STATE OF NORTH CAROLINA

INTRODUCTION TO STABLE VALUE

SECTION I: Introduction to Stable Value

APPENDIX: Professional Biographies

William Weber
Senior Director
612.667.6401
william.l.weber@galliard.com

INTRODUCTION TO STABLE VALUE INVESTING

A BRIEF HISTORY OF STABLE VALUE

- Has been among the most popular choices for plan participants since 1970's
- Comprises almost 25% of 401(k) assets ($719.4 Billion in assets)*
- Has outperformed money market funds by over 2% compounded over the past 10 years with less volatility
- Delivers returns similar to short/intermediate bonds with significantly less volatility
- Has achieved its goals of principal preservation and competitive yield through many different economic and interest rate environments

WHO MIGHT USE STABLE VALUE

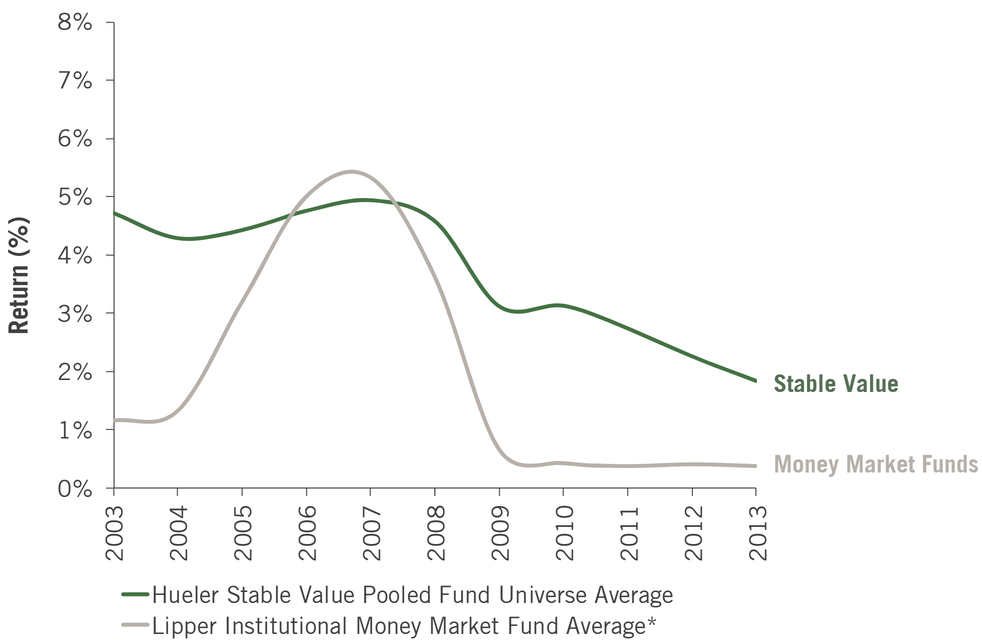
- You are looking to preserve principal
- You are looking for stable income
- You are seeking a long-term investment with low volatility

*Source: Stable Value Investment Association. As of 12/31/13.

