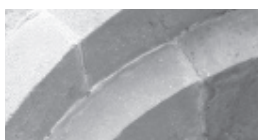


STABLE VALUE INSIGHTS



PROVIDING INVESTORS THE SAFETY &
SECURITY TO NAVIGATE RISING INTEREST RATES

August 8, 2023

KEY POINTS

- Prior to the pause announced at the June 2023 meeting, the Fed had raised its policy rate by a full 5.00% in the ten meetings from March 2022 to May 2023.
- Typically, bond portfolio values decline with rising interest rates; however, stable value investments are particularly attractive during periods of rising interest rates because of the principal protection provided by stable value contracts.
- Stable value investments have generated long-term returns that are comparable to short- to intermediate-term bonds, with return volatility that has been similar to money market funds.
- When interest rates increase, the underlying bond portfolio's cashflows can be reinvested at higher rates, which should translate to a higher crediting rate all else equal.
- Stable value investments' return advantage over money market funds tends to narrow or become negative when short-term rates rise... however, long-term fundamentals still favor stable value investments.
- Stable value's attractive long-term returns and limited return volatility offer significant benefit to savings plan investors, whether stable value is used as a significant allocation for a participant in or nearing retirement or as a diversifying allocation in a portfolio of riskier assets.

AFTER THE PAUSE

At its June 2023 FOMC meeting, the Federal Reserve paused its run of ten consecutive policy rate increases in order to “assess additional information and its implications for monetary policy.”¹ The Fed signaled that additional rate hikes were likely to follow later this year and followed through with an expected 0.25% increase in its policy rate at the July 2023 FOMC meeting – raising the federal funds target range to 5.25% to 5.50%.² With the Fed and the fixed income markets anticipating how much further tightening – if any – will be necessary during this rate cycle, this potential inflection point provides an opportunity for us to assess how stable value investments have performed during this recent period of rapidly rising interest rates and the implications for future returns.

As background, the Fed raised its policy rate for the first time since 2018 in March 2022, implemented the first 0.50% increase since 2000 in May 2022, and raised rates in 0.75% increments (the largest increase since 1994) for *four consecutive meetings* from June 2022 to November 2022. Turning the calendar, the Fed subsequently hiked an additional 0.25% at each of the first three meetings of 2023. Prior to the pause announced at the June 2023 meeting, the Fed had raised its policy rate by a full 5.00% in the ten meetings from March 2022 to May 2023.³ Market forces have also pushed short- to intermediate-term Treasury bond yields significantly higher, if not as high as the Fed's policy rate. Entering 2022, the yield on the 3-year U.S. Treasury Bond was just under 1.00% but rose to levels exceeding 4.50% in Q4 2022 and as high as 4.71% in March 2023 before ending June 2023 near 4.50%.⁴ After more than a decade of tame inflation and relatively low interest rates (from the financial crisis of 2007-08 through the COVID-19 pandemic), financial markets have experienced increased volatility as they grapple with elevated inflation and the Fed's efforts to combat it. During this period of rapidly rising rates, stable value investments have continued to meet their primary objective of principal preservation, and stable value yields have begun to gradually reflect higher reinvestment rates.

STABLE VALUE OVERVIEW

The stable value asset class's prominent role within tax qualified savings plans can be attributed to its unique ability to provide principal preservation, while generating an attractive rate of return with low volatility. Stable value investments seek to achieve their attractive risk-adjusted returns through the combination of broadly diversified, high-quality fixed income investments with stable value investment contracts issued by banks, insurance companies, and other financial institutions. The use of stable value contracts (also known as stable value wrap contracts) allow investors to incrementally earn the returns generated by the underlying bond portfolio, while insulating them from market price volatility. This value proposition is particularly attractive during periods of rising interest rates, as evidenced by this most recent Fed rate hiking cycle; however, the magnitude of this most recent increase in interest rates is not without some near-term challenges.

STABLE VALUE INSIGHTS

Stable value wrap contracts are designed to protect investors from losses by amortizing changes in their underlying bond portfolio’s market value due to changes in interest rates or other factors. While increases in interest rates typically cause the market value of a bond portfolio to decline, a stable value contract seeks to protect investors from such losses, providing a relatively consistent rate of return that typically follows the trend of market interest rates. Increases in interest rates provide the opportunity to reinvest the underlying bond portfolio’s cash flows at higher rates, which – all else equal – should ultimately translate to a higher crediting rate for investors; however, due to its loss amortization feature, a stable value contract’s crediting rate reacts to changes in market rates gradually over time. Consequently, the performance of stable value investments may lag those of shorter-term conservative investments in periods of rapidly rising interest rates, though their long-term fundamental advantages remain intact.

