

# Cost of Capital in the Current Environment

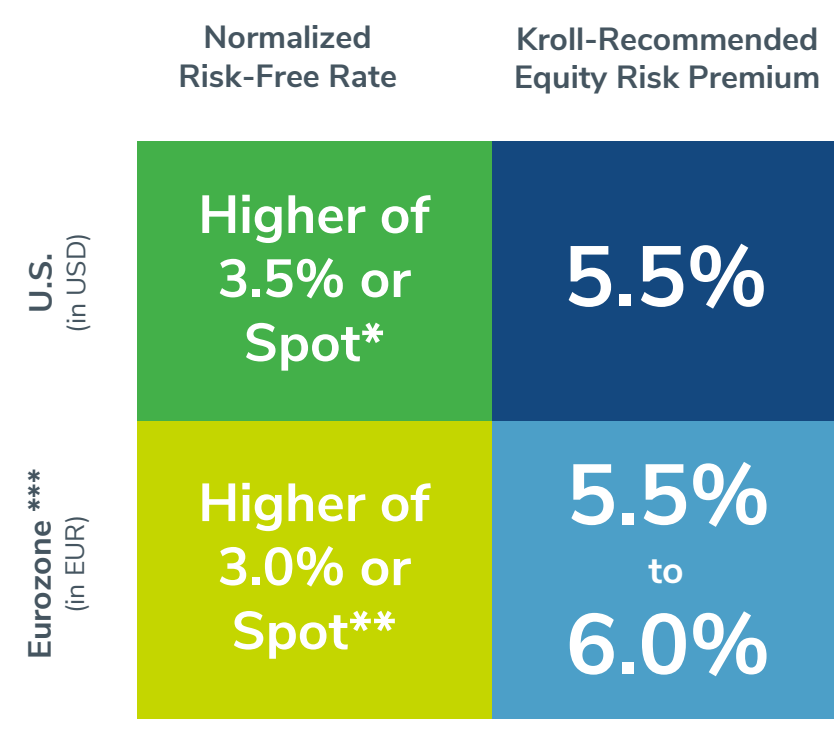
September 2023 Update

“ In this edition, we are happy to introduce real GDP growth estimates for Canada and Brazil. Major central banks are approaching the peak for their policy interest rates. However, while headline inflation has decelerated significantly, core inflation (i.e., excluding the volatile energy and food prices) continues to be stubbornly high, which means interest rates will stay higher for a longer period. The global economy appears to be more resilient than expected at the beginning of 2023. Nonetheless, as high interest rates continue to bite into consumers' pockets and businesses' capital budgets, a slowdown is expected in late 2023 and early 2024, with some countries expected to dip into recession. Global financial markets are generally pricing a soft landing rather than a deep and prolonged recessionary period. Amid this uncertainty, cost of capital estimates are now similar to levels observed around the Global Financial Crisis of 2008–2009. ”

Carla S. Nunes, CFA – Managing Director, Valuation Digital Solutions, Kroll

## Kroll Cost of Capital Inputs

Data as of September 18, 2023



\* We recommend using the spot 20-year U.S. Treasury yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our recommended U.S. normalized risk-free rate of 3.5%. This guidance is effective when developing USD-denominated discount rates as of June 16, 2022, and thereafter.

