

# Cost of Capital in the Current Environment

COVID-19 Update – September 2021

## U.S. Cost of Capital Inputs

Data as of September 20, 2021

**5.5%**

Duff & Phelps-Recommended Equity Risk Premium

**2.5%**

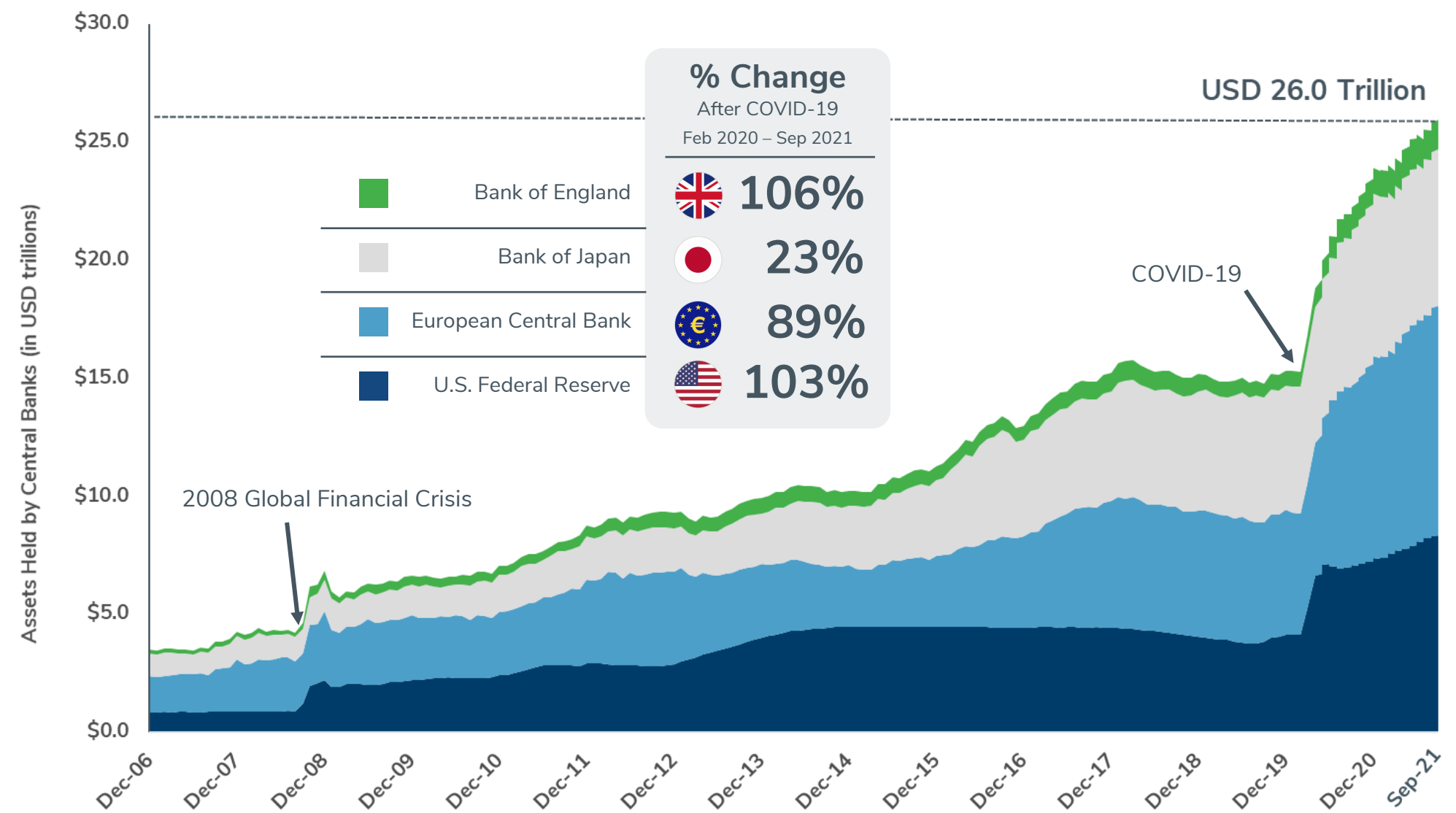
Normalized Risk-Free Rate

Duff & Phelps, A Kroll Business continues to monitor risk-free rates and other cost of capital inputs closely. If and when (i) long-term spot yields increase to a level that approaches the Duff & Phelps-recommended U.S. normalized risk-free rate (e.g., differences are lower than 50 b.p.), and (ii) there is evidence that this increase in spot yields is not transitory, we will then consider recommending a return to using spot 20-year U.S. Treasury Yields as the basis for the risk-free rate to be used in conjunction with our recommended U.S. Equity Risk Premium.

