

# Ohio DC Stable Value Option Review

GSAM



# SVO Portfolio Highlights

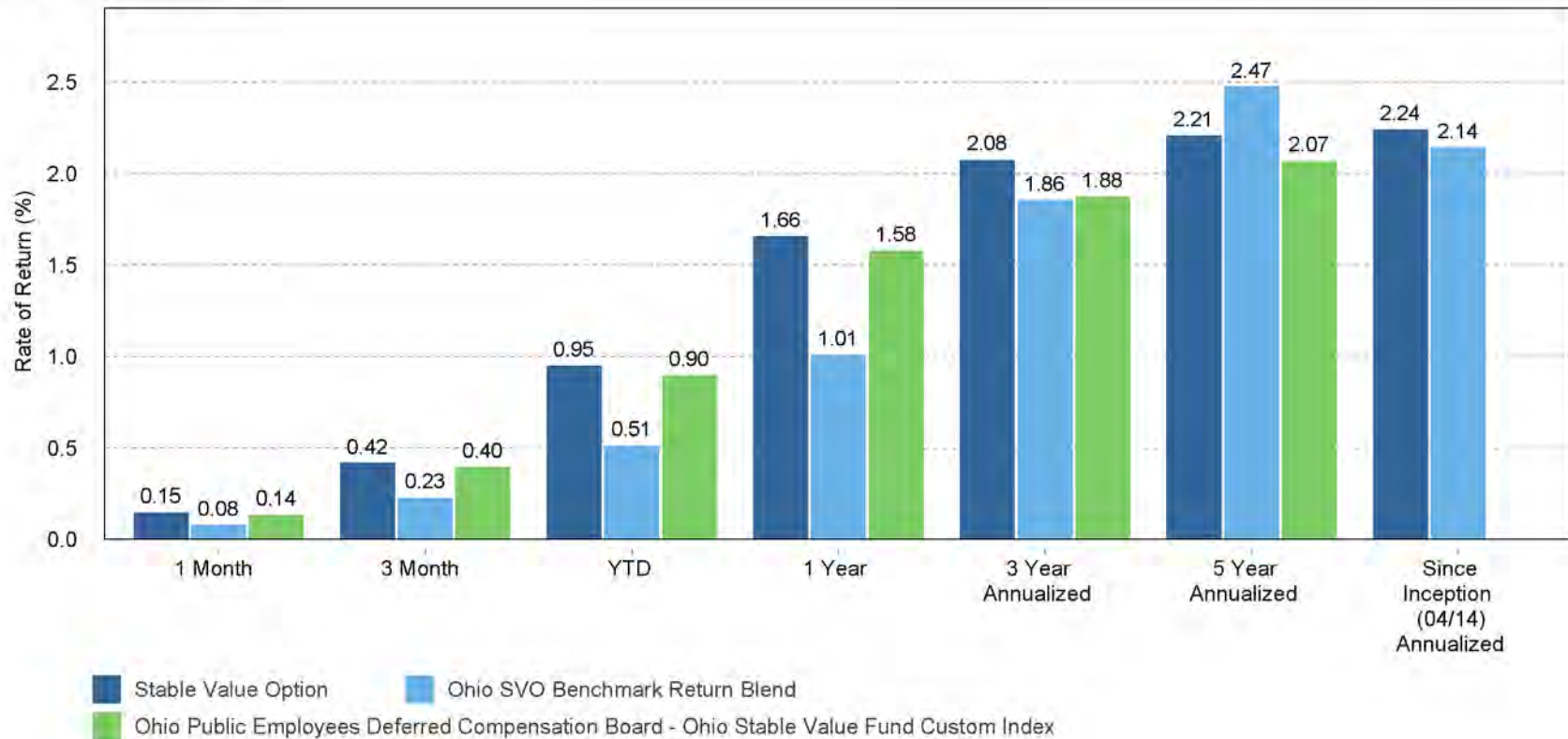
- The Stable Value Option (SVO) has continued to deliver ***principal stability*** and a ***positive return*** during a year of significant financial market volatility and negative equity and fixed income market returns.
  - Positive cash flows, lower market yields and manager portfolio positioning have been a headwind for SVO performance over the last several years.
  - Going forward we expect the rising interest rates and positive cash flows to become a tailwind helping to move SVO's crediting rate higher.
  - The SVO crediting rate for the 4th quarter 2022 was reset from 1.70% to 2.05%.
- Wrap fees have continued to move lower with all wrap contracts now at a fee level of 15 basis points, down from about 20 basis points just 5 years ago.
- We propose to reduce the Fixed Maturity allocation to Term Funds from 32% to 25% to help improve yield and reflecting the more positive cash flows the SVO has experienced.

Source: Goldman Sachs Asset Management. As of June 30, 2022. There is no guarantee that these objectives will be met.

# OhioDC Stable Value Option

## Book value performance

Book Value Performance



As of July 2022. Source: Goldman Sachs Asset Management.

Stable Value Option investment returns include reinvestment of interest income and are presented before the deduction of the Assets Under Management fee paid to GSAM Stable Value and certain other fees and expenses.

Past performance does not guarantee future results, which may vary. Returns less than 12 months are cumulative, not annualized.