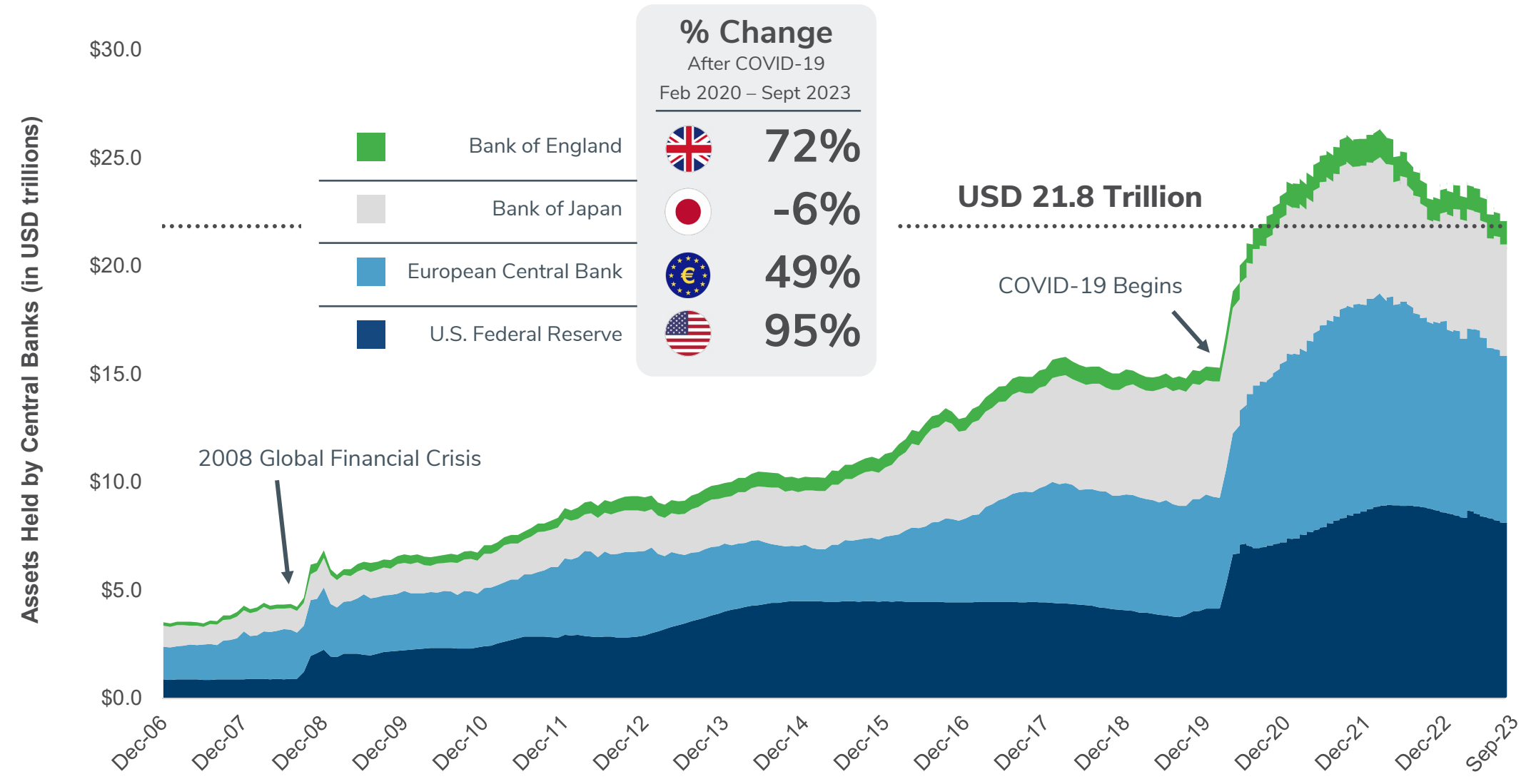
\*\* We recommend using the spot 15-year German government bond yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our recommended German normalized risk-free rate of 3.0%. This guidance is effective when developing EUR-denominated discount rates as of October 18, 2022, and thereafter.

\*\*\* German normalized risk-free rate and Eurozone equity risk premium (ERP) for use in EUR-denominated discount rates from a German investor perspective. Our current ERP recommendation is at the top of the range. Additional country risk adjustments may be warranted when estimating discount rates for other countries in the Eurozone.