For more information, visit: [www.duffandphelps.com/costofcapital](http://www.duffandphelps.com/costofcapital)

## Total Assets Held by Major Central Banks Over Time

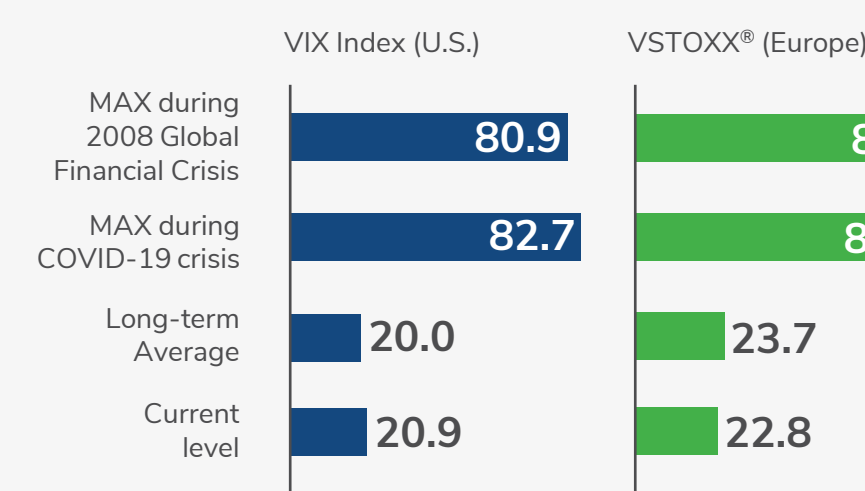
Data as of September 20, 2021



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

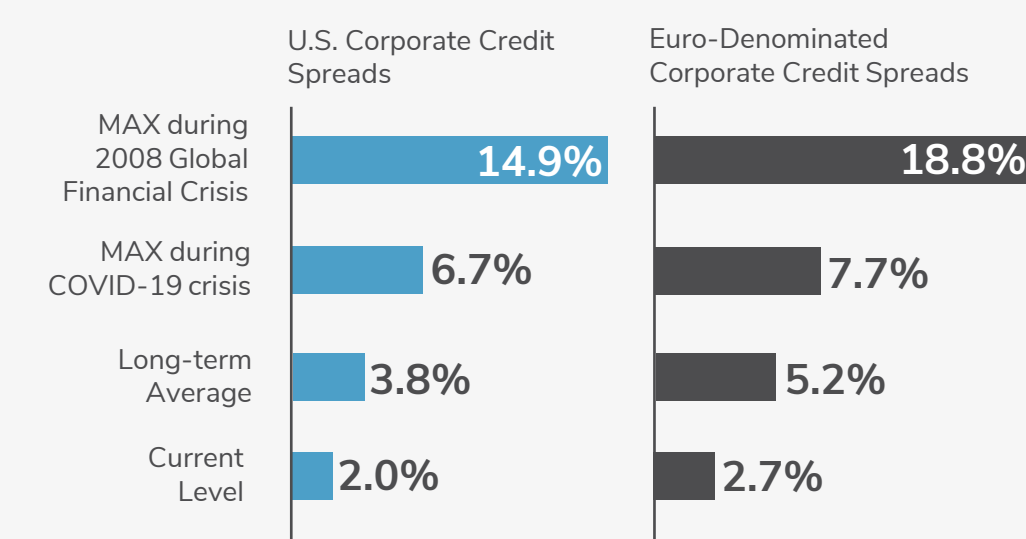
## Global Market Volatility

Data as of September 22, 2021



## Global Credit Spreads

Data as of September 22, 2021