INTRODUCTION TO STABLE VALUE INVESTING
RETURNS VERSUS COMPETING OPTIONS

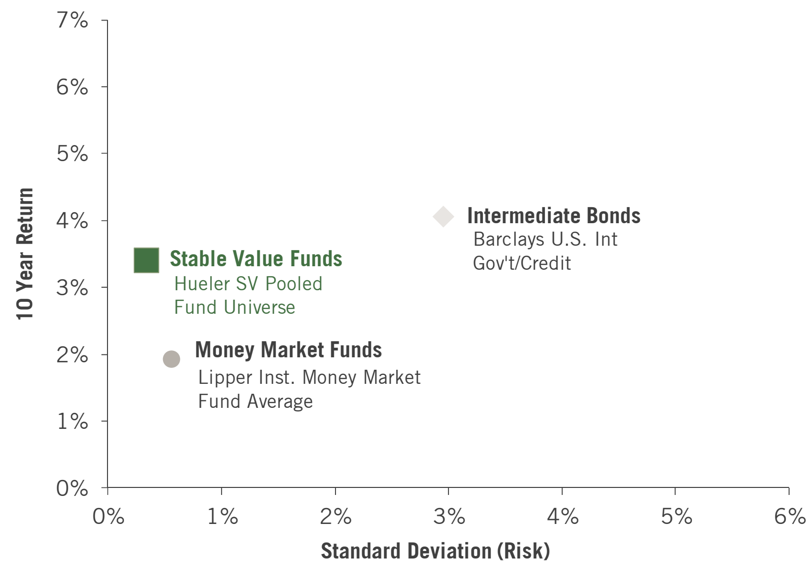
INVESTMENT PERFORMANCE COMPARISON

ANNUAL RETURNS



Stable value funds have historically delivered a very attractive return pattern versus money market funds.

RISK/RETURN COMPARISON (AS OF 9/30/14)



Stable Value funds offer bond-like returns with less volatility than money market funds.

*As of 6/30/14, the Hueler Analytics Stable Value Pooled Fund Universe represented investment strategies of $106.6 billion in stable value assets across 15 pooled funds. The universe reports performance before investment management fees. Source: Stable Value Investment Policy Survey Covering Stable Value Assets as of year end 2011.
**Lipper Institutional Money Market Fund performance has been increased by the average stable value fund fee of 35 basis points

INTRODUCTION TO STABLE VALUE INVESTING
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.

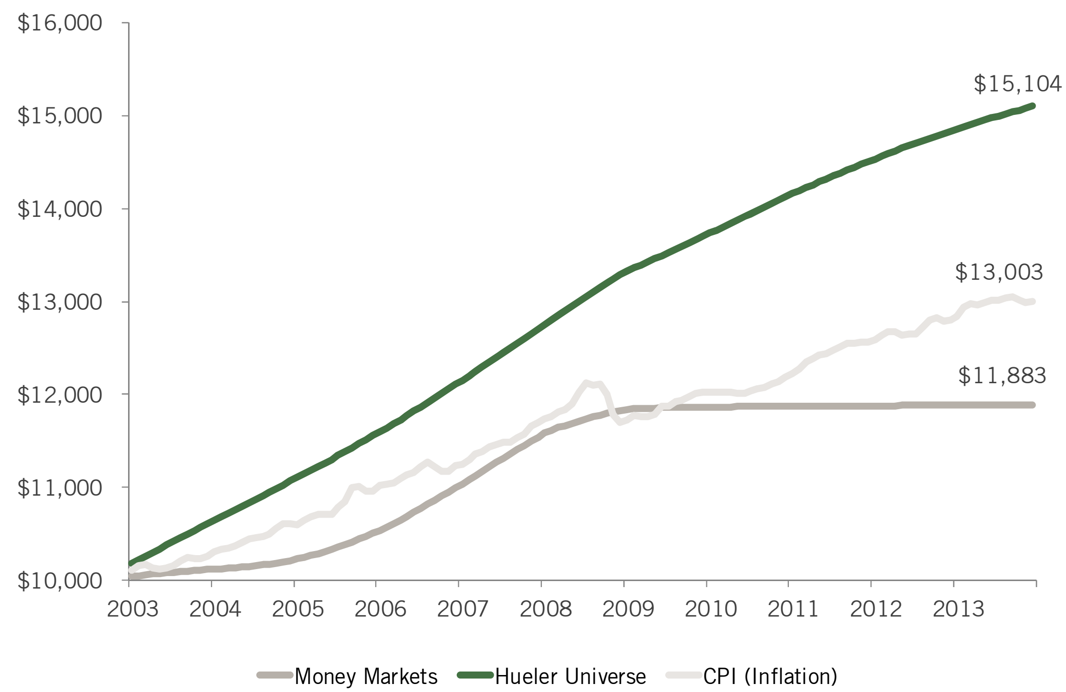
Attractive Returns

- Stable value funds have historically provided a significant return advantage of 1% - 2% over money market funds[1]

