



GALLIARD
Capital Management, Inc.

WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

FOURTH QUARTER 2018 PORTFOLIO REVIEW

STABLE VALUE PORTFOLIO REVIEW - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

Fourth Quarter 2018

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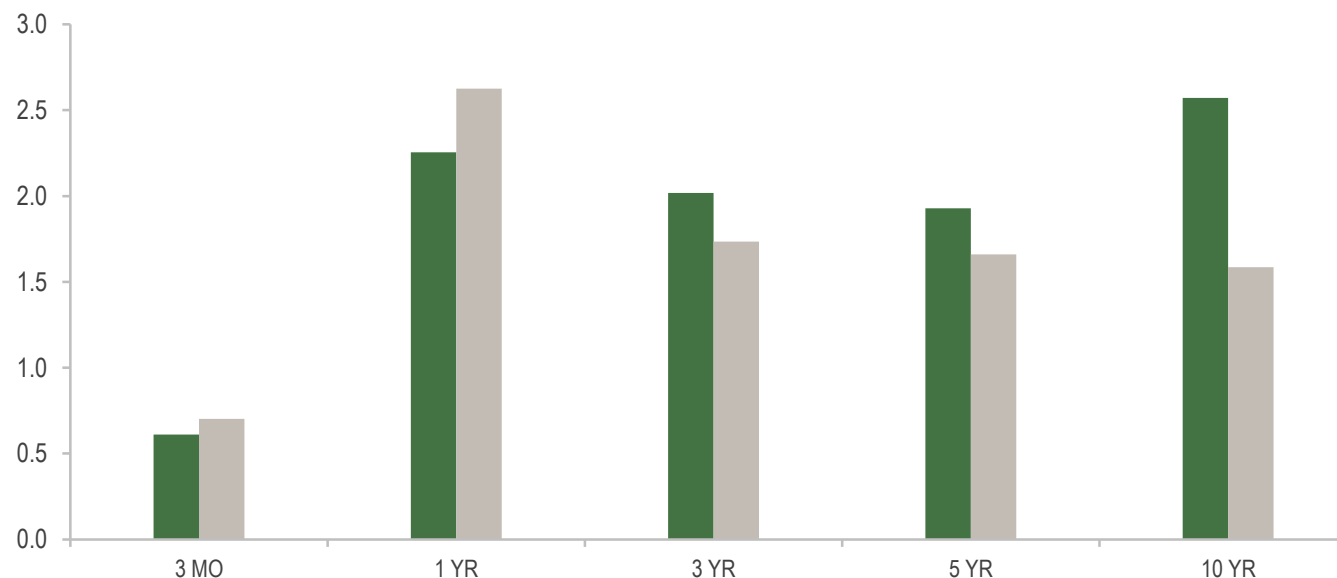
The information contained in this report is for informational purposes only. It is intended to provide a summary of portfolio performance and characteristics, and an accounting based view of transactions and holdings. This is a standardized report and is not intended to be used for compliance purposes. Individual portfolio compliance requirements may not be captured in this report.

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ANNUALIZED INVESTMENT PERFORMANCE AS OF 12/31/18¹



	3 Mo.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
■ Portfolio (net of all fees - NAV level) ²	0.61	2.26	2.02	1.93	2.57
■ Linked Benchmark ³	0.70	2.63	1.73	1.66	1.59
Value Added (net of all fees - NAV level)⁴	(0.09)	(0.37)	0.28	0.27	0.99

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 manager fees, Wells Fargo collective fund administrative fees, and plan administrative reimbursement.

3: Linked benchmark: 3 Year Constant Maturity Treasury; Prior to 11/1/15 was the 5 Year Constant Maturity Treasury.

4: May not add due to rounding.

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WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

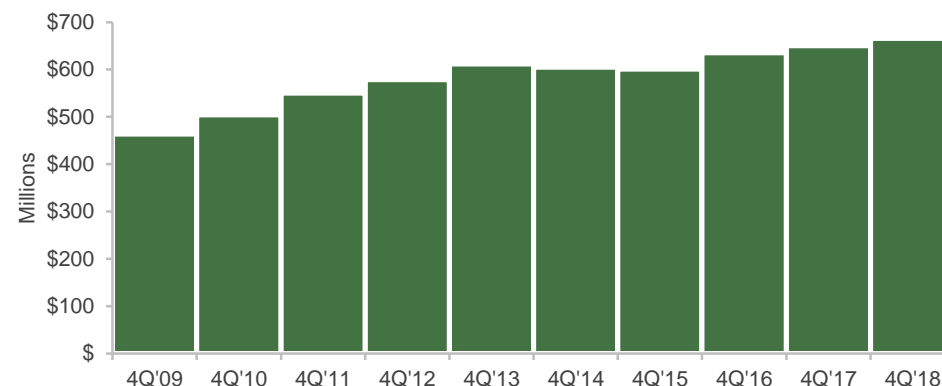
ACCOUNT SUMMARY

Benchmark	3 Year Constant Maturity Treasury
Galliard Inception Date	July 1, 1998
Net Asset Value	\$665,698,049

