Market Analysis / 1st Quarter 2023

INDEPENDENT WEALTH MANAGEMENT

Slowing Inflation Raised Hopes at End of a Jittery Year

After an abrupt rise in 2022, bond yields held steady during Q4 amid signs that rapid inflationary pressures were coming off the boil. The Federal Reserve and many other central banks further tightened monetary policy, and the U.S. and global economies faced rising recession risks. We believe the evolution of these trends defines the 2023 outlook, and valuation opportunities may appear within a still-volatile backdrop.

	MACRO	ASSET MARKETS
Q4 2022	• Slowing global growth continued amid signs of decelerating inflationary pressures.	• Most asset prices rose as interest rates stabilized and the dollar eased.
OUTLOOK	• The maturing global business cycle is confronting elevated recession pressures. • The U.S. is in the late-cycle expansion phase, but a descent into a mild recession appears likely in 2023. • China's lifting of COVID restrictions implies a cyclical uptick in 2023, although structural headwinds remain formidable. • The rate of inflation is set to materially slow, but persistent pressures may keep it more elevated than expected. • The Fed is closer to the end than the beginning of its hiking cycle, but global monetary tightening is dampening liquidity and adding to growth risks.	• The markets appear overly sanguine about how quickly and painlessly the Fed can pivot to easing monetary policy. • Slower liquidity growth, persistent inflation risk, slowing growth momentum, and greater monetary policy uncertainty raise the odds that market volatility will remain elevated. • Some of these challenging dynamics have been priced into markets in the form of much more attractive valuations, particularly in fixed income. • End-of-cycle positioning implies smaller cyclical tilts and readiness for opportunities; high levels of long-term portfolio diversification remain warranted.

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

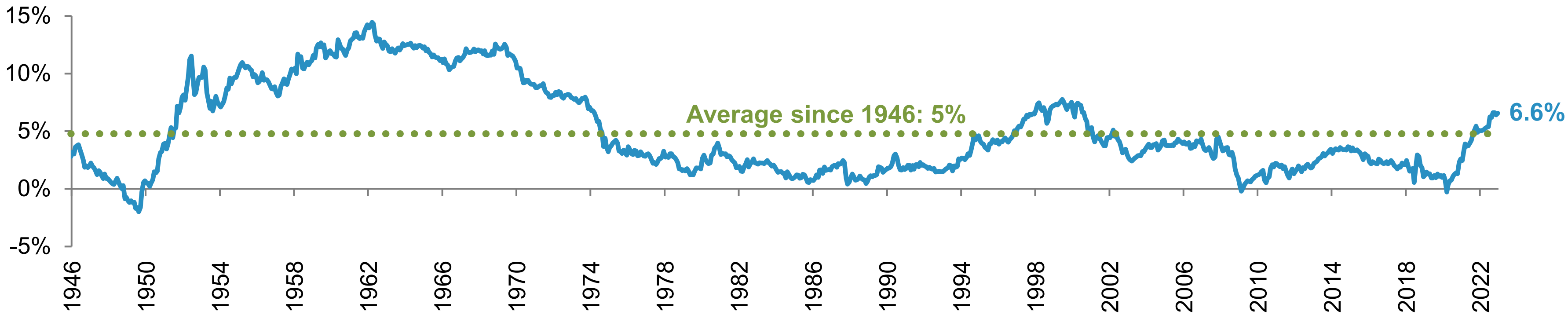
Year of Widespread Declines Ended with a Q4 Upswing

Asset prices staged a broad-based recovery in Q4, with non-U.S. stocks leading the gains amid a weaker dollar. Stable Treasury yields and tighter spreads boosted most fixed income sectors into positive territory. Nevertheless, almost all asset categories finished 2022 with double-digit percentage price declines, and commodities were one of the only bright spots during a year marked by the highest inflation in four decades.

	Q4 2022	2022		Q4 2022	2022
Commodities	2.2%	16.1%	U.S. Mid Cap Stocks	9.2%	-17.3%
Gold	9.8%	-0.3%	U.S. Large Cap Stocks	7.6%	-18.1%
High-Yield Bonds	4.0%	-11.2%	Emerging-Market Stocks	9.7%	-20.1%
Investment-Grade Bonds	1.9%	-13.0%	U.S. Small Cap Stocks	6.2%	-20.4%
Non-U.S. Developed-Country Stocks	17.3%	-14.5%	Non-U.S. Small Cap Stocks	15.8%	-21.4%
U.S. Corporate Bonds	3.4%	-15.3%	Real Estate Stocks	5.2%	-24.4%
Emerging-Market Bonds	7.4%	-16.5%	Long Government & Credit Bonds	2.6%	-27.1%

