



A New Era of Income

Helping Clients Tap into a Range of Opportunities

Schwab Impact 2023
October 25 – 27, 2023

Today's Speakers



Richard Holt, CFA

Chief Investment Strategist
Legacy Advisors



Ben Kirby, CFA

Co-Head of Investments
Managing Director
Thornburg



Jeff Klingelhofer, CFA

Co-Head of Investments
Managing Director
Thornburg



Matt Burdett

Portfolio Manager
Managing Director
Thornburg

Polling Questions: Client Concerns

1. What is your expected annual return on a multi-asset portfolio over the coming 3-5 years?
3% | 5% | 7% | 10% | -5%
2. Where are the most attractive opportunities for income for next 3-5 years?
Equities | Fixed Income | Cash/Money Markets | Real Estate | Crypto
3. What is the likely economic scenario over the next 12 months?
Recession | Soft Landing | Accelerating Growth | End of World | Other
4. What is the 10-year Treasury peak yield?
5.0% | 5.5% | 6.0% | Higher than 6.0% | Already Peaked
5. When will the Fed start lowering interest rates?
1Q 24 | 2Q 24 | 3-4Q 24 | 2025 or Beyond



**REGIME
CHANGE**



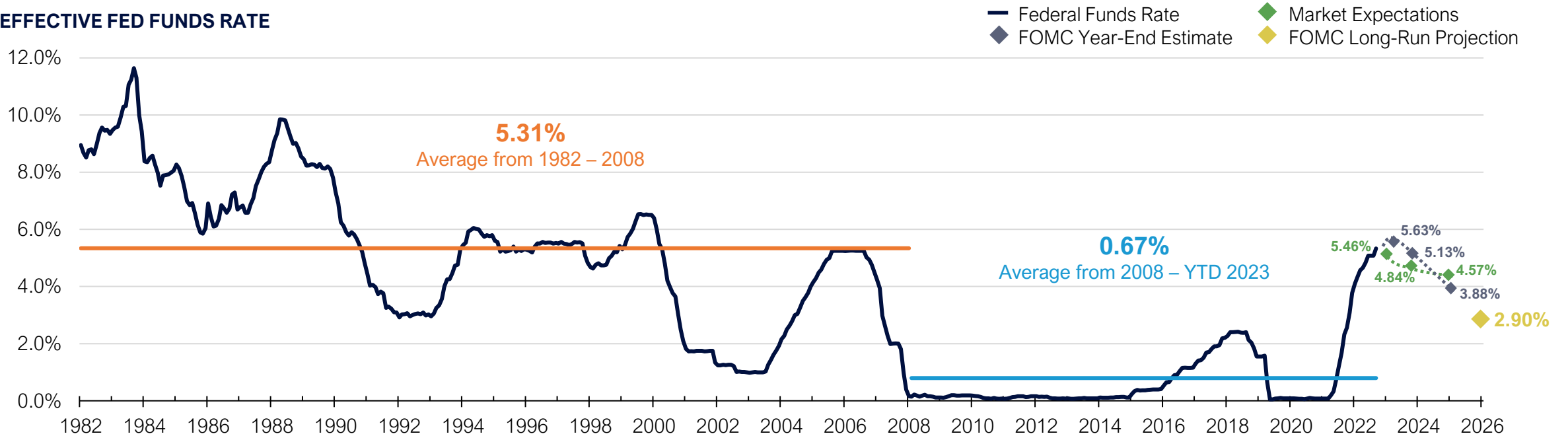
Key Implications:

- Fed policy creates seismic shift in cost of capital
- Changing influence of capital and labor
- Divergent impact on government, corporate & consumer balance sheets
- Secular change in cross-asset correlations

The Normalization of Cost of Capital Is Underway

Higher rates favor companies with positive cash flow and better stewardship of investor capital.

EFFECTIVE FED FUNDS RATE

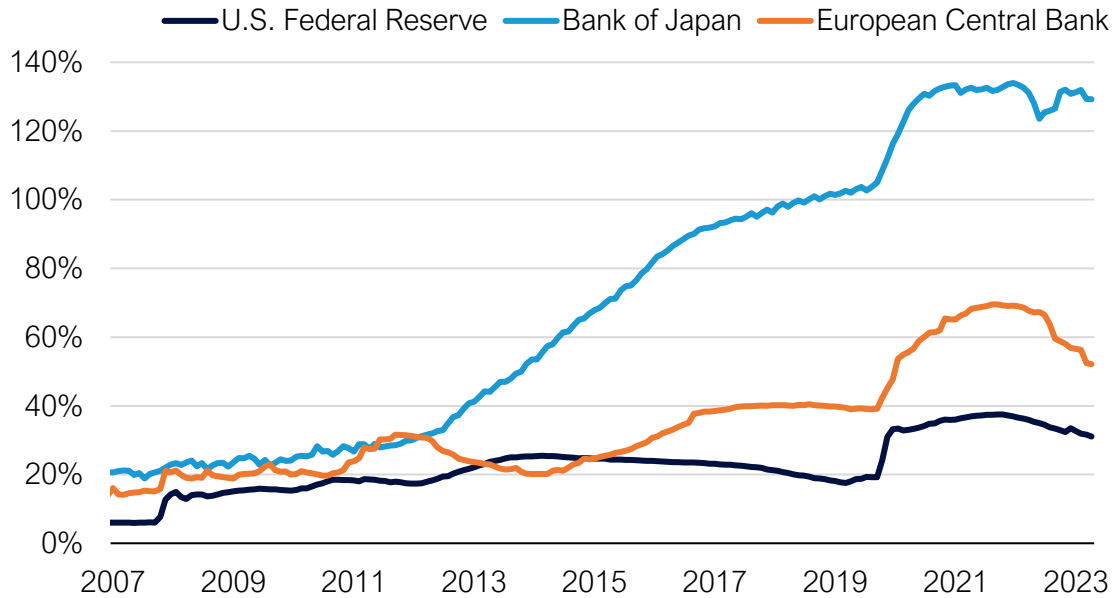


Source: Bloomberg

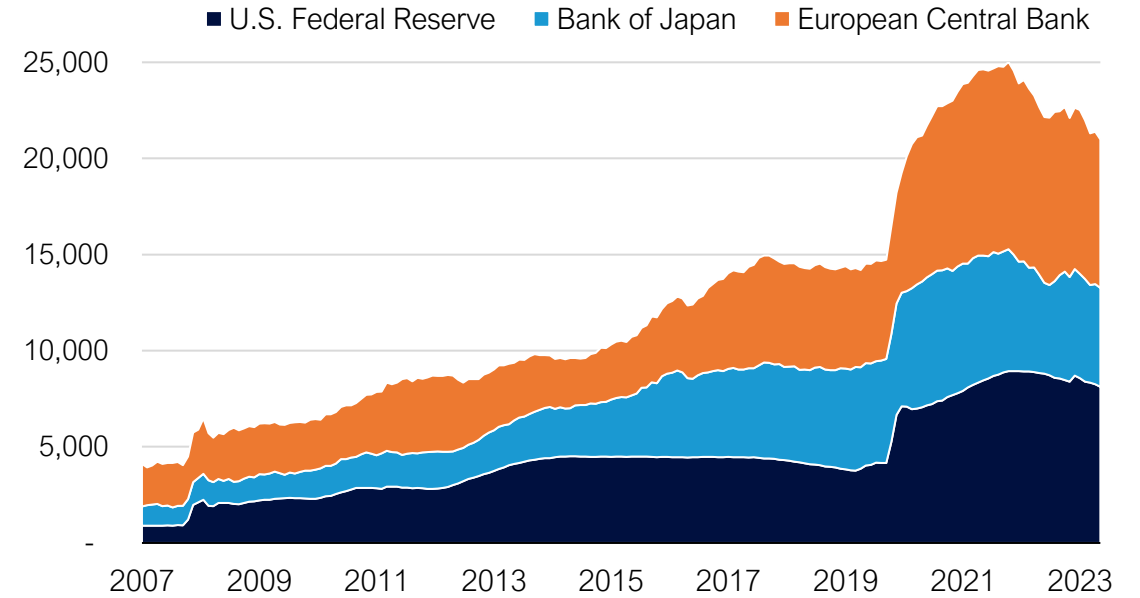
Expansion of Central Bank Balance Sheets

Quantitative easing was a global phenomenon that now restricts policy flexibility and pressures economic growth

CENTRAL BANK BALANCE SHEETS (% OF GDP)



CENTRAL BANK BALANCE SHEET ASSETS (\$ BILLIONS)