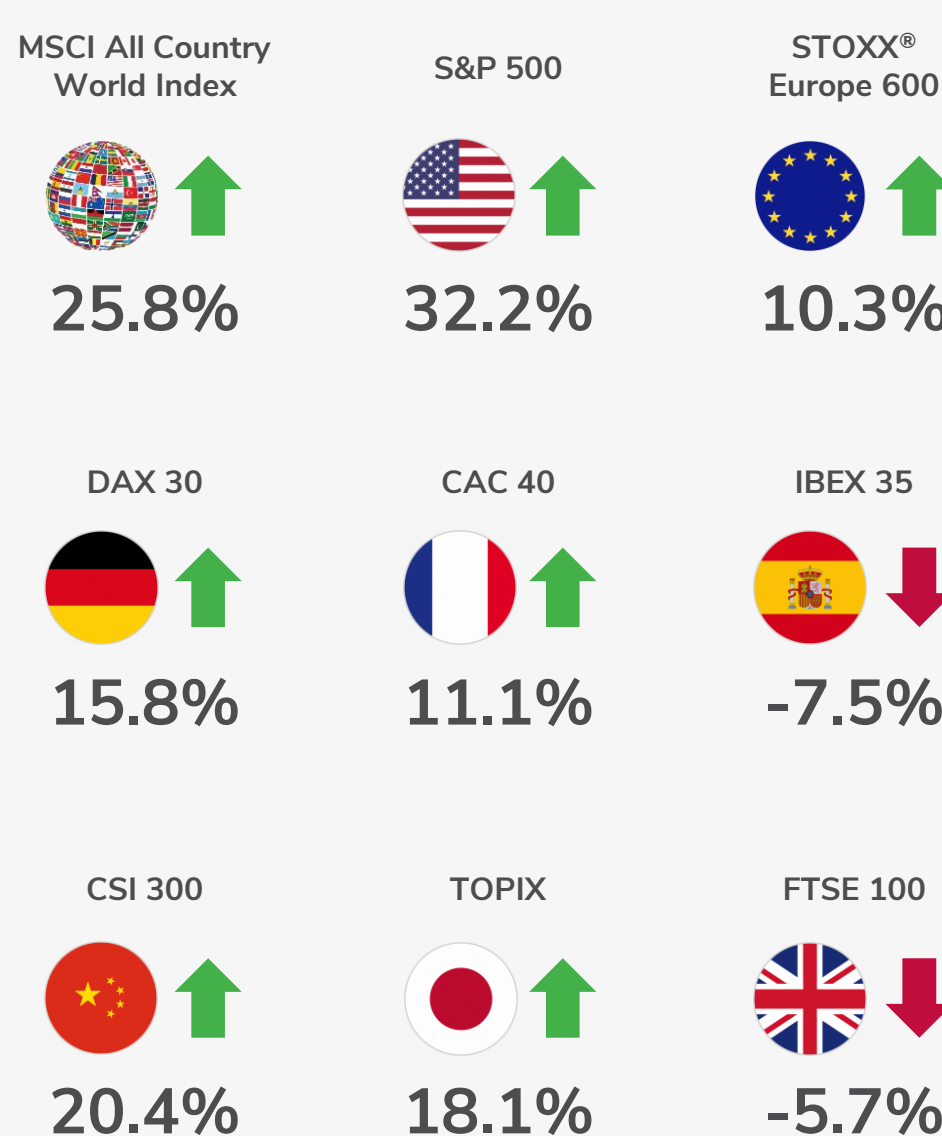


Sources: Capital IQ, FRED® Economic Data, Morningstar Direct

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 US Corporate Index. Euro-Denominated Corporate Credit Spreads based on the difference in effective yields between the Bloomberg Barclays Pan-European High Yield Index (EUR) and the Bloomberg Barclays Euro Aggregate Corporate Bond Index. Long-term averages 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.