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

Annualized Return Difference

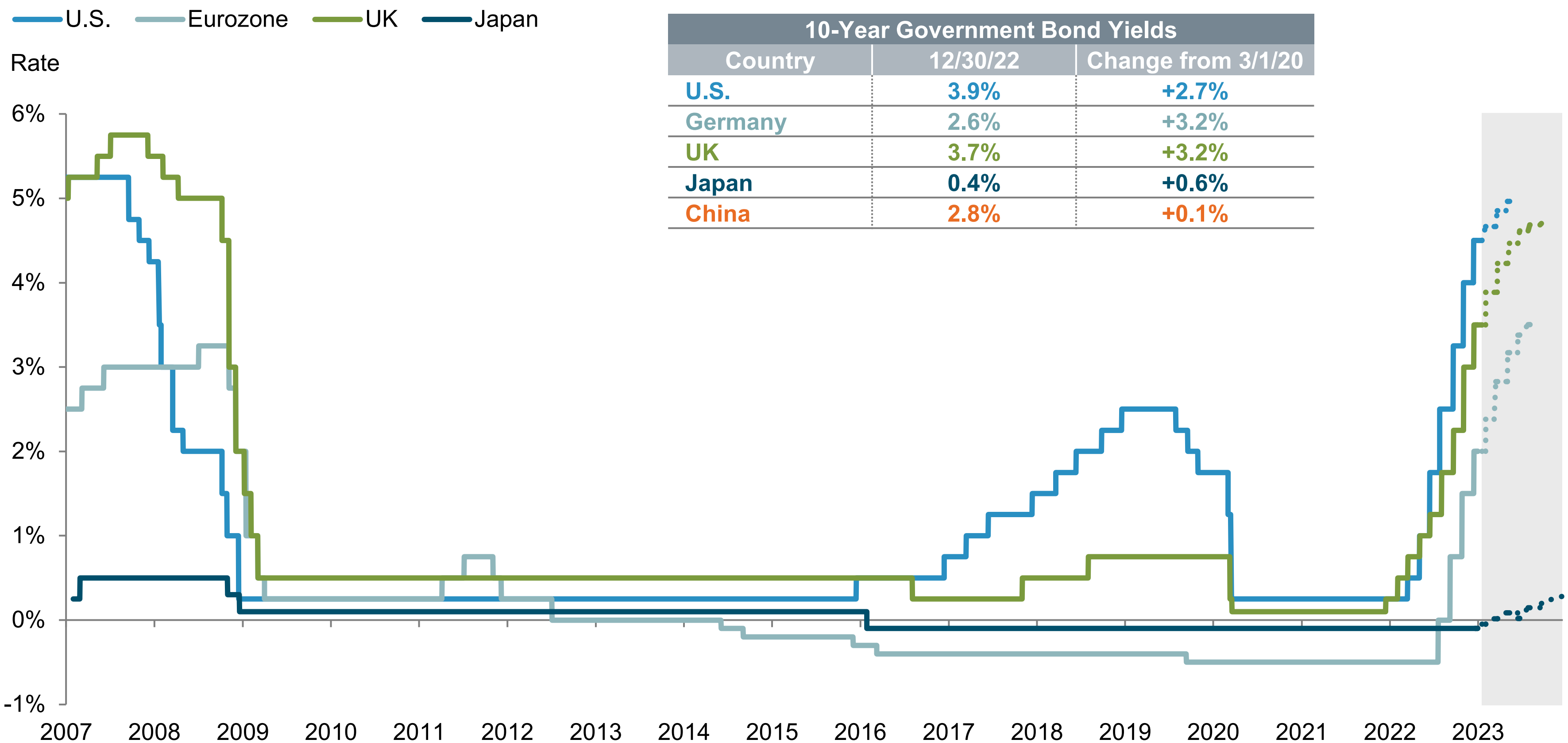


Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. IG: Investment grade. Assets represented by: Commodities—Bloomberg Commodity Index; Emerging-Market Bonds—JP Morgan EMBI Global Index; Emerging-Market Stocks—MSCI EM Index; Gold—Gold Bullion, LBMA PM Fix; High-Yield Bonds—ICE BofA High Yield Bond Index; Investment-Grade Bonds—Bloomberg U.S. Aggregate Bond Index; Non-U.S. Developed-Country Stocks—MSCI EAFE Index; Non-U.S. Small Cap Stocks—MSCI EAFE Small Cap Index; Real Estate Stocks—FTSE NAREIT Equity Index; U.S. Corporate Bonds—Bloomberg U.S. Credit Index; U.S. Large Cap Stocks—S&P 500®; U.S. Mid Cap Stocks—Russell Midcap® Index; U.S. Small Cap Stocks—Russell 2000® Index; Long Government & Credit Bonds—Bloomberg Long Government & Credit Index.
Source: Bloomberg Finance L.P., Haver Analytics, Fidelity Investments Asset Allocation Research Team (AART), as of 12/31/22.

Global Rate Hikes Marked Abrupt Shift from Zero-Rate Era

Aggressive monetary tightening by the world's major central banks continued during Q4, bringing global short-term interest rates to their highest levels in more than a decade. Japan remained an outlier by keeping its policy rate negative, but it raised the target for 10-year bond yields in a move that appeared to solidify the global trend away from the zero-rate era. Most investors expect the pace of rate hikes to slow in 2023.

Global Short-Term Policy Rates



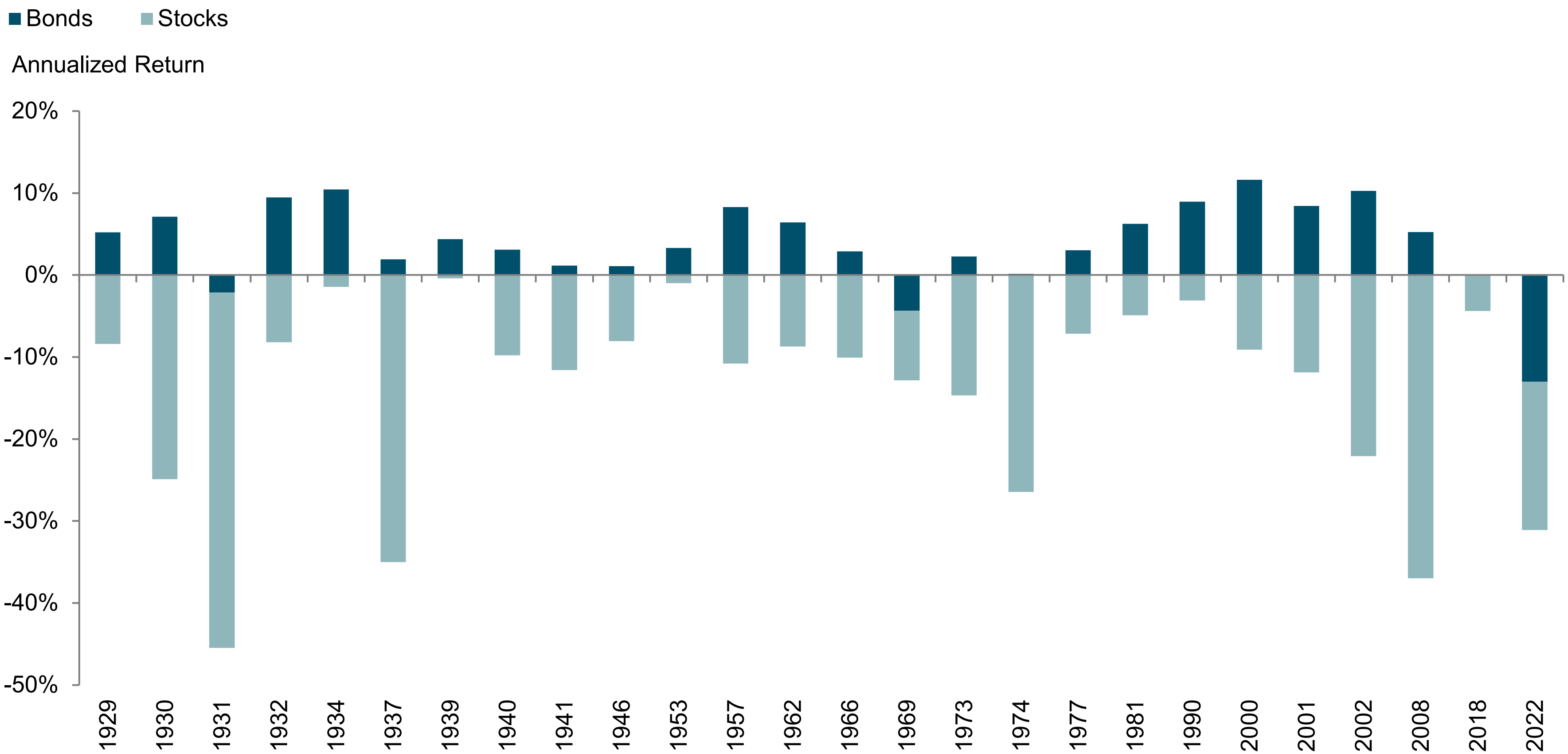
10-Year Government Bond Yields		
Country	12/30/22	Change from 3/1/20
U.S.	3.9%	+2.7%
Germany	2.6%	+3.2%
UK	3.7%	+3.2%
Japan	0.4%	+0.6%
China	2.8%	+0.1%

Dotted line 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 12/31/22.

