

Market Analysis / Second Quarter 2023



INDEPENDENT WEALTH MANAGEMENT

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Stocks Moved Higher amid Disinflationary Expansion

Continued global economic expansion, amid falling commodity prices and generally disinflationary trends, provided a favorable environment for the prices of riskier assets during Q2. However, major central banks hinted at more monetary tightening as core inflation pressures persisted. The late-cycle outlook appears mixed, with a supportive U.S. consumer backdrop tempered by rising rates and slowing liquidity growth.

MACRO

ASSET MARKETS

Q2 2023

- Global disinflation amid continued economic expansion.

- Riskier asset prices and bond yields rose.

OUTLOOK

- The global business cycle is less synchronized and faces multiple crosswinds.
- The U.S. is in the late-cycle expansion phase, supported by a solid consumer backdrop.
- China's reopening momentum is faltering, raising the odds of increased policy stimulus.
- The rate of inflation is decelerating, but greater economic slowing may be necessary to bring core inflation down sustainably.
- The Fed and other central banks are likely nearing the end of their hiking cycles, but global monetary tightening is dampening liquidity and adding to growth risks.

- Markets may be overly sanguine about the lagged impact of monetary tightening.
- Slower liquidity growth and greater monetary policy uncertainty raise the odds that market volatility will return.
- The valuations of fixed income and non-U.S. equities appear to price in more of this uncertainty.
- Late-cycle positioning implies smaller cyclical tilts and a readiness for opportunities; high levels of long-term portfolio diversification remain warranted.

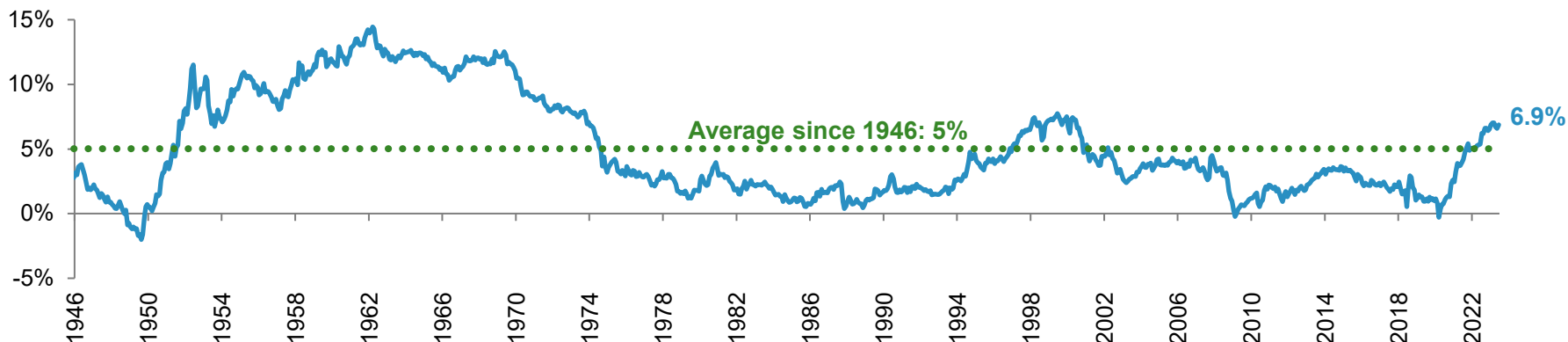
U.S. Large Cap Growth Stocks Soared during Q2

U.S. large cap growth stocks spearheaded the rally in riskier asset prices, with non-U.S. equities registering more modest gains. Credit-sensitive fixed income categories, such as emerging-market debt and corporate high-yield bonds, posted positive returns, but rising interest rates dragged most bond categories lower. After the broad-based downturn in 2022, most asset categories have rebounded through the first half of 2023.

	Q2 2023	YTD (%)		Q2 2023	YTD (%)
U.S. Growth	12.5%	28.1%	High-Yield Bonds	1.6%	5.4%
U.S. Large Cap Stocks	8.7%	16.9%	Emerging-Market Stocks	0.9%	4.9%
U.S. Small Cap Stocks	5.2%	8.1%	U.S. Corporate Bonds	-0.3%	3.1%
U.S. Value	4.0%	5.0%	Investment-Grade Bonds	-0.8%	2.1%
Non-U.S. Developed-Country Stocks	3.0%	11.7%	Long Government & Credit Bonds	-1.3%	4.4%
Real Estate Stocks	2.6%	5.4%	Gold	-2.5%	5.2%
Emerging-Market Bonds	2.2%	4.1%	Commodities	-2.6%	-7.8%

20-Year U.S. Stock Returns Minus IG Bond Returns since 1946

Annualized Return Difference



Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: U.S. Growth Stocks—Russell 3000 Growth Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Gold—Gold Bullion, LBMA PM Fix; U.S. Large Cap Stocks—S&P 500®; Long Government & Credit Bonds—Bloomberg Long Government & Credit Index; Emerging-Market Stocks—MSCI EM Index; High-Yield Bonds—ICE BofA High Yield Bond Index; U.S. Corporate Bonds—Bloomberg U.S. Credit Index; Investment-Grade Bonds—Bloomberg U.S. Aggregate Bond Index; U.S. Small Cap Stocks—Russell 2000® Index; Real Estate Stocks—FTSE NAREIT Equity Index; Emerging-Market Bonds—JP Morgan EMBI Global Diversified Composite Index; U.S. Value Stocks—Russell 3000® Value Index; Commodities—Bloomberg Commodity Index.

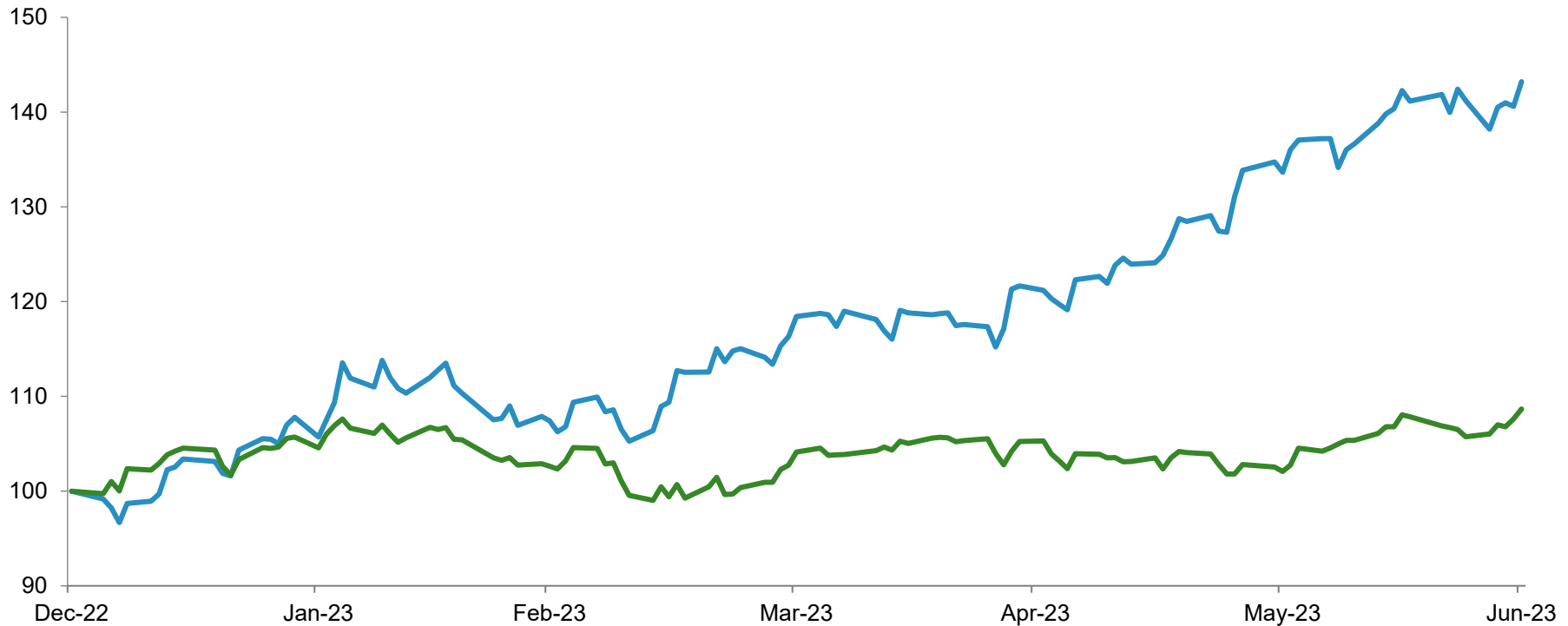
Narrow Leadership in the Equity-Market Rally

Despite sharp gains for U.S. large cap stocks, the 2023 market rebound remained relatively narrow. The top 10 largest U.S. stocks, concentrated in the technology and communications sectors, received a boost from exuberance about the prospects for artificial intelligence and rose more than 40% in the first half of the year. This far outpaced the rest of the market, where the rebound was less pronounced.

