

# Wisconsin Deferred Compensation Program

# WISCONSIN DEFERRED COMPENSATION PROGRAM

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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

<sup>1</sup>20 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 exceed15 years with Galliard

#### CLIENT TYPES

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

FORTUNE 100 / 500

18 Fortune 100 clients; 44 Fortune 500 clients<sup>2</sup>

<sup>2</sup> 2022 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 assets<sup>3</sup>

<sup>3</sup> Pensions & 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

Data as of 12/31/2022. **FOR INSTITUTIONAL INVESTOR USE ONLY.** 



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# **GALLIARD CAPITAL MANAGEMENT**

ORGANIZATION CHART AS OF 12/31/22

EXECUTIVE	MANAGEMENT	TEAM:	President &	Mike No & Senior M	<b>rman</b> anaging Principal	l			<b>jay Mirza, (</b> r Managing P			
FIXED INCOM	IE INVESTMENT	PORTFOLI	O & RELATION	NSHIP N	MANAGEMEN	N T			CLIENT S	UPPORT		
Credit Brandon Kanz, CFA Senior Principal Sector Head	Structured Product Ajay Mirza, CFA Senior Managing Principa Sector Head	Portfolio Andrea Johnson, Senior Principal	Б. 1.1	e	Conor Murphy, ( Senior Director Pete Schmit, CF		Jennifer Lamı Senior Princip Jennifer Hopp Associate Dire		Stable Timothy Associa Lead	<b>Value</b> y Noel te Director	Ste	<b>xed Income</b> eve Patterson esociate
Rene Hoogmoed, CFA Senior Principal	Matt Robertson, CFA Senior Principal	Robert Crandall, Senior Director	01 1 04 0		Senior Director	- A	Shanna Ellefs Associate Dire	on		Ring, CFA Ite		ike Olson enior Associate
Matt Bentley Principal	Mike Meerovich Director	Michael Amunds Director	Senior Dire	ctor	Jordan Bewley Director		ASSOCIATE DIV	CLOI	Derek S Associa	Schmidt te		
Chad Callahan Principal	Tyler Wadsworth, CFA Associate Director	Elizabeth Smithl Associate Directo		ctor	Ryan Olsen Director							
Robert Barrett, CFA Senior Director	Jimmie Wu, CFA Associate Director		Jaime Morg Senior Dire	gan ector	Linh Buoen Associate Direct	tor						
John Kenley, CFA Senior Director	David Que, CFA Senior Associate	STAB	LE VALUE Y/CONTRACT		MARK	ETING	& RFP		INVES	TMENT	COM	PLIANCE
Will Moeller, CFA Director	Sanhakorn Rattanacheeworn Senior Associate	Nick Gage, CFA Senior Principal Christina Burton Director	Kathryn Taguin Associate Kendra Marque Associate		RFP Kelly Lassi Associate Direc Desiree Wright Associate		Marketing acqueline Beck senior Associate	er	Andrew Mc Director Matt Brown Associate D	ı	Se Le	rian Heruth enior Associate eah Schermann enior Associate
TECHNO	DLOGY			ATIONS					LEGA	L/COMPI	IAN	CE
George Jones* Senior Director	Christopher Smith* Senior Director	Jennifer Miller Senior Director	Jason Skull* Associate Director		n Chak ociate	Phil N Assoc	lguyen* iate		Compliance Renelt Compliance	Çhris Bene	edict	<b>Legal</b> David Lui
Charlie Head* Associate Director	Heather Goserud, CFA Associate Director	Carmen Rangel, CPA Senior Director	Trevor Fletcher Senior Associate		na Gemeda ociate	Alex C Assoc	Ostrovksy iate	Chief Office	Compliance r**	Associate Ellen Riva	rd	Principal Paula Novick
Will Ingle* Associate Director	Christian Asilo* Senior Associate	Pete Anderson Director	Phil Kos* Senior Associate		n Helmueller* ociate	Jesse Assoc	Perzichilli iate	Laurie Assoc	Kern iate Director	Associate		Principal
Ben Modica* Associate Director	Baber Khan Senior Associate	Brian Brooks Director	Christopher LaMere Senior Associate	e Jin l Asso	Heo ociate	Christ Assoc	ina Peters iate		DD01F0	-		
Mark Perzichilli* Senior Associate	Joe Ostrowski* Associate	Rasaan Ellison* Director	Matt Remington Senior Associate	Nata Asso	alia Kolakowska ociate	Bre R Assoc		M	PROJECT ANAGEMI	ENT		
Ahmed Taher* Senior Associate		Michelle Boss* Associate Director	Brent Thornton* Senior Associate		nia Lor ociate	Brad S Assoc	Sillanpa iate	Lisa A Direct	nderson or			
Scott Lackey* Associate		Michael Bouska Associate Director	Atu Akaa* Associate	Mar Asso	go Monson ociate	Melaii Assoc	na Sachdeva iate	Emily Senior	Myers Associate			
Suresh Sankaranarayana Associate	n*	Stephanie Ripley Associate Director	Dana Blomgren* Associate		e Myers ociate							

#### OTHER SERVICES PROVIDED BY ALLSPRING INCLUDE:

Human Resources Finance Technology Infrastructure Risk Management

 $^*$ Deferred professional at Allspring close (11/1/21). Temporarily reporting to Wells Fargo under TSA. \*\*Effective February 2, 2023 Paul Felsch was appointed Galliard's Chief Compliance Officer.

