



HYAS GROUP

STATE OF NEVADA

Fund Lineup Introduction

January 18, 2024

COMMON INVESTMENT MENU DESIGN EXAMPLES

NEVADA DEFERRED COMP CATEGORIES OUTLINED



18 Options

EXAMPLE 1
Stable Value
Core Bond Index
Core Bond Active
Large Value
Large Index
Large Growth
Mid Value
Mid Index
Mid Growth
Small Value
Small Index
Small Growth
International Value
International Index
International Growth
Target Date (11)
Retirement Income
Brokerage

14 Options

EXAMPLE 2
Stable Value
Core Bond Index
Core Bond Active
Large Value
Large Index
Large Growth
Small-Mid Value
Small-Mid Index
Small-Mid Growth
International Value
International Index
International Growth
Target Date (11) (CIT)
Brokerage

11 Options

EXAMPLE 3
Stable Value
Core Bond Index
Core Bond Active
Large Blend Active
Large Index
Small-Mid Blend Active
Small-Mid Index
International Blend Active
International Index (CIT)
Target Date (11)
Brokerage

7 Options

EXAMPLE 4
Stable Value
Core Bond Index
Large Index
Small-Mid Index
International Index
Target Date (11)
Brokerage

NEVADA DEFERRED COMPENSATION FUND LINEUP

Category	NEVADA DEFERRED COMPENSATION FUND LINEUP
Stable Value	Voya Fixed Account
Core Bond Index	Vanguard Total Bond Market Index I
Core Bond Active	Sterling Capital Total Return Bond R6
Large Value	MFS Value R4
Large Index	Vanguard Institutional Index Instl Plus
Large Growth	JPMorgan Large Cap Growth R6
Mid Value Index	Vanguard Mid-Cap Value Index Adm
SMID Blend Index	Vanguard Extended Market Index Instl Plus
Mid Growth Index	Vanguard Mid-Cap Growth Index Adm
International Index	Vanguard Instl Total Intl Stock Mkt Index Trust
International Active	American Funds EuroPacific Growth R6
Target Date	Vanguard Target Retirement Trust II: Retirement Income through 2070
Brokerage	Schwab

As of 09/30/2023



NEVADA DEFERRED COMP FUND LINEUP

STATE OF NEVADA

Combined 457(b) DC Plans

PLAN ASSET ALLOCATION

Third Quarter 2023

Fixed Income	Ticker	Assets	%
Voya Fixed Account	-	\$327,537,850	32.9%
Vanguard Total Bond Market Index I	VBPIX	\$34,836,325	3.5%
Sterling Capital Total Return Bond R6	STRDX	\$1,897,058	0.2%
Total		\$364,271,233	36.6%

Large Cap	Ticker	Assets	%
MFS Value R4	MEIJX	\$20,212,092	2.0%
Vanguard Institutional Index Instl Plus	VIIIX	\$141,143,490	14.2%
JPMorgan Large Cap Growth R6	JLGMX	\$65,793,240	6.6%
Total		\$227,148,822	22.8%

Mid Cap	Ticker	Assets	%
Vanguard Mid-Cap Value Index Adm	VMVAX	\$6,955,922	0.7%
Vanguard Extended Market Index Instl Plus	VEMPX	\$94,469,752	9.5%
Vanguard Mid-Cap Growth Index Adm	VMGMX	\$20,211,453	2.0%
Total		\$121,637,127	12.2%

International	Ticker	Assets	%
Vanguard Instl Total Intl Stock Mkt Index Trust	-	\$43,018,913	4.3%
American Funds EuroPacific Growth R6	RERGX	\$6,266,510	0.6%
Total		\$49,285,423	5.0%

Asset Allocation	Ticker	Assets	%
Vanguard Target Retirement Income Trust II	-	\$38,638,308	3.9%
Vanguard Target Retirement 2020 Trust II	-	\$11,447,025	1.2%
Vanguard Target Retirement 2025 Trust II	-	\$43,212,738	4.3%
Vanguard Target Retirement 2030 Trust II	-	\$16,020,138	1.6%
Vanguard Target Retirement 2035 Trust II	-	\$52,689,691	5.3%
Vanguard Target Retirement 2040 Trust II	-	\$9,386,735	0.9%
Vanguard Target Retirement 2045 Trust II	-	\$28,290,282	2.8%
Vanguard Target Retirement 2050 Trust II	-	\$6,512,439	0.7%
Vanguard Target Retirement 2055 Trust II	-	\$8,257,742	0.8%
Vanguard Target Retirement 2060 Trust II	-	\$2,696,288	0.3%
Vanguard Target Retirement 2065 Trust II	-	\$1,257,833	0.1%
Vanguard Target Retirement 2070 Trust II	-	\$305,149	0.0%
Total		\$218,714,369	22.0%

Miscellaneous	Ticker	Assets	%
Self-Directed Brokerage Account	-	\$10,101,817	1.0%
Participant Loans	-	\$3,484,885	0.4%
Total		\$13,586,702	1.4%

TOTAL PLAN ASSETS **\$994,643,677**
 Administrative Account Balance (10/9/23) \$289,317

INVESTMENT COMPLIANCE @ 100%!

STATE OF NEVADA

Combined Retirement Plans

INVESTMENT POLICY STATEMENT COMPLIANCE REPORT

Third Quarter 2023

Investment Policy Status

Key: Ⓟ Pass / Ⓢ Caution / ● Fail

	Performance Factors	Qualitative Factors	On-Watch Information	Notes	Added to Plan
Voya Fixed Account	Ⓟ	Ⓟ	-		4Q2004
Voya Fixed Account - FICA	Ⓟ	Ⓟ	-		4Q2004
Vanguard Total Bond Market Index I	Ⓟ	Ⓟ	-		1Q2010
Sterling Capital Total Return Bond R6	Ⓟ	Ⓟ	-		3Q2021
MFS Value R4	Ⓟ	Ⓟ	-		3Q2016
Vanguard Institutional Index Instl Plus	Ⓟ	Ⓟ	-		3Q2021
JPMorgan Large Cap Growth R6	Ⓟ	Ⓟ	-		2Q2023
Vanguard Mid-Cap Value Index Adm	Ⓟ	Ⓟ	-		2Q2017
Vanguard Extended Market Index Instl Plus	Ⓟ	Ⓟ	-		3Q2021
Vanguard Mid-Cap Growth Index Adm	Ⓟ	Ⓟ	-		2Q2022
Vanguard Instl Total Intl Stock Mkt Index Trust	Ⓟ	Ⓟ	-		4Q2022
American Funds EuroPacific Growth R6	Ⓟ	Ⓟ	-		1Q2019
Vanguard Target Retirement Income Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2020 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2025 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2030 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2035 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2040 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2045 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2050 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2055 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2060 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2065 Trust II	Ⓟ	Ⓟ	-		4Q2022
Vanguard Target Retirement 2070 Trust II	Ⓟ	Ⓟ	-		4Q2022

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Asset and plan activity information provided by plan recordkeeper. Vendor bids and corresponding information sourced from Request for Proposal responses. Expense information sourced from Morningstar.

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The returns on a portfolio consisting primarily of Environmental, Social and Governance (“ESG”) aware investments may be lower or higher than a portfolio that is more diversified or where decisions are based solely on investment considerations. Because ESG criteria exclude some investments, investors may not be able to take advantage of the same opportunities or market trends as investors that do not use such criteria. Diversification does not guarantee a profit or protect against loss in a declining financial market.

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Vanguard

Prepared for

State of Nevada

January 18, 2024

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Agenda

I. Vanguard Target Retirement Review

Presented by:

Stacey Morrison, CFP
Client Account Executive
Institutional Investor Group

Jeff Lostaunau, CFA, CAIA, CFP
Investment Strategist
Institutional Investor Group



Vanguard

A TDF partner for you and your participants' journey

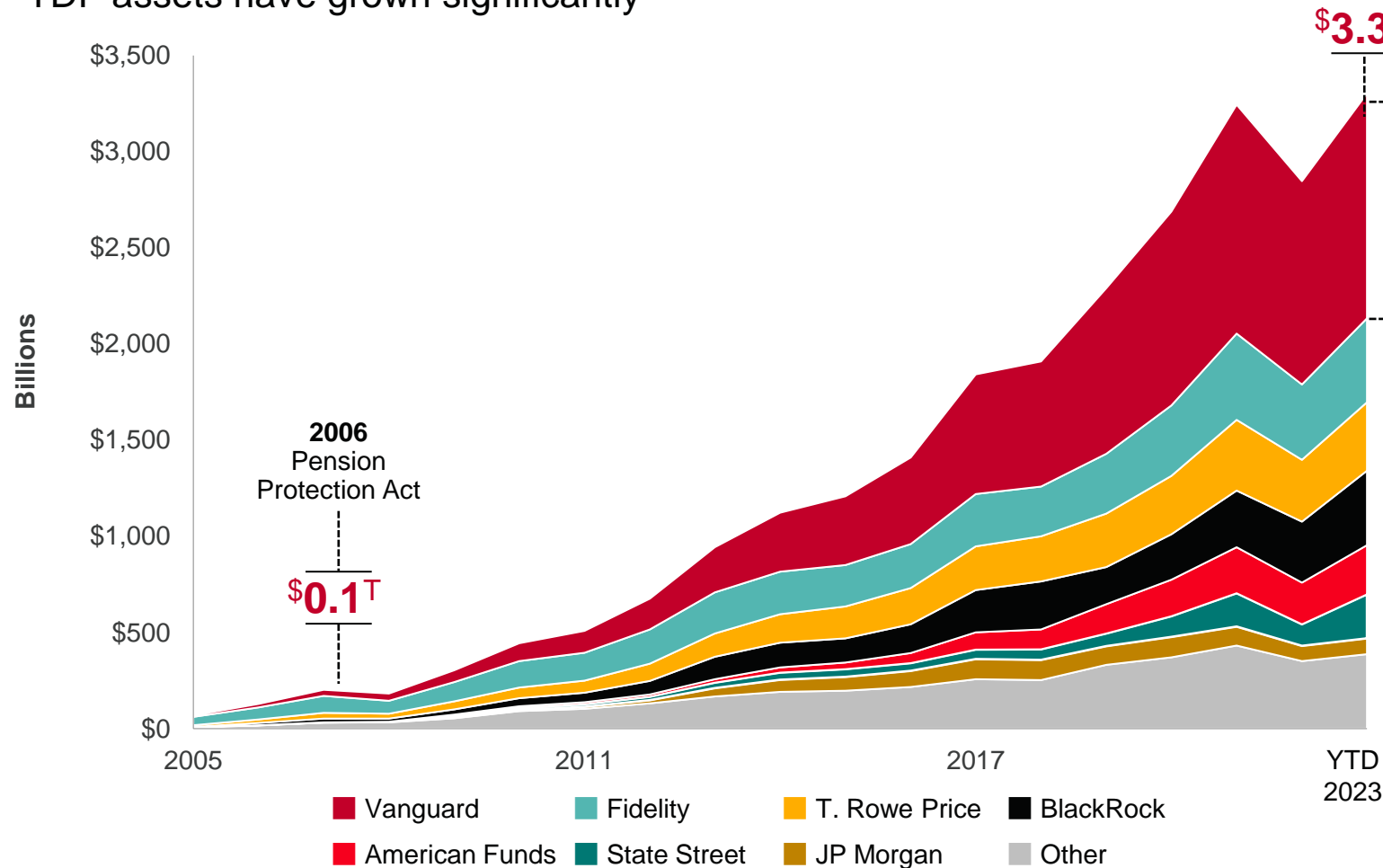
Helping your participants achieve financial well-being now and in the future

September 30, 2023

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TDFs have become the cornerstone of retirement plans

TDF assets have grown significantly



Vanguard Target Retirement Fund AUM growth (2022)

71%

DC Investment-only

21%

DC recordkeeping

8%

Retail

\$1.16T

Vanguard Target Retirement AUM

Widespread adoption by DC plans

Percentage of plans offering target-date funds

99.5%

Percentage of participants using target-date funds

82%

Percentage of contributions directed to target-date funds

61%

Sources: TDF assets are based on data from Vanguard, Morningstar, and company public filings, as of September 30, 2023. Data on TDF use in defined contribution (DC) plans is taken from *How America Saves 2022* and is for Vanguard-administered DC plans only.

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Our key TDF components that power participant success

Aligned interests →

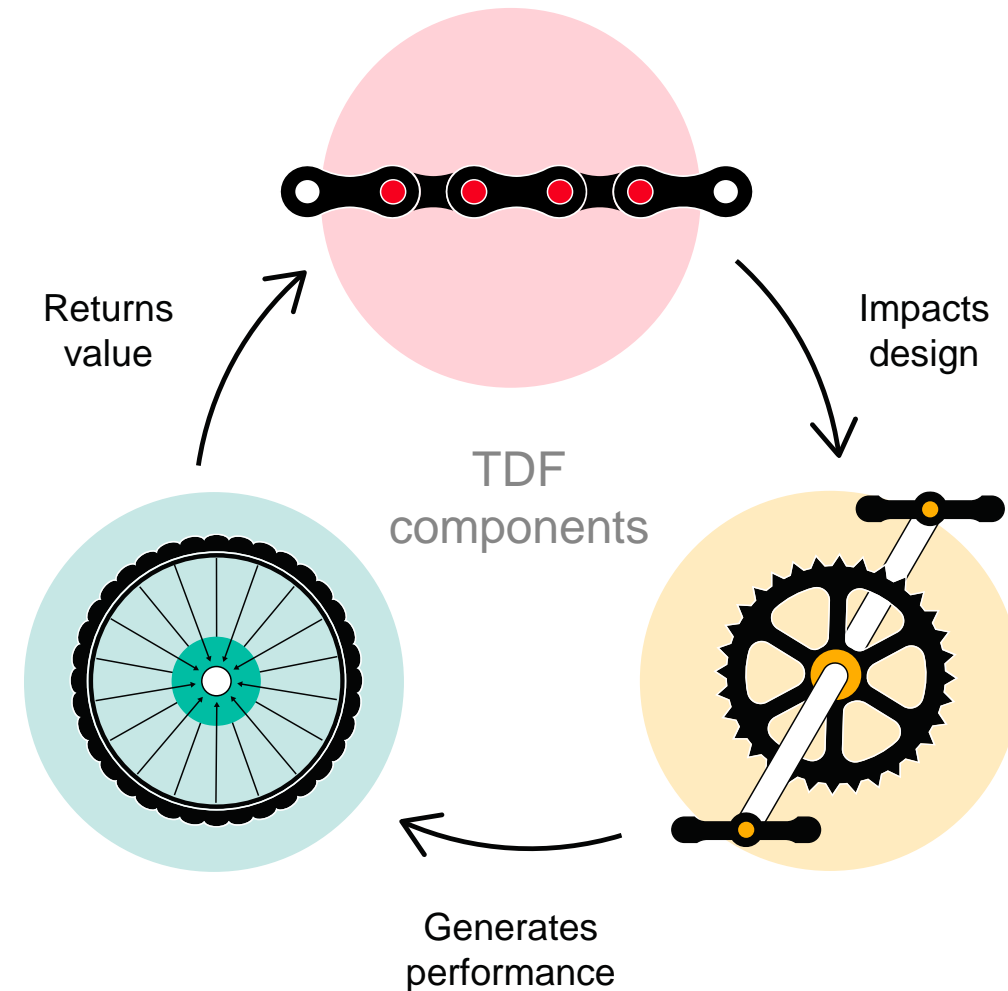
Because Vanguard is the only investor-owned firm in our industry, we're focused on your best interests, seeing your participants' hopes, goals, and dreams as our own.*

Purposeful design and evolution →

We design our TDFs to help give participants the best chance for a lasting retirement income, and we constantly evaluate new ideas for improving investor outcomes.

Time-tested performance →

Our absolute and risk-adjusted performance has been consistently strong through multiple market cycles and up-and-down markets.

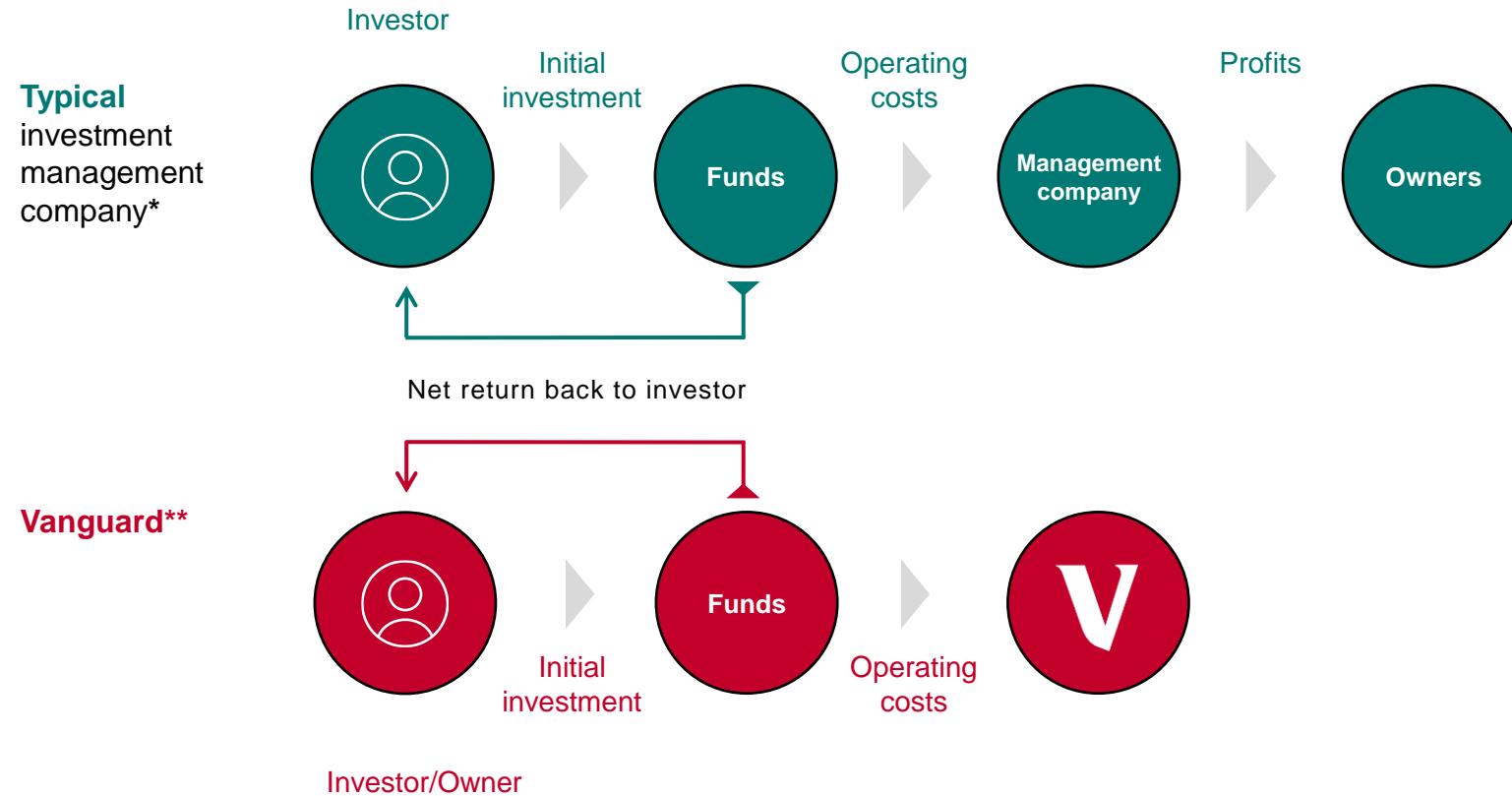


* Fund shareholders own the funds that own Vanguard.

Aligned interests

Vanguard is different

Participants need an asset manager aligned with their interests. At Vanguard, helping them achieve financial well-being is at the core of everything we do.



* Owned by third parties.

** Owned by funds, which are owned by fund shareholders.

The typical fund management company is owned by third parties, either public or private stockholders, not by the funds it serves. The fund management companies have to charge fund investors fees that are high enough to generate profits for the companies' owners. In contrast, the Vanguard funds own the management company known as Vanguard—a unique arrangement that eliminates conflicting loyalties. No wonder Vanguard's average fund expense ratio in 2022 was 0.08%, less than one-fifth that of the 0.47% industry average. That means Vanguard fund investors keep more of any return their funds earn. All averages are asset-weighted. Industry averages exclude Vanguard. Sources: Vanguard; Morningstar, as of December 31, 2022.

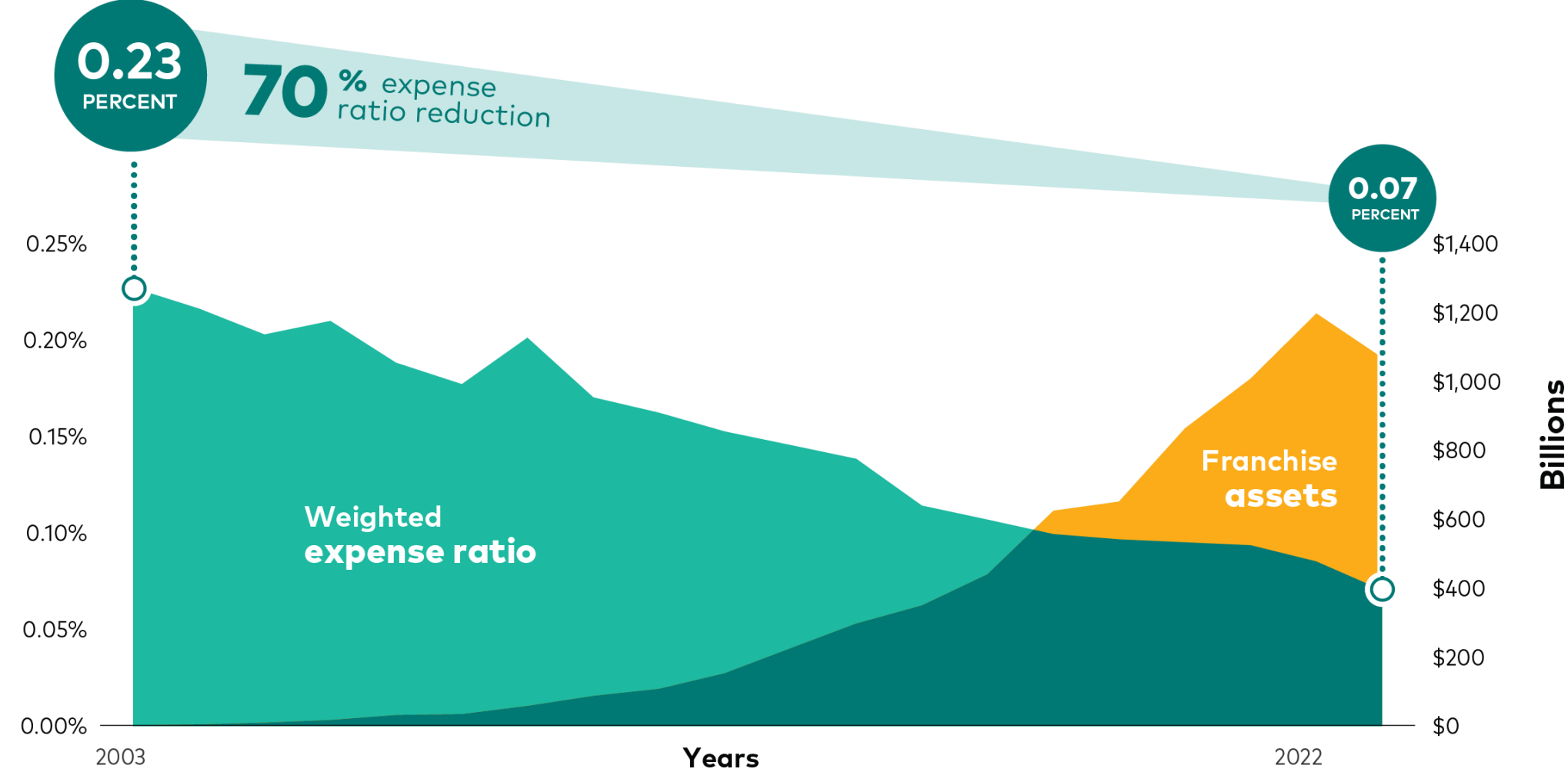
How we return value to you and your participants

Lowering costs is half the equation of returning value, and the other half is reinvesting in the business.

1 WE LOWER COSTS

2 WE REINVEST IN:

- Products
- Services
- Processes
- ... ultimately benefiting participants



Source: Vanguard data from December 31, 2003, to December 31, 2022. Franchise assets include Vanguard Target Retirement Funds and Trusts.

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Dedicated expertise at every step of the process

From analyst to CEO, an extensive group of dedicated professionals strive to maximize participants' chances for retirement success

GLOBAL INVESTMENT COMMITTEE (GIC)

- Primary governance committee for all Vanguard products composed of global business leaders, including Vanguard's CEO
- Considers and approves investment matters pertaining to all Vanguard products and provides organizational direction on strategic fund/investment initiatives



STRATEGIC ASSET ALLOCATION COMMITTEE (SAAC)

- Multi-asset governance committee composed of global investment leaders, including Vanguard's global CIO and chief economist
- Regularly reviews investment methodology, considers and approves investment strategies, and ensures a consistent approach across product and advice offers



PRODUCT MANAGEMENT

INVESTMENT MANAGEMENT

RISK MANAGEMENT

<p>Multi-Asset Solutions Team Portfolio Review Department</p> <ul style="list-style-type: none"> • Fund health and product oversight • Product research and new product development • Competitive analysis and landscape assessment <p> Brian Wimmer Head of Multi-Asset Solutions</p>	<p>Multi-Asset Portfolio Management Team Investment Management Group</p> <ul style="list-style-type: none"> • Daily implementation of the strategic asset allocation • Portfolio rebalance policy execution • Daily cash-flow management <p> Michael Roach Head of Multi-Asset Portfolio Management</p>	<p>Portfolio Construction Team Investment Strategy Group</p> <ul style="list-style-type: none"> • Vanguard investment model development and maintenance • Strategic asset allocation methodology • Sub-asset allocation and portfolio construction research <p> Roger Aliaga-Díaz Chief Economist (Americas) and Global Head of Portfolio Construction</p>	<p>Multi-Asset Risk Team Investment Management and Finance Risk</p> <ul style="list-style-type: none"> • Investment and operational risk monitoring/analysis • Ensure adherence to relevant policies/guardrails • Risk and performance assessments <p> Venky Venkatesh Head of Multi-Asset Investment Risk</p>
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Co-portfolio manager, Target Retirement Funds and Trusts

More information



Purposeful design and evolution

Who are TDFs designed for?