S&P 500 Stock Performance

— Top 10 — Bottom 490

YTD Total Returns (Index: 12/31/22 = 100)

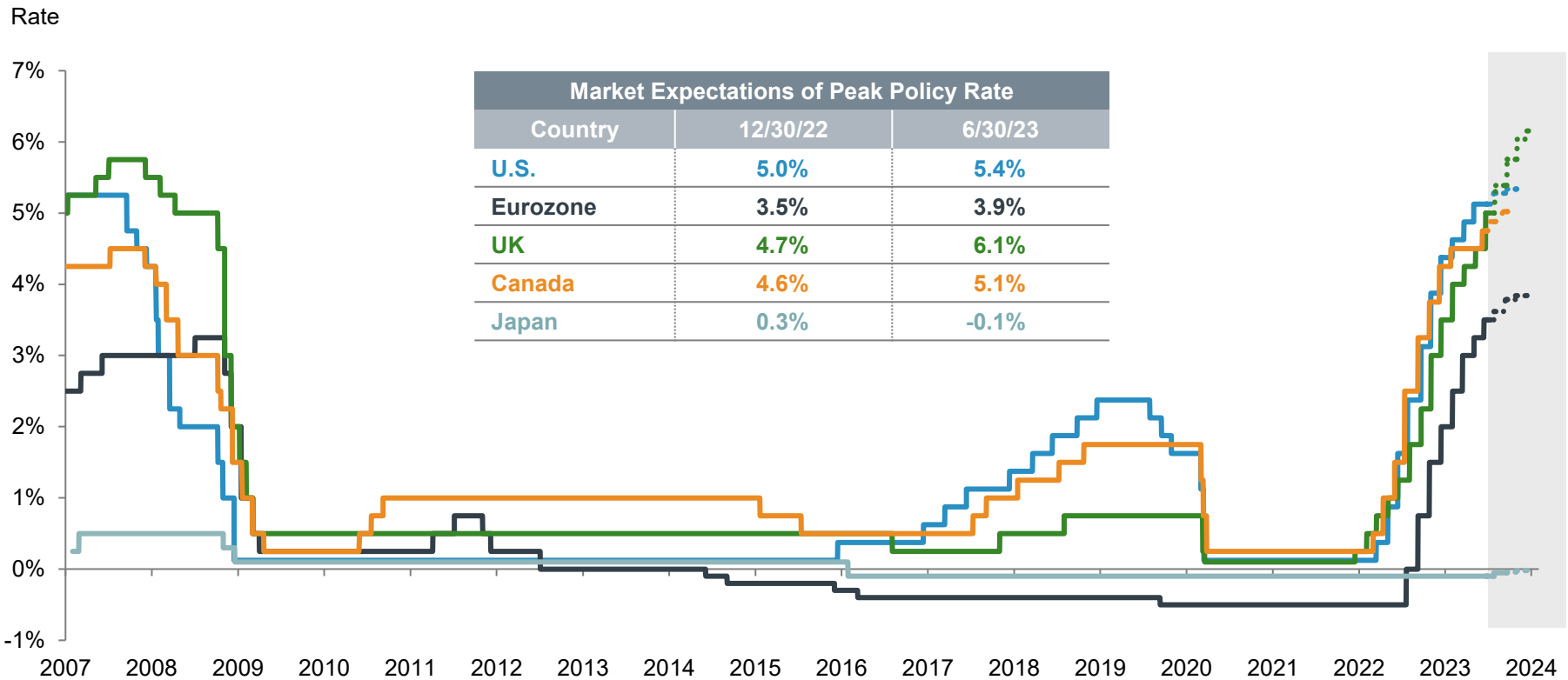


Dramatic Global Hiking Cycle May Be Nearing a Peak

Aggressive monetary tightening by the world's major central banks continued during Q2, bringing global short-term interest rates to their highest levels in more than a decade. Most investors expect the pace of rate hikes to slow and eventually stop during 2023, but the impact of the abrupt departure from the ultra-low rates era may weigh on financial conditions in the quarters to come.

Global Short-Term Policy Rates

— U.S. — Eurozone — UK — Canada — Japan



Dotted lines in the shaded area represent market rate expectations using OIS swaps. They end at the peak expected policy rate by the market. Source: U.S. Federal Reserve Board, ECB, Bank of Japan, Bank of England, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/23.

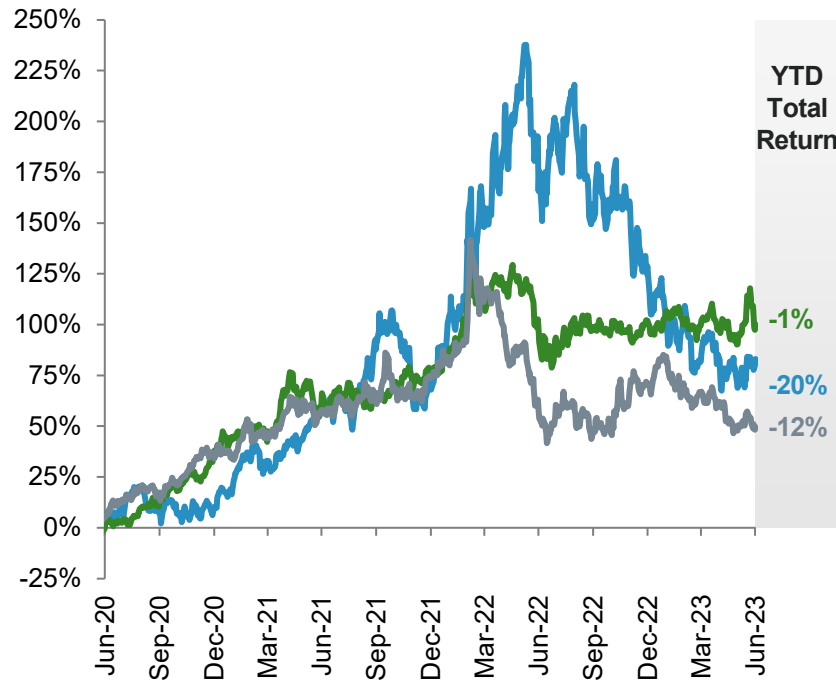
Weakness in Commodity Prices and Global Trade

Commodity prices and global trade activity deteriorated in Q2. Prices of both energy and industrial metals dropped by double-digits on a YTD basis and have seen large contractions relative to the highs reached in 2022. China's subdued recovery and the hangover from the post-reopening global manufacturing boom have weighed on worldwide trade activity.

