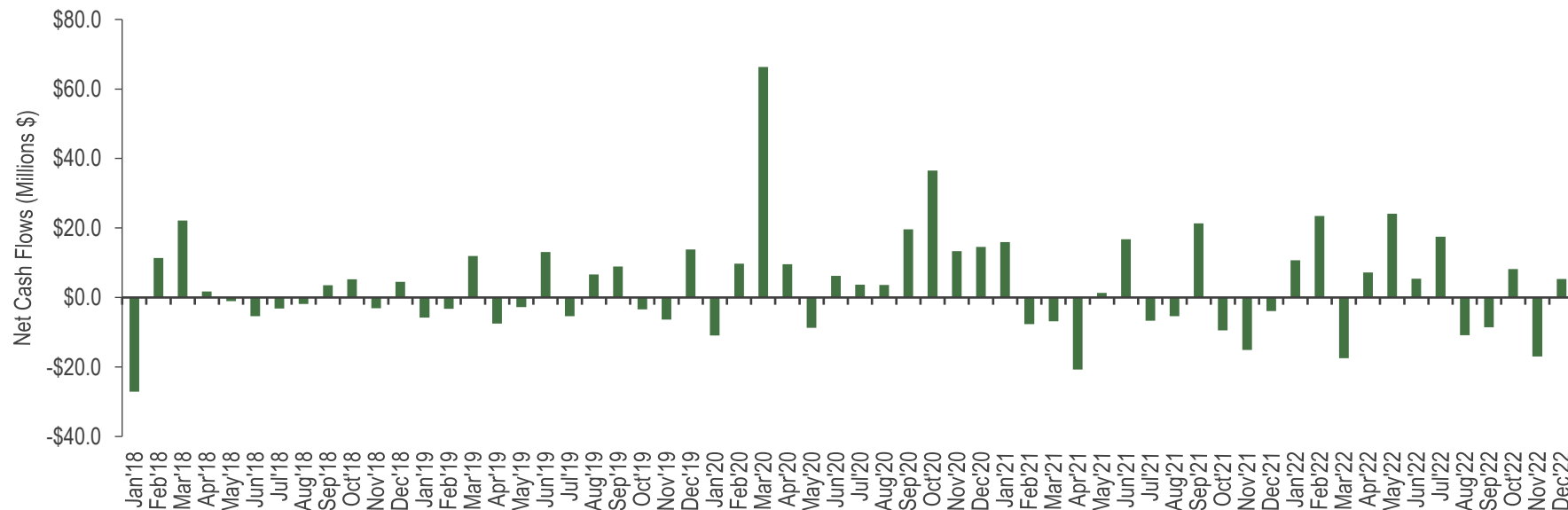
3: Returns are net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external managers fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement

4: May not add due to rounding.

STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

HISTORICAL CASHFLOWS

HISTORICAL CASHFLOWS



	2018	2019	2020	2021	1Q'22	2Q'22	3Q'22	4Q'22	2022 YTD
Beginning Assets	\$2,535.1	\$2,069.8	\$2,143.4	\$2,360.5	\$2,382.4	\$2,408.7	\$2,455.8	\$2,465.9	\$2,382.4
Net Cash Flow (\$)¹	\$6.9³	\$19.8	\$163.5	-\$20.3	\$16.7	\$36.8	-\$1.9	-\$3.5	\$48.1
Net Cash Flow (%)	0.27%	0.95%	7.63%	-0.86%	0.70%	1.53%	-0.08%	-0.14%	2.02%
Estimated Investment Earnings	\$51.6	\$53.9	\$53.5	\$42.2	\$9.5	\$10.3	\$12.1	\$13.4	\$45.4
Ending Assets²	\$2,069.8	\$2,143.4	\$2,360.5	\$2,382.4	\$2,408.7	\$2,455.8	\$2,465.9	\$2,475.9	\$2,475.9