For more information, visit: <https://www.kroll.com/costofcapitalnavigator>

## Total Assets Held by Major Central Banks Over Time

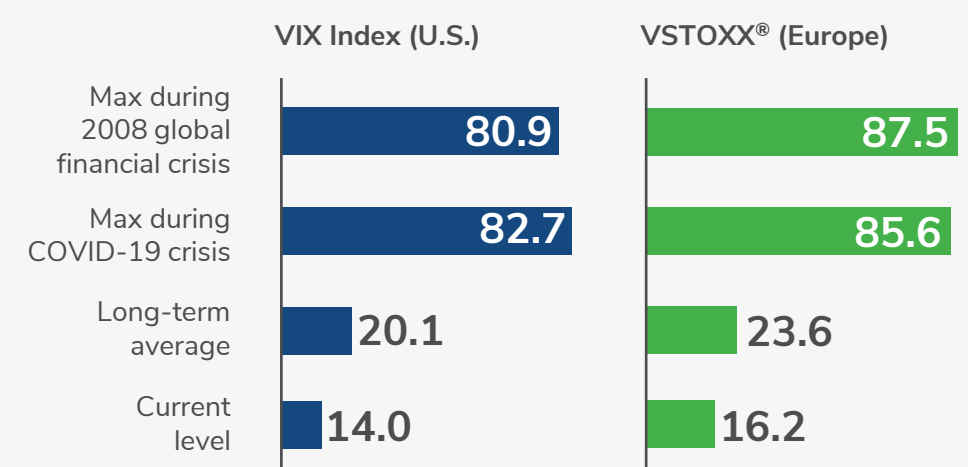
Data as of September 18, 2023



Sources: Capital IQ, FRED® Economic Data, Bank of England, Bank of Japan and European Central Bank