- Broadest swath of participants
- Investors defaulted into TDFs
- One-stop shoppers

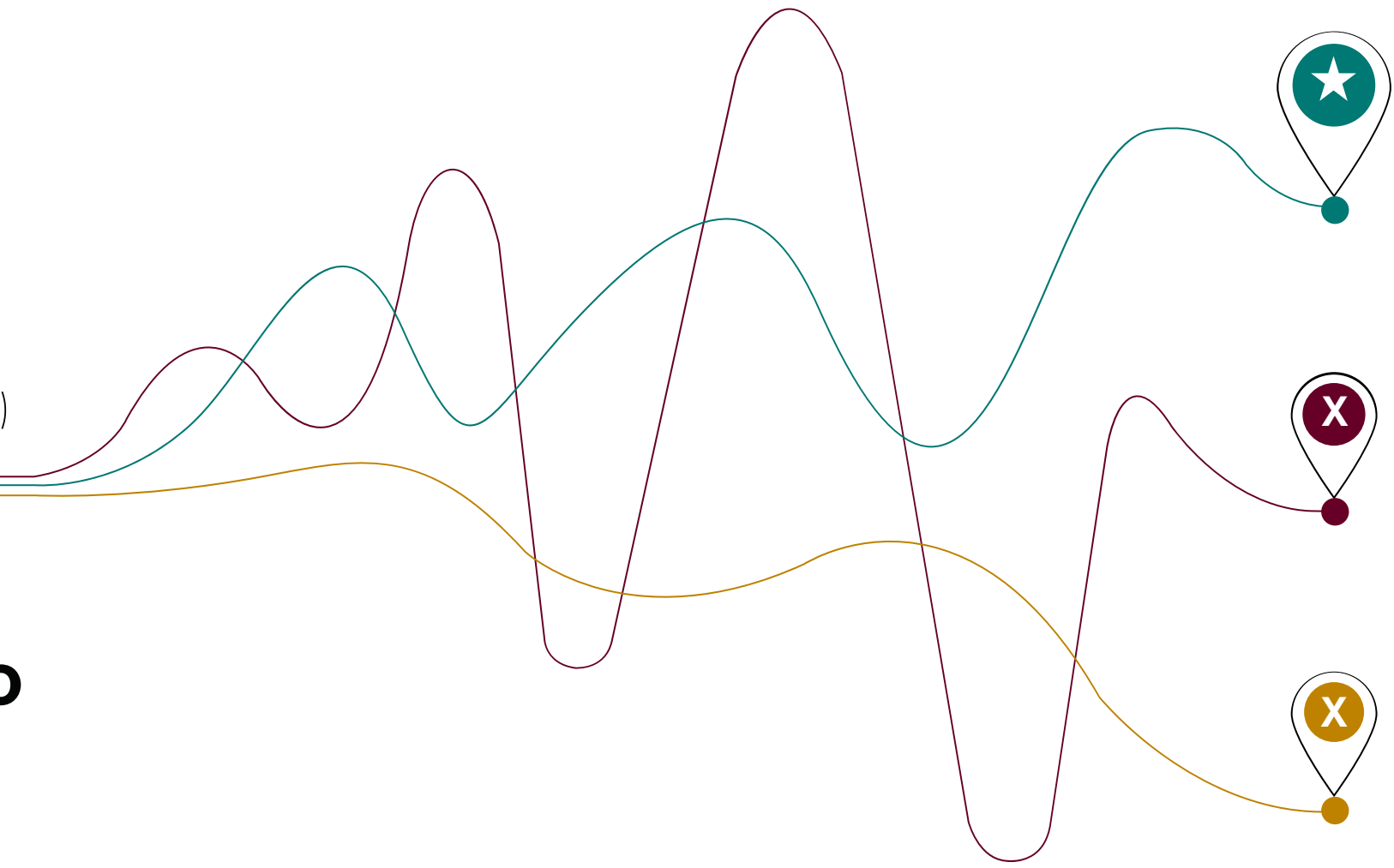
Based on national demographic averages with an assumed retirement age



What is the purpose of a TDF?



Where are we trying to go?

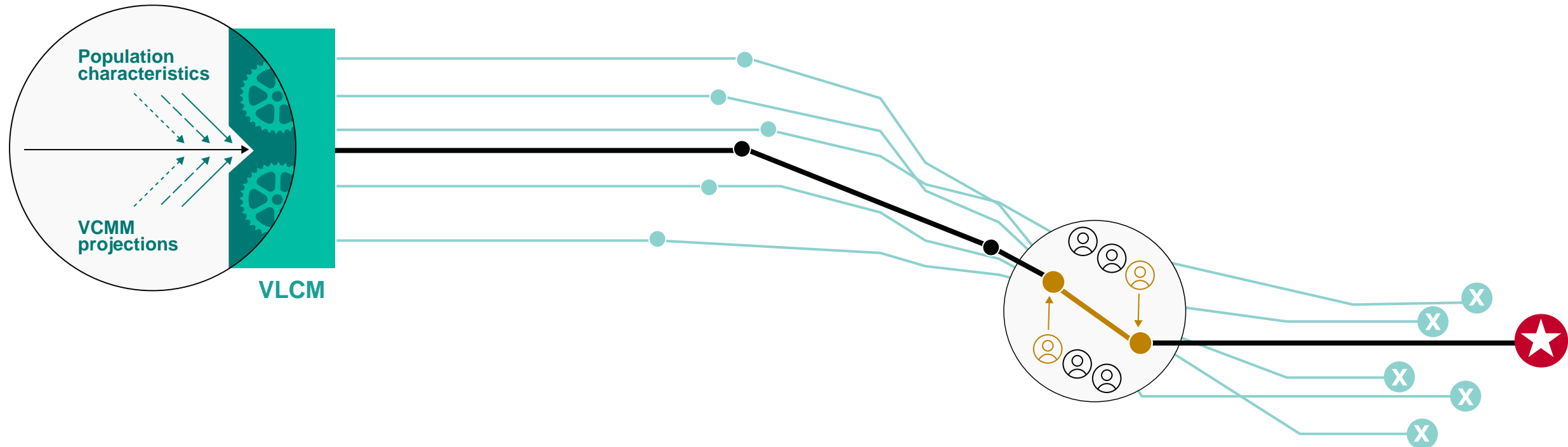


It's about getting participants to and through retirement with **enough income**.

It's NOT about **maximizing expected returns**, which risks panic selling and a wild ride into retirement.

It's NOT about **minimizing risk**, as investors may run out of money in retirement.

A glide path dedicated to improving investor outcomes



Inputs

- Participant population characteristics
- Vanguard Capital Markets Model® (VCMM) asset-class return projections

Constantly evaluated

Due diligence through constant analysis of existing glide path against thousands of simulated glide paths through our Vanguard Life-Cycle Investing Model (VLCM)

Designed for the real world

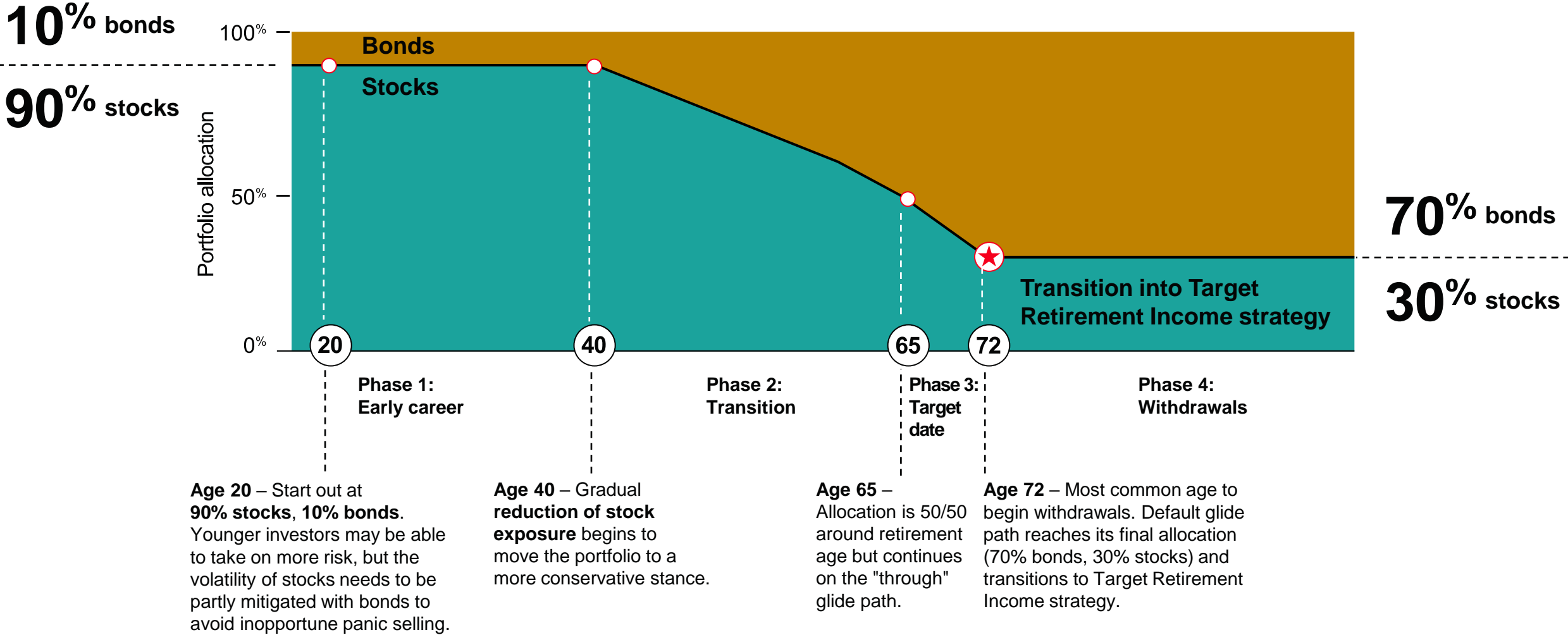
Practical considerations and observed participant behavior taken into account to meet the needs of real-world TDF investors

Outputs

- Retirement income sufficiency
- Wealth accumulation
- Portfolio volatility
- Maximum drawdown
- Probability of positive TDF balance at ages 85 and 95

Balancing risk and return at every stage of the investor's life

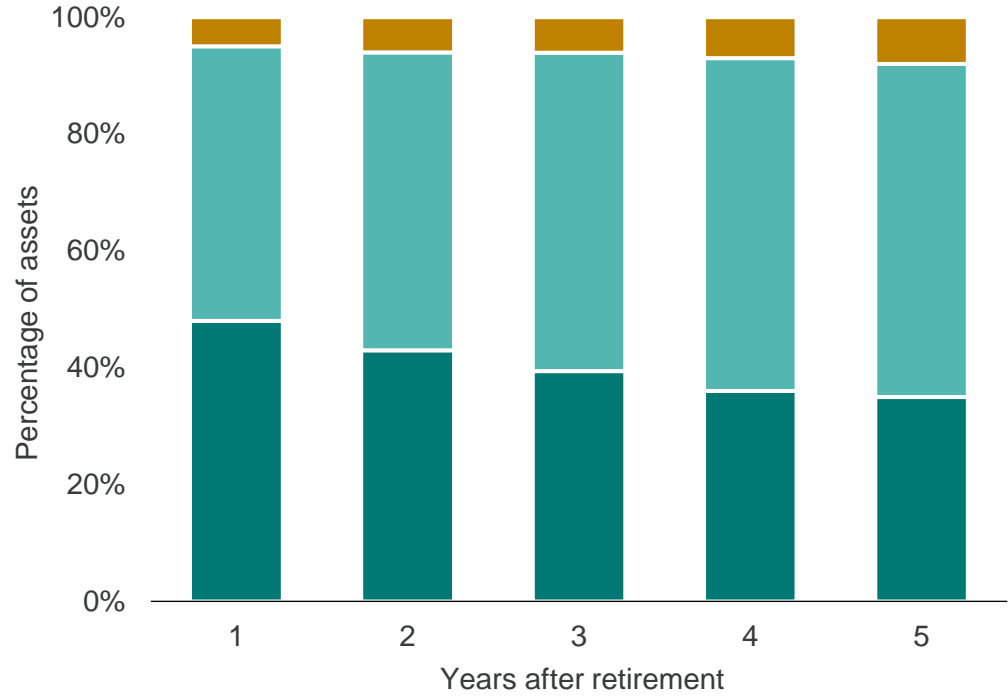
Glide path determined by time-tested investment principles and behavioral insights



Data on participant behavior supports a ‘through’ glide-path design

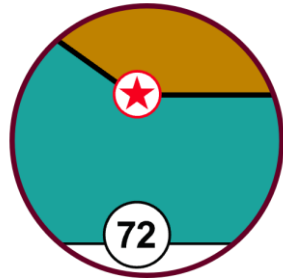
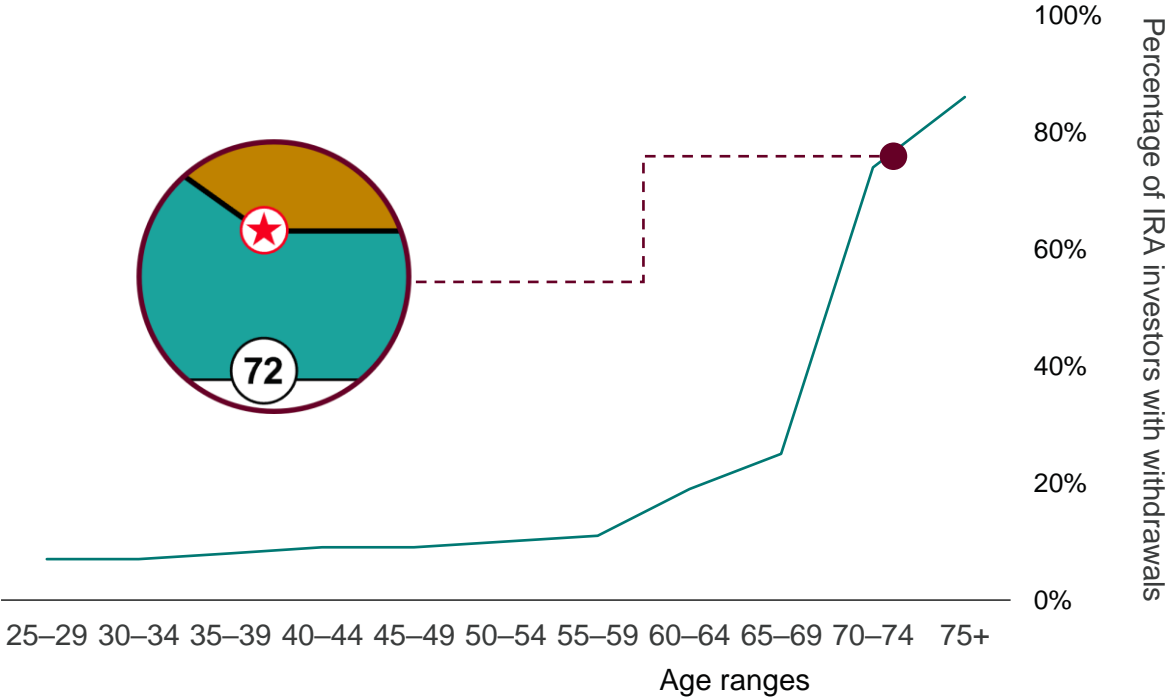
Within five years of retirement, about 60% of assets are rolled over . . .

. . . but investors typically don’t withdraw money after rolling over until around age 72



- Cash
- Rollover
- Remain in the plan

Source: Retirement distribution decisions among DC participants, Vanguard, February 2023.

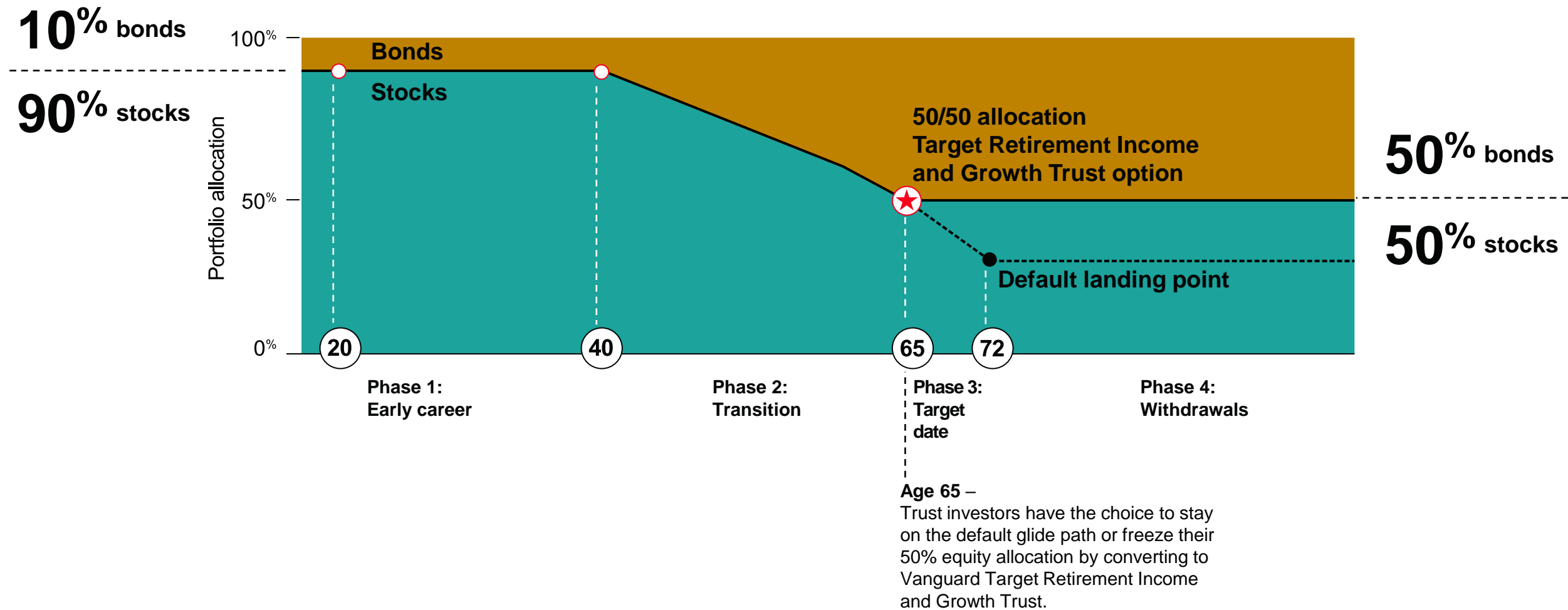


Source: Craig Copeland, “EBRI IRA Database: IRA Balances, Contributions, Rollovers, Withdrawals, and Asset Allocation, 2017 Update,” EBRI Issue Brief, no. 513 (Employee Benefit Research Institute, September 17, 2020).

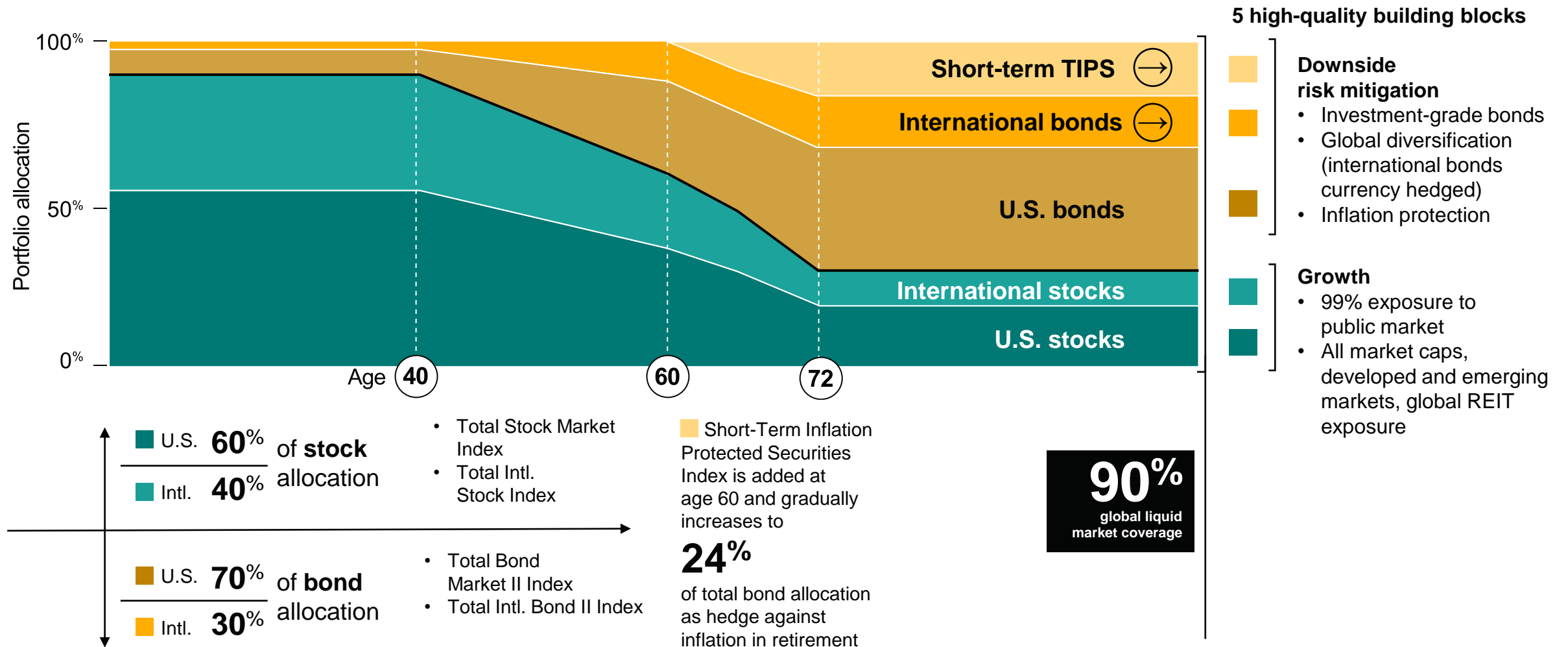


An alternative landing point for participants

Investors with the resources and risk tolerance may consider Target Retirement Income and Growth Trust



A strategic asset allocation using high-quality building blocks



Sources: FactSet, Fidelity, BlackRock. Stock market measured by FactSet data derived from MSCI US Broad Market Free Float and MSCI ACWI ex USA IMI Indexes. Bond market measured by FactSet data derived from Bloomberg Barclays Global Aggregate ex-USD, U.S. Aggregate Float Adjusted, Global High Yield, and EM Hard Currency Aggregate indexes. Commodities market measured by FactSet data. Data as of December 31, 2021.

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Key decisions in TDF construction

Active decisions

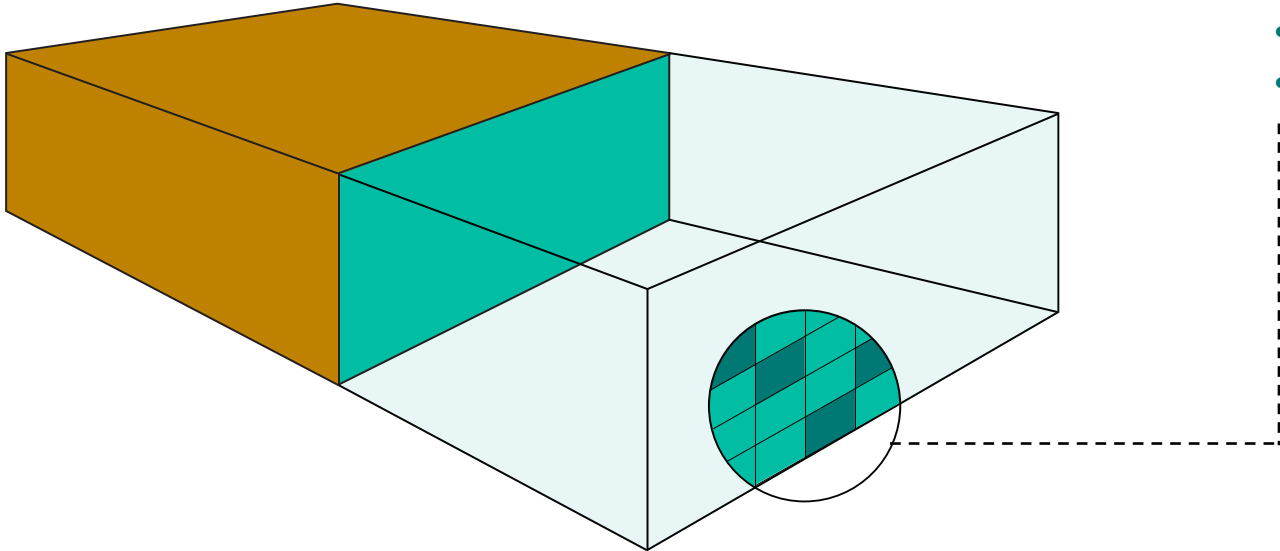
- 1. Glide path
- 2. Sub-asset allocation

Index, active, or blend decision

- 3. Implementation

Construction considerations

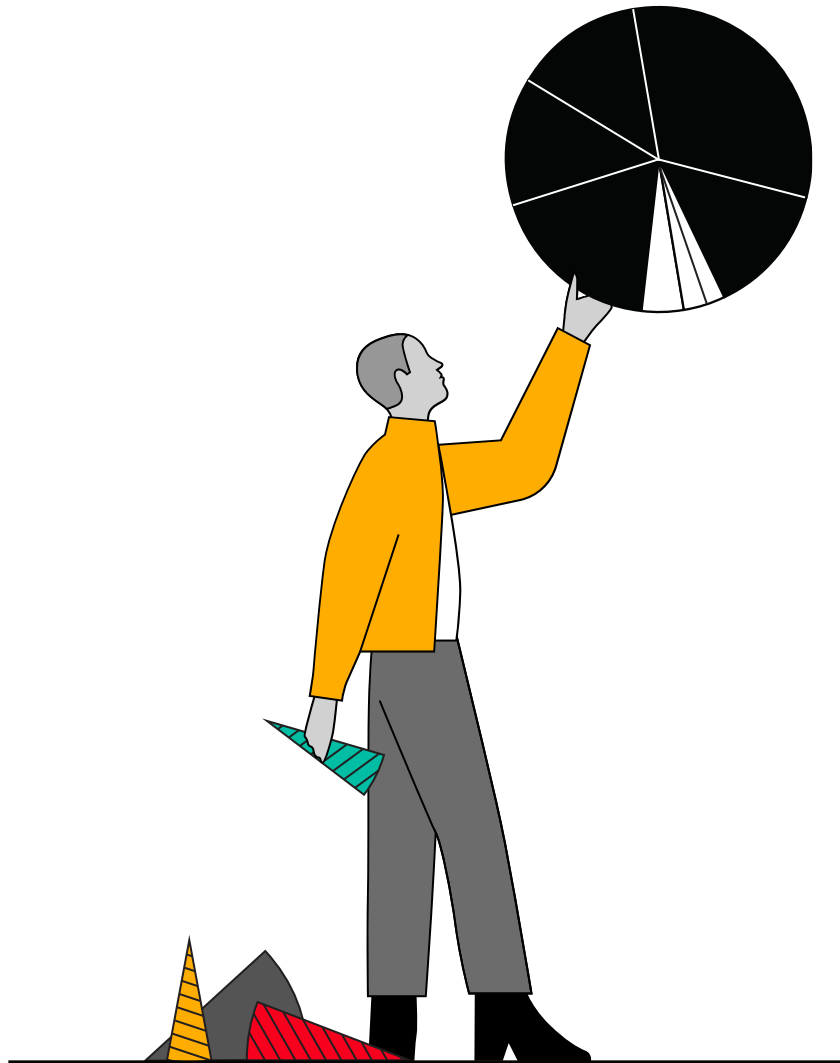
- Straightforward, transparent, liquid, cost-efficient?
- Constraints on glide path or underlying strategies?
- Tactical tilts?
- Undue risks?