PORTFOLIO CHARACTERISTICS

	Portfolio 9/30/18	Portfolio 12/31/18
Average Quality - Book Value¹	A+	A+
Average Quality - Market Value²	AA	AA
Number of Contract Issuers	5	5
Blended Yield (after all fees)³	2.33%	2.48%
Yield to Maturity	3.20%	3.17%
Effective Duration	2.84 years	2.98 years
Market/Book Value Ratio	98.26%	98.82%

HISTORICAL FUND ASSETS



PORTFOLIO DISTRIBUTION

	% Portfolio 9/30/18	% Portfolio 12/31/18
Liquidity Buffer: Cash & Equivalents⁴	1.4	1.7
Liquidity Buffer: WF Stable Return Fund	4.6	-
Short Portfolio	40.2	40.3
Intermediate Portfolio	53.8	58.0
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.

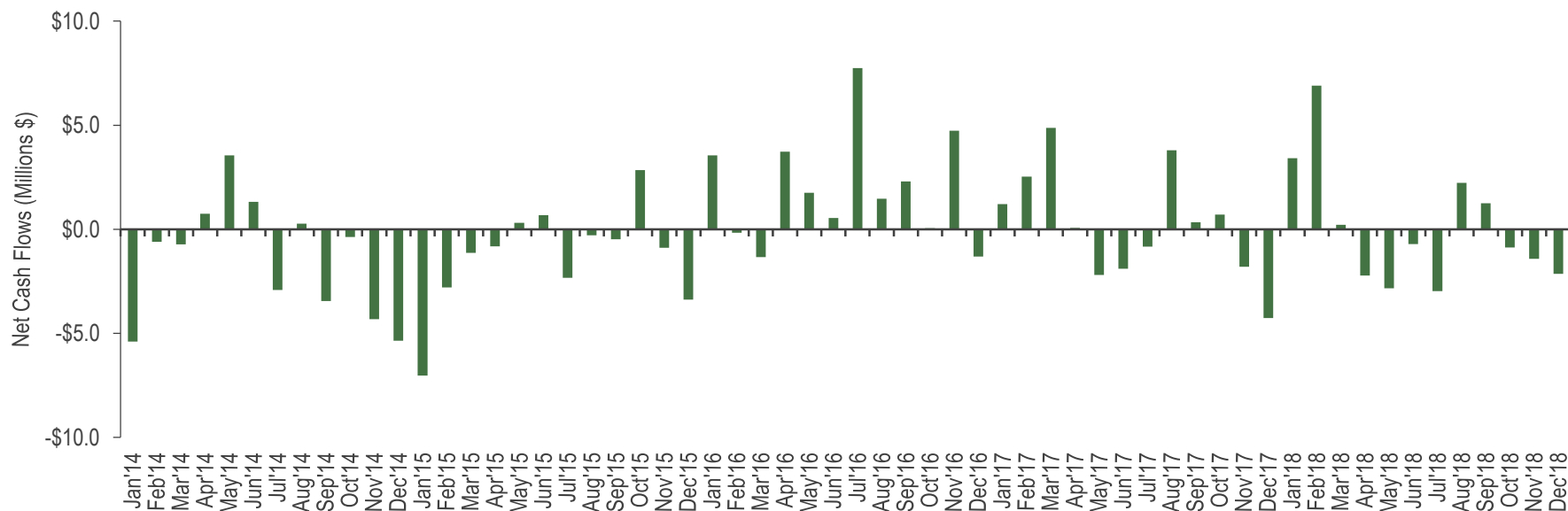
4: Includes Receivables and Payables.