1: Contributions, Withdrawals and Investment Transfers

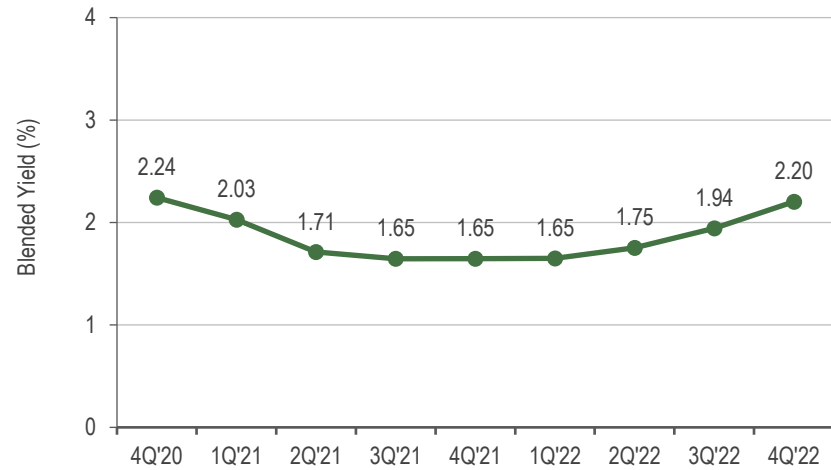
2: Cashflows may not net to final assets due to rounding.

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

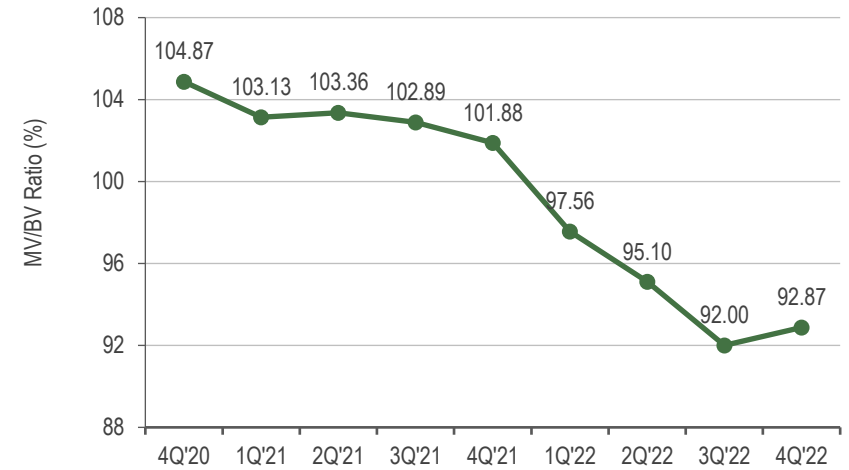
STATE OF NORTH CAROLINA STABLE VALUE PORTFOLIO REVIEW

HISTORICAL STATS

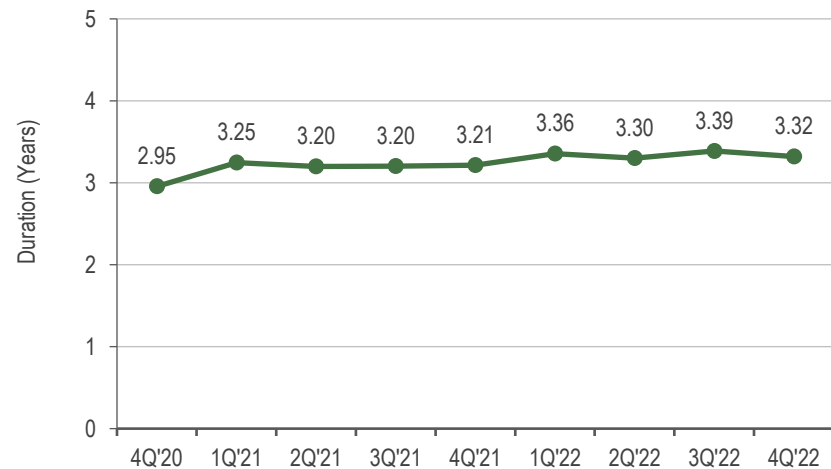
HISTORICAL BLENDED YIELD¹



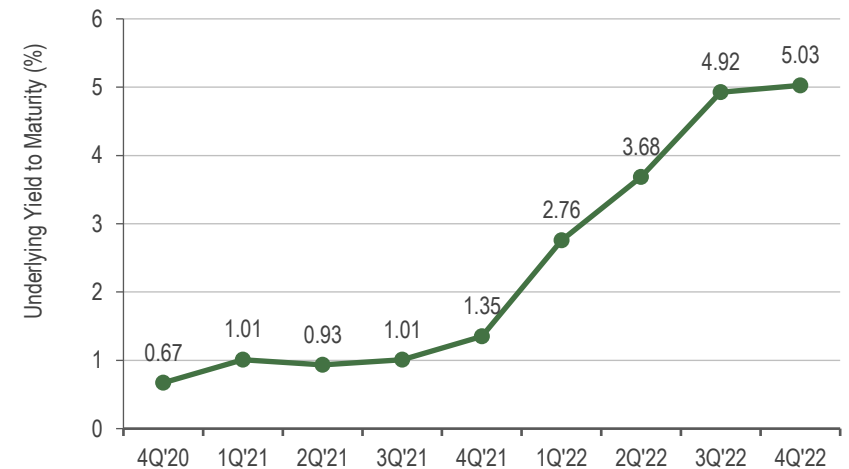
HISTORICAL MARKET VALUE TO BOOK VALUE RATIO