## Stock Market Performance Since the Wuhan Lockdown\*

Data as of September 22, 2021

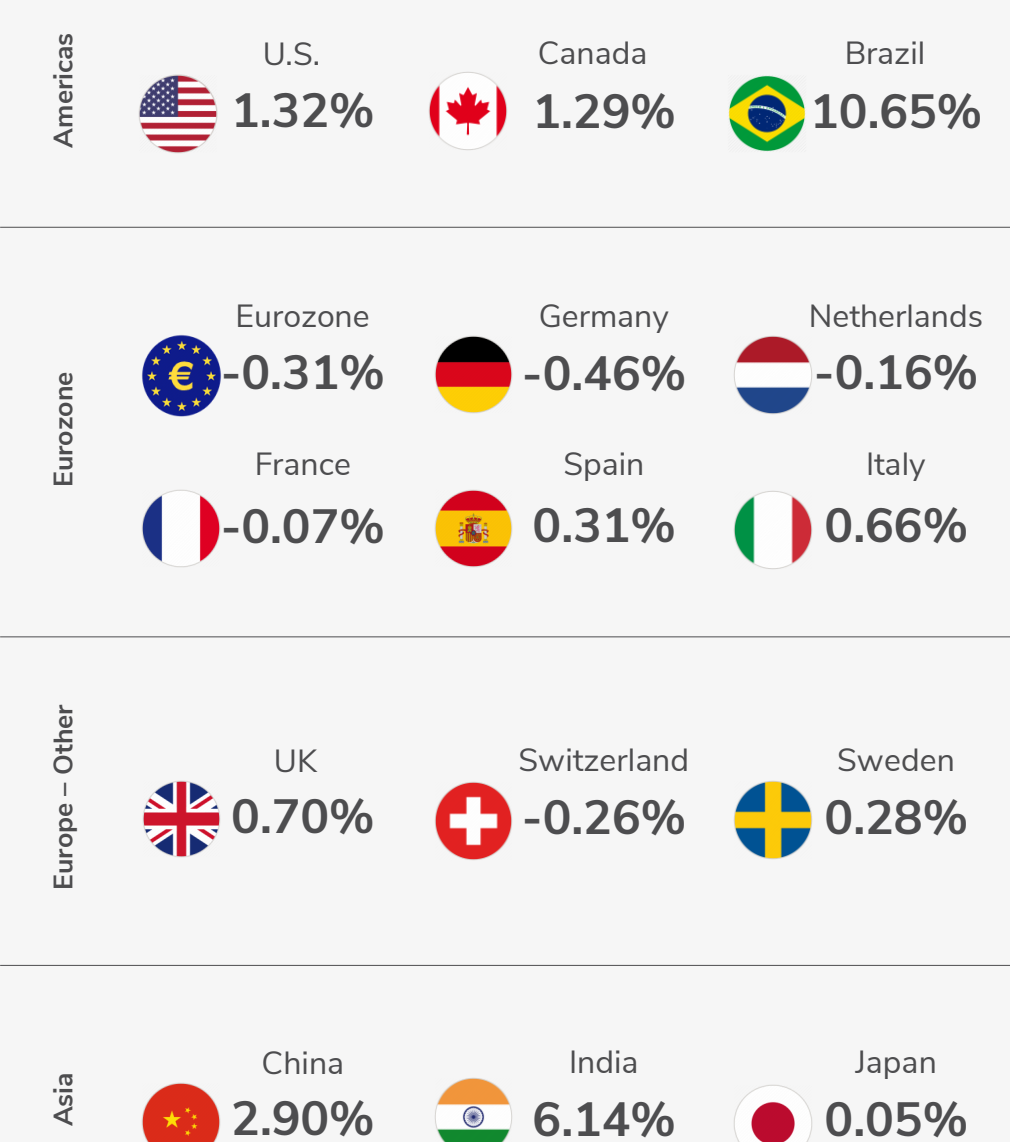


Source: Capital IQ

\*The first lockdown due to COVID-19 began on January 23, 2020, in Wuhan, China.