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

STABLE VALUE PORTFOLIO REVIEW - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

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HISTORICAL CASHFLOWS



	2014	2015	2016	2017	1Q'18	2Q'18	3Q'18	4Q'18	2018 YTD
Beginning Assets	\$611.7	\$605.0	\$600.7	\$635.4	\$650.1	\$663.9	\$661.8	\$666.1	\$650.1
Net Cash Flow (\$)¹	-\$17.2	-\$15.3	\$23.1	\$2.5	\$10.5	-\$5.8	\$0.5	-\$4.4	\$0.9
Net Cash Flow (%)	-2.82%	-2.53%	3.84%	0.40%	1.62%	-0.89%	0.08%	-0.68%	0.13%
Estimated Investment Earnings	\$10.5	\$11.0	\$11.6	\$12.2	\$3.3	\$3.6	\$3.8	\$4.1	\$14.8
Ending Assets²	\$605.0	\$600.7	\$635.4	\$650.1	\$663.9	\$661.8	\$666.1	\$665.7	\$665.7

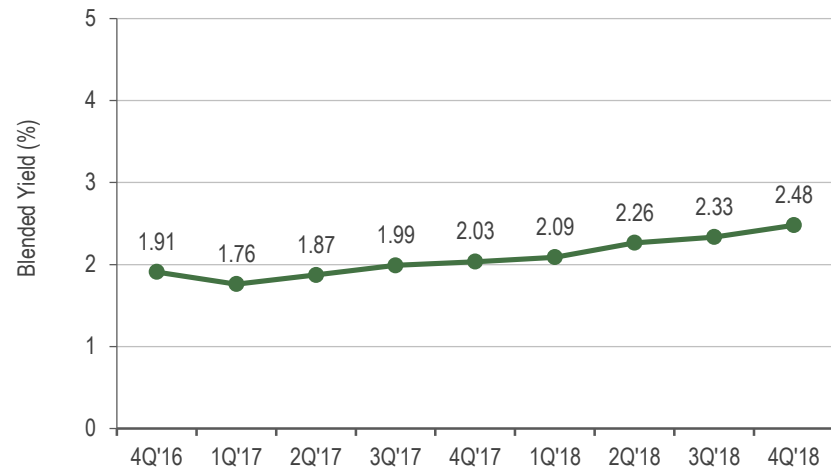
1: Contributions, Withdrawals and Investment Transfers

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

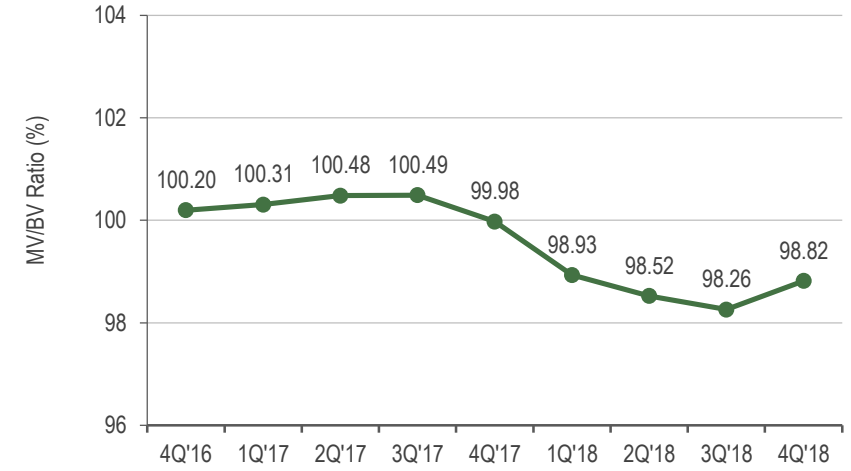
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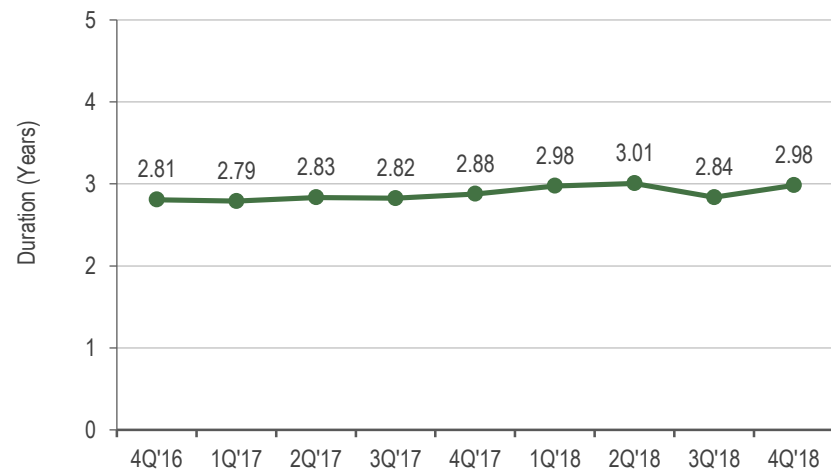
HISTORICAL BLENDED YIELD¹