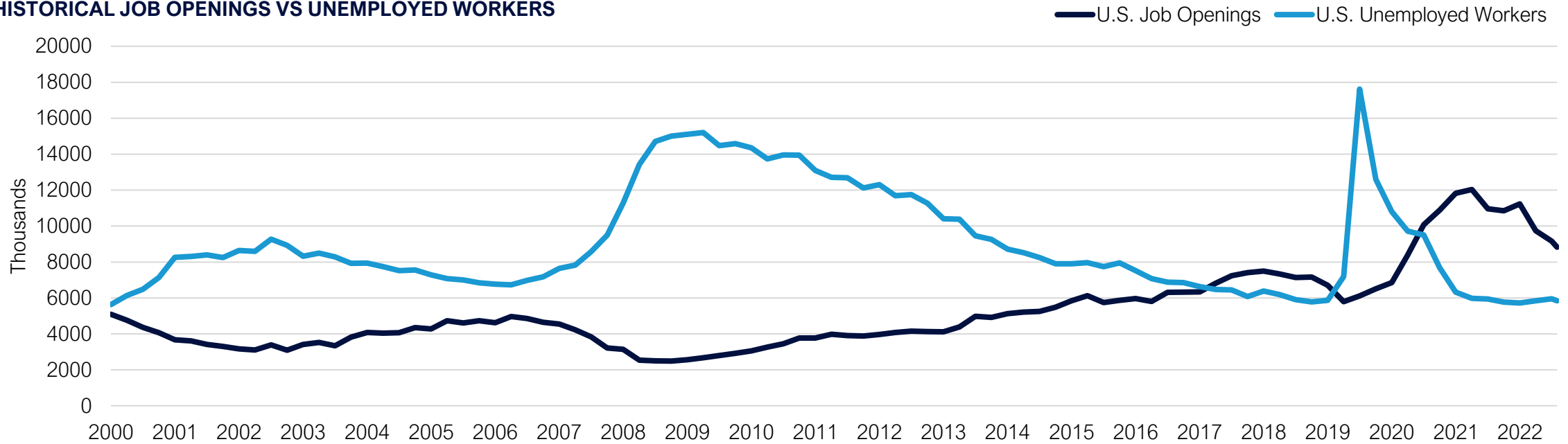


Source: Bloomberg, as of 31 August 2023

A Structural Shift in the Supply of Labor

Workforce participation significantly lags pre-COVID levels

HISTORICAL JOB OPENINGS VS UNEMPLOYED WORKERS

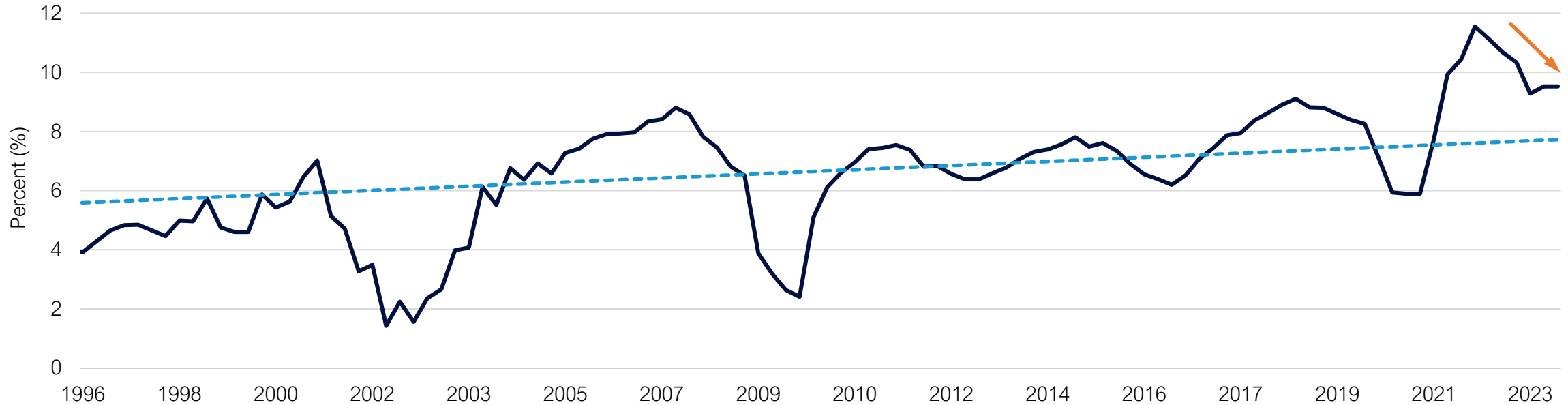


Source: Bloomberg, as of 31 July 2023

Increasing Labor Costs and Capital Inputs Pressure Profit Margins

Return to investing in companies with strong fundamentals to generate cash regardless of interest rate environment

MSCI WORLD INDEX: TRAILING 12-MONTH PROFIT MARGIN



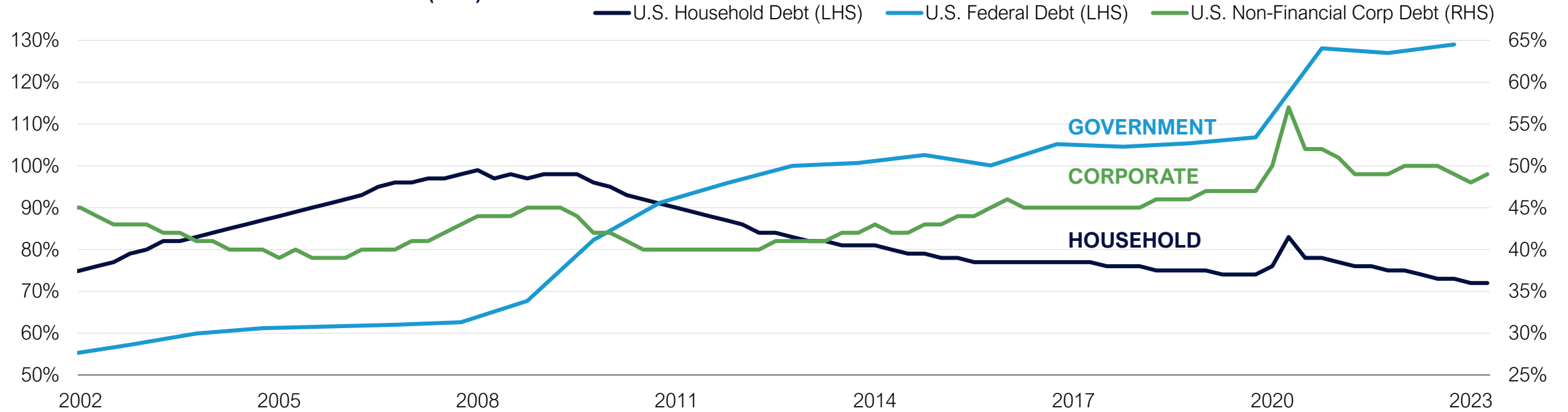
Past performance does not guarantee future results.

Source: Bloomberg, as of 31 March 2023

Not All Balance Sheets Are Created Equal

Investing at its core is about choosing good balance sheet exposure and avoiding the bad ones

% OF DEBT TO GROSS DOMESTIC PRODUCT (GDP)

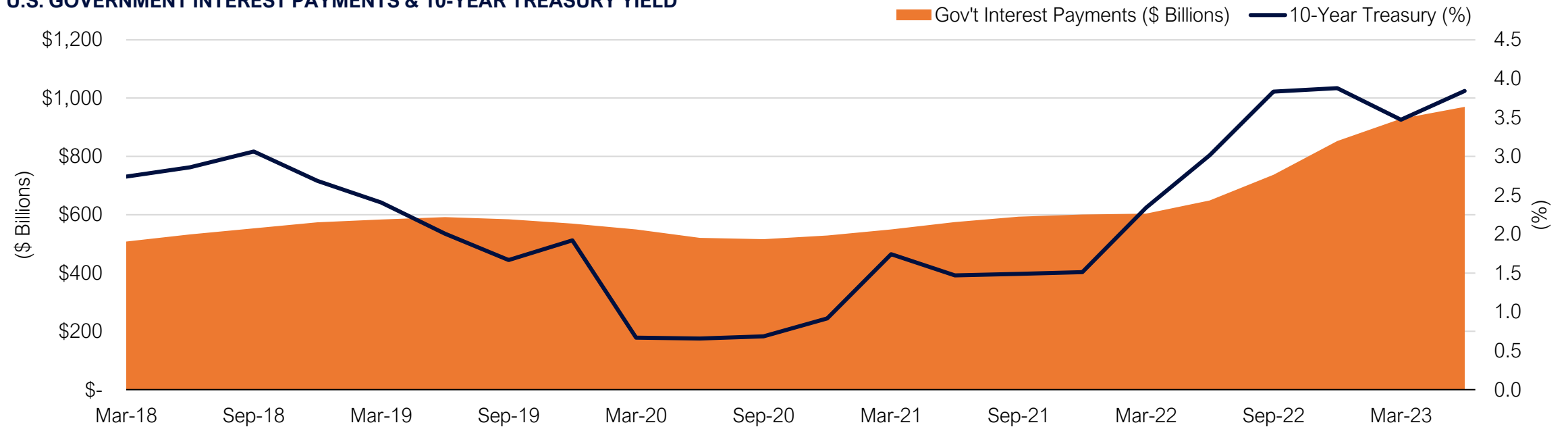


Source: Bloomberg, as of 30 June 2023

Rising Rates Matter a Lot for the Government Balance Sheet

Higher net interest costs, all things equal, means less ability for government spending to influence growth

U.S. GOVERNMENT INTEREST PAYMENTS & 10-YEAR TREASURY YIELD



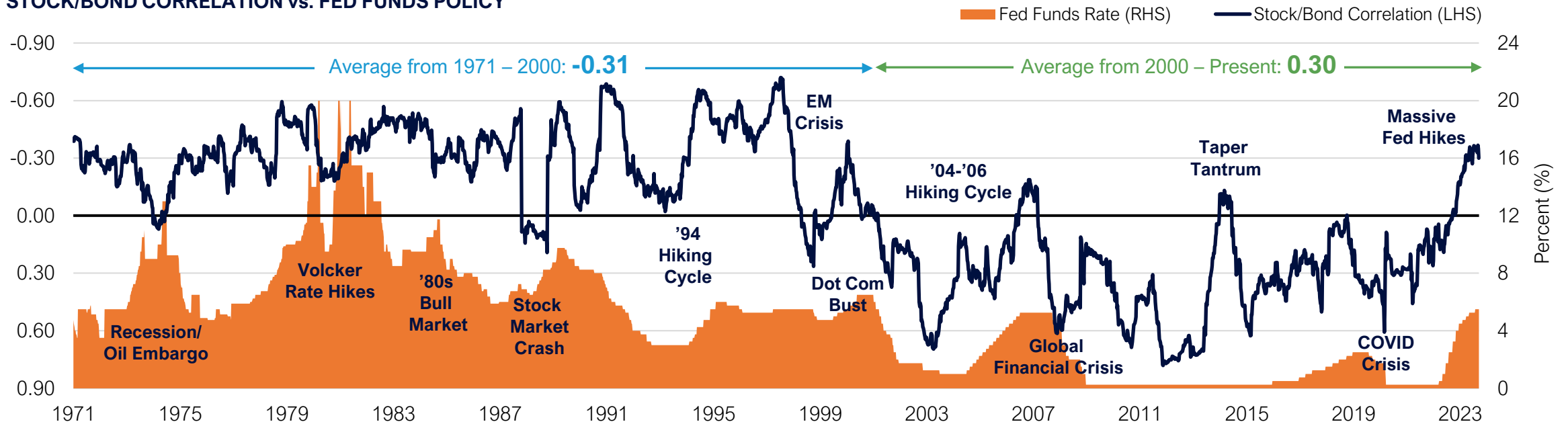
Past performance does not guarantee future results.

Source: Federal Reserve, as of 30 June 2023

Effective Portfolio Construction Depends on Correlations Expectations

Rate normalization means the potential for bonds to reassert themselves as ballast to the broader portfolio.