As of December 2013, the average one year annualized return for stable value was 1.84%[2]

- The average annualized return of money market funds was 0.35%[3]

GROWTH OF $10,000 OVER 10 YEARS*
January 2003 to December 2013



Stable value has consistently delivered solid returns

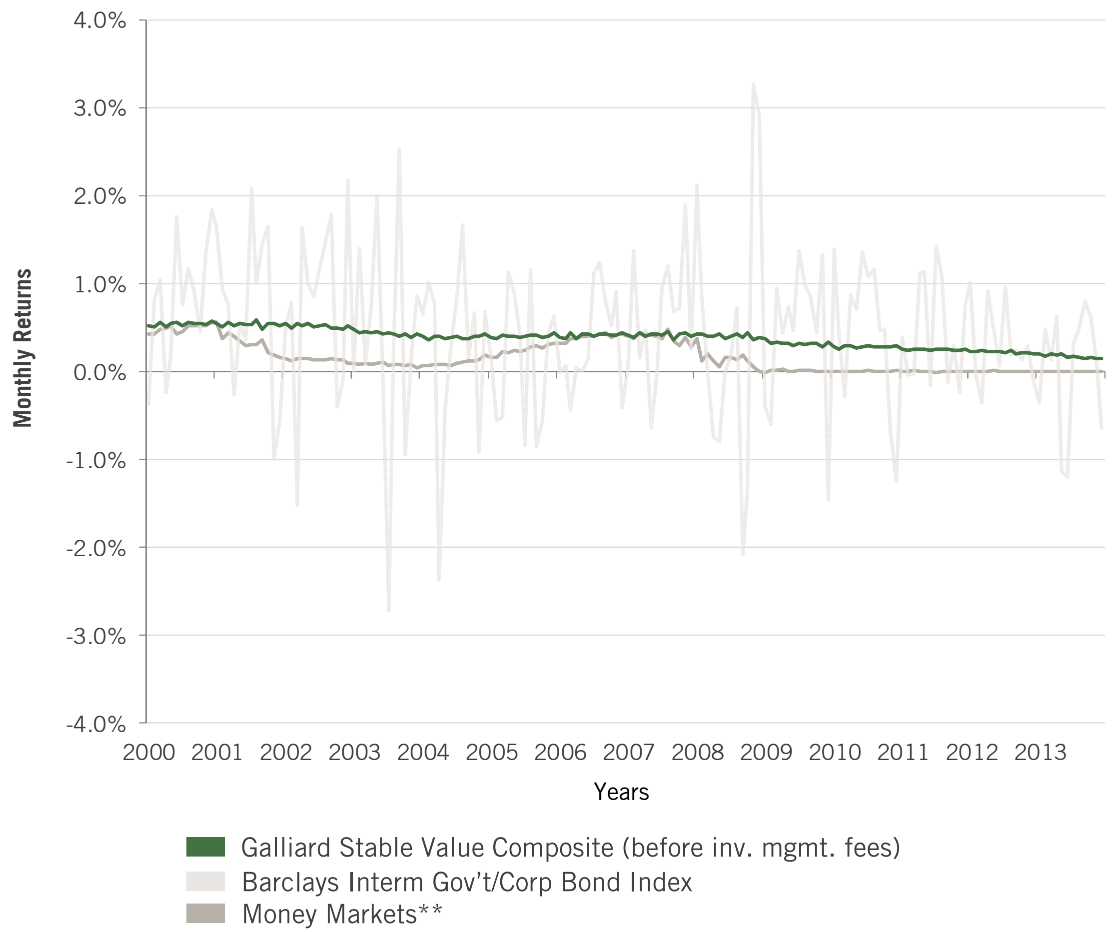
*The growth of $10,000 is a hypothetical illustration based on the growth of returns of the Hueler Stable Value Pooled Fund Universe since January 2003 through December 2013.The growth of $10,000 is shown before fees. Fees would reduce the growth of $10,000 shown. The growth of Money Markets shown is based on the returns of the Lipper Institutional Money Market index 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.