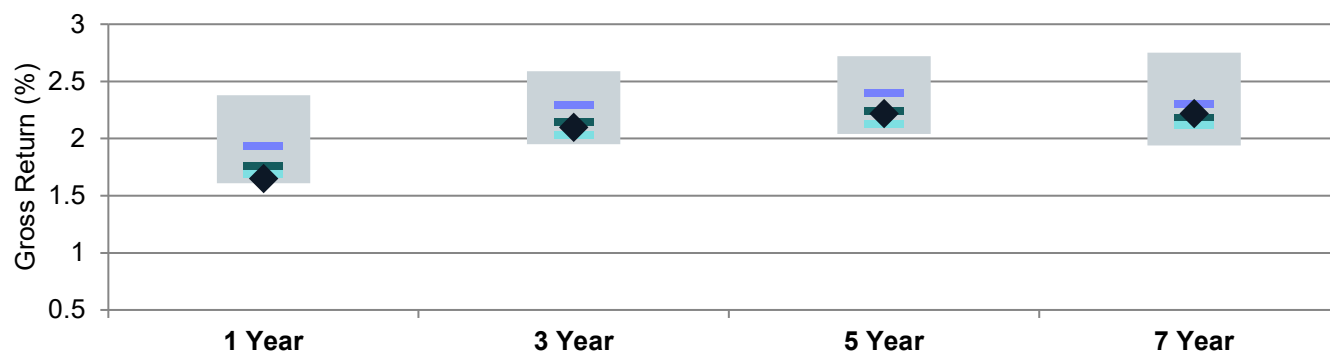
The Ohio SVO Benchmark Return Blend is calculated using the iMoneyNet +150 bps Index from inception date through June 30, 2017, the ICE BofAML 90-Day US Treasury +150 bps from July 1, 2017 through September 30, 2021 and the 3 Year US Treasury Rolling CMT from October 1, 2021 through current month-end.

The Ohio Public Employees Deferred Compensation Board - Ohio Stable Value Fund Custom Index is an index developed by Goldman Sachs Asset Management Stable Value to analyze relative performance to that of the Ohio Public Employees Deferred Compensation Program Board - Stable Value Option. The index generates a series of book value returns comparable to those generated by the crediting rate formulas associated with the book value contracts of the Fund. Operationally, the index calculates and applies crediting rates by substituting each underlying strategy's market value benchmark for the actual underlying asset portfolios to generate an overall book value benchmark return. Note for return periods greater than 1-month, the benchmark composition will vary based on changes to the underlying asset portfolios. See Custom Stable Value Benchmark for additional information. As of 07/31/2022 the benchmark composition was as follows: Bloomberg 60% Int Agg & 40% SIMI Blend: 7.8%, Bloomberg US Intermediate Aggregate Index: 57.1%, Maturing Benchmark 2022: 3.0%, Maturing Benchmark 2023: 8.0%, Maturing Benchmark 2024: 8.0%, Maturing Benchmark 2025: 8.1%, Maturing Benchmark 2026: 4.6%, iMoneyNet Money Fund Average: 3.3%. The iMoneyNet Money Fund Average is the all-taxable money fund report average, a product of iMoneyNet, Inc., and is presented gross of fees.

# eVestment Stable Value Separate Account Universe

## OhioDC Stable Value Option – as of June 2022

Provided below is the annual return of OhioDC Stable Value Option, presented gross of GSAM Stable Value, LLC management fees, versus the eVestment Stable Value Separate Account Universe of fixed income managers (the “Universe”). The return figure that separates each quartile is presented under the corresponding time period. The Universe includes stable value Separate Account composites reported Gross of Fees by each manager submitting results to eVestment. Performance is the only metric used to determine the universe ranking.



### As of June 30, 2022

	1 Year	3 Year	5 Year	7 Year
High	2.38	2.59	2.72	2.75
25th Percentile	1.93	2.29	2.40	2.30
Median	1.76	2.14	2.24	2.18
75th Percentile	1.69	2.03	2.13	2.12
Low	1.61	1.95	2.04	1.94
OhioDC SVO	1.65	2.10	2.22	2.22
GSAM Core Broad-Market Focused Composite	1.80	2.14	2.24	2.22
Observations	11	11	11	11

Performance differentials relative to the Low quartile:

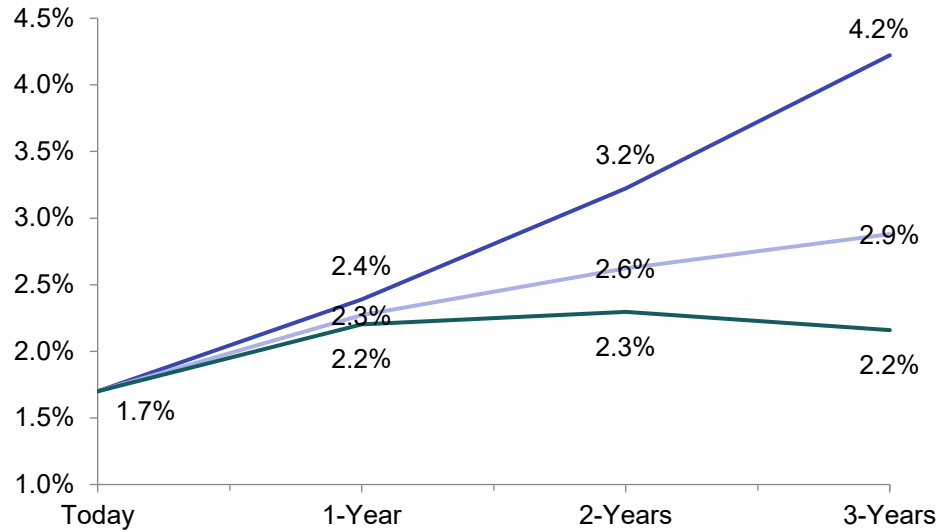
- 1 Year: -11 bps
- 3 Year: -4 bps
- 5 Year: -2 bps
- 7 Year: +4 bps

Past performance does not guarantee future results, which may vary.