STOCK/BOND CORRELATION vs. FED FUNDS POLICY



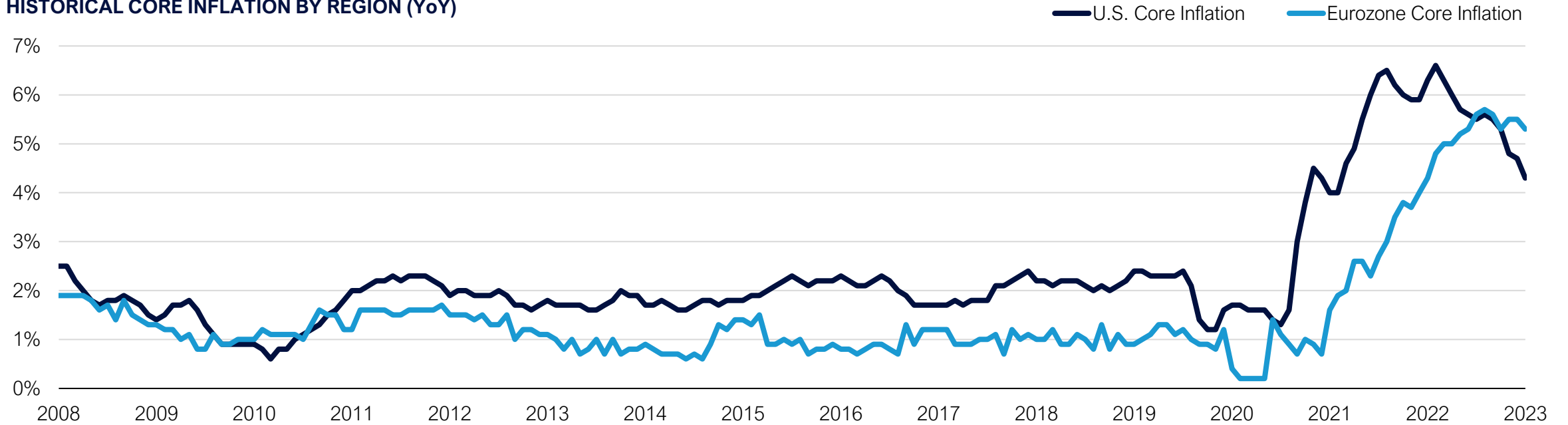
Past performance does not guarantee future results.

Source: Bloomberg

Higher for Longer?

Core inflation remains well above central bank targets

HISTORICAL CORE INFLATION BY REGION (YoY)

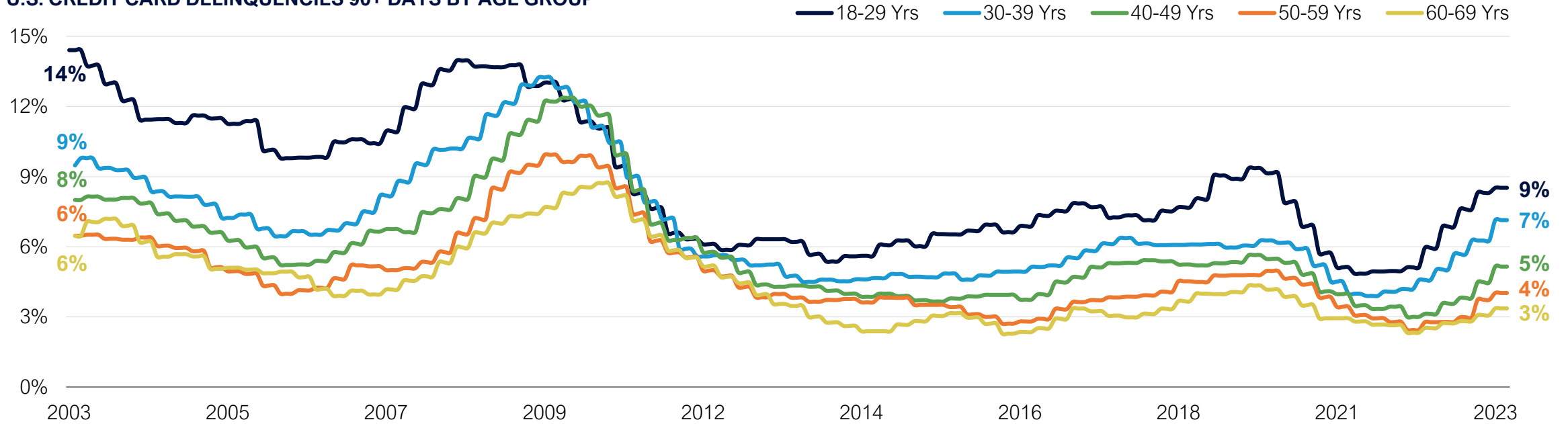


Source: Bloomberg

Consumer Credit: Delinquencies Rising from Post-pandemic Lows

Cracks in the consumer balance sheet increase the chance of recession

U.S. CREDIT CARD DELINQUENCIES 90+ DAYS BY AGE GROUP

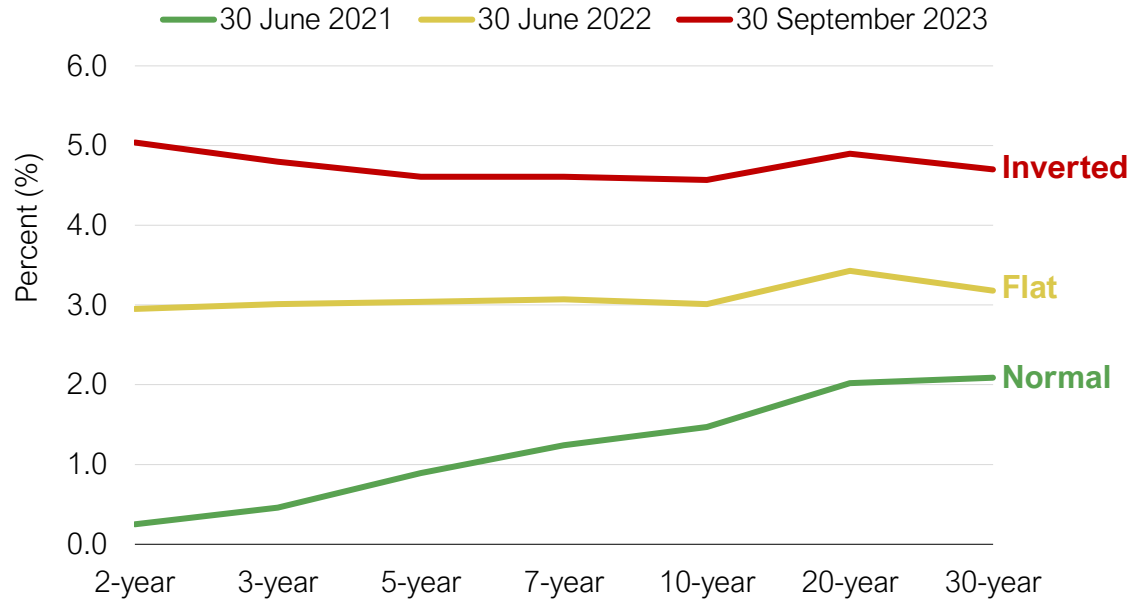


Source: Bloomberg, as of 31 August 2023
Data represents U.S. Credit Card Quality Index.

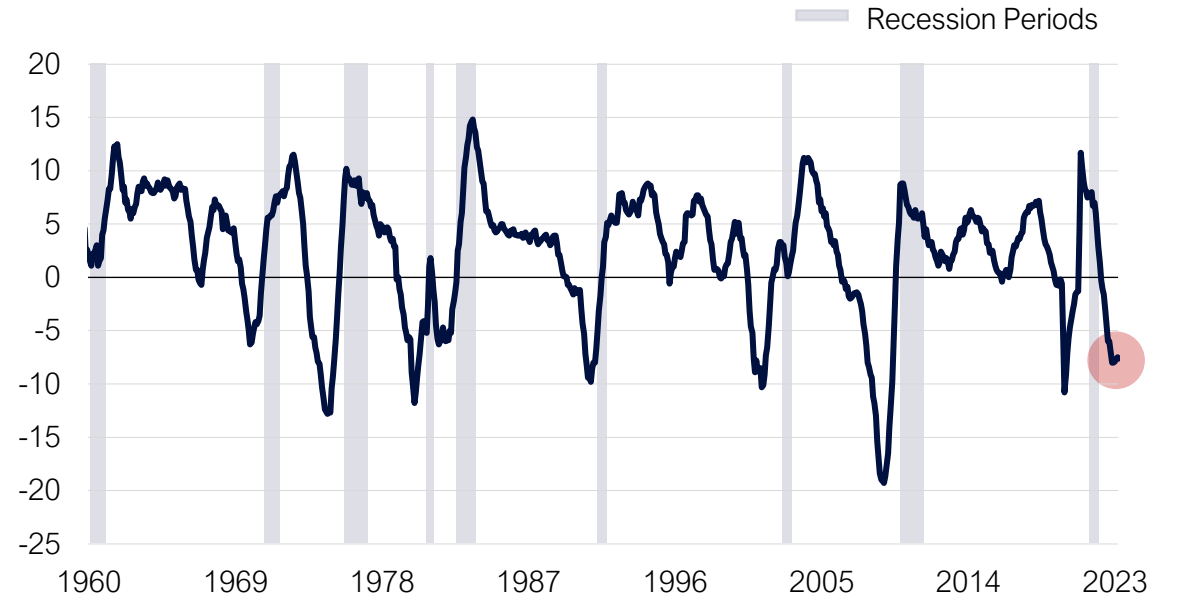
Recession: Traditional Indicators Issue a Warning

The signals have been incorrect – so far

U.S. TREASURY YIELD CURVE



LEADING ECONOMIC INDICATORS INDEX



Past performance does not guarantee future results.