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, 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 9/30/22	% Portfolio 12/31/22	Rating 9/30/22	Rating 12/31/22	Wrap Fees (bps) 9/30/22	Wrap Fees (bps) 12/31/22
American General Life Ins. Co.	SBIC	19.6	19.5	A+	A+	15	15
Metropolitan Life Ins. Co.	SAGIC	10.4	10.4	AA-	AA-	17	17
Nationwide Life Ins. Co.	SBIC	20.4	20.4	A+	A+	15	15
Prudential Ins. Co. of America	SBIC	24.7	24.6	AA-	AA-	15	15
Transamerica Life Ins. Co.	SBIC	23.1	23.0	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

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)			-1,419,051	-1,419,051	100.0	-0.1	4.44	4.44	0.10	AAA	
9983008\$P	Short-Term Investment Fund A S			54,306,682	54,306,682	100.0	2.2	4.44	4.44	0.10	AAA	
TOTAL LIQUIDITY BUFFER				52,887,631	52,887,631	100.0	2.1	4.44	4.44	0.10	AAA	
SHORT PORTFOLIO												
946996EE1	American General Life Ins. Co.	SBIC	Galliard	188,995,518	175,244,202	92.7	7.6	2.24	5.15	1.83	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	Galliard	198,967,427	183,988,326	92.5	8.0	2.10	5.15	1.83	A+	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	Galliard	240,198,757	224,394,339	93.4	9.7	2.49	5.15	1.83	AA-	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	Galliard	224,413,048	208,485,546	92.9	9.1	2.32	5.15	1.83	A+	15.0
TOTAL SHORT PORTFOLIO				852,574,749	792,112,413	92.9	34.4	2.30	5.15	1.83	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 HOLDINGS

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)
INTERMEDIATE PORTFOLIO												
590994VM8	Metropolitan Life Ins. Co.	SAGIC	Dodge & Cox	256,349,357	233,571,501	91.1	10.4	2.01	5.14	4.14	AA-	17.0
946996EE1	American General Life Ins. Co.	SBIC	PGIM	108,126,337	100,259,063	92.7	4.4	2.24	5.06	4.44	A+	15.0
946996EE1	American General Life Ins. Co.	SBIC	TCW	53,768,737	49,856,523	92.7	2.2	2.24	4.93	4.21	A+	15.0
946996EE1	American General Life Ins. Co.	SBIC	Payden & Rygel	52,062,646	48,274,567	92.7	2.1	2.24	4.94	4.39	A+	15.0
946996EE1	American General Life Ins. Co.	SBIC	Galliard	26,173,292	24,268,923	92.7	1.1	2.24	5.03	4.39	A+	15.0
946996EE1	American General Life Ins. Co.	SBIC	Jennison Assoc.	54,563,564	50,593,518	92.7	2.2	2.24	4.70	3.86	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	TCW	55,665,358	51,474,637	92.5	2.2	2.10	4.93	4.21	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	Galliard	138,350,235	127,934,650	92.5	5.6	2.10	5.03	4.39	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	Payden & Rygel	55,364,181	51,196,134	92.5	2.2	2.10	4.94	4.39	A+	15.0
896994GW4	Nationwide Life Ins. Co.	SBIC	Jennison Assoc.	55,635,310	51,446,851	92.5	2.2	2.10	4.70	3.86	A+	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	Galliard	89,489,164	83,601,023	93.4	3.6	2.49	5.03	4.39	AA-	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	Jennison Assoc.	66,893,903	62,492,468	93.4	2.7	2.49	4.70	3.86	AA-	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	TCW	68,191,643	63,704,820	93.4	2.8	2.49	4.93	4.21	AA-	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	Payden & Rygel	67,822,442	63,359,912	93.4	2.7	2.49	4.94	4.39	AA-	15.0
744999CV3	Prudential Ins. Co. of America	SBIC	PGIM	76,638,434	71,595,835	93.4	3.1	2.49	5.06	4.44	AA-	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	TCW	62,002,775	57,602,188	92.9	2.5	2.32	4.93	4.21	A+	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	Galliard	98,776,143	91,765,601	92.9	4.0	2.32	5.03	4.39	A+	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	Jennison Assoc.	63,019,418	58,546,675	92.9	2.5	2.32	4.70	3.86	A+	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	Payden & Rygel	62,982,569	58,512,441	92.9	2.5	2.32	4.94	4.39	A+	15.0
600996QF2	Transamerica Life Ins. Co.	SBIC	PGIM	58,567,595	54,410,816	92.9	2.4	2.32	5.06	4.44	A+	15.0
TOTAL INTERMEDIATE PORTFOLIO				1,570,443,103	1,454,468,147	92.6	63.4	2.25	4.97	4.25	A+	
TOTAL PORTFOLIO				2,475,905,483	2,299,468,190	92.9	100.0	2.32	5.03	3.32	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 12/31/22	Per \$1000	Est. Annual Revenue
Investment Management Fees paid to Galliard	0.053%	\$0.53	\$1,316,567
Investment Management fees paid to Non-Affiliated Investment Advisors	0.057%	\$0.57	\$1,401,618
Investment Contract Fees ¹	0.149%	\$1.49	\$3,685,797
Acquired Fund Fees ²	0.002%	\$0.02	\$48,876
-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	\$48,876
12b-1 Distribution Fee	None	None	None
Other Expenses ⁴	0.014%	\$0.14	\$354,054
Total Annual Fund Operating Expenses⁵	0.275%	\$2.75	\$6,806,912