Commodity Price Index Returns

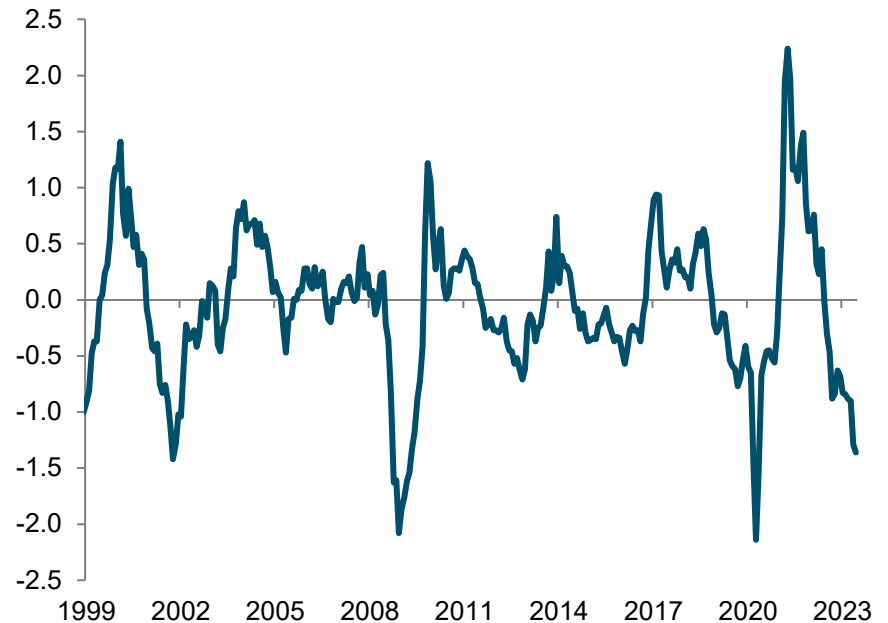
— Energy — Agriculture — Industrial Metals

Cumulative Total Return



AART Global Trade Indicator

Z-Score



LEFT: Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Returns represented by Bloomberg Commodity Total Return Sub-indices (Bloomberg Industrial Metals Subindex Total Return Index, Bloomberg Agriculture Subindex Total Return Index, and Bloomberg Energy Subindex Total Return Index). Source: Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/23. **RIGHT:** The AART Global Trade Indicator is a proprietary measure of global trade activity such as measures of freight activity, FX, and commodities. Z-scores measure the number of standard deviations above or below the mean of the sample. Source: Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 6/30/23.

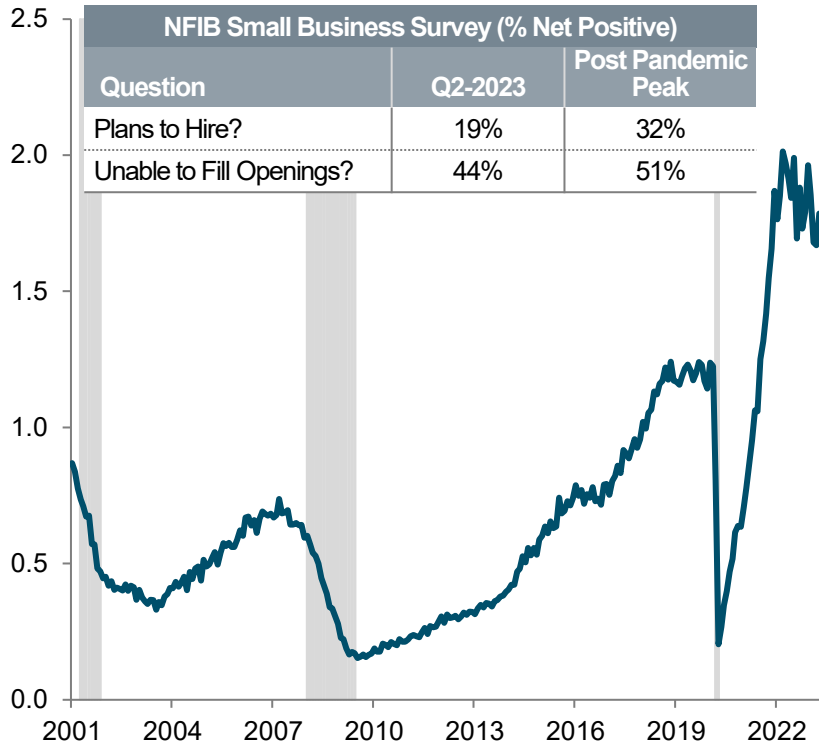
Modest Cooling in Extremely Tight Labor Markets

Businesses pared back on their job openings and hiring plans, but unemployment stayed near multi-decade lows and labor markets remained very tight. The overall participation rate of adults in the labor force, including prime-age workers (25 to 54 years), has surpassed pre-pandemic levels. However, the over-55 participation rate remains depressed, and aging demographics will likely constrain labor supply for years to come.

Job Openings

— Job Openings/Unemployed Workers

Ratio

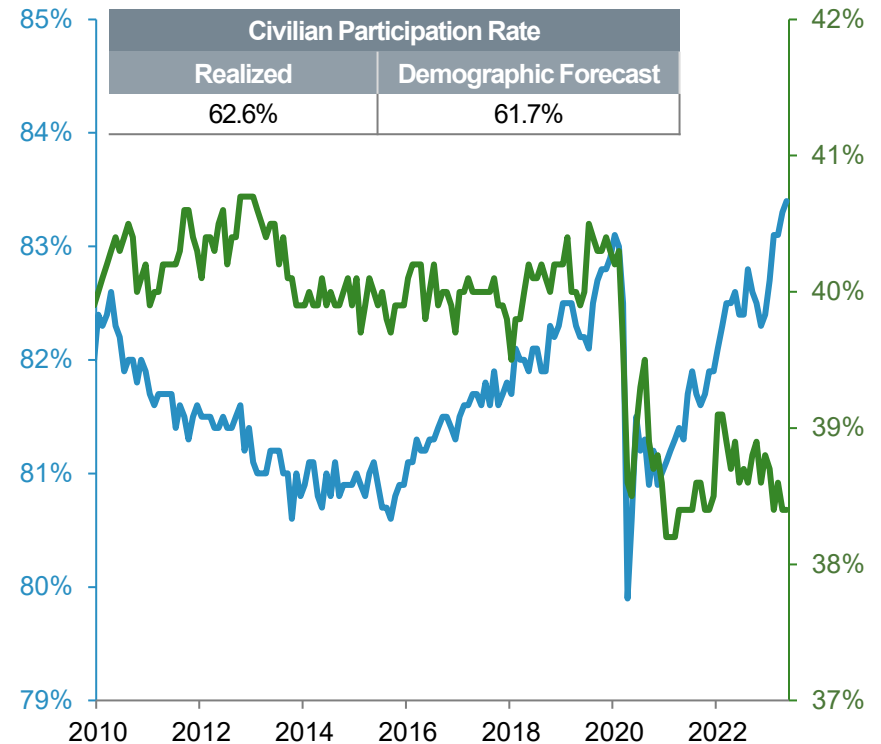


Labor Force Participation Rate by Age

— 25 to 54 Years — 55 Years & Over

Labor Force/Adult Population

Labor Force/Adult Population



LEFT: Seasonally adjusted data. Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 6/30/23. RIGHT: Demographic projection: Fidelity calculation. Source: Census Bureau, Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 6/30/23.