Source: Bloomberg, (RHS) as of 31 August 2023



**EQUITY
INCOME**



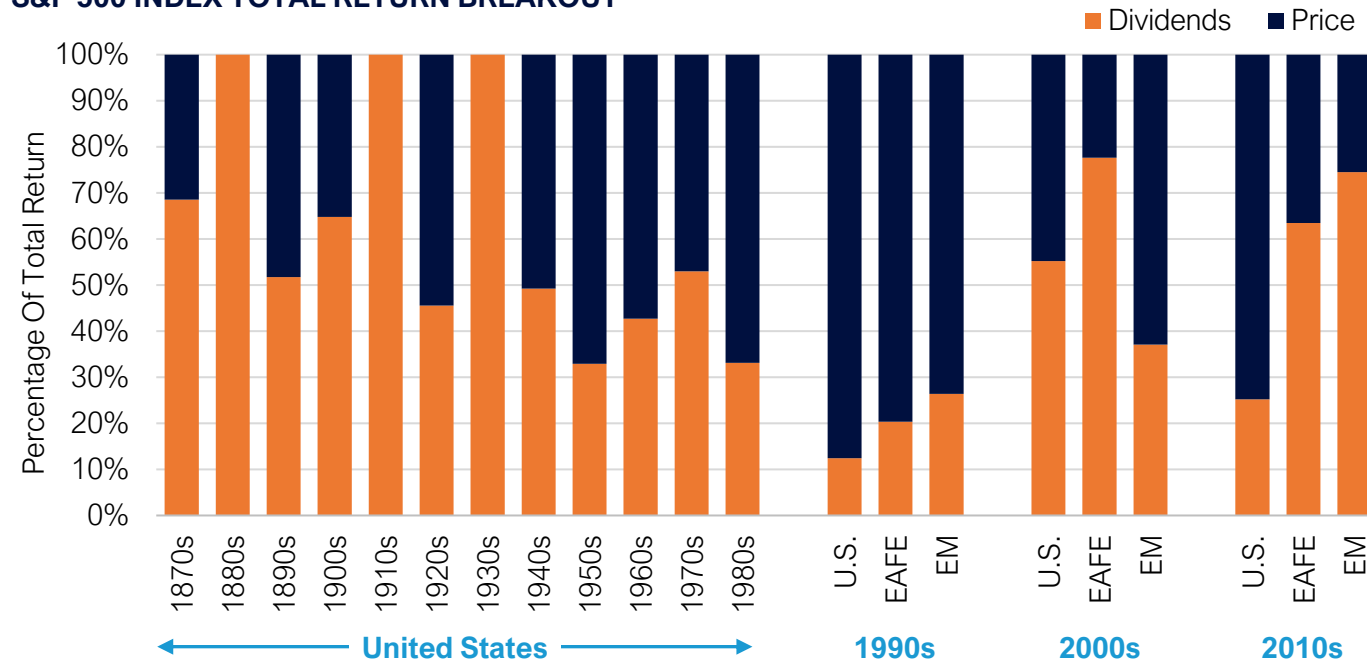
Key Themes:

- Income is essential to strong long-term returns but can be cyclical
- International equities reveal better opportunities for dividend income
- Dividend stocks are cheap based on long-term valuations
- Companies that can grow dividends historically outperform
- Yield is not the same as income

Historically, Dividends Have Been Essential to Total Return

Over the long term, total shareholder returns (TSR) are roughly 50% price / 50% dividends

S&P 500 INDEX TOTAL RETURN BREAKOUT



4.5%
Average income component across decades

4.6%
Average price appreciation across decades

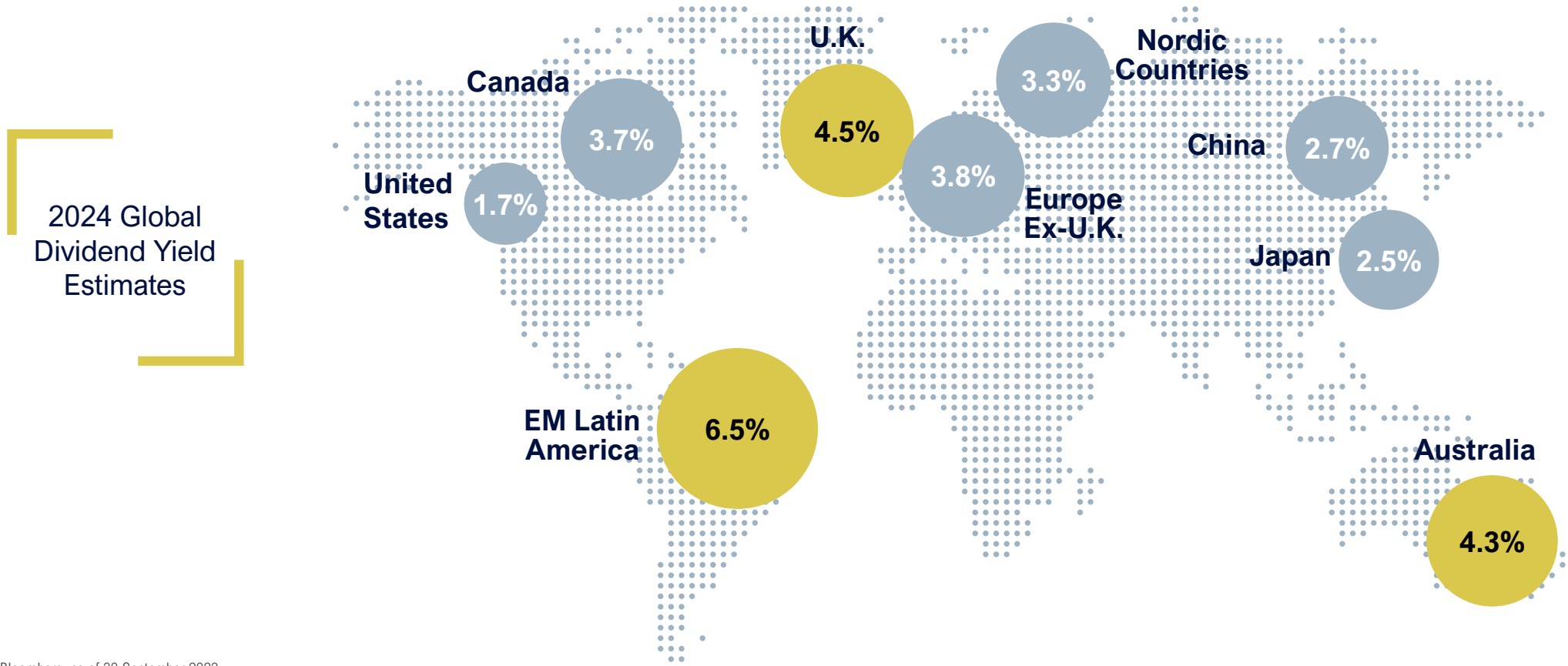
49.3%
Average income as percentage of total return

Past performance does not guarantee future results.

Sources: Jack W. Wilson and Charles P. Jones, "An Analysis of the S&P 500 Index and Cowles's Extensions: Price Indexes and Stock Returns, 1870-1999", Journal of Business, 2002, vol. 75 no 3. Data after 1990 is from Bloomberg, Confluence, and FactSet. Calculated by Thornburg Investment Management. Returns are annualized.

Non-U.S. Equity Markets Have Better Opportunities for Income

Investors must look globally for compelling yield

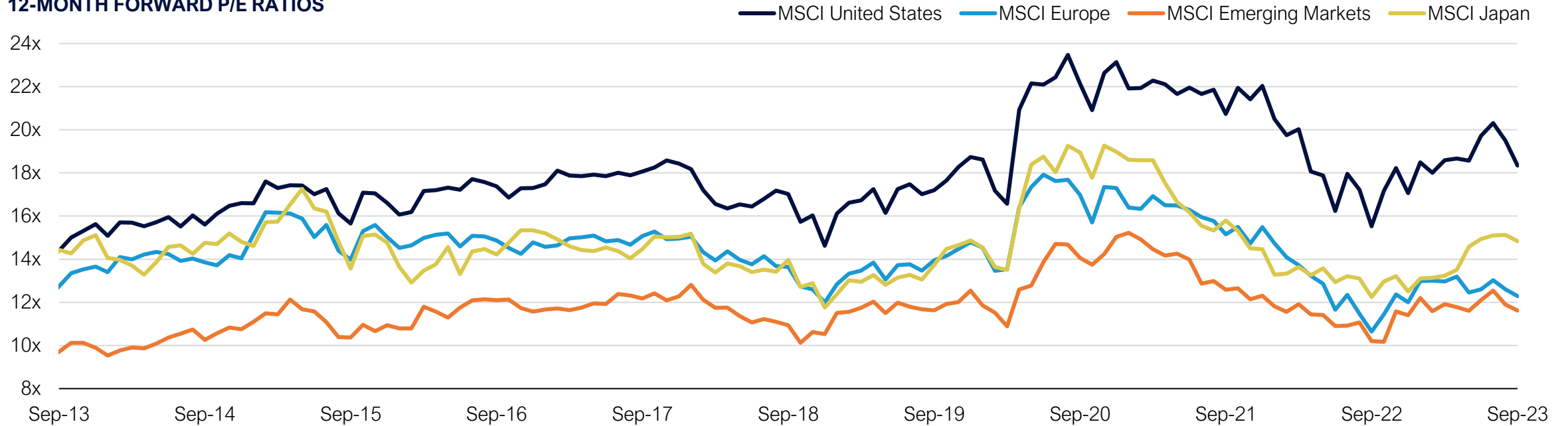


Source: Bloomberg, as of 30 September 2023

Relative Valuations Support Non-U.S. Assets

Non-U.S. markets present attractive bottom-up opportunities

12-MONTH FORWARD P/E RATIOS

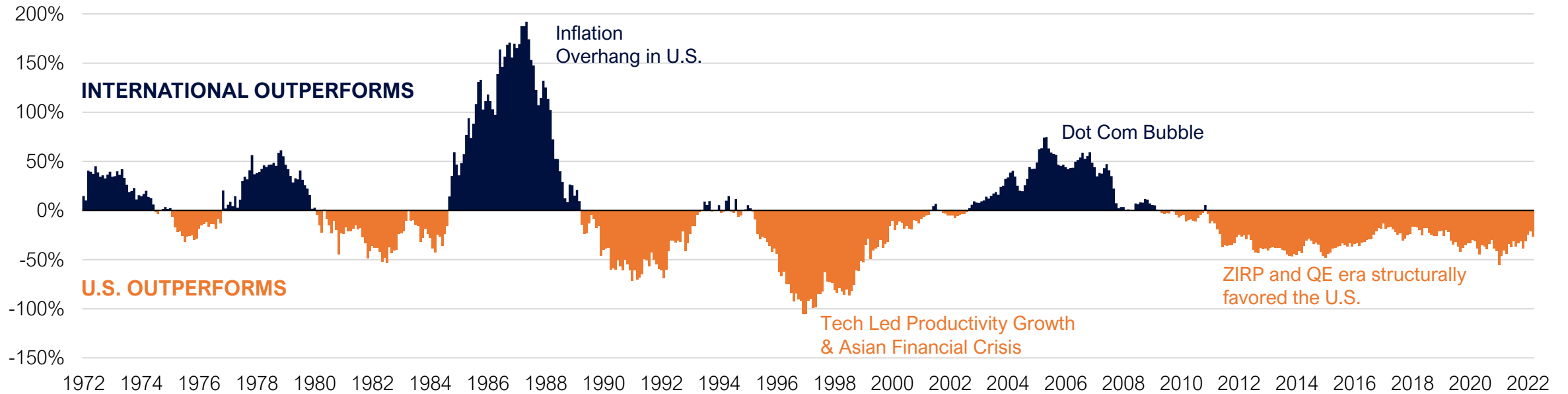


Source: Bloomberg, as of 30 September 2023

Market Leadership Can Last Many Years

A cyclical shift could be a long-term tailwind for non-U.S. markets

ROLLING 3-YEAR ANNUALIZED RETURNS (FROM 1972 – YTD 2023)