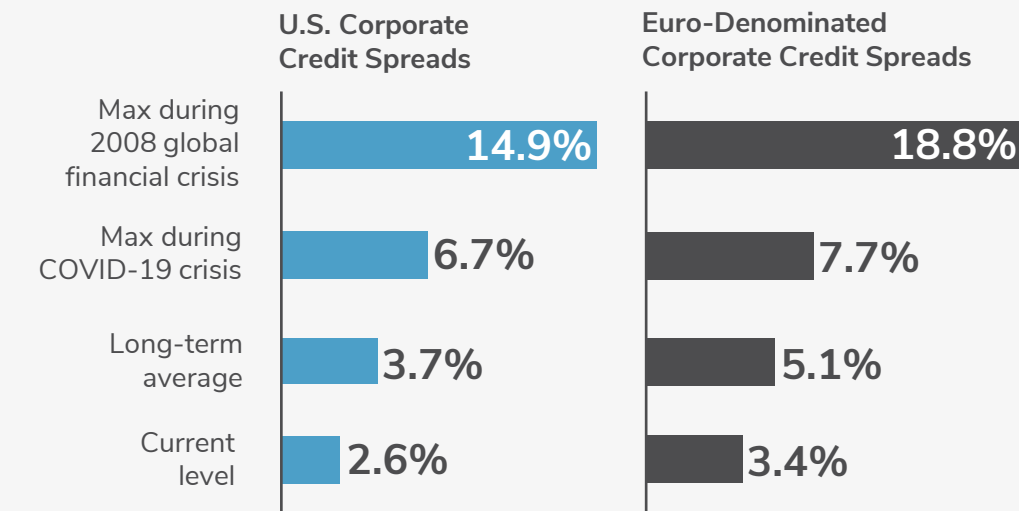
## Global Market Volatility

Data as of September 18, 2023



## Global Credit Spreads

Data as of September 18, 2023

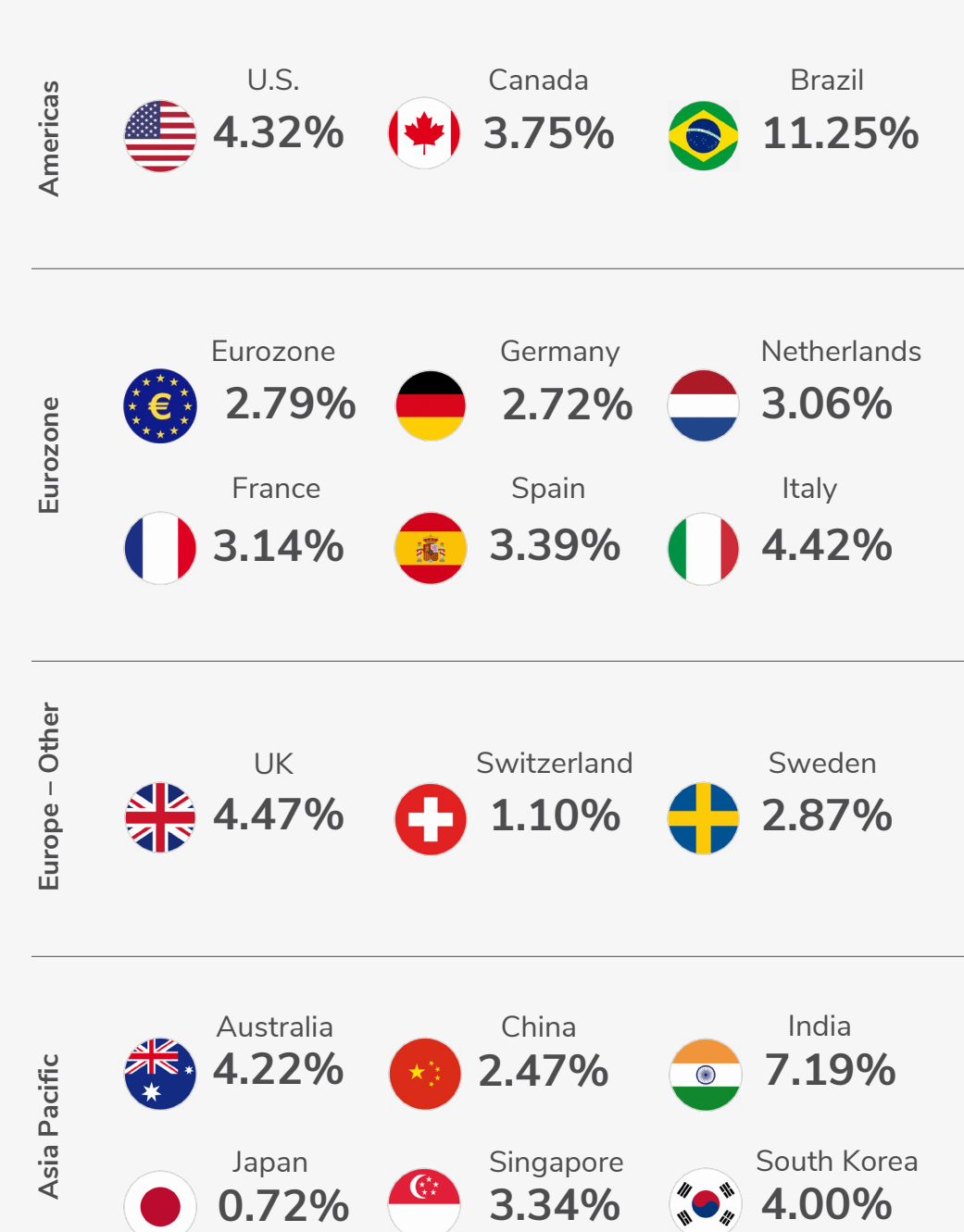


Sources: Capital IQ, FRED® Economic Data, Bloomberg

U.S. corporate credit spreads are based on the difference in effective yields between the ICE BofA U.S. High Yield Index and the ICE BofA U.S. Corporate Index. Euro-denominated corporate credit spreads are based on the difference in effective yields between the Bloomberg Pan-European High Yield Index (EUR) and the Bloomberg Euro Aggregate Corporate Bond Index. Long-term averages are based on 1995 to present for VIX daily series, 1999 to present for VSTOXX daily series, 1996 to present for U.S. credit spread daily series, and 1998 to present for EUR-denominated credit spread monthly series.