Historically 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)

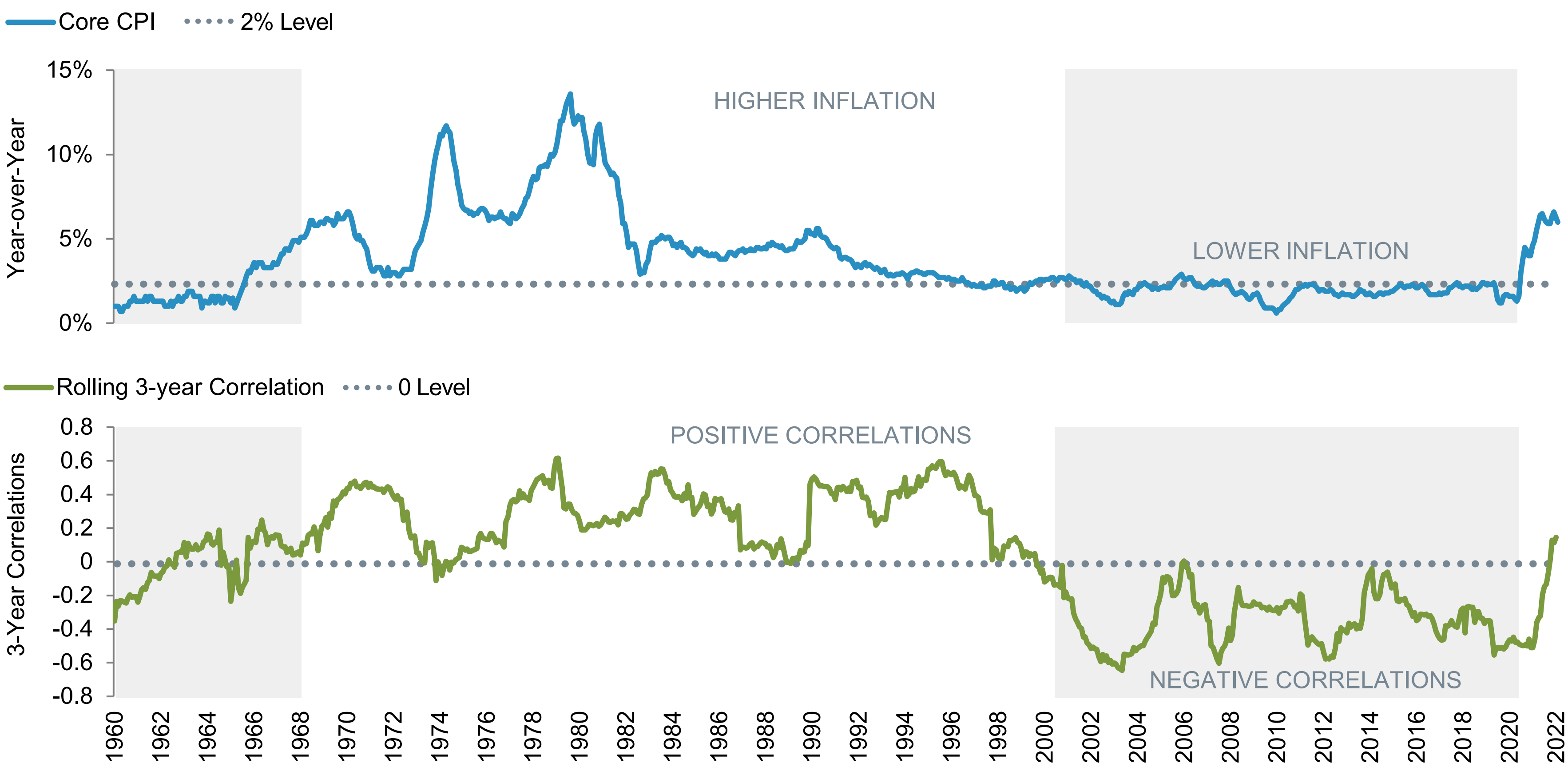


Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss. Fidelity Investments proprietary analysis of historical asset class performance is not indicative of future performance. Source: Fidelity Investments (AART), Haver Analytics, as of 12/31/22.

High Inflation Drives Positive Stock-Bond Correlations

Over the past 20 years, subdued U.S. core inflation averaged about 2% and facilitated an environment of negative correlations between U.S. stocks and Treasury bonds, leading to strong portfolio diversification. The 2022 backdrop was more akin to prior periods of high inflation, which caused rising interest rates, positive stock-bond correlations, and the lack of diversification between stocks and bonds.

Stock and Treasury Bond Correlations vs. Inflation



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: Bureau of Labor Statistics, Haver Analytics, Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/22.

Commodity Prices: Cooling Demand, Supply Uncertainty

Amid fading growth momentum, commodity prices continued to drop in Q4 after reaching multiyear highs at midyear. The energy and agricultural sectors experienced the biggest 2022 price gains, as Ukraine-war disruptions presented supply challenges. Europe remains vulnerable to shortages due to its dependency on Russian natural gas, but warm weather and other factors pushed gas prices far below recent highs.

Commodity Index Returns

	Commodity Prices		Russia Share of Global Exports
	U.S.	Europe	
Nat. Gas	$5	$36	25%
Oil	$85	$91	11%