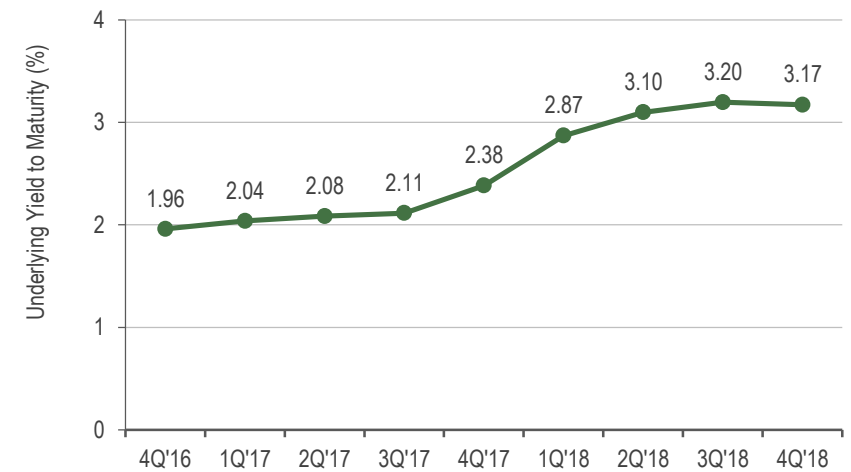
HISTORICAL MARKET VALUE TO BOOK VALUE RATIO



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.

STABLE VALUE PORTFOLIO REVIEW - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

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CONTRACT ISSUER DISTRIBUTION & RATING SUMMARY¹

	% Portfolio 9/30/18	% Portfolio 12/31/18	Rating 9/30/18	Rating 12/31/18
American General Life Ins. Co.	20.0	20.2	A+	A+
Nationwide Life Ins. Co.	11.2	14.9	A+	A+
Prudential Ins. Co. of America	20.4	20.5	AA-	AA-
Transamerica Premier Life Ins. Co.	23.6	23.8	A+	A+
Voya Ret. Ins. and Annuity Co.	18.8	18.9	A	A

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.

STABLE VALUE PORTFOLIO REVIEW - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

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MANAGER DISTRIBUTION

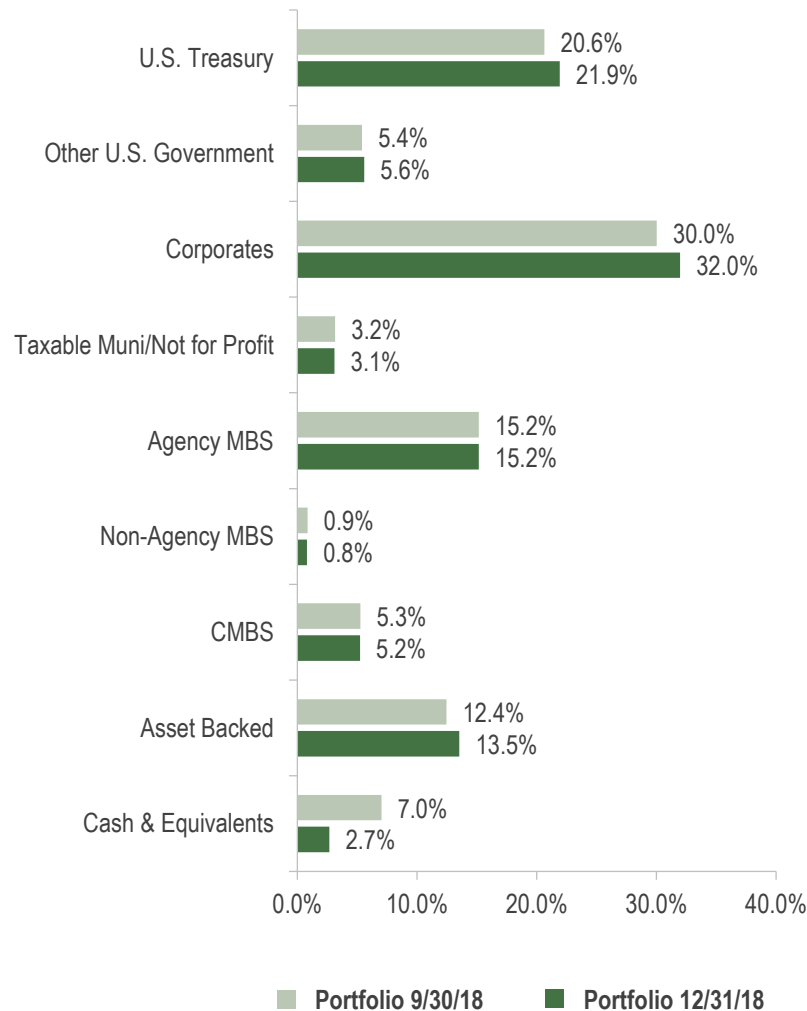
	Strategy	Benchmark	% of Portfolio 9/30/18	% of Portfolio 12/31/18
Liquidity Buffer: Cash & Equivalents	STIF/Money Market		1.4	1.7
Liquidity Buffer: Stable Value Funds	Stable Value Fund	50% Citigroup 3 Mon T-Bill, 50% ICE BofAML 1-3 Year U.S. Treasury	4.6	-
Galliard	Short	Targeted Duration Portfolio	40.2	40.3
Galliard	Intermediate	Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index	23.6	27.5
Dodge & Cox	Intermediate	Bloomberg Barclays U.S. Intermediate Aggregate Bond Index	10.0	10.1
Jennison Assoc.	Intermediate	Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index	10.1	10.2
TCW	Intermediate	Bloomberg Barclays U.S. Intermediate Government/Credit Bond Index	10.0	10.1
Total			100% ¹	100% ¹