## Global 10-Year Government Bond Yields

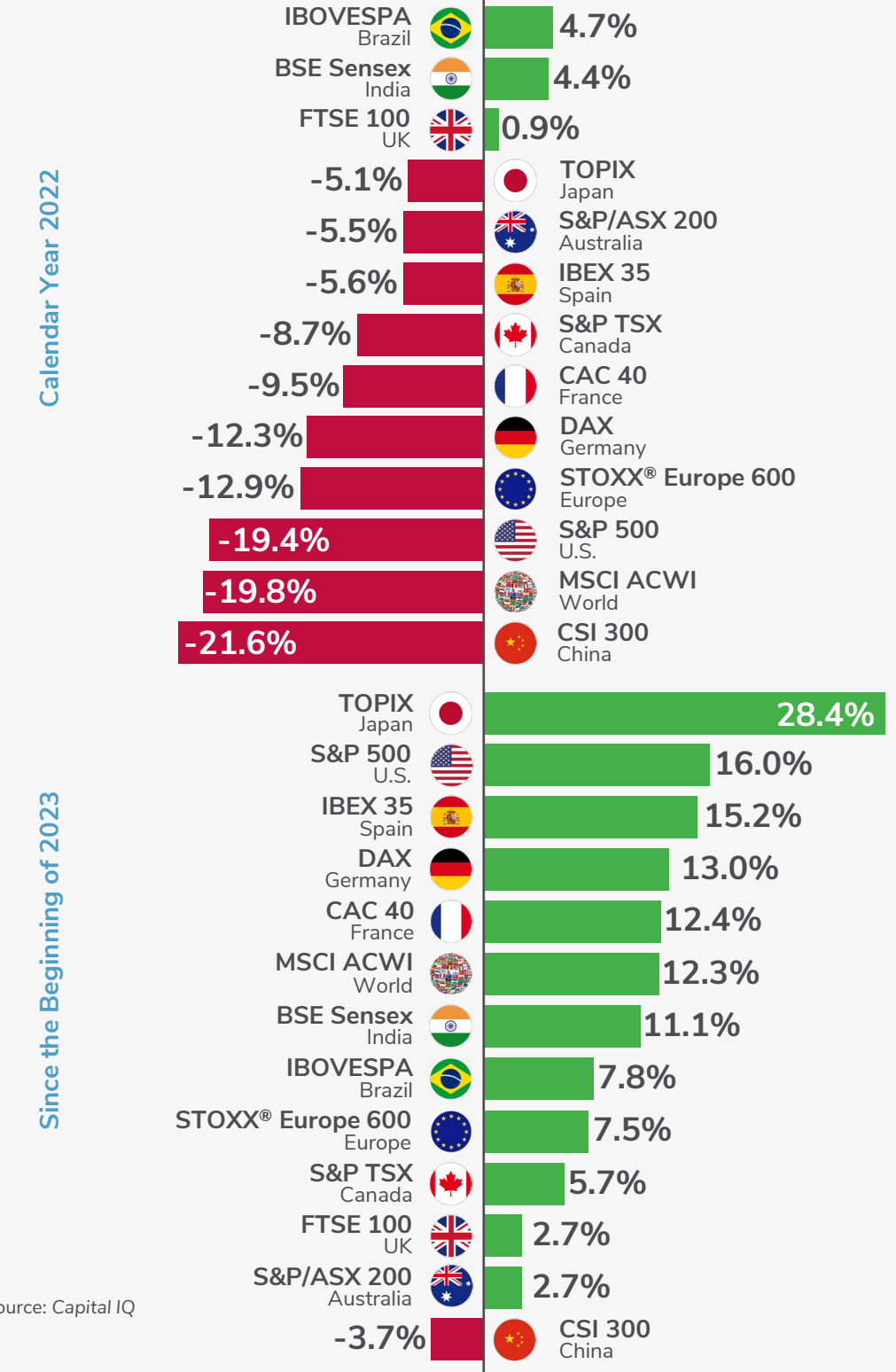
Data as of September 18, 2023



Sources: Refinitiv (Brazil, India), European Central Bank (Eurozone aggregate yield) and Capital IQ (other countries)