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 0.0125% is included in Other Expenses.

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

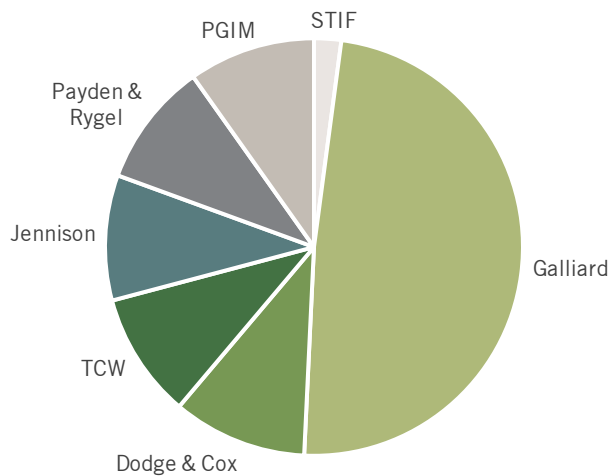
STATE OF NORTH CAROLINA STABLE VALUE FUND MANAGER STYLES

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

STATE OF NORTH CAROLINA STABLE VALUE FUND

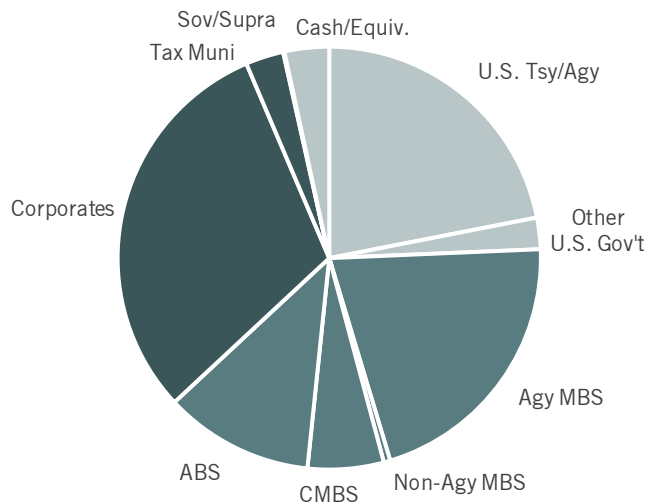
PORTFOLIO AS OF 12/31/22

MANAGER ALLOCATION



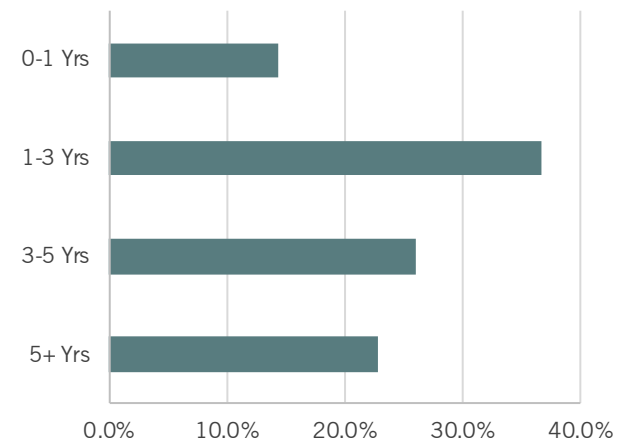
STIF	2.1%
Galliard	48.6%
Dodge & Cox	10.4%
TCW	9.7%
Jennison	9.7%
Payden & Rygel	9.6%
PGIM	9.8%
TOTAL EXT. MANAGER	49.2%
TOTAL PORTFOLIO	100%

UNDERLYING FIXED INCOME SECTOR ALLOCATION



U.S. Tsy/Agy	21.9%
Other U.S. Gov't	2.4%
Agy MBS	21.0%
Non-Agy MBS	0.5%
CMBS	5.8%
ABS	11.4%
Corporates	30.5%
Tax Muni	2.9%
Sov/Supra	0.1%
Cash/Equiv.	3.4%

UNDERLYING DURATION DISTRIBUTION



0-1 Yrs	14.4%
1-3 Yrs	36.7%
3-5 Yrs	26.1%
5+ Yrs	22.8%

STATE OF NORTH CAROLINA STABLE VALUE FUND

MARKET VALUE PERFORMANCE SUMMARY AS OF 12/31/22¹

	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr	Since Inception	Inception Date
SHORT DURATION							
Galliard (before fees)	1.03	(3.58)	0.04	-	-	1.37	6/1/2018
Bloomberg U.S. 1-3 Yr. Government/Credit	0.89	(3.69)	(0.32)	-	-	0.99	
Value Added (before fees)²	0.14	0.11	0.35	-	-	0.38	
INTERMEDIATE DURATION							
Dodge & Cox (before fees)	2.39	(8.99)	(1.21)	0.85		1.30	3/1/2015
Dodge & Cox (after fees)	2.37	(9.08)	(1.31)	0.75		1.19	
Bloomberg U.S. Intermediate Aggregate	1.72	(9.51)	(1.93)	0.31		0.78	