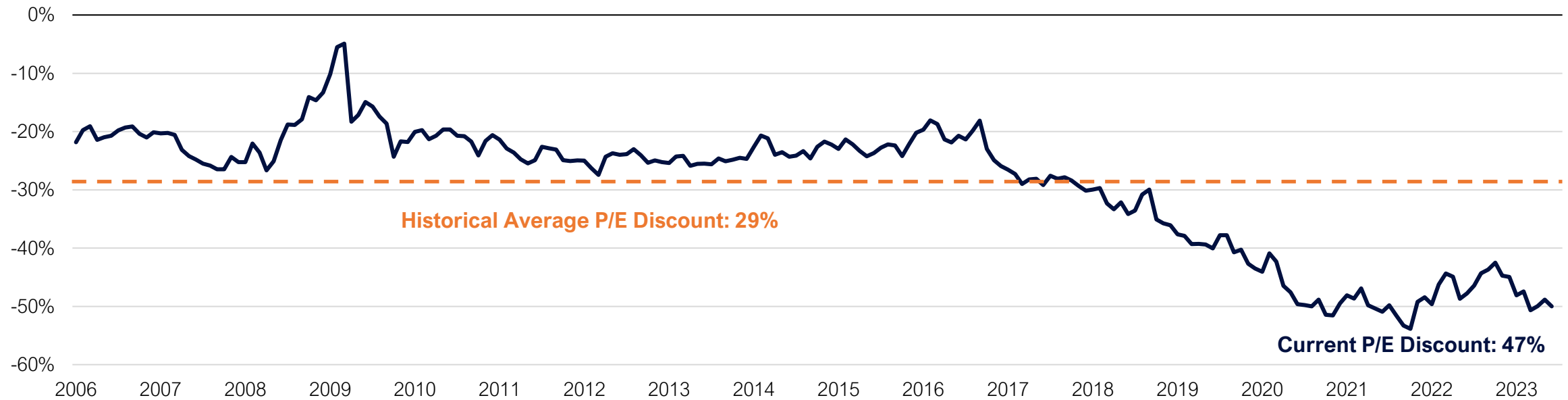
Past performance does not guarantee future results.

Source: Bloomberg

Income Generating Equities Present Attractive Value

Income-oriented stocks are historically cheap vs. their growth counterparts

P/E DISCOUNT (NEXT 12 MONTHS' FORWARD): MSCI WORLD VALUE INDEX vs. MSCI WORLD GROWTH INDEX

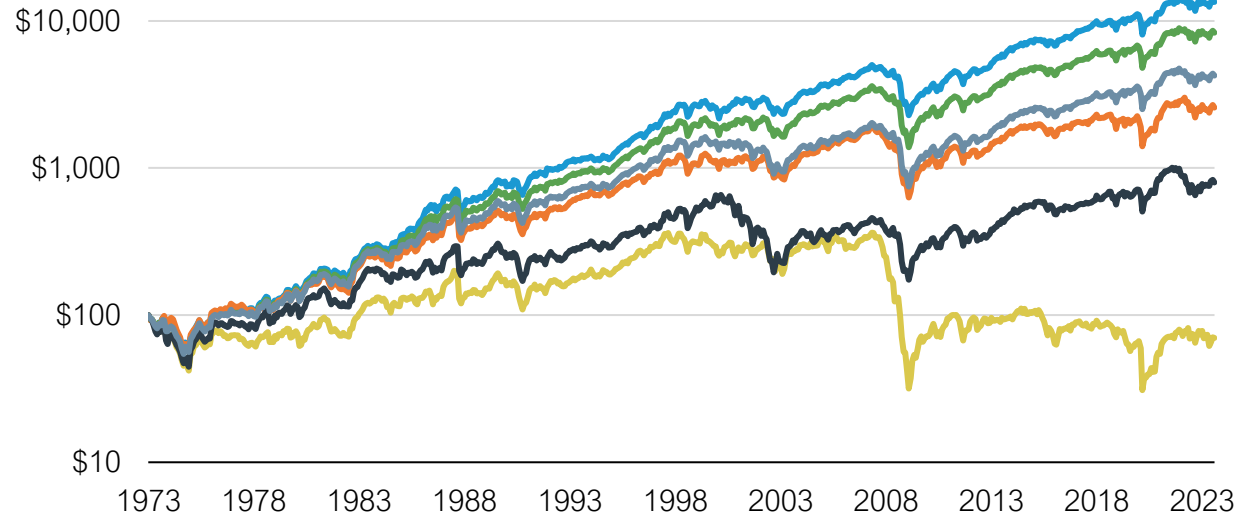


Source: Bloomberg

Companies That Can Grow Their Dividend Have Historically Outperformed

Focus on companies with the ability and willingness to pay dividends

CUMULATIVE GROWTH OF THE S&P 500 INDEX BY DIVIDEND POLICY (INDEXED TO 100)



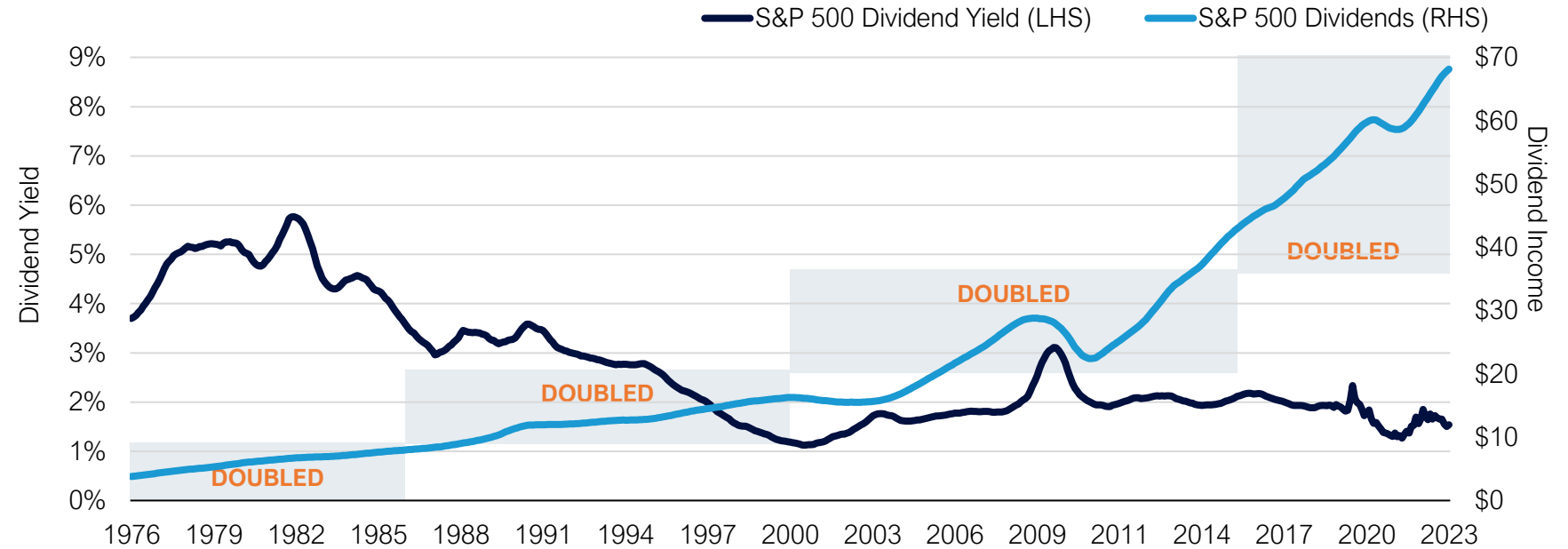
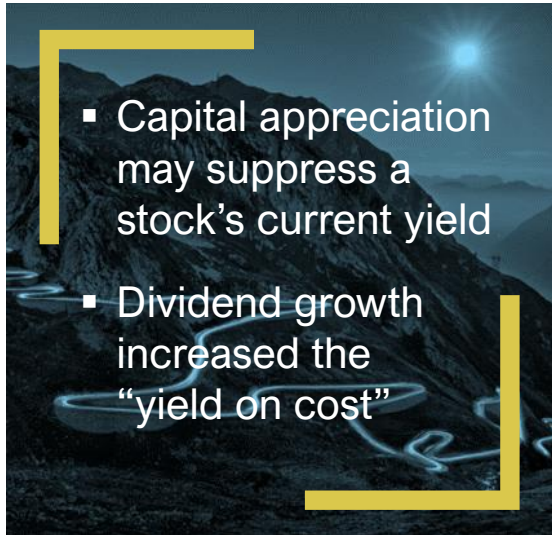
	Total Return (annual)	Sharpe Ratio	Std Deviation (annual)	Growth of \$100
Dividend Growers & Initiators	10.17%	0.35	16.14%	\$13,432
All Dividend Paying Stocks	9.12%	0.27	16.89%	\$8,300
S&P 500 Geometric Equal-Weighted TR	7.69%	-0.21	17.75%	\$4,243
Dividend Payers No Change in Dividends	6.63%	0.11	18.58%	\$2,575
Non-Dividend Paying Stocks	4.19%	-0.01	22.15%	\$797
Dividend Cutters & Eliminators	-0.71%	-0.21	25.11%	\$70

Past performance does not guarantee future results.

Source: Ned David Research and Revfritiv 1973 through 31 August 2023

Yield Is Not the Same as Income

Focus on long-term income growth for client portfolios rather than chasing absolute yield



Past performance does not guarantee future results.