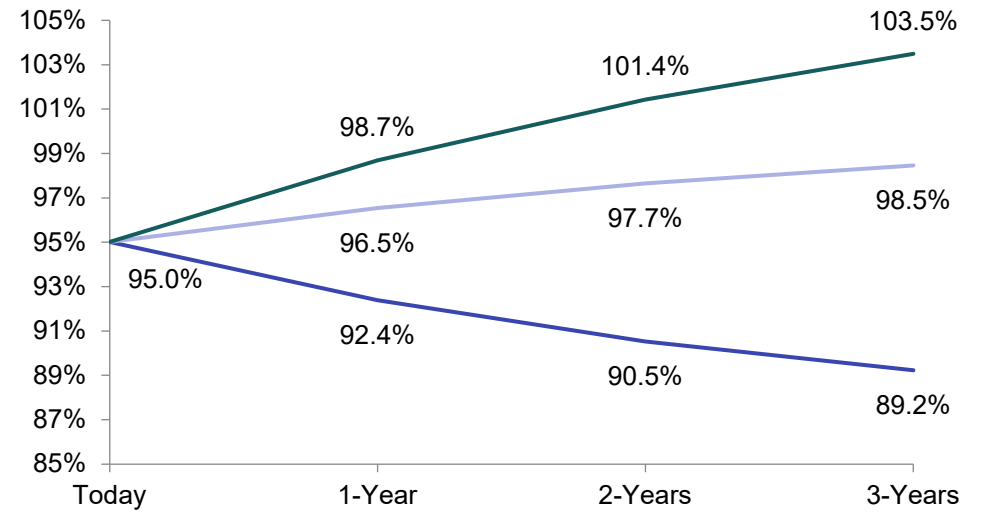
Source: eVestment. eVestment and its affiliated entities (collectively, "eVestment") collect information directly from investment management firms and other sources believed to be reliable; however, eVestment does not guarantee or warrant the accuracy, timeliness, or completeness of the information provided and is not responsible for any errors or omissions. Performance results may be provided with additional disclosures available on eVestment's systems and other important considerations such as fees that may be applicable. Not for general distribution. Copyright 2020-2021 eVestment, LLC. All Rights Reserved. The returns presented herein are gross and do not reflect the deduction of investment advisory fees, which will reduce returns. Returns less than 12 months are cumulative, not annualized.

# Ohio SVO Projections

### Ohio SVO Projected Crediting Rate



### Ohio SVO Projected MV/BV Ratio



— Rates up 150bps (annually) — Rates are flat — Rates down 75bps (annually) — Rates up 150bps (annually) — Rates are flat — Rates down 75bps (annually)

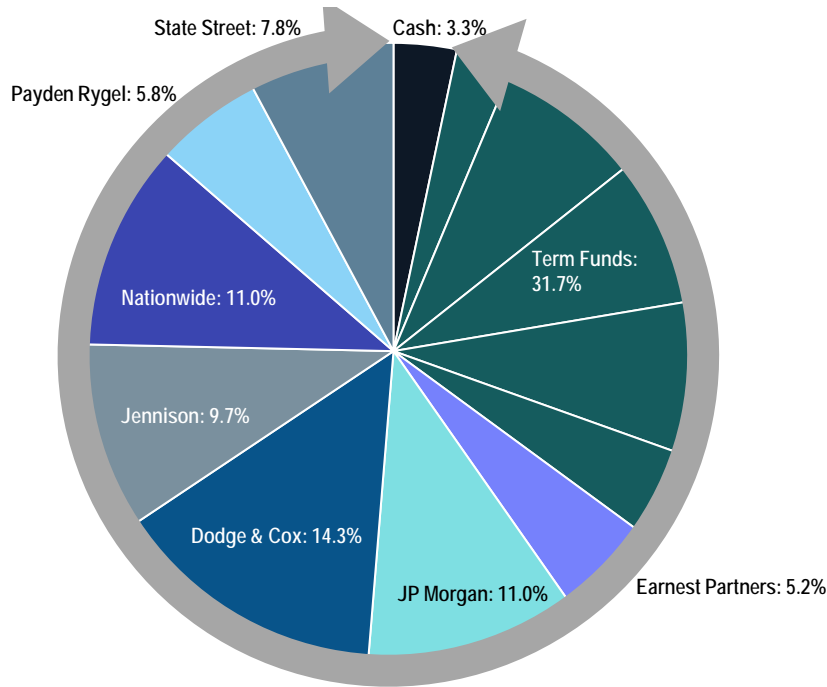
### Assumptions as of June 30, 2022

Initial Market Yield	1.7%	Initial MV:BV Ratio	95.0%
Initial Fund Balance	\$5,318,000,000	Cash Flow	\$0
Duration	3.3 years		

Source: Goldman Sachs Asset Management. As of June 2022. Economic and market forecasts presented herein reflect a series of assumptions and judgments as of the date of this presentation and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, these forecasts should be viewed as merely representative of a broad range of possible outcomes. These forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. Goldman Sachs has no obligation to provide updates or changes to these forecasts. Case studies and examples are for illustrative purposes only.

# Portfolio Overview

As of July 2022



Wrap Contracts	
Metropolitan Tower Life	20.6%
Prudential	23.3%
RGA	17.8%
Royal Bank of Canada	16.4%
Transamerica Premier	18.5%

Key Statistics	
Crediting Rate	1.78%
Average Credit Quality	AA-/Aa2
Duration	3.30 years
Market/Book Value Ratio	96.29%

Sector Allocation	
Treasury	30.4%
Agency	2.5%
Mortgage Backed Securities	18.0%
Asset Backed Securities	3.9%
Commercial Mortgage Backed Securities	3.4%
Credit/Corporate Securities	32.1%
Municipals	2.1%
Other	2.1%
Cash	5.5%
	<b>100.0%</b>

Quality Allocation	
AAA	63.9%
AA	3.6%
A	15.2%
BBB	16.8%
Below BBB	0.1%
Not Rated	0.4%
	<b>100.0%</b>

Source: Goldman Sachs Asset Management.

Portfolio holdings and/or allocations shown above are as of the date indicated and may not be representative of future investments. The holdings and/or allocations shown may not represent all of the portfolio's investments. Future investments may or may not be profitable. Duration is calculated using actual, benchmark or target duration as applicable.