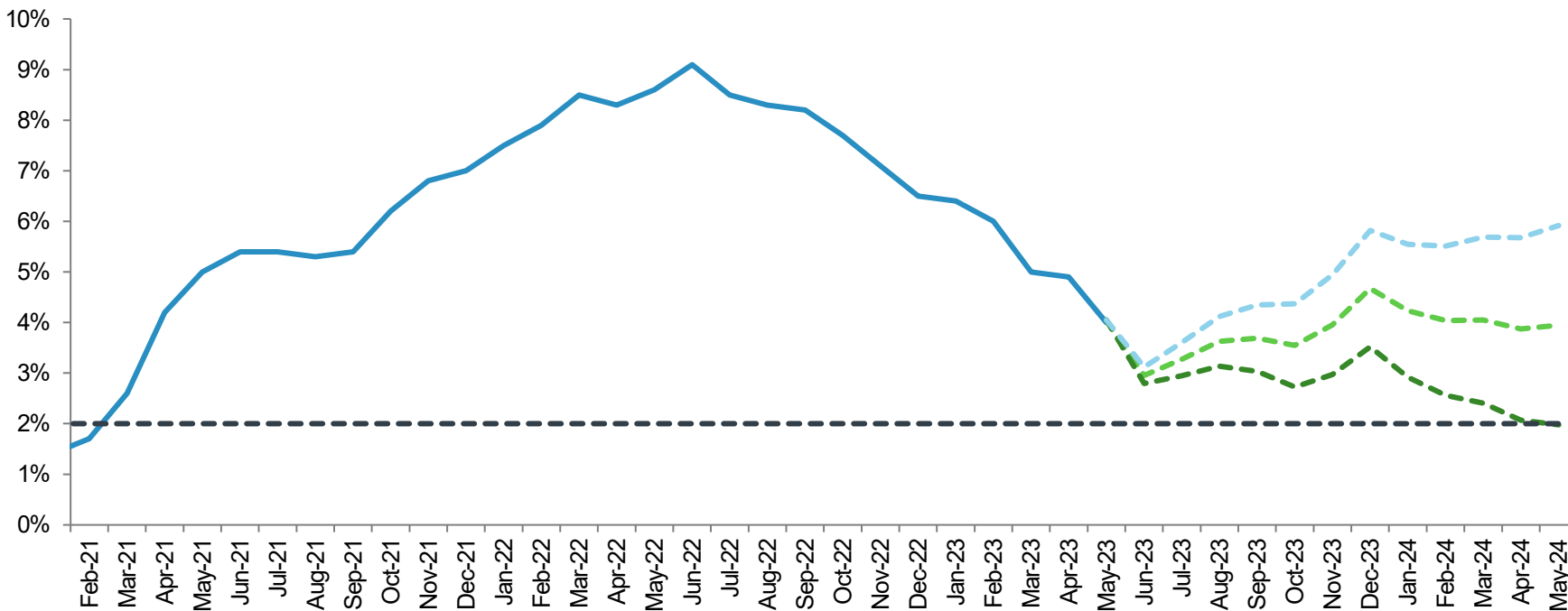
Inflation to Moderate but May Be Tough to Reach 2%

U.S. consumer inflation rates continued to decelerate after reaching a multi-decade peak above 9% last year. We believe this moderating trend may be coming to an end and that it will be difficult to return to the stable, low core-inflation environment of the past two decades. A big drop in energy prices helped reduce year-over-year total inflation, and additional energy weakness would help boost the chances of continued disinflation.

Inflation Estimates under Different Commodity Price Scenarios

— Headline CPI - - - AART Scenario 1: Baseline - - - AART Scenario 2: Commodities -30% - - - AART Scenario 3: Commodities +30%

Year-over-Year



CPI: Consumer Price Index. Commodity prices are represented by the Bloomberg Commodity Index (BCOM), and their hypothetical changes over the next year are assumed to occur equally throughout the year. Source: Bureau of Labor Statistics, Bloomberg, Haver Analytics, Fidelity Investments (AART), as of 6/30/23.

Technology Sector Led Equity Rally in Q2

Equity markets continued to rally during Q2, led by large U.S. technology companies as the perceived beneficiaries of an anticipated boom in artificial intelligence. Globally, developed-market equities outperformed emerging markets, and commodity prices dropped. Riskier fixed income sectors, such as leveraged loans, added to year-to-date gains, but more interest rate sensitive ones, such as government bonds, posted losses.

U.S. Equity Styles Total Return

	Q2 2023	YTD (%)
Growth	12.5%	28.1%
Large Caps	8.7%	16.9%
Small Caps	5.2%	8.1%
Mid Caps	4.8%	9.0%
Value	4.0%	5.0%

U.S. Equity Sectors Total Return

	Q2 2023	YTD (%)
Info Tech	17.2%	42.8%
Consumer Discretionary	14.6%	33.0%
Communication Services	13.1%	36.2%
Industrials	6.5%	10.2%
Financials	5.3%	-0.5%
Materials	3.3%	7.7%
Health Care	3.0%	-1.5%
Real Estate	1.8%	3.7%
Consumer Staples	0.5%	1.3%
Energy	-0.9%	-5.6%
Utilities	-2.5%	-5.7%

International Equities and Global Assets Total Return

	Q2 2023	YTD (%)
ACWI ex-USA	2.4%	9.5%
Japan	6.4%	13.0%
Canada	3.7%	8.2%
EAFE	3.0%	11.7%
Europe	2.7%	13.6%
EAFE Small Cap	0.6%	5.5%
Latin America	14.0%	18.5%
EMEA	2.7%	1.6%
Emerging Markets	0.9%	4.9%
EM Asia	-0.8%	4.0%
Gold	-2.5%	5.2%
Commodities	-2.6%	-7.8%

U.S. Equity Factors Total Return

	Q2 2023	YTD (%)
Momentum	8.5%	13.5%
Value	7.8%	13.2%
Quality	6.9%	15.0%
Low Volatility	5.9%	9.6%
Yield	5.4%	9.1%
Size	4.0%	7.7%

Fixed Income Total Return

	Q2 2023	YTD (%)
Leveraged Loan	3.1%	6.5%
EM Debt	2.2%	4.1%
High Yield	1.6%	5.4%
Municipal	-0.1%	2.7%
ABS	-0.1%	1.7%
Credit	-0.3%	3.1%
Agency	-0.4%	1.6%
CMBS	-0.6%	1.2%
MBS	-0.6%	1.9%
Aggregate	-0.8%	2.1%
Long Govt & Credit	-1.3%	4.4%
Treasuries	-1.4%	1.6%
TIPS	-1.4%	1.9%

EAFE: Europe, Australasia, and the Far East. EM: Emerging markets. EMEA: Europe, the Middle East, and Africa. For indexes and other important information used to represent above asset categories, see Appendix. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. Sector returns represented by S&P 500 sectors. Sector investing involves risk. Because of its narrow focus, sector investing may be more volatile than investing in more diversified baskets of securities. Source: Bloomberg Finance L.P.,

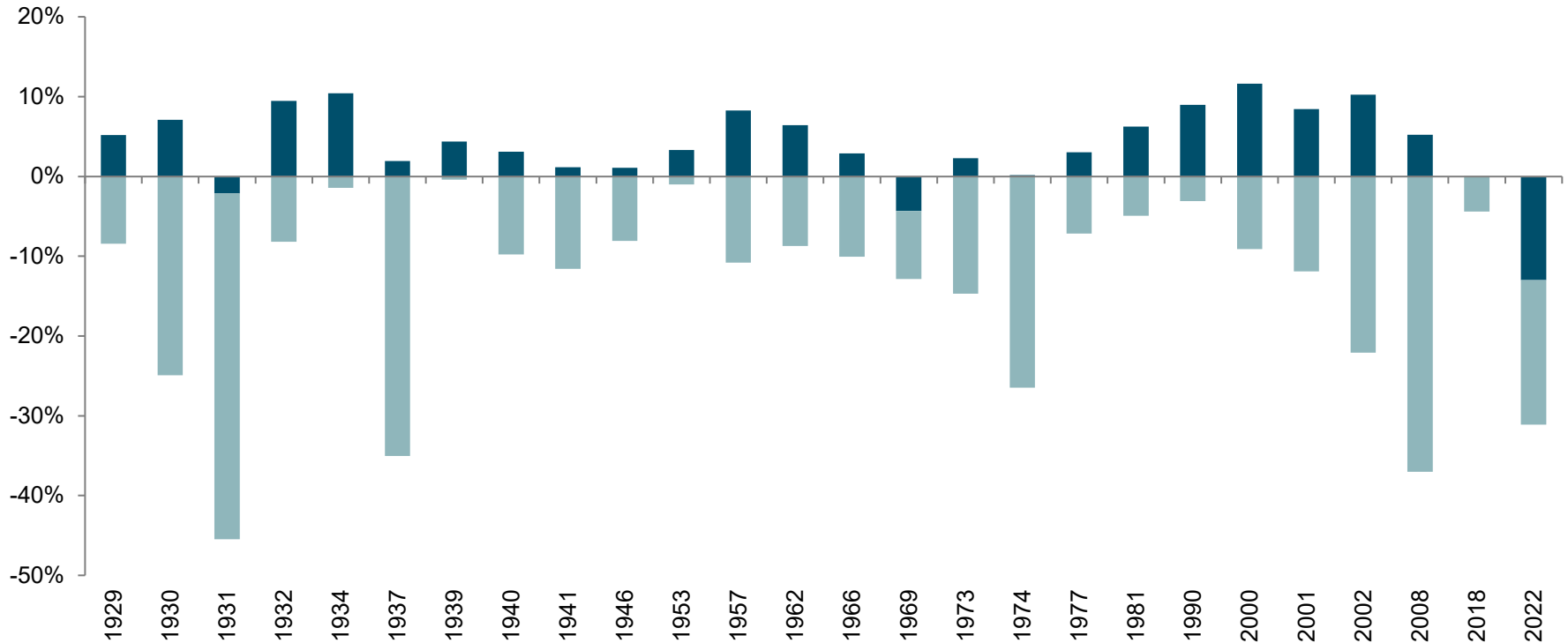
2022 Was an Unusually Bad Year for Bonds as Diversifiers

In 2022, broad measures of the two largest U.S. asset categories—large cap stocks and investment-grade bonds—both posted double-digit losses for the first time in modern history (since 1926). Historically, the bond market often registered a gain during the calendar years that equity prices declined, making 2022 the most challenging year in history for portfolio diversification.