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# SECTION II

### STABLE VALUE MARKET UPDATE

AS OF MARCH 2023

#### GALLIARD VIEW

# CONTRACT ISSUERS

- Diverse market of 18 active wrap contract issuers (4 banks, 14 insurance companies), with the entry of Citigroup in Q4 2022
- Galliard-approved issuers are generally well capitalized with good stable value business risk controls
- Issuers continue to seek growth opportunities, and contract supply/demand dynamics continue to favor stable value investors
- Contract market-to-book value ratios have dropped well below par due to increased rates; contracts continue to provide principal protection and crediting rates are generally resetting higher
- AIG completed an IPO of its Life & Retirement unit on 9/15/2022, and the new parent company is named Corebridge Financial. The legal issuing entities and their structure did not change

#### **PORTFOLIO**

- 4Q GDP growth registered 2.7% q/q as trade effects and inventory buildup surprised to the upside; however, with consumer demand expected to soften and business activity declining, a modest recession in 2023 remains a real possibility
- In response to inflation trending lower, the Fed raised the policy rate by only 0.25% in February; however, recent statements from several FOMC members reaffirmed a commitment to keep rates higher-for-longer, with additional rate hikes still on the table and rate cuts not expected until at least 2024
- With a hawkish Fed, uncertain inflation path, and ongoing geopolitical risk, volatility in risk assets is likely to remain elevated over the near-term
- Most stable value accounts experienced positive inflows in 2022, although flows were generally negative in the second half of the year

#### GALLIARD POSITIONING

- Selectively engaging with potential new issuers but continue to prioritize established, experienced counterparties
- No material credit risk concerns with our approved issuers, all of which remain committed to the stable value market, despite lower market-to-book value ratios
- Continuing work with issuers to improve contract terms and explore new market opportunities; expect firmer pricing near current levels
- Maintaining dialog with issuers to proactively manage risk and address client liquidity needs, as necessary
- Monitoring the potential long-term impact on our relevant Corebridge Financial counterparties (American General Life and U.S. Life) but have no near-term concerns
- Maintaining neutral duration positioning
- Portfolios are fully invested, generally speaking, and we are comfortable with overall positioning
- After recent spread widening, high quality spread assets now look fair to modestly cheap, presenting some limited opportunities across multiple sectors
- We continue to favor short-to-intermediate maturities, with an emphasis on quality, diversification, and liquidity as cheap insurance
- We will look to maintain our overall defensive positioning to protect against downside risks and elevated levels of uncertainty



# **STABLE VALUE MARKET UPDATE**

# APPROVED CONTRACT ISSUER SUMMARY

#### APPROVED WRAP CONTRACT ISSUERS

AS OF DECEMBER 31, 2022

NAME	MOODY'S CREDIT RATING	S&P CREDIT RATING
AMERICAN GENERAL LIFE INS CO.*	A2	A+
MASSMUTUAL LIFE INS. CO.	Aa3	AA+
METROPOLITAN LIFE INS. CO.	Aa3	AA-
NATIONWIDE LIFE INS. CO.	A1	A+
PACIFIC LIFE INS. CO.	Aa3	AA-
PRUDENTIAL INS. CO. OF AMERICA	Aa3	AA-
ROYAL BANK OF CANADA		AA-
STATE STREET BANK AND TRUST CO.	Aa2	AA-
TRANSAMERICA LIFE INS. CO.*	A1	A+
VOYA RETIREMENT INS. AND ANNUITY CO.	A2	A+

<sup>\*</sup>Affiliate entity is approved for accounts requiring contracts issued in the State of New York

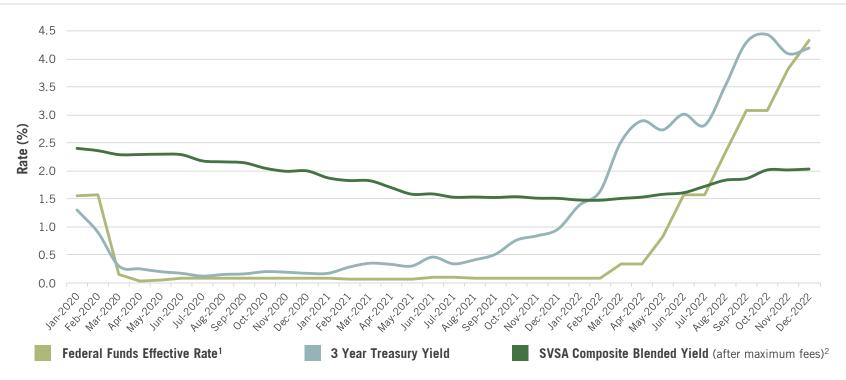
• MassMutual Life Ins. Co., Metropolitan Life Ins. Co., Principal Life Ins. Co. (A1/A+) and New York Life Ins. Co. (Aaa/AA+) are approved to issue traditional GICs





# STABLE VALUE MARKET UPDATE

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.

<sup>2:</sup> 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.