[1]Stable Value Investment Association
[2]Returns shown are before fees. As of 9/30/13, The Hueler Analytics Stable Value Pooled Fund Universe represented investment strategies of $109.8 billion in stable value assets across 15 pooled funds.
[3]Lipper Institutional Money Market Fund performance has been increased by the average stable value fund fee of 35 bps

INTRODUCTION TO STABLE VALUE INVESTING
VOLATILITY VERSUS COMPETING OPTIONS

VOLATILITY OF RETURN COMPARISON (AS OF 12/31/13)*

Stable value portfolios have not experienced the monthly return volatility typical of like-duration fixed income products



*Source: Morningstar EnCorr
** Barclays U.S. 1-3 Year Treasury Bill

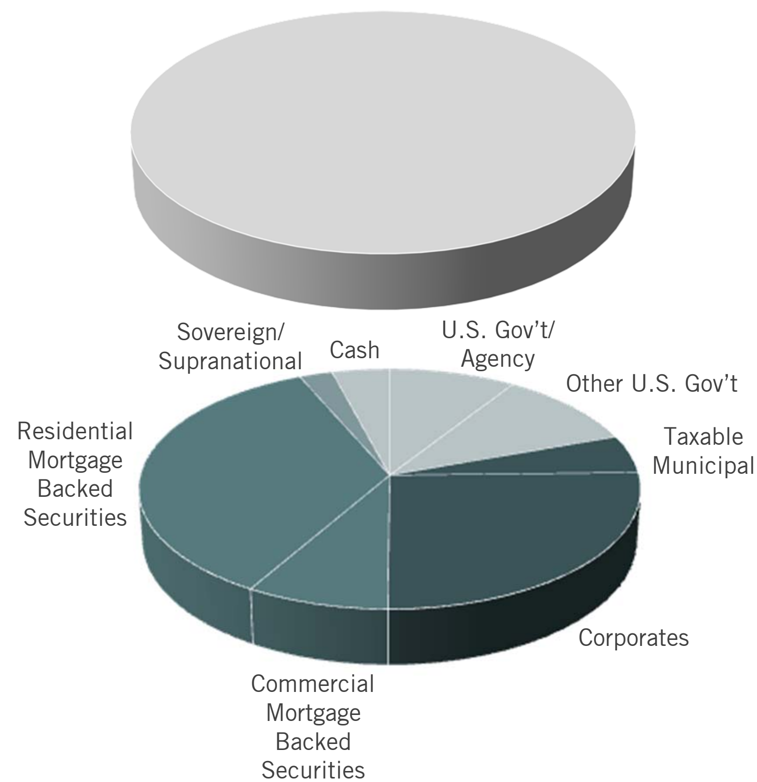
INTRODUCTION TO STABLE VALUE INVESTING

COMPOSITION OF SECURITY BACKED INVESTMENT CONTRACTS

Security Backed Investment Contract (Wrap Contract)

A fixed income bond portfolio combined with an investment contract issued from a bank or insurance company

Book Value Contract



Security Backed Investment Contracts (wrap contracts)

- Issued by banks and insurance companies

Underlying Fixed Income Portfolio

The Security Backed Investment Contract is designed to facilitate participants' ability to transact at book value (principal plus accrued interest)

INTRODUCTION TO STABLE VALUE INVESTING

OPTIONS FOR STABLE VALUE/BOOK VALUE PROTECTION

TRADITIONAL GUARANTEED INVESTMENT CONTRACTS

GIC assets are a part of Insurance Company General Account

Issuer: Insurance company issues Group Annuity Contract and owns GIC assets
Plan Trust: Contract holder/Creditor of General Account

WHAT IS...A GIC?