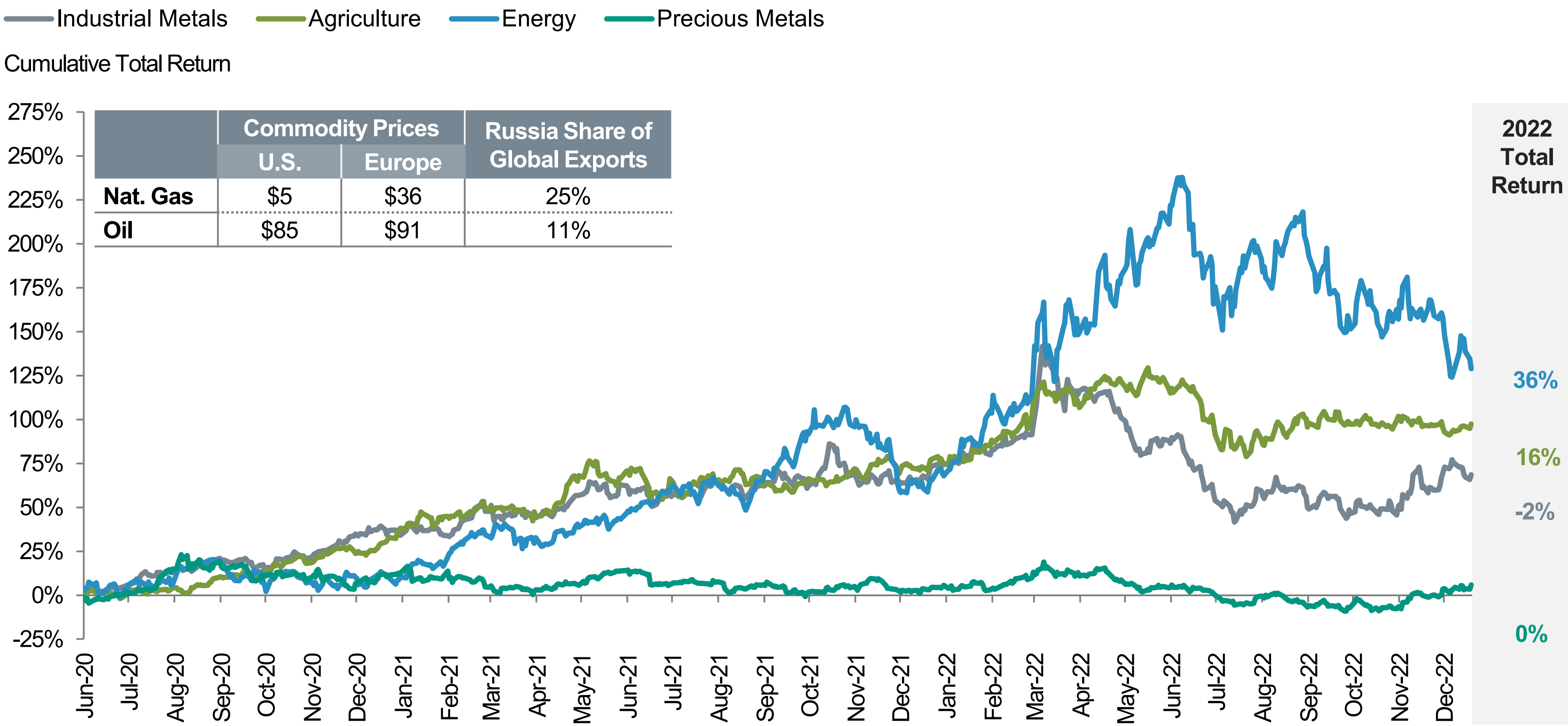
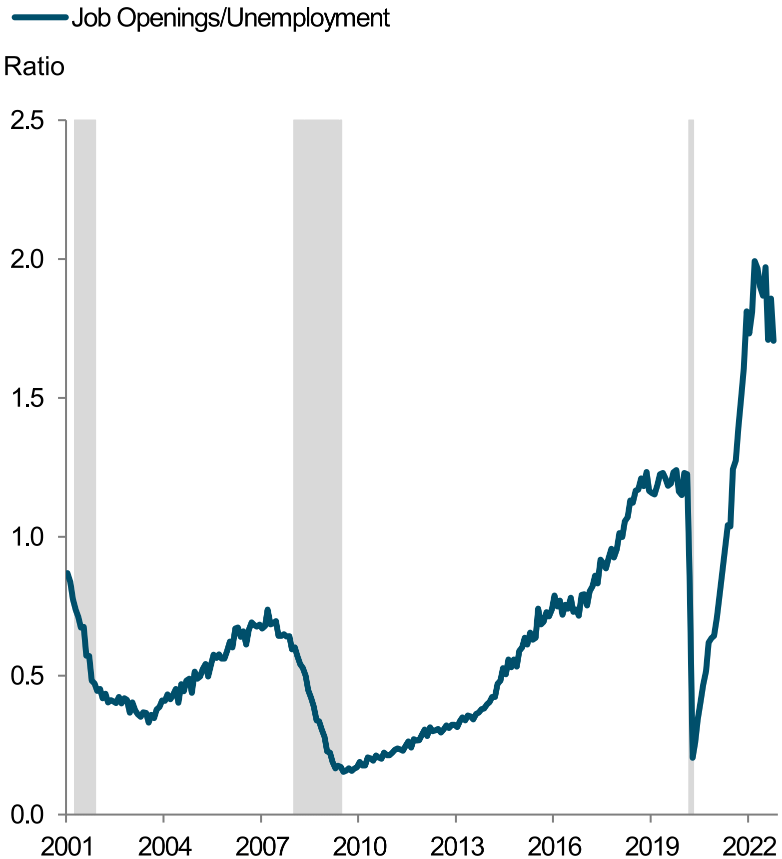


TABLE: Natural gas prices measured as $/mmbtu. Oil prices measured as $/bbl. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Returns represented by Bloomberg Commodity Total Return Sub-indexes (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.) Source: World Bank, JP Morgan, Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/22.

Labor-Market Conditions Easing but Still Tight

Labor markets showed signs of cooling as 2022 drew to a close. Job openings dropped from all-time highs, although there remained many more unfilled openings than unemployed workers. Several long-term trends may keep labor conditions tighter than usual, including demographic factors, such as slower working-age population growth and aging demographics that lead to lower labor-force participation rates.