## Global 10-Year Government Bond Yields

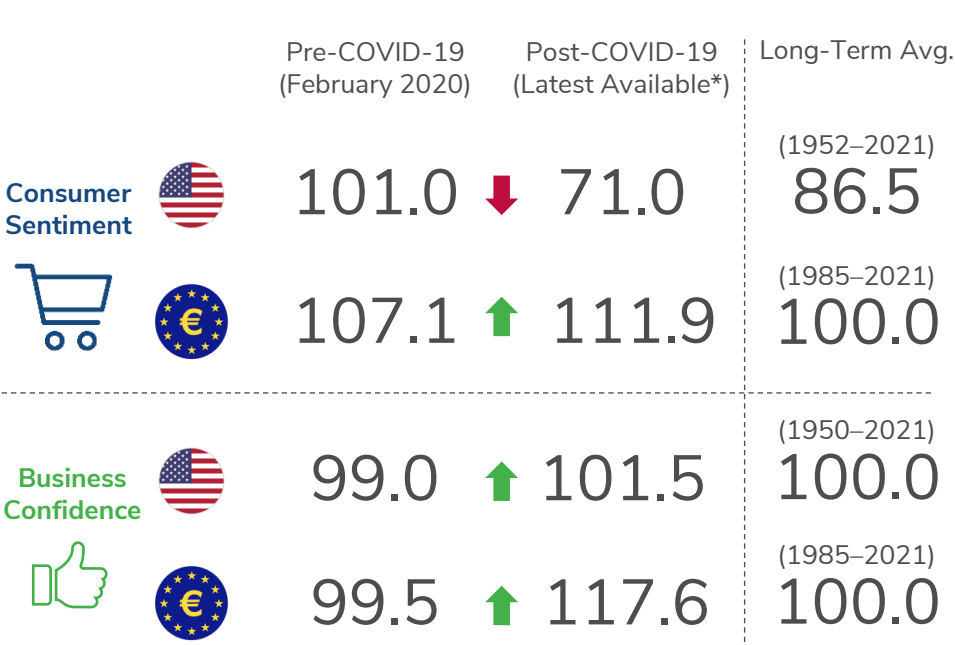
Data as of September 22, 2021



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

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

Data as of September 20, 2021

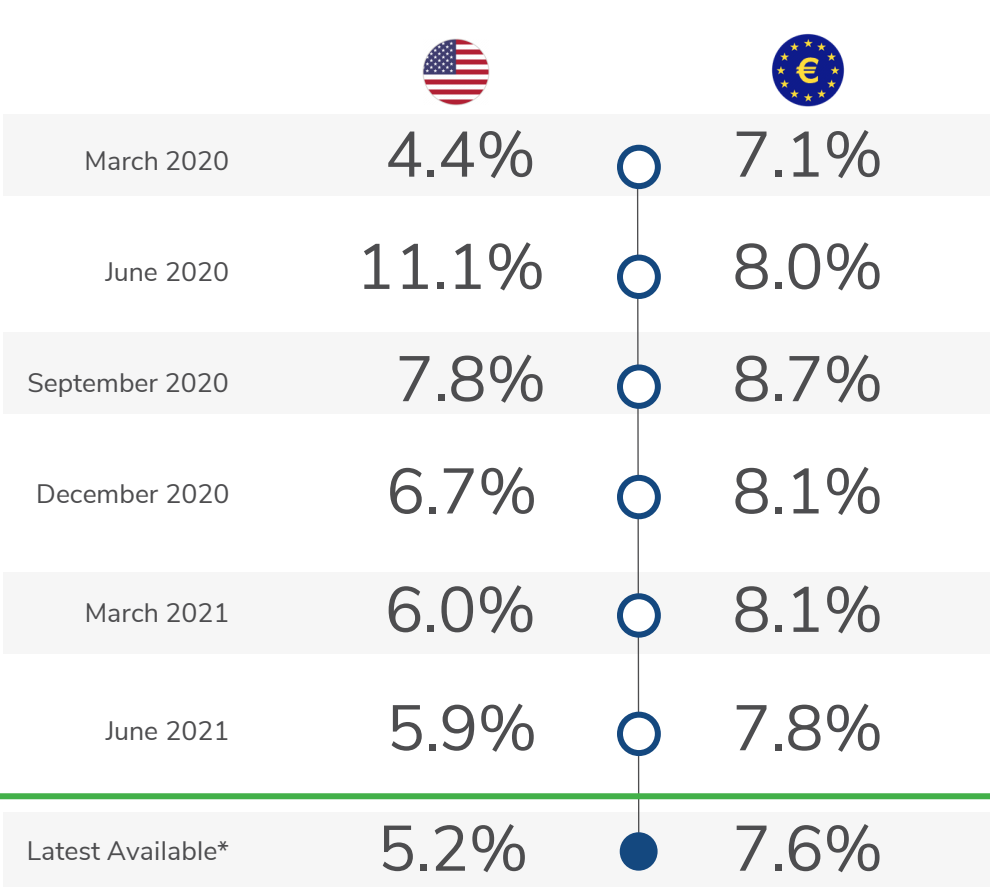


Sources: Michigan University's Index of Consumer Sentiment, OECD's Business Confidence Index, European Commission business and consumer surveys [The same methodology that the European Commission uses to standardize its Economic Sentiment Indicator (ESI) was applied to the Eurozone Consumer Confidence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

\*Data through September 2021 for U.S. and Eurozone Consumer Sentiment. Data through August 31, 2021, for U.S. and Eurozone Business Confidence.