STABLE VALUE PERFORMANCE DURING ADVERSE INTEREST RATE ENVIRONMENTS

In 2022, the U.S. entered its seventh interest rate cycle since 1982 (see Figure 1). Each cycle has been characterized by expanding economic growth leading to inflationary pressures, more restrictive monetary policy, and rising short-term interest rates. Consistent with the term premium typically required by investors to hold longer dated maturities, a positively sloped U.S. Treasury yield curve has prevailed for most of this period; however, the yield curve occasionally can become “inverted” – when short-term rates exceed longer-term rates. In such an environment, short-term investments may command higher yields, at least in the short run, relative to stable value investments.

FIGURE 1: CONSTANT MATURITY TREASURY INTEREST RATES SINCE 1982⁵

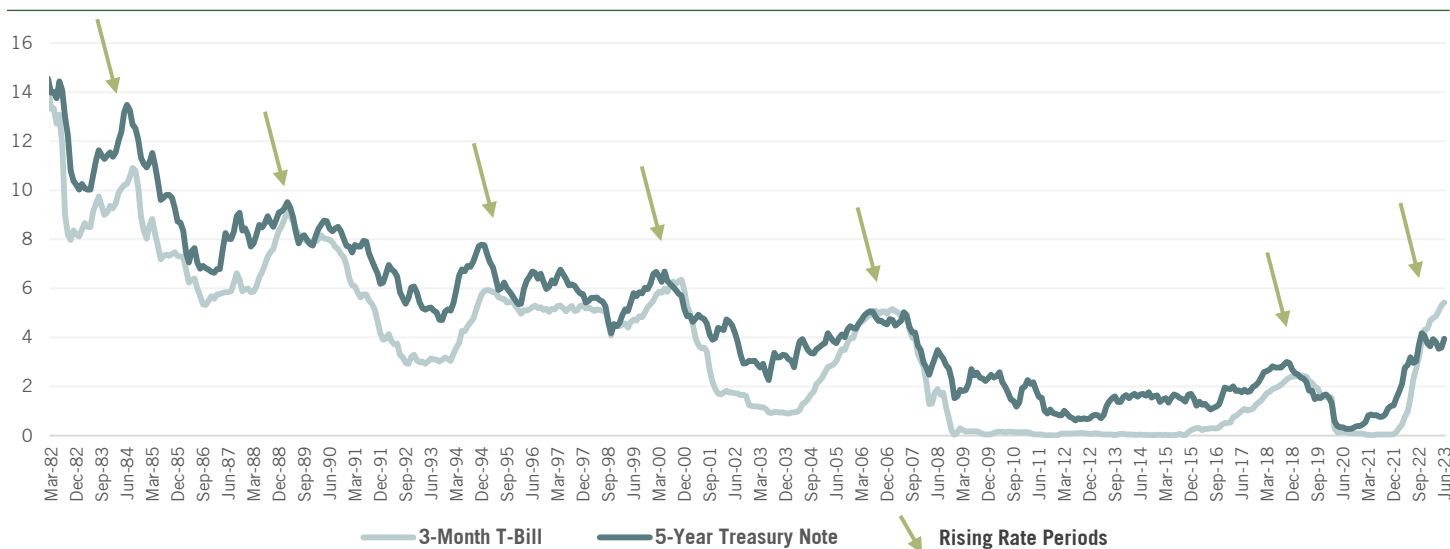


FIGURE 2: PERIODS OF INVERTED YIELD CURVES SINCE 1982⁶

Inversion Period	# of Months	Average Magnitude of Inversion
June 1989 - Aug 1989	3	0.18%
Aug 2000 - Feb 2001	7	0.42%
July 2006 - May 2007	11	0.35%
March 2019 - Oct 2019	8	0.26%
Average Duration (# of months)		7.25
Average Magnitude		0.30%
Nov 2022 - ?	8+	1.07%

Curve inversions have correlated closely with Fed policy and the U.S. economic cycle, and since the beginning of 1982, there had been four periods prior to 2022 in which the portion of the U.S. Treasury yield curve most relevant to stable value investments remained inverted for a period of three months or more, as measured by the average monthly market yield on U.S. Treasury securities at 3-month constant maturity relative to the average monthly market yield on U.S. Treasury securities at a 5-year maturity (see Figure 2). In the current rising rate cycle, the Treasury yield curve again became inverted by this measure beginning in November 2022 and has since remained inverted through the publication date of this

article. While prior periods of inversion lasted an average of just over seven months with an average magnitude of 0.30% (the largest average monthly inversion was 0.77% in December 2000), the current inversion has already lasted eight months and has been far more severe, averaging 1.07% through June 30, 2023, and reaching a monthly average as high 1.72% in May 2023.