## Stock Market Performance

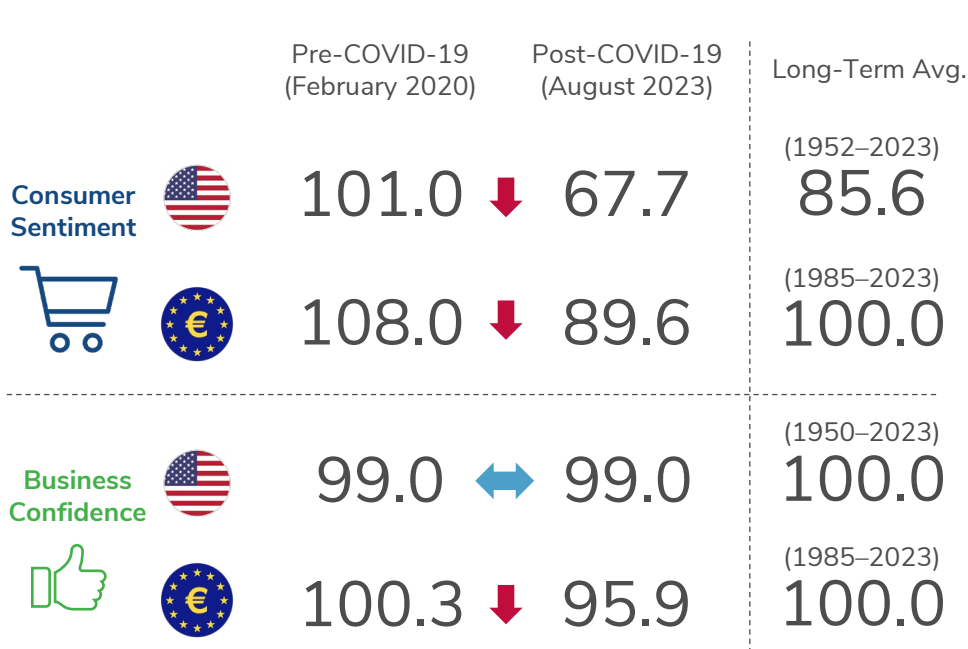
Data as of September 18, 2023



Source: Capital IQ

## U.S. and Eurozone Consumer Sentiment vs. Business Confidence

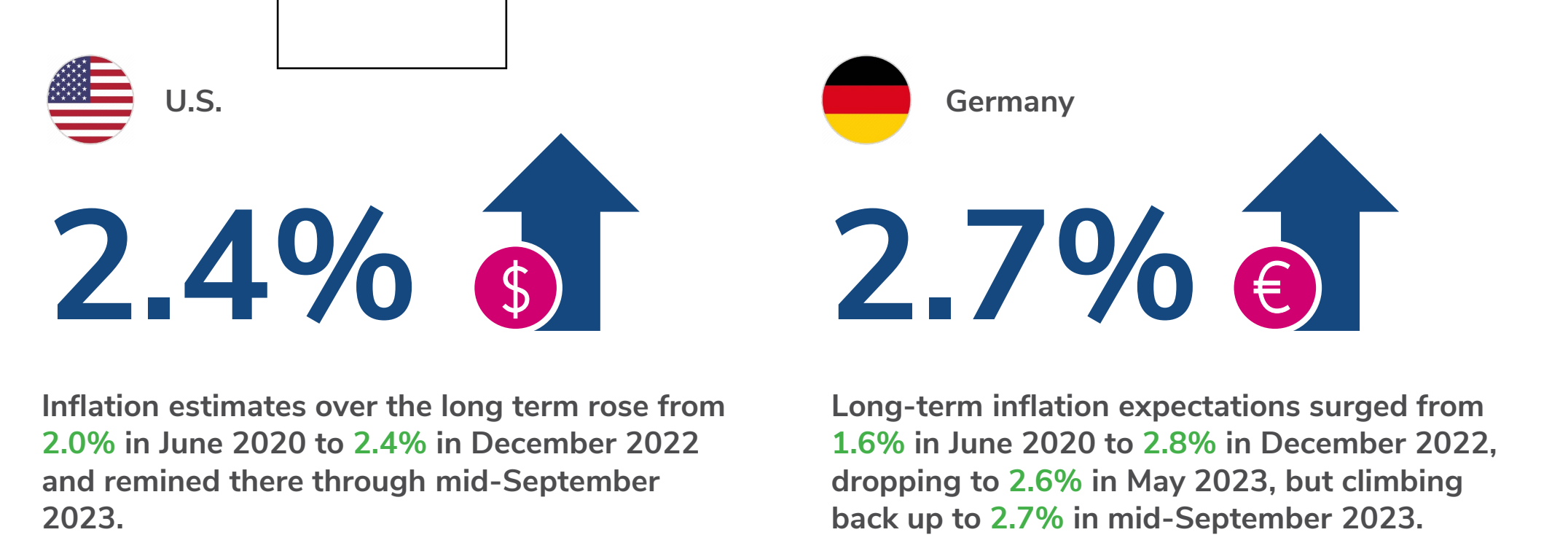
Data as of September 18, 2023



Sources: Michigan University's Index of Consumer Sentiment (preliminary September 2023 reading), OECD's Business Confidence Index and European Commission business and consumer surveys (The same methodology that the European Commission uses to standardize its Economic Sentiment Indicator (ESI) was applied to the Eurozone Consumer Confidence and Business Climate Indicator series.)