Learn how Vanguard rebalances 

Index-based approach is leading the target-date market 

What's NOT in our TDFs, and why



We carefully evaluate strategies on:

- Appropriateness for the broadest swath of participants, including those disengaged and defaulted into TDFs
- Broad investment criteria (cost, simplicity, transparency, liquidity)
- Portfolio construction criteria (improve diversification, enhance return, reduce risk)
- Ability to materially improve long-term probability of retirement success

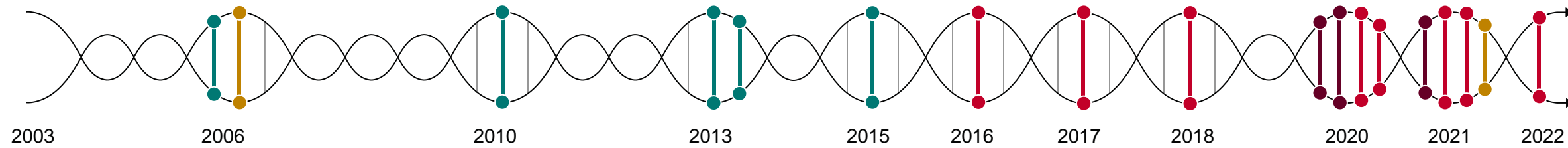
We exclude strategies that add volatility without adequate compensation in return or that fail to meet the criteria above.

Examples of strategies we do not currently include:

- High-yield bonds (→)
- Commodities
- Overweighting REITs (→)
- Tactical or static tilts based on size, style, sector, duration, etc.

Purposeful evolution through constant evaluation

Since our TDFs' 2003 inception, we've only made changes that can **meaningfully improve investor outcomes.**



Enhanced asset allocation

- Increased equity weight in Income fund (2006)
- Added emerging markets stocks (2006)
- Added Canada and more international equity exposure (including small-caps) through Total International Stock Index, replacing three regional funds (2010)
- Added international bonds (2013)
- Replaced broad TIPS fund with short-term TIPS for better responsiveness to inflation and removed money market fund (2013)
- Increased international allocations for both stocks and bonds (2015)

Improved fund/trust suite

- Launched five-year vintage increments (2006)
- Added Target Retirement Income and Growth Trust, an alternative landing point with a 50/50 allocation (2021)
- Added series 2065 (2017) and 2070 (2022) as part of the five-year vintage increments

Reduced implementation costs and tax drag

- Moved from quarterly to monthly glide-path rolldown (2020)
- Widened rebalancing bands (2020)
- Across trust vintages, replaced underlying international fund with an international trust, minimizing foreign tax withholdings (2021)

Lowered fees, increased access

- Lowered expense ratios (2016, 2017, 2018, 2020, and 2021)
- Reduced minimum for Institutional Target Retirement Funds (2020)
- Reduced minimum for Target Retirement Trusts (2021)
- Merged Institutional Target Retirement Funds into Target Retirement Funds (2022)

Vanguard's Target Retirement Trust options for participants near retirement

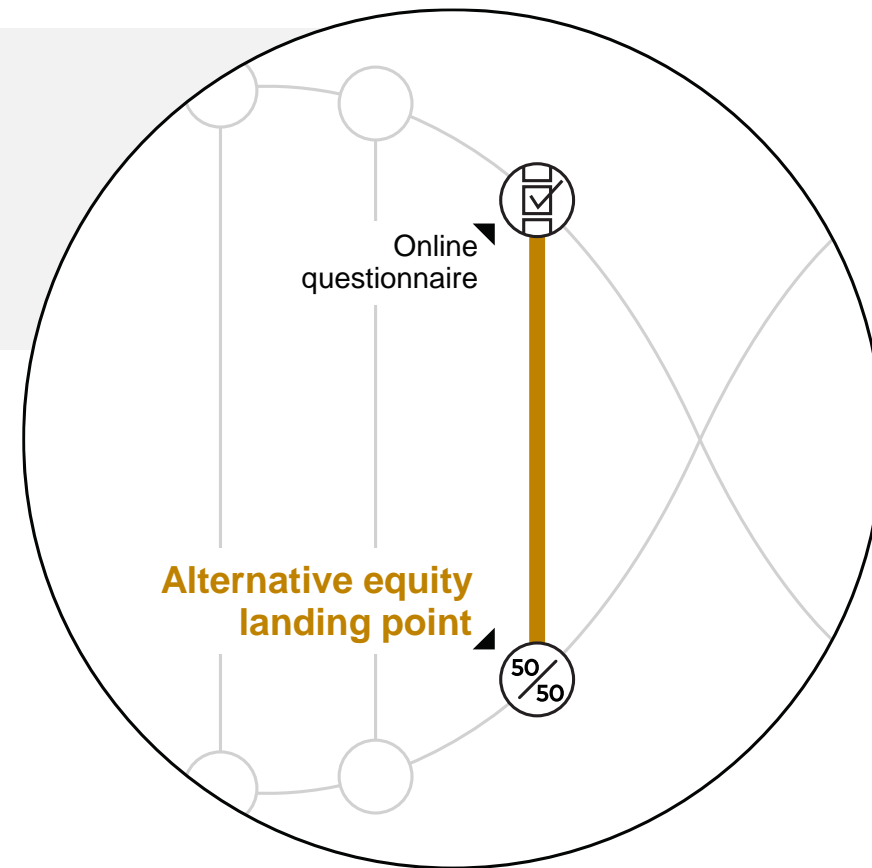


Investments

Vanguard Target Retirement Income and Growth Trust offers an alternative equity landing point for those participants who have more financial resources, alternative income streams in retirement, and the risk tolerance to take on a higher equity allocation to potentially fund higher spending goals in retirement.*

Participant guidance

Online questionnaire sent beginning at age 60 to help participants choose the appropriate landing point.



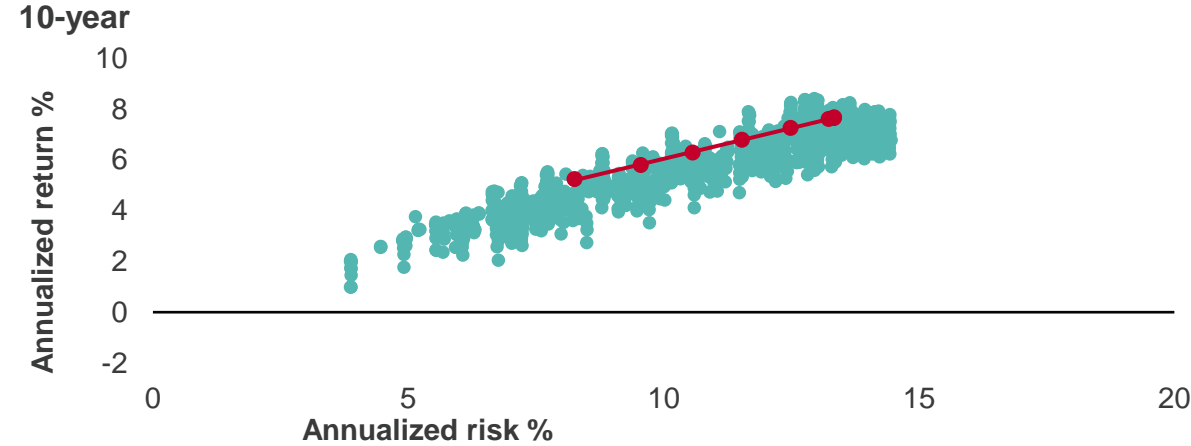
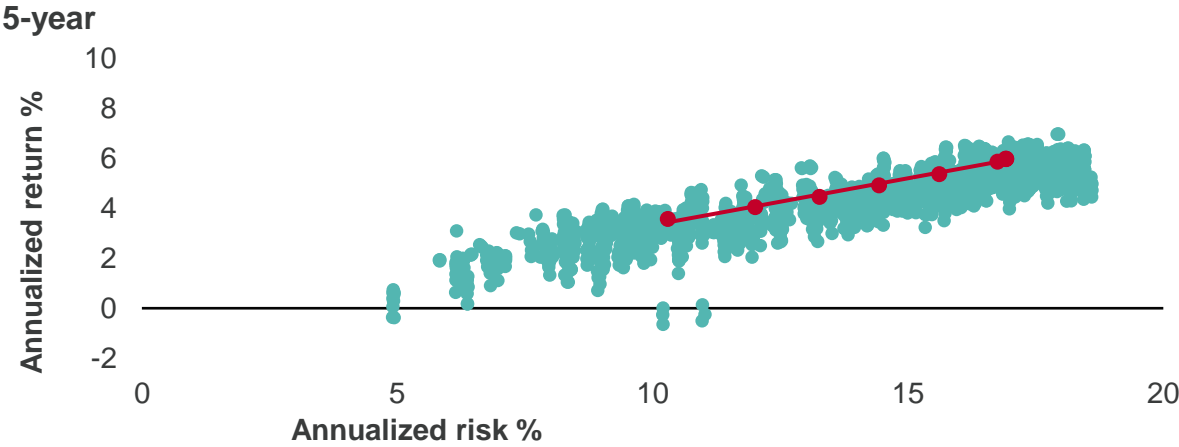
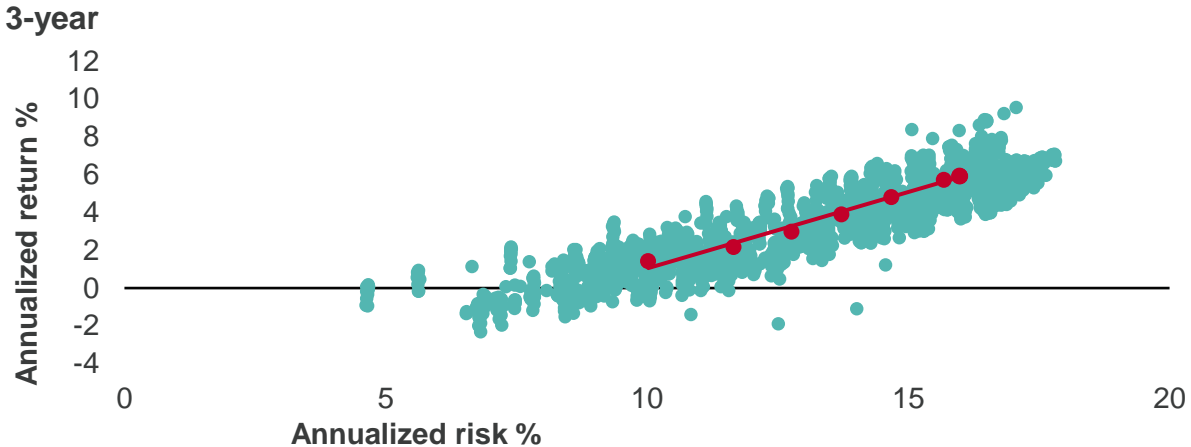
We are connecting the dots for participants—
at no additional cost.

*This option is currently only available as a commingled investment trust, not as a 1940 Act mutual fund.

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Performance matters.
Consistent performance
matters even more.

A history of consistently strong risk-adjusted performance



Investors may be in TDFs for decades. Consistent performance across all market environments is critical.

● TDF peers in Morningstar universe ● Vanguard Target Retirement Funds




Standard deviation was used for annualized risk. Results will vary for other time periods. All funds in the Morningstar peer group with a minimum 3-, 5-, or 10-year history, respectively, were included in the comparison. There may be other material differences between products that must be considered prior to investing. **Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For the most recent performance, visit our website at vanguard.com/performance.**

Sources: Vanguard and Morningstar, Inc., as of September 30, 2023. Vanguard Investor Shares highlighted.

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Consistent stellar performance relative to peers

	Income fund	2025 fund	2050 fund
Average quartile ranking in Morningstar peer group for rolling 10-year periods since inception	Top quartile 	Top quartile 	Top quartile 
Percentage of times fund outperformed the peer-group average based on 10-year rolling returns since inception	100% of the time	100% of the time	100% of the time

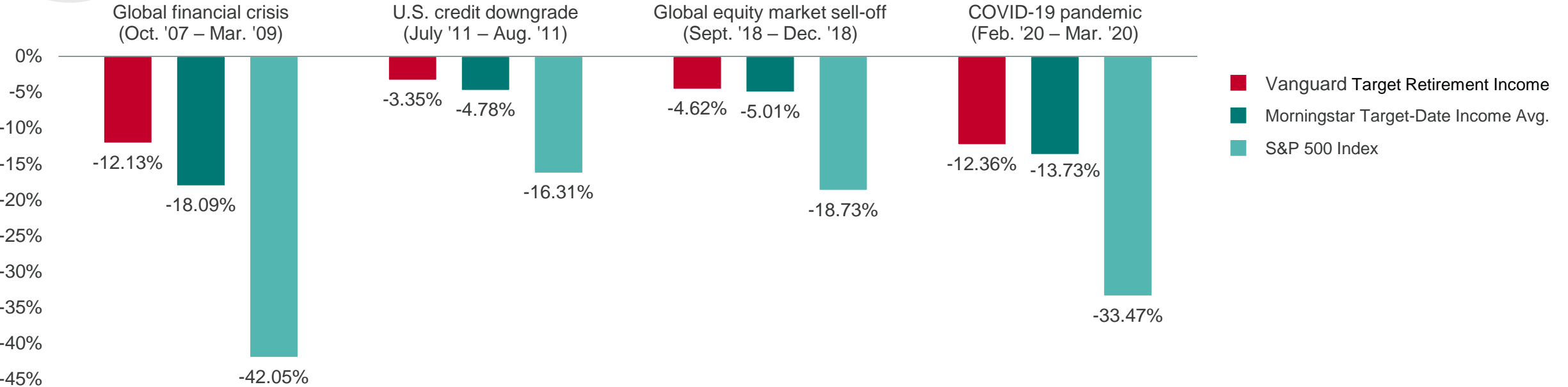
The three vintages were chosen because they represented scenarios for those who are well into retirement, those nearing retirement, and those further from retirement, and because each fund has a track record of at least 15 years. The analysis reviewed 10-year returns on a rolling quarterly basis from June 30, 2006, through December 31, 2022. Only competing funds with a 10-year history for the relevant period were included. For the Income Fund, the number of funds in the peer group ranged from 35 in the earliest periods to 111 in the most recent periods; for the 2025 Fund, from 10 to 143; and for the 2050 fund, from 26 to 130. The top row shows the average quartile ranking for the aggregate rolling periods. The bottom row shows how often our fund outperformed the peer average over those rolling periods. Vanguard Target Retirement Income Fund ranked in the top quartile 63% of the rolling 10-year periods (17 out of 27 periods) and outperformed the peer-group average in all those 10-year periods. Vanguard Target Retirement 2025 Fund ranked in the top quartile 89% of periods (24 out of 27) and outperformed the peer group average in all those periods. Vanguard Target Retirement 2050 Fund ranked in the top quartile 70% of periods (19 out of 27) and outperformed the peer-group average in all those periods. Results will vary with different time periods.

Sources: Vanguard and Morningstar, Inc., as of December 31, 2022. **Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks. For the most recent performance, visit our website at www.vanguard.com/performance.**

Designed to deliver strong performance while limiting volatility



Investors in retirement are the most vulnerable. Vanguard Target Retirement Income Fund has fared better than the peer average during severe market downturns, **providing better risk mitigation when investors need it most.**



The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. Visit our website at institutional.vanguard.com/performance for the most recent Vanguard investment performance. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Sources: Vanguard and Morningstar, Inc. Data are as of month-end through month-end for each relevant period.

Vanguard is the QDIA provider of choice

**#1 manager
of DC assets**

**#1 manager
of TDF assets**



37% of the industry
have entrusted Vanguard with
more than \$1 trillion
in TDF assets for their
15 million
participants

Note: DC assets are based on AUM in both Vanguard-administered plans and those administered by others. Other figures are based on AUM market share of the TDF industry.
Sources: Vanguard and Morningstar, Inc., as of December 31, 2022.



Investment performance returns

Annualized (as of September 30, 2023)

	Expense ratio	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
Vanguard Target Retirement Income Vintage								
Fund	0.08	-2.35	7.02	-0.13	2.69	3.60	4.56	10/27/2003
Trust II	0.075	-2.41	7.05	-0.12	2.72	3.64	4.17	2/29/2008
<i>Target Retirement Income Composite Index¹</i>	—	-2.26	7.31	0.10	2.97	3.84	—	—
Vanguard Target Retirement 2020 Vintage								
Fund	0.08	-2.65	9.36	1.43	3.58	5.24	5.53	6/7/2006
Trust II	0.075	-2.63	9.39	1.46	3.62	5.30	5.35	2/29/2008
<i>Target Retirement 2020 Composite Index¹</i>	—	-2.47	9.68	1.73	3.95	5.54	—	—
Vanguard Target Retirement 2025 Vintage								
Fund	0.08	-2.99	11.56	2.17	4.06	5.79	6.16	10/27/2003
Trust II	0.075	-2.99	11.57	2.26	4.14	5.88	5.72	2/29/2008
<i>Target Retirement 2025 Composite Index¹</i>	—	-2.77	11.91	2.58	4.50	6.13	—	—
Vanguard Target Retirement 2030 Vintage								
Fund	0.08	-3.20	13.14	2.97	4.46	6.28	6.11	6/7/2006
Trust II	0.075	-3.24	13.12	3.05	4.55	6.36	6.02	2/29/2008
<i>Target Retirement 2030 Composite Index¹</i>	—	-2.98	13.51	3.39	4.91	6.62	—	—

The performance data shown represent past performance. Past performance is no guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at vanguard.com/performance. Some funds assess purchase, redemption, and/or account maintenance fees. The performance data shown do not reflect deduction of these fees. If they did, performance would be lower. Details on these fees and adjusted performance figures can be found in the fund detail section. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Source: Data derived from Morningstar, Inc.

For some funds, fees are levied on purchases or redemptions to offset the costs of buying and selling portfolio securities. For others, fees are assessed on redemptions made within certain time periods after a purchase to discourage short-term trading. All purchase or redemption fees are paid directly to the fund to compensate long-term shareholders for the costs of trading activity. *Note that one-year performance figures are not fee-adjusted for fees incurred on shares held less than one year.*

¹ A blended composite that weights the returns of market indexes for each asset class in proportion with the target weighting of the fund. Detail for each composite index is available upon request.

Investment performance returns

Annualized (as of September 30, 2023)

	Expense ratio	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
Vanguard Target Retirement 2035 Vintage								
Fund	0.08	-3.28	14.61	3.89	4.93	6.79	6.91	10/27/2003
Trust II	0.075	-3.30	14.65	3.98	5.01	6.87	6.40	2/29/2008
<i>Target Retirement 2035 Composite Index¹</i>	—	-3.04	14.99	4.31	5.37	7.14	—	—
Vanguard Target Retirement 2040 Vintage								
Fund	0.08	-3.34	16.15	4.81	5.37	7.26	6.73	10/27/2003
Trust II	0.075	-3.36	16.18	4.87	5.45	7.34	6.78	2/29/2008
<i>Target Retirement 2040 Composite Index¹</i>	—	-3.10	16.48	5.23	5.82	7.62	—	—
Vanguard Target Retirement 2045 Vintage								
Fund	0.08	-3.45	17.67	5.72	5.87	7.61	7.53	10/27/2003
Trust II	0.075	-3.42	17.73	5.79	5.93	7.68	6.98	2/29/2008
<i>Target Retirement 2045 Composite Index¹</i>	—	-3.15	17.97	6.14	6.30	7.96	—	—
Vanguard Target Retirement 2050 Vintage								
Fund	0.08	-3.46	18.48	5.92	5.99	7.67	6.99	6/7/2006
Trust II	0.075	-3.48	18.52	5.98	6.05	7.74	7.03	2/29/2008
<i>Target Retirement 2050 Composite Index¹</i>	—	-3.20	18.74	6.34	6.43	8.03	—	—

Source: Data derived from Morningstar, Inc.

For some funds, fees are levied on purchases or redemptions to offset the costs of buying and selling portfolio securities. For others, fees are assessed on redemptions made within certain time periods after a purchase to discourage short-term trading. All purchase or redemption fees are paid directly to the fund to compensate long-term shareholders for the costs of trading activity. *Note that one-year performance figures are not fee-adjusted for fees incurred on shares held less than one year.*

¹ A blended composite that weights the returns of market indexes for each asset class in proportion with the target weighting of the fund. Detail for each composite index is available upon request.

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Investment performance returns

Annualized (as of September 30, 2023)

	Expense ratio	3 months	1 year	3 years	5 years	10 years	Since inception	Inception date
Vanguard Target Retirement 2055 Vintage								
Fund	0.08	-3.46	18.48	5.91	5.99	7.65	9.11	8/18/2010
Trust II	0.075	-3.48	18.54	5.98	6.05	7.72	9.49	8/31/2010
<i>Target Retirement 2055 Composite Index¹</i>	—	-3.20	18.74	6.34	6.43	8.03	—	—
Vanguard Target Retirement 2060 Vintage								
Fund	0.08	-3.48	18.49	5.91	5.98	7.65	8.77	1/19/2012
Trust II	0.075	-3.48	18.54	5.99	6.07	7.74	8.47	3/1/2012
<i>Target Retirement 2060 Composite Index¹</i>	—	-3.20	18.74	6.34	6.43	8.03	—	—
Vanguard Target Retirement 2065 Vintage								
Fund	0.08	-3.46	18.47	5.93	5.97	—	7.02	7/12/2017
Trust II	0.075	-3.49	18.51	5.97	6.08	—	7.63	7/17/2017
<i>Target Retirement 2065 Composite Index¹</i>	—	-3.20	18.74	6.34	6.43	—	—	—
Vanguard Target Retirement 2070 Vintage								
Fund	0.08	-3.47	18.49	—	—	—	7.56	6/8/2022
Trust II	0.075	-3.46	18.60	—	—	—	-2.51	4/7/2022
<i>Target Retirement 2070 Composite Index</i>	—	-3.20	18.74	6.34	6.43	7.86	—	—

Source: Data derived from Morningstar, Inc.

For some funds, fees are levied on purchases or redemptions to offset the costs of buying and selling portfolio securities. For others, fees are assessed on redemptions made within certain time periods after a purchase to discourage short-term trading. All purchase or redemption fees are paid directly to the fund to compensate long-term shareholders for the costs of trading activity. *Note that one-year performance figures are not fee-adjusted for fees incurred on shares held less than one year.*

¹ A blended composite that weights the returns of market indexes for each asset class in proportion with the target weighting of the fund. Detail for each composite index is available upon request.

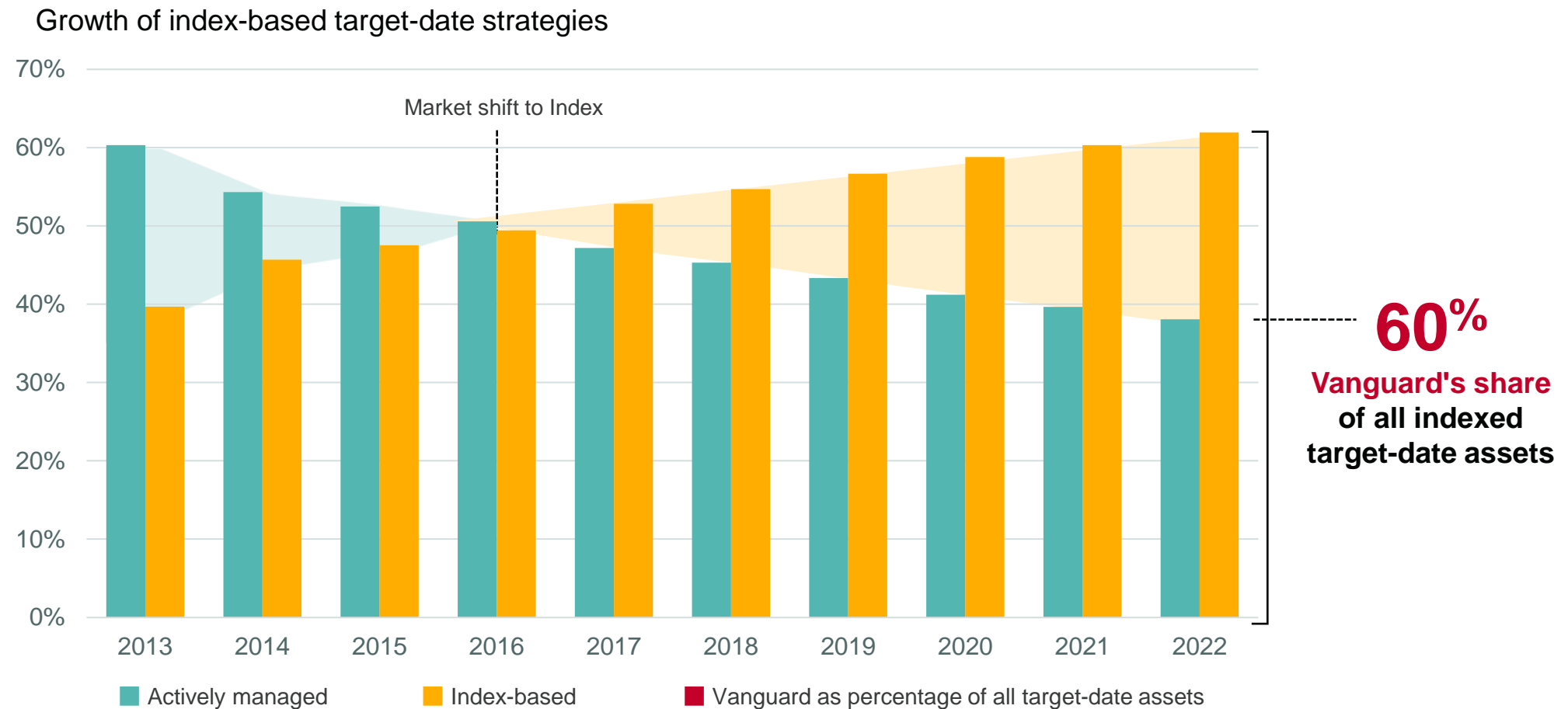
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Appendix

Index-based approach is leading the target-date market...