U.S. Unemployment and Job Openings



Secular Influences on U.S. Labor Markets

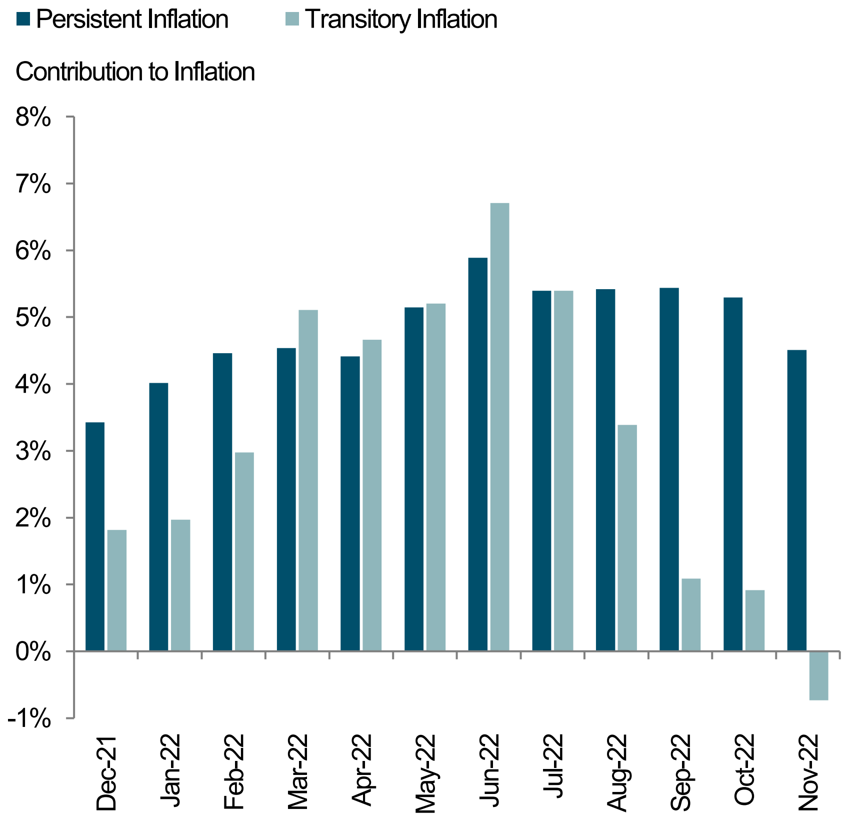
Secular Factors	Long-Term Trends
RESTRAINED SUPPLY	
Demographics	• Aging population: Lower participation rate • Slower working-age population growth
Immigration	• Slower pace of inbound migrant workers
Income Gains for Lower Tiers	• Higher wages lead to reduced hours, fewer multiple job workers
Health Headwinds	• Long COVID • Rising disabilities, deaths of despair[1]
INCREASED DEMAND	
Onshoring/ Reshoring	• Increased demand for domestic manufacturing workers
Fiscal Policy	• Multiyear spending on infrastructure, manufacturing, clean energy, etc.
Employer Hoarding	• Higher threshold for layoffs?

LEFT: Shaded areas denote U.S. Recession. Source: Bureau of Labor Statistics, NBER, Haver Analytics, Fidelity Investments (AART), as of 12/31/22. **RIGHT:** 1) Deaths of despair refers to deaths related to substance abuse or suicides. Source: Fidelity Investments (AART), as of 12/31/22.

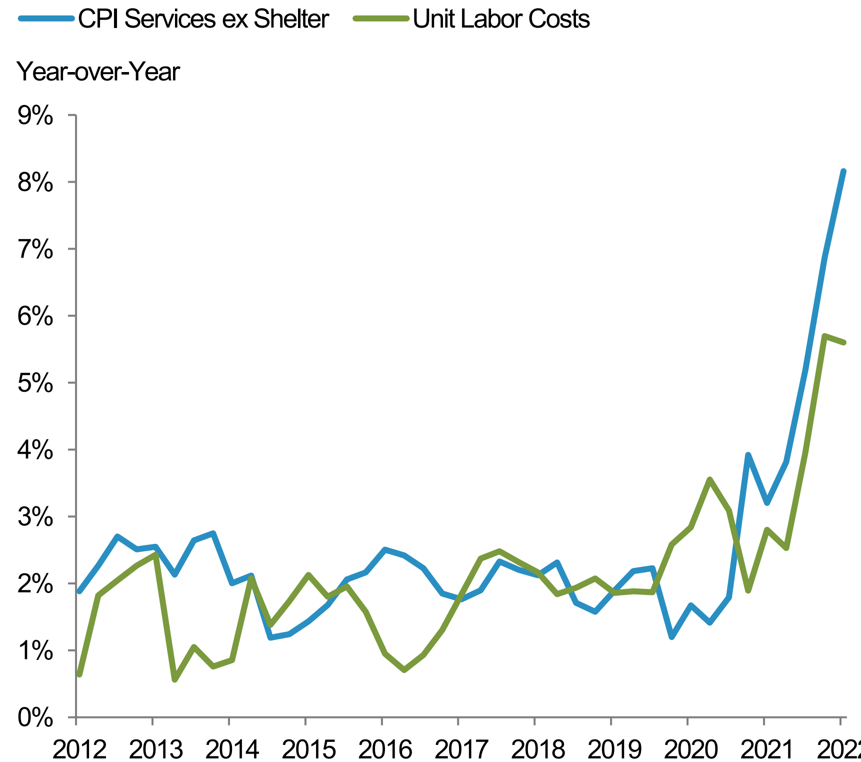
Inflation Drivers Peaked but Remain Stubbornly Persistent

Many inflation pressures that tend to be less persistent, such as supply-chain disruptions, slowed significantly in recent months. However, categories where price increases tend to be more persistent and more reliant on demand-side factors account for the bulk of current inflation drivers. If tight labor markets continue to boost unit labor costs, inflation in services sectors may linger for longer than investors expect.