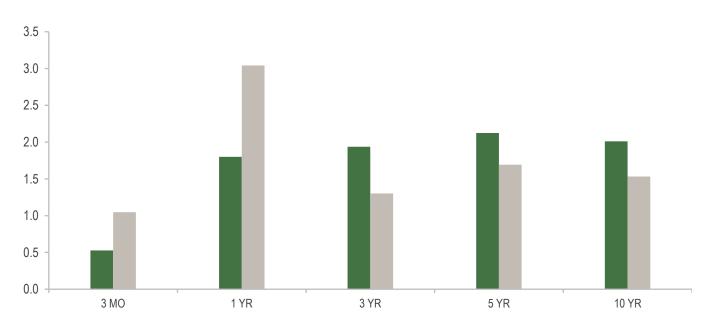


<sup>1:</sup> Effective Federal Funds Rate sourced from the Federal Reserve, Rates are not annualized.

# SECTION III

# ANNUALIZED INVESTMENT PERFORMANCE

#### **ANNUALIZED INVESTMENT PERFORMANCE** AS OF 12/31/221



	3 Mo.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Portfolio (net of all fees - NAV level) <sup>2</sup>	0.53	1.80	1.94	2.12	2.01
Linked Benchmark <sup>3</sup>	1.05	3.04	1.30	1.69	1.53
Value Added (net of all fees - NAV level) <sup>4</sup>	(0.52)	(1.24)	0.63	0.43	0.48

Past performance is not an indication of how the investment will perform in the future. FOR INSTITUTIONAL INVESTOR USE ONLY.



<sup>1:</sup> Returns for periods of less than one year are not annualized.

<sup>2:</sup> Returns are 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.

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

<sup>4:</sup> May not add due to rounding.

PORTFOLIO CHARACTERISTICS

#### WISCONSIN DEFERRED COMPENSATION PROGRAM - STABLE VALUE FUND

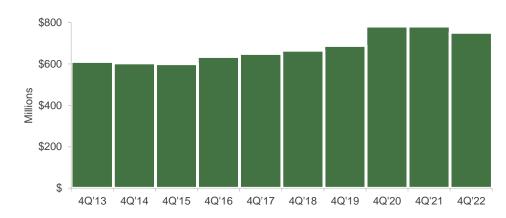
#### ACCOUNT SUMMARY

Benchmark	3 Year Constant Maturity Treasury Yield
Galliard Inception Date	July 1, 1998
Net Asset Value	\$752,352,829

# PORTFOLIO CHARACTERISTICS

	Portfolio 9/30/22	<b>Portfolio</b> 12/31/22
Average Quality - Book Value <sup>1</sup>	A+	A+
Average Quality - Market Value <sup>2</sup>	AA	AA
Number of Contract Issuers	5	5
Blended Yield (after all fees) <sup>3</sup>	1.88%	2.14%
Yield to Maturity	4.95%	5.05%
Effective Duration	3.06 years	3.03 years
Market/Book Value Ratio	92.28%	92.76%

#### **HISTORICAL FUND ASSETS**



#### PORTFOLIO DISTRIBUTION

	<b>% Portfolio</b> 9/30/22	<b>% Portfolio</b> 12/31/22
Liquidity Buffer: Cash & Equivalents <sup>4</sup>	1.6	1.4
Short Portfolio	41.4	41.3
Intermediate Portfolio	57.0	57.3
Total	100.0%5	100.0%5



<sup>1:</sup> 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.

<sup>2:</sup> 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.

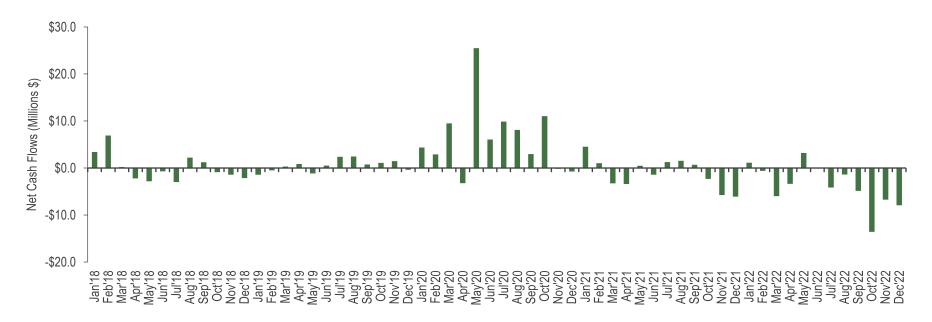
<sup>3:</sup> Blended Yield is net of all fees, including book value contract fees, Galliard investment management fees, and, if applicable, external manager fees, collective fund administrative fees, and plan administrative reimbursement.

<sup>4:</sup> Includes Receivables and Payables.

<sup>5:</sup> Total % of portfolio may not add to 100% due to rounding.