...and Vanguard is driving that approach



Sources: Vanguard and Morningstar, Inc., as of December 31, 2022. The assets include both 1940 Act mutual funds and commingled investment trusts.

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Why indexing is a logical choice for QDIA

Percentage of equity funds that underperformed relevant index

Fund category	Comparison index	10-year	20-year*
All domestic	S&P Composite 1500	93%	92%
Global	S&P Global 1200	89%	89%
International	S&P Developed Ex-U.S. SmallCap	87%	94%
Emerging markets	S&P/IFCI Composite	85%	97%

Percentage of fixed income funds that underperformed relevant index

Fund category	Comparison index	10-year	15-year*
Government intermediate	iBoxx \$ Domestic Sovereigns & Sub-Sovereigns 1-10Y	94%	91%
Investment-grade intermediate	Bloomberg U.S. Aggregate	64%	70%
High yield	iBoxx \$ Liquid High Yield	73%	81%
Global	Barclays Global Aggregate	60%	58%

Advantages

- ✓ **Straightforward**
- ✓ **Transparent**
- ✓ **Cost-efficient**
- ✓ **Low manager risk**

History of long-term outperformance relative to active strategies across asset classes

Source: S&P SPIVA Scorecard, data as of December 31, 2022.

* Longest time period measured in SPIVA report was 20 years for equity funds and 15 years for fixed income funds. **Past performance is not a guarantee of future returns.**

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Vanguard, a premier index portfolio manager

Skill and scale

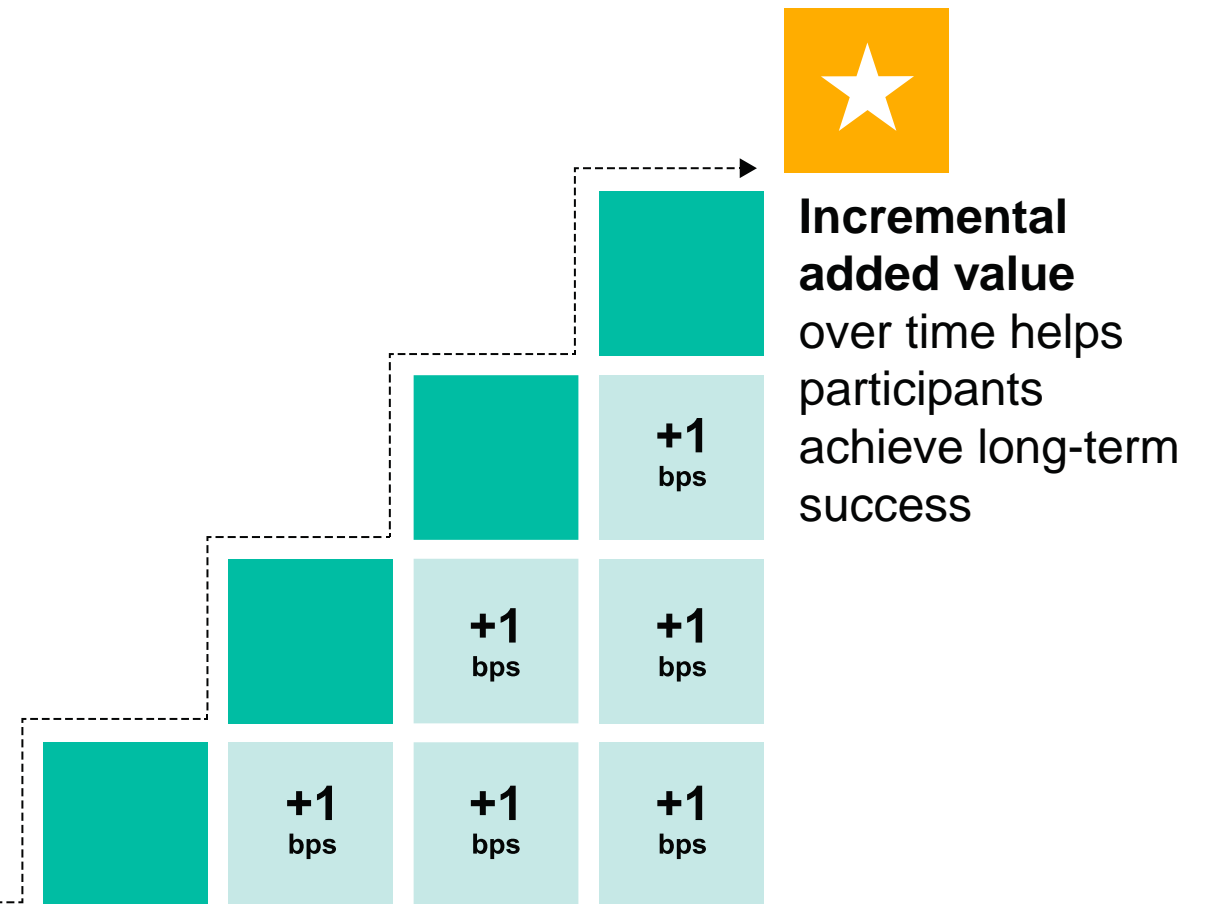
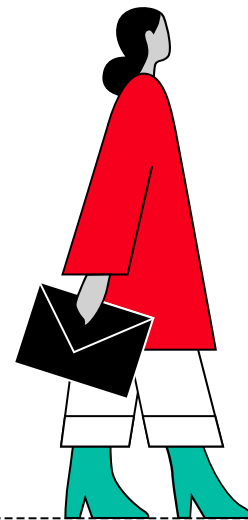
- 40+ years indexing experience
- 200+ dedicated investment professionals
- Global trading platform
- History of consistent tight tracking

Safeguards and infrastructure

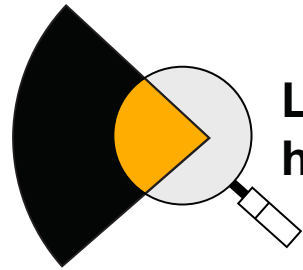
- Integrated but independent risk management
- Value-add proprietary trading strategies

Client focus

- Proactive cost reductions
- Investor-friendly securities lending
- TDF rebalancing optimization



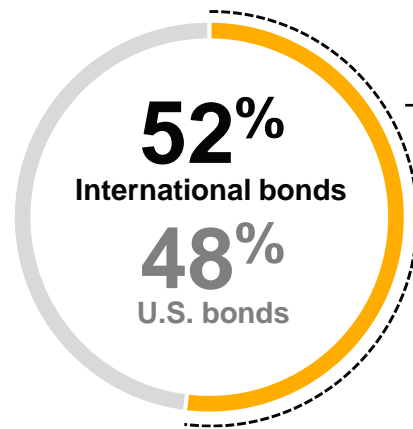
Hedged international bonds can improve portfolio diversification



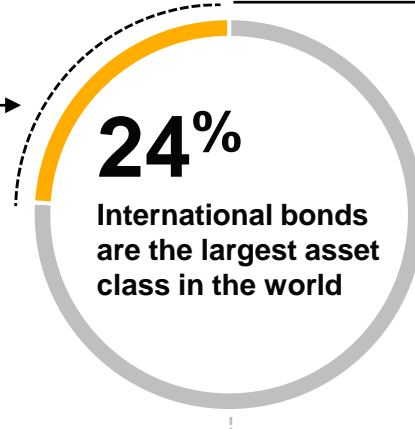
Let's take a closer look at hedged international bonds

Including international bonds **expands the opportunity set and diversification potential**

Global fixed income markets

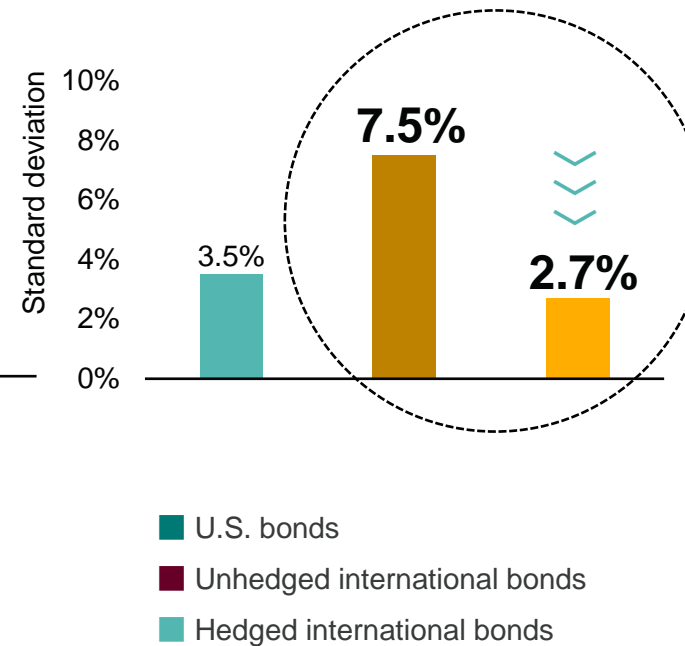


Global liquid capital markets



All other asset classes

Annualized volatility (1988–2022)



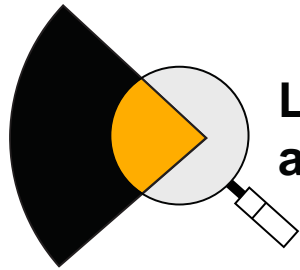
Currency hedging **reduces the volatility** of international bonds, helping to preserve their diversification benefits

Sources: Vanguard calculations using data from Bloomberg, MSCI, and FactSet, for the period from January 1, 1988, through December 31, 2022. MSCI U.S. Broad Market Index was used for U.S. stocks, MSCI AC World Ex USA IMI Index for international stocks and Bloomberg U.S. Aggregate Bond Index for U.S. bonds. International bonds were represented by Citigroup World Government Bond Index through 1989 and Bloomberg Global Aggregate ex-USD Index thereafter.

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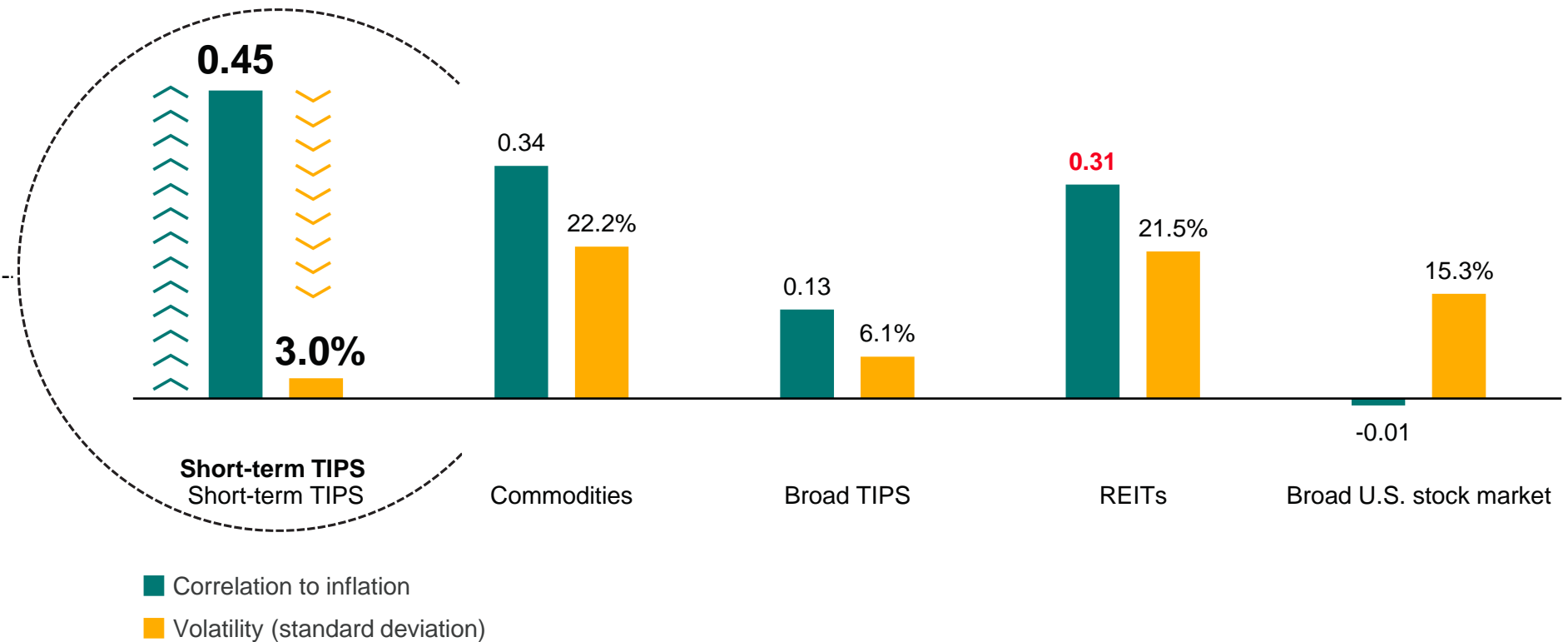
Short-term TIPS: Higher correlation to inflation with less volatility



Let's take a closer look at short-term TIPS



Short-term TIPS provide a hedge against unexpected inflation without the volatility of other asset classes



IMPORTANT: The projections and other information generated by the VCMM regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from VCMM are derived from 10,000 simulations for each modeled asset class. Simulations as of June 30, 2022. Results from the model may vary with each use and over time.

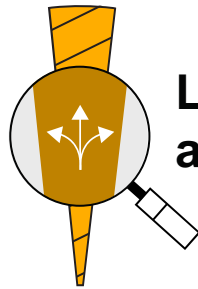
Sources: Vanguard.

Notes: Correlation with inflation was calculated across the median return from the VCMM distribution of each asset class and inflation within equilibrium market conditions. Inflation beta was calculated as the slope of each asset class and inflation across all 10,000 paths cross-sectionally to year 30 to best represent equilibrium market conditions. For more information about the VCMM, see Appendix 2. See Appendix 3 for further details on asset classes.

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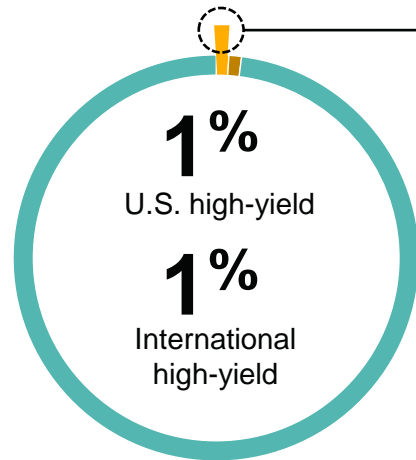


High-yield bonds are a poor diversifier



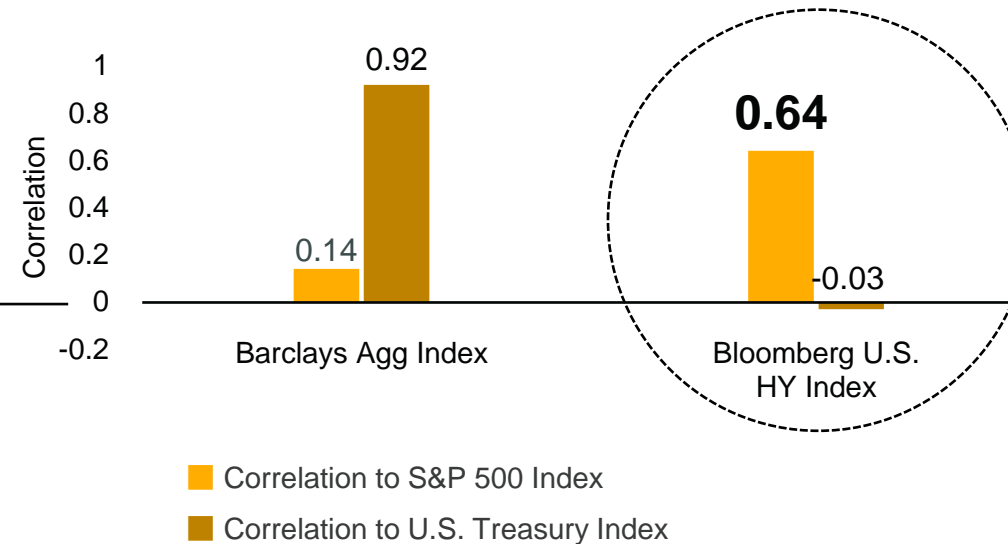
Let's take a closer look at high-yield bonds

High yield is a **very small percentage** of the total liquid global market



- 1% U.S. high yield
- 1% International high yield
- 98% all other liquid global markets

A hybrid asset class with significant equity market correlation



Why Vanguard Target Retirement strategies do not currently include high-yield bonds

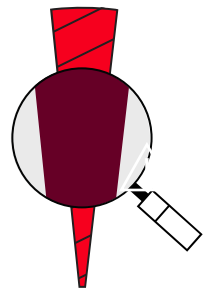
- At market weight, they do not significantly change the risk/return profile of a diversified portfolio or the long-term probabilities of success.
- Their high correlation to equities makes them a poor diversifier during stock market downturns.
- When the allocation to high-yield bonds is from the fixed income side of the portfolio, volatility increases with only a modest improvement in return.

Past performance is no guarantee of future results.

Source: Vanguard calculations using FactSet data from 1991 through 2022.

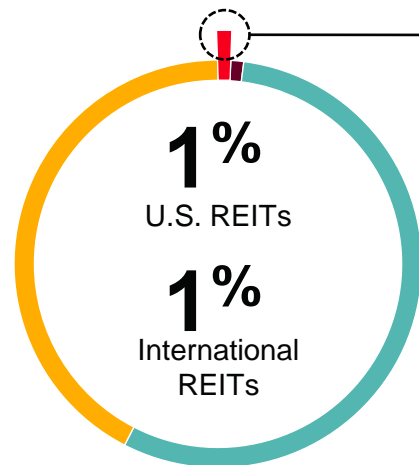
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Overweighting REITs may result in unwanted risk



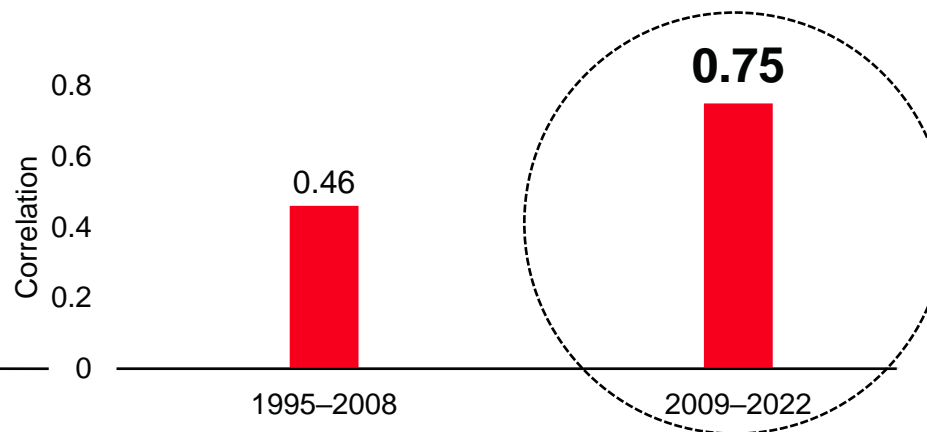
Let's take a closer look at REITs

REITs are a **very small percentage** of the global equity market



- 1% U.S. REITs
- 1% International REITs
- 55% U.S. stocks
- 42% International stocks

U.S. REITs correlation to U.S. equities



Why Vanguard Target Retirement strategies do not currently overweight REITs

- REITs are already represented in our diversified portfolio; any additional allocation is beyond what the market consensus believes is their market value.
- REITs are highly correlated with equities, and that correlation has increased in recent years.
- Any additional allocation to REITs is an overweight of a concentrated and potentially volatile sector.

Past performance is no guarantee of future results.

Source: Vanguard calculations using FactSet data from 1995 through 2022. U.S. REITs is represented by Dow Jones US Select REIT Index.

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5 building blocks for broad diversification

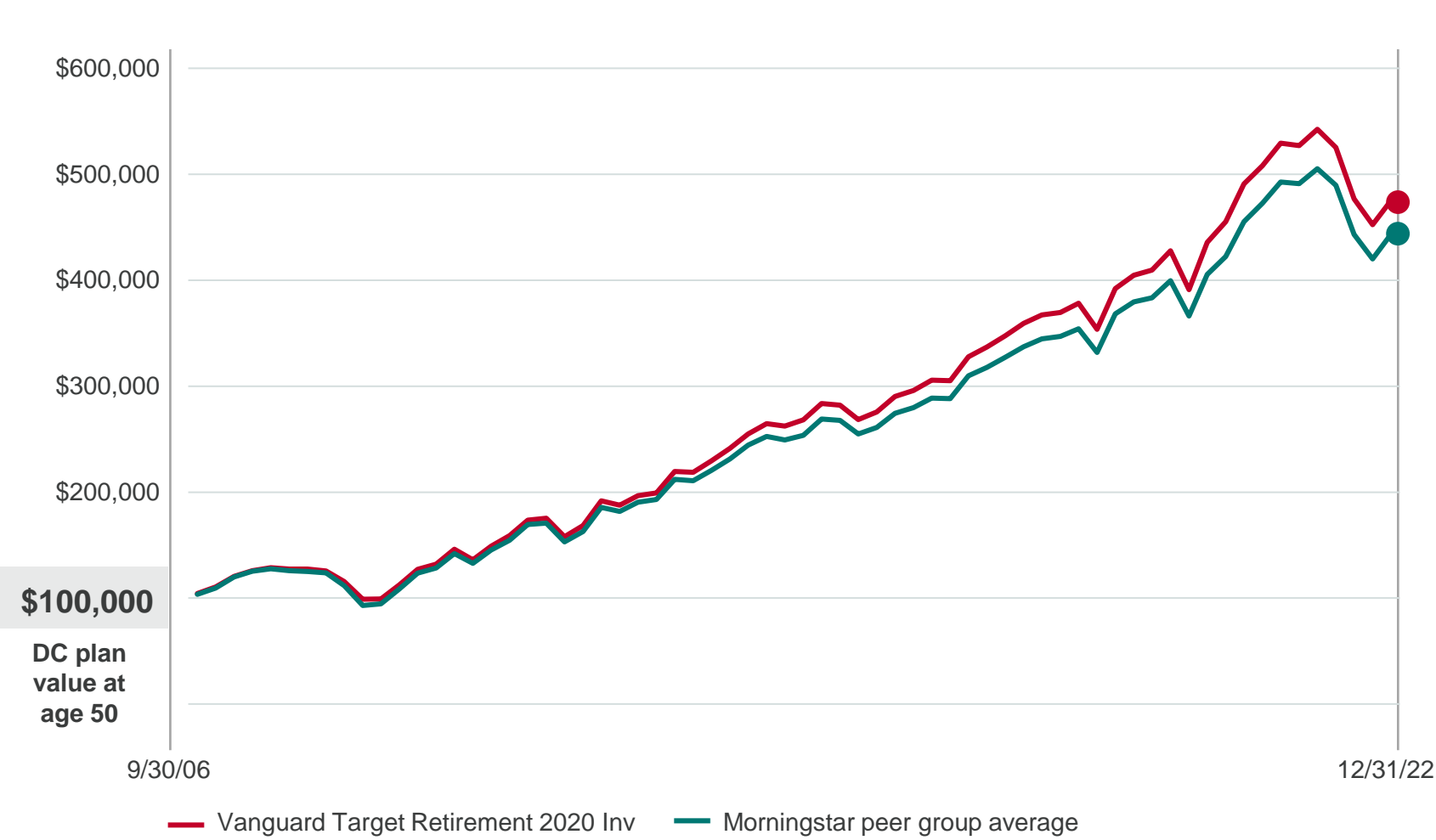
29K+ SECURITIES
40+ COUNTRIES
25+ SUB-ASSET CLASSES
25+ GLOBAL LIQUID MARKET COVERAGE

	Vanguard Target Retirement	BlackRock LifePath Index	Fidelity Freedom Index	State Street Target Retirement	
Equity and REITs	1 CRSP U.S. Total Market Index	Russell 1000 Index	Dow Jones US Total Stock Market Index	S&P 500 Index	
		Russell 2000 Index		Russell Small Cap Completeness Index	
		FTSE EPRA/NAREIT Developed Index		Dow Jones Global Select Real Estate Securities Index	
	2 FTSE Global All Cap ex U.S. Index	MSCI Total International Stock Index	MSCI ACWI ex-USA Index	MSCI ACWI ex-USA IMI Index	
		FTSE EPRA/NAREIT Developed Index		Dow Jones Global Select Real Estate Securities Index	
		International REITs			
Fixed income	3 Bloomberg U.S. Aggregate Float Adjusted Index	Bloomberg US Long Govt Bond Index Bloomberg US Long Credit Bond Index Bloomberg US Securitized: MBS, ABS & CMBS Index Bloomberg US Intermediate Govt Bond Index Bloomberg US Intermediate Credit Bond Index Bloomberg US Securitized: MBS, ABS & CMBS Index	Bloomberg Long US Treasury Index Bloomberg US Aggregate Bond Index Bloomberg US Aggregate Bond Index	Bloomberg Long US Treasury Index Bloomberg US Aggregate Bond Index Bloomberg Intermediate US Treasury Index Bloomberg US Aggregate Bond Index Bloomberg US Aggregate Bond Index Bloomberg 1-3 Yr US Treasury Index Bloomberg 1-3 Yr Corp Bond Index	
		NO EXPOSURE			
		4 Bloomberg Global Aggregate ex-USD Float Adjusted RIC Capped Index		Bloomberg Global Agg Treasury ex-USD, ex-EM, RIC Capped, Float Adjusted (Hedged USD) Index	NO EXPOSURE
	Emerging markets	NO EXPOSURE	NO EXPOSURE	NO EXPOSURE	
	High yield	<i>Excluded due to high equity market correlation and small market size</i>	Bloomberg US Securitized: MBS, ABS & CMBS Index	NO EXPOSURE	Bloomberg US HY Very Liquid Bond Index
	Inflation hedging	5 Bloomberg U.S. 0-5 Year Treasury Inflation Protected Securities Index	ICE US Treasury Inflation Linked Bond Index	Bloomberg US TIPS 5+ Years Index	Bloomberg 1-10 Yr Govt Inflation-linked Bond Index
Commodities			Bloomberg Commodity Index (CIT only)	NO EXPOSURE	NO EXPOSURE

Source: Bloomberg, December 2022. There may be other material differences between products that must be considered prior to investing. For institutional use only. Not for distribution to retail investors.