## U.S. vs. Eurozone Unemployment Rate

Data as of September 20, 2021

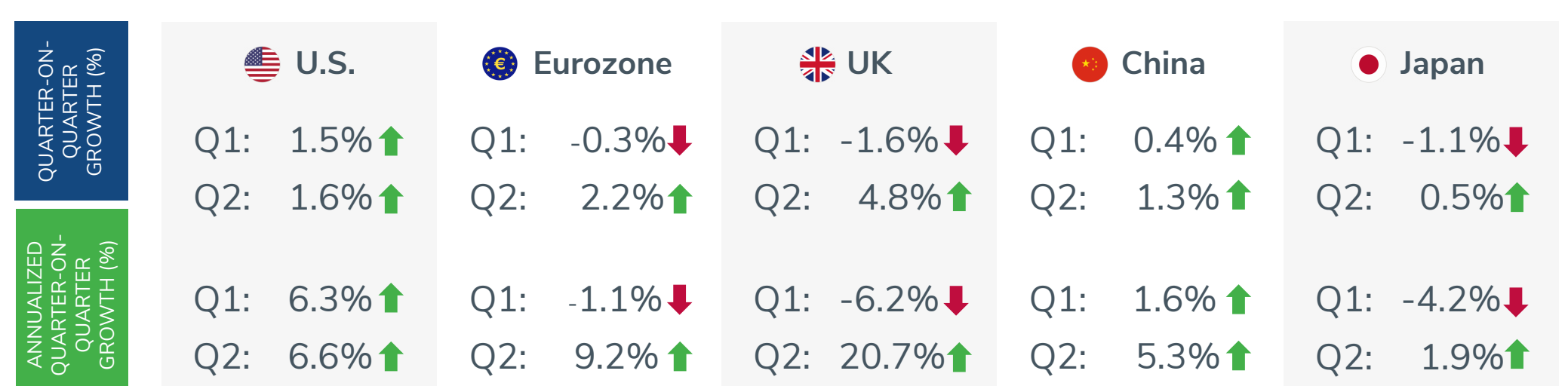


Source: U.S. Bureau of Labor Statistics, Eurostat

\* Data through August 2021 for the United States and July 2021 for the Eurozone.