HISTORICAL CASHFLOWS

#### HISTORICAL CASHFLOWS



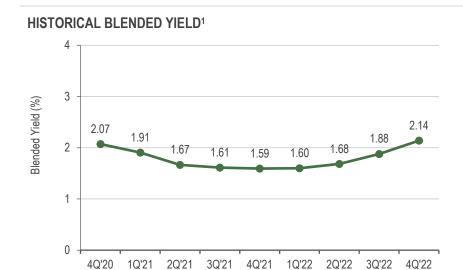
	2018	2019	2020	2021	1Q'22	2Q'22	3Q'22	4Q'22	2022 YTD
Beginning Assets	\$650.1	\$665.7	\$689.2	\$782.1	\$782.7	\$780.2	\$783.3	\$776.6	\$782.7
Net Cash Flow (\$)1	\$0.9	\$6.4	\$76.1	-\$12.7	-\$5.5	-\$0.1	-\$10.4	-\$28.3	-\$44.2
Net Cash Flow (%)	0.13%	0.96%	11.04%	-1.62%	-0.70%	-0.01%	-1.33%	-3.64%	-5.65%
Estimated Investment Earnings	\$14.8	\$17.1	\$16.9	\$13.3	\$3.0	\$3.2	\$3.7	\$4.0	\$13.8
Ending Assets <sup>2</sup>	\$665.7	\$689.2	\$782.1	\$782.7	\$780.2	\$783.3	\$776.6	\$752.4	\$752.4

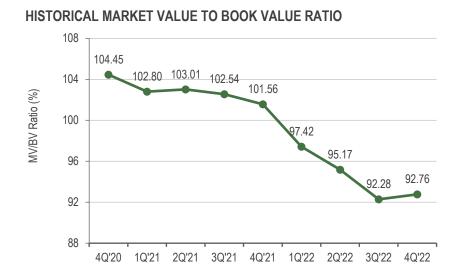
<sup>1:</sup> Contributions, Withdrawals and Investment Transfers



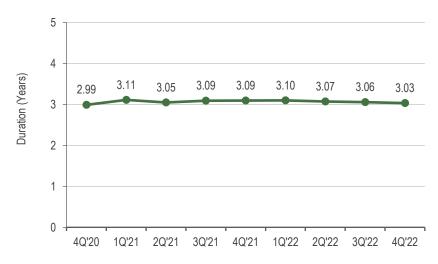
<sup>2:</sup> Cashflows may not net to final assets due to rounding.

HISTORICAL STATS

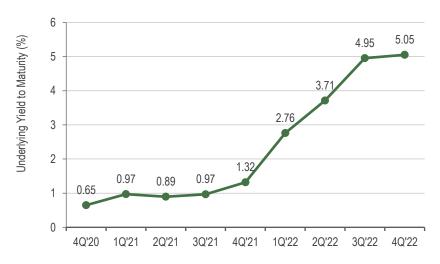




#### HISTORICAL DURATION



#### 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. FOR INSTITUTIONAL INVESTOR USE ONLY.



**CONTRACT ISSUERS** 

# **CONTRACT ISSUER DISTRIBUTION & RATING SUMMARY<sup>1</sup>**

	Contract Type <sup>2</sup>	<b>% Portfolio</b> 9/30/22	% Portfolio 12/31/22	<b>Rating</b> 9/30/22	<b>Rating</b> 12/31/22	Wrap Fees (bps) 12/31/22
American General Life Ins. Co.	SBIC	19.7	19.8	A+	A+	15
Nationwide Life Ins. Co.	SBIC	20.0	20.1	A+	A+	15
Prudential Ins. Co. of America	SBIC	19.8	19.9	AA-	AA-	15
Transamerica Life Ins. Co.	SBIC	21.7	21.7	A+	A+	15
Voya Ret. Ins. and Annuity Co.	SBIC	17.1	17.2	А	А	15



<sup>1:</sup> 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.

<sup>2:</sup> SBIC = Security Backed Investment Contract. SAGIC = Separate Account GIC

# MANAGER DISTRIBUTION

# MANAGER DISTRIBUTION

	Strategy	Benchmark	% of Portfolio 9/30/22	% of Portfolio 12/31/22
Liquidity Buffer: Cash & Equivalents	STIF/Money Market		1.6	1.4
Galliard	Short	Bloomberg U.S. 1-3 Year Government/Credit Bond Index	41.4	41.3
Galliard	Intermediate	Bloomberg U.S. Intermediate Government/Credit Bond Index	27.8	27.9
Dodge & Cox	Intermediate	Bloomberg U.S. Intermediate Aggregate Bond Index	9.9	10.0
Jennison Assoc.	Intermediate	Bloomberg U.S. Intermediate Government/Credit Bond Index	9.3	9.3
TCW	Intermediate	Bloomberg U.S. Intermediate Government/Credit Bond Index	10.0	10.0
Total			100%1	100%1

<sup>1:</sup> Total % of portfolio may not add to 100% due to rounding. FOR INSTITUTIONAL INVESTOR USE ONLY.



CALENDAR YEAR PERFORMANCE

#### CALENDAR YEAR INVESTMENT PERFORMANCE

	2018	2019	2020	2021	2022
Portfolio (net of all fees - NAV level) <sup>1</sup>	2.26	2.56	2.31	1.70	1.80
Linked Benchmark <sup>2</sup>	2.63	1.94	0.43	0.46	3.04
Value Added (net of all fees – NAV level) <sup>3</sup>	(0.37)	0.62	1.88	1.24	(1.24)
MARKET INDICES					
ICE BofA U.S. 3 Month Treasury Bill	1.87	2.28	0.67	0.05	1.46
Consumer Price Index	1.67	2.29	1.36	7.04	6.84

#### **GUIDELINE COMPLIANCE**

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

3: May not add due to rounding.