Better outcomes over time

Hypothetical growth of \$100,000 initial balance with regular contributions over 15 years into Vanguard Target Retirement 2020 Fund (Investor Shares) vs. peer average



7% above peer average

\$474,957

+\$31,844

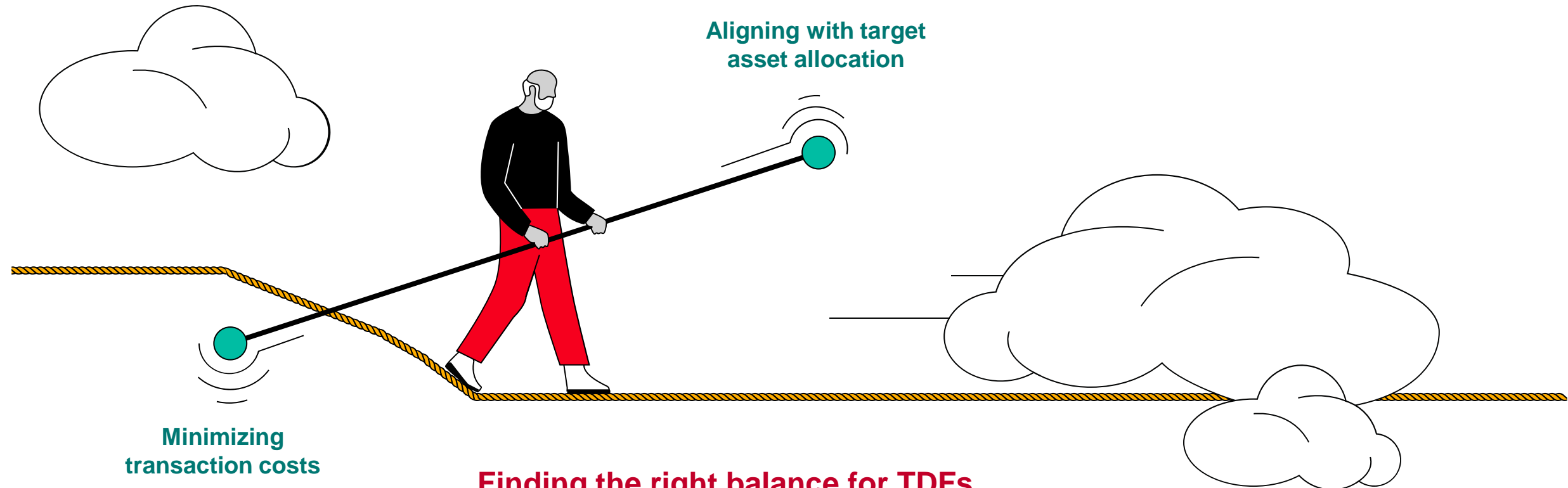
\$443,113

Note: This hypothetical illustration assumes an investor who started at age 50 with a balance of \$100,000 in a DC plan, contributing 10% of an \$80,000 salary that increases 2% each year.

Note that the competitive performance data shown represent past performance, which is not a guarantee of future results, and that all investments are subject to risks. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For the most recent performance, visit our website at vanguard.com/performance.

Sources: Vanguard calculations using data from Morningstar, Inc., as of December 31, 2022.

A rebalancing strategy unlike most in the industry



Finding the right balance for TDFs

- Instead of rebalancing monthly or quarterly, we rebalance our TDFs daily, providing the asset allocation experience investors expect each and every day.
- But we rebalance only if the asset mix drifts too far from its target asset allocation, seeking the optimal balance between minimizing transaction costs and maintaining tight alignment to the glide path.
- Daily rebalancing means more effort on our part, but we believe it best serves the interests of our investors.

Daily rebalancing means closer alignment to target asset mix

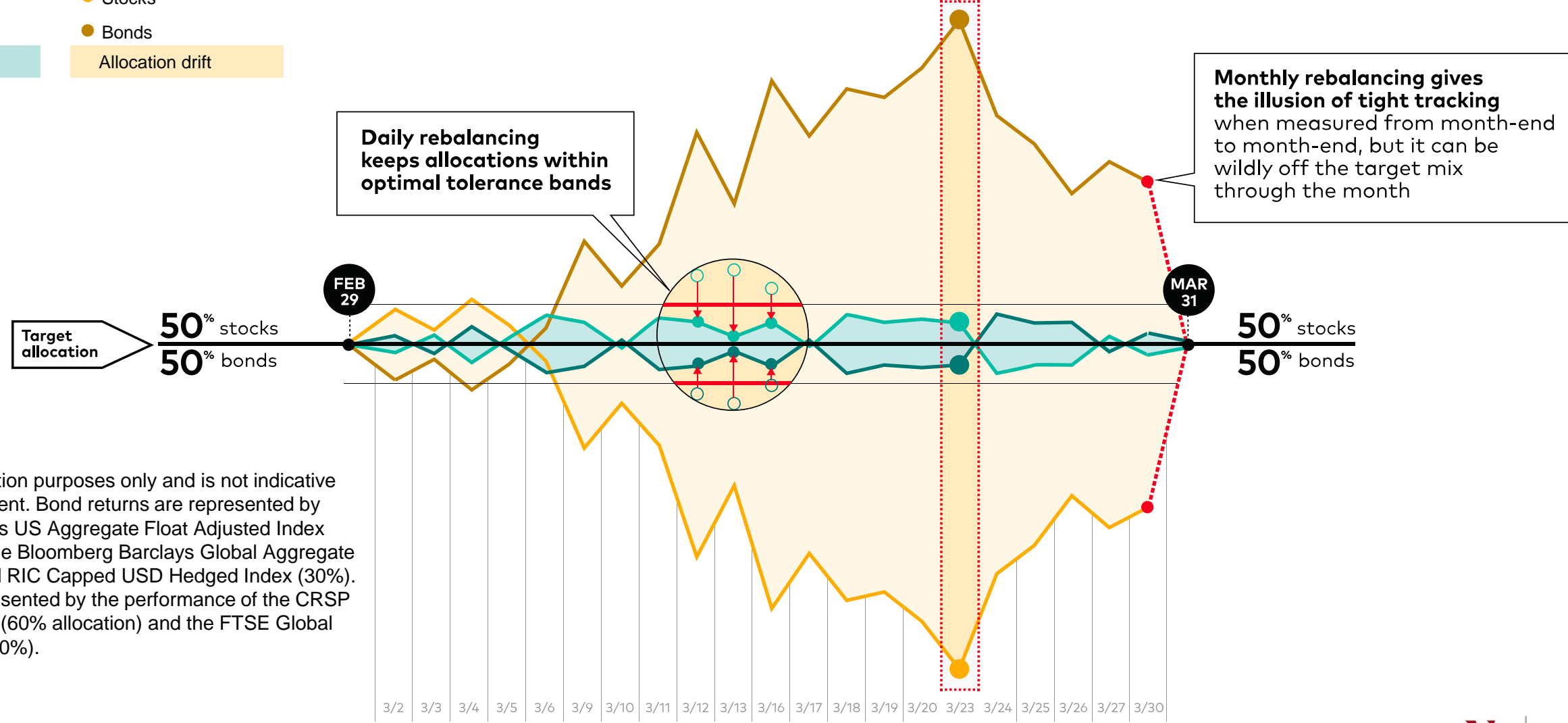
Vanguard's approach

Daily rebalancing	Monthly rebalancing
● Stocks	● Stocks
● Bonds	● Bonds
Allocation drift	Allocation drift

	Daily	Monthly
stocks	● 50.5%	● 43%
bonds	● 49.5%	● 57%

MARCH 23, 2020

At the height of pandemic-induced market volatility, the monthly rebalancing portfolio was 7 percentage points off the target 50/50 asset allocation



This chart is for illustration purposes only and is not indicative of any specific investment. Bond returns are represented by the Bloomberg Barclays US Aggregate Float Adjusted Index (70% allocation) and the Bloomberg Barclays Global Aggregate ex-USD Float-Adjusted RIC Capped USD Hedged Index (30%). Stock returns are represented by the performance of the CRSP US Total Market Index (60% allocation) and the FTSE Global All Cap ex US Index (40%).

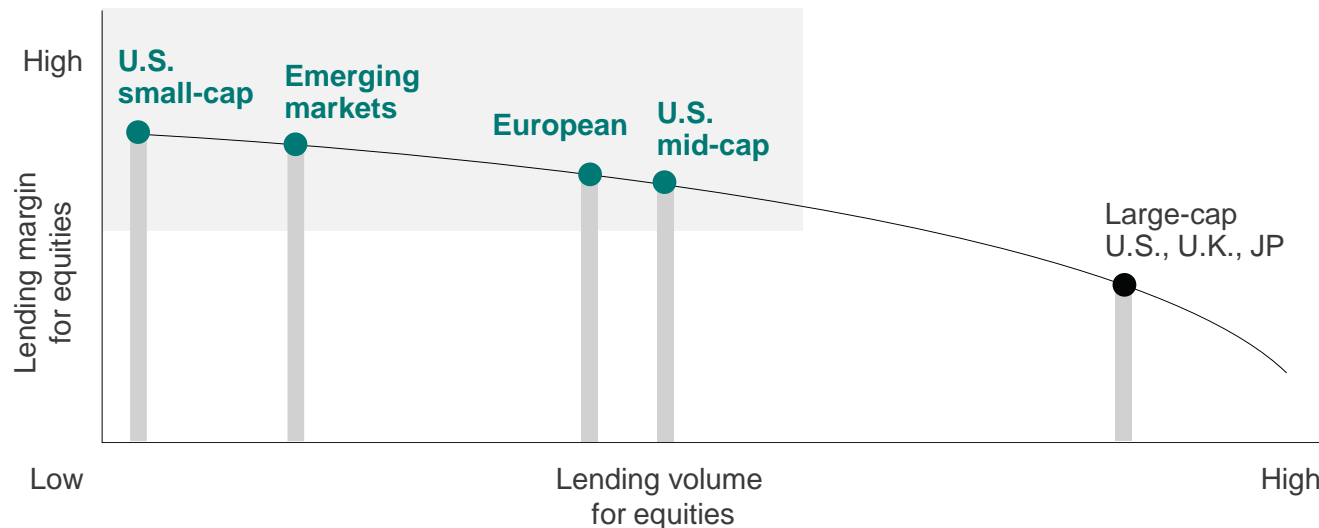
Source: Vanguard.

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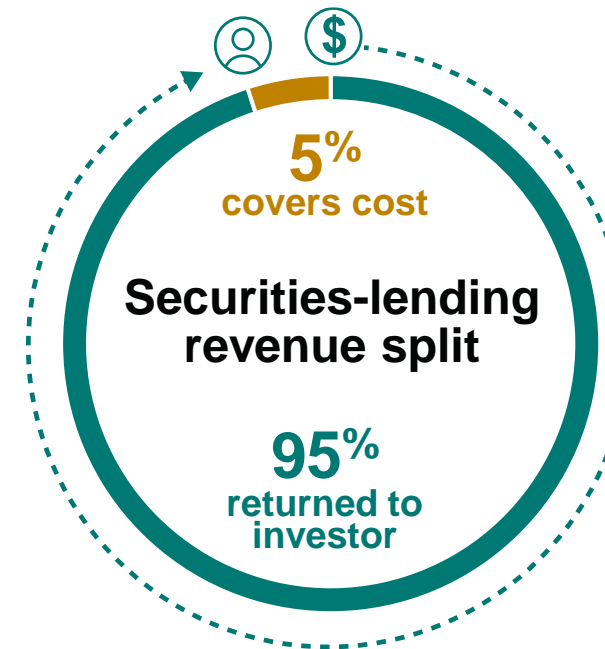
Vanguard's securities lending puts shareholders first

Safety first: Value over volume

- We lend only high-demand securities
- Our funds on average have 0.4% of assets on loan (SEC allows up to one-third of assets)
- We only accept cash as collateral
- We invest all collateral in the low-cost, conservative Market Liquidity Fund



All revenue minus cost is returned to the investor



Resulting in, on average,
an extra 0.7 bps
 in annual returns for Target Retirement Funds and
2.2 bps
 for Target Retirement Trusts

Sources: BBH and Vanguard, as of December 31, 2022.

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Slide ID #: S061572 Tracking #: 3211645 Expiration date: 4/3/2025



About the SAAC

The Vanguard Strategic Asset Allocation Committee (SAAC) is a multi-asset oversight committee composed of global investment leaders from across the firm.

The members of the SAAC are responsible for the investment methodology behind our single-fund solutions, including Vanguard LifeStrategy® Funds, Target Retirement Funds, 529 plans, and model portfolios.

The SAAC meets regularly to review its investment methodology, debate investment strategies, and coordinate any changes with Vanguard's Advice Policy Committee, thereby ensuring a consistent approach in our single-fund solutions and advice offers.



Greg Davis, CFA
Global Chief Investment Officer



Joseph Davis, Ph.D.
Global Chief Economist and
Global Head of Investment
Strategy Group (Committee
Chair)



Roger Aliaga-Díaz, Ph.D.
Chief Economist, Americas,
Global Head of Portfolio
Construction
(Committee Vice-chair)



Matthew Brancato, CFA, CPA
Head of Institutional Investor
Services



Dan Reyes, CFA
Head of Portfolio Review
Department



Joel Dickson, Ph.D.
Head of Enterprise Advice
Methodology



Ryan Ludt
European Regional Head of
Investment Management Group



Kaitlyn Caughlin, CFA, CFP®
Global Head of IMG Risk
Management



Duncan Burns
Head of Investments, Asia-
Pacific, and of Investment
Strategy Group, Asia-Pacific



Qian Wang, Ph.D.
Chief Economist, Asia-Pacific,
Investment Strategy Group



Brian Wimmer
Head of Multi-Asset Solutions
(nonvoting member)



Ian Kresnak, CFA
Chief of Staff, Investment
Strategy Group (nonvoting
member)

Source: Vanguard.

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Slide ID #: S075577

Tracking #: 3211645

Expiration date: 4/3/2025

If you select Vanguard as your TDF provider, we make it a smooth transition

We're here to support you

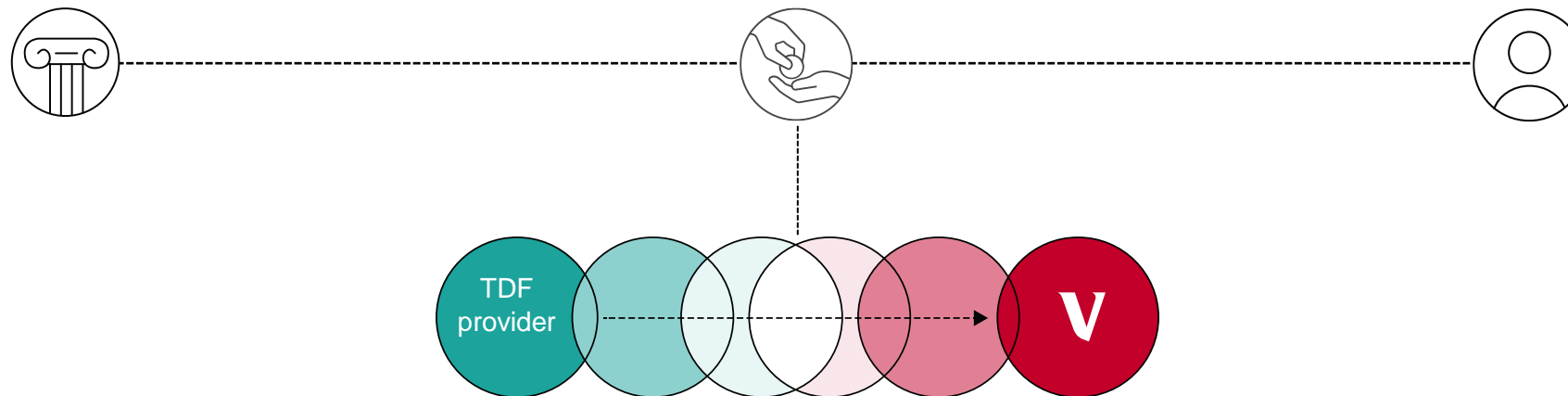
- Partnering with plan sponsor and consultant
- Relationship management
- Legal support

We're here to make a smooth TDF transfer

- Partnering with trustee/recordkeeper
- Project management
- Transition management of assets

We're here to support your participants

- Partnering with plan sponsor and recordkeeper
- Communication tools
- Continuing education



Important information

IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model® (VCMM) regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More importantly, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model® is a proprietary financial simulation tool developed and maintained by Vanguard's primary investment research and advice teams. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data from as early as 1960. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.



Important information

The Vanguard Lifecycle Model (VLCM) is designed to identify the product design that represents the best investment solution for a theoretical, representative investor who uses the target-date funds to accumulate wealth for retirement. The VLCM generates an optimal custom glide path for a participant population by assessing the trade-offs between the expected (median) wealth accumulation and the uncertainty about that wealth outcome, for thousands of potential glide paths. The VLCM does this by combining two set of inputs: the asset class return projections from the VCMM and the average characteristics of the participant population. Along with the optimal custom glide path, the VLCM generates a wide range of portfolio metrics such as a distribution of potential wealth accumulation outcomes, risk and return distributions for the asset allocation, and probability of ruin, such as the odds of participants depleting their wealth by age 95.

The VLCM inherits the distributional forecasting framework of the VCMM and applies to it the calculation of wealth outcomes from any given portfolio.

The most impactful drivers of glide path changes within the VLCM tend to be risk aversion, the presence of a defined benefit plan, retirement age, savings rate and starting compensation. The VLCM chooses among glide paths by scoring them according to the utility function described and choosing the one with the highest score. The VLCM does not optimize the levels of spending and contribution rates. Rather, the VLCM optimizes the glide path for a given customizable level of spending, growth rate of contributions and other plan sponsor characteristics.

A full dynamic stochastic life-cycle model, including optimization of a savings strategy and dynamic spending in retirement is beyond the scope of this framework.

Vanguard Short-Term Inflation-Protected Securities Index Fund invests in bonds that are backed by the full faith and credit of the federal government and whose principal is adjusted periodically based on inflation. The fund is subject to interest rate risk because although inflation-indexed bonds seek to provide inflation protection, their prices may decline when interest rates rise and vice versa. The fund's quarterly income distributions are likely to fluctuate considerably more than the income distributions of a typical bond fund. Income fluctuations associated with changes in interest rates are expected to be low; however, income fluctuations associated with changes in inflation are expected to be high. Overall, investors can expect income fluctuations to be high for the fund.

Important information

For more information about any fund, visit institutional.vanguard.com or call 866-499-8473 to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF® Shares are not redeemable with the issuing fund other than in very large aggregations worth millions of dollars. Instead, investors must buy or sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

Mutual funds and all investments are subject to risk, including the possible loss of the money you invest. Prices of mid- and small-cap stocks often fluctuate more than those of large-company stocks. Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. These risks are especially high in emerging markets. Funds that concentrate on a relatively narrow sector face the risk of higher share-price volatility. It is possible that tax-managed funds will not meet their objective of being tax-efficient. Because company stock funds concentrate on a single stock, they are considered riskier than diversified stock funds.

Investments in bond funds are subject to the risk that an issuer will fail to make payments on time and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments. High-yield bonds generally have medium- and lower-range credit quality ratings and are therefore subject to a higher level of credit risk than bonds with higher credit quality ratings. Although the income from a municipal bond fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax. Diversification does not ensure a profit or protect against a loss. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income.

While U.S. Treasury or government agency securities provide substantial protection against credit risk, they do not protect investors against price changes due to changing interest rates. Unlike stocks and bonds, U.S. Treasury bills are guaranteed as to the timely payment of principal and interest.

Investments in Target Retirement Funds and Trusts are subject to the risks of their underlying funds. The year in the fund or trust name refers to the approximate year (the target date) when an investor in the fund or trust would retire and leave the workforce. The fund/trust will gradually shift its emphasis from more aggressive investments to more conservative ones based on its target date. The Income Trust/Fund and Income and Growth Trust have fixed investment allocations and are designed for investors who are already retired. An investment in a Target Retirement Fund or Trust is not guaranteed at any time, including on or after the target date.

Vanguard is responsible only for selecting the underlying funds and periodically rebalancing the holdings of target-date investments. The asset allocations Vanguard has selected for the Target Retirement Funds are based on our investment experience and are geared to the average investor. Investors should regularly check the asset mix of the option they choose to ensure it is appropriate for their current situation.

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The Factor Funds are subject to investment style risk, which is the chance that returns from the types of stocks in which a Factor Fund invests will trail returns from U.S. stock markets. The Factor Funds are also subject to manager risk, which is the chance that poor security selection will cause a Factor Fund to underperform its relevant benchmark or other funds with a similar investment objective, and sector risk, which is the chance that significant problems will affect a particular sector in which a Factor Fund invests, or that returns from that sector will trail returns from the overall stock market.

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Rev_092023

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Tracking #: 3090298

Expiration date: 3/26/2025





Schroders Multi-Asset Retirement Target Return A Decumulation Solution

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www.schroders.com/us

Our global footprint

\$923.1 billion Assets Under Management
As at 30 June 2023

North America¹

\$103bn

South America

\$12.8bn

Argentina
Bermuda
Brazil
Canada
Chile
Mexico
Peru
United States

UK and Channel Islands

\$435.7bn

Guernsey
Jersey
United Kingdom

Europe, Middle East and Africa

\$135.1bn

Austria
Belgium
Denmark
Finland
France
Georgia
Germany
Gibraltar
Israel
Italy
Kenya
Luxembourg
Netherlands
South Africa
Spain
Sweden
Switzerland
United Arab Emirates

Asia Pacific¹

\$236.4bn

Australia
Mainland China
Hong Kong SAR
Indonesia

Japan
Republic of Korea
Singapore
Taiwan

Wealth Management centres:
Germany, Gibraltar, Guernsey,
Hong Kong SAR, Jersey, Singapore,
Switzerland, United Kingdom

¹JVs and associates AUM comprises of \$118.2bn in Asia Pacific, \$16bn in UK and \$1.5bn in North America.



The Americas
429 people



UK and Channel Islands
3,576 people



EMEA
1,013 people



Asia Pacific
1,084 people

How many of your plan participants are 55 and up?

Results from Schroders US Retirement Survey

Plan Participants Ages 55-64

- 82% worry a major market downturn will significantly reduce their assets.
- 31% of their retirement assets are in Cash.
- 6 in 10 plan participants fear losing money.
- 2022 hurt: 59% said value of portfolio declined in 2022.
- 12% of participants will wait until age 70 to take maximum Social Security because they fear it will run out and they will need the money.

Almost 2/3 (64%) won't be able to grow their workplace retirement plan assets to the level they had hoped

Source: Schroders. There is no guarantee these objectives and investment outcomes will be achieved.

55+ Plan Participants

Over-Exposed to 4 Key Risks

Key Risks

1. Risk of Losses
2. Risk of Inadequate Allocation
3. Risk of Costly Emotional Decisions
4. Risk of Losing Control

The SMARTR Solution

1. Growth Objective with Active Risk Management to and through retirement to combat Sequencing Risk and mitigate losses.
2. Flexibility to accumulate and or decumulate as the participant wishes.
3. Power to extend accumulation phase through lower volatility and defined growth objectives.
4. Retain control and flexibility over your assets while avoiding constraints of annuities.

Source: Schroders. There is no guarantee these objectives and investment outcomes will be achieved.