## Long-Term Inflation Expectations (Median)

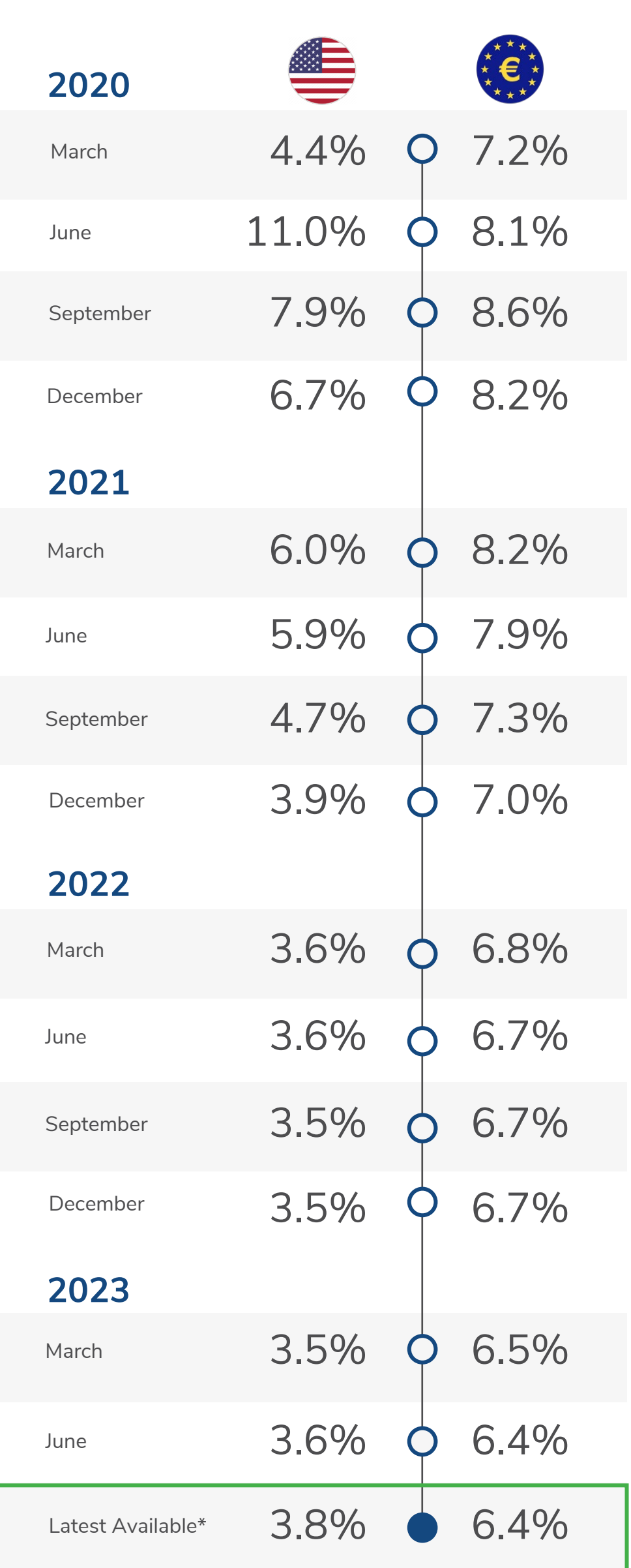
Data as of September 18, 2023



Sources of underlying U.S. data: Blue Chip Economic Indicators; Blue Chip Financial Forecasts, Consensus Economics, IHS Markit (S&P Global Market Intelligence), Federal Reserve Bank of Cleveland, Federal Reserve Bank of Philadelphia (Aruba Term Structure of Inflation Expectations, Livingston Survey, and Survey of Professional Forecasters), Oxford Economics and the University of Michigan's Surveys of Consumers Inflation Expectations. Sources of underlying German data: Consensus Economics, Economist Intelligence Unit, IHS Markit (S&P Global Market Intelligence), International Monetary Fund, Oxford Economics and PwC.