Equity and Bond Returns in Years When Equities Fell (1926–2022)

■ Bonds ■ Stocks

Annualized Return



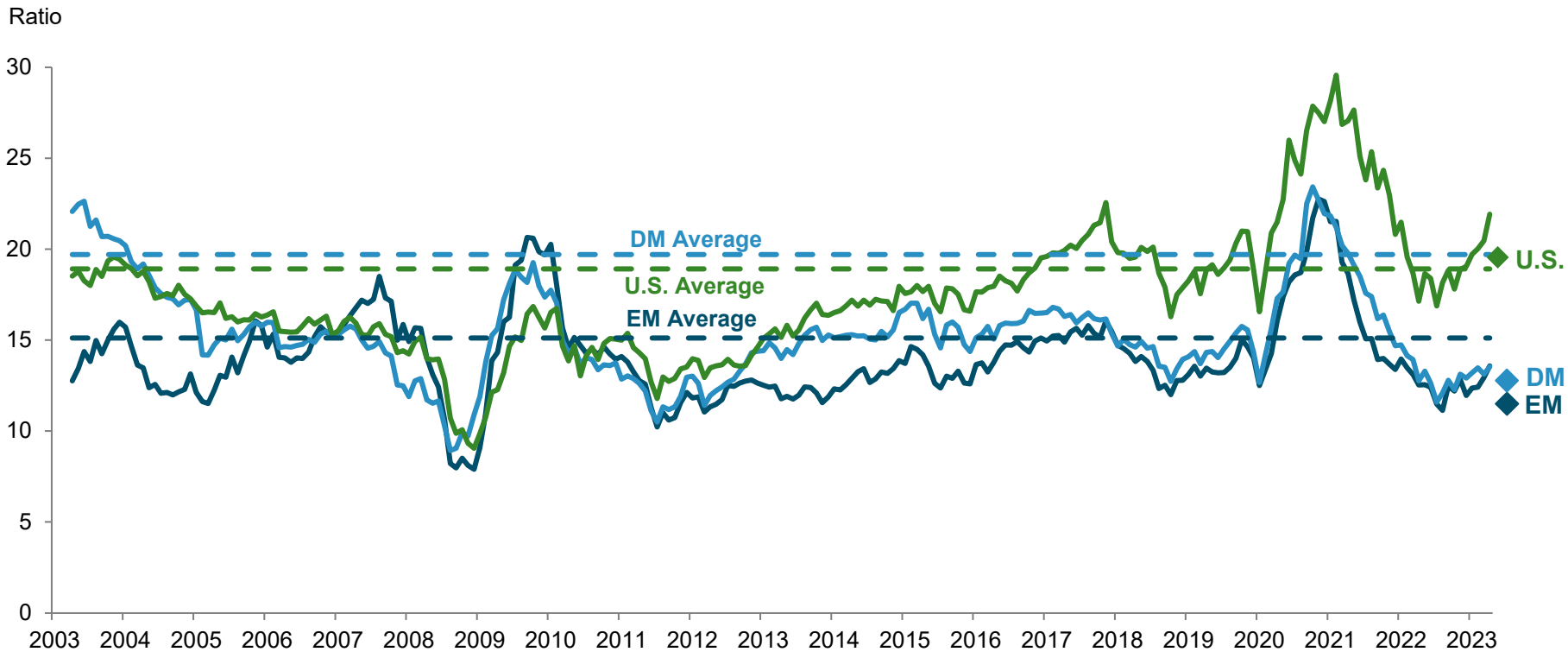
Stocks: S&P 500 index. Bonds: Bloomberg U.S. Aggregate Bond Index. Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. Fidelity Investments proprietary analysis of historical asset class performance is not indicative of future performance. Source: Fidelity Investments (AART), Haver Analytics, as of 12/31/22.

U.S. Equity Valuation Gap Rose Further

Valuations moved higher for all major regions as stock prices rallied during Q2. The trailing, one-year price-to-earnings (PE) ratios for non-U.S. stocks (developed markets and emerging markets) remained below their long-term averages, while the U.S. climbed to well above its longer-term average.

Global Stock Market P/E Ratios

— EM — DM — U.S. ◆ Forward P/E



DM: Non-U.S. developed markets. EM: Emerging markets. Chart includes trailing 12-month P/Es. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Price-to-earnings (P/E) ratio (or multiple): Stock price divided by earnings per share, which indicates how much investors are paying for a company's earnings power. Long-term average P/E includes data from 9/30/95 to 6/30/23. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: Factset,

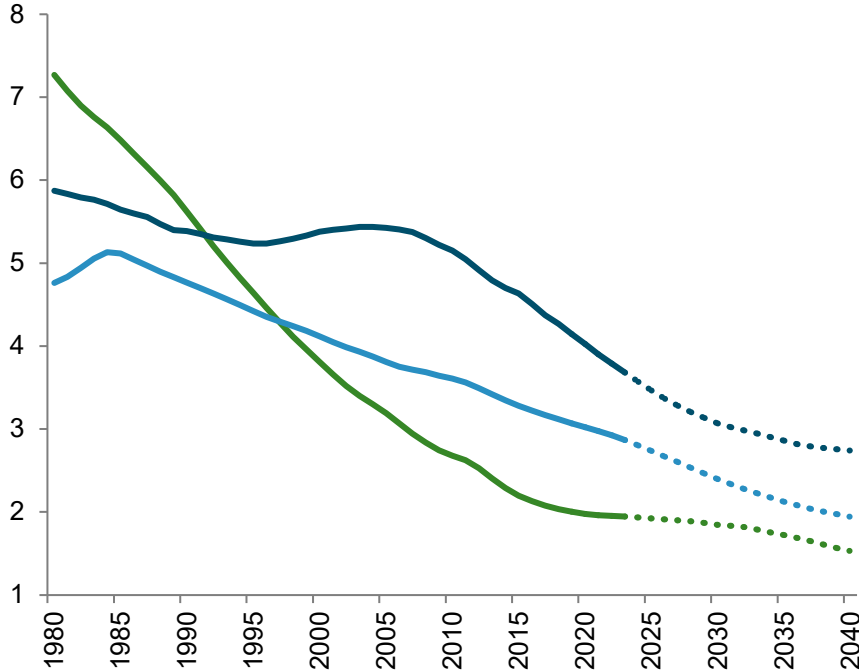
Unprecedented Debt Levels amid Aging Demographics

Most major economies face deteriorating demographic trends. With fewer new workers to support a growing number of retirees, greater fiscal pressures are ahead due to rising spending on pensions and health care. The dramatic worldwide rise in public and private debt in recent decades has been sustained by extraordinary monetary accommodation, leaving the outlook more uncertain amid higher interest and inflation rates.

Demographic Support Ratio

— Japan — Eurozone — U.S.