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

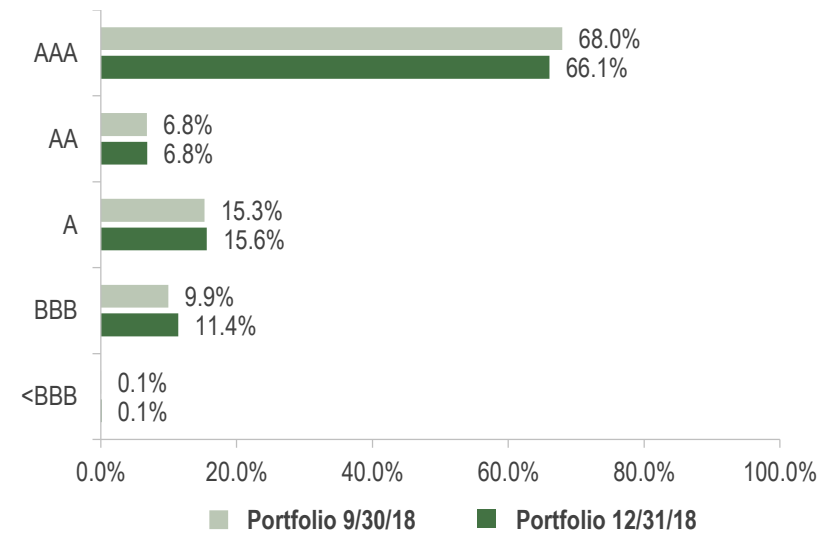
STABLE VALUE PORTFOLIO REVIEW - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

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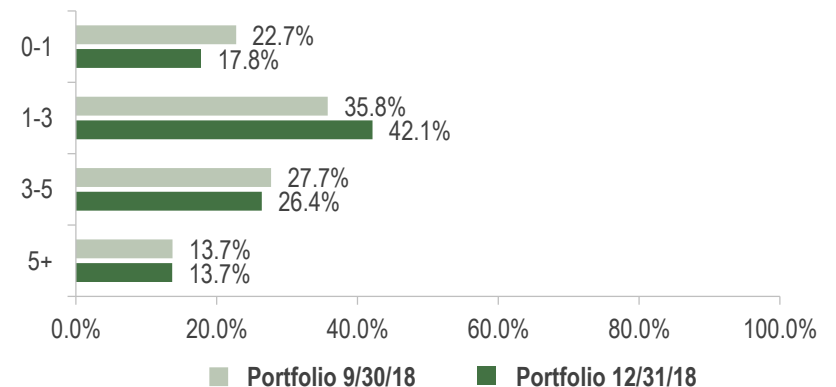
UNDERLYING FIXED INCOME ASSET ALLOCATION¹



UNDERLYING QUALITY DISTRIBUTION¹



UNDERLYING DURATION DISTRIBUTION



¹: Market Value. Total % of portfolio may not add to 100% due to rounding. The external managers provide holdings and the securities are classified using Galliard's analytics methodology for maximum comparability across managers. The quality distribution shown represents the distribution of 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. Distributions represent the portfolio positions for reporting purposes only. Investment guideline compliance is reported in your quarterly portfolio commentary or separately through your Galliard relationship manager.

WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND PORTFOLIO TRANSACTIONS

Period: 10/1/2018 - 12/31/2018

Asset ID	Security Description	Par Amount	Trade Date	Settle Date	Galliard Composite Rating
PURCHASES					
9983008\$P	WF/BlackRock Short Term Investment Fund S	6,519,824	12/3/2018	12/3/2018	AAA
896994DP2	Nationwide Life Ins. Co.	24,500,000	12/3/2018	12/3/2018	A+
TOTAL PURCHASES		31,019,824			
SALES					
94988K104	Wells Fargo Stable Value Fund W	31,019,824	12/3/2018	12/3/2018	AAA
TOTAL SALES		31,019,824			

WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND PORTFOLIO HOLDINGS

December 31, 2018

Asset ID	Security Description	Manager	Contract Value (\$)	Market Value (\$)	Market/Book Value Ratio (%)	% of Portfolio	Crediting Rate (%) ¹	UCA Yield (%)	Effective Duration (yrs)	Galliard Composite Rating	Wrap Fees (bps)
LIQUIDITY BUFFER											
	Cash Receivable / (Payable)		-438,494	-438,494	100.0	-0.1	2.54	2.54	0.10	AAA	
9983008\$P	WF/BlackRock Short Term Investment Fund S		11,541,586	11,541,586	100.0	1.7	2.54	2.54	0.10	AAA	
TOTAL LIQUIDITY BUFFER			11,103,092	11,103,092	100.0	1.7	2.54	2.54	0.10	AAA	
SHORT PORTFOLIO											
946996EP6	American General Life Ins. Co.	Galliard	44,749,511	44,172,975	98.7	6.7	2.52	3.04	1.77	A+	18.0
896994DP2	Nationwide Life Ins. Co.	Galliard	31,098,551	30,833,253	99.1	4.7	2.82	3.04	1.77	A+	17.0
744999ZU0	Prudential Ins. Co. of America	Galliard	68,870,305	68,086,854	98.9	10.3	2.46	3.04	1.77	AA-	18.0
600996CC4	Transamerica Premier Life Ins. Co.	Galliard	65,556,183	64,702,104	98.7	9.8	2.69	3.04	1.77	A+	17.0
75999UNG9	Voya Ret. Ins. and Annuity Co.	Galliard	58,320,843	57,539,162	98.7	8.8	2.38	3.04	1.77	A	18.0
TOTAL SHORT PORTFOLIO			268,595,392	265,334,348	98.8	40.3	2.55	3.04	1.77	A+	
INTERMEDIATE PORTFOLIO											
946996EP6	American General Life Ins. Co.	Galliard	89,446,654	88,294,257	98.7	13.4	2.52	3.31	3.81	A+	18.0
896994DP2	Nationwide Life Ins. Co.	Galliard	68,298,542	67,715,896	99.1	10.3	2.82	3.31	3.81	A+	17.0
744999ZU0	Prudential Ins. Co. of America	Jennison Assoc.	67,922,318	67,149,650	98.9	10.2	2.46	3.09	4.04	AA-	18.0
600996CC4	Transamerica Premier Life Ins. Co.	Dodge & Cox	67,377,677	66,499,867	98.7	10.1	2.69	3.51	3.70	A+	17.0
600996CC4	Transamerica Premier Life Ins. Co.	Galliard	25,415,135	25,084,022	98.7	3.8	2.69	3.31	3.81	A+	17.0
75999UNG9	Voya Ret. Ins. and Annuity Co.	TCW	67,539,238	66,634,002	98.7	10.1	2.38	3.15	4.26	A	18.0
TOTAL INTERMEDIATE PORTFOLIO			385,999,564	381,377,695	98.8	58.0	2.58	3.28	3.91	A+	
TOTAL PORTFOLIO			665,698,049	657,815,135	98.8	100.0	2.57	3.17	2.98	A+	

¹: Crediting rates are net of wrap fees and any other fees being netted out of the rates.