<sup>1:</sup> 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 Yield; Prior to 11/1/15 was the 5 Year Constant Maturity Treasury Yield.

# APPENDIX I

# INTRODUCTION TO STABLE VALUE

**OBJECTIVES** 

Stable value funds are designed to preserve capital while providing a steady rate of return

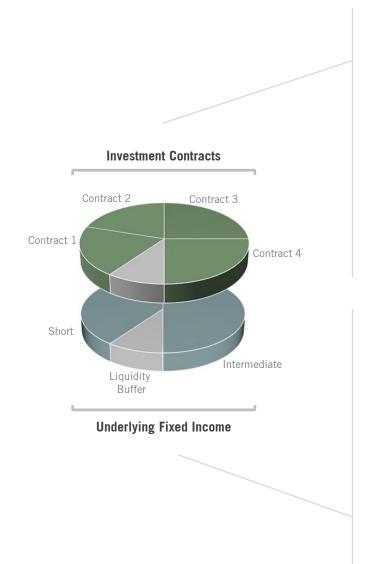
#### OBJECTIVES OF STABLE VALUE

- PRINCIPAL PRESERVATION option that has demonstrated an ability to earn a real return over the long-term
- Designed to provide:
  - Day-to-day principal protection (i.e. no loss)
  - Returns comparable to short/intermediate bonds with significantly less volatility
- · Low correlation (especially downside) with other asset classes
- Stable value is exclusively accessed through tax-advantaged defined contribution savings plans (i.e. 401(k), 403(b), 457, and 529 plans)
  - Stable value investments are not available via individual retirement accounts (IRAs)
- Stable value is considered to be one of the lowest risk investment options available in retirement plans



# INTRODUCTION TO STABLE VALUE

### COMPONENTS OF SEPARATE ACCOUNT GICS & SYNTHETIC GICS



#### BENEFIT RESPONSIVE STABLE VALUE CONTRACTS

#### Provide principal preservation, low volatility of returns

- Each stable value contract accounted for at contract value typically, principal + accrued interest
- Interest rate credited by each contract (i.e. crediting rate) resets periodically based on the characteristics of the underlying assets
- Contract issuer guarantees:
  - Participants can transact at contract value regardless of underlying bond portfolio performance (under normal operations of the plan and stable value fund)
  - Crediting rate ≥ 0%

#### UNDERLYING BOND PORTFOLIO

#### Source of return

- Underlying bond portfolio provides source of long-term total return
- Stable value contract smoothes return over time (amortizes gains/losses)
- Contract crediting rate typically set based on the market value, yield, and duration of the bond portfolio
- Underlying portfolio typically consists of short to intermediate duration bonds characterized by:
  - Investment grade quality
  - Diversified across sector and issuer

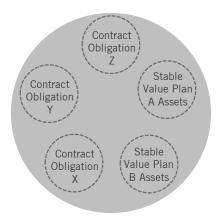


# INTRODUCTION TO STABLE VALUE

#### STABLE VALUE INVESTMENT CONTRACT TYPES

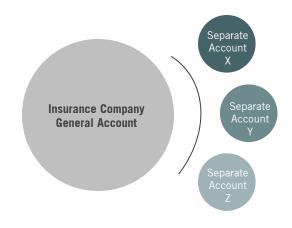
#### CONTRACT OPTIONS FOR STABLE VALUE/BOOK VALUE PROTECTION

# TRADITIONAL GUARANTEED INVESTMENT CONTRACT (GIC)



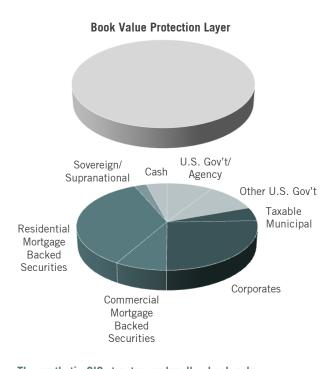
GICs are obligations of the issuing insurance company's general account backed by the creditworthiness of the Insurance Company.

#### SEPARATE ACCOUNT GIC



Assets backing separate account GICs are owned by the issuing insurance company but segregated from the insurance company's general account.

#### SYNTHETIC GIC



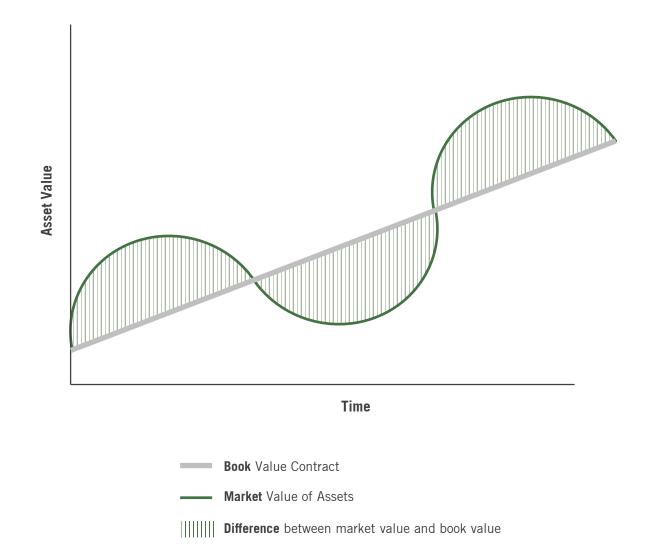
The synthetic GIC structure unbundles book value protection (wrap contract) from underlying investments. The contract is backed by bonds owned by the plan or trust.