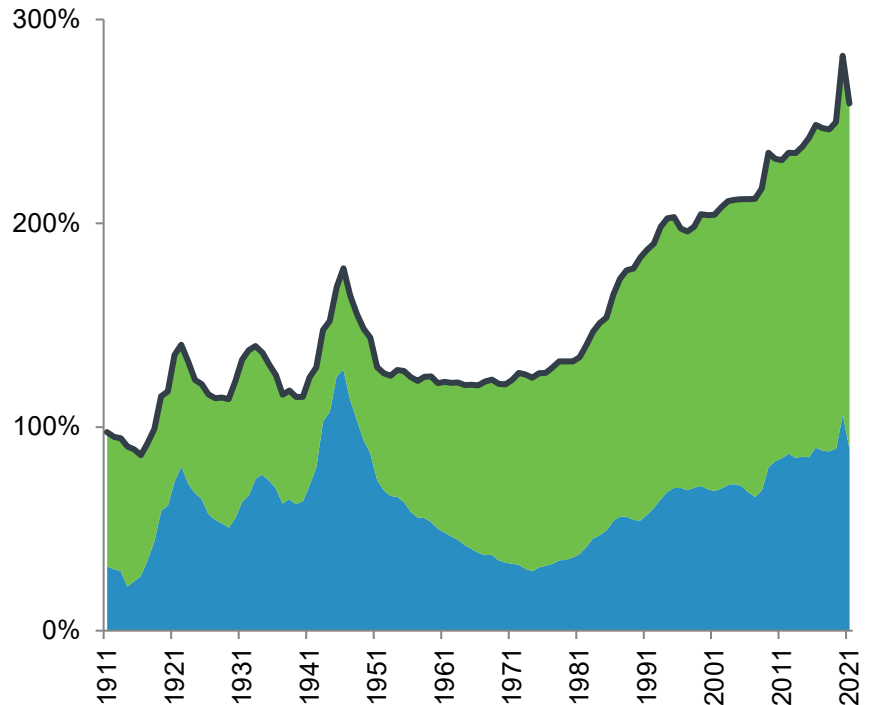
Workers/Retirees



Global Debt as a Share of GDP

■ Public ■ Private

Percentage



LEFT: The demographic support ratio is calculated as the number of workers (15–64 years old)/number of retirees (65 and older). Dotted line represents a projection. Source: United Nations, Haver Analytics, Fidelity Investments (AART), as of 7/31/22.

RIGHT: Source: Bank of International Settlements, International Monetary Fund, Maddison Project, Fidelity Investments (AART), and the Jordà-Schularick-Taylor Macrohistory Database, compiled by Oscar Jordà, Moritz Schularick, and Alan M. Taylor, as of 12/31/21.

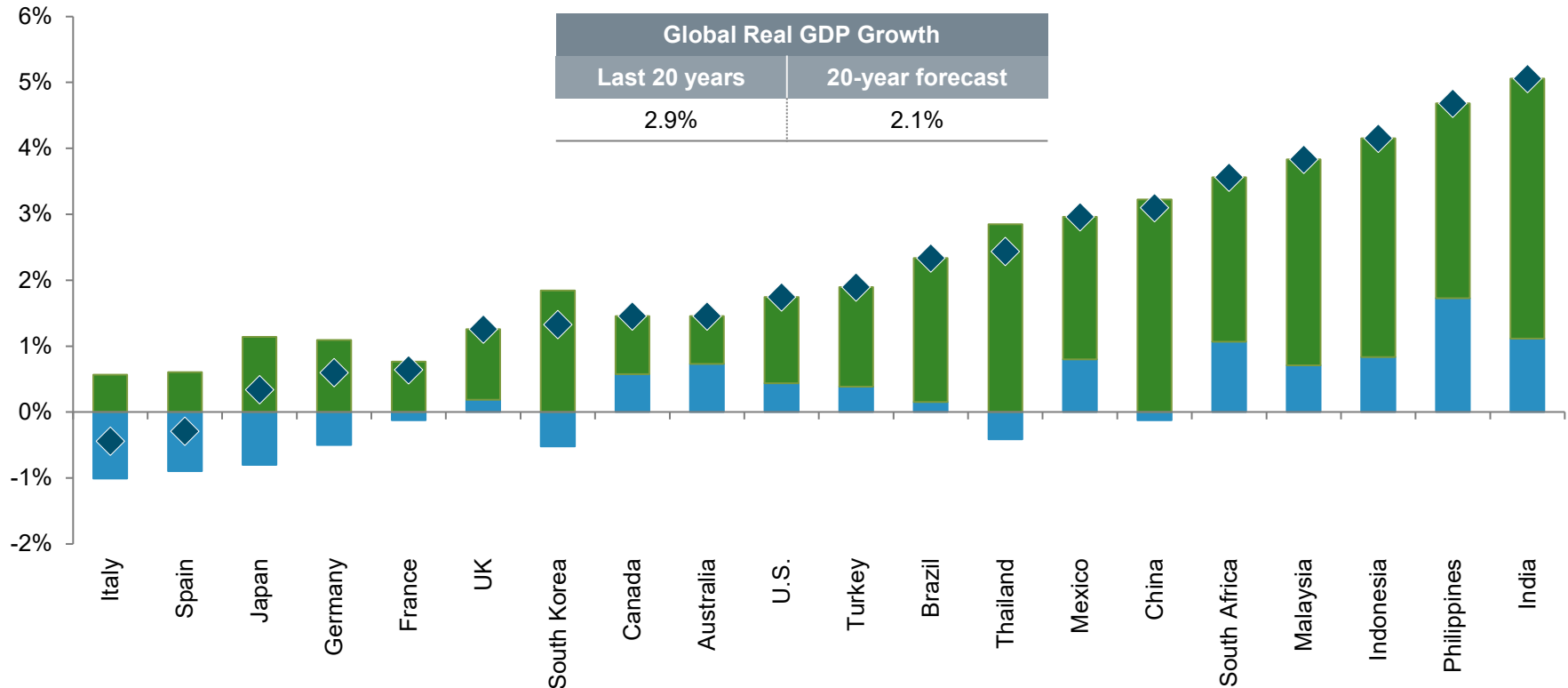
Secular Forecast: Slower Global Growth, EM to Lead

Slowing labor-force growth and aging demographics are expected to tamp down global economic growth over the next two decades (relative to the past 20 years). We expect GDP growth in emerging markets to outpace that of developed markets over the long term, providing a relatively favorable secular backdrop for emerging-market equity returns.

Real GDP 20-Year Growth Forecasts

■ Productivity Growth ■ Labor Force Growth ◆ Total Growth

Annualized Rate



Past performance is no guarantee of future results. EM: Emerging markets. GDP: Gross domestic product.

Performance Rotations Underscore Need for Diversification

The performance of different assets has fluctuated widely from year to year, and the magnitude of returns can vary significantly among asset classes in any given year—even among asset classes that are moving in the same direction. A portfolio allocation with a variety of global assets illustrates the potential benefits of diversification.

Periodic Table of Returns

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	Legend
32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	36%	38%	43%	16%	28%	Growth Stocks
26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	31%	20%	29%	-8%	17%	Large Cap Stocks
21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	26%	18%	27%	-11%	12%	Foreign-Developed Country Stocks
18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	26%	18%	26%	-13%	11%	60% Large Cap 40% IG Bonds
17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	26%	14%	25%	-14%	8%	Small Cap Stocks
11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	22%	8%	17%	-16%	5%	High-Yield Bonds
11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	22%	8%	15%	-18%	5%	REITs
9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	18%	6%	11%	-20%	5%	Value Stocks
8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	14%	3%	5%	-20%	5%	Emerging-Market Stocks
7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	9%	-3%	-2%	-24%	2%	Investment-Grade Bonds
4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	8%	-8%	-3%	-29%	-8%	Commodities

Past performance is no guarantee of future results. Diversification/asset allocation does not ensure a profit or guarantee against a loss. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Asset classes represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Stocks—MSCI Emerging Markets Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Growth Stocks—Russell 3000 Growth Index; High-Yield Bonds—ICE BofA U.S. High Yield Index; Investment-Grade Bonds—Bloomberg U.S. Aggregate Bond Index; Large Cap Stocks—S&P 500 index; Real Estate/REITs—FTSE NAREIT All Equity Total Return Index; Small Cap Stocks—Russell 2000 Index; Value Stocks—Russell 3000 Value Index. Source: Morningstar, Standard & Poor's, Haver Analytics, Fidelity Investments (AART), as of 6/30/23.



