KROLL

DPU Exhibit 2.01 SR

Cost of Capital in the Current Environment

Presented by:

Carla S. Nunes, CFA

James P. Harrington

28 September 2022

Our Evolution

In Operation for Nearly 100 Years

STORIED BRAND
1932-2004

- Duff & Phelps founded as investment research firm

NEW FIRM, EXPANDING CAPABILITIES
2005-2020

- Started as valuation and corporate finance advisor
- Rapid growth into other governance, risk, compliance and complementary solutions
- Acquired 30+ businesses, including Kroll in 2018

ONE TEAM, ONE KROLL
2021-2022

- Duff & Phelps rebrands as Kroll and completes brand unification
- Full business life cycle capabilities across risk, governance and growth
- Serving clients in 140 markets across nearly every industry and sector

Stay Ahead with KROLL

Data, technology and insights for risk, governance and growth

One Team, One Kroll.
Your preferred partner for all your complex global demands.

With over **6,000 experts** around the world, we create value and impact for our clients and communities.

- Valuation
- Compliance and Regulation
- Corporate Finance and Restructuring
- Cyber Risk
- Environmental, Social and Governance
- Investigations and Disputes
- Business Services

Valuation Advisory Highlights

World's Leading Independent Valuation Provider

1,427

Professionals

including 160 Managing Directors, dedicated to Valuation Advisory

In 2021 we performed over **10,667**

engagements for more than **3,618** clients

Kroll professionals:

- Serve on AICPA task forces including: Business Combinations, Goodwill Impairment (Co-Chair) and Private Equity/Venture Capital
- Appointed to The Appraisal Foundation's Appraisal Practices Board
- Principal drafter of U.S. Private Equity Valuation Guidelines
- Provided public commentary to the OECD on base erosion and profit shifting action items impacting transfer pricing
- Served as panelists on IFRS and mark-to-market SEC roundtables
- Appointed to the International Valuation Professional Board by the International Valuation Standards Council (IVSC)
- Numerous involvement in IVSC Boards: Member of the IVSC Business Valuation Board, Financial Instruments Board, Tangible Assets Board, Standards Review Board and IVSC Europe Board
- Participant on the EFRAG Advisory Panel on Intangibles

Disclaimer

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Carla S. Nunes, CFA, ABV

Managing Director

Carla S. Nunes is a Managing Director in the Office of Professional Practice of Kroll (previously Duff & Phelps). She has over 25 years of experience. In that role, Carla provides firm-wide technical guidance on a variety of valuation, financial reporting and tax issues. She also co-authors Kroll's annual U.S. and European Goodwill Impairment Studies. In addition, Carla is the Global Leader of Kroll's Valuation Digital Solutions group, which produces cost of capital thought leadership content and data housed in the Cost of Capital Navigator.

- In 2011, Carla completed a one-year rotation in Kroll's London office, where she promoted the firm's IFRS education efforts and marketing initiatives, as well dealing with IFRS implementation issues.
- Prior to this role, Carla was part of the Valuation Advisory Services business unit, performing engagements primarily for financial reporting and tax purposes at Kroll's predecessor firms, PricewaterhouseCoopers, Standard & Poor's, and Duff & Phelps.
- Carla has conducted numerous business and asset valuations for a variety of purposes, including purchase price allocations, goodwill impairment testing, M&A, corporate tax restructuring and debt analysis. She has been involved in multiple valuation assignments for a wide range of industries, including pharma & biotech, healthcare, vitamin retail, specialty chemicals, industrial manufacturing and gaming & hospitality. Carla has substantial experience with cross-border valuations, working with multinational corporations to address complex tax, international cost of capital and foreign exchange issues.
- Carla is one of Kroll's experts addressing valuation issues related to cost of capital. She is a co-author of the "Valuation Handbook" series and is a co-creator of the Kroll Cost of Capital Navigator. Carla is a frequent speaker in webinars and conferences on the topics of cost of capital, goodwill impairment and valuation in general.
- Carla is a Kroll Institute Fellow, a Practitioner Director in the Board of the Financial Management Association (FMA) International, and a member of the Education Committee of the International Institute of Business Valuers (iiBV).
- Carla received her M.B.A. in finance from the University of Rochester's Simon School, an honors degree is busines administration from Lisbon's School of Economics and Management (ISEG Lisbon) and completed coursework for a Masters of Taxation from Villanova University School of Law. Additionally, she holds a Chartered Financial Analyst (CFA) designation, an Accredited in Business Valuation (ABV) credential, and has passed the exam and fulfilled all the requirements for the Certified in Entity and Intangibles Valuations (CEIV) credential.

James P. Harrington

Director

James P. Harrington is a Director at Kroll (previously Duff & Phelps) James is a member of the Kroll Valuation Digital Solutions group, which produces cost of capital thought leadership content and data housed in the Cost of Capital Navigator at kroll.com/costofcapitalnavigator.

- James provides technical support on client engagements involving cost of capital and business valuation matters and is a leading contributor to Kroll's efforts in the development of studies, surveys, online content and tools, and firmwide valuation models.
- Previously, James was director of valuation research in Morningstar's Financial Communications Business where he led the group that produced the Stocks, Bonds, Bills, and Inflation® (SBBI®) Valuation Yearbook, Stocks, Bonds, Bills, and Inflation® (SBBI®) Classic Yearbook, Cost of Capital Yearbook, various international cost of capital reports, and created a website dedicated to cost of capital issues.
- James is co-author of the "Valuation Handbook" series with colleagues Carla Nunes and Roger Grabowski. The four Valuation Handbooks were published as physical books starting in 2014; as of 2021 the information and data previously published in the Valuation Handbooks has been transitioned over to the Cost of Capital Navigator at kroll.com/costofcapitalnavigator.
- James is co-author of the *Stocks, Bonds, Bills, and Inflation® (SBBI®) 2021 Summary Edition* with Roger Ibbotson (Professor in the Practice Emeritus of Finance at Yale School of Management). The *SBBI® 2021 Summary Edition* is produced in a partnership of Kroll, the CFA Institute Research Foundation, and Morningstar, Inc.
- James is a contributing author to *Cost of Capital: Applications and Examples*, 5th edition, by Shannon P. Pratt and Roger J. Grabowski (John Wiley & Sons, Inc., 2014).
- James is a contributing author to the upcoming Shannon Pratt's *Valuing a Business – The Analysis and Appraisal of Closely Held Companies*, Sixth ed. (McGraw-Hill, expected publication date 2021).

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6. Eurozone Equity Risk Premium
7. Industry Betas
8. Country Risk
9. Extra Resources

Projected Economic Growth

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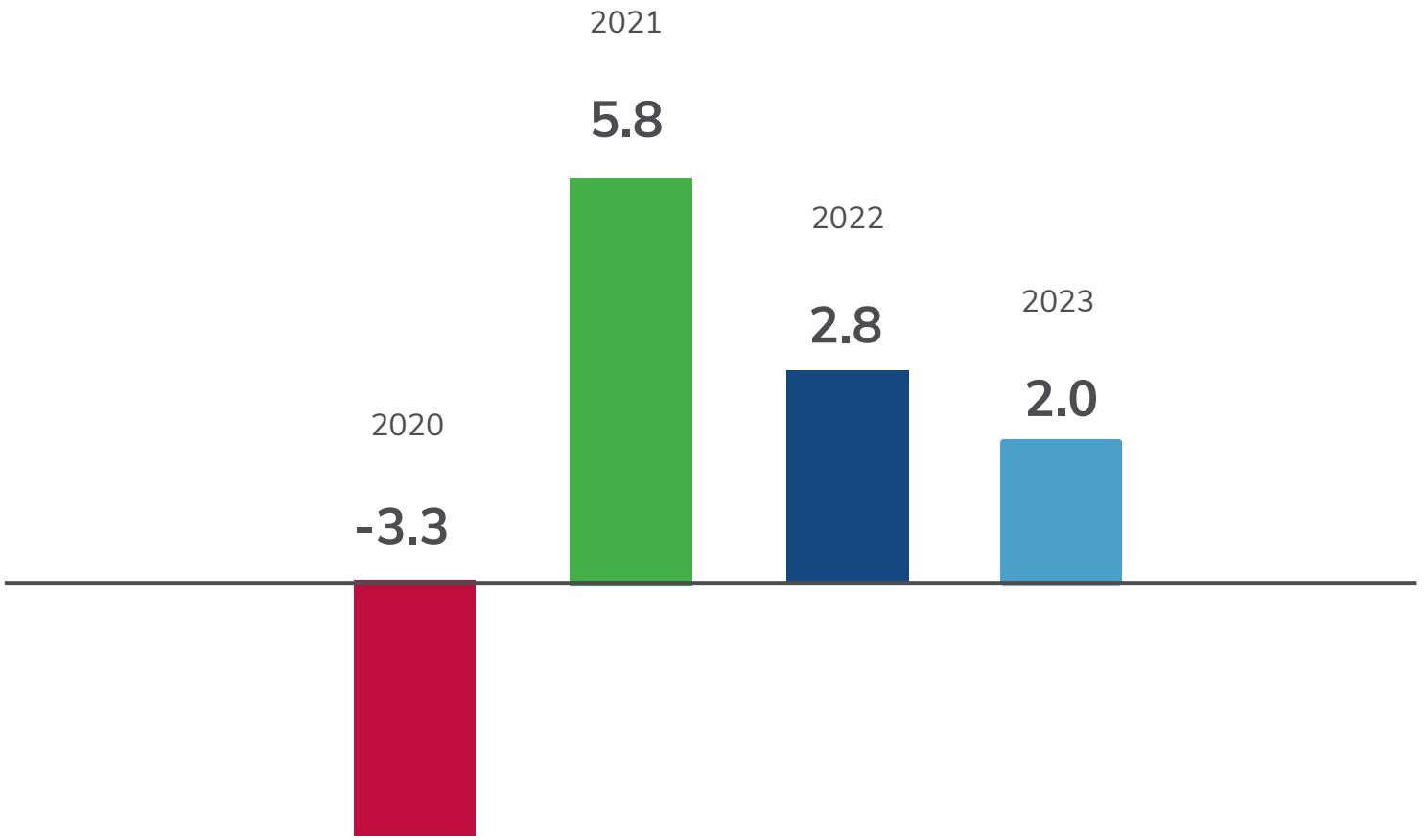
Real GDP Growth – Source of Estimates

We reviewed multiple sources of Real GDP Growth forecasts:

1. International Monetary Fund (IMF)
2. Organisation for Economic Co-operation and Development (OECD)
3. World Bank
4. Blue Chip Economic Indicators
5. Consensus Economics
6. Economist Intelligence Unit (EIU)
7. Fitch Ratings
8. IHS Markit
9. Moody's Analytics
10. Oxford Economics
11. Standard & Poor's

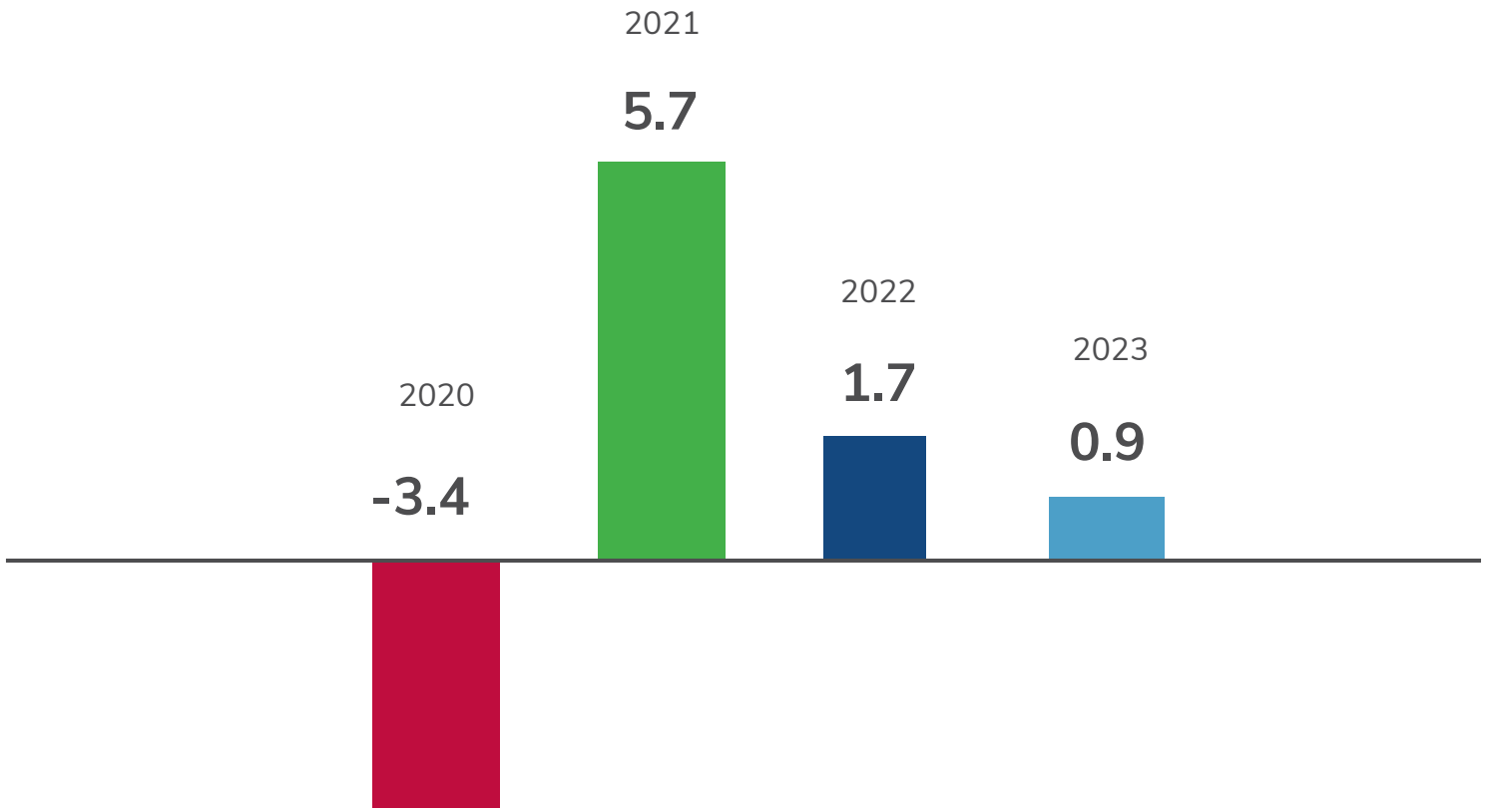
Real GDP Growth (%) Estimates by Region: World