# THE ROLE OF THE CREDITING RATE

Wrap contracts are designed to help preserve principal and provide a stable return pattern.

A wrap contract's crediting rate formula tends to smooth the impact of fluctuating interest rates and their effect on bond prices by amortizing the gains or losses over the duration of the portfolio.

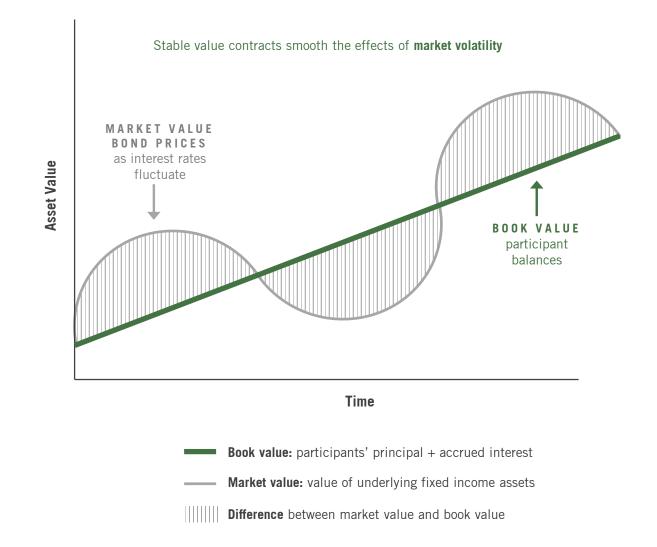




# THE ROLE OF THE CREDITING RATE

Wrap contracts are designed to help preserve principal and provide a stable return pattern.

A wrap contract's crediting rate formula tends to smooth the impact of fluctuating interest rates and their effect on bond prices by amortizing the gains or losses over the duration of the portfolio.



Crediting Rate Formula: Crediting Rate =  $(MV \text{ of portfolio})^{(1/Duration)*(1 + YTM)} - 1$ 





# THE CREDITING RATE FORMULA

The role of the crediting rate is to assign a book value yield to investors that reflects the market value yield, but also amortizes gains/losses on the underlying bond portfolios to par (when Market Value = Book Value) over the duration of the portfolio.

# Looked at as an equation:

(BV of Portfolio)\*(1 + Crediting Rate)^Portfolio Duration = (MV of Portfolio)(1 + Annualized YTM)^Portfolio Duration

# Solving for the crediting rate, the formula may be rewritten as:

Crediting Rate = (MV of portfolio/BV of portfolio)(1/Duration)\*(1 + YTM) - 1

As the formula suggests, a variety of factors impact a stable value fund's crediting rate.

# HOW A CONTRACT CREDITING RATE WORKS

Simple Formula			
Book Value	\$100,000,000	Gain/(Loss)	(1.00%)
Market Value	\$99,000,000	Portfolio Yield	3.00%
Loss	(\$1,000,000)	Portfolio Duration	3.0 Years

#### 3.00% - (1.00%/3) = Estimated Crediting rate of 2.67%

The crediting rate formula spreads the 1% loss over a 3-year period, from the rate reset data.

# **Compound Formula**

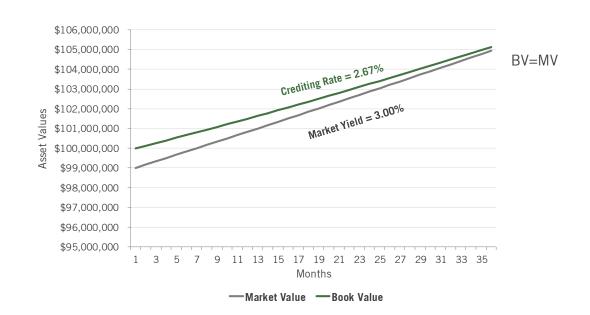
Gross Crediting Rate =  $(MV/BV)^{(1/D)*(1+AYTM)-1}$ 

MV: Market Value BV: Book Value D: Duration

AYTM: Annualized Yield to Maturity which is equal to

 $(1+YTM/2)^2-1$ 

The crediting rate
amortizes gains/losses
over the duration of the
portfolio in order to
smooth the rate earned
by participants

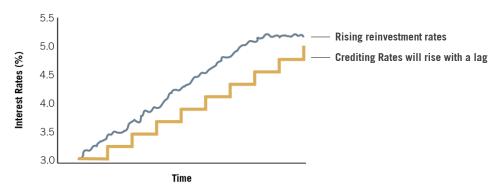




# IMPACT OF MARKET RATES ON STABLE VALUE YIELDS

#### STABLE VALUE YIELDS IN A RISING INTEREST RATE ENVIRONMENT

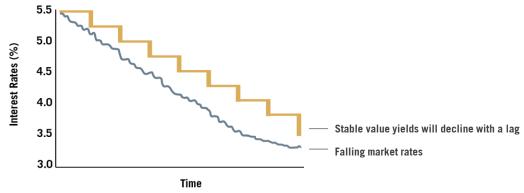
• If reinvestment rates are higher when cash flows are reinvested, the fund's yield will increase (with a lag)...