Source: Bloomberg, as of 31 August 2023



FIXED INCOME

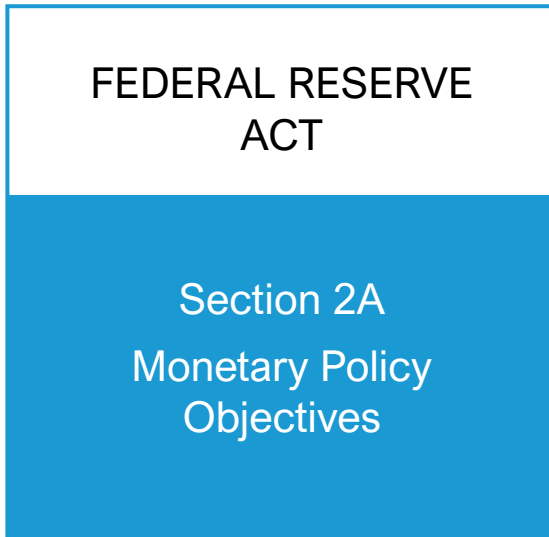


Key themes:

- Fed's THREE mandates
- Speed and flexibility is essential when markets dislocate
- Market behavior during dislocations is not all the same
- Is Cash Really King? Why Bonds Should Reign

The Federal Reserve Has Not Two but THREE Mandates

The third mandate has shifted from a focus on financial stability to one of social stability



**FEDERAL RESERVE
ACT**

Section 2A
Monetary Policy
Objectives

FEDERAL RESERVE ACT

The Board of Governors of the Federal Reserve System and the Federal Open Market Committee shall maintain long run growth of the monetary and credit aggregates commensurate with the economy's long run potential to increase production, so as to promote effectively the goals of:

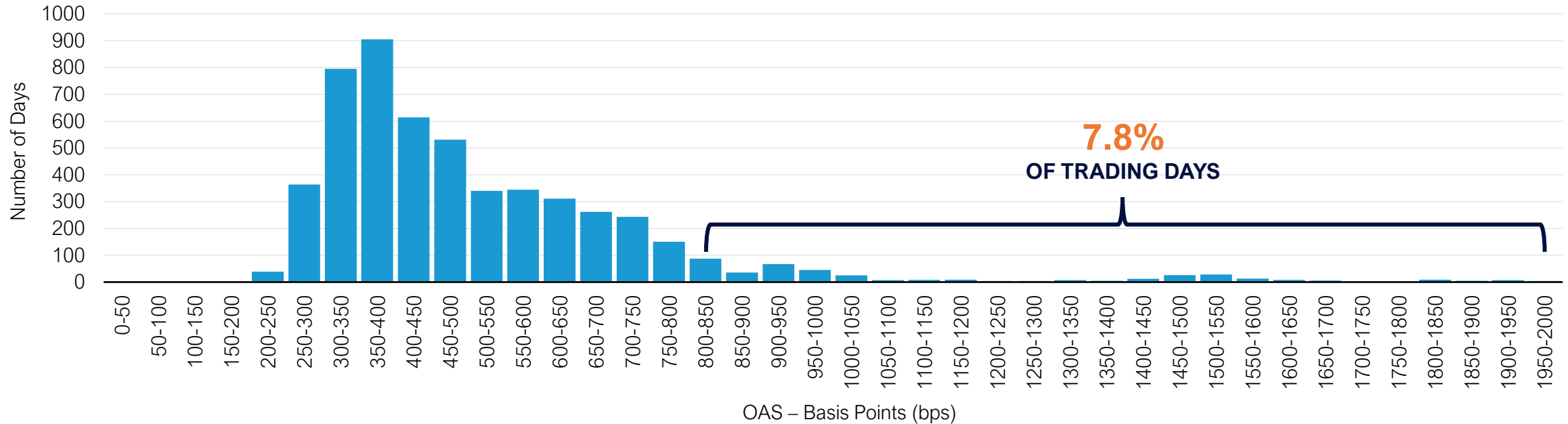
- **Maximum employment**
- **Stable prices**
- **Moderate long-term interest rates**

Source: Federal Reserve, 12USC 225a. As added by act of November 16,1977 (91 Stat.1387) and amended by acts of October 27, 1978 (92 Stat.1897); Aug. 23,1988 (102 Stat. 1375); and Dec.27, 2000 (114 Stat. 3028).

Spreads over Time Do Not Resemble a Normalized Distribution

Dislocations and recovery happening faster and faster, which emphasizes the need for quicker investor decision-making

BLOOMBERG HIGH YIELD INDEX OPTION ADJUSTED SPREAD (OAS): DAILY DATA POINTS SINCE 2002

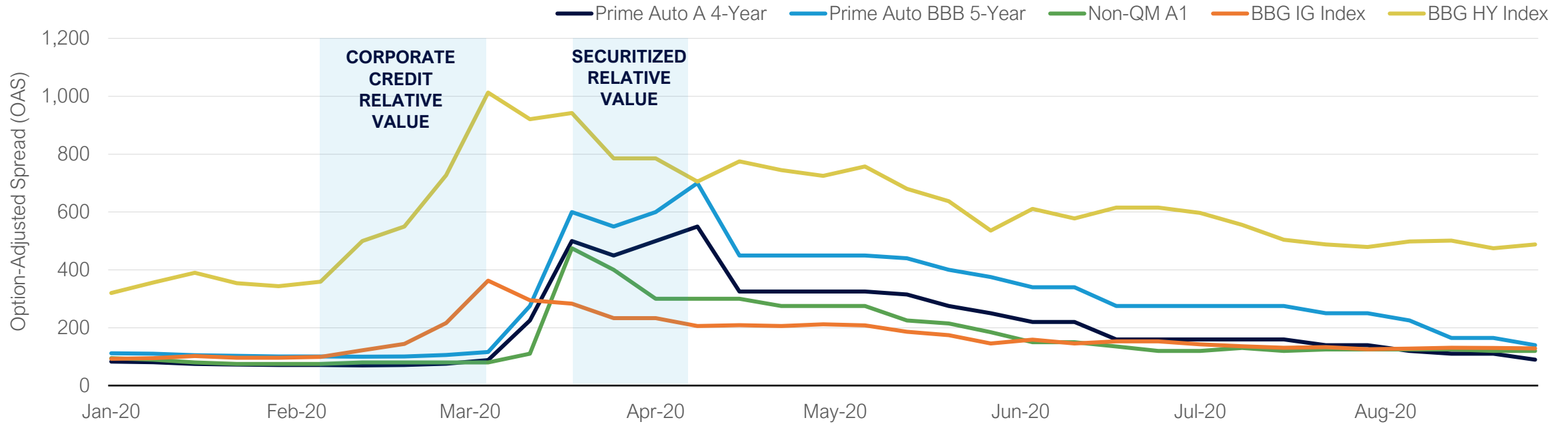


Past performance does not guarantee future results.

Source: Bloomberg, as of 30 September 2023

Market Behavior during Dislocations Is Not All the Same

Flexible investors can capitalize on dislocations as they occur, which can augment upside participation

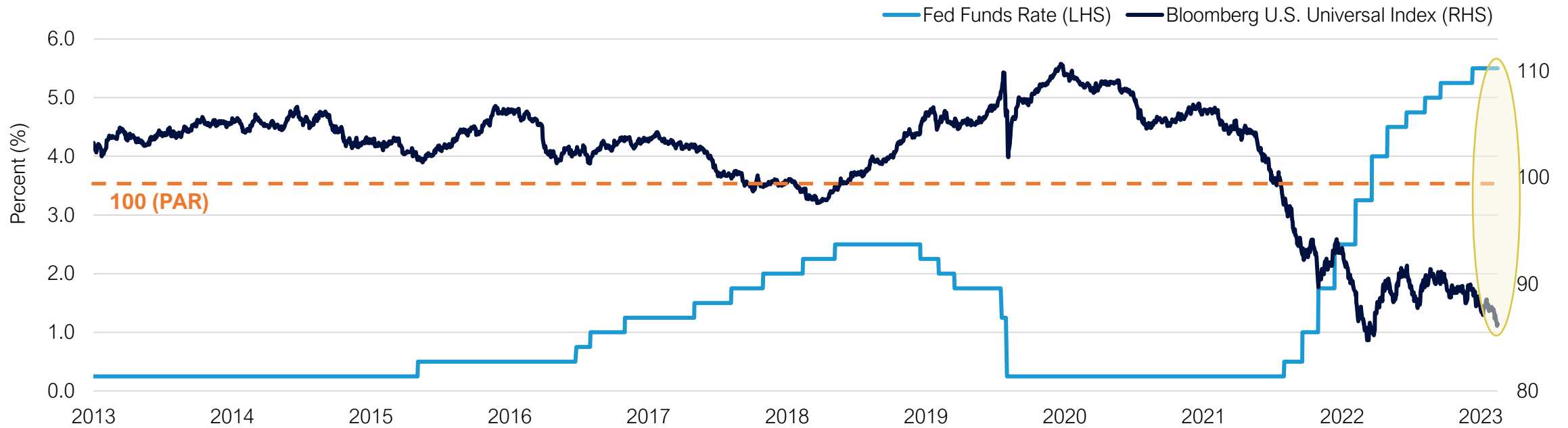


Past performance does not guarantee future results.

Source: BofA Global Research, Bloomberg, as of 31 August 2020

Today's Rate Environment Leaves Fixed Income Market Priced at a Discount

Return generation will be driven not only by income but the 'pull-to-par'



Past performance does not guarantee future results.