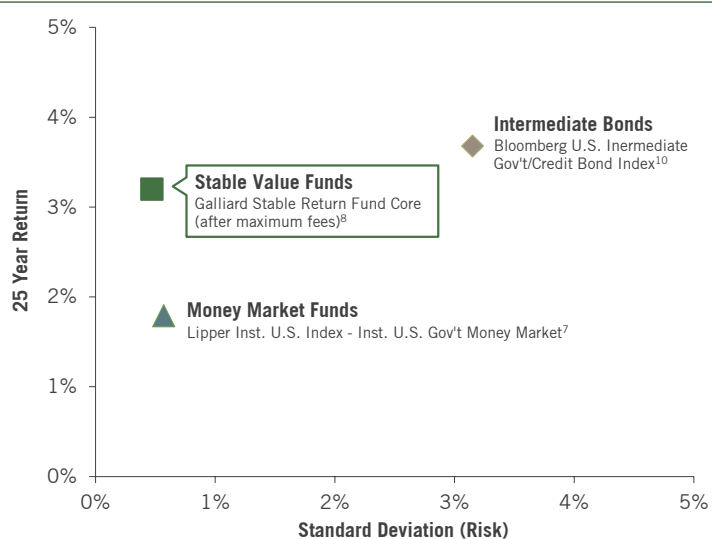
Comparing money market returns with the returns of stable value investments – represented here by the Galliard Stable Return Fund – during prior periods of inversion shows that money market funds have not outperformed significantly during past periods of inverted yield curves (see Figure 3). However, the dramatic rise in interest rates and the magnitude of the most

recent curve inversion have provided money market funds with a significant short-term return advantage over existing stable value funds. Nonetheless, we believe the yield advantage currently enjoyed by money market funds to be temporary.

PRINCIPAL PRESERVATION WITH SUPERIOR RETURNS OVER THE LONG-TERM

During past periods of rising rates, stable value investments have generally delivered on their primary objective of providing principal preservation and a competitive yield versus other low-risk alternatives. Historically, stable value investments have generated long-term returns that are comparable to short- to intermediate-term bonds, reflecting the returns of the underlying fixed income securities in which they invest. For example, the Galliard Stable Return Fund has outperformed money market funds by an annualized margin of 1.41% over the last 25 years.⁹ Importantly, they have generated these returns with return volatility that has been similar to money market funds (see Figure 4).

FIGURE 4: RISK/RETURN COMPARISON
AS OF JUNE 30, 2023



by Bloomberg).¹⁰ The ability of stable value products to capture the additional term and credit risk premia available via their broader investment universe provides a structural return advantage (that can be augmented via actively managed fixed income strategies), while meeting the long-term objectives of principal protection and a consistent credited rate of interest.