Data as of September 15, 2022

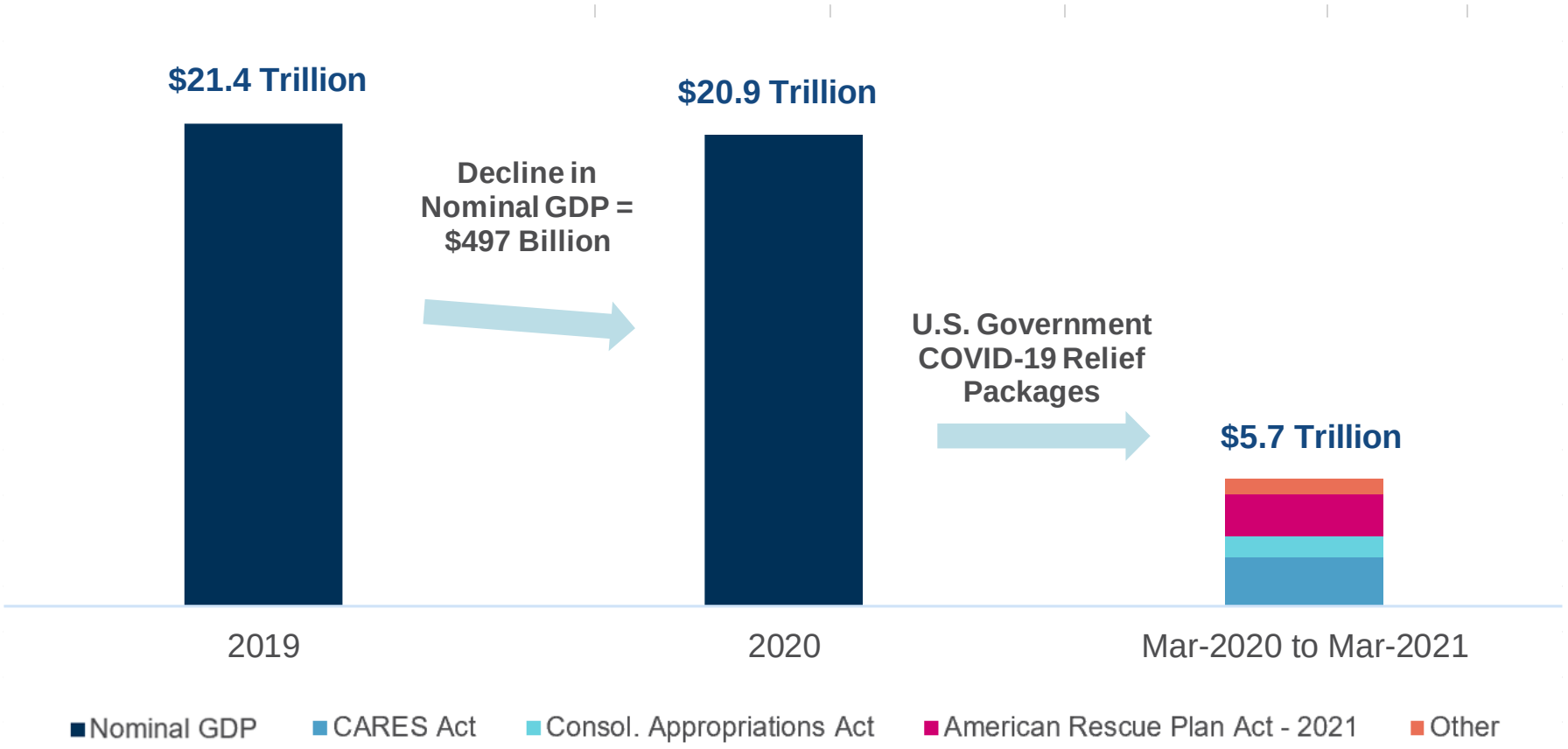


Real GDP Growth (%) Estimates by Region: United States

Data as of September 15, 2022



U.S. Fiscal Policy Response to COVID-19 as a Proportion of Nominal GDP



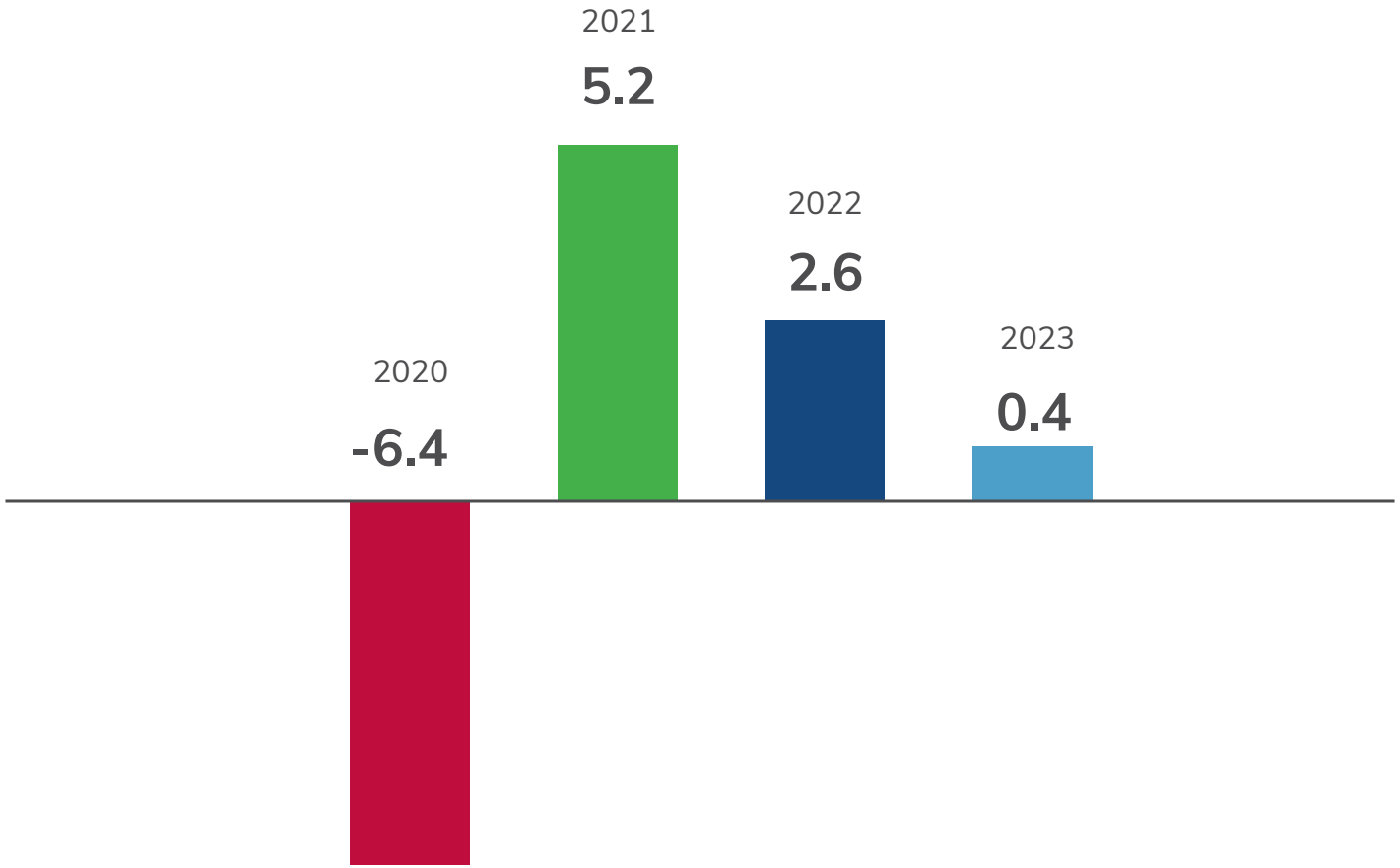
Size of Combined COVID-19 Fiscal Stimulus Packages:

27%

of 2019 Nominal GDP

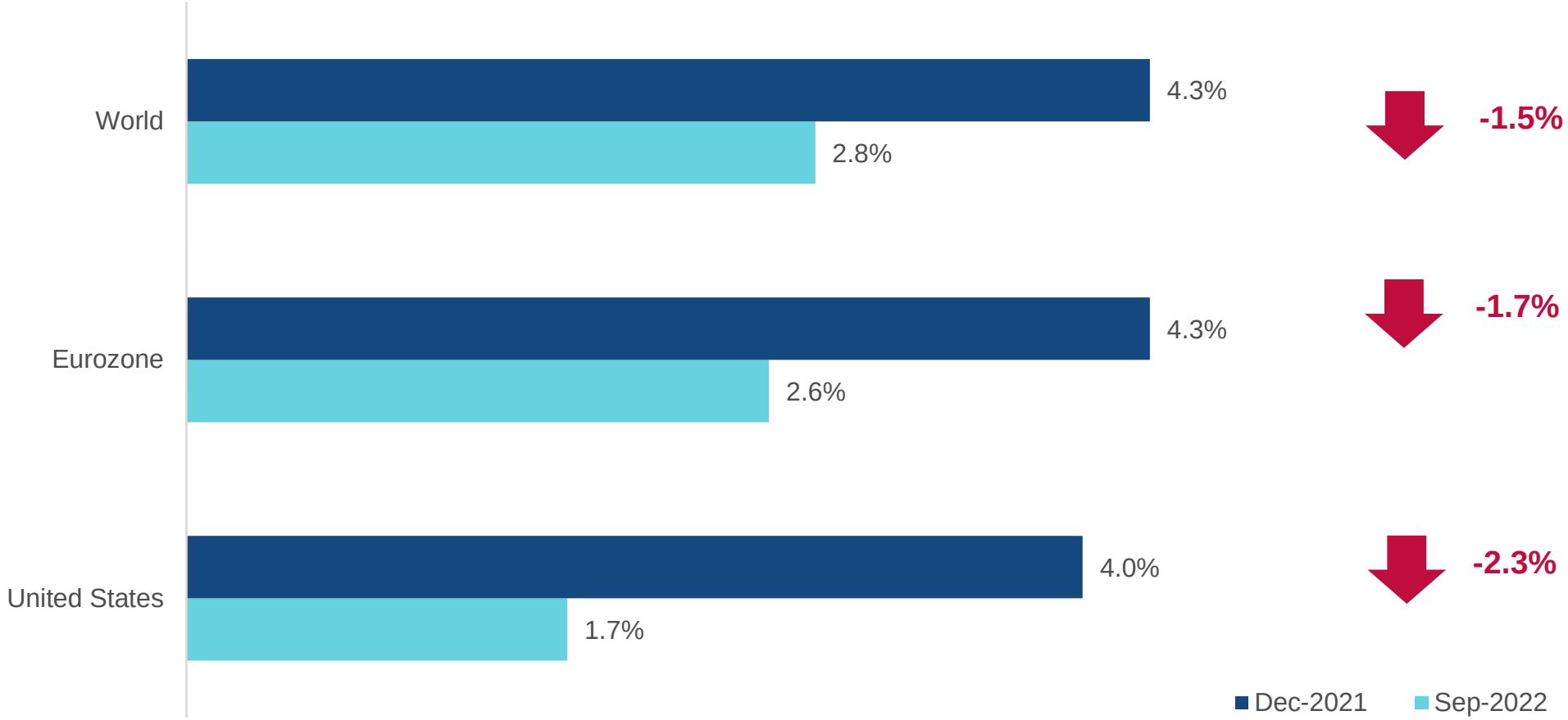
Real GDP Growth (%) Estimates by Region: Eurozone

Data as of September 15, 2022



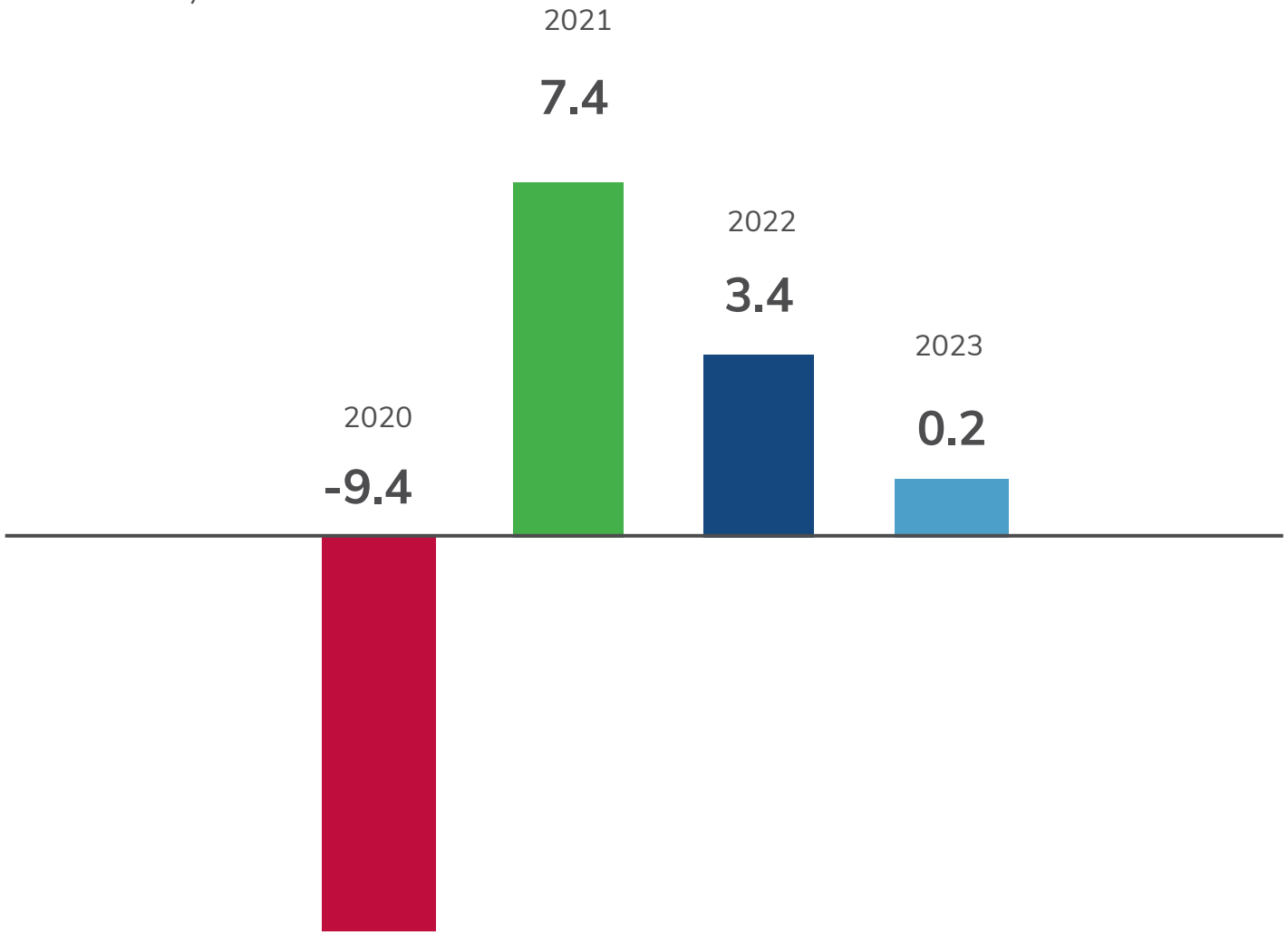
2022 Real GDP Growth Rates of World, U.S., Eurozone

Data as of September 15, 2022



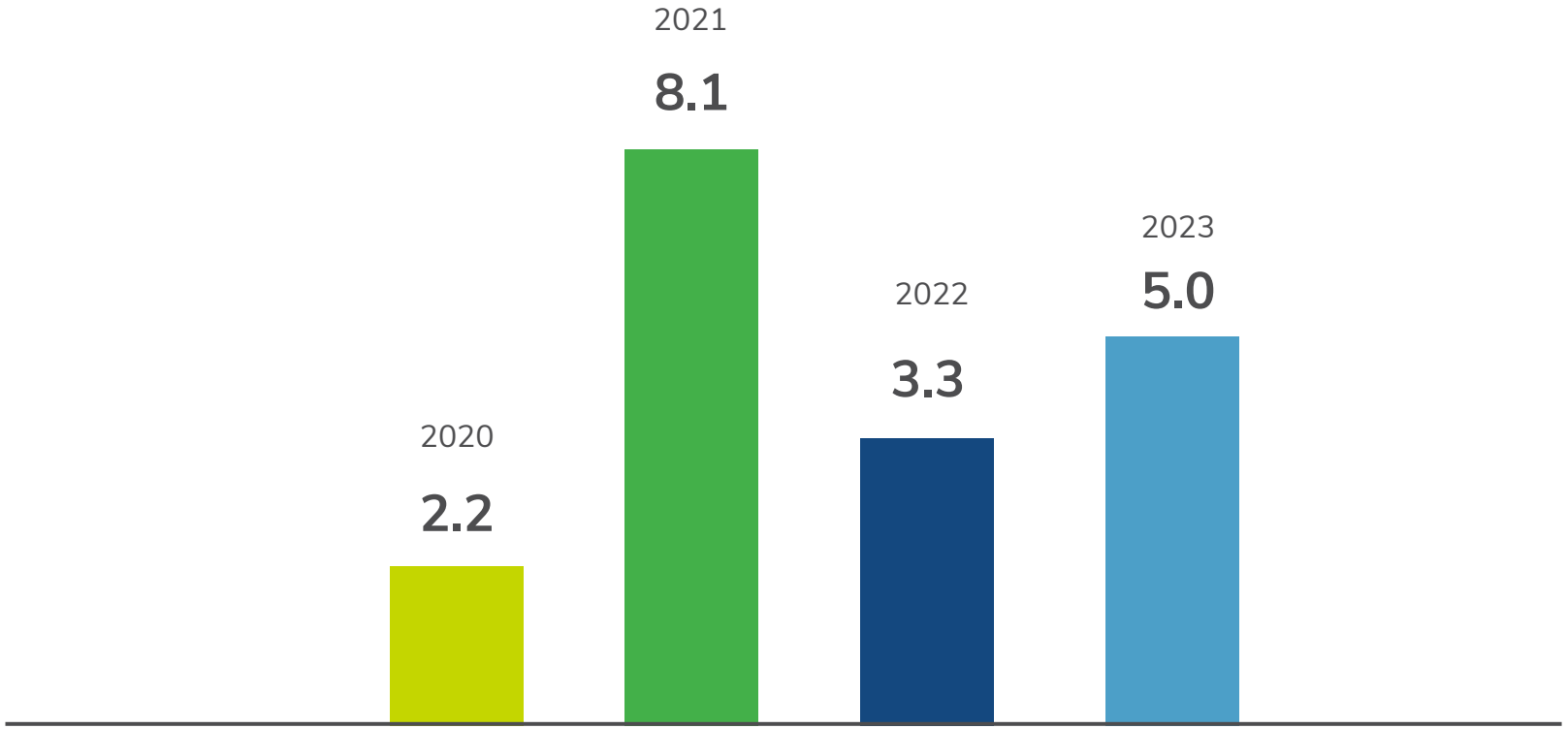
Real GDP Growth (%) Estimates by Region: United Kingdom

Data as of September 15 ,2022



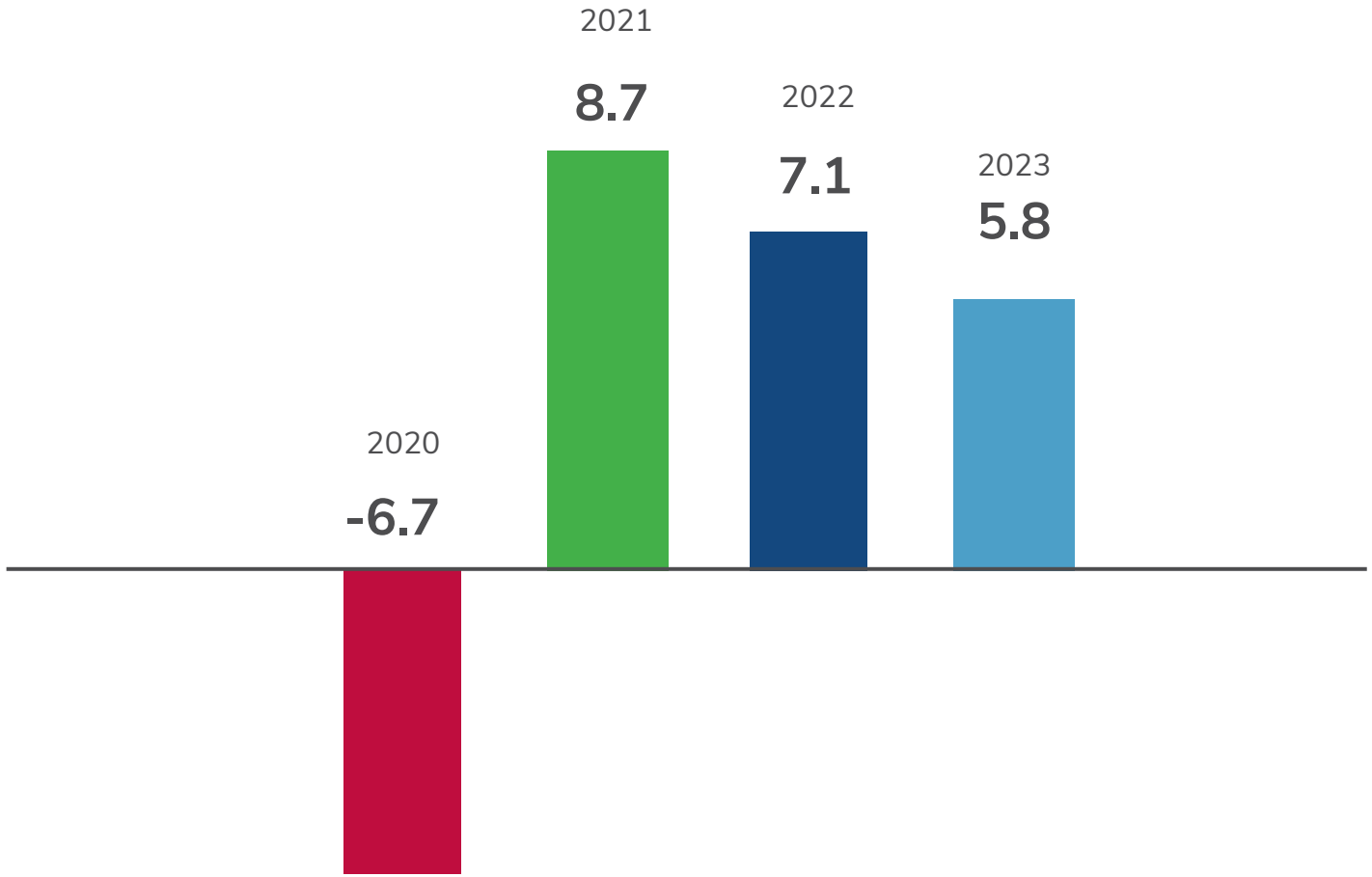
Real GDP Growth (%) Estimates by Region: China

Data as of September 15, 2022



Real GDP Growth (%) Estimates by Region: India

Data as of September 15, 2022



Financial Market Performance

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Since COVID Lows in March 2020

MSCI Developed, Emerging, and Frontier Markets (USD)