Value Added (before fees)²	0.67	0.52	0.72	0.54	-	0.52	
Galliard (before fees)	1.81	(9.34)	(1.48)	-	-	0.98	6/1/2018
Bloomberg U.S. Intermediate Aggregate	1.72	(9.51)	(1.93)	-	-	0.54	
Value Added (before fees)²	0.08	0.16	0.45	-	-	0.43	
Jennison (before fees)	1.78	(8.06)	(0.68)	1.12	-	1.71	10/1/2013 ³
Jennison (after fees)	1.75	(8.15)	(0.78)	1.02	-	1.60	
Bloomberg U.S. Intermediate Govt/Credit	1.54	(8.23)	(1.26)	0.73	-	1.30	
Value Added (before fees)²	0.24	0.18	0.58	0.39	-	0.41	
Payden & Rygel (before fees)	1.84	(9.10)	(1.37)	0.87	0.98	1.54	7/1/2009
Payden & Rygel (after fees)	1.80	(9.22)	(1.51)	0.74	0.84	1.40	
Bloomberg U.S. Intermediate Aggregate ⁴	1.72	(9.51)	(1.93)	0.51	0.67	1.05	
Value Added (before fees)²	0.11	0.41	0.55	0.36	0.31	0.49	
PGIM (before fees)	2.06	(9.37)	(1.66)	0.63	-	1.13	2/1/2016
PGIM (after fees)	2.02	(9.49)	(1.79)	0.49	-	0.99	
Bloomberg U.S. Intermediate Aggregate	1.72	(9.51)	(1.93)	0.31	-	0.65	
Value Added (before fees)²	0.34	0.14	0.27	0.32	-	0.48	
TCW (before fees)	1.50	(8.46)	(0.88)	-	-	1.35	6/1/2018
TCW (after fees)	1.48	(8.55)	(0.97)			1.26	
Bloomberg U.S. Intermediate Govt/Credit	1.54	(8.23)	(1.26)	-	-	1.00	
Value Added (before fees)²	(0.04)	(0.23)	0.38	-	-	0.35	

1: Returns for periods of less than one year are not annualized. Returns after fees reflect additional investment contract or external management fees. Galliard managed portfolios do not have net returns as fees are charged within the stable value account.