Appendix: Important Information

Information presented herein is for discussion and illustrative purposes only and is not a recommendation or an offer or a solicitation to buy or sell any securities. Views expressed are as 6/30/23, based on the information available at that time, and may change based on market and other conditions. Unless otherwise noted, the opinions provided are those of the authors and not necessarily those of Fidelity Investments or its affiliates. Fidelity does not assume any duty to update any of the information.

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Past performance and dividend rates are historical and do not guarantee future results.

Investing involves risk, including risk of loss.

Diversification does not ensure a profit or guarantee against a loss.

Index or benchmark performance presented in this document does not reflect the deduction of advisory fees, transaction charges, and other expenses, which would reduce performance.

Indexes are unmanaged. It is not possible to invest directly in an index.

Although bonds generally present less short-term risk and volatility than stocks, bonds do contain interest rate risk (as interest rates rise, bond prices usually fall, and vice versa) and the risk of default, or the risk that an issuer will be unable to make income or principal payments.

Additionally, bonds and short-term investments entail greater inflation risk—or the risk that the return of an investment will not keep up with increases in the prices of goods and services—than stocks. Increases in real interest rates can cause the price of inflation-protected debt securities to decrease.

Stock markets, especially non-U.S. markets, are volatile and can decline significantly in response to adverse issuer, political, regulatory, market, or economic developments. Foreign securities are subject to interest rate, currency exchange rate, economic, and political risks, all of which are magnified in emerging markets. The securities of smaller, less well-known companies can be more volatile than those of larger companies.

There is no guarantee that a factor-based investing strategy will enhance performance or reduce risk. Before investing, make sure you understand how a factor investment strategy may differ from a more traditional index-based or actively managed approach. Depending on market conditions, factor-based investments may underperform compared to investments that seek to track a market-capitalization-weighted index or investments that employ full active management.

Growth stocks can perform differently from the market as a whole and from other types of stocks and can be more volatile than other types of stocks. Value stocks can perform differently from other types of stocks and can continue to be undervalued by the market for long periods of time.

Lower-quality debt securities generally offer higher yields but also involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Any fixed income security sold or redeemed prior to maturity may be subject to loss.

Floating rate loans generally are subject to restrictions on resale, and sometimes trade infrequently in the secondary market; as a result, they may be more difficult to value, buy, or sell. A floating rate loan may not be fully collateralized and therefore may decline significantly in value.

The municipal market can be affected by adverse tax, legislative, or political changes, and by the financial condition of the issuers of municipal securities. Interest income generated by municipal bonds is generally expected to be exempt from federal income taxes and, if the bonds are held by an investor resident in the state of issuance, from state and local income taxes. Such interest income may be subject to federal and/or state alternative minimum taxes. Investing in municipal bonds for the purpose of generating tax-exempt income may not be appropriate for investors in all tax brackets. Generally, tax-exempt municipal securities are not appropriate holdings for tax-advantaged accounts, such as IRAs and 401(k)s.

The commodities industry can be significantly affected by commodity prices, world events, import controls, worldwide competition, government regulations, and economic conditions.

The gold industry can be significantly affected by international monetary and political developments, such as currency devaluations or revaluations, central bank movements, economic and social conditions within a country, trade imbalances, or trade or currency restrictions between countries.

Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry.

Leverage can magnify the impact that adverse issuer, political, regulatory, market, or economic developments have on a company. In the event of bankruptcy, a company's creditors take precedence over the company's stockholders.

Appendix: Important Information

Market Indexes

Index returns on slide 30 represented by: Growth—Russell 3000® Growth Index; Small Cap—Russell 2000® Index; Large Cap—S&P 500®; Mid Cap—Russell Midcap® Index; Value—Russell 3000® Value Index; ACWI ex USA—MSCI ACWI (All Country World Index) ex USA Index; Japan—MSCI Japan Index; EAFE Small Cap—MSCI EAFE Small Cap Index; EAFE—MSCI EAFE (Europe, Australasia, Far East) Index; Europe—MSCI Europe Index; Canada—MSCI Canada Index; EM Asia—MSCI Emerging Markets Asia Index; Emerging Markets (EM)—MSCI EM Index; EMEA (Europe, Middle East, and Africa)—MSCI EM EMEA Index; Latin America—MSCI EM Latin America Index; Gold—Gold Bullion Price, LBMA PM Fix; Commodities—Bloomberg Commodity Index; High Yield—ICE BofA U.S. High Yield Index; Leveraged Loan—S&P/LSTA Leveraged Loan Index; TIPS (Treasury Inflation-Protected Securities)—Bloomberg U.S. TIPS Index; EM Debt (Emerging-Market Debt)—JP Morgan EMBI Global Diversified Composite Index; CMBS (Commercial Mortgage-Backed Securities)—Bloomberg Investment-Grade CMBS Index; Credit—Bloomberg U.S. Credit Bond Index; Municipal—Bloomberg Municipal Bond Index; Long Government & Credit (Investment-Grade)—Bloomberg Long Government & Credit Index; ABS (Asset-Backed Securities)—Bloomberg ABS Index; Aggregate—Bloomberg U.S. Aggregate Bond Index; Agency—Bloomberg U.S. Agency Index; Treasuries—Bloomberg U.S. Treasury Index; MBS (Mortgage-Backed Securities)—Bloomberg MBS Index; Momentum—Fidelity U.S. Momentum Factor Index TR; Low Volatility—Fidelity U.S. Low Volatility Factor Index; Quality—Fidelity U.S. Quality Factor Index; Value—Fidelity U.S. Value Factor Index; Size—Fidelity Small-Mid Factor Index; Yield—Fidelity High Dividend Index.

Bloomberg U.S. Aggregate Bond is a broad-based, market value-weighted benchmark that measures the performance of the investment-grade, U.S. dollar-denominated, fixed-rate taxable bond market. **Bloomberg U.S. Credit Bond Index** is a market value-weighted index of investment-grade corporate fixed-rate debt issues with maturities of one year or more.

Bloomberg U.S. Treasury Index is a market value-weighted index of public obligations of the U.S. Treasury with maturities of one year or more. **Bloomberg U.S. Treasury Inflation-Protected Securities (TIPS) Index (Series-L)** is a market value-weighted index that measures the performance of inflation-protected securities issued by the US Treasury. **Bloomberg Long U.S. Government Credit Index** includes all publicly issued U.S. government and corporate securities that have \$250 million or more of outstanding face value. **Bloomberg U.S. Agency Bond Index** is a market value-weighted index of U.S. Agency government and investment-grade corporate fixed-rate debt issues. **Bloomberg Municipal Bond Index** is a market value-weighted index of investment-grade municipal bonds with maturities of one year or more.

Bloomberg U.S. MBS Index is a market value-weighted index of fixed-rate securities that represent interests in pools of mortgage loans, including balloon mortgages, with original terms of 15 and 30 years that are issued by the Government National Mortgage Association (GNMA), the Federal National Mortgage Association (FNMA), and the Federal Home Loan Mortgage Corp. (FHLMC).

investment-grade quality (Baa3/BBB-/BBB- or above) using Moody's, S&P, and Fitch, respectively, with maturities of at least one year. **Bloomberg ABS Index** is a market value-weighted index that covers fixed-rate asset-backed securities with average lives greater than or equal to one year and that are part of a public deal; the index covers the following collateral types: credit cards, autos, home equity loans, stranded-cost utility (rate-reduction bonds), and manufactured housing.

ICE BofA U.S. High Yield Index is a market capitalization-weighted index of U.S. dollar-denominated, below-investment-grade corporate debt publicly issued in the U.S. market.

JPM® EMBI Global Diversified Composite Index comprises of USD denominated Brady bonds, Eurobonds and Traded loans issued by sovereign and quasi sovereign entities. The Diversified version limits the weights of the index countries by only including a specified portion of those countries' eligible current face amounts of debt outstanding. This provides a more even distribution of weights within the countries in the index.

Standard & Poor's/Loan Syndications and Trading Association (S&P/LSTA)

Leveraged Performing Loan Index is a market value-weighted index designed to represent the performance of U.S. dollar-denominated institutional leveraged performing loan portfolios (excluding loans in payment default) using current market weightings, spreads, and interest payments.