Portfolios and benchmarks are not rated by an independent ratings agency. Goldman Sachs Asset Management may receive credit quality ratings on the underlying securities of portfolios and their respective benchmarks from the three major rating agencies: Standard & Poor's, Moody's and Fitch. Goldman Sachs Asset Management calculates the credit quality breakdown and overall rating for both portfolios and their respective benchmarks according to the client's preferred method or such other method as selected by Goldman Sachs Asset Management in its sole discretion. The applicable method may differ from the method independently used by benchmark providers. Securities that are not rated by all three agencies are reflected as such in the breakdown. For illustrative purposes, Goldman Sachs Asset Management converts all ratings to the equivalent S&P major rating category when reporting the credit rating breakdown. Ratings and portfolio credit quality may change over time. Unrated securities do not necessarily indicate low quality, and for such securities the investment adviser will evaluate the credit quality.

# OhioDC Stable Value Option

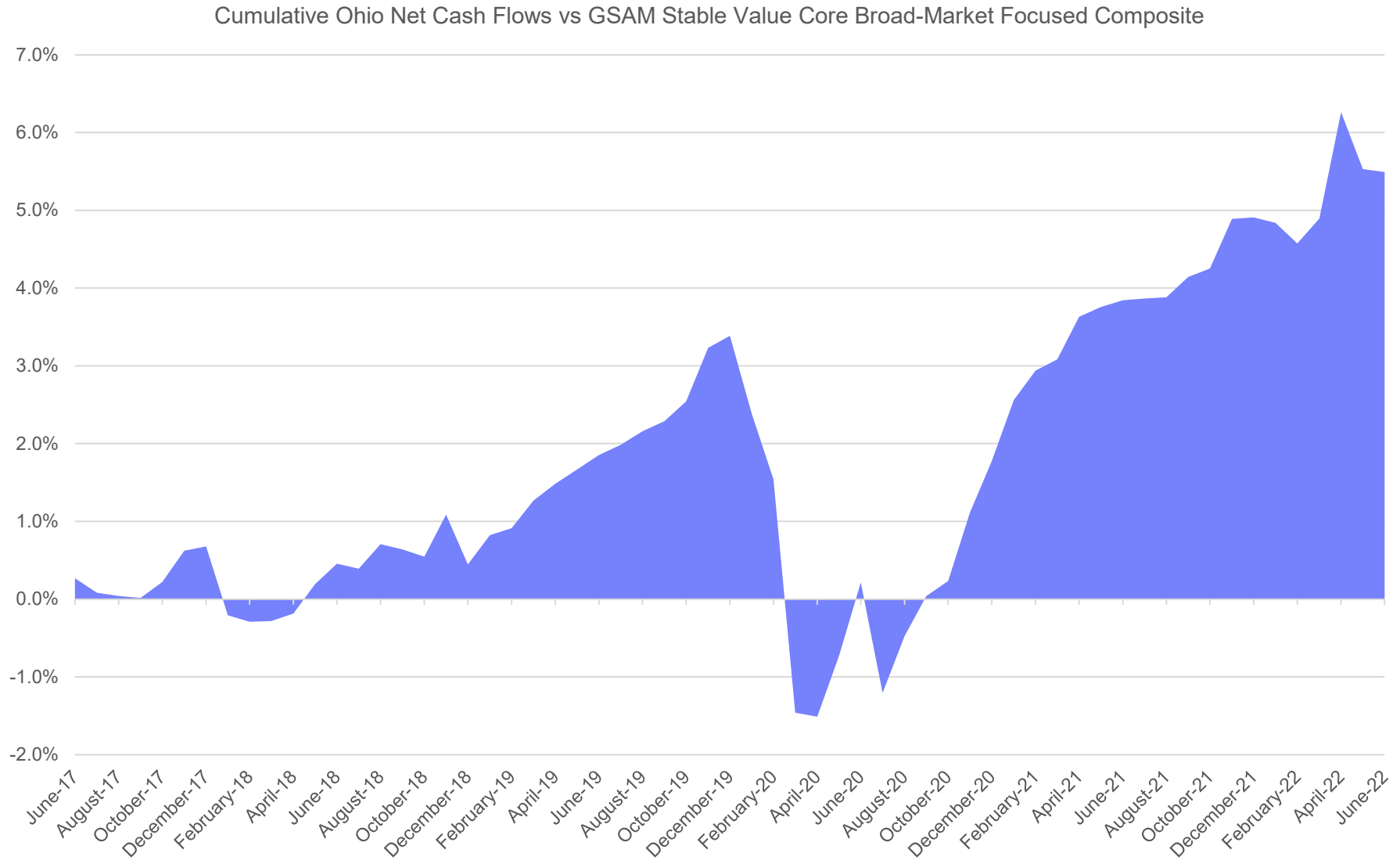
## Summary of Wrap Fees

- GSAM SV has made significant progress in our objective of reducing wrap fees for OhioDC participants as the wrap market has improved.

Wrap Issuer	Fees (bp)							
	2015	2016	2017	2018	2018	2019	2021	July 2022
MetLife	23	23	19	18	16	16	16	15
Prudential	20	20	20	18	18	16	16	15
RGA	20.8	20	18	18	18	16	15	15
Royal Bank of Canada	20	20	20	18	16	16	15	15
Transamerica	22	20	20	18	16	16	15	15
<b>Average Wrap Fee</b>	<b>21.1</b>	<b>20.6</b>	<b>19.4</b>	<b>18.0</b>	<b>16.8</b>	<b>15.6</b>	<b>15.2</b>	<b>15.0</b>

Source: Goldman Sachs Asset Management. Fees are generally billed and payable at the end of each quarter and are based on average month-end market values during the quarter. Additional information is provided in our Form ADV Part 2. Asset Management