2023 Bounced Back. Did your 55+ participants?

IF THEY DID



They have more to lose and protect at the most vulnerable stage of their investing lifecycle

IF THEY DID NOT

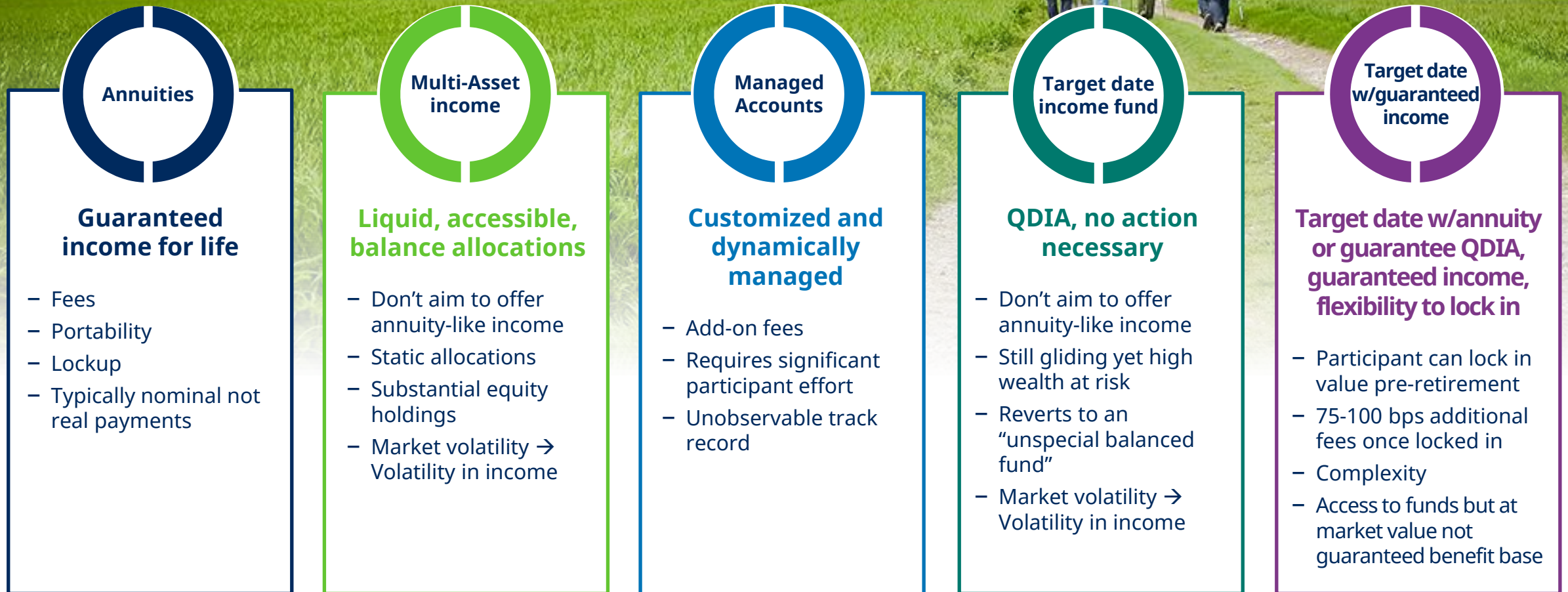


They may have fallen victim to Sequence of Return Risk and are losing time to recover - they can't afford to lose more or make costly emotional decisions based on volatility

How are your later-stage solutions actively managing risk for participants 55+ during this critical phase of accumulation?

Schroders' solution addresses deficiencies in current offerings

Retirement income options for DC plan participants



Source: Schroders. The views and opinions are those of Schroders and are subject to change as market conditions evolve. Shown for illustrative purposes only and should not be interpreted as a recommendation to adopt a particular investment strategy.

Challenges with implementing retirement income in a DC plan

Lack of flexibility and liquidity

Implementation complexity on recordkeeping platforms

High fees

Complexity in participant communication and automation

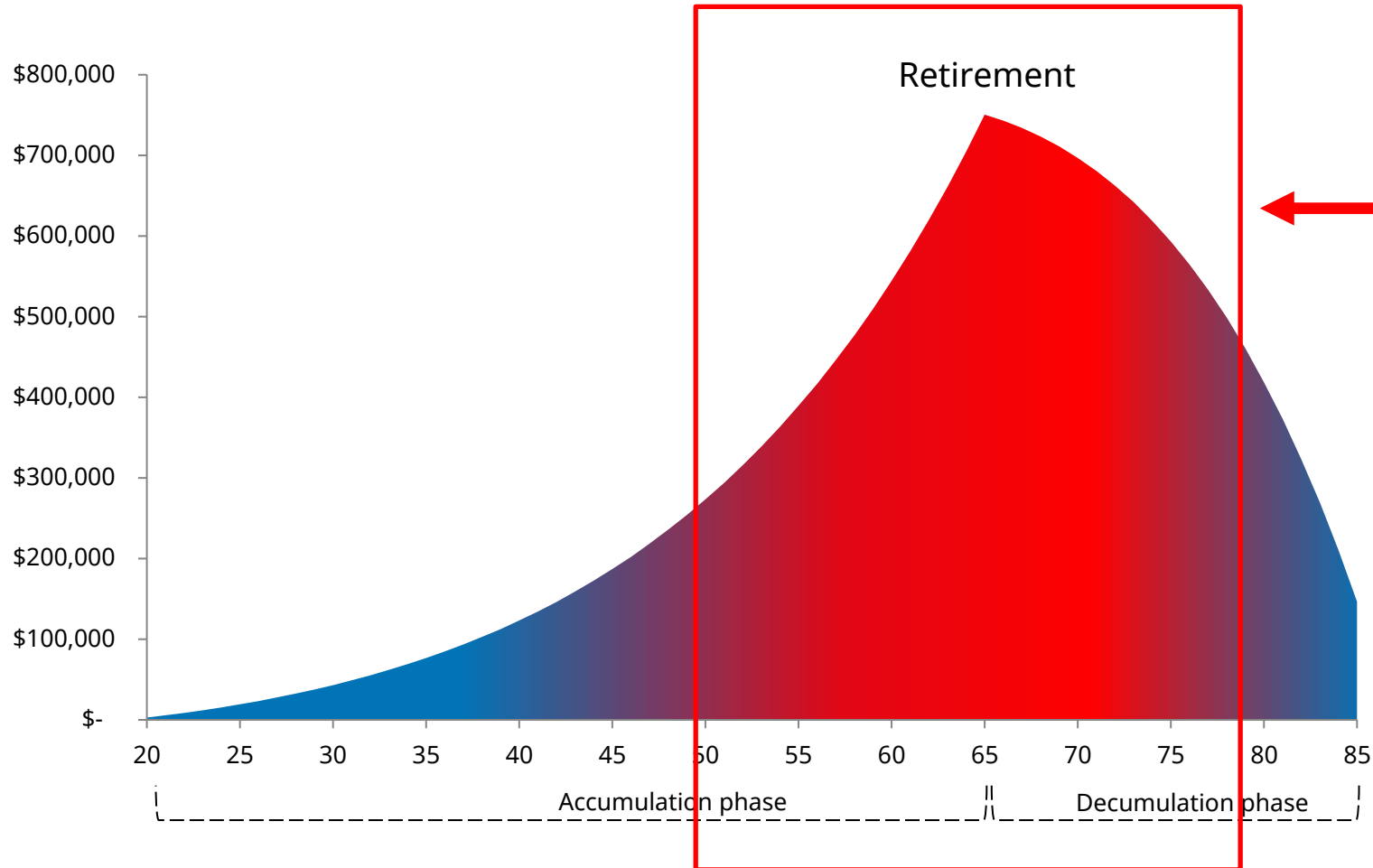
Lack of track record

In decumulation, participant profiles differ greatly so flexibility in an investment solution is key

Source: Schroders. The views shared are those of the Schroders Multi-Asset Team and are subject to change.

Investor needs near or in retirement

Growing wealth while minimizing drawdowns



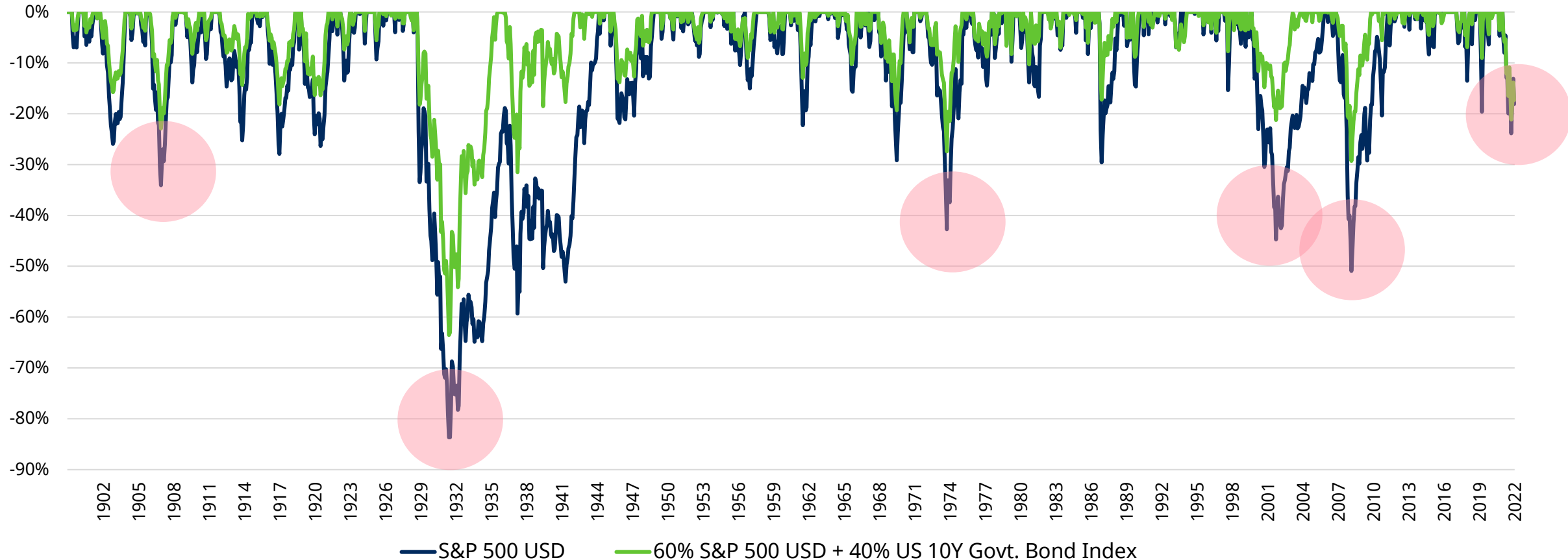
Source: Schroders. The illustration shown is hypothetical. Actual performance results will vary from the data shown. There is no guarantee these objectives will be achieved.

Schroders Multi-Asset Retirement Target Return (SMARTR) is designed to minimize sequence of returns risk which is greatest around retirement

Static asset allocation can't avoid drawdowns

Even 'balanced funds' have difficulty avoiding market corrections

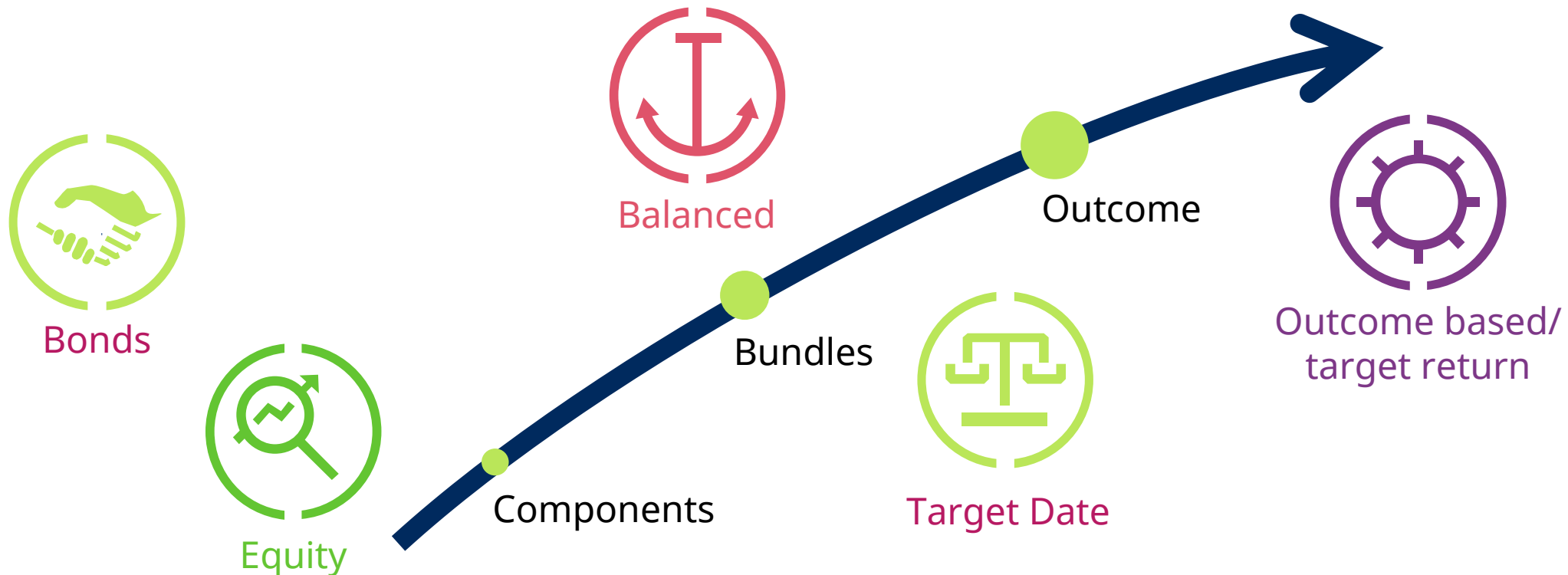
Drawdown (%)



Source: Schroders, Global Financial Database, from 1 January 1900 to 31 December 2022. Past performance is not indicative of future performance. 60/40 Balanced is a portfolio comprising 60% S&P 500 Index in USD, 40% US 10Y Govt. Bond Index.

The evolution of Multi Asset investing

Moving beyond components to solutions



Single asset class products

Single asset class products failed to realize the diversification benefits of multi-asset portfolios

First generation multi-asset

Portfolios that contain equities and bonds in a set specified ratio

Second generation multi-asset

Multi-Asset portfolios that simplified choices to be made by participants with an easily understood objective

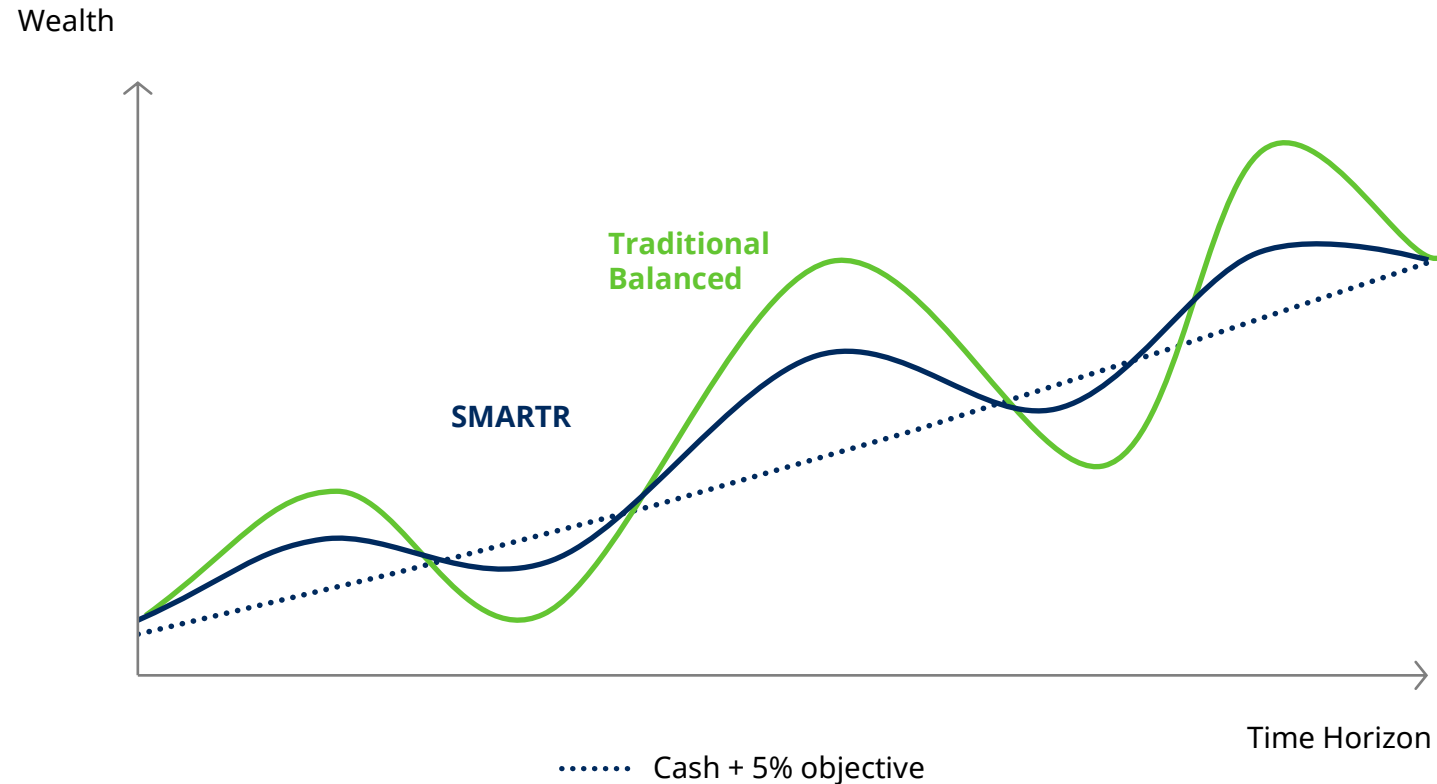
Next generation multi-asset

Portfolios focused on specific, potentially complex, investment outcomes not easily reflected in benchmark relative risk and return objectives

Source: Schroders. For illustrative purposes only. The views shared are those of the Schroders Multi-Asset Team and are subject to change.
Diversification cannot ensure profits or protect against loss of principal.

Why outcome based investing?

We focus on the journey and the outcome



Source: Schroders. There is no guarantee that these objectives and investor outcomes will be achieved.

What can it provide?

Growth of wealth

Managing volatility

Managing sequencing risk

Schroder Multi-Asset Retirement Target Return

A unique decumulation solution



Investor needs

Pre- and post-retirement



Grow wealth

Savers need to keep pace as they near retirement



Stable returns

Sequence of return risks are key near retirement



Simplicity and flexibility

Need for income, liquidity and control



Schroders' Solution

SMARTR Strategy



Cash plus objective

Targeting a return of Cash +5% p.a. before fees, over rolling three-year periods



Minimize volatility and drawdown risk objectives

Targets both a smoother path of returns and minimizing downside risk



Suitable for a broad range of investors

We keep our investments uncomplicated, unlevered and liquid

Source: Schroders. There is no guarantee these objectives and investment outcomes will be achieved.

It doesn't have to be complicated

Schroders Multi-Asset Retirement Target Return

Equity 31.5%

MSCI ACWI Index Future 30.0%

US REITS 1.5%

Fixed Income 43.2%

US High Yield ETF 14.0%

US Investment Grade 9.9%

Emerging Market Debt (Local) 5.4%

European Investment Grade ETF 5.2%

Securitized CLO ETF 3.3%

US Treasury 10yr 3.0%

Emerging Market Debt (Corporate) 2.5%

Alternatives and Cash 25.3%

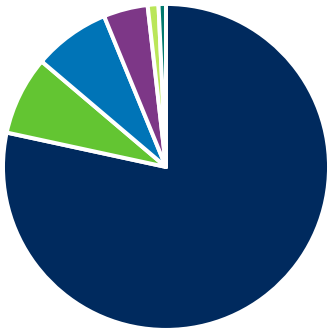
Commodities 2.0%

Cash 23.3%

Duration 2.0

FX Breakdown

■ USD	78.4%
■ EM FX	7.8%
■ EUR	7.6%
■ Other DM	4.4%
■ GBP	1.1%
■ CHF	0.7%

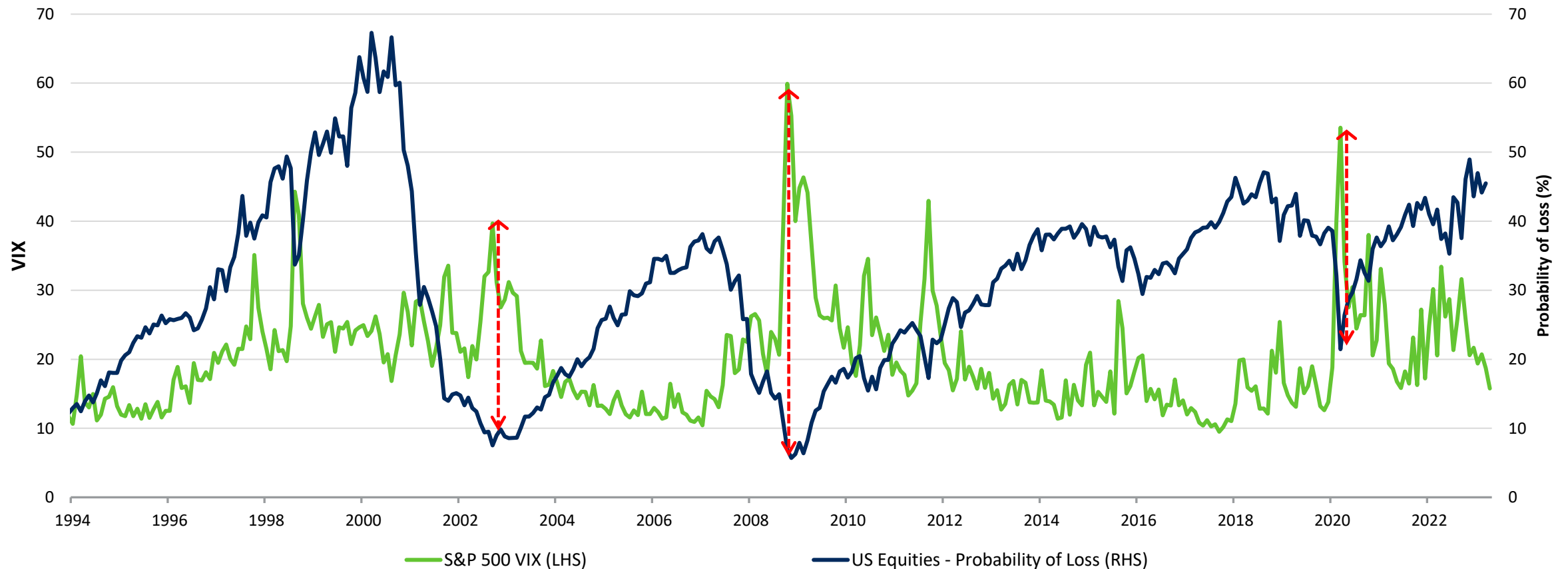


Source: Schroders as of January 8, 2024. Holdings are shown for illustrative purposes only and may change at any time. Totals may not sum due to rounding. FX Breakdown is done on full look-through of portfolio.

Volatility is not risk

Risk is the probability of loss

VIX versus probability of loss for US equities



Source: Schroders, Bloomberg as of April 30, 2023. Past performance is not indicative of future performance. Shown for illustrative purposes only. The views shared are those of the Schroders Multi-Asset Team and should not be interpreted as investment guidance. The data shown is hypothetical and does not represent actual losses associated with investing in equities. Probability of loss was calculated by forecasting an expected return, the expected volatility, and the time period being analysed to calculate a normal distribution. Any outputs below 0 would be considered the probability of loss.

Downside Risk

Incorporating downside risk & tail risk hedging strategies

A pragmatic approach to risk management



Avoid

- **Volatility is not risk**
- Prefer to avoid loss than hedge



Diversify & mitigate

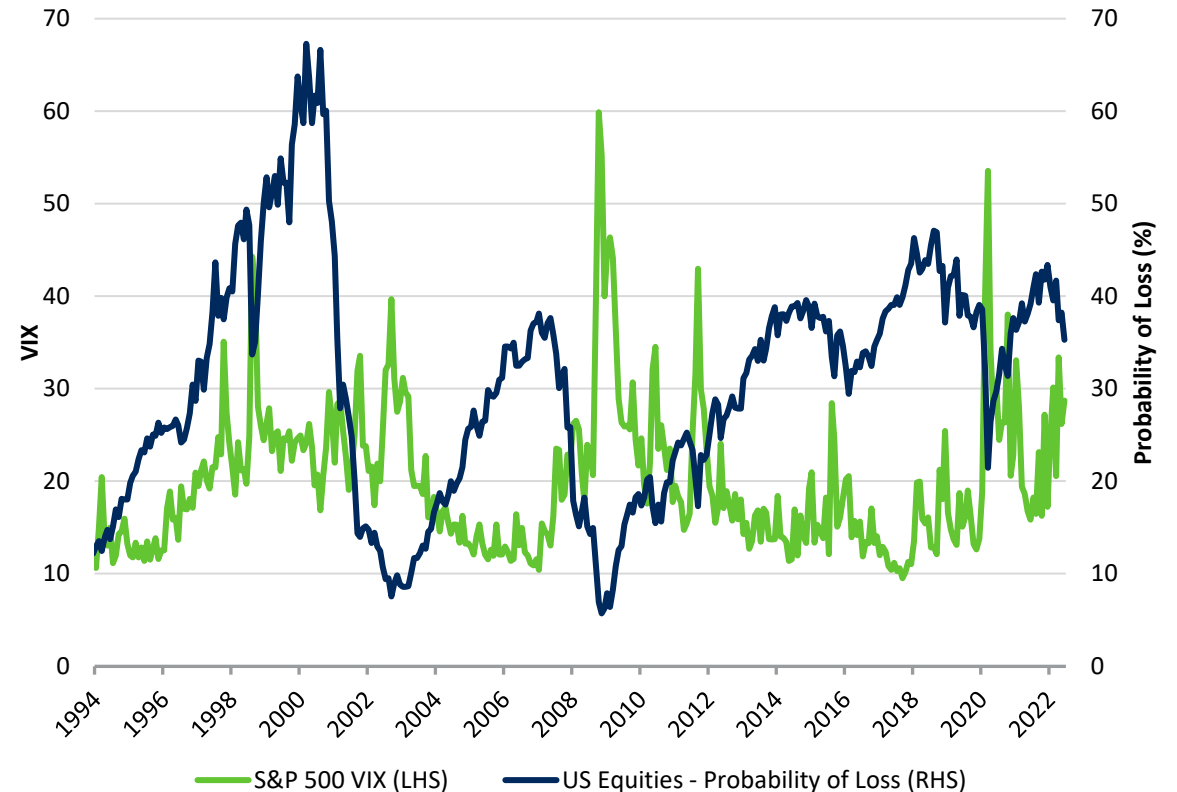
- **Own assets where risk of loss is low**
- Diversification difficult in stress environments
- Specific risk
 - targeted strategies
- Low probability but high impact
 - Insurance (e.g. options)



Re-assess

- **Drawdowns are an opportunity** (if you're positioned well!)
- We're typically contrarian (buy low, sell high)


Volatility & risk are not the same




Source: Schroders, Bloomberg. RHS chart as of June 30, 2022. Past performance is not indicative of future performance. The views shared are those of the Schroders Multi-Asset Team and should not be interpreted as investment guidance or a recommendation to adopt a particular strategy.