Bloomberg Commodity Index measures the performance of the commodities market. It consists of exchange traded futures contracts on physical commodities that are weighted to account for the economic significance and market liquidity of each commodity.

Russell 3000® Index is a market capitalization-weighted index designed to measure the performance of the 3,000 largest companies in the U.S. equity market. **Russell 3000 Growth Index** is a market capitalization-weighted index designed to measure the performance of the broad growth segment of the U.S. equity market. It includes those Russell 3000 Index companies with higher price-to-book ratios and higher forecasted growth rates. **Russell 3000 Value Index** is a market capitalization-weighted index designed to measure the performance of the small to mid cap value segment of the U.S. equity market. It includes those Russell 3000 Index companies with lower price-to-book ratios and lower forecasted growth rates. **Russell Midcap® Index** is a market capitalization-weighted index designed to measure the performance of the mid cap segment of the U.S. equity market. It contains approximately 800 of the smallest securities in the Russell 1000 Index.

Russell 1000® Index is a market capitalization-weighted index designed to measure the performance of the large cap segment of the U.S. equity market. **Russell 1000 Growth Index** is a market capitalization-weighted index designed to measure the performance of the large cap growth segment of the U.S. equity market. It includes those Russell 1000 Index companies with higher price-to-book ratios and higher forecasted growth rates. **Russell 1000 Value Index** is a market capitalization-weighted index designed to measure the performance of the large cap value segment of the U.S. equity market. It includes those Russell 1000 Index companies with lower price-to-book ratios and lower expected growth rates.

Russell 2000® Index is a market capitalization-weighted index designed to measure the performance of the small cap segment of the U.S. equity market. It includes approximately 2,000 of the smallest securities in the Russell 3000 Index.

Appendix: Important Information

Market Indexes (continued)

S&P 500[®] is a market capitalization-weighted index of 500 common stocks chosen for market size, liquidity, and industry group representation to represent U.S. equity performance. S&P 500 is a registered service mark of The McGraw-Hill Companies, Inc., and has been licensed for use by Fidelity Distributors Corporation and its affiliates.

Sectors and Industries are defined by Global Industry Classification Standards (GICS[®]), except where noted otherwise. **S&P 500 sectors:** Consumer Discretionary—companies that tend to be the most sensitive to economic cycles. Consumer Staples—companies whose businesses are less sensitive to economic cycles. Energy—companies whose businesses are dominated by either of the following activities: the construction or provision of oil rigs, drilling equipment, and other energy-related services and equipment; or the exploration, production, marketing, refining, and/or transportation of oil and gas products, coal, and consumable fuels. Financials—companies involved in activities such as banking, consumer finance, investment banking and brokerage, asset management, insurance and investments, and mortgage real estate investment trusts (REITs). Health Care—companies in two main industry groups: health care equipment suppliers, manufacturers, and providers of health care services; and companies involved in research, development, production, and marketing of pharmaceuticals and biotechnology products. Industrials—companies that manufacture and distribute capital goods, provide commercial services and supplies, or provide transportation services. Information Technology—companies in technology software and services and technology hardware and equipment. Materials—companies that engage in a wide range of commodity-related manufacturing. Real Estate—companies in real estate development, operations, and related services, as well as equity REITs. Communication Services—companies that facilitate communication and offer related content through various media. Utilities—companies considered electric, gas, or water utilities, or that operate as independent producers and/or distributors of power.

Dow Jones U.S. Total Stock Market IndexSM is a full market capitalization-weighted index of all equity securities of U.S.-headquartered companies with readily available price data.

MSCI All Country World Index (ACWI) is a market capitalization-weighted index designed to measure investable equity market performance for global investors of developed and emerging markets. **MSCI ACWI (All Country World Index) ex USA Index** is a market capitalization-weighted index designed to measure investable equity market performance for global investors of large and mid cap stocks in developed and emerging markets, excluding the United States.

MSCI Europe, Australasia, Far East Index (EAFE) is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in developed markets, excluding the U.S. and Canada. **MSCI EAFE Small Cap Index** is a market capitalization-weighted index designed to measure the investable equity market performance of small cap stocks for global investors in developed markets, excluding the U.S. and Canada.

MSCI Europe Index is a market capitalization-weighted index that is designed to measure the investable equity market performance for global investors of the developed markets in Europe.

MSCI Canada Index is a market capitalization-weighted index designed to measure equity market performance in Canada. **MSCI Japan Index** is a market capitalization-weighted index designed to measure equity market performance in Japan.

MSCI Emerging Markets (EM) Index is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in emerging markets.

MSCI EM Asia Index is a market capitalization-weighted index designed to measure equity market performance of EM countries of Asia. **MSCI EM Europe, Middle East, and Africa (EMEA) Index** is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in the EM countries of Europe, the Middle East, and Africa. **MSCI EM Latin America Index** is a market capitalization-weighted index designed to measure the investable equity market performance for global investors in Latin America.

FTSE[®] National Association of Real Estate Investment Trusts (NAREIT[®]) All REITs Index is a market capitalization-weighted index that is designed to measure the performance of all tax-qualified REITs listed on the NYSE, the American Stock Exchange, or the NASDAQ National Market List. **FTSE[®] NAREIT[®] Equity REIT Index** is an unmanaged market value-weighted index based on the last closing price of the month for tax-qualified REITs listed on the New York Stock Exchange (NYSE). **FTSE NAREIT All Equity Total Return Index** is a market capitalization-weighted index that is designed to measure the performance of tax-qualified real estate investment trusts (REITs) listed on the New York Stock Exchange, the NYSE MKT LLC, or the NASDAQ National Market List.

Fidelity U.S. Low Volatility Factor Index is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies with lower volatility than the broader market.

Fidelity U.S. Value Factor Index is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies that have attractive valuations. **Fidelity U.S.**

Quality Factor Index is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies with a higher quality profile than the broader market. **Fidelity Small-Mid Factor Index** is designed to reflect the performance of stocks of small and mid-capitalization U.S. companies with attractive valuations, high quality profiles, positive momentum signals, and lower volatility than the broader market. **Fidelity U.S. Momentum Factor Index** is designed to reflect the performance of stocks of large and mid-capitalization U.S. companies that exhibit positive momentum signals. **Fidelity High Dividend Index** is designed to reflect the performance of stocks of large and mid-capitalization dividend-paying companies that are expected to continue to pay and grow their dividends.

The London Bullion Market Association (LBMA) publishes the international benchmark price of gold in USD, twice daily. The LBMA gold price auction takes place by ICE Benchmark Administration (IBA) at 10:30 a.m. and 3:00 p.m.

Consumer Price Index (CPI) is an inflationary indicator published monthly by the U.S. Bureau of Labor Statistics that measures the change in the cost of a fixed basket of products and services, including housing, electricity, food, and transportation.

Personal consumption expenditure (PCE) indexes, published by the U.S. Bureau of Economic Analysis, are a primary measure of actual and imputed household expenditures on goods (durable and non-durable) and services. Core PCE, the Federal Reserve's preferred measure of consumer price inflation, excludes volatile food and energy prices. Definitions, data, and related resources regarding CPI and PCE variants are available at <https://www.atlantafed.org/research/inflationproject/underlying-inflation-dashboard>.

Appendix: Important Information

Market Indexes (continued)

Bloomberg Commodity Total Return Sub-indexes are composed of futures contracts and reflect the returns on fully collateralized commodity investments in metals, agriculture, energy, and precious metals. The sub-indexes are the Bloomberg Industrial Metals Subindex Total Return Index, Bloomberg Agriculture Subindex Total Return Index, Bloomberg Energy Subindex Total Return Index, and the Bloomberg Precious Metals Subindex Total Return Index.

The Chartered Financial Analyst® (CFA®) designation is offered by CFA Institute. To obtain the CFA charter, candidates must pass three exams demonstrating their competence, integrity, and extensive knowledge in accounting, ethical and professional standards, economics, portfolio management, and security analysis, and must also have at least 4,000 hours of qualifying work experience completed in a minimum of 36 months, among other requirements. CFA® is a trademark owned by CFA Institute.

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