MARKET REVIEW

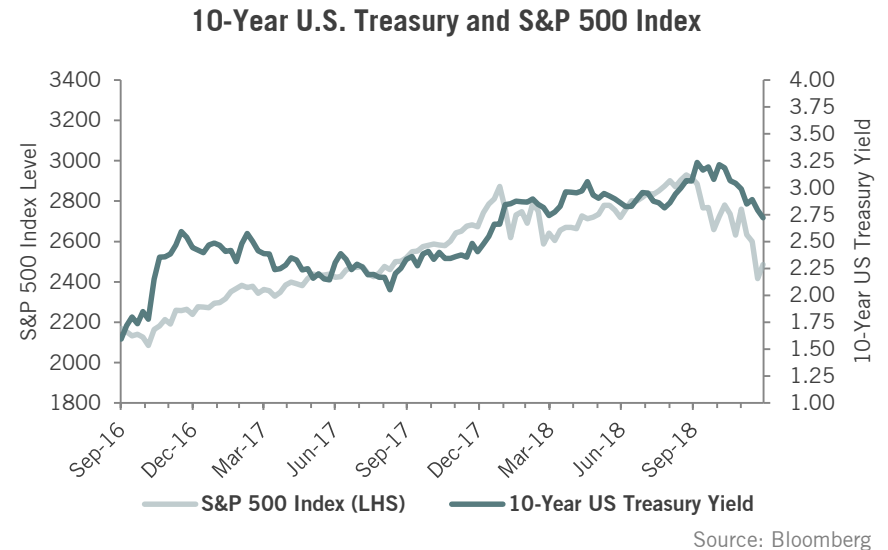
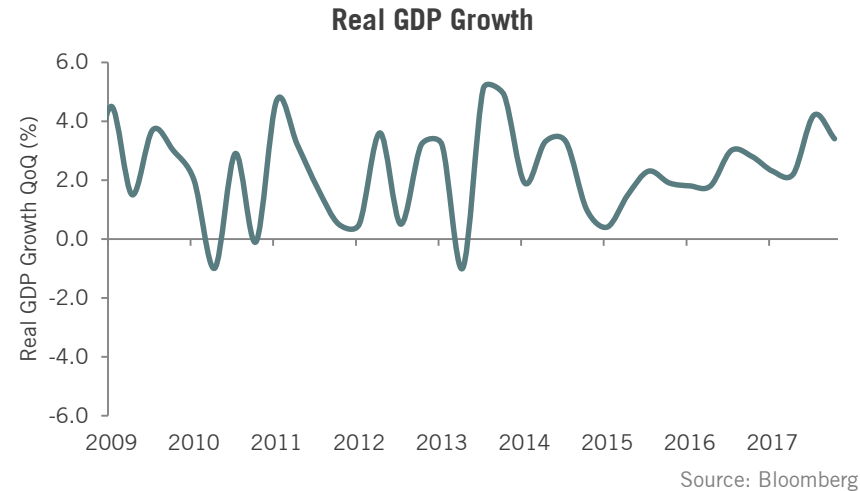
FOURTH QUARTER 2018

Strong Economic Momentum in Q3...

- The U.S. economy grew at a q/q annualized pace of 3.4% in 3Q18. Following 2Q18 growth of 4.2%, this marked the strongest consecutive quarters of growth since 2014.
- Personal consumption drove growth once again in 3Q, registering 3.5% q/q annualized; momentum continued in October and November with control group retail sales rising 0.7% and 0.9% m/m respectively.
- Business activity also continued to expand; however, there are signs that this may be slowing. The Institute for Supply Management (ISM) Manufacturing Index saw a steep decline in December, from 59.3 to 54.1 – while still signaling expansion, this was the largest one-month drop since October 2008.
- Market consensus is currently calling for 4Q18 GDP growth of 2.5% to 3.0%.

...Gives Way to Volatility and Risk Repricing in Q4

- No sooner did 3Q end did markets begin to change as investors grew weary in the face of slowing global growth forecasts, Fed policy commentary, trade wars and deficit spending.
- Consequently, the year ended with a dramatic repricing of risk across asset classes. The S&P 500 ended the year down ~15% from the all-time high reached in September and the 10-year Treasury rallied 55 bps between November 8 and December 31 (3.24% to 2.69%).
- Market moves of this magnitude can be a strong leading indicator of a slowdown in economic activity; indeed, the Conference Board U.S. Leading Indicator Index slowed to 5.2% y/y in November from an 8-year high of 7.1% y/y in September.



The information contained herein reflects the views of Galliard Capital Management, Inc. & sources believed to be reliable by Galliard as of the date of publication. The views expressed here may change at any time subsequent to the date of publication. This publication is for informational purposes only. For institutional investor use only.