Source: Bloomberg, as of 30 September 2023

Is Cash Really King? Why Bonds Should Reign

Fixed Income has largely outperformed cash when the Fed stops raising rates

SUBSEQUENT 1-YEAR RETURN

PERIOD	FED HIKING CYCLE	END OF CYCLE	U.S. TREASURY BILL	U.S. IG CORPORATES	U.S. MBS	U.S. HY CORPORATES
1994-1995	3.00% - 6.00%	1 Feb 1995	6.16%	20.48%	15.22%	19.65%
1999-2000	5.00% - 6.50%	16 May 2000	6.30%	14.55%	14.37%	1.79%
2004-2006	1.00% - 5.25%	29 Jun 2006	3.96%	7.21%	6.69%	4.46%
2015-2018	0.25% - 2.50%	20 Dec 2018	2.39%	14.43%	6.70%	14.19%

SUBSEQUENT 2-YEAR RETURN

U.S. TREASURY BILL	U.S. IG CORPORATES	U.S. MBS	U.S. HY CORPORATES
5.75%	11.25%	10.15%	14.96%
4.56%	10.54%	11.20%	1.82%
4.44%	5.06%	7.24%	4.67%
1.58%	11.85%	5.36%	10.40%

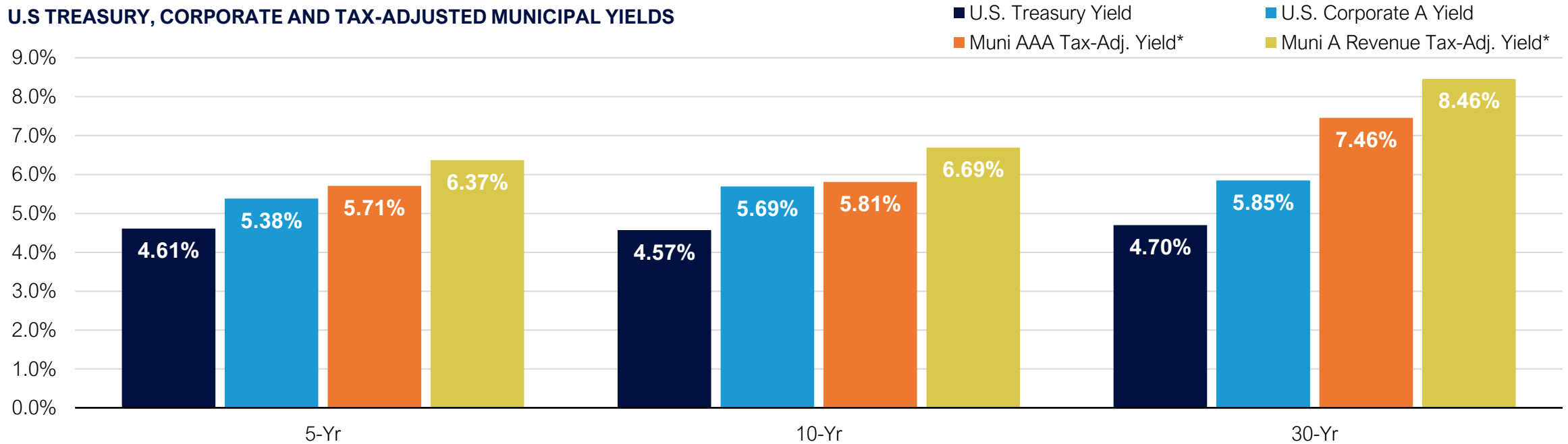
Past performance does not guarantee future results.

Source: Bloomberg

Despite Rally in Munis, Tax-Exemption Makes Yields Relatively Appealing

Tax-adjusted municipal yields compare or eclipse U.S. Treasuries and high-grade corporates

U.S. TREASURY, CORPORATE AND TAX-ADJUSTED MUNICIPAL YIELDS



Past performance does not guarantee future results.

Source: Bloomberg, as of 30 September 2023

*Top Federal marginal rate of 37% plus 3.8% Medicare surcharge.



MULTI-ASSET INCOME



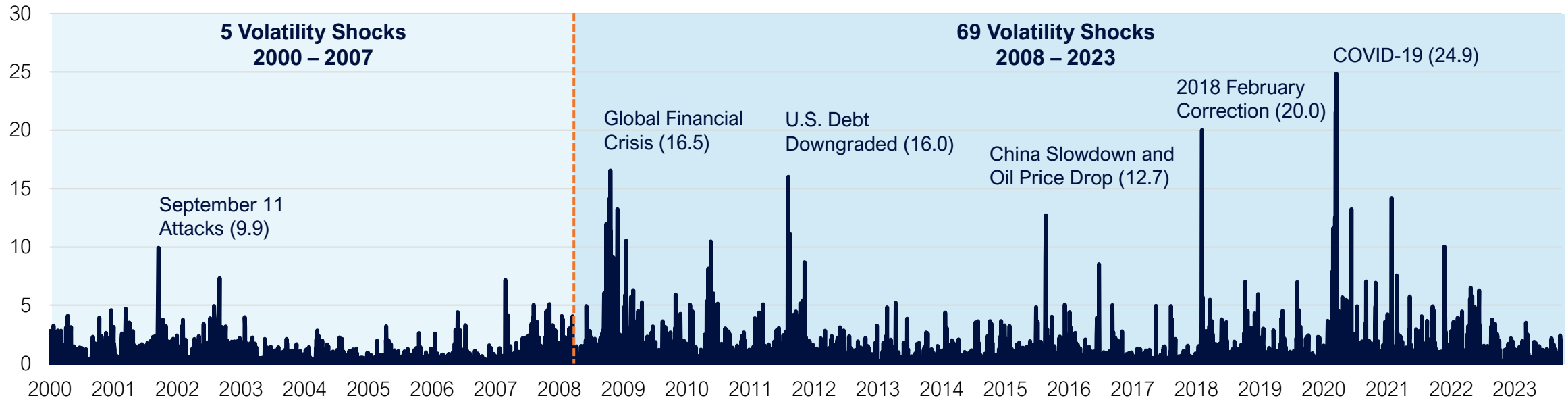
Key themes:

- Putting the multi-asset portfolio puzzle together requires flexibility and agility
- Essential to look across and within asset classes for opportunity
- Income comes in many sizes and shapes

A New Era of Extreme Volatility

Is there a fundamental change in frequency, direction and magnitude of markets?

VOLATILITY SHOCKS = # OF DAYS VIX INDEX MOVED GREATER THAN 5 POINTS IN ONE DAY

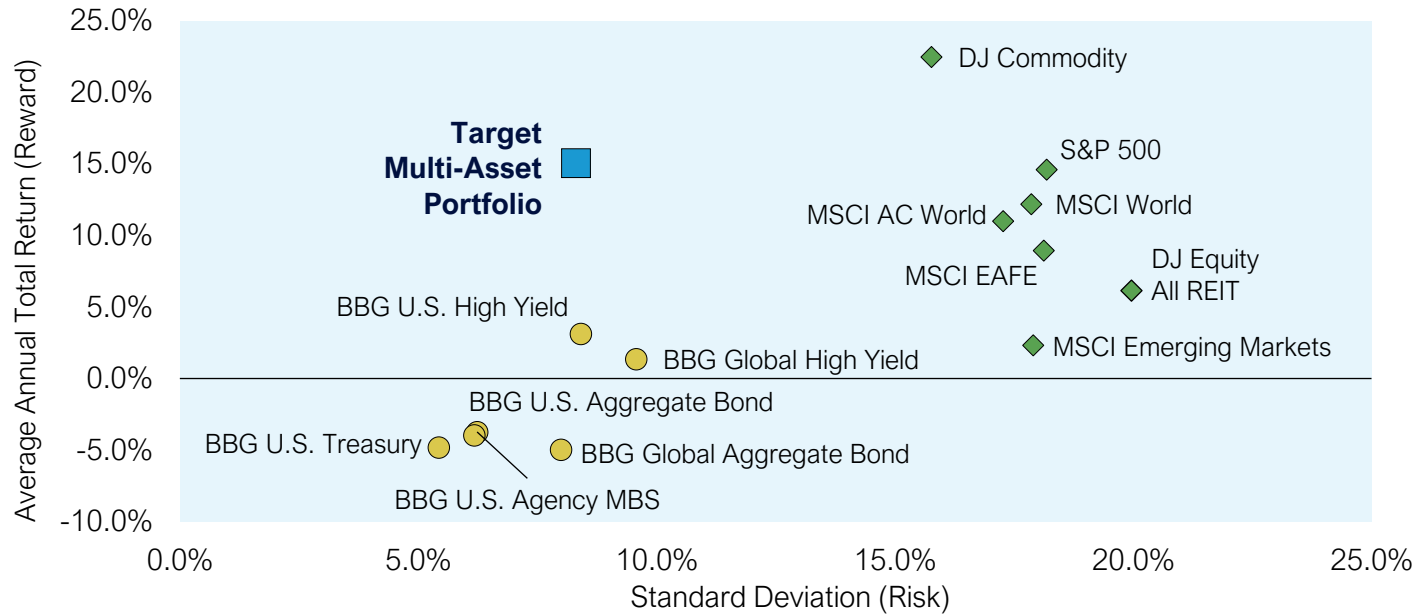


Source: Bloomberg, and SG Cross Asset Research/Derivatives
From 31 December 1999 through 30 September 2023

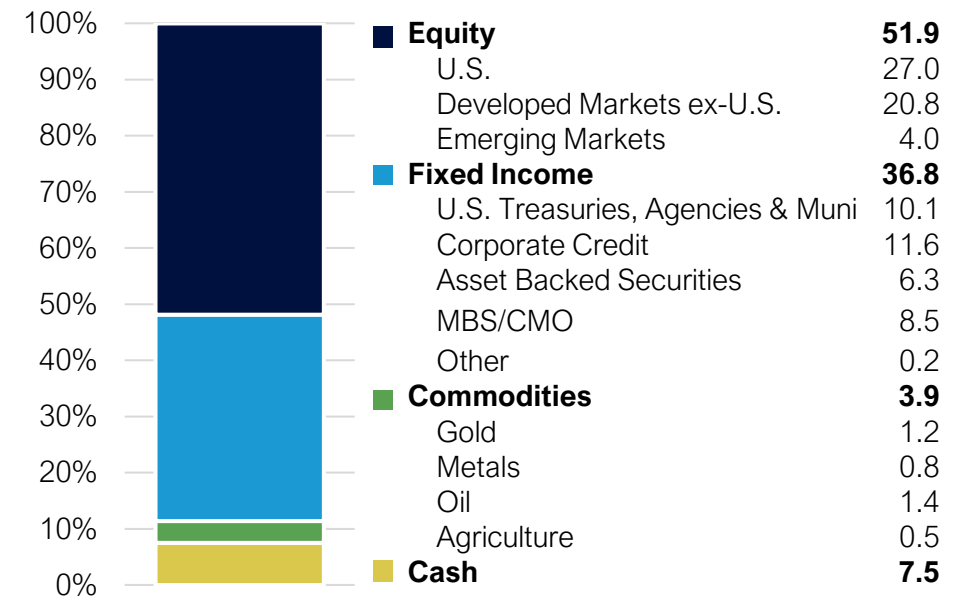
A Total Portfolio Solution to Grow Assets across Market Cycles

A global, diversified portfolio designed to capture market opportunity and manage market volatility

3-YR ANNUALIZED RISK/REWARD (HYPOTHETICAL)



HYPOTHETICAL PORTFOLIO COMPOSITION (%)



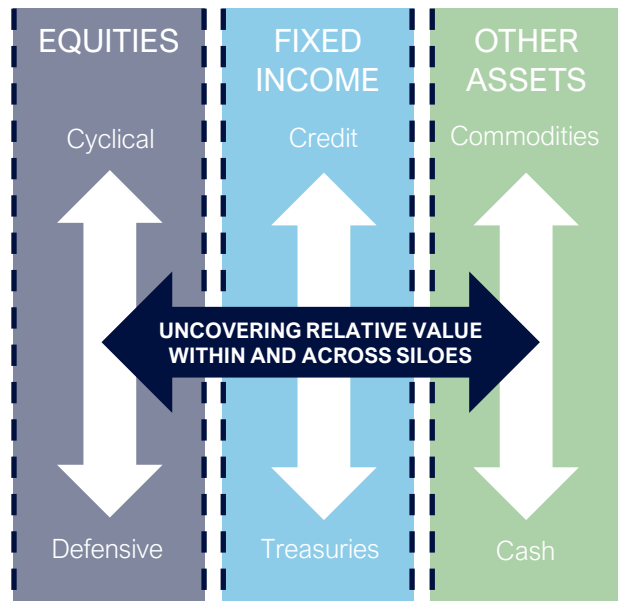
Performance data shown represents past performance and is no guarantee of future results.