Developed Markets

	January 2022 – August 2022	April 2020 – August 2022
Australia	-7.3%	65.6%
Austria	-38.4%	49.2%
Belgium	-23.1%	8.3%
Canada	-10.9%	65.3%
Denmark	-17.5%	54.3%
Finland	-19.3%	33.3%
France	-21.9%	35.9%
Germany	-31.1%	12.2%
Hong Kong	-9.7%	11.0%
Ireland	-29.6%	18.7%
Israel	-16.6%	35.4%
Italy	-27.0%	22.7%
Japan	-17.7%	15.7%
Netherlands	-33.4%	33.5%
New Zealand	-21.2%	-5.8%
Norway	-0.8%	82.0%
Portugal	-2.2%	31.5%
Singapore	-14.8%	16.1%
Spain	-16.9%	14.7%
Sweden	-32.8%	31.3%
Switzerland	-20.1%	22.0%
United Kingdom	-10.8%	33.1%
United States	-17.1%	58.9%
Average	-19.2%	32.4%
Median	-17.7%	31.5%

Emerging Markets

	January 2022 – August 2022	April 2020 – August 2022
Brazil	15.6%	56.0%
Chile	27.9%	56.2%
China	-19.4%	-8.8%
Colombia	-10.4%	25.2%
Czech Republic	-8.3%	129.2%
Egypt	-38.0%	-28.8%
Greece	-14.1%	24.2%
Hungary	-40.2%	-2.9%
India	-3.3%	106.2%
Indonesia	8.8%	70.6%
Korea	-26.7%	26.4%
Kuwait	13.4%	82.6%
Malaysia	-8.4%	10.1%
Mexico	-12.3%	64.2%
Peru	-4.6%	13.4%
Philippines	-13.4%	19.4%
Poland	-42.8%	-13.0%
Qatar	15.3%	56.6%
Saudi Arabia	10.5%	113.0%
South Africa	-10.5%	50.9%
Taiwan	-23.3%	70.6%
Thailand	-3.3%	27.6%
Turkey	22.3%	15.3%
United Arab Emirates	1.2%	106.7%
Average	-6.8%	44.6%
Median	-8.4%	39.3%

Frontier Markets

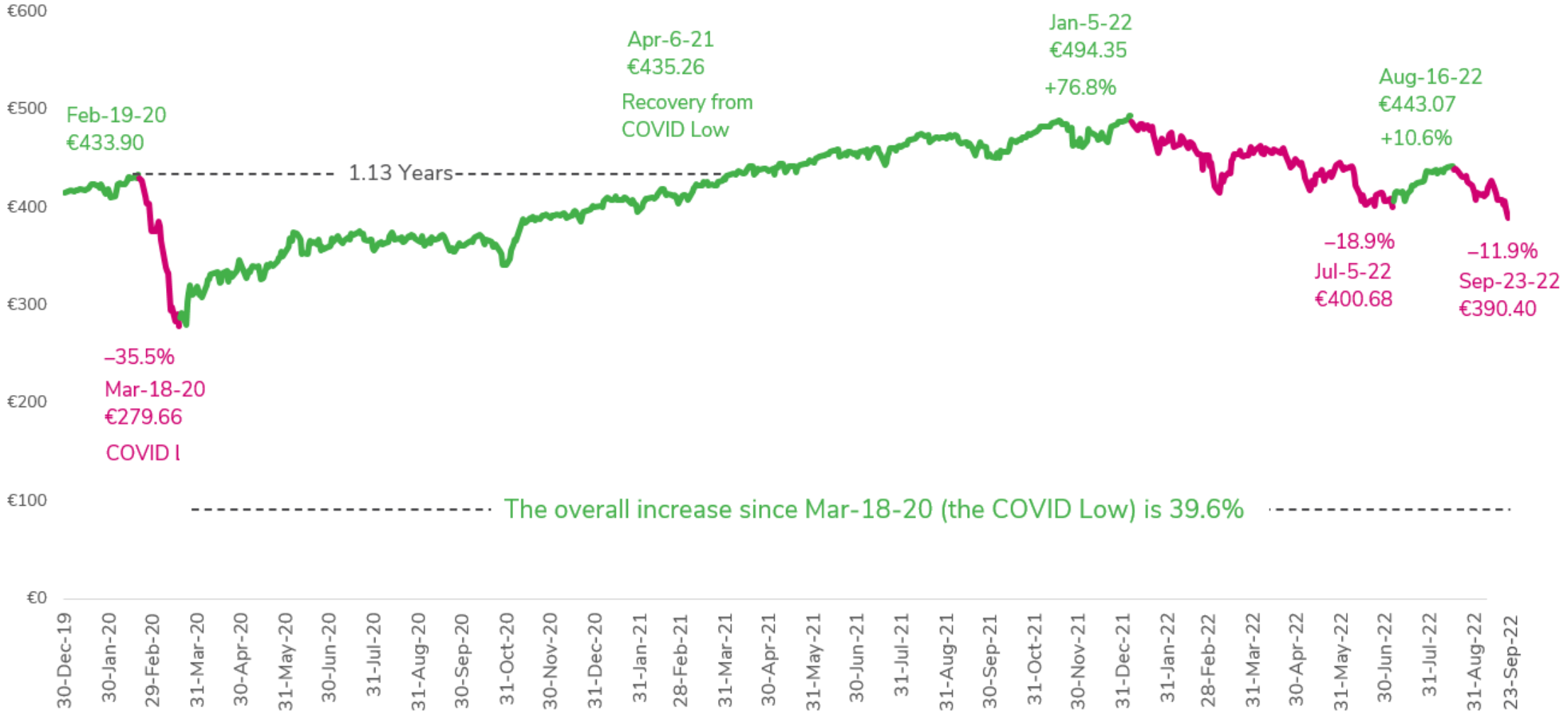
	January 2022 – August 2022	April 2020 – August 2022
Bahrain	18.2%	76.3%
Bangladesh	-18.4%	22.7%
Croatia	-6.4%	22.0%
Estonia	-21.8%	32.5%
Jordan	27.1%	-8.1%
Kazakhstan	-33.9%	91.3%
Kenya	-21.7%	8.3%
Lithuania	-15.8%	29.3%
Mauritius	-5.1%	27.4%
Morocco	-21.3%	23.1%
Nigeria	-1.1%	92.2%
Oman	35.1%	118.1%
Pakistan	-31.9%	-28.4%
Romania	-4.9%	71.0%
Serbia	-4.7%	23.3%
Slovenia	-22.3%	63.8%
Sri Lanka	-61.8%	-45.2%
Tunisia	-6.1%	1.5%
Vietnam	-25.1%	55.7%
Average	-11.7%	35.6%
Median	-15.8%	27.4%

S&P 500 (Price) Index (USD)

December 31, 2019 – September 23, 2022

STOXX Europe 600 (Price) Index (EUR)

December 31, 2019 – September 23, 2022



U.S. Market Crashes; S&P 500 Price is Index Benchmark

1929 Crash

Start Date of the Decline	16-Sep-29
S&P 500	31.86
End date of the Decline	29-Oct-29
S&P 500	20.43
Decline	**-35.9%**
Recovery Date	22-Sep-54
S&P 500	32.00
Years to Recover	**25.02**

1987 Crash

Start Date of the Decline	25-Aug-87
S&P 500	336.77
End date of the Decline	19-Oct-87
S&P 500	224.84
Decline	**-33.2%**
Recovery Date	26-Jul-89
S&P 500	338.05
Years to Recover	**1.92**

Dotcom Crash

Start Date of the Decline	24-Mar-00
S&P 500	1,527.46
End date of the Decline	9-Oct-02
S&P 500	776.76
Decline	**-49.1%**
Recovery Date	30-May-07
S&P 500	1,530.23
Years to Recover	**7.18**

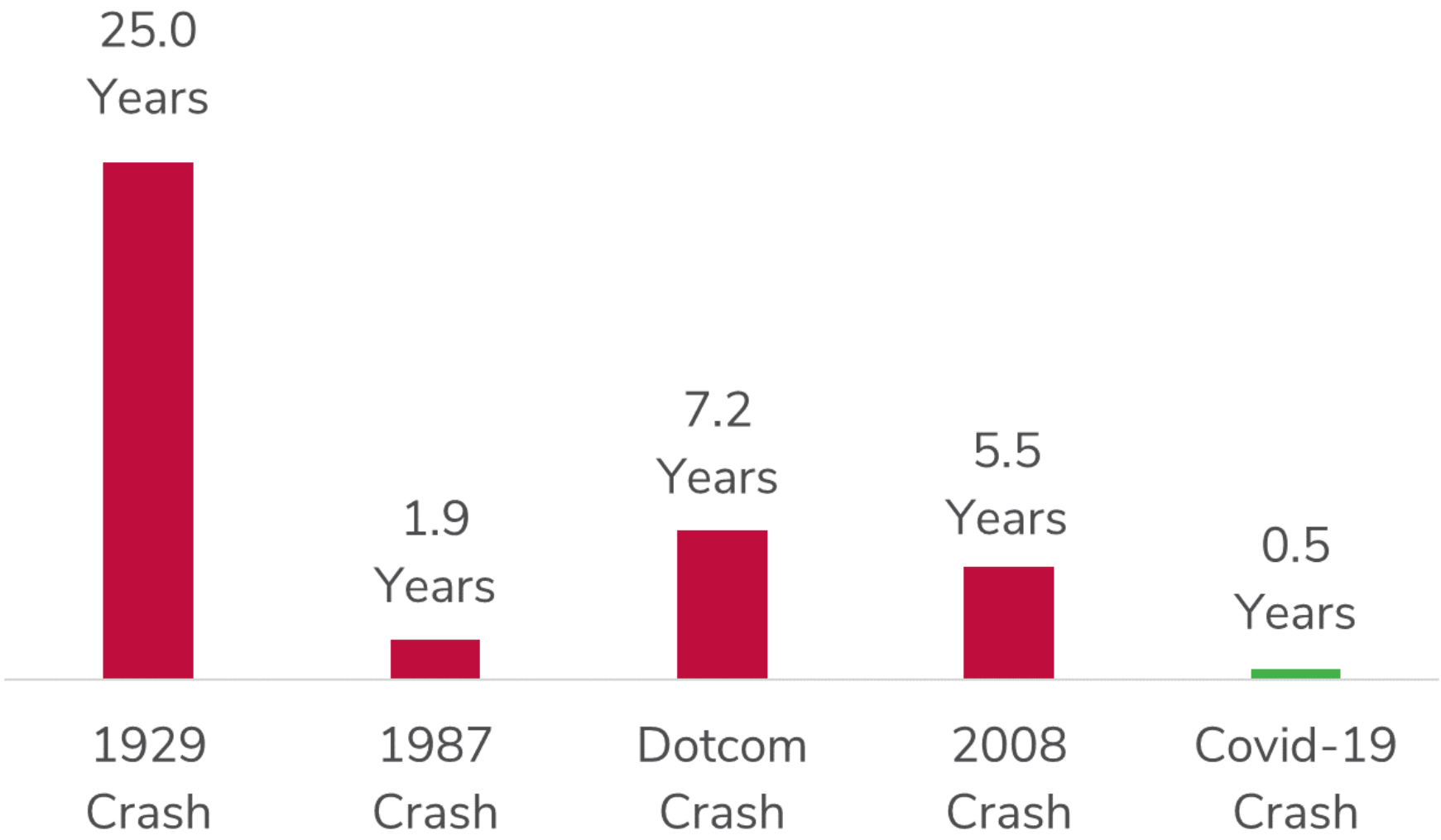
2008 Crash

Start Date of the Decline	9-Oct-07
S&P 500	1,565.15
End date of the Decline	9-Mar-09
S&P 500	676.53
Decline	**-56.8%**
Recovery Date	28-Mar-13
S&P 500	1,569.19
Years to Recover	**5.47**

Covid-19 Crash

Start Date of the Decline	19-Feb-20
S&P 500	3,386.15
End date of the Decline	23-Mar-20
S&P 500	2,237.40
Decline	**-33.9%**
Recovery Date	18-Aug-20
S&P 500	3,389.78
Years to Recover	**0.50**

U.S. Market Crashes; S&P 500 Price is Index Benchmark



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Years to Recover	**0.50**

Current Situation

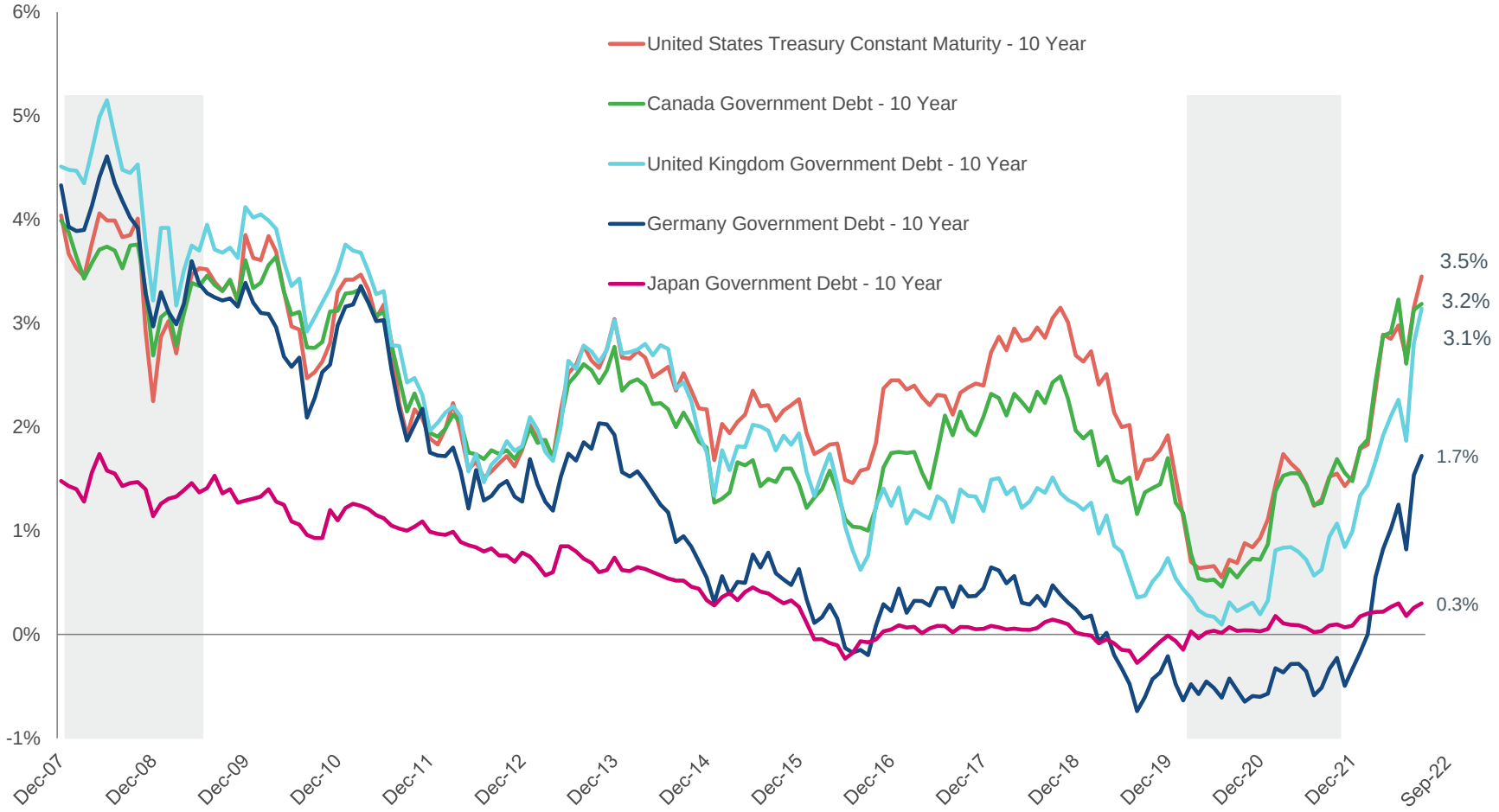
	S&P 500 Price Index	% Change since 1/3/22
1/3/22	4,796.56	–
6/16/22	3,666.77	**-23.6%**
8/16/22	4,305.20	**-10.2%**
9/23/22	3,693.23	**-23.0%**

Risk-free Rate Analysis

KROLL

10-Year Yields for U.S., Canada, U.K., Germany, Japan,

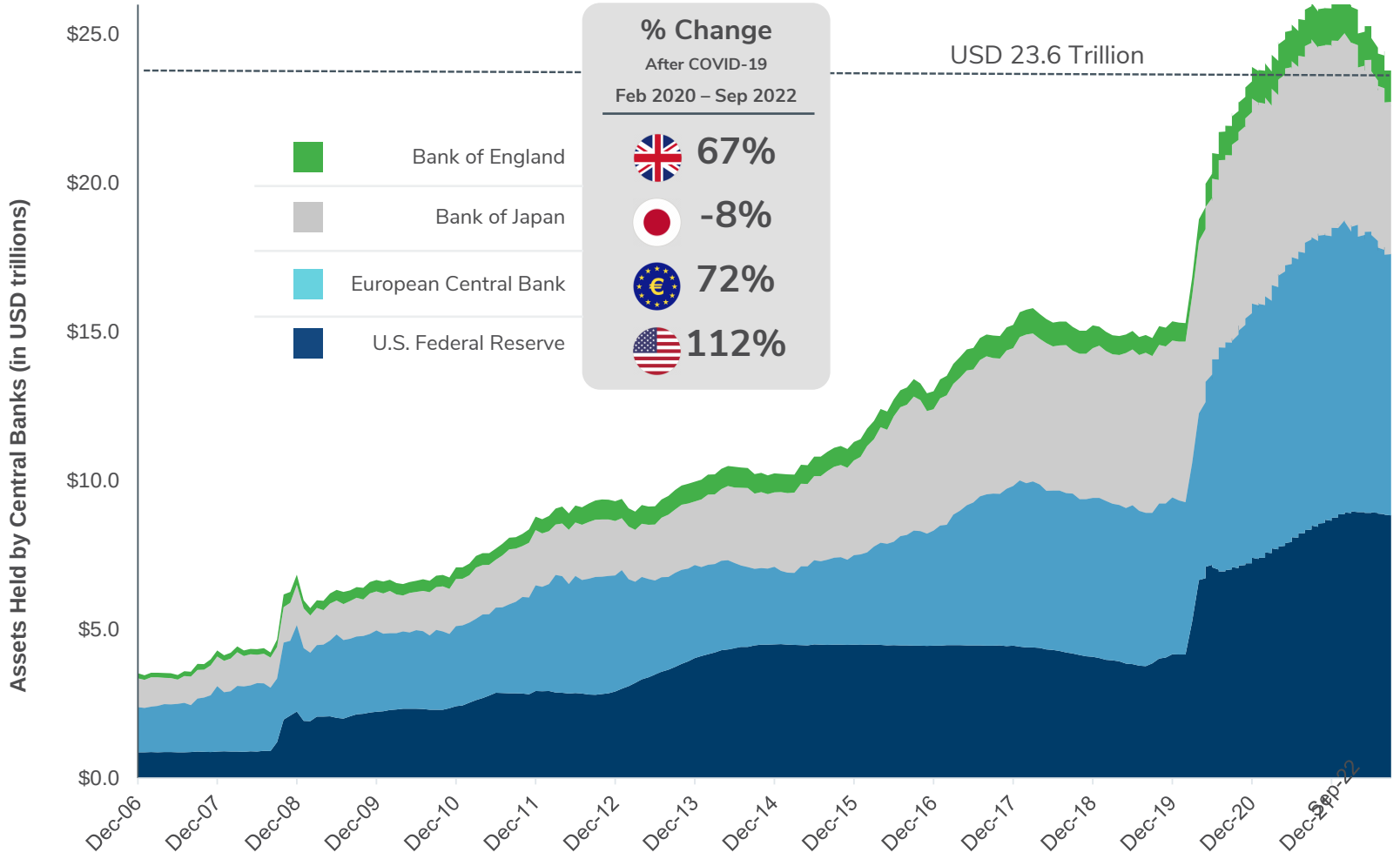
December 31, 2007 – September 15, 2022



Source: S&P Capital IQ

Combined Major Central Banks Balance Sheets: Fed, ECB, BOJ, BOE

February 2020 – Mid-September 2022



Source: Federal Reserve Bank of St. Louis Economic Research and the Bank of England