## U.S. vs. Eurozone Unemployment Rate

Data as of September 18, 2023

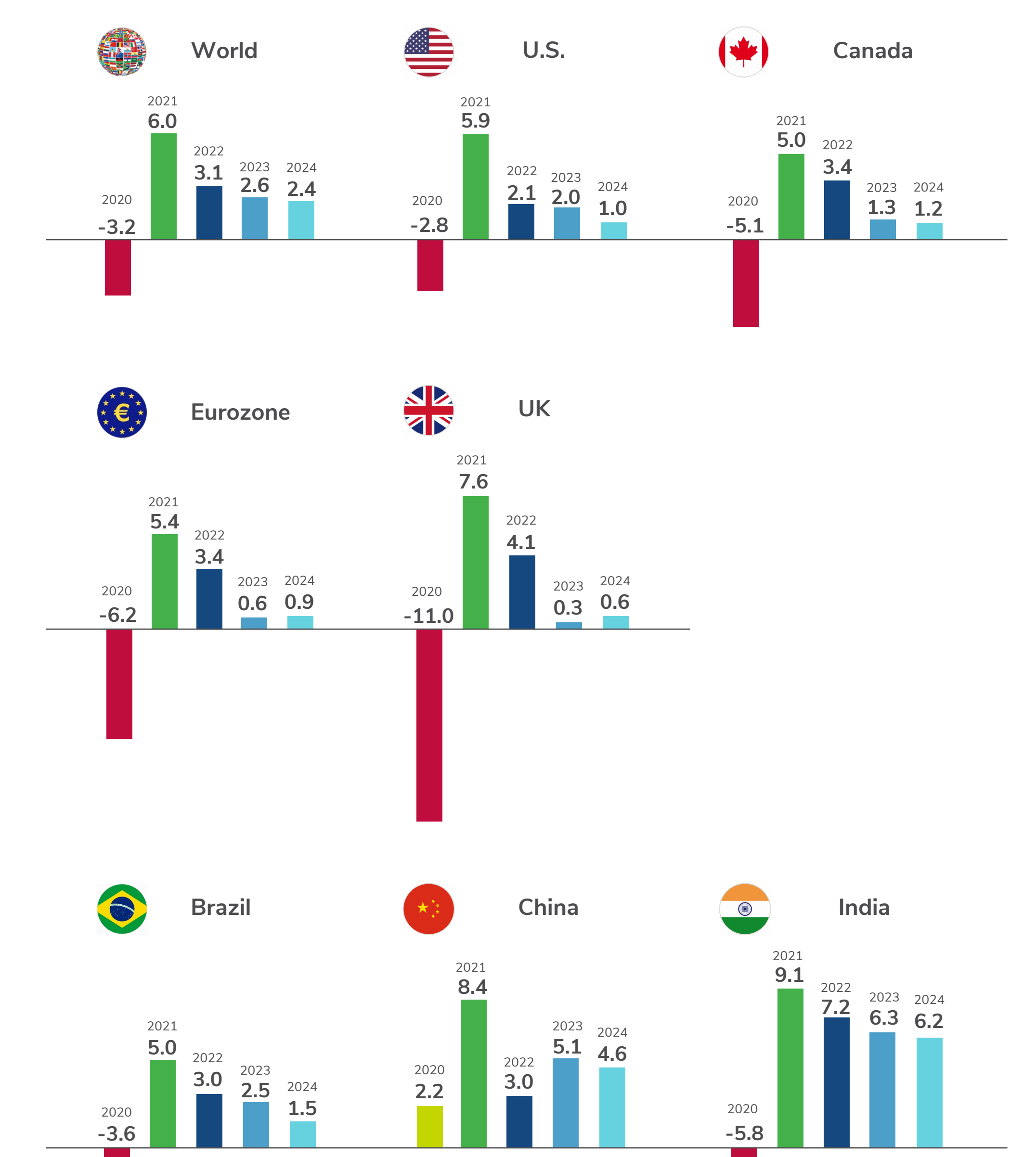


Source: U.S. Bureau of Labor Statistics and Eurostat

\* Data through August 2023 for the U.S. and July 2023 for the Eurozone.

## Real GDP Growth (%) Estimates (Median)

Data as of September 18, 2023



Sources: OECD, International Monetary Fund, World Bank, Blue Chip Economic Indicators, Consensus Economics, Economist Intelligence Unit, Fitch Ratings, IHS Markit (S&P Global Market Intelligence), Moody's Analytics, Oxford Economics and S&P Global Ratings. Some sources did not have data available for all countries and regions.