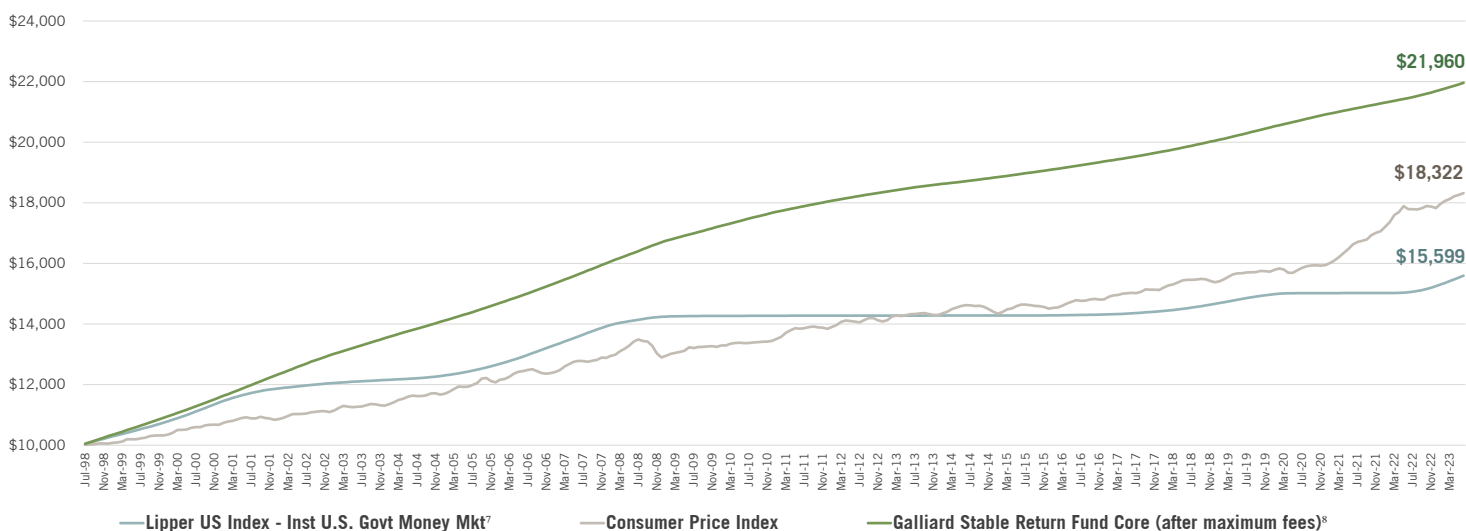
FIGURE 3: TOTAL RETURNS DURING PERIODS OF INVERTED YIELD CURVES

Inversion Period	TOTAL RETURNS		Money Market Excess Returns
	Money Market Funds ⁷	Galliard Stable Return Fund Core ⁸	
June 1989 - Aug 1989	2.24%	2.04%	+0.20%
Aug 2000 - Feb 2001	3.59%	3.58%	+0.01%
July 2006 - May 2007	4.71%	4.17%	+0.54%
March 2019 - Oct 2019	1.44%	1.48%	-0.04%
Nov 2022 - June 2023	2.93%	1.66%	+1.27%

Stable value investments' return advantage over money market funds tends to narrow or become negative when short-term rates rise, particularly with rapid increases as we have seen during this most recent rate hiking cycle; however, long-term fundamentals still favor stable value investments. Stable value funds' ability to invest in longer maturity assets diversified across the investment grade sectors of the bond market provides a more robust, diversified source of yield than that of a money market fund. Since 1982, the term premium – the compensation required by investors for bearing the risk that interest rates may change over the life of a bond – for three-year Treasuries has averaged 0.72%.¹¹ The option-adjusted spread of the Bloomberg U.S. 1-5 Year Government/Credit Bond Index, which measures the additional yield of the index over risk-free Treasuries of comparable maturity, has averaged 0.39%, since August 2000 (the earliest date for which that data is published

STABLE VALUE INSIGHTS

FIGURE 5: GROWTH OF \$10,000 OVER 25 YEARS¹²



Though the current yield curve inversion may yet persist longer than in past periods, historical experience suggests a very small probability of money market funds outperforming stable value on a consistent, long-term basis. While stable value investments do not provide a hedge against inflation, they have demonstrated an ability to generate real returns over the long term (see Figure 5). Additionally, stable value investments have maintained their near-zero correlation to equity investments during periods, like 2022, in which both fixed income and equity investments have experienced negative returns. Thus, stable value’s attractive long-term returns and limited return volatility offer significant benefit to savings plan investors, whether stable value is used as a significant allocation for a participant in or nearing retirement or as a diversifying allocation in a portfolio of riskier assets.

THE IMPORTANCE OF A WELL-MANAGED STABLE VALUE FUND

With the significant increase in interest rates since the beginning of 2022, most stable value funds are now operating with underlying bond portfolio market values that are less than the contract value guaranteed by stable value contract issuers (as measured by a contract’s market-to-book-value ratio). While the risk exposure to stable value contract issuers is greater when market-to-book-value ratios are below 100% (or “par”), a well-managed stable value fund seeks to mitigate these risks via issuer oversight, diversification, and strong contract terms. Additionally, plan sponsor-initiated withdrawals from stable value funds potentially require more diligence when market-to-book-value ratios are less than 100%; thus, plan sponsors should work closely with their stable value manager to minimize, to the extent possible, any adverse impact to the stable value fund resulting from such events. Exit provisions from some stable value products may also be more onerous when market-to-book-value ratios are below par, and an experienced stable value manager can often help provide solutions for plans seeking to make a change.