A GIC is backed by the creditworthiness of the issuer. A traditional GIC is a group annuity contract issued by an insurance company and provides a guarantee of principal and accumulated interest. Most GICs for stable value provide a specified interest rate for a set period of time. GICs seek to enable aparticipants to make withdrawals at book value. At the plan level, GICs are relatively illiquid until maturity.

WHO OWNS PLAN ASSETS?

Plan assets are owned by the insurance company and are part of the insurance company's General Account. With a traditional GIC, stable value contract holders and participants are creditors of the insurer and do not have priority claim status on the General Account assets of the insurance company.

PROTECTION BENEFITS

Plan sponsor has creditor rights on insurer assets. As part of an insurance company General Account, plan assets could be used to meet many of the contractual guarantees and general obligations of the insurance company.

SEPARATE ACCOUNT INVESTMENT CONTRACT

Separate account assets are segregated from Insurance Company General Account

Issuer: Insurance company issues Group Annuity Contract and owns Separate Account assets
Plan Trust: Contract holder/First priority creditor of Separate Account assets

...A SEPARATE ACCOUNT INVESTMENT CONTRACT?

A Separate Account Investment Contract is a GIC backed by high quality bonds held in an account separate from Insurance Company General Account. A Separate Account Investment Contract is a book value GIC issued from within an insurance company separate account. Like a traditional GIC, a separate account GIC seeks to enable participants to make book value withdrawals, and assets are owned by the insurer. Unlike a traditional GIC, the separate account GIC is typically backed by a marketable (open maturity) portfolio of fixed income securities.

Plan assets are owned by the Insurance Company but are separate and insulated from the insurance company's General Account. Separate Account contract holders and plan participants are creditors of the insurer and have first priority claim status on assets held within the Separate Account.

Plan trust has first claim on Separate Account Investment Contract assets.

SECURITY BACKED INVESTMENT CONTRACT

SBIC structure unbundles book value protection (wrap) from underlying investments

Issuer: Banks and insurance companies issue book value contracts
Plan Trust: Owns underlying assets

...A SECURITY BACKED INVESTMENT CONTRACT?

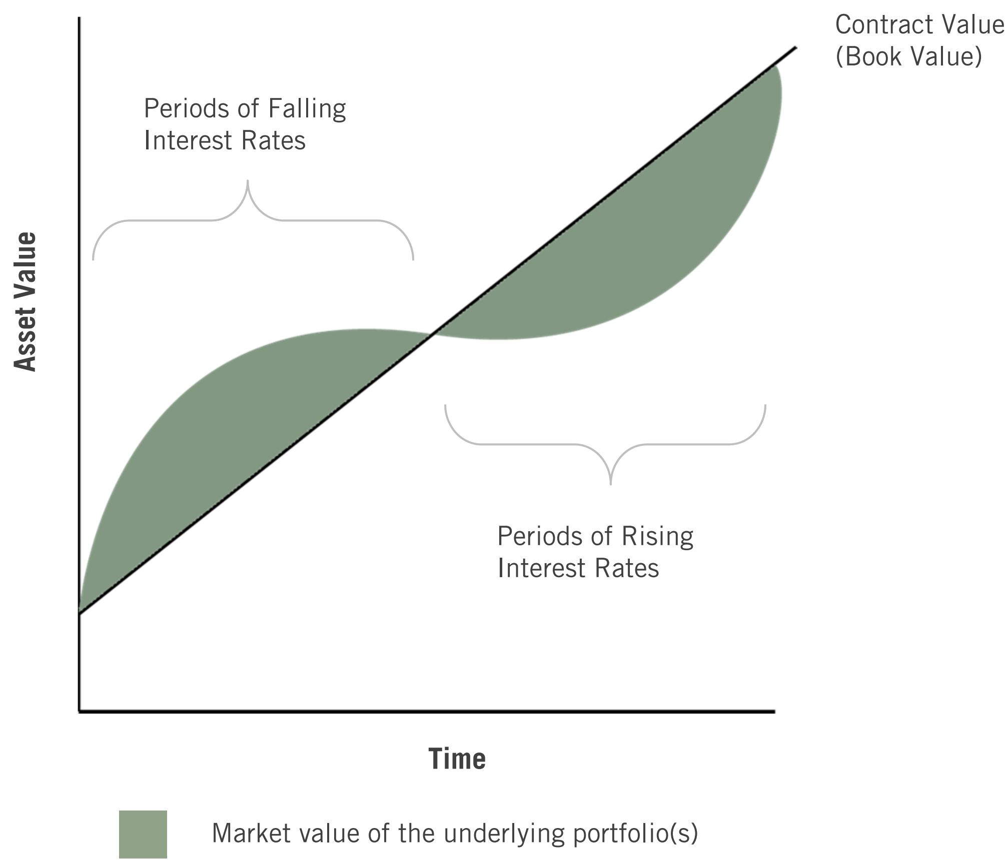
A Security Backed Investment Contract is backed by bonds owned by plan trust. A Security Backed Investment Contract seeks to enable participants to make book value withdrawals. Unlike a traditional GIC, a Security Backed Investment Contract unbundles the book value wrap contract protection from the marketable portfolio of fixed income securities. The plan trust is the owner of the underlying assets. Wrap contracts/agreements are established with financial institutions (typically banks or insurance companies).