The experience and expertise to deliver


Experienced team integrated with Schrodgers' global resources




SMARTR Team




Remi Olu-Pitan
Head of Multi-Asset Growth and Income



Mina Krishnan
Portfolio Manager

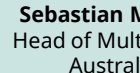


Gaia Marinaccio
Portfolio Manager




Adam Farstrup
Head of Multi-Asset, Americas

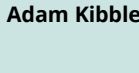
Australian Multi-Asset Team



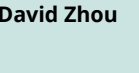
Sebastian Mullins
Head of Multi-Asset, Australia




Mihkel Kase



Adam Kibble




David Zhou




Dr. Roland Winn


Business Management



Jaclyn Campis
Associate Investment Director



Patrick Kiernan
Investment Product Analyst



Multi-Asset research and idea generation

Global Multi-Asset Team of 140+ including:

Portfolio Management Team

Economics Team

Multi-Asset Risk Team

Portfolio Implementation Team

Product Management Team

Strategic Investment Group Multi-Asset (SIGMA)
7 risk premia groups ~ 6 cross-asset groups ~ Quantitative and qualitative research

Global Asset Allocation Committee (GAAC)
Chaired by Johanna Kyrklund with 5 voting members (Senior Portfolio Managers):

Patrick Brenner Head of MA Investments	Keiko Kondo Head of MA Investments, Asia	Ugo Montrucchio Head of MA Investments, Europe	Remi Olu-Pitan Head of Multi-Asset Income and Growth	Philip Chandler Head of UK Multi-Asset
--	--	--	--	--

All Multi-Asset analysts and portfolio managers attend



Schrodgers specialists



Equity teams



Fixed Income teams



Alternative teams



Manager Selection team



Sustainability team

Multi-Asset Assets Under Management

\$200 billion

Source: Schrodgers, October 2023. Team members and roles are subject to change.

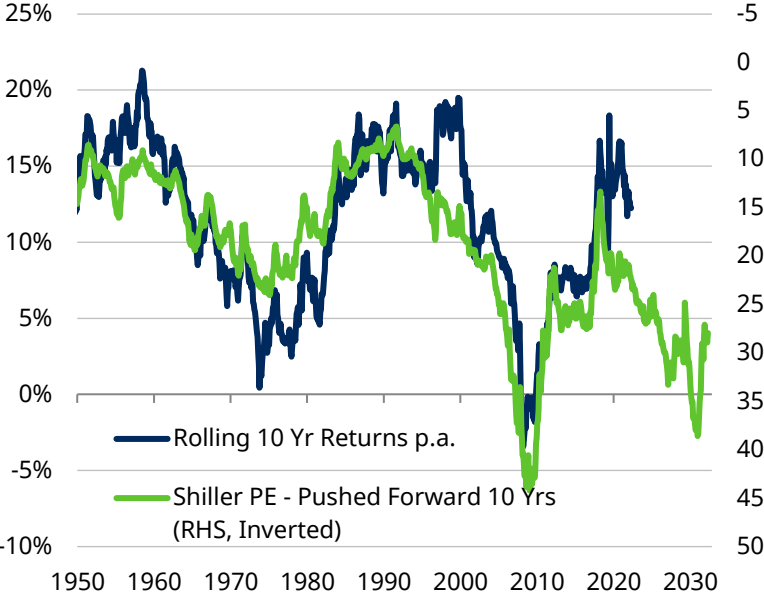
Investment process – “VCL” framework

Anchored by our beliefs



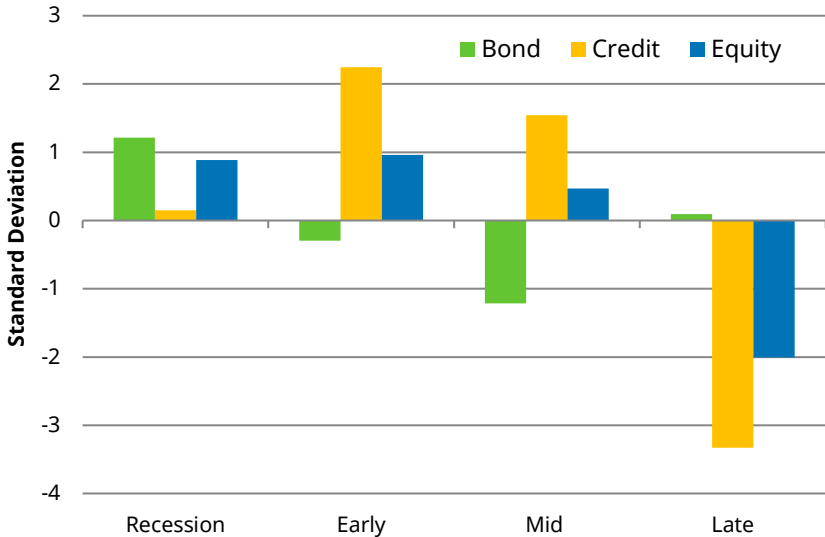
Valuations

US Equities: Shiller PE vs. 10Yr Returns



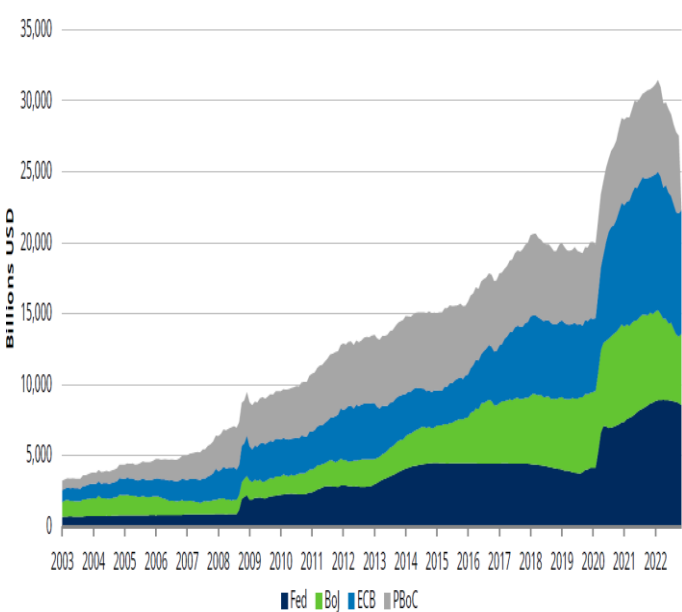

Business Cycle

Cycle and Asset Class Performance




Liquidity

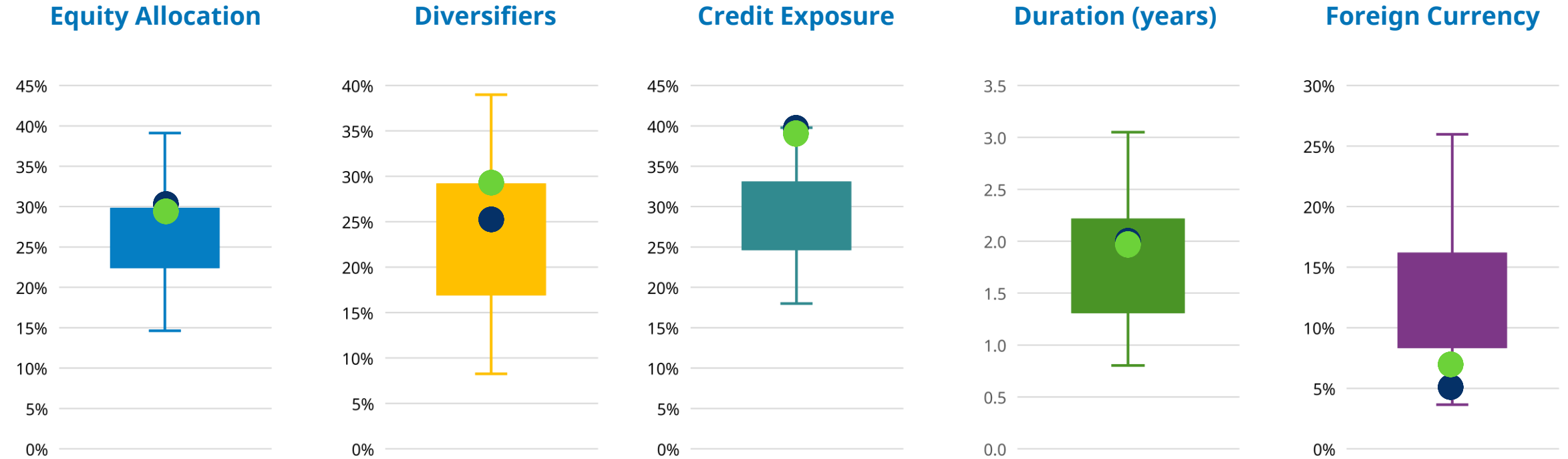
Central Bank Balance Sheets



Source: Schroders, as at March 2023 (LHS). Past performance is not a guide to future performance and may not be repeated. Forward looking projections are not a guarantee of future performance. Any references to securities, sectors, regions and/or countries are for illustrative purposes only.

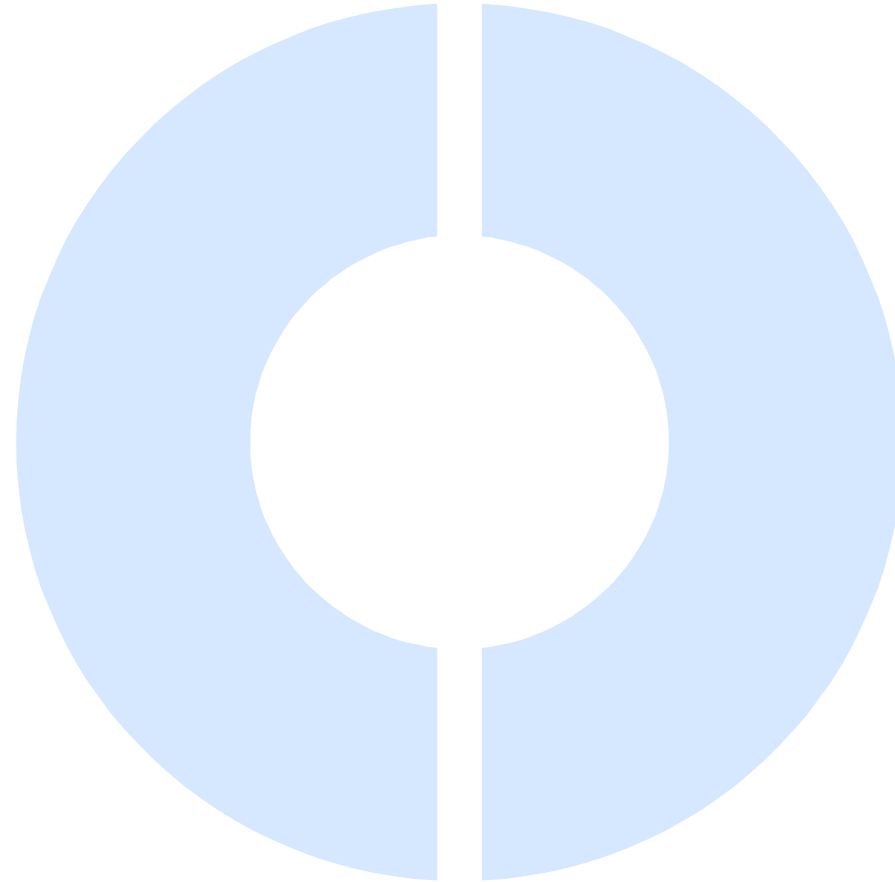
Dynamic asset allocation focused on objective

Key risk position changes – current exposure vs. historical range since Nov 2018



- SISF Global Target Return – December 2023
- Schroder Multi-Asset Retirement Target Return - Projected

Source: Schroders, Blackrock/Aladdin. Exposure from 30 November 2018 to 08 January 2024. For illustrative purposes only and should not be viewed as a recommendation to buy or sell. Box plot is representative of historical allocation in SISF Global Target Return Fund with current allocation shown. Schroder Multi-Asset Retirement Target Return shown for projected allocation as of January 8, 2024. Projected allocations are subject to change. No asset allocation strategy can ensure profits or protect against loss of principal. SISF Global Target Return is not available to US Investors.



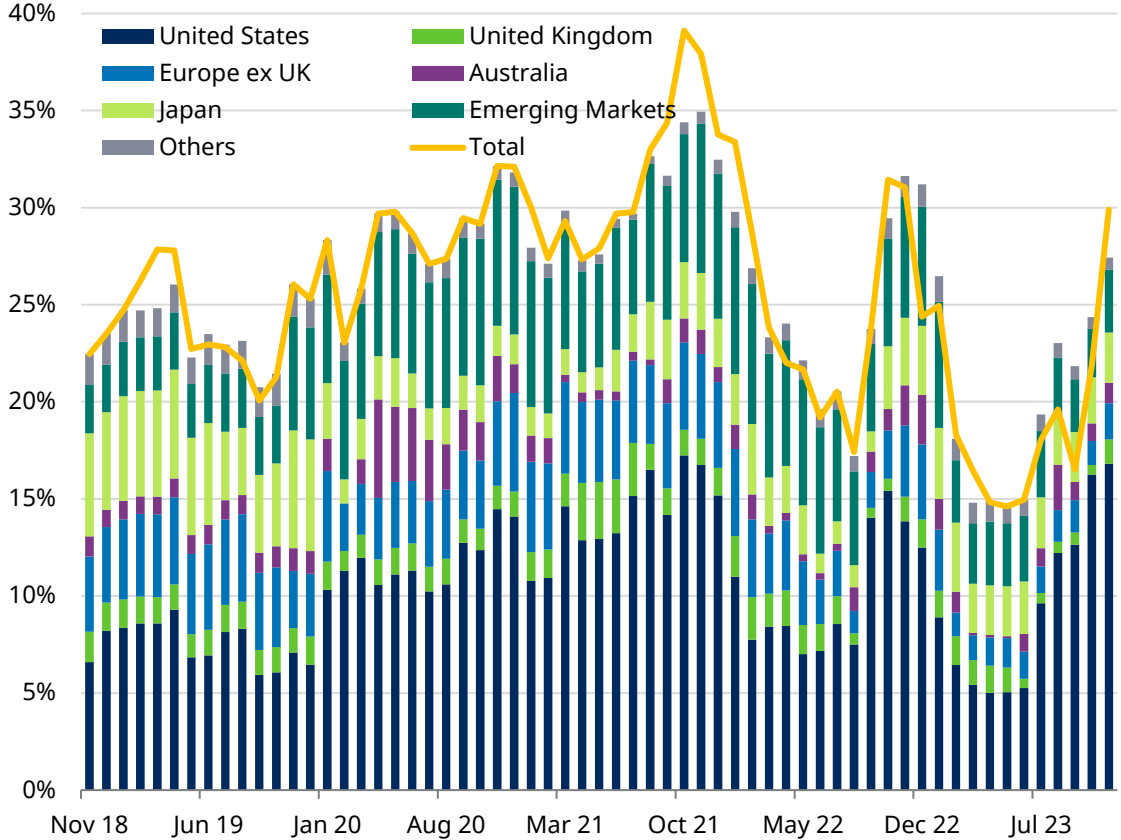
Schroder ISF Global Target Return (GTR) Representative portfolio for SMARTR

Schroder ISF Global Target Return is not available to US investors.

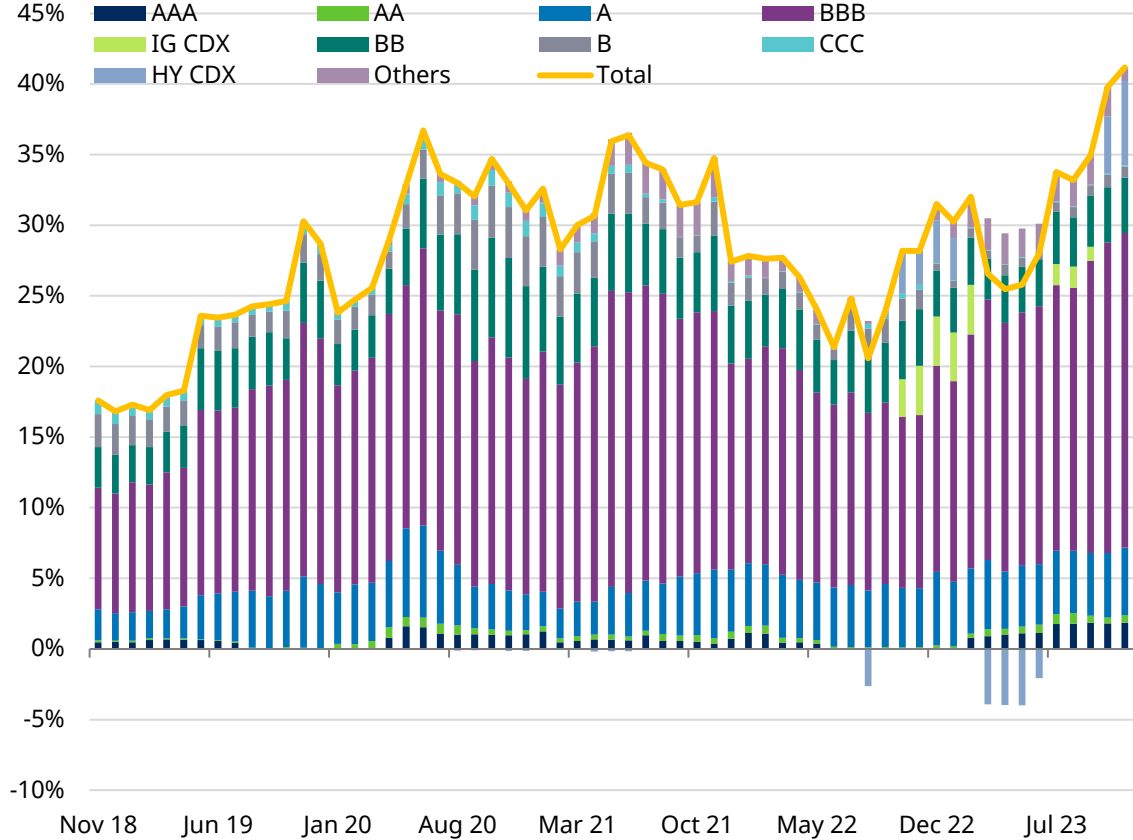
Representative Defensive core : Portfolio Allocations

Active management of equity and credit risk

Historical equity exposure



Historical credit exposure

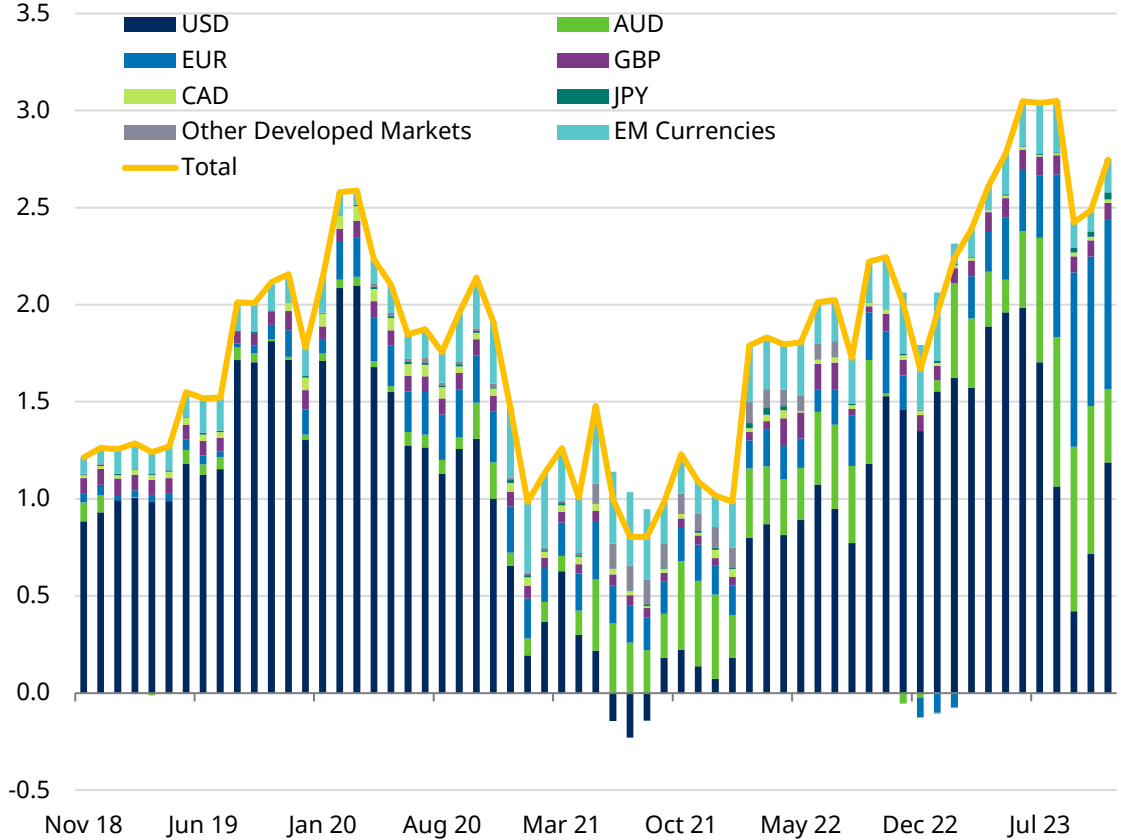


Source: Schroders, Aladdin, updated to 30 November 2023. For illustrative purposes only and should not be viewed as a recommendation to buy or sell.

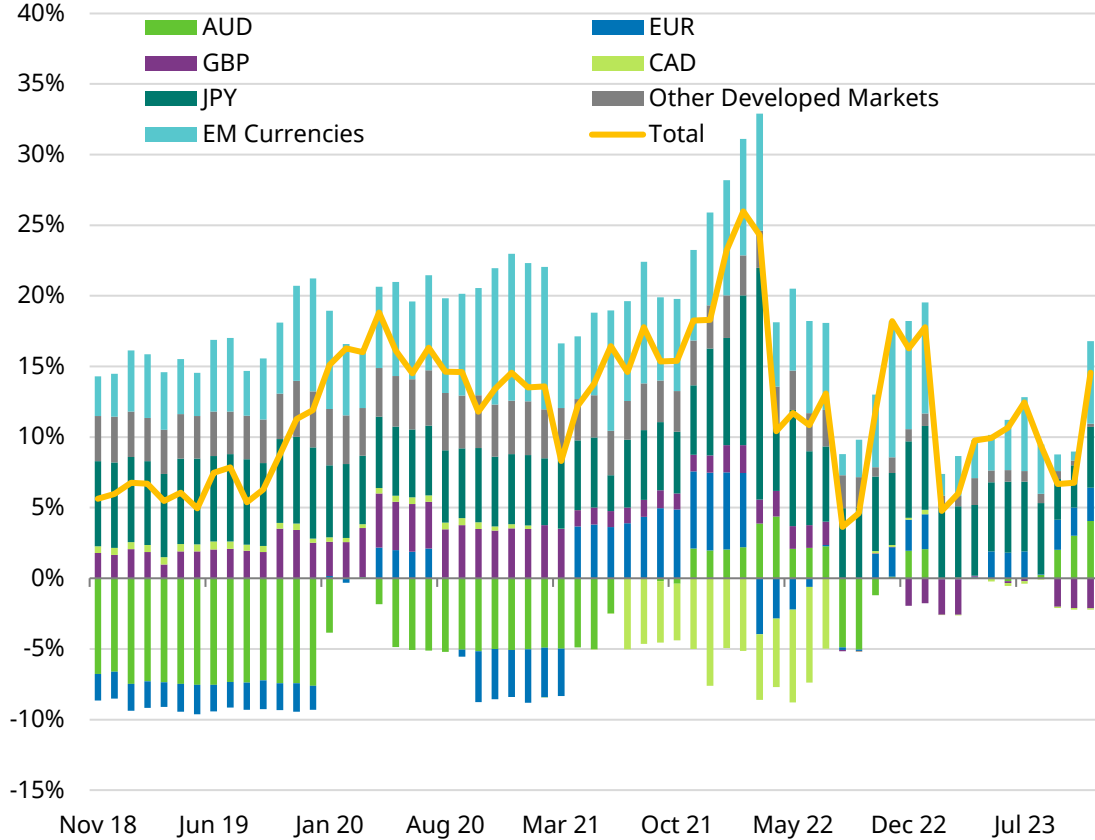
Representative Defensive core : Portfolio Allocations

Active management of portfolio hedges

Historical duration by currency







Historical foreign currency exposure

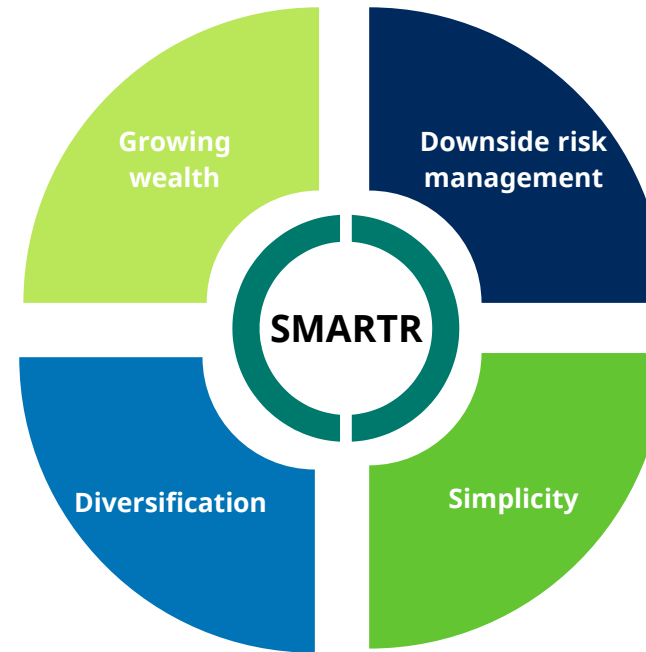


Source: Schroders, Aladdin, updated to 30 November 2023. For illustrative purposes only and should not be viewed as a recommendation to buy or sell.