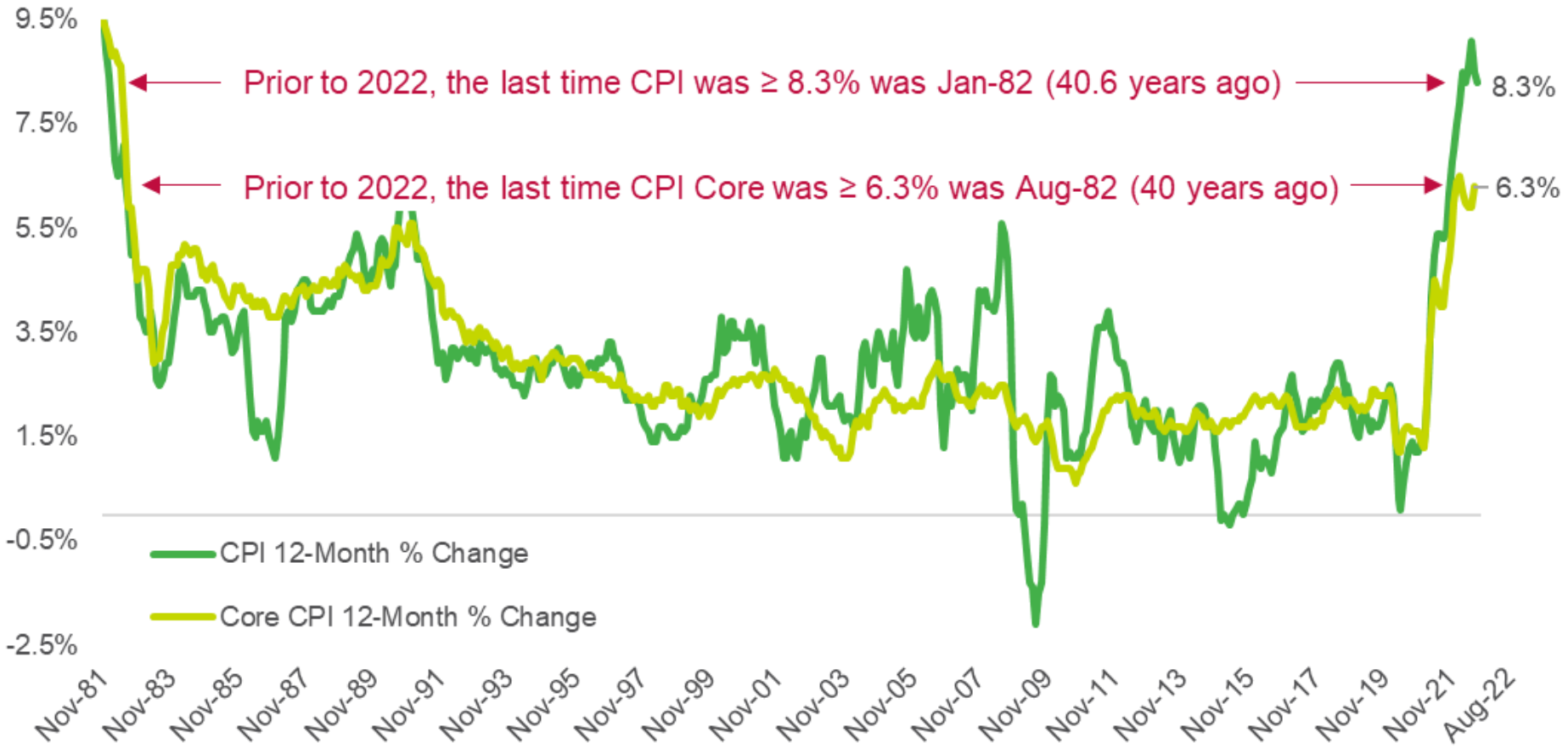
12-Month Percentage Change (%) in Consumer Price Inflation (CPI) Index (YOY)

	August 2022	Comments
United States	8.3%	Down from 8.5% in July, but still near the 40-year record high of 9.0% in June 2022.
Canada	7.0%	Down from the 7.6% gain in July 2022, the second consecutive monthly drop, but still near 31-year record high.
United Kingdom	9.9%	Down from 10.1% in July 2022, but still near 40-year record high.
Germany*	7.9%	Ties 40-year high (May 2022 was 7.9%). Largely driven by price rises for energy products, but to some extent food.
Eurozone	9.1%	Record since series creation in January 1997 (25 years ago), just prior to the launch of the euro, driven primarily by unprocessed food and energy prices.

Source: U.S. Bureau of Labor Statistics, Statistics Canada, U.K. Office for National Statistics, Germany's Destatis Statistisches Bundesamt, Eurostat.
* Non-harmonized measure.

12-Month Percentage Change, CPI vs. Core Inflation (%)

November 1981 to August 2022



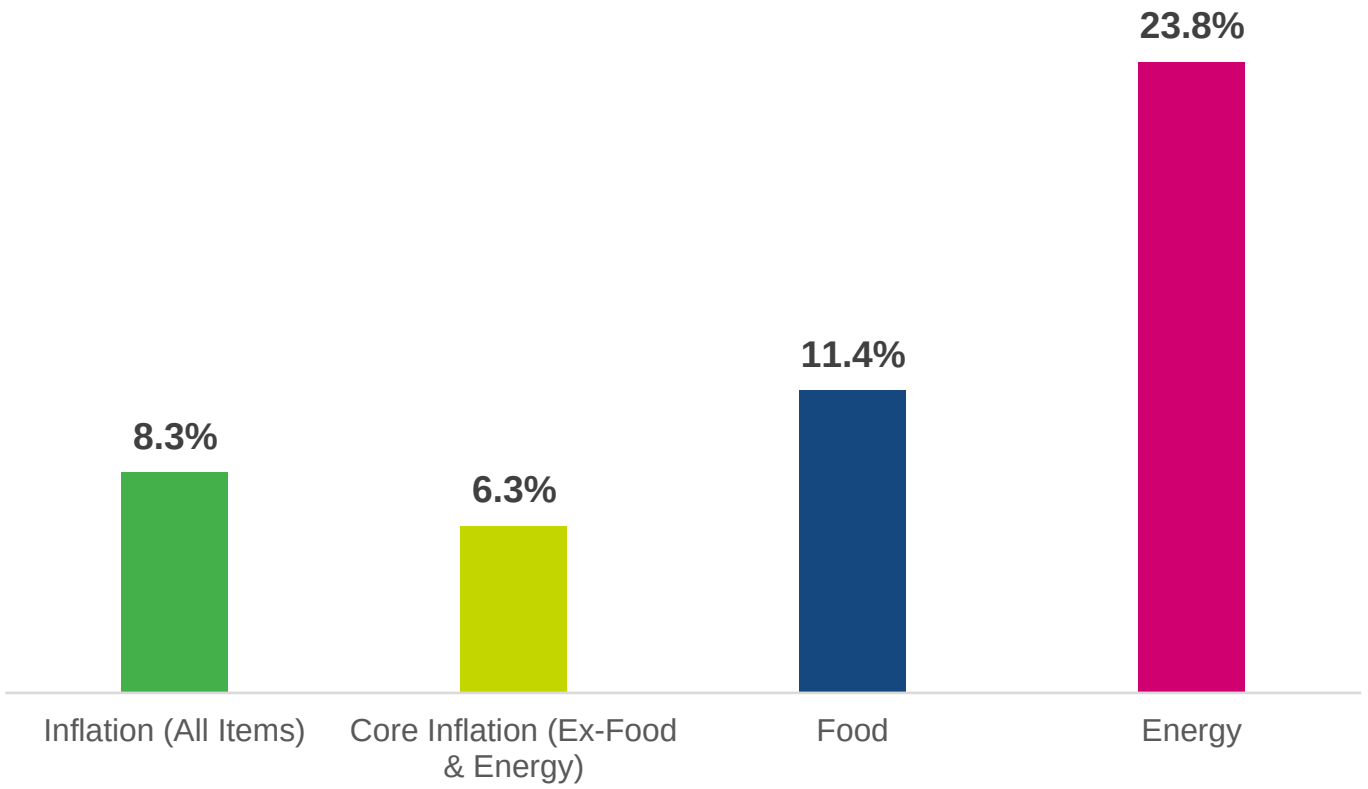
CPI reached a 2022 high of **9.1%** in June.

CPI Core reached a 2022 high of **6.5%** in March.

Source: U.S. Bureau of Labor Statistics, Non-Seasonally Adjusted series

12-Month Percentage Change, CPI Inflation by Major Categories (%)

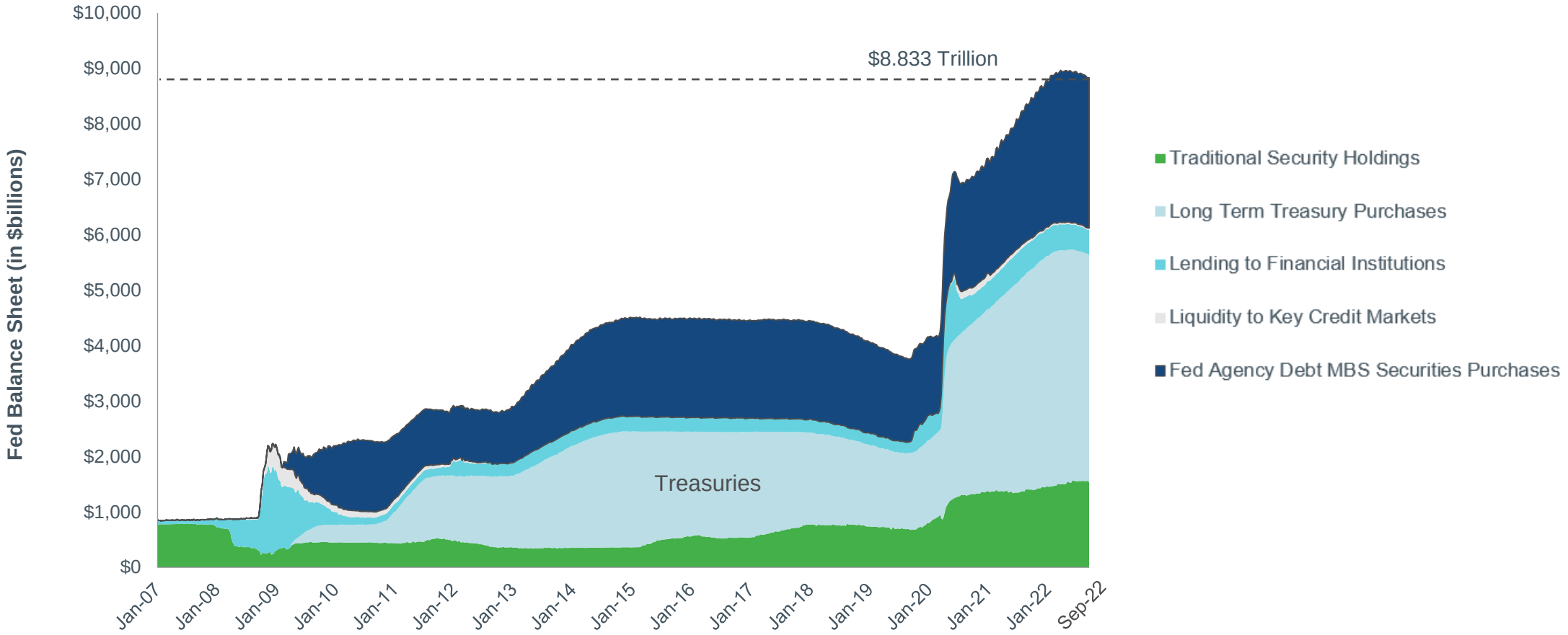
August 2022



Source: U.S. Bureau of Labor Statistics, Non-Seasonally Adjusted series

U.S. Central Bank Balance Sheet

January 1, 2007 – September 14, 2022



Source: Cleveland Federal Reserve, S&P Capital IQ

Quantitative Tightening (QT)

Monthly Caps and Actual Reduction in Federal Reserve's Security Holdings (USD in Billions)

	Monthly Cap: Maturing U.S. Treasury Securities	Monthly Cap: Maturing MBS & Agency Debt	Monthly Cap: Total Maturing Treasuries, MBS & Agency Debt	(A) End-of-Period Cumulative Cap (# mos. x monthly cap)	(B) Actual Period Change Holdings	Shortfall (A - B)
Jun-Aug 2022	30.0	17.5	47.5	125.0	73.0	(52.0)
Sep-Dec 2022	60.0	35.0	95.0	380.0		
Jan-Dec 2023	60.0	35.0	95.0	1,140.0		
Total Projected Reduction in Security Holdings by Dec 2023				**$1,645.0**	(C)	

Source: Federal Reserve of St. Louis. Kroll calculations

Quantitative Tightening (QT)

Monthly Caps and Actual Reduction in Federal Reserve's Security Holdings (USD in Billions)

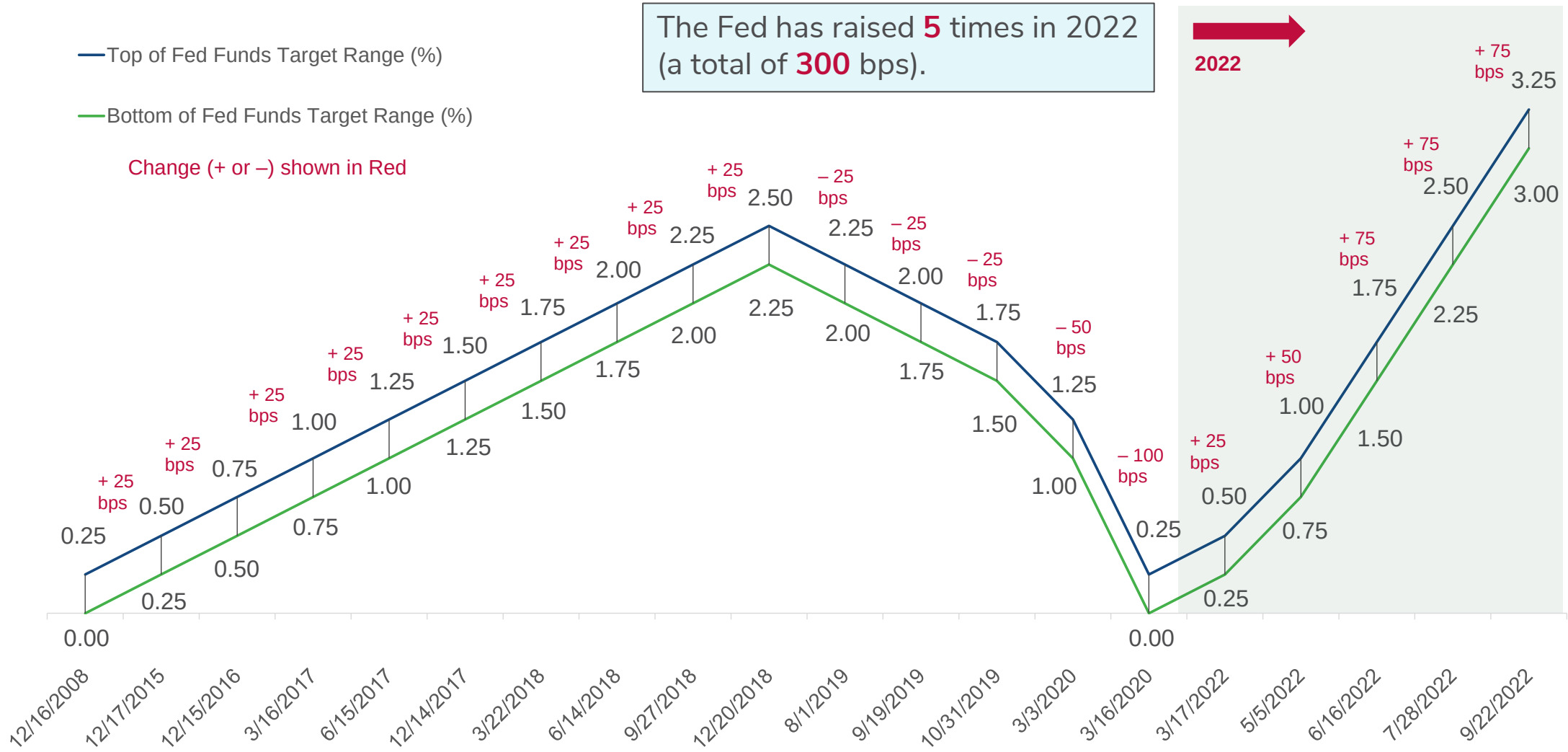
Actual Total Holdings 31 May 2022	Less: Fed Projected Reduction in Security Holdings (C)	Fed Projected Holdings 31 Dec 2023
$8,479	– $1,645	= $6,834 bn

Fed Actual Holdings Pre-COVID (26 Feb 2020)
$3,848 bn

Excess Holdings 31 Dec 2023
+$2,896 bn

Source: Federal Reserve of St. Louis. Kroll calculations

Fed Funds Target Range (Dec 2008 – Sep 2022)



Date the Federal Open Market Committee (FOMC) Changed the Fed Funds Target Rate

The Risk-free Rate (R_f) – Spot Rate or "Normalized" Rate?

During periods in which risk-free rates appear to be **abnormally low** due to flights to quality or massive monetary policy interventions (i.e., QE or quantitative easing)

Kroll recommends normalizing the risk-free rate:

Abnormally Low R_f

Use Normalized Risk-free Rate

The Risk-free Rate (R_f) – Spot Rate or Normalized Rate or "Normalized" Rate?