## Real GDP Growth – Q1 and Q2 2021

Data as of September 22, 2021

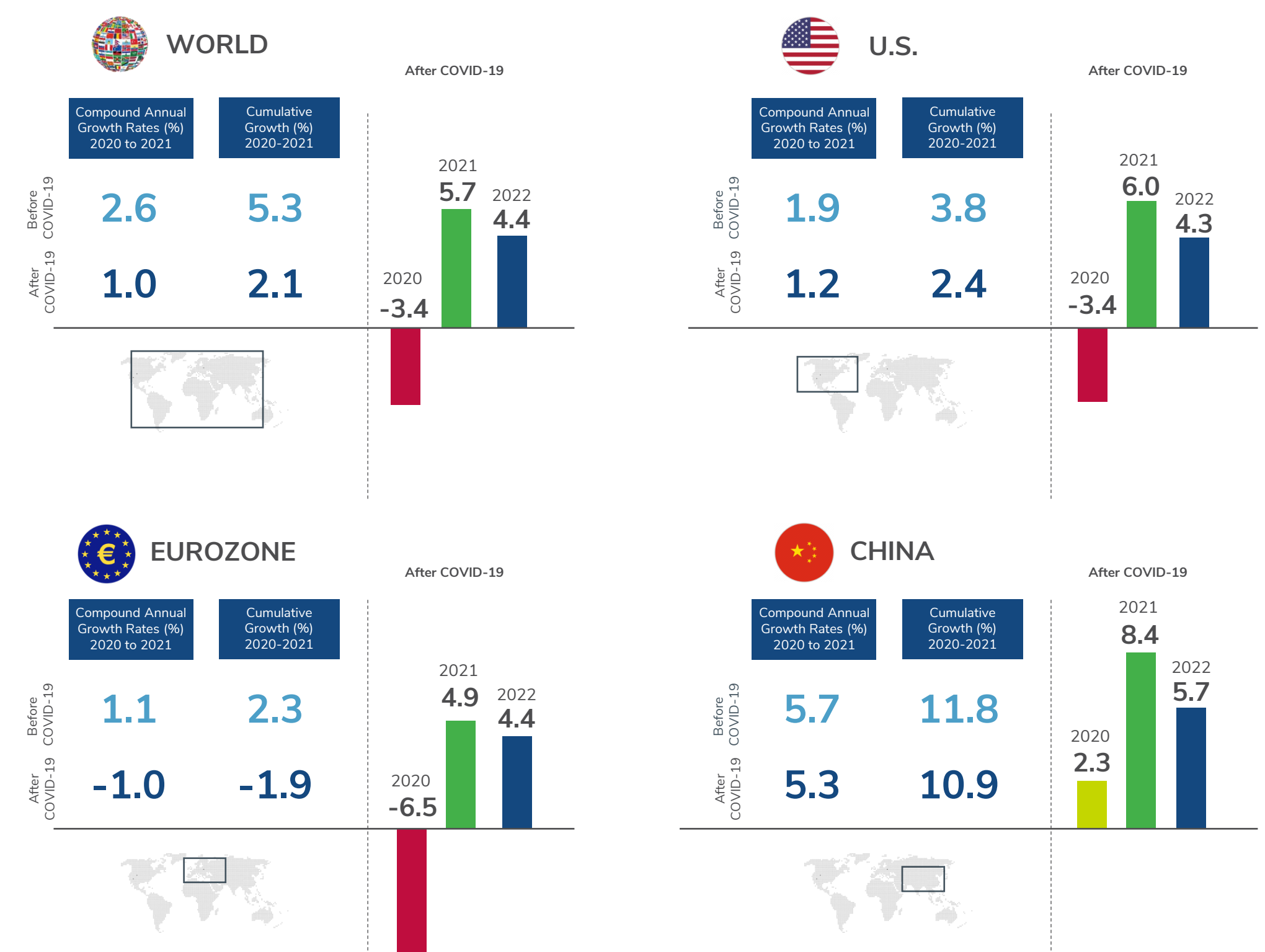


Sources: FRED® Economic Data (Eurozone, Japan, U.S.), National Bureau of Statistics of China, UK's Office for National Statistics

Quarter-on-quarter growth based on the growth rate from Q4 2020 to Q1 2021, and Q1 2021 to Q2 2021. This rate is annualized by computing the compounded growth rate for four quarters as follows: (1 + Real GDP Q/Q Growth)<sup>4</sup>. The annualized rate shows what the quarterly change would be if it lasted a full year.

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

Data as of September 20, 2021



Sources: OECD, International Monetary Fund, World Bank, Blue Chip Economic Indicators, Consensus Economics, Economic Intelligence Unit, Fitch Ratings, IHS Markit, Moody's Analytics, Oxford Economics, S&P Global Ratings

Before COVID-19 median estimates are based on data released in December 2019 and early January of 2020. After COVID-19 median estimates are based on data available as of the date noted above.

Compound annual growth rate (CAGR) is calculated as the annualized rate of return of median real GDP growth rate estimates from the end of 2019 through the end of 2021:  $[(1 + 2020 \text{ Real GDP Growth Rate}) * (1 + 2021 \text{ Real GDP Growth Rate})]^{1/2} - 1$ . Cumulative growth is calculated as the total (cumulative) growth rates of median real GDP estimates from the end of 2019 through the end of 2021:  $(1 + 2020 \text{ Real GDP Growth Rate}) * (1 + 2021 \text{ Real GDP Growth Rate}) - 1$ . These metrics show the annualized and cumulative real GDP growth rates that were expected at the end of 2019 (Before COVID-19) for the 2020-2021 period vs. what the expectations are currently (After COVID-19).

“ Risk has subsided since the outbreak of COVID-19, but economic recovery is still progressing at different speeds among regions. The Delta variant is leading to downward revisions in real GDP growth for some geographies.”

— Carla Nunes, CFA, Managing Director, Duff & Phelps, A Kroll Business

About Duff & Phelps, A Kroll Business - For nearly 100 years, Duff & Phelps has helped clients make confident decisions in the areas of valuation, real estate, taxation and transfer pricing, disputes, M&A advisory and other corporate transactions. For more information, visit [www.duffandphelps.com](http://www.duffandphelps.com).

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