At Galliard, we remain attuned to the impact of rising interest rates on bond portfolio valuations, but we believe that stable value offers savings plan participants unique protections against these risks. Increases in interest rates provide opportunities for us to reinvest our stable value portfolios’ underlying assets at higher yields, and the increase in rates during this cycle is already resulting in higher crediting rates and greater earnings potential for stable value investors going forward. Meanwhile, stable value’s unique principal protections give investors the safety and security needed to navigate this volatile period of transition more confidently. With a foundational understanding that the stable value funds we manage are the “safe” option offered in most defined contribution plans,¹³ we manage our clients’ stable value portfolios to guard against these potential risks to continue providing a principal protected investment that plan participants can count on to meet their savings plan objectives.



NICK GAGE, CFA

Senior Principal

As Head of Stable Value Contract Strategy, Nick oversees the design, implementation, and management of customized stable value investment solutions to meet the unique needs of Galliard’s institutional clients. In this role, he is responsible for ongoing relationship management of all stable value contract issuers, as well as chairing the strategy group that is responsible for management and oversight of all of Galliard’s stable value portfolios, including the Galliard Stable Return Fund and Galliard Managed Income Fund collective funds. In addition, he is actively involved in product development and provides industry leadership as the current Chairman of the Stable Value Investment Association’s Board of Directors. Nick has worked in the investment industry since 2001 and joined Galliard in 2008. He received a B.S. in Economics from Vanderbilt University.

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You can also visit the Galliard website at www.galliard.com

ENDNOTES

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

1: “Federal Reserve issues FOMC statement” *Federal Reserve Board*, June 14, 2023, www.federalreserve.gov/newsevents/pressreleases/monetary20230614a.htm

2: “Federal Reserve issues FOMC statement” *Federal Reserve Board*, July 26, 2023, www.federalreserve.gov/newsevents/pressreleases/monetary20230726a.htm

3: *Federal Reserve Board* <https://www.federalreserve.gov/newsevents.htm>. Accessed August 8, 2023.

4: “Interest Rate Statistics” *U.S. Department of Treasury*, home.treasury.gov/policy-issues/financing-the-government/interest-rate-statistics. Accessed August 8, 2023

5: Source: Derived from Federal Reserve “H.15 Selected Interest Rates” <https://www.federalreserve.gov/datadownload/>. Accessed August 8, 2023.

6: Source: Derived from Federal Reserve “H.15 Selected Interest Rates” <https://www.federalreserve.gov/datadownload/>. Accessed August 8, 2023. Inversion periods are defined as periods when monthly average yields on 5-Year Treasuries were less than yields on the 3-Month T-bill.

7: Source: Lipper Institutional Money Market Fund performance. Returns shown are net of all fees. The Lipper US Index – Inst U.S. Gov’t Money Mkt is an average of funds that invest principally in financial instruments issued or guaranteed by the United States 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 this Lipper Index does not include the effect of sales charges. You cannot invest directly in the Lipper Index.

8: 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.

9: Excess return of the 25 year annualized return as of June 30, 2023 for the Galliard Stable Return Fund Core (3.20%) and the Lipper US Index – Inst U.S. Govt Money Mkt (1.79%).

10: Index data is sourced from Bloomberg.

11: “Treasury Term Premia” *Federal Reserve Bank of New York: Federal Reserve Board*. [/www.newyorkfed.org/research/data_indicators/term-premia-tabs#/interactive](http://www.newyorkfed.org/research/data_indicators/term-premia-tabs#/interactive). Accessed July 19, 2023. ACM term premia are obtained from the model described in Adrian, Crump, and Moench (2013). The ACM model is re-estimated once a month. This may result in minor changes to the historical decompositions of Treasury yields.

12: The growth of \$10,000 is an illustration based on the growth of returns of the Galliard Stable Return Fund Core since June 1998 through June 2023. 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.

13: Caswell, John R. and Tourville, Karl. *The Handbook of Stable Value Investments* - Edited by Frank J Fabozzi, “Managing Synthetic GIC Portfolios.” New Hope, Pa.: Frank J. Fabozzi Associates, c1998

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