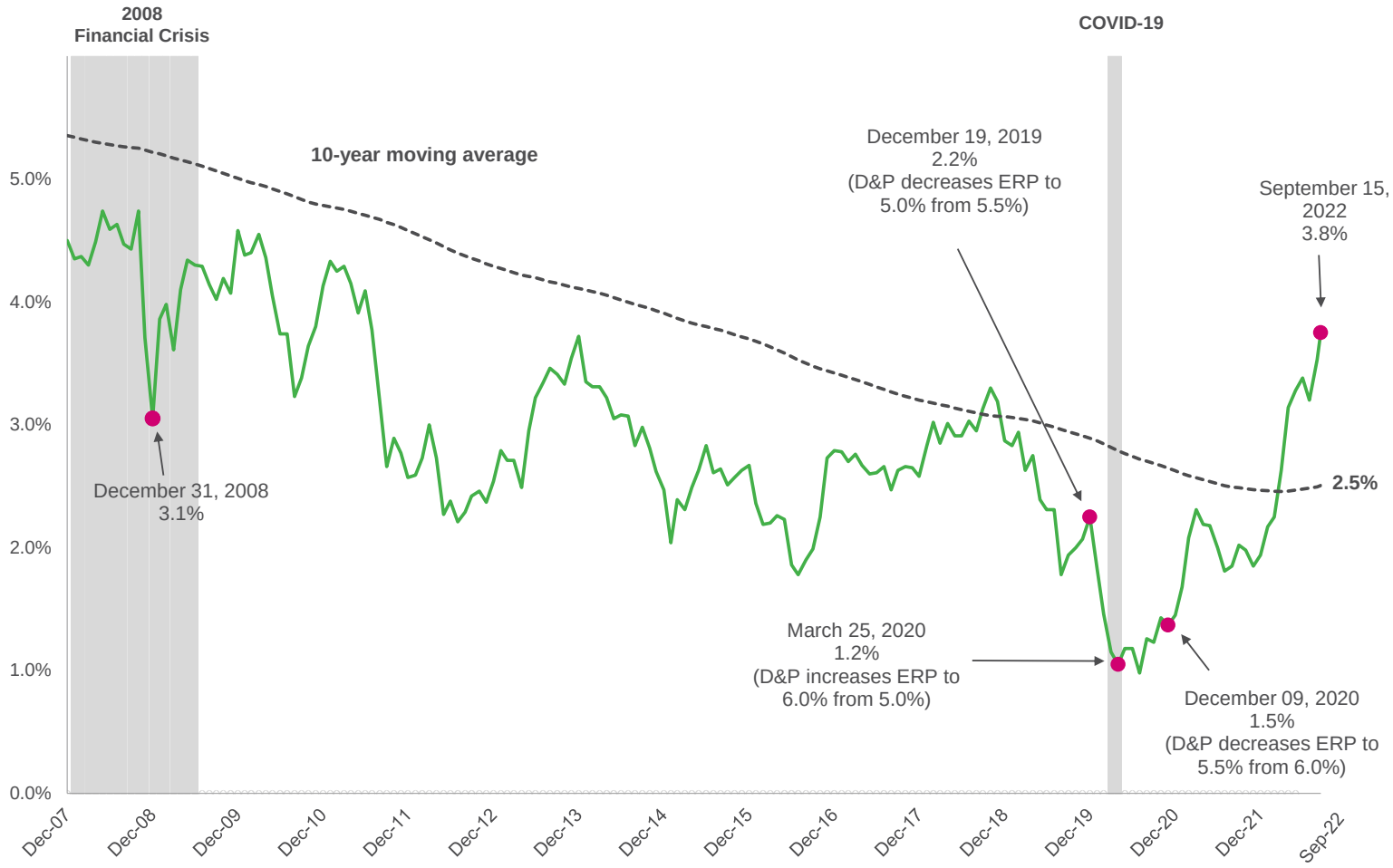
Normalization can be accomplished in several ways, including:

1. Simple averaging

2. Various "buildup" methods

U.S. 20-Year Treasury Yield, Including Trailing Average

December 31, 2007 – September 15, 2022



What is it as of 26 Sep 2022?

4.05%

Source: 20-year U.S. government bond series. Board of Governors of the Federal Reserve System

Risk-free Rate Normalization – by Build Up "Fisher Equation"

Conceptually, the risk-free rate can be (loosely) illustrated as the return on the following two components:*

* This is a simplified version of the "Fisher equation", named after Irving Fisher. Fisher's "The Theory of Interest" was first published by Macmillan (New York), in 1930. The Fisher equation is formally expressed as (1 + Nominal Rate) = (1 + Real Rate) x (1 + Expected Inflation). When rates are low, there is very little difference between the simple form and the Fisher equation. Various academic research papers show that the decomposition of the nominal rate into a real rate and expected inflation should include an additional component excluded from the Fisher equation: the inflation risk premium. This premium reflects the risk that actual inflation may vary significantly from expected inflation, and it can be positive or negative, with some academic estimates at close to 0%.

Real Rate Estimates

United States

Several academic studies have suggested the long-term real risk-free rate to be somewhere in the range of -1.1% to 2.0% based on the study of inflation swap rates, yields on long-term U.S. Treasury Inflation-Protected Securities (TIPS), OLG, DSGE and other econometric models *

-1.1 % ← **Long-term Real Rate** → **2.0%**

* Based on academic studies issued between 2015 and 2022. In academic literature, this is also sometimes called the natural rate of interest, the neutral rate, or the equilibrium rate.

OLG = Overlapping Generational Model

DGSE = Dynamic Stochastic General Equilibrium Model

Long-Term Inflation Expectations

Estimates as of September 2022 (approximately)

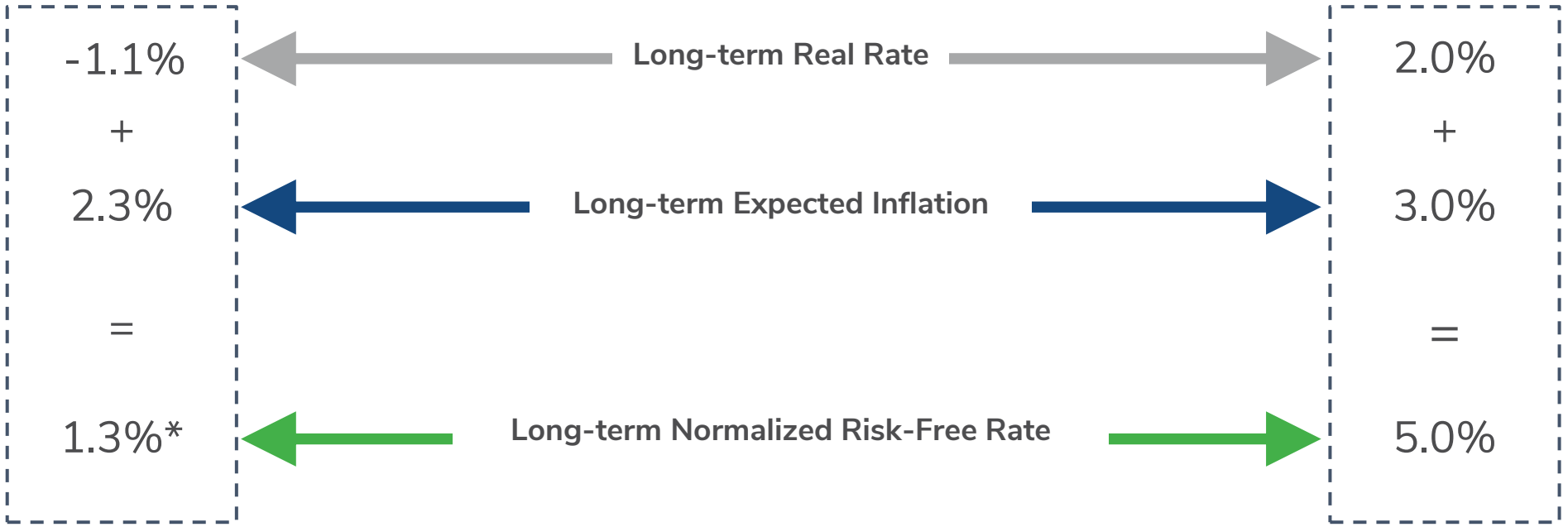
SOURCES	Long-Term Average (%)
Aruoba Term Structure of Inflation Expectations	2.5
Blue Chip Economic Indicators	2.9
Blue Chip Financial Forecasts	2.8
Consensus Economics	3.0
Federal Reserve Bank of Cleveland	2.3
IHS Markit	2.9
Livingston Survey (Federal Reserve Bank of Philadelphia)	2.5
Survey of Professional Forecasters (Federal Reserve Bank of Philadelphia)	2.8
University of Michigan Survey 5-10 Year Ahead Inflation Expectations	2.8
Range of Inflation Estimates	**2.3% – 3.0%**

Median

2.8%

Risk-Free Rate Normalization – United States

As of September 15, 2022



What is the spot 20-year yield as of 26 Sep 2022?

4.1%

- **Fisher Equation:** Midpoint = 3.1% / Median = 3.4%
- **LT Average:** 10-Year Trailing Average of 20-Year U.S. Treasury Yield = 2.5%

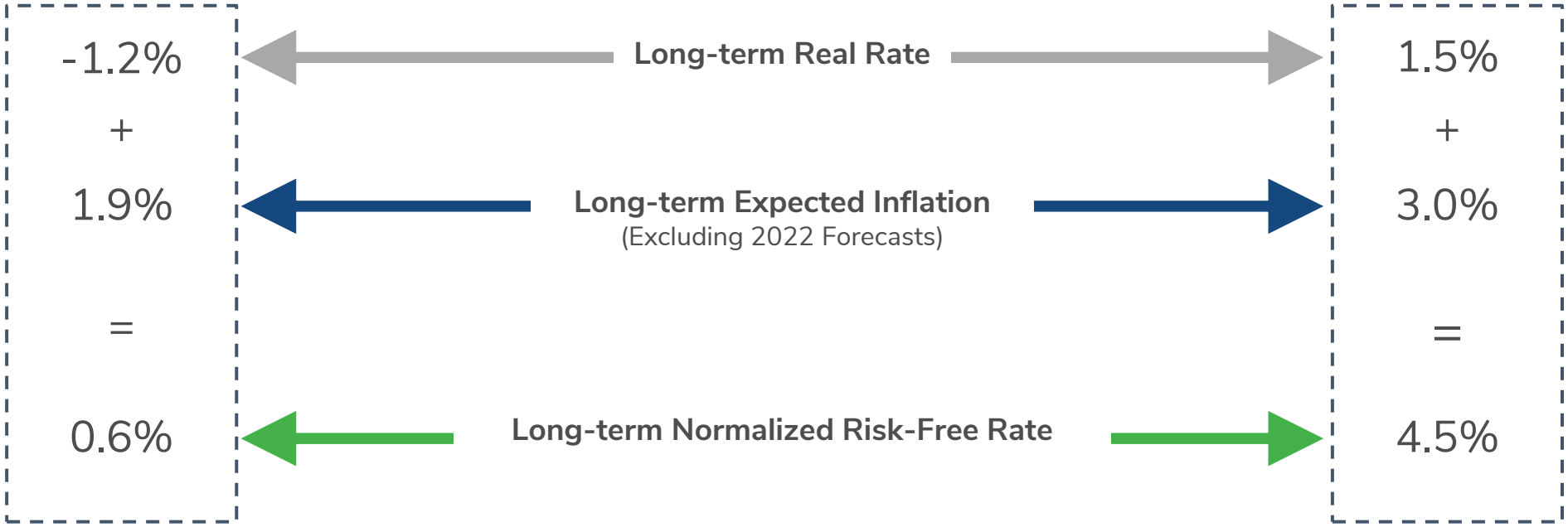
Concluded Normalized R_f = 3.5%

* Differences due to rounding.

Guidance: Use the higher of the Spot Rate or the Normalized Risk-free Rate.

Risk-Free Rate Normalization – Germany

As of September 15, 2022



What is the spot 15-year yield as of 26 Sep 2022?

2.1%

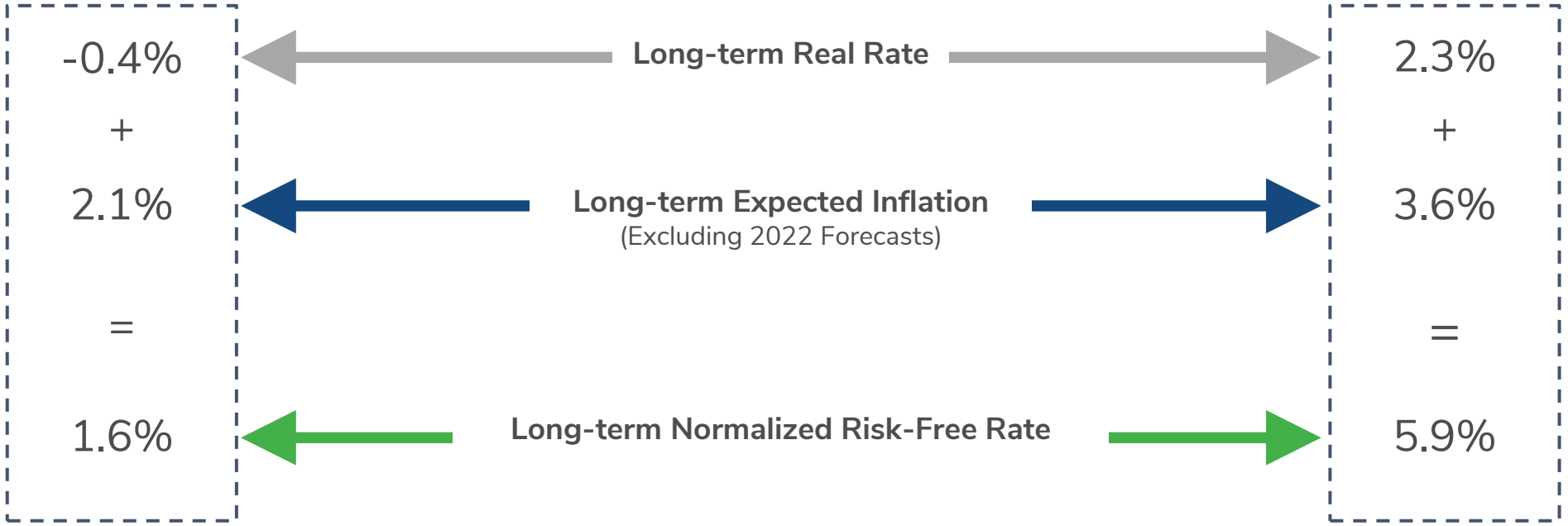
- **Fisher Equation:** Midpoint = 2.6% / Median = 3.3%
- **LT Average:** 10-Year Trailing Average of *15-Year Bund Yield* = 0.8%

Concluded Normalized R_f = 2.0%

Guidance: We *are considering* a change to the Normalized Risk-free Rate from 2.0% to 2.5% in the near future. Final guidance will be issued as soon as we finalize analyzing the latest data.

Risk-Free Rate Normalization – United Kingdom

As of September 15, 2022



What is the spot 20-year yield as of 26 Sep 2022?

4.6%

- **Fisher Equation:** Midpoint = 3.8% / Median = 3.9%
- **LT Average:** 10-Year Trailing Average of *20-Year U.K. Government Yield* = 2.0%

Concluded Normalized R_f = 3.5%

Guidance: We are shifting to a hybrid approach of using the higher of the Spot Rate or the Normalized Risk-free Rate by September 30, 2022. An increase of the Normalized Risk-free Rate is being considered thereafter. Final guidance will be issued as soon as we finalize analyzing the latest data.

U.S. Equity Risk Premium

KROLL

The Kroll Recommended ERP is a Two-Step Process

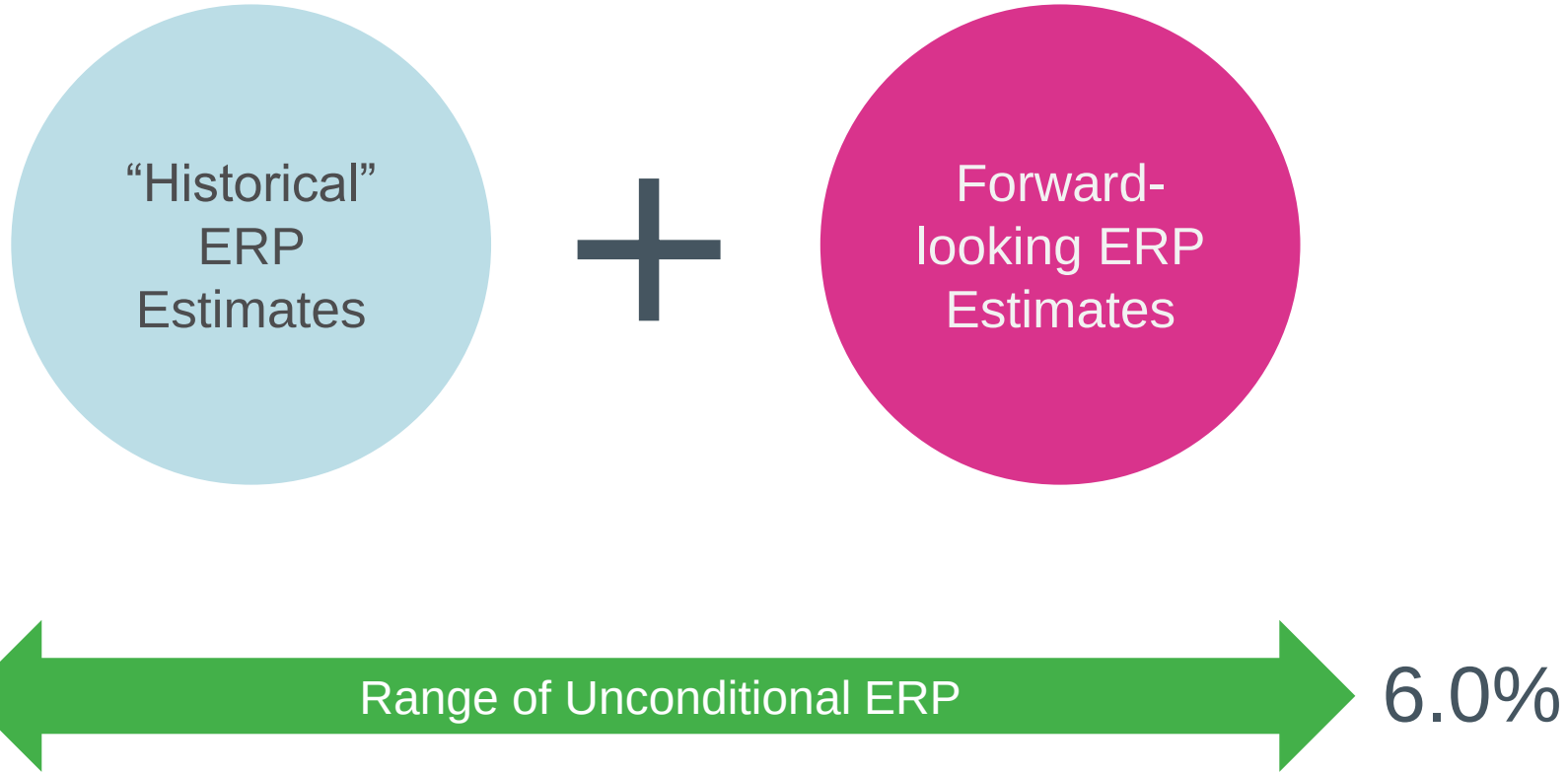
STEP 1: What is a reasonable range of unconditional ERP that can be expected over an entire business cycle?