Persistent vs. Transitory Inflation Contribution



Services Inflation vs. Unit Labor Costs

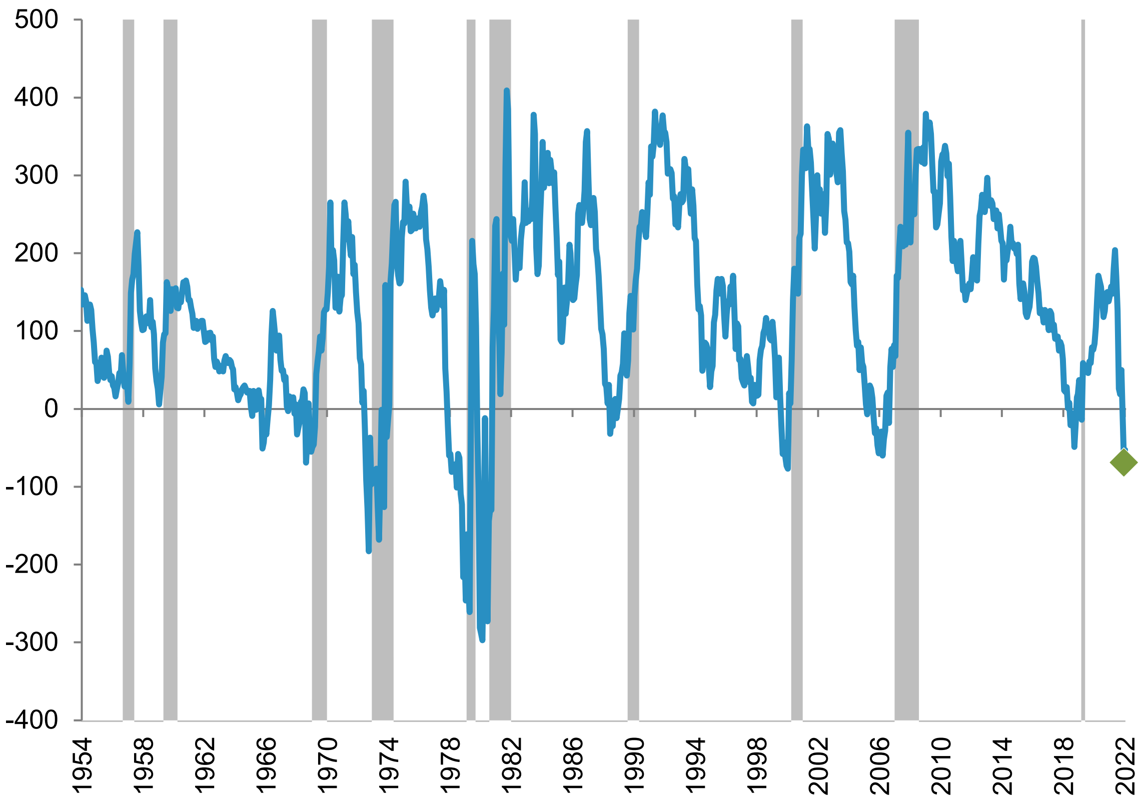


CPI: Consumer Price Index. **LEFT:** Contribution to expected CPI indicates the expected contribution to Year-over Year CPI over the next six months. Persistent Categories include areas where, historically, inflation has taken longer to dissipate, such as Housing and Food & Beverages. Series are 6-month averages at an annualized rate. Source: Bureau of Labor Statistics, Haver Analytics, Fidelity Investments (AART), as of 11/30/22. **RIGHT:** Source: Bureau of Labor Statistics, Bloomberg, Fidelity Investments (AART), as of 9/30/22.

Inverted Yield Curve Is a Reliable Recession Indicator

Our preferred yield curve—the 10-year less 3-month Treasury yield—inverted during Q4 as the Fed continued to hike short-term rates. Historically, the yield curve has been a reliable leading indicator of economic weakness and, on average, inverted during the late cycle one year before recession. However, the timing of recession after curve inversions is uncertain and variable, ranging between four and 21 months historically.

Treasury Yield-Curve Spread



Yield-Curve Inversions since 1950 (10-year minus 3-month)

Occurred before the last 8 recessions

Occurred twice without a recession (1966,1998)

Peak inversion ranged from 35 to 373 basis points

Recessions started 4 to 21 months after, averaging ~1 year

-53 bps as of 12/31/22

Bps: basis points. Shaded areas denote U.S. recession. Source: U.S. Federal Reserve Board, NBER, Haver Analytics, Fidelity Investments (AART), as of 12/31/22.

Tough Year for Almost Everything Ended on a High Note

Almost all asset categories posted positive gains in Q4 but negative returns for 2022. Commodities, energy and utility stocks, and Latin American equites, were the year's exceptions, finishing in positive territory and benefiting from the more inflationary environment. All fixed-income categories ended down for the year with more interest-rate sensitive sectors—such as long-duration government bonds—suffering the biggest losses.

U.S. Equity Styles Total Return

	Q4 2022	2022
Value	12.2%	-8.0%
Mid Caps	9.2%	-17.3%
Large Caps	7.6%	-18.1%
Small Caps	6.2%	-20.4%
Growth	2.3%	-29.0%

U.S. Equity Sectors Total Return

	Q4 2022	2022
Energy	22.7%	65.4%
Utilities	8.6%	1.6%
Consumer Staples	12.7%	-0.6%
Health Care	12.8%	-2.0%
Industrials	19.2%	-5.5%
Financials	13.6%	-10.6%
Materials	15.0%	-12.3%
Real Estate	3.8%	-26.2%
Info Tech	4.7%	-28.2%
Consumer Discretionary	-10.2%	-37.0%
Communication Services	-1.4%	-39.9%

International Equities and Global Assets Total Return

	Q4 2022	2022
ACWI ex-USA	14.3%	-16.0%
Canada	7.4%	-12.9%
EAFE	17.3%	-14.5%
Europe	19.3%	-15.1%
Japan	13.2%	-16.6%
EAFE Small Cap	15.8%	-21.4%
Latin America	5.7%	8.9%
Emerging Markets	9.7%	-20.1%
EM Asia	10.8%	-21.1%
EMEA	5.8%	-28.3%
Commodities	2.2%	16.1%
Gold	9.8%	-0.3%

U.S. Equity Factors Total Return

	Q4 2022	2022
Yield	13.8%	-3.8%
Low Volatility	10.5%	-10.1%
Size	9.4%	-10.8%
Value	10.2%	-14.1%
Momentum	4.7%	-18.9%
Quality	7.5%	-19.3%

Fixed Income Total Return

	Q4 2022	2022
Leveraged Loan	2.7%	-0.6%
ABS	0.8%	-4.3%
Agency	0.7%	-7.9%
Municipal	4.1%	-8.5%
CMBS	1.0%	-10.9%
High Yield	4.0%	-11.2%
MBS	2.1%	-11.8%
TIPS	2.0%	-11.8%
Treasuries	0.7%	-12.5%
Aggregate	1.9%	-13.0%
Credit	3.4%	-15.3%
EM Debt	7.4%	-16.5%
Long Govt & Credit	2.6%	-27.1%

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., Fidelity Investments (AART), as of 12/31/22.

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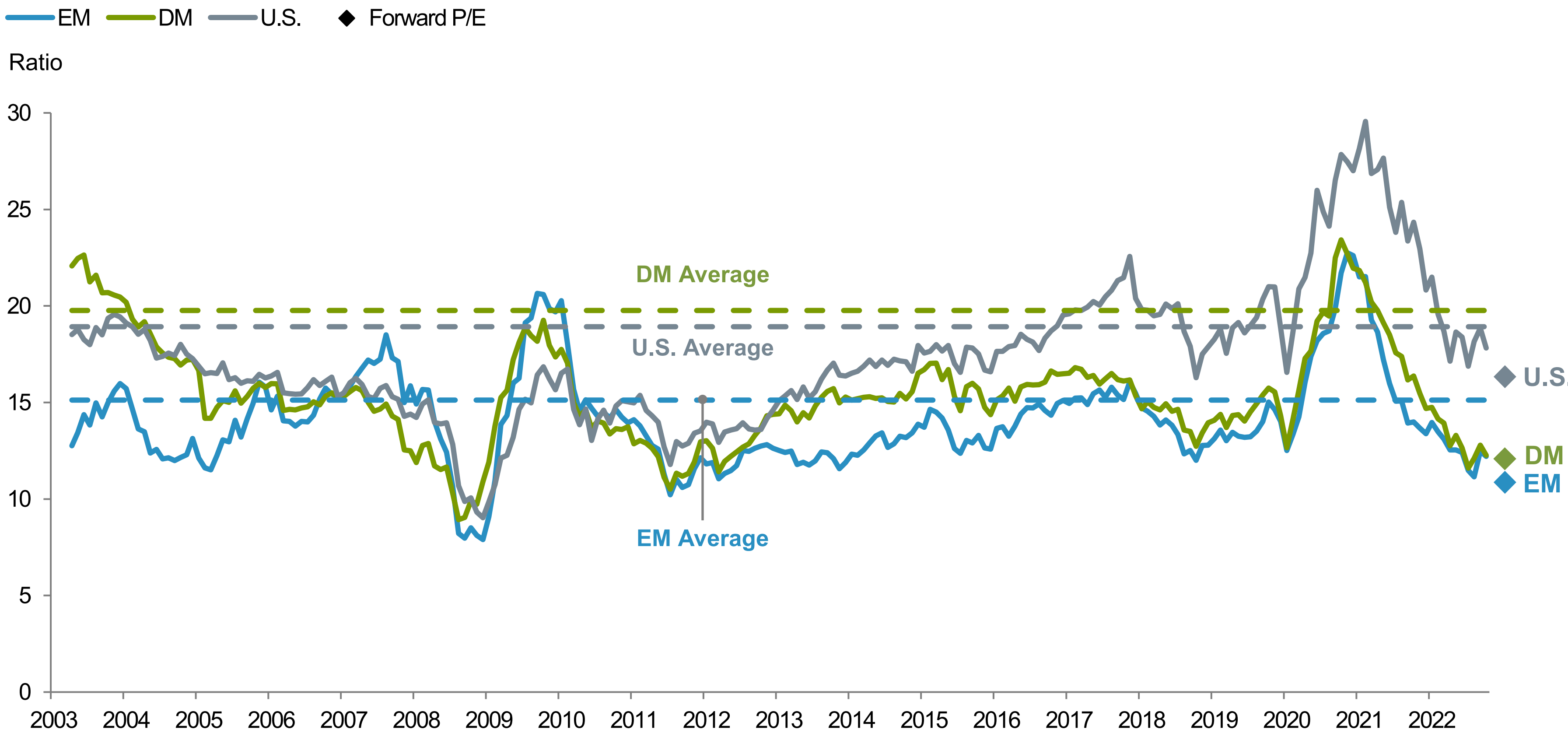
Valuations Compressed; Non-U.S. Equities More Attractive