• In a rapidly rising interest rate environment, stable value yields would likely lag market interest rates and money market funds

#### STABLE VALUE YIELDS IN A FALLING INTEREST RATE ENVIRONMENT

• If reinvestment rates are lower when cash flows are reinvested, the fund's yield will decrease (with a lag)...



• In a stable or rapidly decreasing interest rate environment, stable value yields would likely outperform market interest rates and money market funds INSTITUTIONAL INVESTOR USE ONLY



# **STABLE VALUE RESULTS**

# WHAT ARE THE BENEFITS OF STABLE VALUE INVESTMENTS?

# WHAT ARE THE KEY BENEFITS OF STABLE VALUE PRODUCTS?

#### **Principal Preservation**

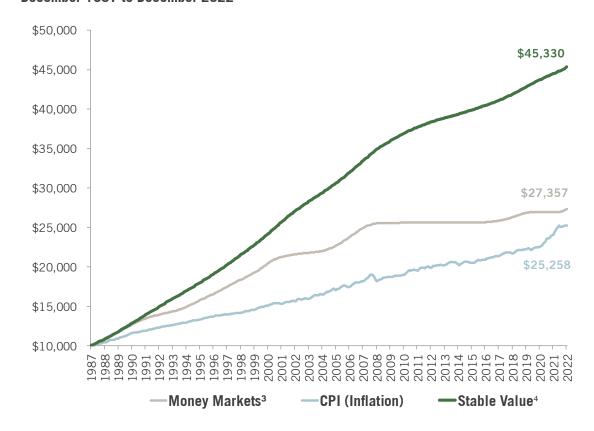
 Stable value is a cornerstone in a participants' retirement plan asset allocation. It can be used to offset the risk associated with more volatile asset classes such as stocks and bonds.

#### **Attractive Returns**

 Stable value funds have historically provided a return advantage of 1%-2% over money market funds over a full market cycle<sup>2</sup>

# Stable value has consistently delivered solid returns

# GROWTH OF \$10,000 OVER 35 YEARS<sup>1</sup> December 1987 to December 2022



<sup>1:</sup> The growth of \$10,000 is an illustration based on the growth of returns of the Galliard Stable Return Fund Core since December 1987 through December 2022. The growth of Money Markets shown is based on the returns of the Lipper US Index – Inst U.S. Govt Money Mkt returns. The growth of the CPI which is a proxy for inflation is based on the CPI all Urban data from the Bureau of Labor Statistics.

<sup>4:</sup> Returns shown are net of all fees. Galliard Stable Return Fund Core has been in existence since 1985 with a maximum investment management fee charged of 35 bps. Since 7/1/2020, the maximum investment management fee that could be charged was reduced to 25 bps. Historical returns reflect these fees for their respective time periods. Historical returns also reflect the deduction of other Fund expenses.

Past Performance is not an indication of how the investment will performance in the future. FOR INSTITUTIONAL INVESTOR USE ONLY



<sup>2:</sup> Refer to annual performance of stable value funds compared to money market funds shown on the following page of this presentation.

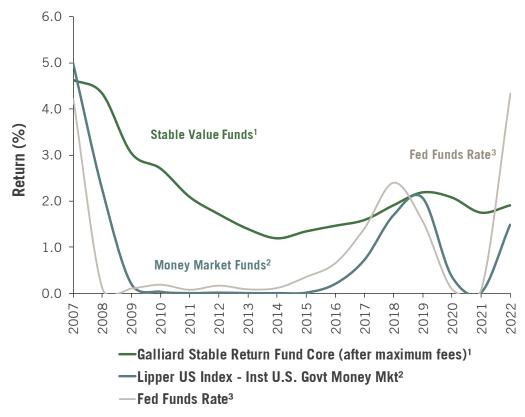
<sup>3:</sup> Source: Lipper Institutional Money Market Fund performance. Returns shown are net of all fees. The Lipper US Index – Inst U.S. Govt Money Mkt is an average of funds that invest principally in financial instruments issued or guaranteed by the U.S. Government, its agencies, or its instrumentalities, with dollar weighted average maturities of less than 90 days. These funds are eligible to keep a constant net asset value. The total return of the Lipper Average does not include the effect of sales charges. You cannot invest directly in a Lipper Average.

# INVESTMENT PERFORMANCE COMPARISON

#### RETURNS VERSUS MONEY MARKET FUNDS

#### INVESTMENT PERFORMANCE COMPARISON

Annual Returns as of 12/31/22



- Stable value funds have historically delivered a very attractive return pattern versus money market funds.
- Stable Value funds offer bond-like returns with volatility similar to that of money market funds.

Past performance is not an indication of how the investment will perform in the future.

- 1: Returns shown are net of all fees. Galliard Stable Return Fund Core has been in existence since 1985 with a maximum investment management fee charged of 35 bps. Since 7/1/2020, the maximum investment management fee that could be charged was reduced to 25 bps. Historical returns reflect these fees for their respective time periods. Historical returns also reflect the deduction of other Fund expenses.
- 2: Source: Lipper Institutional Money Market Fund performance. Returns shown are net of all fees. The Lipper US Index Inst U.S. Govt Money Mkt is an average of funds that invest principally in financial instruments issued or guaranteed by the U.S. Government, its agencies, or its instrumentalities, with dollar weighted average maturities of less than 90 days. These funds are eligible to keep a constant net asset value. The total return of the Lipper Average does not include the effect of sales charges. You cannot invest directly in a Lipper Average.