# Cash Flow Comparison

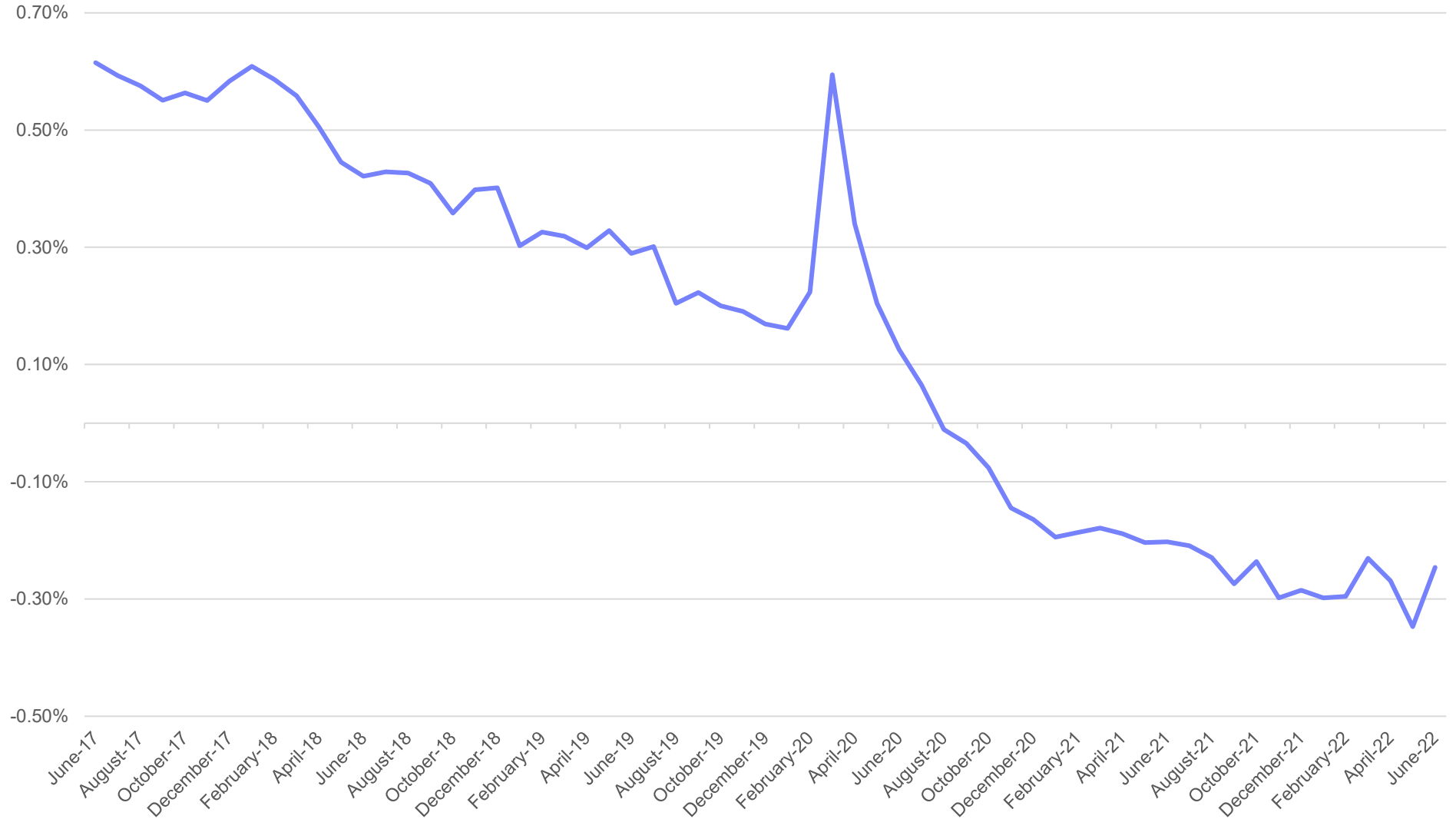


Source: Goldman Sachs Asset Management.