The Multi-Asset Portfolio risk and reward expectations, and portfolio composition information is hypothetical and for illustration purposes only. Under no circumstances does the information represent a recommendation to buy or sell.

Source: Morningstar (for category return and risk data), as of 30 June 2023

Integrated Portfolio Construction

A holistic approach to asset allocation informed by fundamentals



Assess relative value within and across asset classes

Equity and fixed income positioning not made in isolation, but in concert to one another



Portfolio decisions are made on a name vs. name basis – not macro driven

High conviction positioning allows security selection to drive returns



Constant dialog between Portfolio Managers on individual positions and portfolio metrics

Frequent discussions on outlooks for each portion of the market

Decision-making by consensus

Speaker Biographies



Richard Holt, CFA
Chief Investment Strategist
Legacy Advisors

Richard Holt is a Chief Investment Strategist with Legacy Advisors, LLC. He joined Legacy in 2005 to significantly expand the firm's Investment Advisory Services and was responsible for developing the firm's investment strategy and operating platform. He currently serves on the Investment Policy Committee and manages client portfolios and relationships.

Prior to joining Legacy Advisors, LLC, Richard was a Managing Director at 1838 Investment Advisors. His duties included co-managing the firm's US large cap equity strategy, covering various industries from an analytical standpoint and managing client portfolios and relationships. As a research analyst, Richard was voted to the Institution Investor magazine's All-American Research Team on four occasions.

He received a Bachelor of Science degree (Cum Laude) from the University of Richmond in 1980. Richard holds the Chartered Financial Analyst (CFA®) designation and is a member of the CFA Society of Philadelphia and the CFA Institute. Richard currently resides in Newtown Square, PA, with his wife. In his spare time, he competes as a long-distance triathlete and has completed two Ironman distance events.



Ben Kirby, CFA
Co-Head of Investments and Managing Director
Thornburg Investment Management

Ben Kirby is co-head of investments for Thornburg Investment Management. He is responsible for driving the investment process at the firm level. Ben is also a portfolio manager on multiple strategies. He joined Thornburg in 2008 as equity research analyst, was promoted to associate portfolio manager in 2011, and was named portfolio manager and managing director in 2013.

Ben holds a BA in computer science from Fort Lewis College and an MBA from Duke University's Fuqua School of Business. Prior to graduate school, Ben was a software engineer at Pinnacle Business Systems in Oklahoma City, Oklahoma. He is a CFA charterholder.



Jeff Klingelhofer, CFA
Co-Head of Investments and Managing Director
Thornburg Investment Management

Jeff Klingelhofer is co-head of investments for Thornburg Investment Management. He is responsible for driving the investment process at the firm level. Jeff is also a portfolio manager on multiple strategies. He joined the firm in 2010, then was promoted to associate portfolio manager in 2012. In 2015, Jeff was made portfolio manager and managing director.

Jeff earned a BA in economics with a minor in business from the University of California at Irvine, and an MBA from the University of Chicago Booth School of Business in 2010. He is also a CFA charterholder. Prior to joining Thornburg Investment Management, Jeff spent four years with PIMCO, where he was responsible for monitoring portfolio leverage and risk tolerances.



Matt Burdett
Portfolio Manager and Managing Director
Thornburg Investment Management

Matt Burdett is portfolio manager for Thornburg Investment Management. He rejoined the firm in 2015 as an associate portfolio manager and was promoted to portfolio manager in 2018. Matt spent several years as a senior vice president and portfolio manager at PIMCO, where he co-managed various dividend-oriented strategies. Prior to his time at PIMCO, Matt worked as an equity analyst at Thornburg.

Matt was director of healthcare investment banking at CIBC World Markets / Oppenheimer prior to joining Thornburg in 2010. Earlier in his career, he was a medicinal chemist at Sunesis Pharmaceuticals. Matt holds an MBA from the Marshall School of Business at the University of Southern California and a bachelor's degree in chemistry from the University of California, Berkeley.



APPENDIX



Thornburg Investment Management:

- Firm Overview
- Global Investment Generalists



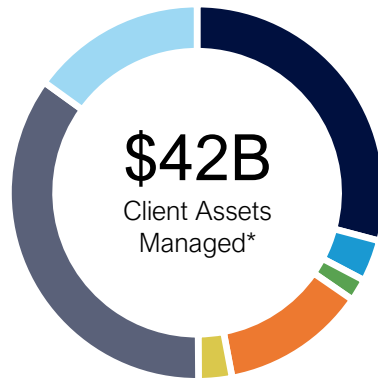
Thornburg Investment Management

A global, multi-asset investment platform built to exploit market inefficiencies through active fundamental investing



ASSETS BY TYPE

Multi-Asset	\$12.2B
Global Equity	\$1.5B
U.S. Equity	\$0.8B
Global Equity ex-U.S.	\$5.2B
Emerging Markets Equity	\$1.2B
Global Fixed Income	\$14.7B
Municipal Fixed Income	\$6.3B



INVESTMENT VEHICLES

- Institutional Separate Accounts
- Mutual Funds
- UCITS Funds
- Retail Managed Accounts
- Collective Funds
- Closed-End Funds

*Includes assets under management (\$40.9B) and assets under advisement (\$1.0B), as of 30 June 2023.

EQUITY

- Global Equity
- Global Equity ex-U.S.
- U.S. Equity
- Emerging Markets

FIXED INCOME

- Ultra-Short & Short
- Intermediate & Long-Term
- Multi-Sector Credit
- High Yield
- Municipal Bonds

MULTI-ASSET

- Global Income
- Multi-Asset

REAL ESTATE

- Opportunistic
- Core Plus / Income

ESG

Signatory of:



The PRI is the world's leading proponent of responsible investment. It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions.

AMERICAS | EMEA | ASIA-PACIFIC

Santa Fe, New Mexico | Hong Kong | Shanghai

Global Investment Generalists

The siloed nature of markets create inefficiencies that generalist investors are built to exploit. A broad, global investment perspective within a team-based culture and structure guides investment research, security selection and risk-management.

SILOED MARKETS CREATE INEFFICIENCIES

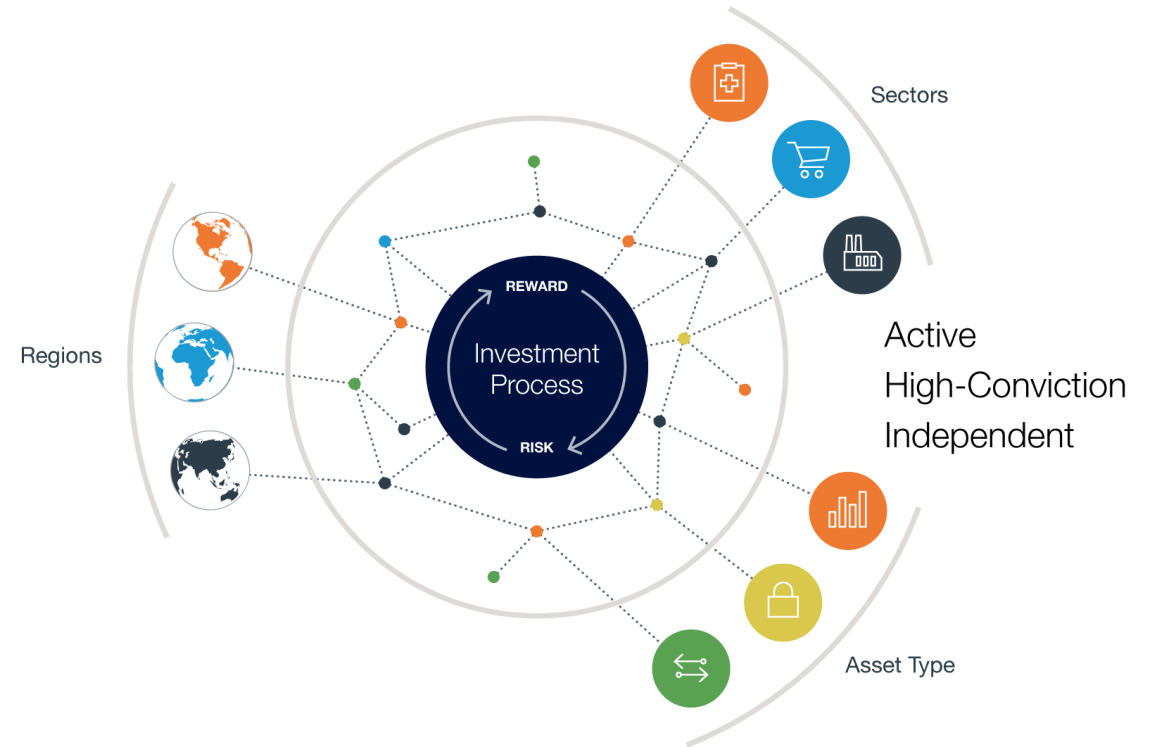
Investment team is structured to capitalize on valuation inefficiencies arising from the siloed nature of markets.

GENERALISTS THINK DIFFERENTLY

Our generalist approach attracts free thinkers with broad perspectives, allowing Thornburg to identify value others may have overlooked.

DISCIPLINED PROCESS GENERATES ALPHA

Investment research combines multiple inputs, applying quantitative and qualitative criteria, resulting in selective, and focused portfolios designed to outperform over time.



www.thornburg.com



Our client teams are here to support you.

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