The broad 2022 equity sell-off caused valuations for all categories of global stocks to fall from their elevated 2021 levels. The trailing, one-year price-to-earnings (PE) ratios for all major categories of global equities—U.S., non-U.S. developed markets, and emerging markets—are below their long-term averages, with emerging markets and non-U.S. developed markets appearing the most attractive.

Global Stock Market P/E Ratios

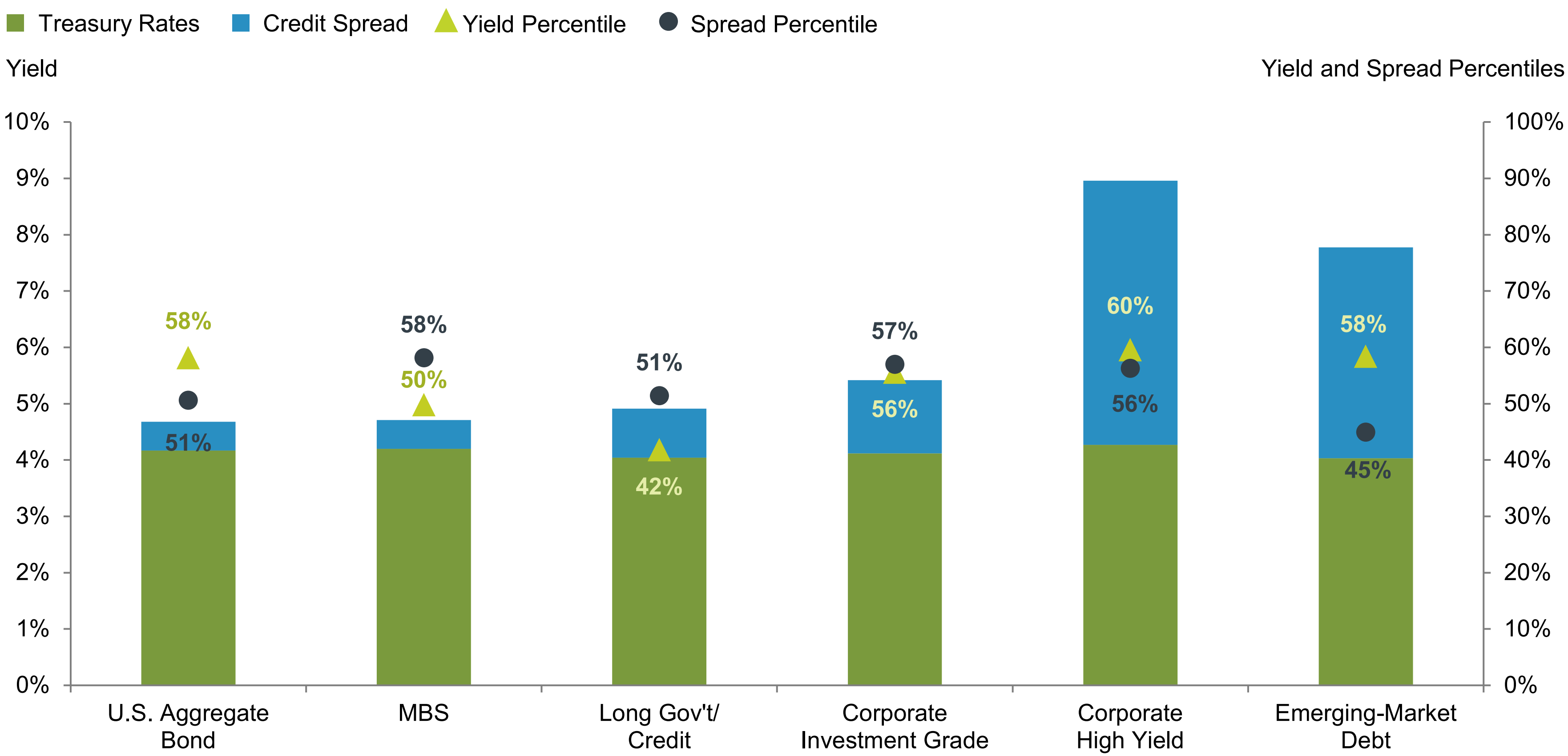


DM: Non-U.S. developed markets. EM: Emerging markets. Chart includes Trailing 12-month P/Es. Past performance is no guarantee of future results. It is not possible to invest directly in an index. All indexes are unmanaged. See Appendix for important index information. Price-to-earnings (P/E) ratio (or 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 9/30/22. Indexes: DM—MSCI EAFE Index; EM—MSCI Emerging Markets Index; U.S.—S&P 500. Source: Factset, Bloomberg Finance L.P., Fidelity Investments (AART), as of 12/31/22.

Fixed-Income Valuations More Attractive to Begin 2023

Both Treasury yields and credit spreads rose during 2022 across all major bond categories. During Q4, credit spreads tightened somewhat across all categories to end the year close to their respective historical averages. After many years of extremely low bond yields, fixed-income assets now offer relatively better income with more attractive valuations.