# Market to Book Ratio Comparison

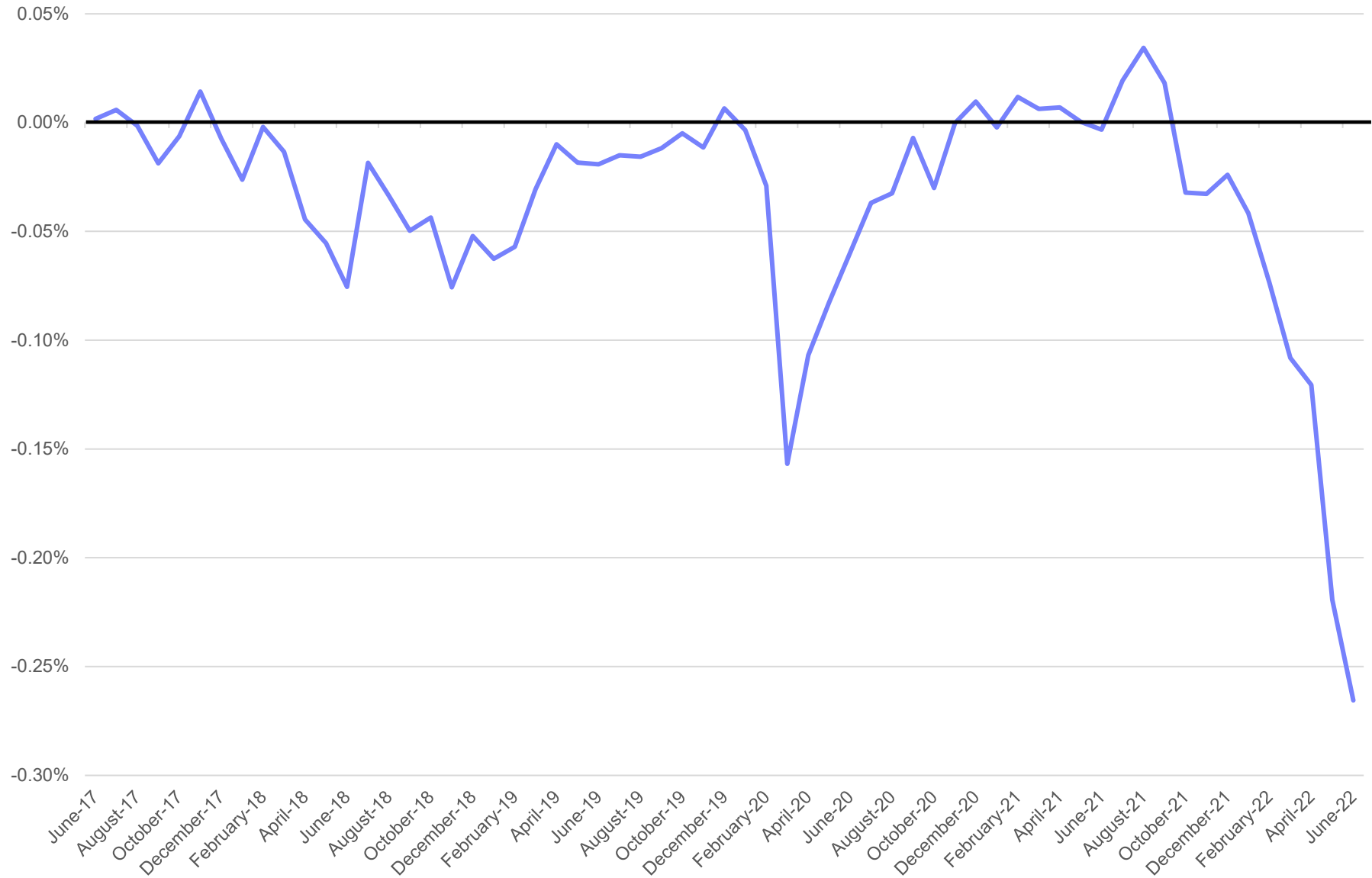
Ohio MV/BV Ratio vs GSAM Stable Value Core Broad-Market Focused Composite



Source: Goldman Sachs Asset Management.

# Yield Comparison

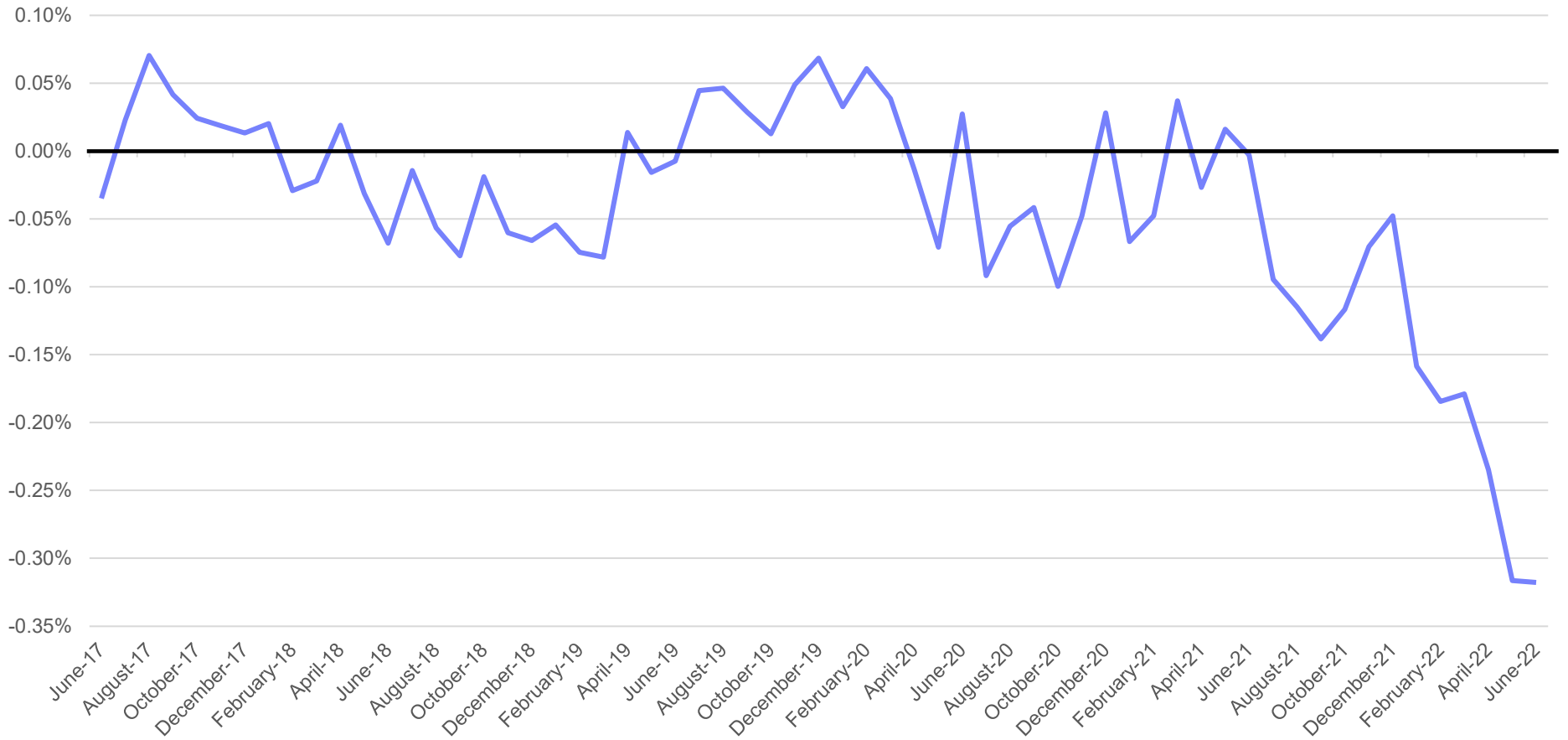
Ohio Underlying Yield vs GSAM Stable Value Core Broad-Market Focused Composite



Source: Goldman Sachs Asset Management.