MARKET REVIEW

FOURTH QUARTER 2018

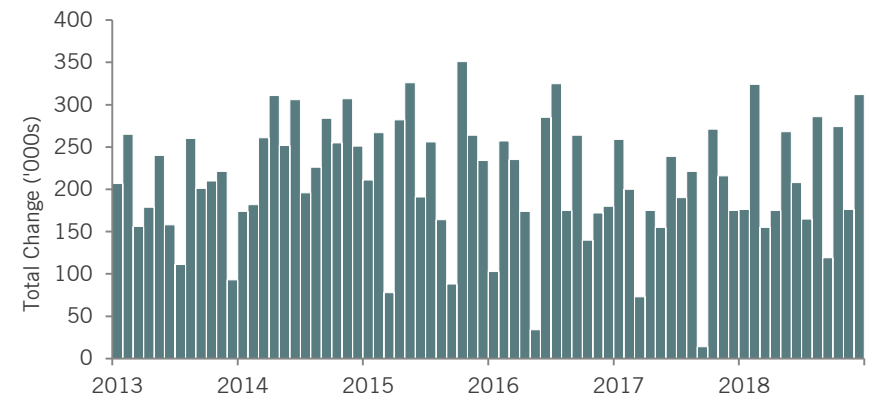
Fed Raises in December and Signals 2 Rate Hikes in 2019...

- As planned, the Fed raised its policy rate in December by another 25 bps. The policy rate now stands at a range of 2.25% to 2.50%.
- At the end of September, the forward rate markets implied a high probability of two rate hikes in 2019, in-line with the Fed's median projection from its most recent Summary of Economic Projections.
- However, by the end of December, there was a very low market implied probability of a rate increase in 2019. Fed policymakers have also changed their tone, recently emphasizing policy flexibility rather than a rigid path to higher rates.

...But Tepid Inflation May Outweigh Strong Labor Market

- Job creation remained robust throughout the quarter, adding 274k, 176k and 312k jobs in October, November and December respectively; the unemployment rate ended the year at 3.9%, a slight uptick from recent months due to an increase in labor force participation.
- Notably, average hourly earnings rose 3.1% to 3.2% y/y in each month during 4Q, marking a post-crisis high for wage growth.
- Despite the strong growth in average hourly earnings, virtually all measures of inflation remain muted. Most importantly, core PCE, the Fed's preferred measure of inflation, dipped to 1.8% and 1.9% in October and November respectively.
- Furthermore, measures of core producer price inflation were flat to slightly lower over the quarter.

Non-Farm Payrolls



Source: Bloomberg

Core PCE Price Index



Source: Bloomberg

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STABLE VALUE PORTFOLIO REVIEW - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

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CALENDAR YEAR INVESTMENT PERFORMANCE

	2014	2015	2016	2017	2018
Portfolio (net of all fees - NAV level) ¹	1.73	1.85	1.90	1.90	2.26
Linked Benchmark ²	1.64	1.45	1.01	1.58	2.63
Value Added (net of all fees – NAV level)³	0.09	0.40	0.90	0.32	(0.37)

MARKET INDICES

ICE BofAML U.S. 3 Month Treasury Bill	0.03	0.05	0.33	0.86	1.87
Consumer Price Index	0.76	0.73	2.07	2.11	2.17

GUIDELINE COMPLIANCE

We have not become aware of any investment guideline compliance issues occurring in the portfolio during the quarter.

1: Returns are net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, and plan administrative reimbursement.

2: Linked benchmark: 3 Year Constant Maturity Treasury; Prior to 11/1/15 was the 5 Year Constant Maturity Treasury.

3: May not add due to rounding.

APPENDIX - WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

Fourth Quarter 2018

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 12/31/18	Per \$1000
Investment Management Fees paid to Galliard	0.088%	\$0.88
Investment Management fees paid to Non-Affiliated Investment Advisors	None	None
Investment Contract Fees* ¹	0.173%	\$1.73
Acquired Fund Fees ²	0.058%	\$0.58
-Investment Contract Fees	None	None
-Other Acquired Fund Fees and Non-Affiliated Investment Management Fees paid to Non-Affiliated Investment Advisors ³	0.058%	\$0.58
12b-1 Distribution Fee	None	None
Other Expenses	None	None
Total Annual Fund Operating Expenses⁴	0.319%	\$3.19

*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: 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., TCW.