Fixed Income Yields and Spreads (1993–2022)



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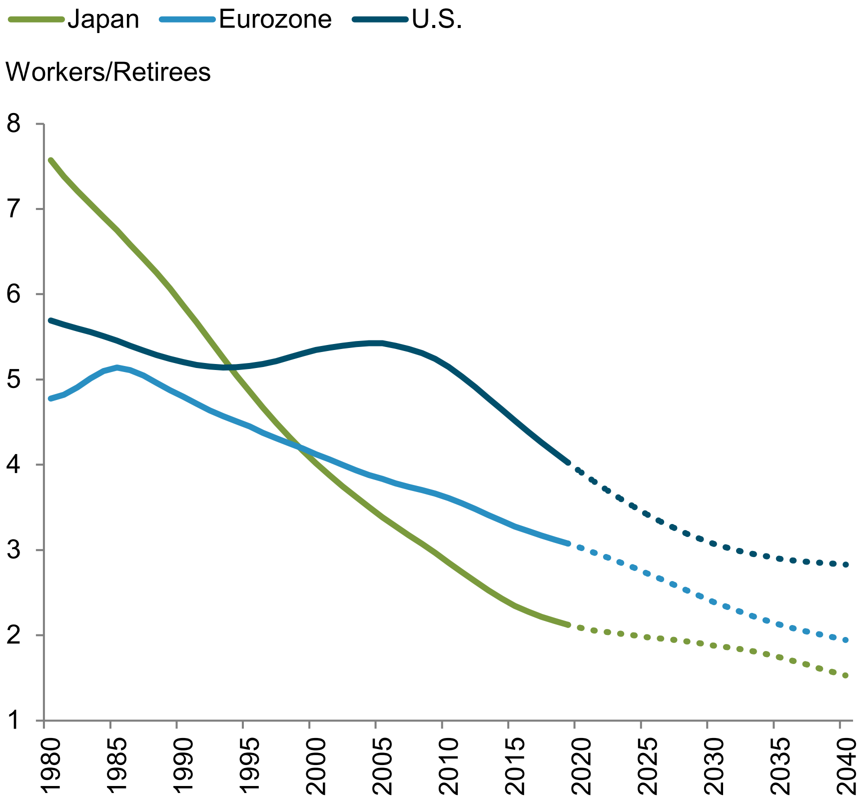
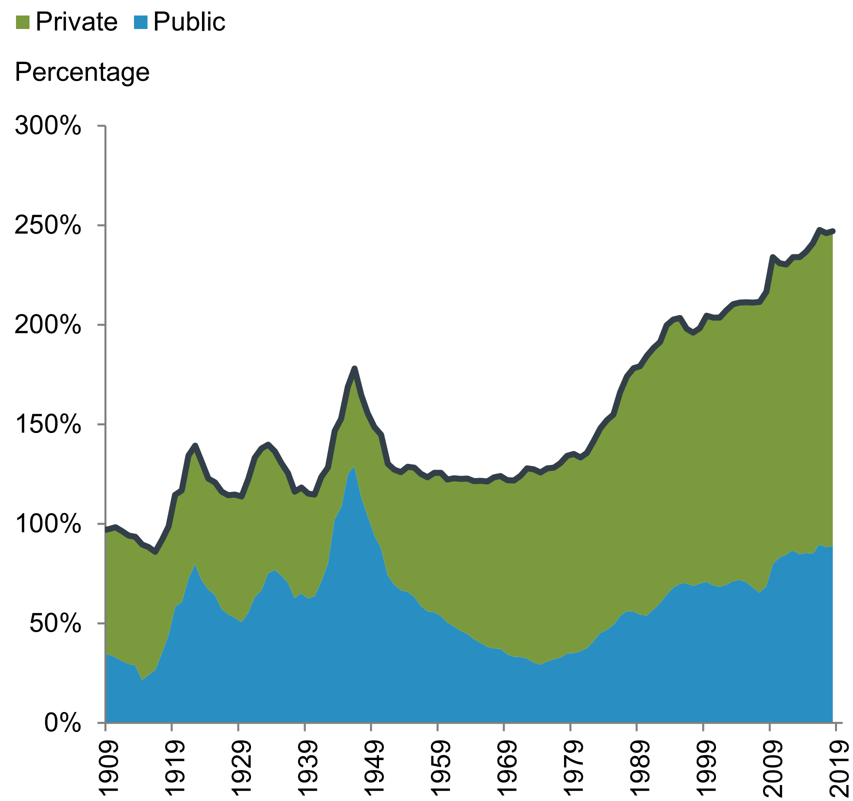
Unprecedented Debt Levels amid Aging Demographics

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 system more dependent than ever on low interest rates.

Demographic Support Ratio



Global Debt as a Share of GDP



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 10/31/19.

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 12/31/19.

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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

2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
56%	32%	35%	35%	40%	5%	79%	28%	8%	20%	39%	28%	5%	21%	38%	0%	36%	38%	43%	16%
47%	26%	21%	33%	16%	-20%	58%	27%	8%	19%	34%	14%	3%	18%	30%	-2%	31%	20%	29%	-8%
39%	21%	14%	27%	12%	-26%	37%	19%	4%	18%	33%	13%	1%	18%	26%	-2%	26%	18%	27%	-11%
37%	18%	12%	22%	11%	-34%	32%	18%	4%	18%	32%	12%	1%	12%	22%	-3%	26%	18%	26%	-13%
31%	17%	7%	18%	7%	-36%	28%	17%	2%	16%	23%	11%	1%	12%	15%	-4%	26%	14%	25%	-14%
31%	11%	5%	16%	6%	-36%	27%	16%	2%	16%	19%	6%	0%	11%	15%	-4%	22%	8%	17%	-16%
29%	11%	5%	12%	5%	-37%	26%	15%	0%	16%	7%	5%	-4%	9%	13%	-9%	22%	8%	15%	-18%
28%	9%	5%	11%	2%	-38%	20%	15%	-4%	15%	3%	3%	-4%	8%	9%	-11%	18%	6%	11%	-20%
24%	8%	4%	9%	-1%	-38%	19%	12%	-12%	11%	-2%	-2%	-5%	7%	8%	-11%	14%	3%	5%	-20%
19%	7%	3%	4%	-2%	-43%	18%	8%	-13%	4%	-2%	-4%	-15%	3%	4%	-11%	9%	-3%	-2%	-24%
4%	4%	2%	2%	-16%	-53%	6%	7%	-18%	-1%	-10%	-17%	-25%	2%	1%	-14%	8%	-8%	-3%	-29%

Legend
Commodities
Value Stocks
High-Yield Bonds
Investment-Grade Bonds
Foreign-Developed Country Stocks
60% Large Cap 40% IG Bonds
Large Cap Stocks
Emerging-Market Stocks
Small Cap Stocks
REITs
Growth Stocks

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