# Crediting Rate Comparison

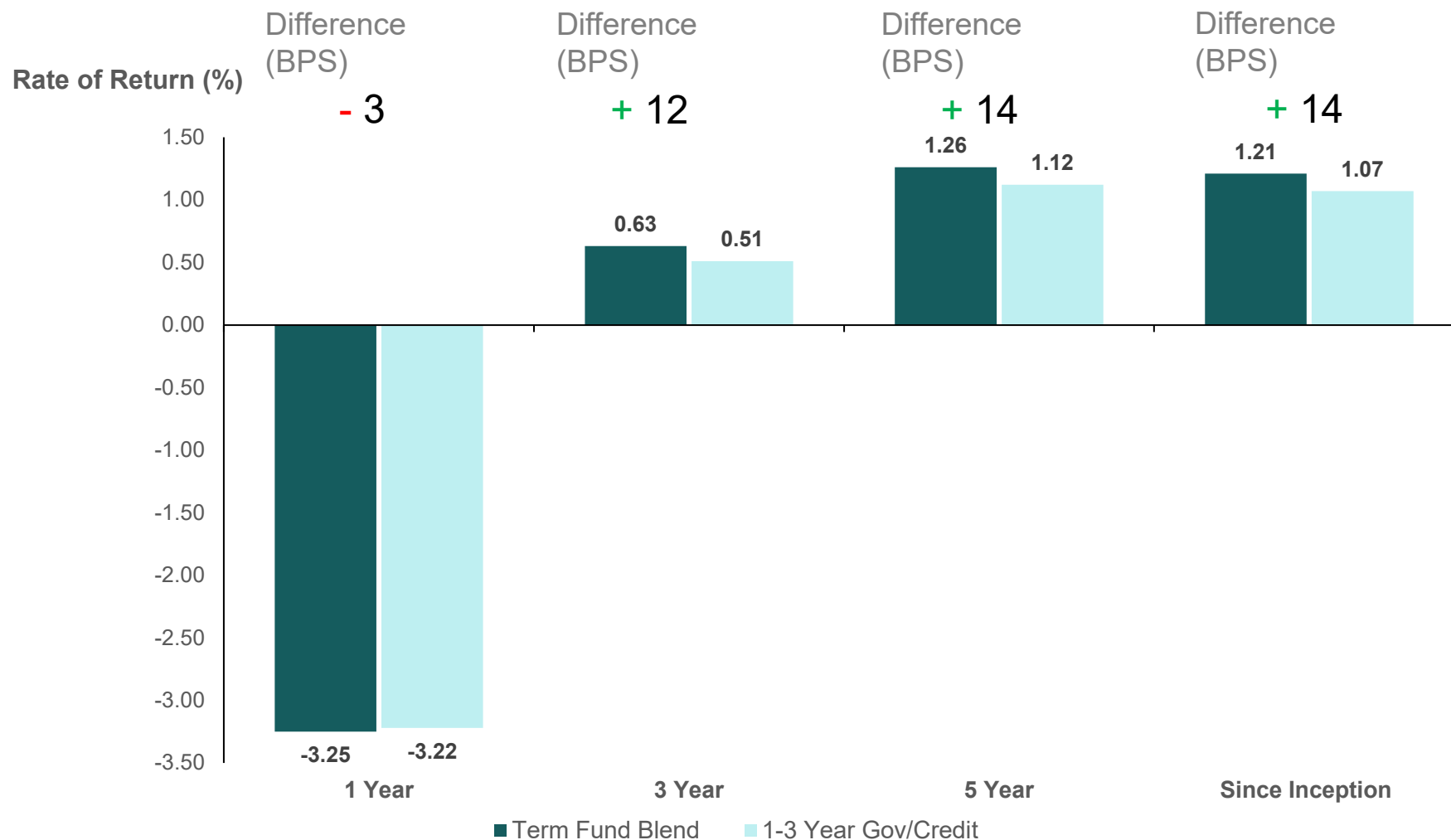
Ohio Crediting Rate vs GSAM Stable Value Core Broad-Market Focused Composite



Source: Goldman Sachs Asset Management.

# GSAM-managed Term Funds

## OhioDC – Stable Value Option



As of July 2022. Past performance does not guarantee future results, which may vary. The returns are gross and do not reflect the deduction of investment advisory fees, which will reduce returns. The Term Fund Blend return is calculated by multiplying the weighted average current month end allocation of each Term Fund held by the OhioDC SVO by the current month return of each Term Fund. The returns of each Term Fund are then summed to determine a total Term Fund return for the period presented. Actual market value returns will vary from the returns presented above due to intra-month transactions and other factors. Investment returns include reinvestment of interest income and are presented net of fees. Past performance is no guarantee of future results.

The Term Fund Blend Benchmark return is calculated by multiplying the weighted average current month end allocation of each Term Fund held by the OhioDC SVO by the current month return of the Maturing Benchmark of each Term Fund. The returns of each Term Fund are then summed to determine a total Benchmark return for the period presented. Combined Term Fund statistics are based on the market value weighted average of the Term Funds. Market values used are based on internal sources. The weighted average is the sum of each Term Fund statistic multiplied by the weight of the Term Fund (the weight is the Term Fund portfolio market value as a percentage of the total market value of all Term Funds). Portfolio holdings and/or allocations shown above are as of the date indicated and may not be representative of future investments. The holdings and/or allocations shown may not represent all of the portfolio's investments. Future investments may or may not be profitable.