2: May not add due to rounding.

3: Performance inception for the separate account was May 1, 2018. Prior to this date returns are linked to Galliard SA Intermediate Core Fund N.

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

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

GALLIARD SHORT +14 Q4 2022

- Curve positioning, with an overweight to 3-5 year maturities, added to returns
- An overweight to corporates and security selection in the sector added to relative performance
- Allocations to ABS and Agency RMBS detracted

DODGE & COX +67 Q4 2022

- The overweight to Corporates and security selection in the sector drove outperformance
- Within structured products, the impact of security selection in Agency RMBS had a negative impact relative performance
- Shorter benchmark relative duration and yield curve positioning was immaterial to performance

GALLIARD INTERMEDIATE +8 Q4 2022

- Overweight allocation to Corporates drove outperformance
- Curve positioning, with an overweight to intermediate maturities, also added to returns
- Security selection in Agency RMBS hurt relative performance

JENNISON +24 Q4 2022

- Overweight allocations to Corporates and MBS added to relative performance
- Allocations to Structured products had a mixed impact to performance
- Yield curve positioning slightly added to relative performance

PAYDEN & RYGEL +11 Q4 2022

- The overweight to Corporates and MBS drove outperformance
- Security selection within Corporates hurt relative performance
- Short benchmark relative duration and yield curve positioning contributed negatively to performance

PGIM +34 Q4 2022

- Overweight allocations to Corporates and MBS added to relative performance
- Security selection in Corporates and CMBS contributed positively to performance
- Duration and yield curve positioning did not materially impact performance

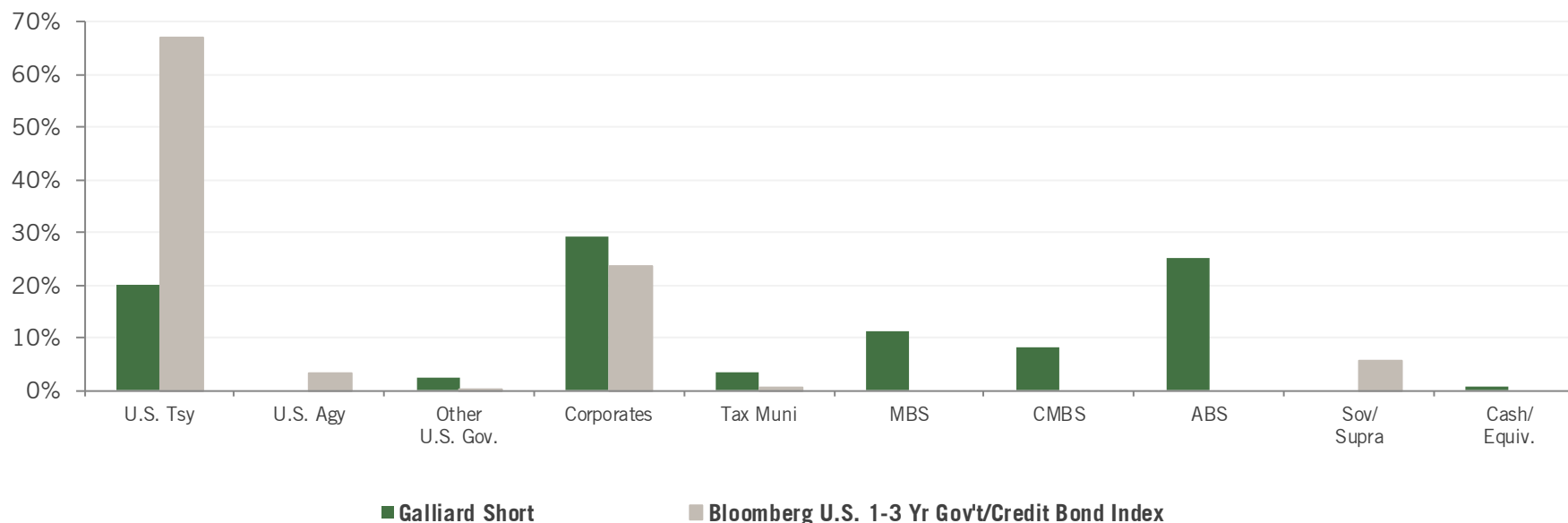
TCW -4 Q4 2022

- The out-of-benchmark allocation to MBS contributed positively to performance
- Security selection in MBS was the main detractor of performance
- Long benchmark relative duration and yield curve positioning detracted from relative performance

Before fees.