"What is the range?"

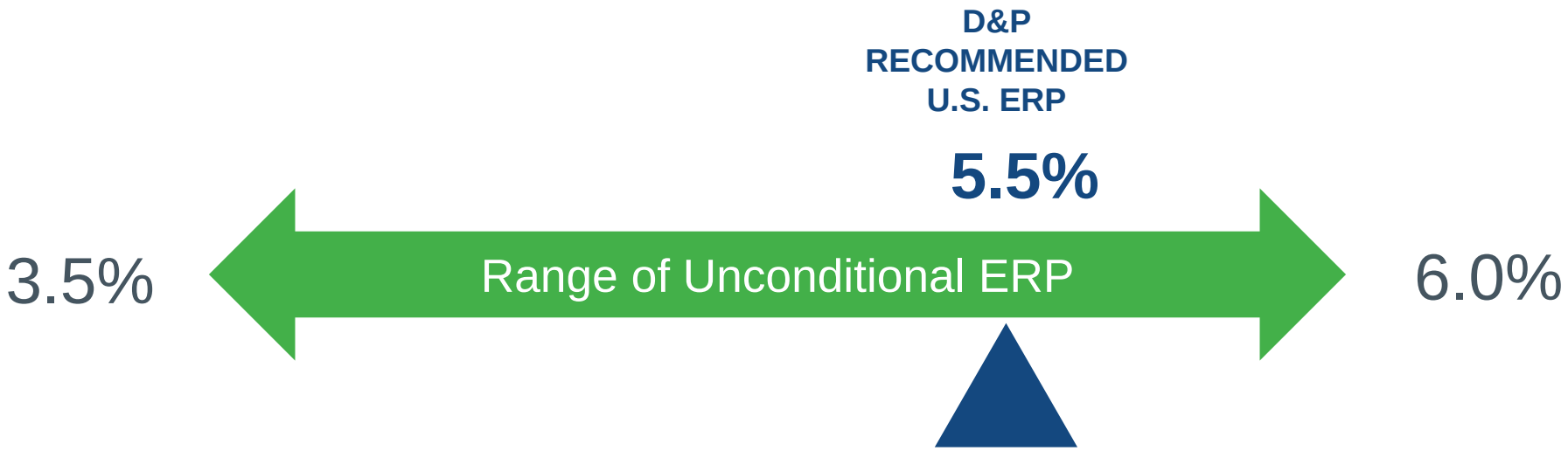
STEP 2: Research has shown that ERP is cyclical during the business cycle. We use the term conditional ERP to mean the ERP that reflects current market conditions.

"Where are we in the range?"

Kroll Considers Multiple Models to Estimate U.S. ERP



Kroll Considers Multiple Models to Estimate U.S. ERP



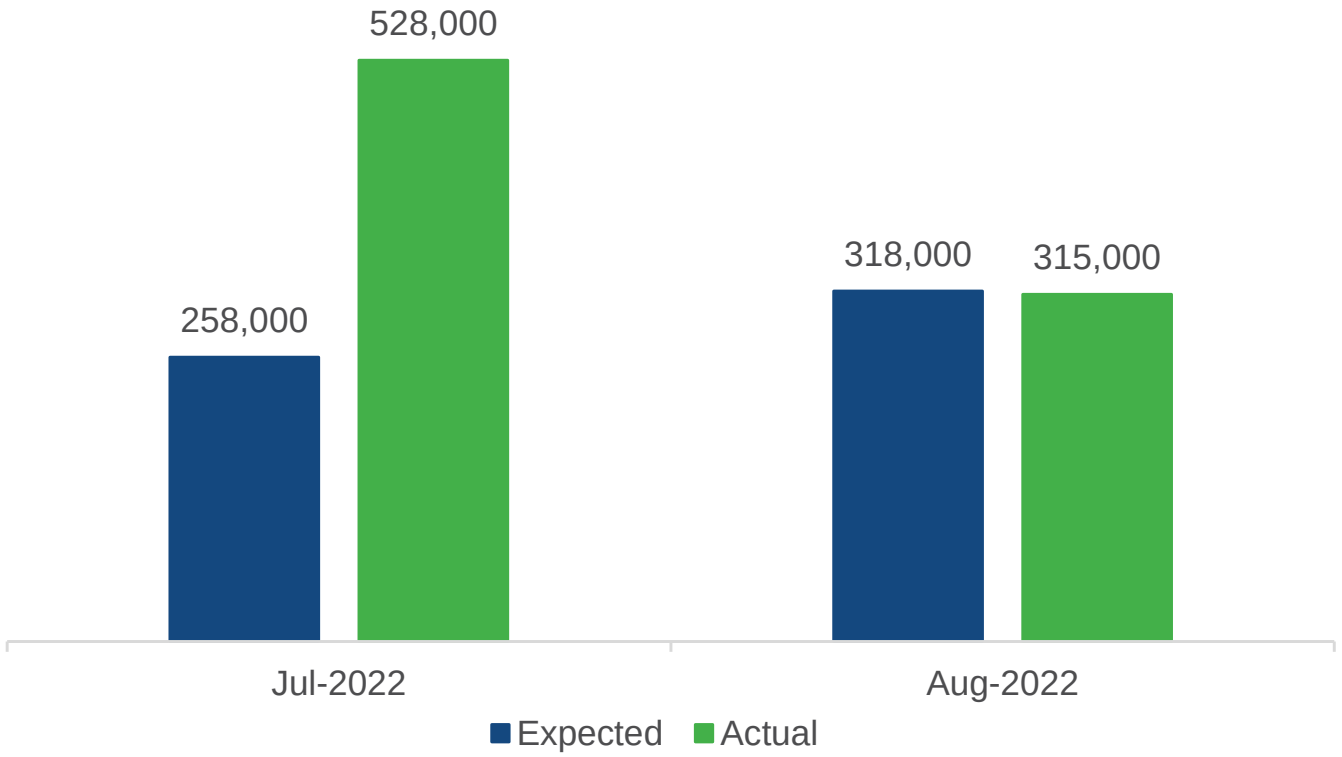
Factors Considered in ERP Recommendation – Summary Table

Changes from December 9, 2020 to September 15, 2022

	Factor	Change	Effect on ERP
Financial Markets	U.S. Equity Markets	▲	▼
	Implied Equity Market Volatility	▼	▼
	Corporate Credit Spreads	▲	▲
	Damodaran Impllied ERP Model	▲	▲
	Default Spread Model	▲	▲
	U.S. Equity Market Uncertainty Index	▲	▲
Economic Indicators	Historical & Projected Real GDP Growth	▲	▼
	Unemployment	▼	▼
	Consumer Sentiment	▼	▲
	Business Confidence	◀▶	▲
	Sovereign Credit Ratings	◀▶	◀▶
	Economic Policy Uncertainty (EPU) Index	▼	▼

Unemployment Increases for First Time Since January 2022…

…. but still near pre-COVID lows

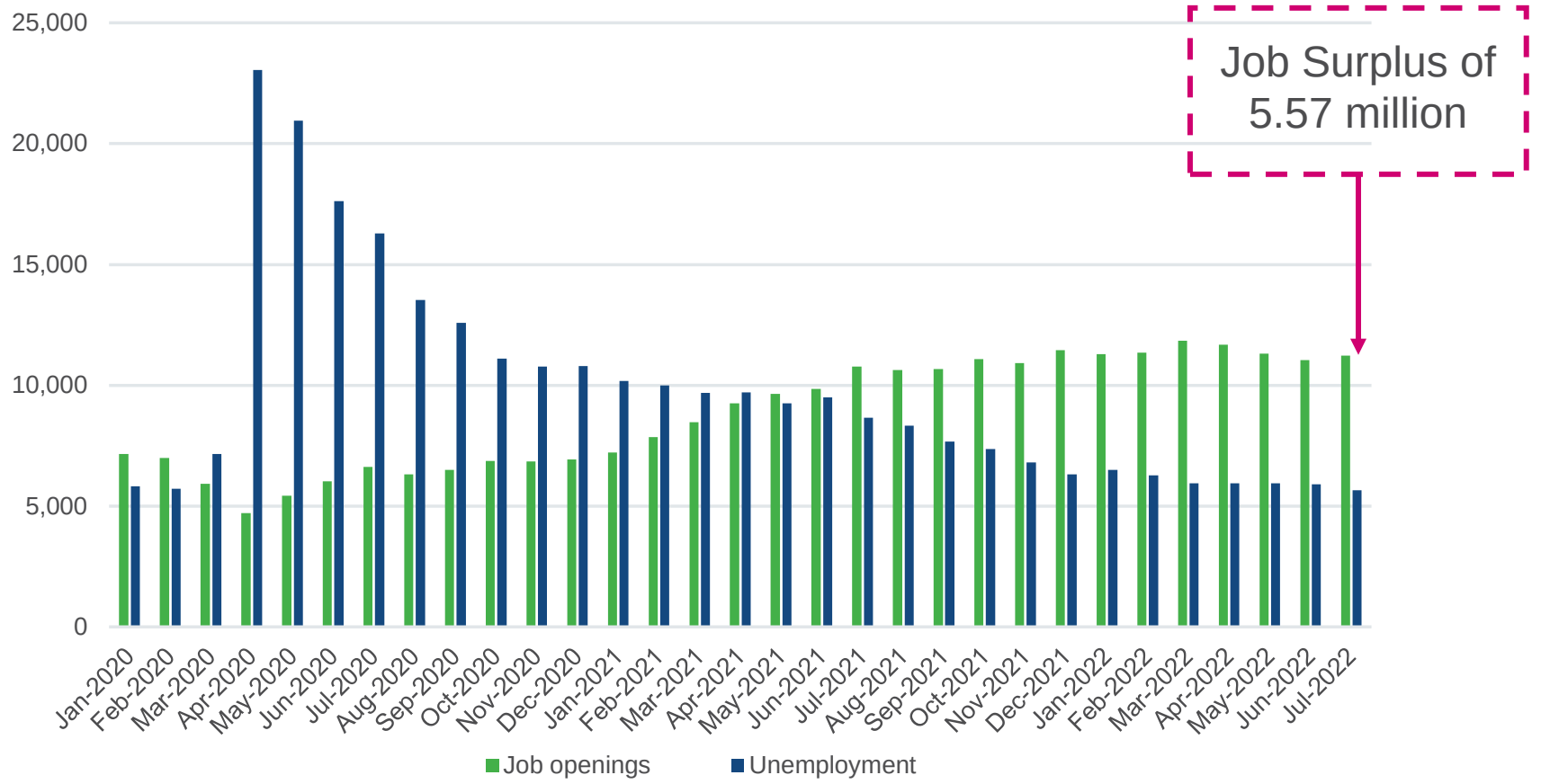


	July	August
Unemployment Rate	3.5%	3.7%
Change from Prior Month	-0.1%	0.2%

Sources: Non-farm payrolls by Bureau of Labor Statistics; CNBC “Payrolls increased 528,000 in July, much better than expected in a sign of strength for jobs market” August 5, 2022; CNBC “Payrolls rose 315,000 in August as companies keep hiring”, September 2, 2022.

U.S. Job Openings vs Number of Employed (thousands)

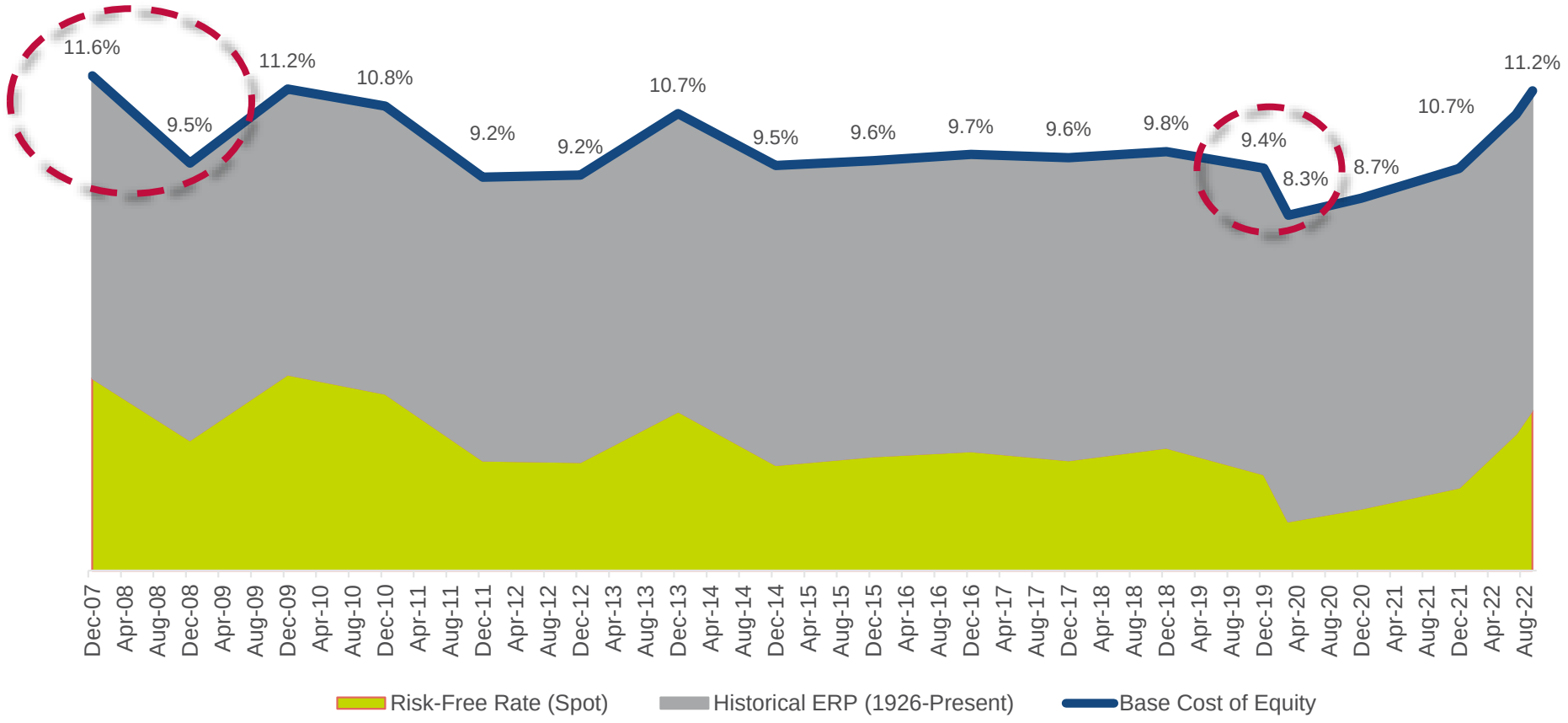
January 2020 to July 2022



Job Surplus peaked at 5.90 million in March 2022

Spot 20-Year U.S. Government Yield in Conjunction with Unadjusted "Historical" Equity Risk Premium *

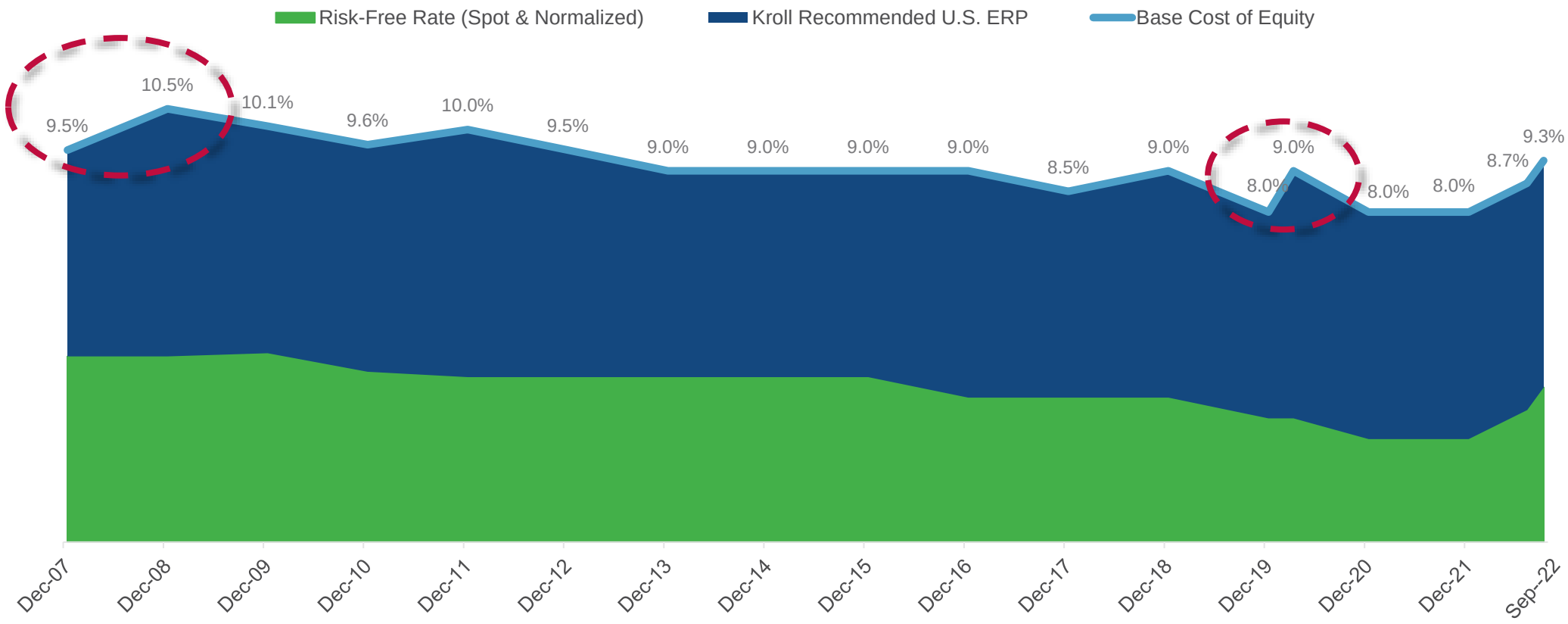
December 31, 2007 – September 15, 2022



* The Historical Equity Risk Premium is defined as the ERP over the years 1926–Present as of the date of the analysis. For example, the Historical Equity Risk Premium for December 2019 spans the years 1926–2019 while the Historical ERP for 2020 spans the years 1926–2020.