# Recommended changes to the SVO Investment Policy Statement (IPS)

- Eliminate the Asset Allocation Targets from the Fixed Maturity, Open Maturity and Liquidity Buffer allocations in the IPS
  - Allow the stable value roll-up manager more flexibility to adjust these allocations – in consultation with the Staff and the Investment Consultant - to reflect the SVO's current cash flow needs, which are dynamic and change over time.
- Retain the Permissible Ranges to the Fixed Maturity, Open Maturity and Liquidity Buffer allocations in the IPS, but expand the Open Maturity range from “50% to 70%” to “50% to 80%”.
  - Allow for a higher allocation to Open Maturity contracts.
- Increase the maximum duration limit from 3.75 years to 4.0 years in the IPS.
  - Allow for extending mortgage durations in light of rapidly rising interest rates.

# General Disclosures

THESE MATERIALS ARE PROVIDED SOLELY ON THE BASIS THAT THEY WILL NOT CONSTITUTE INVESTMENT ADVICE AND WILL NOT FORM A PRIMARY BASIS FOR ANY PERSON'S OR PLAN'S INVESTMENT DECISIONS, AND GOLDMAN SACHS IS NOT A FIDUCIARY WITH RESPECT TO ANY PERSON OR PLAN BY REASON OF PROVIDING THE MATERIAL OR CONTENT HEREIN. PLAN FIDUCIARIES SHOULD CONSIDER THEIR OWN CIRCUMSTANCES IN ASSESSING ANY POTENTIAL INVESTMENT COURSE OF ACTION.

This material is provided at your request solely for your use.

This material is provided for informational purposes only and should not be construed as investment advice or an offer or solicitation to buy or sell securities. This material is not intended to be used as a general guide to investing, or as a source of any specific investment recommendations, and makes no implied or express recommendations concerning the manner in which any client's account should or would be handled, as appropriate investment strategies depend upon the client's investment objectives.

Economic and market forecasts presented herein reflect a series of assumptions and judgments as of the date of this presentation and are subject to change without notice. These forecasts do not take into account the specific investment objectives, restrictions, tax and financial situation or other needs of any specific client. Actual data will vary and may not be reflected here. These forecasts are subject to high levels of uncertainty that may affect actual performance. Accordingly, these forecasts should be viewed as merely representative of a broad range of possible outcomes. These forecasts are estimated, based on assumptions, and are subject to significant revision and may change materially as economic and market conditions change. Goldman Sachs has no obligation to provide updates or changes to these forecasts. Case studies and examples are for illustrative purposes only.

Although certain information has been obtained from sources believed to be reliable, we do not guarantee its accuracy, completeness or fairness. We have relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources.

Views and opinions expressed are for informational purposes only and do not constitute a recommendation by GSAM to buy, sell, or hold any security. Views and opinions are current as of the date of this presentation and may be subject to change, they should not be construed as investment advice.

The strategy may include the use of derivatives. Derivatives often involve a high degree of financial risk because a relatively small movement in the price of the underlying security or benchmark may result in a disproportionately large movement in the price of the derivative and are not suitable for all investors. No representation regarding the suitability of these instruments and strategies for a particular investor is made.

**Past performance does not guarantee future results, which may vary. The value of investments and the income derived from investments will fluctuate and can go down as well as up. A loss of principal may occur.**

High-yield, lower-rated securities involve greater price volatility and present greater credit risks than higher-rated fixed income securities.

Emerging markets securities may be less liquid and more volatile and are subject to a number of additional risks, including but not limited to currency fluctuations and political instability.

## Index Benchmarks

Indices are unmanaged. The figures for the index reflect the reinvestment of all income or dividends, as applicable, but do not reflect the deduction of any fees or expenses which would reduce returns. Investors cannot invest directly in indices.

The indices referenced herein have been selected because they are well known, easily recognized by investors, and reflect those indices that the Investment Manager believes, in part based on industry practice, provide a suitable benchmark against which to evaluate the investment or broader market described herein. The exclusion of "failed" or closed hedge funds may mean that each index overstates the performance of hedge funds generally.

References to indices, benchmarks or other measures of relative market performance over a specified period of time are provided for your information only and do not imply that the portfolio will achieve similar results. The index composition may not reflect the manner in which a portfolio is constructed. While an adviser seeks to design a portfolio which reflects appropriate risk and return features, portfolio characteristics may deviate from those of the benchmark.

Valuation levels for the assets listed in the Account statements and other documents containing prices reflect GSAM's good faith effort to ascertain fair market levels (including accrued income, if any) for all positions. The valuation information is believed by GSAM to be reliable for round lot sizes. The prices are indicative only of the assumed fair value of the positions on the relevant date. These valuation levels may not be realized by the Account upon liquidation. Market conditions and transaction size will affect liquidity and price received upon liquidation. Current exchange rates will be applied in valuing positions in foreign currency.

For portfolio valuation purposes it is the responsibility of the custodian, administrator or such other third party appointed by the client, to obtain accurate and reliable information concerning the valuation of any securities including derivative instruments which are comprised in the portfolio. The information that GSAM provides should not be deemed the official pricing and valuation for the Account. GSAM is not obligated to provide pricing information to satisfy any regulatory, tax or accounting requirements to which the Client may be subject.

This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. This material has been prepared by GSAM and is not financial research nor a product of Goldman Sachs Global Investment Research (GIR). It was not prepared in compliance with applicable provisions of law designed to promote the independence of financial analysis and is not subject to a prohibition on trading following the distribution of financial research. The views and opinions expressed may differ from those of Goldman Sachs Global Investment Research or other departments or divisions of Goldman Sachs and its affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and GSAM has no obligation to provide any updates or changes.

## Confidentiality

No part of this material may, without GSAM's prior written consent, be (i) copied, photocopied or duplicated in any form, by any means, or (ii) distributed to any person that is not an employee, officer, director, or authorized agent of the recipient.