STATE OF NORTH CAROLINA STABLE VALUE FUND SHORT DURATION PORTFOLIO AS OF 9/30/22

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



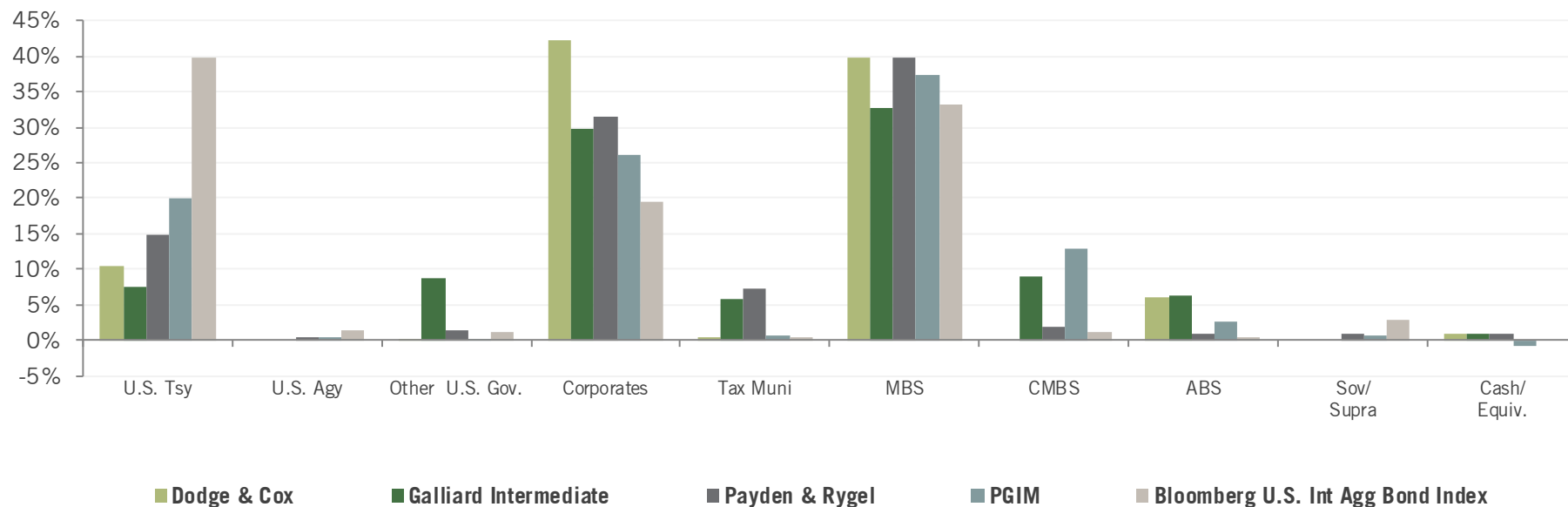
Characteristic	Galliard Short	Bloomberg U.S. 1-3 Yr Gov't/ Credit Bond Index
Weighted Average Quality ¹	AA	AA
Effective Duration	1.83 Yrs	1.80 Yrs
Yield to Maturity	5.15%	4.70%

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 9/30/22

BLOOMBERG U.S. INTERMEDIATE AGGREGATE BOND INDEX



Characteristic	Dodge & Cox	Galliard Intermediate	Payden & Rygel	PGIM	Bloomberg U.S. Int Agg Bond Index
Weighted Average Quality ¹	AA-	AA	AA	AA-	AA+
Effective Duration	4.14 Yrs	4.39 Yrs	4.39 Yrs	4.44 Yrs	4.47 Yrs
Yield to Maturity	5.14%	5.03%	4.94%	5.06%	4.64%

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 9/30/22

BLOOMBERG U.S. INTERMEDIATE GOVERNMENT/CREDIT BOND INDEX



Characteristic	Jennison	TCW	Bloomberg U.S. Int Gov't/Credit Bond Index
Weighted Average Quality ¹	AA+	AA	AA
Effective Duration	3.86 Yrs	4.21 Yrs	3.79 Yrs
Yield to Maturity	4.70%	4.93%	4.58%

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.