Current U.S. Normalized Risk-free Rate and ERP Recommendations

As of September 15, 2022

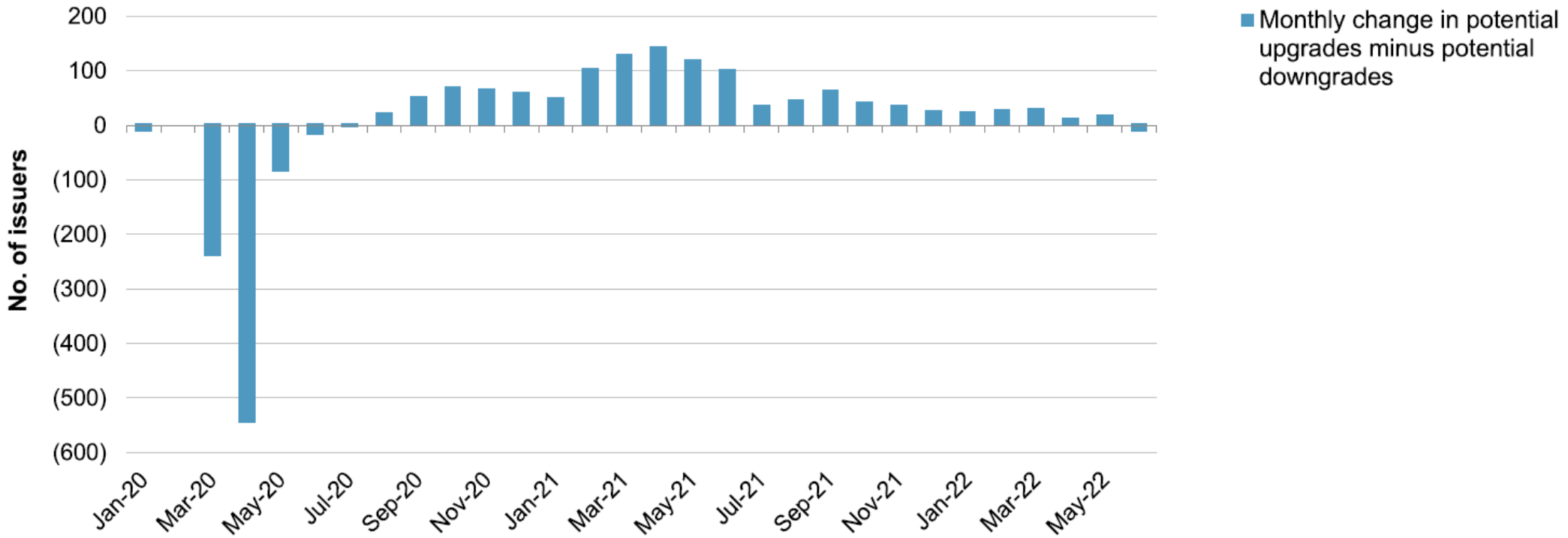


Cost of Debt

S&P Corporate, Financial and Sovereign Debt Downgrades Signaling Stress

Post-COVID Credit Recovery Running Out Of Steam

Potential downgrades outpace upgrades for first time since July 2020

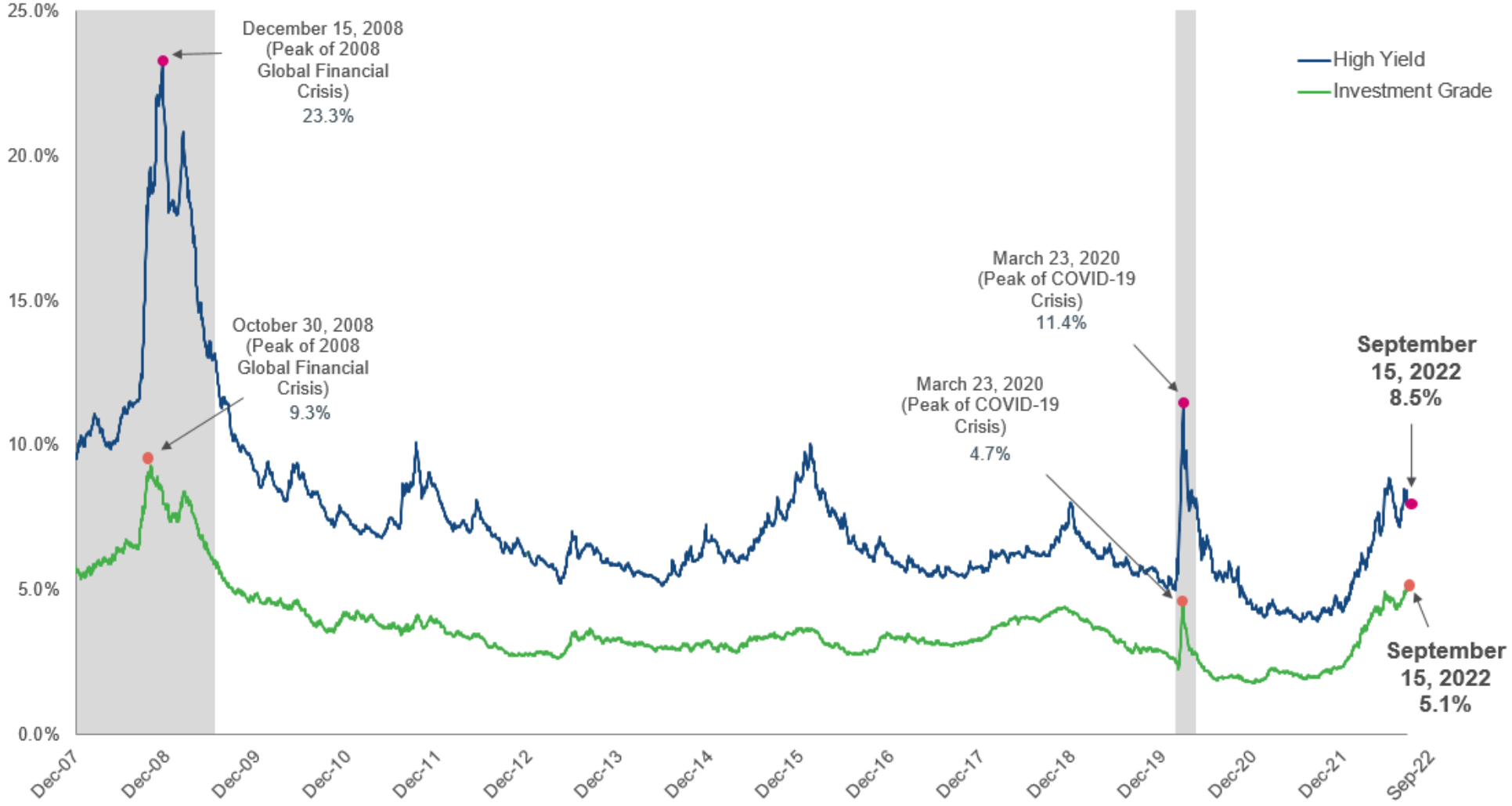


Data as of June 30, 2022. Source: S&P Global Ratings Research. Net outlook bias means negative bias means.

Source: S&P Global "Rating Indicators Signal A Turn in Rating Momentum", July 28, 2022

U.S. High Yield versus U.S. Investment Grade Corporate Bond Yields

December 2007 – September 2022



Source: Federal Reserve Bank of St. Louis. Based on the effective yields between of the ICE BofA U.S. Corporate Index and the ICE BofA U.S. High Yield Index

Eurozone Equity Risk Premium

KROLL

Summary Table of Factors – Eurozone

Changes from December 31, 2021 to September 15, 2022

	Factor	Change	Effect on ERP
Financial Markets	European Equity Markets	▼	▲
	Implied Equity Market Volatility	▲	▲
	Corporate Credit Spreads	▲	▲
	Dividend Discount Model Implied ERP	▲	▲
	Default Spread Model	▲	▲
Economic Indicators	Historical & Projected Real GDP Growth	▼	▲
	Unemployment	▼	▼
	Consumer Sentiment	▼	▲
	Business Confidence	▼	▲
	Sovereign Credit Ratings	◀▶	◀▶
	Economic Policy Uncertainty (EPU) Index	▲	▲

Conditional ERP – Quantitative Models

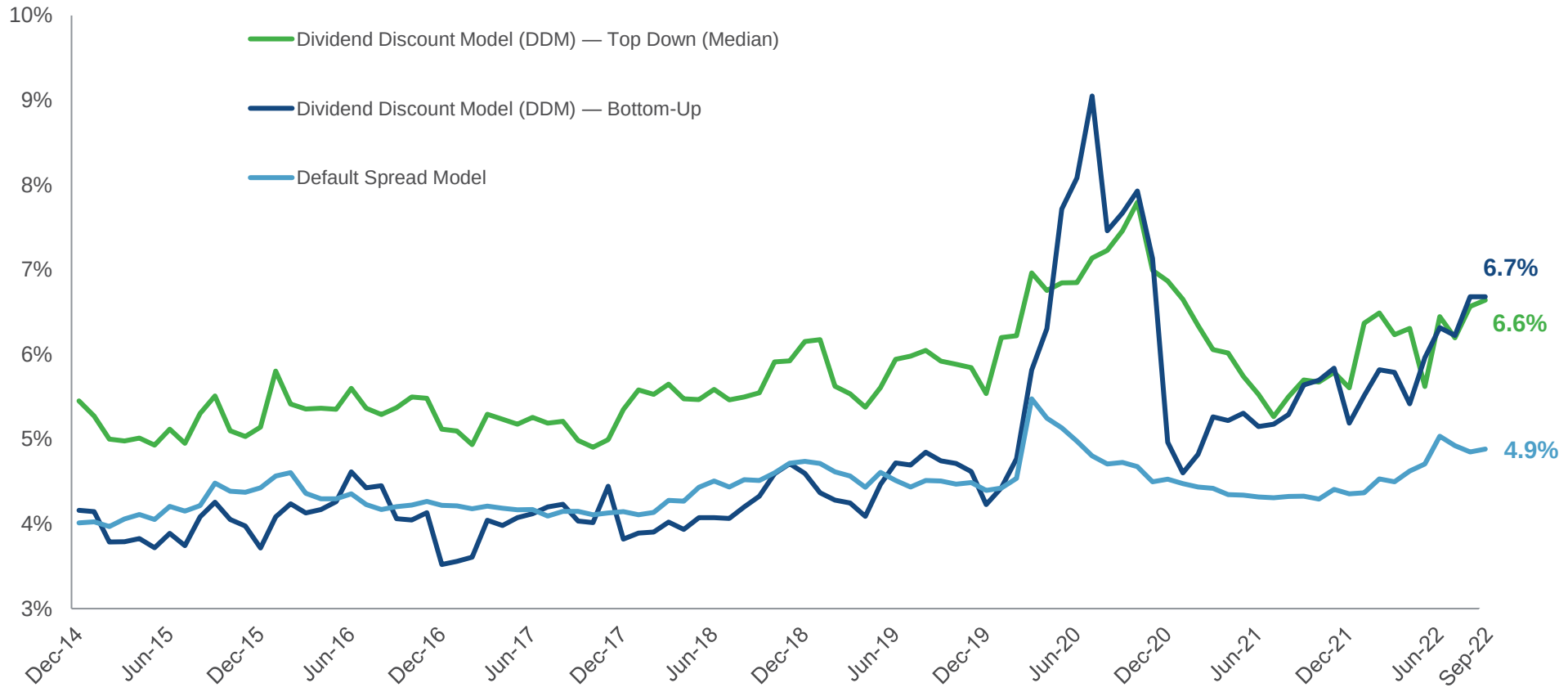
MODELS

- Default Spread Model *
- Dividend Discount Model (DDM) – Bottom-Up **
- Dividend Discount Model (DDM) – Top Down (Median)

* The Default Spread Model is based on the premise that the long-term average ERP (the unconditional ERP) is constant and deviations from that average over an economic cycle can be measured by reference to deviations from the long-term average of the default spread between corporate bonds rated in the Baa category by Moody's versus those in the Aaa rating category. For more details see: Jagannathan, Ravi, and Wang, Zhenyu," The Conditional CAPM and the Cross -Section of Expected Returns," The Journal of Finance, Volume 51, Issue 1, March 1996: 3–53.
** Bottom-Up Dividend Discount Model is based on the methodology outlined in: Pástor, Ľuboš, Meenakshi Sinha, and Bhaskaran Swaminathan. "Estimating the intertemporal risk–return tradeoff using the implied cost of capital." The Journal of Finance 63, no. 6 (2008): 2859-2897.

Conditional ERP – Quantitative Models

December 2014 – September 15, 2022



Dividend Discount Model (DDM) – Top Down

Defining the Models: Variation of Models Inputs

MODELS	Projected EPS – Year 1	Payout Ratio – Year 1	Payout Ratio – Other Years
1	Next 12 Months	Last 12 months	Interpolated to $\left(1 - \frac{LTG}{ROE(12m)}\right)$
2	**Next 12 Months**	**Last 12 months**	**Constant**
3	Next 12 Months	10-year historical average	Constant
4	**Next 12 Months**	10-year historical average	**Interpolated to** $\left(1 - \frac{LTG}{ROE(\text{10-year avg.})}\right)$
5	Historical Inflation Adjusted EPS (10 years)	10-year historical average	Constant

ROE = Return on Equity

LTG= Long Term Growth Rate=$(1 + Long\ Term\ Real\ GDP\ Growth\ Forecast) \times (1 + Long\ Term\ Inflation\ Forecast)$ **- 1**

Sources of data:

- Earnings projections based on Refinitiv I/B/E/S Estimates
- Payout Ratios and ROE are calculated based on data obtained from Refinitiv DataStream

Long-term Projected Real GDP Growth

Estimates as of mid-September 2022 (approximately)

SOURCE	Long-Term Average (%)	Last Year in the Forecast (%)
Consensus Economics	1.1	1.1
Economist Intelligence Unit	0.9	1.4
IHS Markit	1.0	1.1
International Monetary Fund (IMF)	1.2	1.1
Oxford Economics	1.2	1.0
PwC	1.2	1.3
	0.9% – 1.2%	**1.0% – 1.4%**
	Range of Real GDP Growth Estimates	Range of Real GDP Growth Estimates

Median ▶ 1.1%

1.1% ◀ Median

Long-term Inflation Expectations

Estimates as of mid-September 2022 (approximately)

SOURCE	Long-Term Average (%)
Consensus Economics	3.0
Economist Intelligence Unit	3.8
IHS Markit	3.4
International Monetary Fund (IMF)	2.7
Oxford Economics	2.5
PwC	3.2
Range of Inflation Estimates	**2.5% – 3.8%**

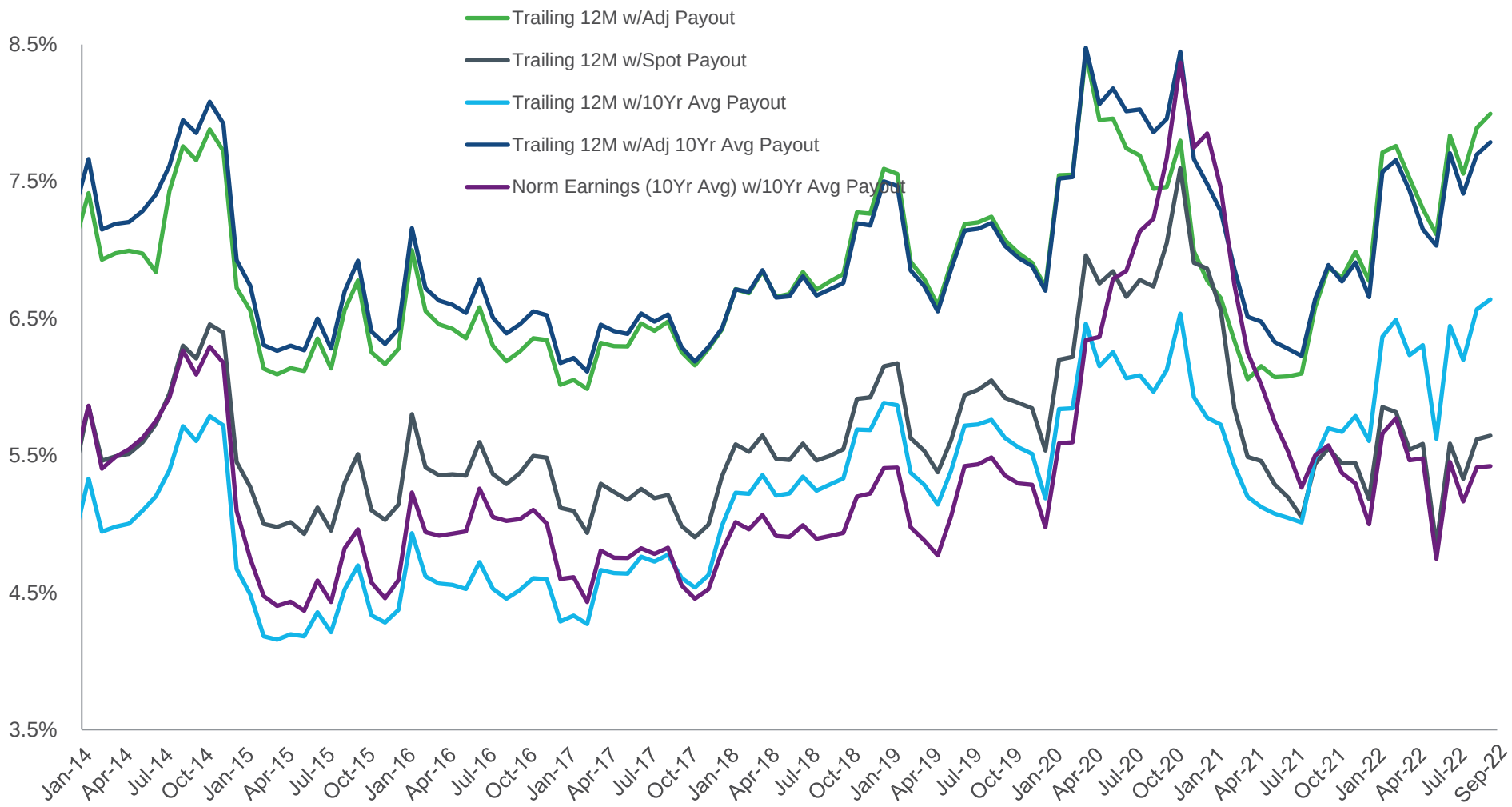
3.1% ◀ Median

2.4% ◀ Median Ex-2022 Forecasts

Long Term Growth Rate (Median) = $(1 + \ Long\ Term\ Real\ GDP\ Growth\ Forecast) \times (1 + Long\ Term\ Inflation\ Forecast) - 1$
= (1 + 1.1%) x (1 + 2.4%) – 1 = 3.6%