 ${\tt 3: Effective \ Federal \ Funds \ Rate \ sourced \ from \ the \ Federal \ Reserve. \ Rates \ are \ not \ annualized.}$ 

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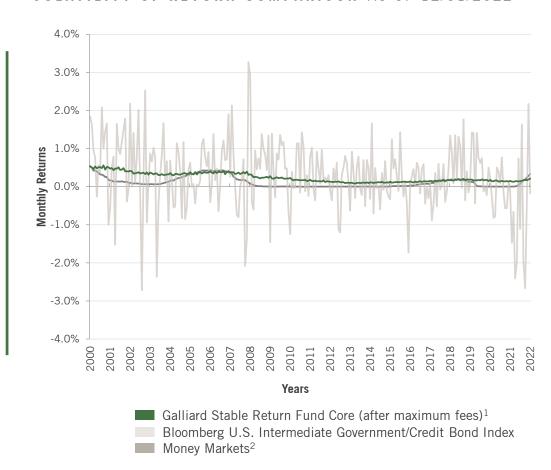


# **STABLE VALUE RESULTS**

### **VOLATILITY VERSUS COMPETING OPTIONS**

#### VOLATILITY OF RETURN COMPARISON AS OF 12/31/2022

Stable value portfolios
have not experienced
the monthly return
volatility typical of likeduration fixed income
products



<sup>1:</sup> Returns shown are net of all fees. Galliard Stable Return Fund Core has been in existence since 1985 with a maximum investment management fee charged of 35 bps. Since 7/1/2020, the maximum investment management fee that could be charged was reduced to 20 bps. Historical returns reflect these fees for their respective time periods. Historical returns also reflect the deduction of other Fund expenses.

Past Performance is not an indication of how the investment will performance in the future. FOR INSTITUTIONAL INVESTOR USE ONLY



<sup>2:</sup> Source: Lipper Institutional Money Market Fund performance. Returns shown are net of all fees. The Lipper US Index – Inst U.S. Govt Money Mkt is an average of funds that invest principally in financial instruments issued or guaranteed by the U.S. Government, its agencies, or its instrumentalities, with dollar weighted average maturities of less than 90 days. These funds are eligible to keep a constant net asset value. The total return of the Lipper Average does not include the effect of sales charges. You cannot invest directly in a Lipper Average.

# APPENDIX II

# **GALLIARD CAPITAL MANAGEMENT**

#### **PROFESSIONALS**



Mike Norman
Senior Managing Principal
President
612.895.1276
michael.d.norman@galliard.com

### Responsibilities

Mike is a senior managing principal and president of Galliard. He is responsible for day-to-day management of the firm, as well as oversight of the front office teams of client services, consultant relations, new business development, marketing, and stable value contract relationship management.

#### **Oversight Committees**

Operating Committee, New Business & Fees Committee (Chair), Stable Value Strategy Committee, Investment Contract Review Sub-Committee, GIPS Working Group, Client Contract Working Group, External Manager Oversight Working Group, Systems Governance Working Group, Investment Committee (non-voting), Galliard Culture Council

#### **Experience**

- Joined Galliard in 1996
- Previously a securities lending trader and trust officer with Norwest Bank

#### Education

B.A., Economics, University of Notre Dame MBA, Carlson School of Management at the University of Minnesota

#### **Memberships**

Formerly on the Board of Directors of the Stable Value Investment Association (SVIA) American Society of Pension Professionals & Actuaries (ASPPA) Association of Governmental Risk Pools (AGRIP) National Association of Government Defined Contribution Administrators (NAGDCA) National Association of Plan Advisors (NAPA) The Society of Professional Asset-Managers and Record Keepers (SPARK)



# **GALLIARD CAPITAL MANAGEMENT**

#### **PROFESSIONALS**



**Tami Pearse**Principal
331.431.4606
tami.pearse@galliard.com

#### Responsibilities

Tami is a member of the Client Relationship team, working with Galliard's clients and their consultants to develop and implement investment strategies in order to ensure relationship expectations and objectives are met. As a result of 30 years dedicated to the stable value and fixed income markets, she brings to her work a deep understanding and perspective of wrap providers and the stable value and fixed income markets. Since joining Galliard in 2011, Tami has served as a key member of Galliard's Contract Negotiation and Issuer Management team, with responsibility for day-to-day relationship management, wrap contract negotiation, and deal placement. She continues to collaborate closely with that team on behalf of Galliard's clients.

#### **Oversight Committees**

Investment Contract Review Working Group, Stable Value Strategy Committee, Galliard Culture Council

#### **Experience**

- Joined Galliard in 2011
- Previously Director of Global Markets and Benefit Responsive Products at Deutsche Bank
- · Prior to Deutsche Bank was Vice President of Sales and Marketing for the Benefits Strategies Group at Bankers Trust Company
- Authored a chapter in *The Handbook of Stable Value Investments*
- · Has worked in the investment industry since 1980

#### Education

B.A., Economics and International Relations, Lake Forest College

#### Memberships

Formerly on the Board of Directors of the Stable Value Investment Association (SVIA) Phi Beta Kappa Society