Plan assets are owned directly by the Plan Trust.

Unlike a Separate Account Investment Contract, plan trust owns assets outright and is not considered a creditor.

MECHANICS OF STABLE VALUE INVESTING
THE ROLE OF THE CREDITING RATE

Security backed investment contracts provide a relatively consistent return profile during periods of rising or falling interest rates. The contracts tend 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.



Objective of Stable Value Investing: Minimize volatility (changes) in the Fund's yield, while protecting principal

MECHANICS OF STABLE VALUE INVESTING
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

By manipulating the formula the crediting rate may be determined 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.

MECHANICS OF STABLE VALUE INVESTING
HOW A CONTRACT CREDITING RATE WORKS

Simple Formula

Book Value	$100,000,000	**Gain/(Loss)**	(2.00%)
Market Value	$98,000,000	**Portfolio Yield**	2.00%
Loss	($2,000,000)	**Portfolio Duration**	3.0 Years

2.00% - (2.00%/3) = Estimated Crediting rate of 1.33%

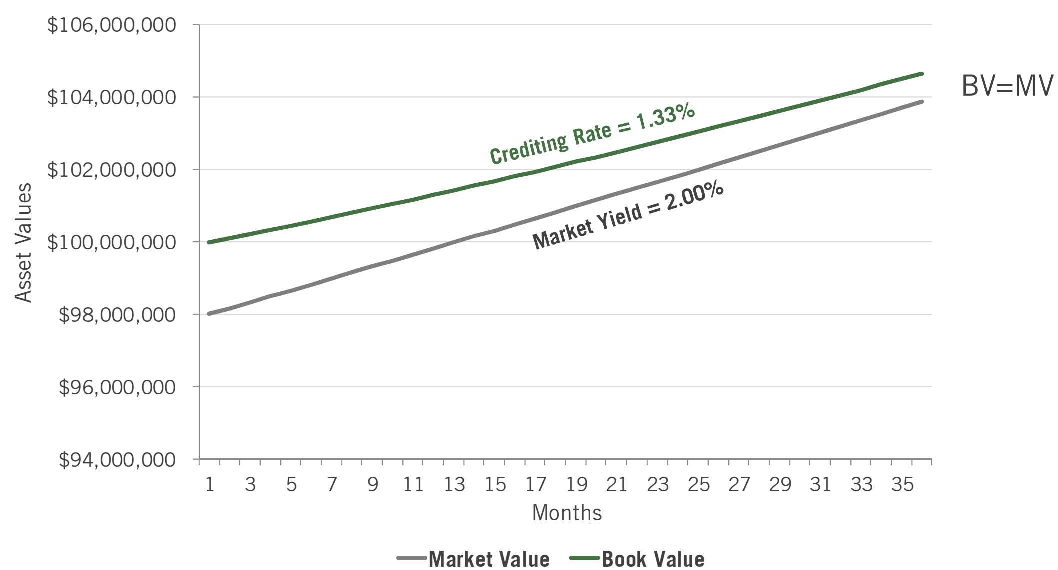
The crediting rate formula spreads the 2% loss over a 3-year period, from the rate reset data.