Schroder Multi-Asset Retirement Target Return

Outcome based investing across global growth and income assets

-  More stable investment returns
-  Focus on downside risk
-  Global diversification
-  High conviction asset allocation



Flexible asset allocation seeking stable returns

Source: Schroders. Asset allocation and diversification cannot ensure profits or protect against loss of principal. There is no guarantee these objectives will be achieved.

Schroder Multi-Asset Retirement Target Return

Implementation options



Replace the target date series retirement vintage with Schroders Multi-Asset Retirement Target Return
a more appropriate allocation for retirees



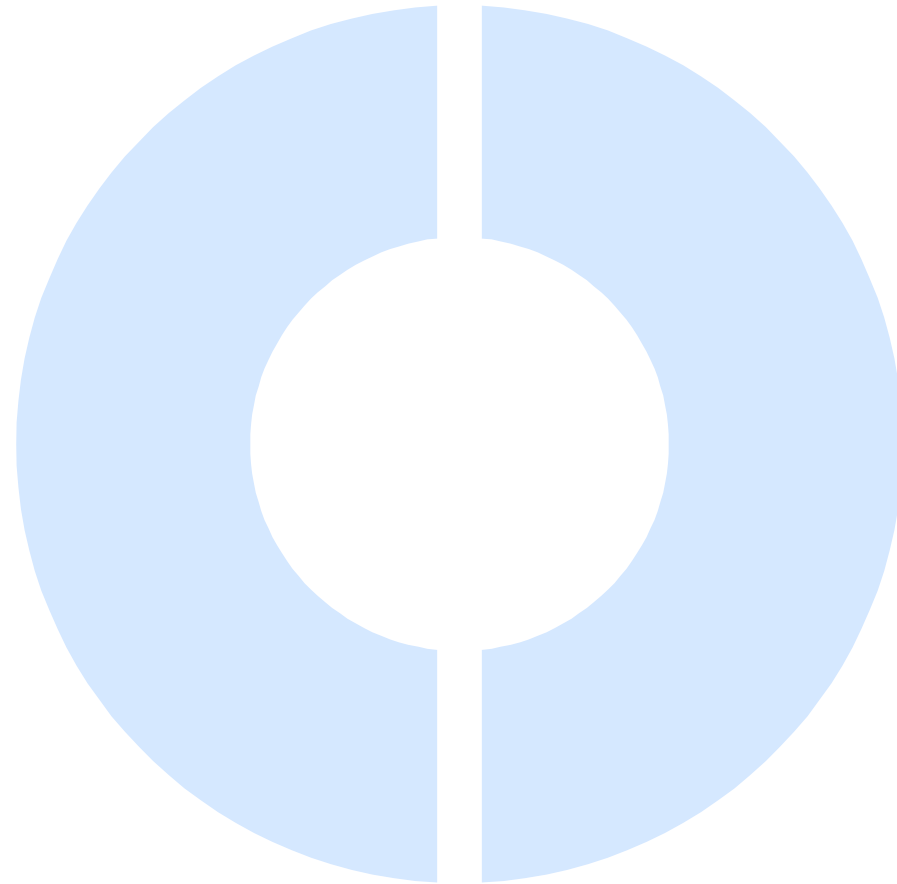
Add SMARTR to a managed account solution
to create a more holistic solution for the decumulation phase



Add as a single fund investment in the plan lineup
may serve as income **building block or full solution for smaller balances**

Source: Schroders. For illustration only, The views and opinions are those of Schroders and are subject to change as market conditions evolve. There can be no guarantee any objective will be achieved.

Schroders



Appendix

Schroders Multi-Asset Retirement Target Return

Proposed Fee Structure

Vehicle	Collective Investment Trust
Objective	Targeting Cash +5 %, before fees, over a rolling 3-year period
Fee Structure	<p><u>Class 1*</u> 0.39% No account minimum – Early Bird</p> <p><u>Class 2*</u> 0.49% No account minimum</p> <p><u>Class 3</u> 0.44% For investors more than \$200m</p>
Administrative/ Custodial	Included
Liquidity	Daily
Domicile/Structure	US/Collective Investment Trust

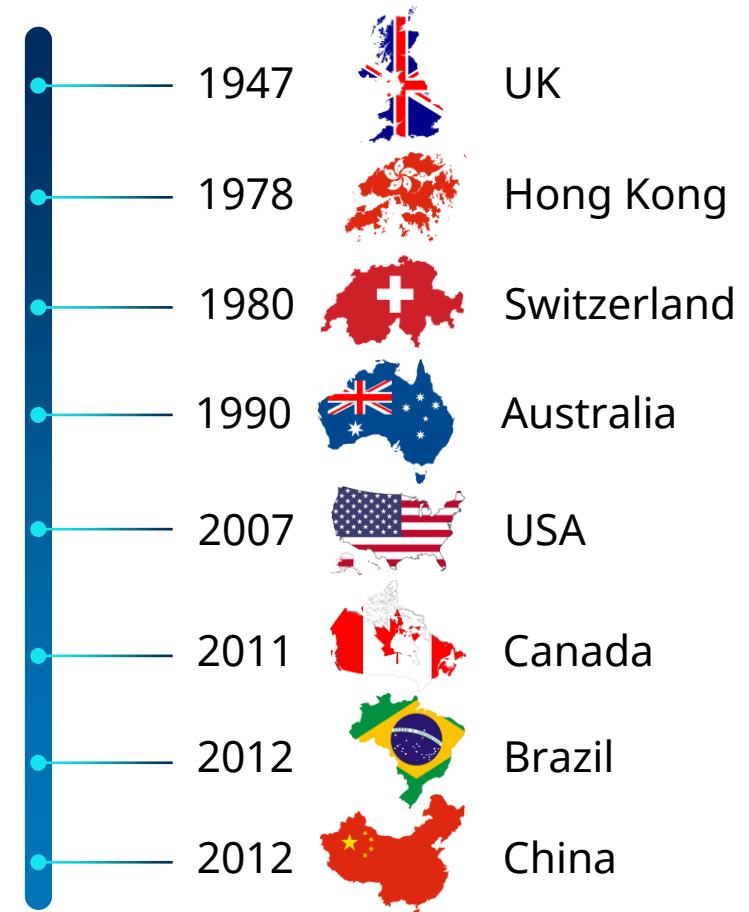
Source: Schroders. There can be no guarantee that any risk and return objectives will be achieved. *While there is no account minimum for Class 1 and Class 2 of the CIT, it will require an initial seed investment of \$25 million in order to launch. Fees are the capped total operating expenses and are inclusive of operating expenses capped at 9bps p.a.

Multi-Asset investments

At the heart of Schroders' business



First mandate by country



Source: Schroders, September 30, 2023. ¹Including Multi-Manager; excluding Risk Mitigation and GAIA. There is no guarantee these objectives will be achieved. Some funds not available to US investors.

A risk focused growth strategy built for DC savers

Schroder Multi-Asset Retirement Target Return

Flexible and Dynamic

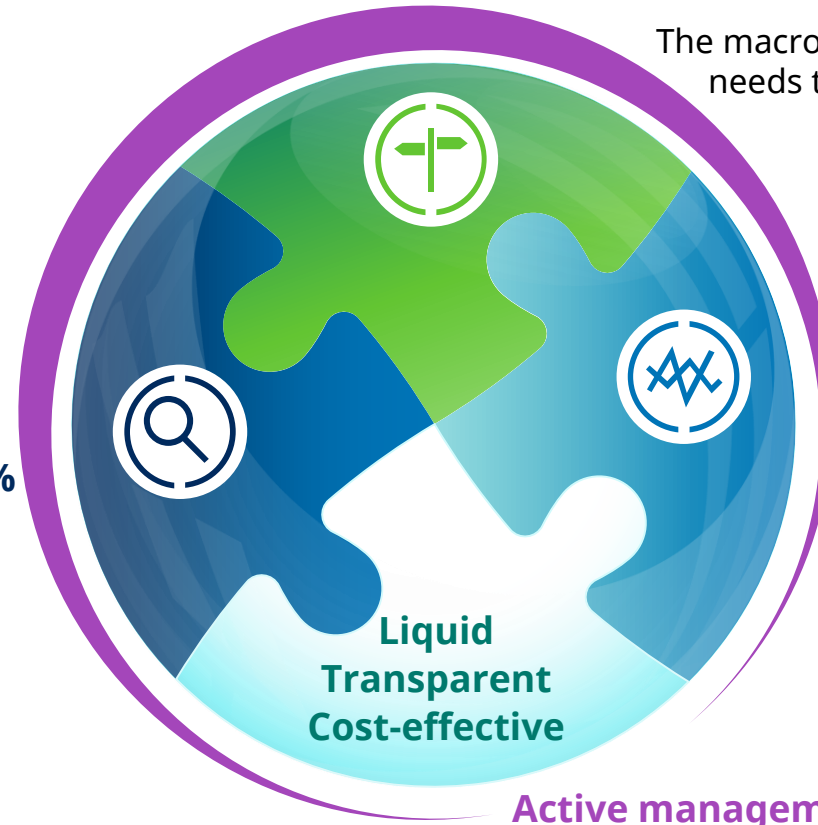
Fixed asset allocation has limitations

The macroeconomic environment needs to be taken into account

Return Generation

Return objective of Cash +5%

DC savers seek attractive returns across their retirement journey



Risk Management

Risk is more than volatility...

...drawdowns matter too so the strategy seeks to minimize losses as well as manage volatility

Active management

Source: Schroders. The views shared are those of the Multi-Asset team and are subject to change. Active management cannot ensure profits or protect against loss of principal. There is no guarantee these objectives will be achieved.

Schroder Multi-Asset Retirement Target Return

Investment objectives and characteristics

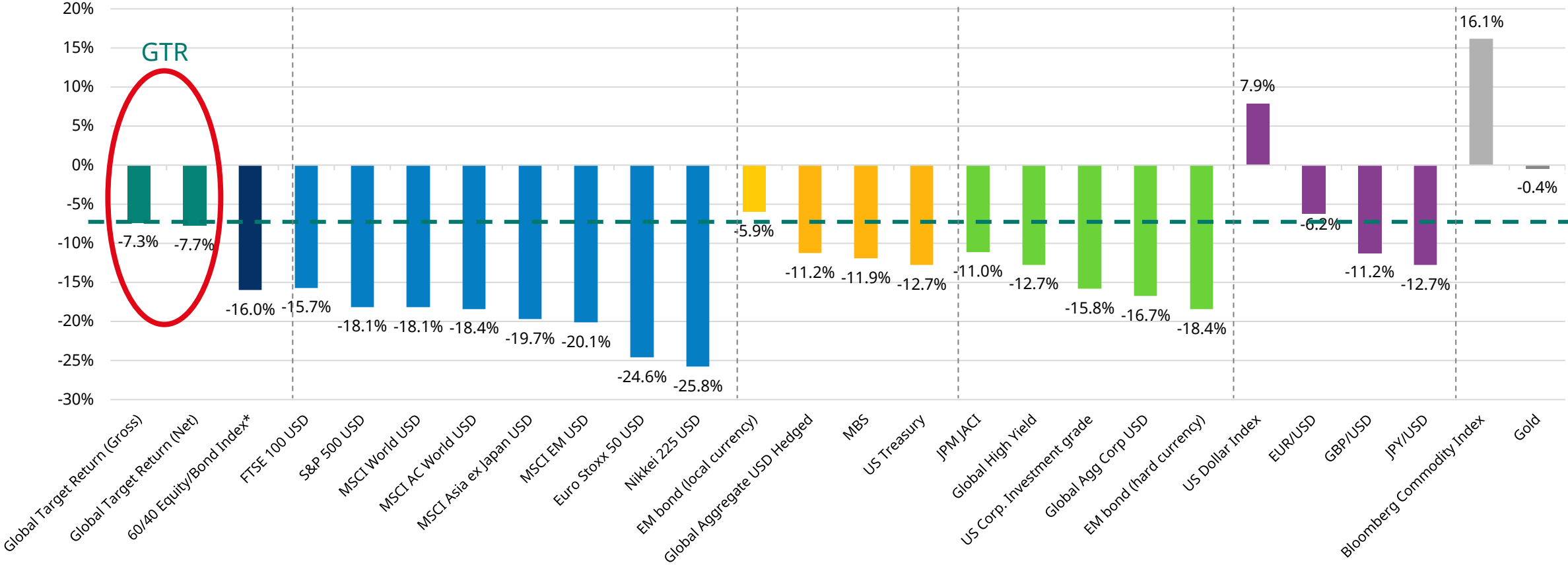


Source: Schroders. Investment objectives are targets only and not guaranteed. Expected volatility and beta are an internal objective only. Return objective is per annum gross of fee over rolling three year periods. Cash represented by 3 month USD LIBOR.

Representative defensive core performance comparison

Performance vs. key indices – 2022

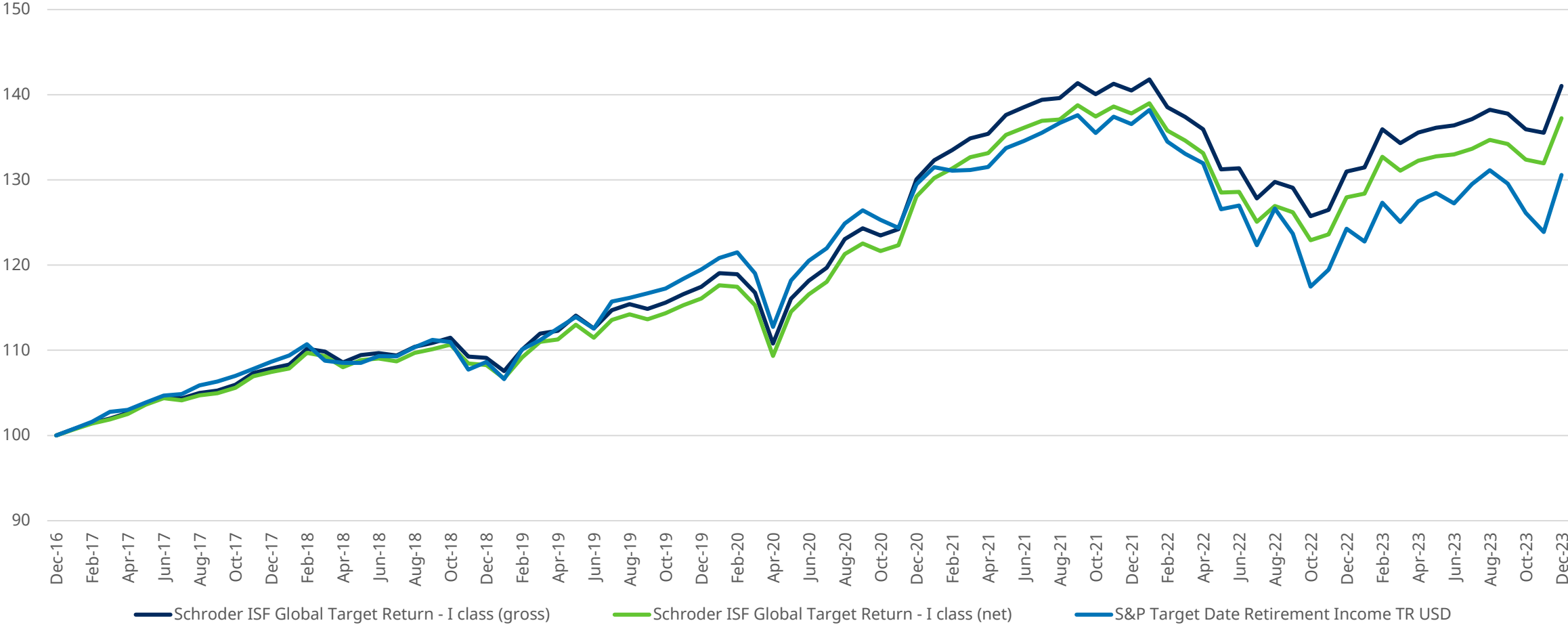
Representative Defensive Portfolio Return Fund performance (gross) vs. key indices – 2022



Source: Schroder, MSCI, Refinitiv from 31 December 2021 to 31 December 2022. Based on Schroder ISF Global Target Return Fund I Class, gross of fees. Global High Yield is represented by Bloomberg Global High Yield USD, EM bond (local currency) is represented by JPM GBIEM Global Diversified Composite, EM bond (hard currency) is represented by JPM EMBI Global Core Index, Global Aggregate is represented by Bloomberg Global Aggregate USD Hedged, US Corp investment grade is represented by Bloomberg US Corporate Investment Grade USD, MBS is represented by ICE BofA US Mortgage Backed Securities Index, US Treasury is represented by ICE BofA US Treasury & Agency Index. *The 60/40 Equity/Bond Index is estimated with 60%*YTD return of S&P 500 Index + 40%*YTD return of US Treasury as represented by ICE BofA US Treasury & Agency Index. Past performance is not a guide to future performance. Net of fees is calculated at 0.39%. Schroder ISF Global Target Return Fund is not available to US Investors.

Schroder ISF Global Target Return

Global Target Return Performance vs Index



Source: Schroders, Blackrock/Aladdin and Refinitiv. Data as of 31 December 2023. Net of fees is calculated at 0.39%. Schroder ISF Global Target Return is not available to US investors. Past performance provides no guarantee of future returns.

Team

Biographies



Johanna Kyrklund, CFA

Group Chief Investment Officer

- Joined Schroders in 2007 and is based in London.
- As Group CIO, Johanna oversees investment performance, philosophy and process for all asset classes (excluding private assets), reinforcing a culture of collaboration across all desks. Johanna is also a Co-Head of Investment.
- In addition, she is responsible for investments on behalf of Multi-Asset clients globally and is the lead portfolio manager of the Schroder Diversified Growth Strategy.
- Johanna is a member of the Group Management Committee (GMC) which oversees the development and delivery of Schroders' overall business strategy. She also chairs the Global Asset Allocation Committee.
- From 2005-2007 Johanna worked at Insight Investment where she managed an unconstrained global macro absolute return fund. From 1997 to 2005 she worked at Deutsche Asset Management as Head of Asset Allocation in the UK and fund manager of the Deutsche tactical asset allocation fund.
- CFA Charterholder
- Degree in Philosophy, Politics and Economics from Oxford University
- Johanna is a member of the Cambridge University Investment Board and the Railpen Investment Board



Remi Olu-Pitan, CFA

Head of Multi-Asset Growth and Income

- Joined Schroders in 2006 and is based in London
- Remi is responsible for Multi-Asset Income and Diversified Growth mandates. Remi is the lead fund manager of the Schroder ISF Global Multi-Asset Income and co-fund manager of the Schroder Diversified Growth Fund
- She is a member of the Equity risk premium team of the Strategic Investment Group Multi-Asset (SIGMA) and a member of the Global Asset Allocation Committee
- CFA Charterholder
- Masters in Statistics, London School of Economics. Bachelors in Business Finance, Durham University

Team

Biographies



Mina Krishnan, CFA

Multi-Asset Portfolio Manager

- Joined Schroders in 2012 and is based in New York.
- Prior to her transfer to the New York office in 2019, Mina worked with the Global Multi-Asset investment team in London, supporting the Income and Risk Controlled Growth funds.
- She is a member of the Equity and Duration Risk Premia groups where she focuses on North American markets.
- Mina joined Schroders as a Fixed Income Analyst with a focus on US and Global Credit. In April 2016 she became a Multi-Asset Quantitative analyst covering the Advanced Beta strategies.
- Master in Financial Engineering from University of California, Berkeley, and dual BA in Economics and Statistics from Northwestern University
- CFA Charterholder and IMC



Gaia Marinaccio, CFA

Multi-Asset Portfolio Manager

- Joined Schroders in 2015 and is currently based in New York.
- Gaia is a Multi Asset fund manager with responsibilities focused on US clients, managing both benchmark relative and total return portfolios.
- She is a member of the duration and cross asset research teams of the Strategic Investment Group Multi Asset (SIGMA).
- BA in Economics and Finance from LUISS University.
- Master in Financial Engineering and Risk Management from HEC Lausanne.
- CFA Charterholder

Team

Biographies



Sebastian Mullins

Head of Multi-Asset, Australia

- Sebastian is the Head of Multi-Asset for the Australian Multi-Asset team. He is a co-portfolio manager of the Schroder Real Return Fund strategies and the Global Total Return Fund and is also a member of several local strategy research groups including equities, credit, currency and relative value.
- In addition, he is a member of the global SIGMA equity risk premium group, contributing to the global multi-asset research platform.
- Sebastian has over 13 years' experience in portfolio management and has been managing multi-asset portfolios for over 10 years; prior to joining Schroders in February 2019, he worked for Nikko Asset Management in both Singapore and Sydney, as well as Challenger Limited in Sydney.
- Sebastian holds a Master of Applied Finance (Distinction) from Macquarie University in Australia as well as a Bachelor of Science (Honors) in Mathematics and Computer Science from the University of Bath in the UK.



Adam Kibble

Multi-Asset Portfolio Manager

- Adam is a portfolio manager within Schroders Australian Multi-Asset team with co-portfolio management responsibilities across all multi-asset strategies and funds.
- He has extensive portfolio management experience initially at Queensland Investment Corporation, followed by 18 years at Macquarie Investment Management, where he has lead portfolio manager across global fixed income, currency and commodity strategies.
- Adam joined Schroders in 2020 as an Investment Director for Fixed Income and Multi-Asset and moved into the Multi-Asset team in early 2023, and is a member of our Foreign Currency and Rates strategy research groups.
- Adam has a B.Comm majoring in Finance from the University of NSW and is a CAIA Charterholder.

Team

Biographies



David Zhou

Multi-Asset Portfolio Manager

- David joined Schroders in May 2013.
- In his role as Portfolio Manager & Investment Analyst, David undertakes macro, sector and quantitative research for Schroder's Australian multi-asset funds. He works closely with the investment team on the management of the Australian Multi-Asset strategies and mandates.
- He is also responsible for developing and maintaining the research database and providing product support to the distribution teams with respect to multi-asset.
- Prior to joining Schroders, David worked at BT Financial Group and Westpac Institutional Bank as an analyst.
- He holds a Bachelor of Commerce (Liberal Studies) (Hons) from the University of Sydney.



Adam Farstrup, CFA

Head of Multi-Asset, Americas

- Adam joined Schroders in 2007 and is based in New York.
- Adam's role involves managing a team which is responsible for assets across a range of investor outcomes utilizing a risk premia based approach. Adam leads our Multi-Asset effort in the Americas, both in delivering solutions to clients and participating in our investment discussions. Adam was a Product Manager for the Global and International Equity team at Schroders from 2007 to 2013.
- Previously Chief Investment Officer, Multi-Manager Solutions at Rogerscasey from 2003 to 2007, which involved overseeing investment programs and strategy for the firm's discretionary clients.
- He was Director of International Equity Manager Research at Rogerscasey from 1997 to 2003, which involved overseeing Rogerscasey's Global, International and Emerging Markets Equity manager research effort, which was accountable for rating and recommending international equity managers and portfolio structures for the firm.
- Adam is a member of the CFA Institute and CFA Society New York.
- Qualifications: CFA Charterholder; BA in Economics from Muhlenberg College.

Important information

The strategy will be affected by the investment decisions, techniques, and risk analyses of the investment team, and there is no guarantee that the portfolio will achieve its investment objective. The values of investments held by the portfolio may fluctuate in response to actual or perceived issuer, political, market, and economic factors influencing the financial markets generally, or relevant industries or sectors within them. Investments in smaller companies may be less liquid than in larger companies and price swings may therefore be greater than in larger company funds. Exchange rate changes may cause the value of overseas investments to rise or fall, and would vary from those shown herein. Less developed markets are generally less well regulated than the US, they may be less liquid and may have less reliable custody arrangements. Investors should be aware that investments in emerging markets involve a high degree of risk and should be seen as long term in nature. The Strategy will invest in some higher-yielding bonds (non-investment grade). The risk of default is higher with non-investment grade bonds than with investment grade bonds. Higher yielding bonds may also have an increased potential to erode your capital sum than lower yielding bonds. The use of derivatives involves risks different from, or possibly greater than, the risks associated with investing directly in the underlying assets. The use of leverage may magnify gains and losses. No investment strategy or risk management technique can guarantee future returns or eliminate risk in any market environment.

Any hypothetical /simulated/carve-out results shown must be considered as no more than an approximate representation of the portfolio's performance, not as indicative of how it would have performed in the past. Simulated returns are the result of statistical modeling, with the benefit of hindsight, based on a number of assumptions and there are a number of material limitations on the retrospective reconstruction of any performance results from performance records. For example, it may not take into account any dealing costs or liquidity issues which would have affected the strategy's performance. In addition, gross returns would be lower if applicable management fees and expenses were factored in to the calculation. There can be no assurance that this performance could actually have been achieved using tools and data available at the time. No representation is made that the particular combination of investments would have been selected at the commencement date, held for the period shown, or the performance achieved. This data is provided to you for information purposes only as of the dates of this material and should not be relied on to predict possible future performance. There can be no guarantee that these or any simulated and/or carve-out results will occur in the future, generate a positive return or protect against loss of principal. This data is provided to you for information purposes only as at today's date and should not be relied on to predict possible future performance.

The success of any quantitative ESG research model depends largely upon the effectiveness of the investment team's quantitative model. A quantitative model, such as the risk and other models used by the investment team requires adherence to a systematic, disciplined process. The team's ability to monitor and, if necessary, adjust its quantitative model could be adversely affected by various factors including incorrect or outdated market and other data inputs. Factors that affect a security's value can change over time, and these changes may not be reflected in the quantitative model. In addition, factors used in quantitative analysis and the weight placed on those factors may not be predictive of a security's value. No investment strategy, technique or model can guarantee future results or eliminate the risk of loss of principal.

The views and forecasts contained herein are those of the Multi-Asset team and are subject to change. The information and opinions contained in this document have been obtained from sources we consider to be reliable. No responsibility can be accepted for errors of facts obtained from third parties. Reliance should not be placed on the views and information in the document when taking individual investment and/or strategic decisions. The opinions stated in this presentation include some forecasted views. We believe that we are basing our expectations and beliefs on reasonable assumptions within the bounds of what we currently know. However, there is no guarantee that any forecasts or opinions will be realized.

Past performance is no guarantee of future results. Performance shown is gross of fees. The value of an investment can go down as well as up and is not guaranteed.

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Thank you