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

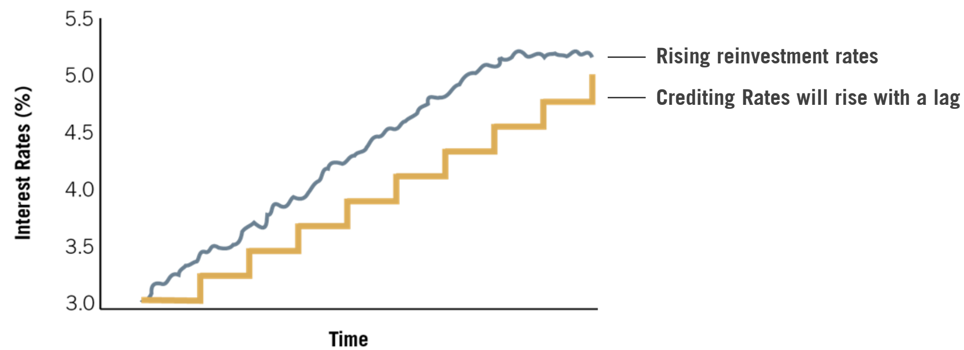
The crediting rate amortizes gains/losses over the duration of the portfolio in order to smooth the rate earned by participants



MECHANICS OF STABLE VALUE INVESTING
IMPACT OF MARKET RATES ON STABLE VALUE YIELDS

STABLE VALUE YIELDS IN A RISING INTEREST RATE ENVIRONMENT

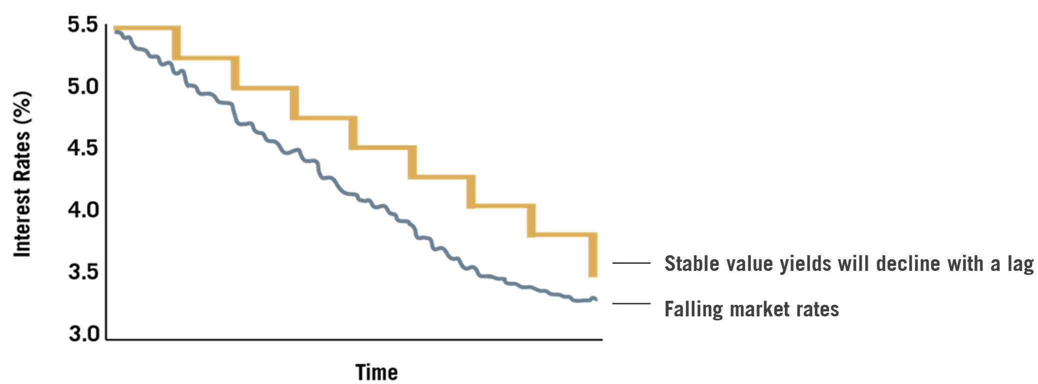
- If reinvestment rates are higher when cash flows are reinvested, the fund's yield will increase (with a lag)…



- In a rapidly rising interest rate environment, stable value yields will likely lag market-valued benchmarks 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 will typically outperform market rates and money market funds