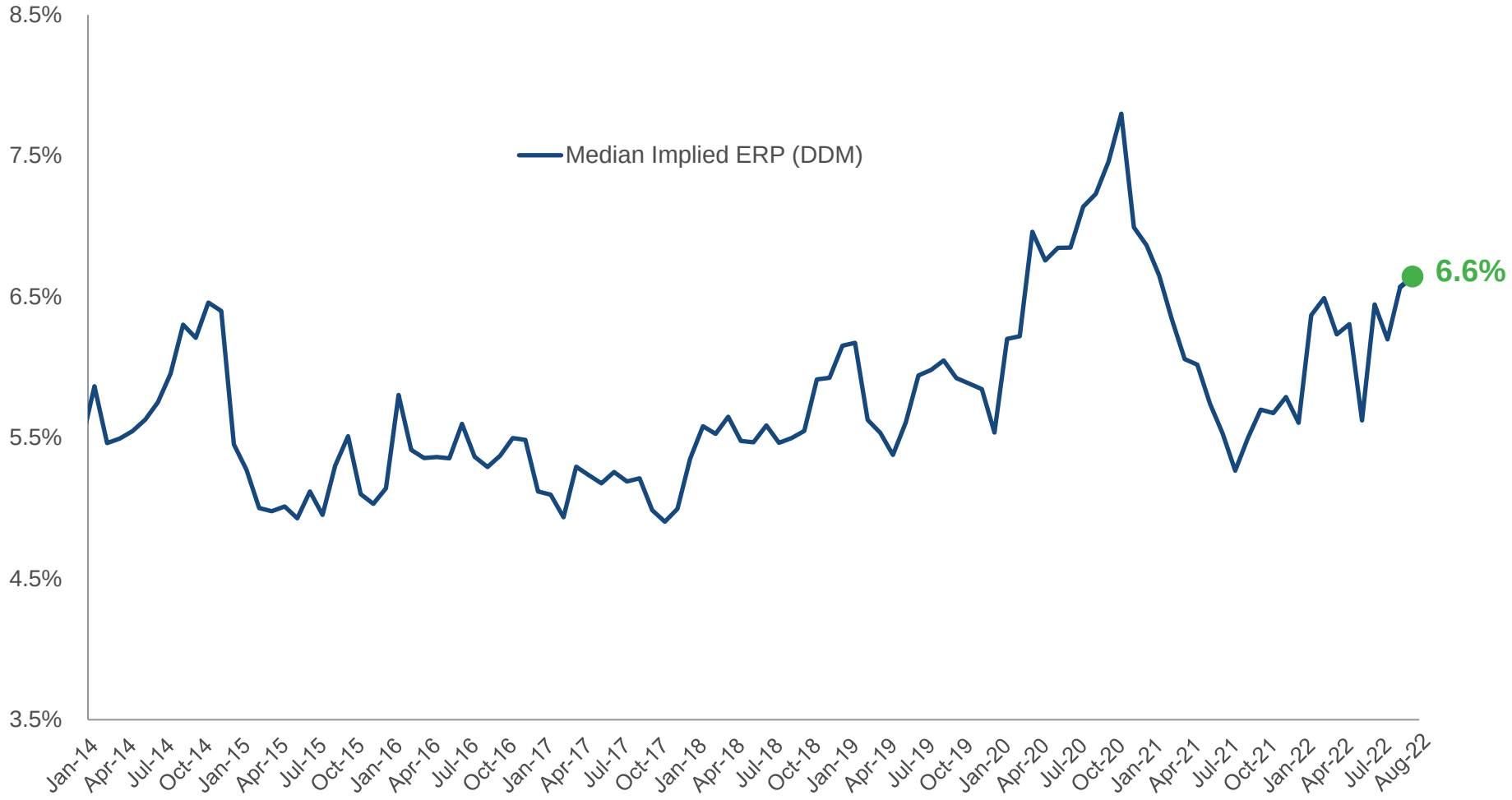
Top Down DDM Implied ERP – All Model Specifications

January 2014 – September 15, 2022



Top Down DDM Implied ERP – Median

January 2014 – September 15, 2022



Kroll Recommended Eurozone Equity Risk Premium

German Investor Perspective applied to EUR-Denominated Projections *

	December 31, 2019	March 31, 2020	December 31, 2021	September 15, 2022 **
Normalized Risk-Free Rate – Germany	2.0%	2.0%	1.5%	2.0%**
Eurozone Equity Risk Premium Recommendation	4.5% to 5.0%	5.5% to 6.0%	5.5% to 6.0%	5.5% to 6.0%
Base Cost of Equity	6.5% to 7.0%	7.5% to 8.0%	7.0% to 7.5%	7.5% to 8.0%

* Some countries may have regulations or guidelines that preclude the use of normalized risk-free rates. The Kroll approach does not supersede such local guidance. In Germany, for instance, the IDW (Institute of German Chartered Accountants) created a committee (FAUB) whose function is to issue guidance regarding (company) valuation topics. Under FAUB guidance, when estimating cost of capital using CAPM, a spot risk-free rate (Svensson method) should be used, while the ERP will change over time to reflect changes in the risk aversion.

** Base Cost of Equity likely to increase in the near future, assuming we increase the German Normalized Risk-free Rate from 2.0% to 2.5%.

Inferred ERP: Using the Kroll Eurozone Recommended ERP Against A Spot German Risk-free Rate

As of September 15, 2022

	Kroll Eurozone Recommended ERP		German Normalized Risk-free Rate		15-Year German Government Spot Yield *		Inferred Eurozone ERP
Low Range	5.5%	+	2.0%	−	1.8%	=	5.7%
High Range	6.0%	+	2.0%	−	1.8%	=	6.2%

* Source: Deutsche Bundesbank

Industry Betas

COVID-19 Impact on Industry Betas

OLS Betas by Industry Before and During COVID-19 Recovery

Industry	Pre COVID-19 Beta As of 31-Dec-2019	COVID-19 Beta As of 30-Jun-2022	Difference
Pharmaceuticals	1.12	0.59	-0.53
Telecommunications	0.99	0.55	-0.44
Food, Beverage, and Tobacco	0.72	0.62	-0.10
Banks	0.86	0.82	-0.04
Automobiles	1.45	1.42	-0.03
Software	1.05	1.05	0.00
Insurance	0.71	0.82	0.11
Energy	1.27	1.48	0.21
Retail	0.83	1.45	0.62

Source: Based on the median OLS (raw) betas by industry from the Cost of Capital Navigator's U.S. Industry Benchmarking Module. The summary above is based on USD-denominated returns of companies in United States as of December 31, 2019 and June 30, 2022.

COVID-19 Impact on Industry Betas

OLS Betas by Industry Before and During COVID-19 Recovery

Industry	Pre COVID-19 Beta As of 31-Dec-2021	COVID-19 Beta As of 30-Jun-2022	Difference
Energy	1.71	1.48	-0.23
Banks	0.94	0.82	-0.13
Telecommunications	0.67	0.55	-0.12
Food, Beverage, and Tobacco	0.73	0.62	-0.12
Pharmaceuticals	0.70	0.59	-0.11
Automobiles	1.50	1.42	-0.08
Insurance	0.85	0.82	-0.03
Software	1.06	1.05	0.00
Retail	1.45	1.45	0.00

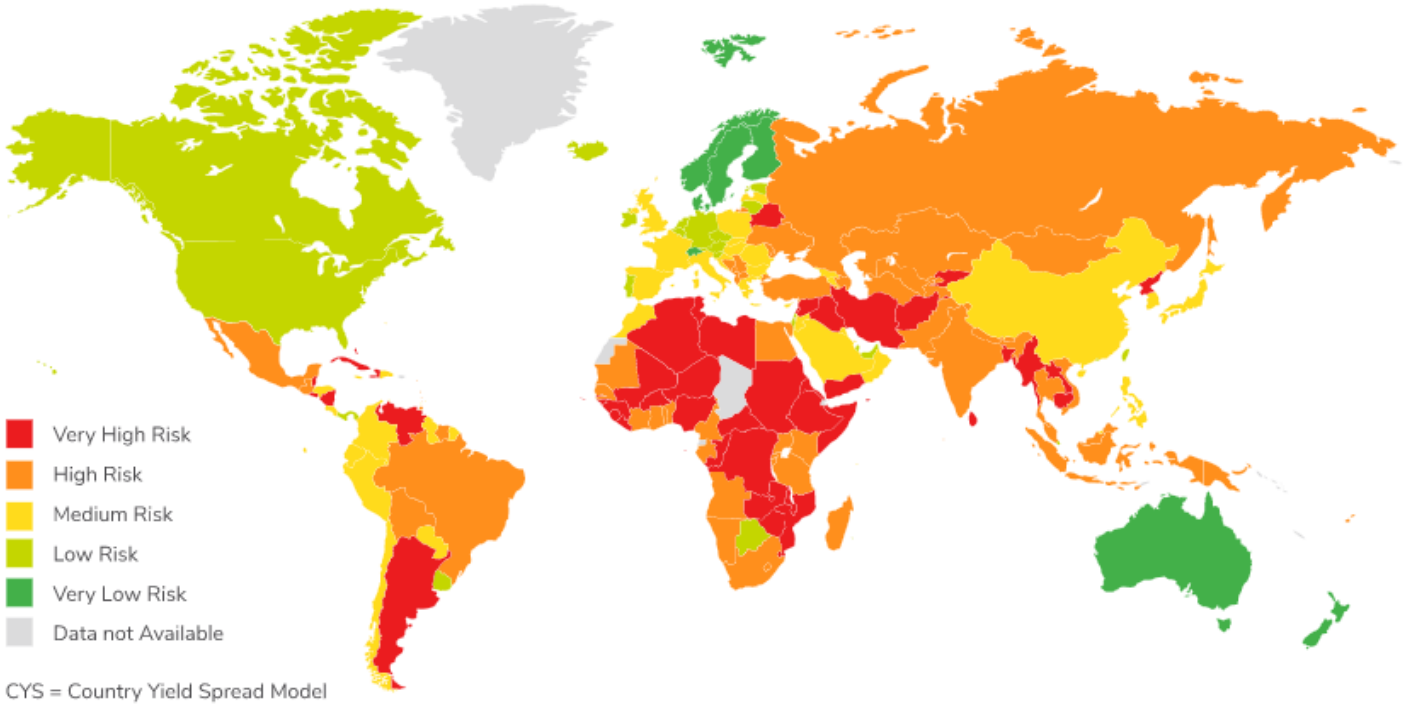
Source: Based on the median OLS (raw) betas by industry from the Cost of Capital Navigator's U.S. Industry Benchmarking Module. The summary above is based on USD-denominated returns of companies in United States as of December 31, 2021 and June 30, 2022.

Country Risk

KROLL

Global Heat Map – Country Risk

Data as of June 30, 2022



CYS = Country Yield Spread Model

CCR = Country Credit Rating Model

RV = Relative Volatility Model

*Ranking of risk based on each country's Euromoney Country Risk (ECR) score, as published by Euromoney. For more information, visit: https://www.euromoney.com/country-risk. To the extent a country does not have an ECR score, but has a sovereign credit rating issued by one of the main rating agencies (Standard & Poor's, Moody's, Fitch), a similar methodology to ECR's is used to assign the risk level. Country risk premia and relative volatility factors based on data extracted from the three international cost of capital models currently supported in the Cost of Capital Navigator's International Cost of Capital module.

Median Country Risk Premium (CRP) and Relative Volatility (RV) Factors in USD by Region*

North America

0.0%	0.0%	1.0
CYS	CCR	RV

Latin America and Caribbean

5.1%	3.3%	1.6
CYS	CCR	RV

Europe

1.3%	1.1%	1.2
CYS	CCR	RV

Africa

10.0%	5.9%	1.2
CYS	CCR	RV

Middle East

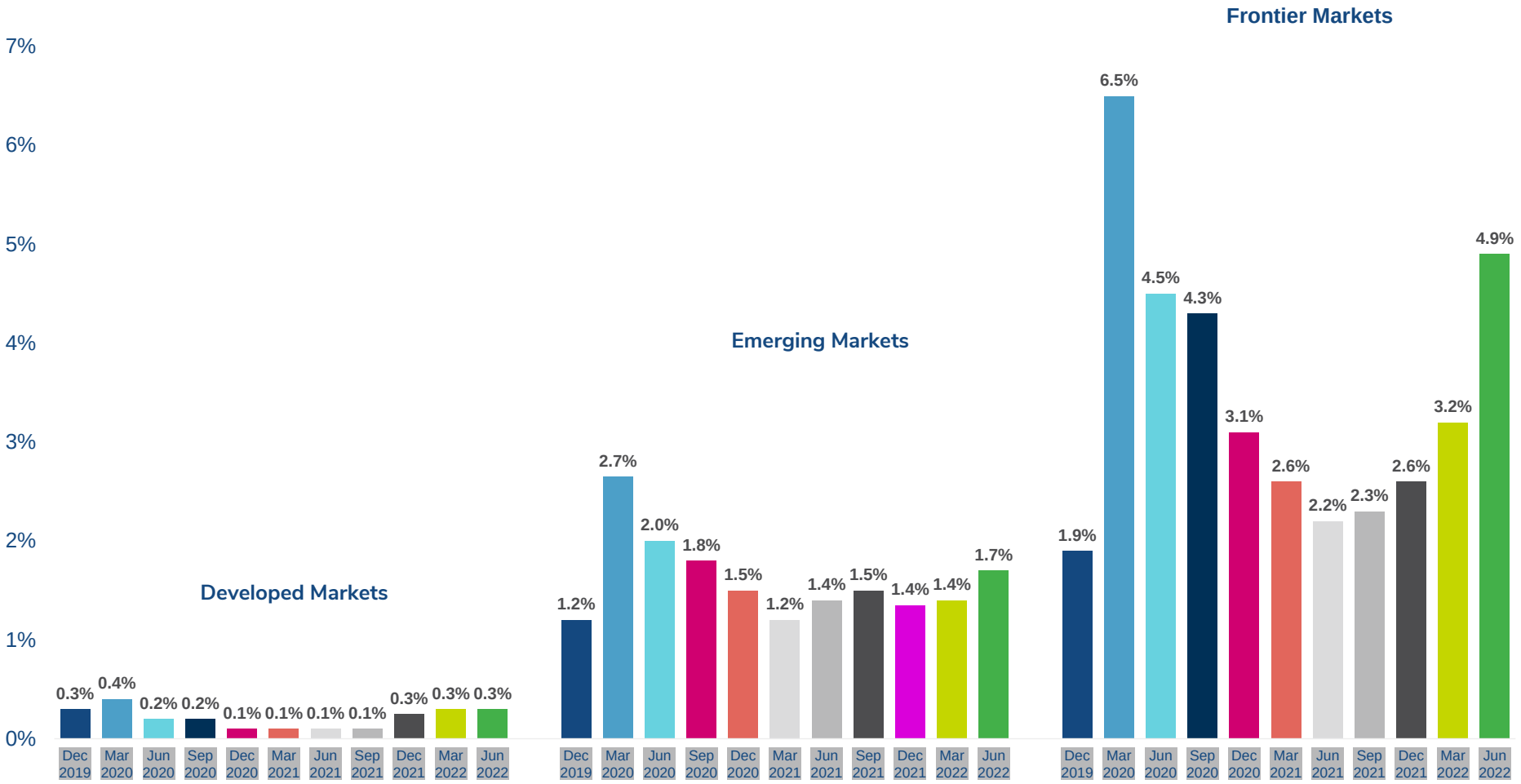
4.9%	1.8%	1.1
CYS	CCR	RV

Asia-Pacific

3.3%	3.6%	1.2
CYS	CCR	RV

Country Risk Premia Pre-and Post COVID-19

Country Yield Spread Model from a United States (USD) investor perspective*



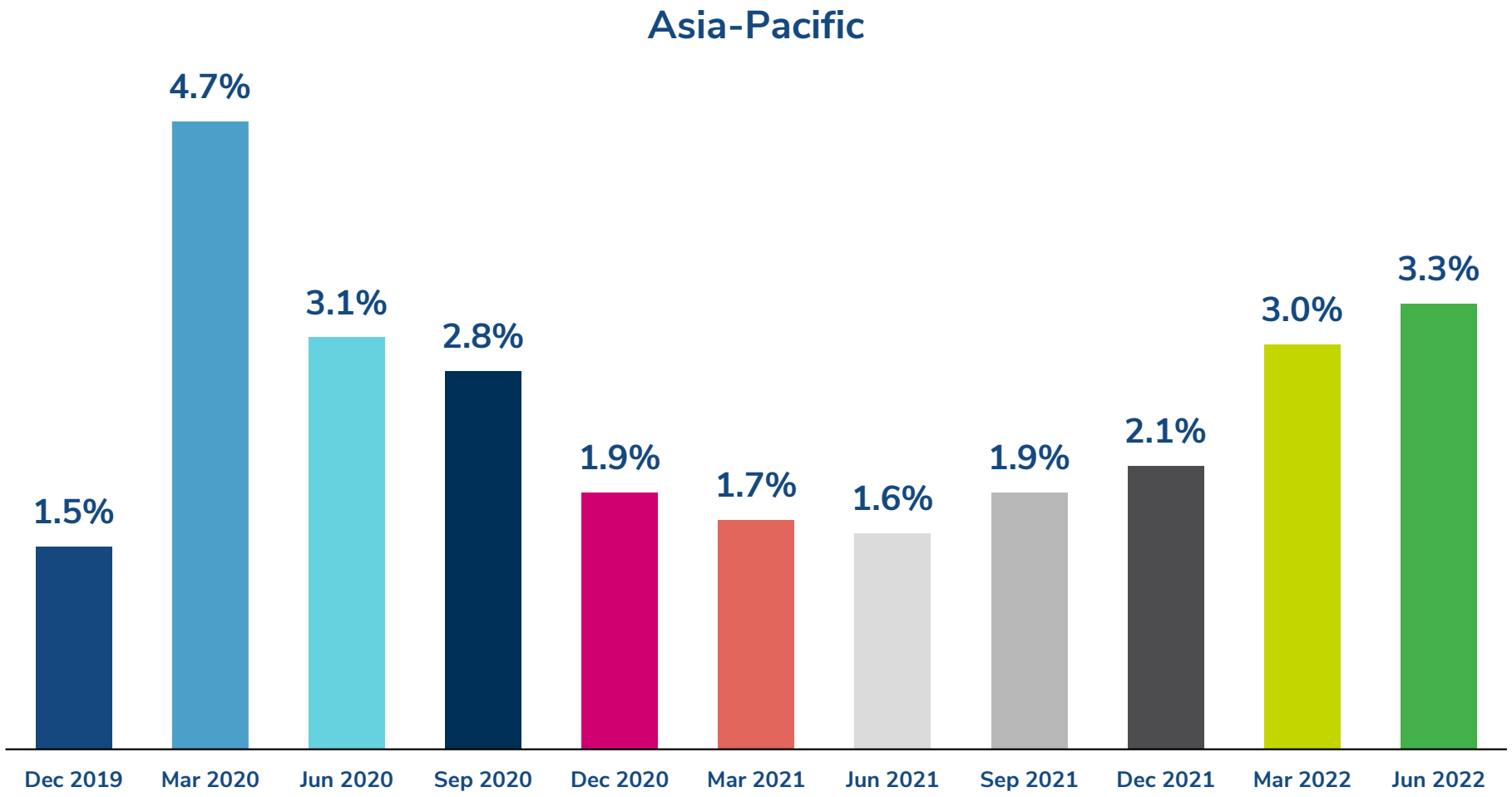
* Based on the median country risk premia of countries classified by MSCI as developed, emerging, and frontier markets. MSCI only classifies 71 countries under these three categories.

International Cost of Capital Module | https://www.kroll.com/en/cost-of-capital/international-cost-of-capital

Get insights like these and more in the Cost of Capital Navigator.

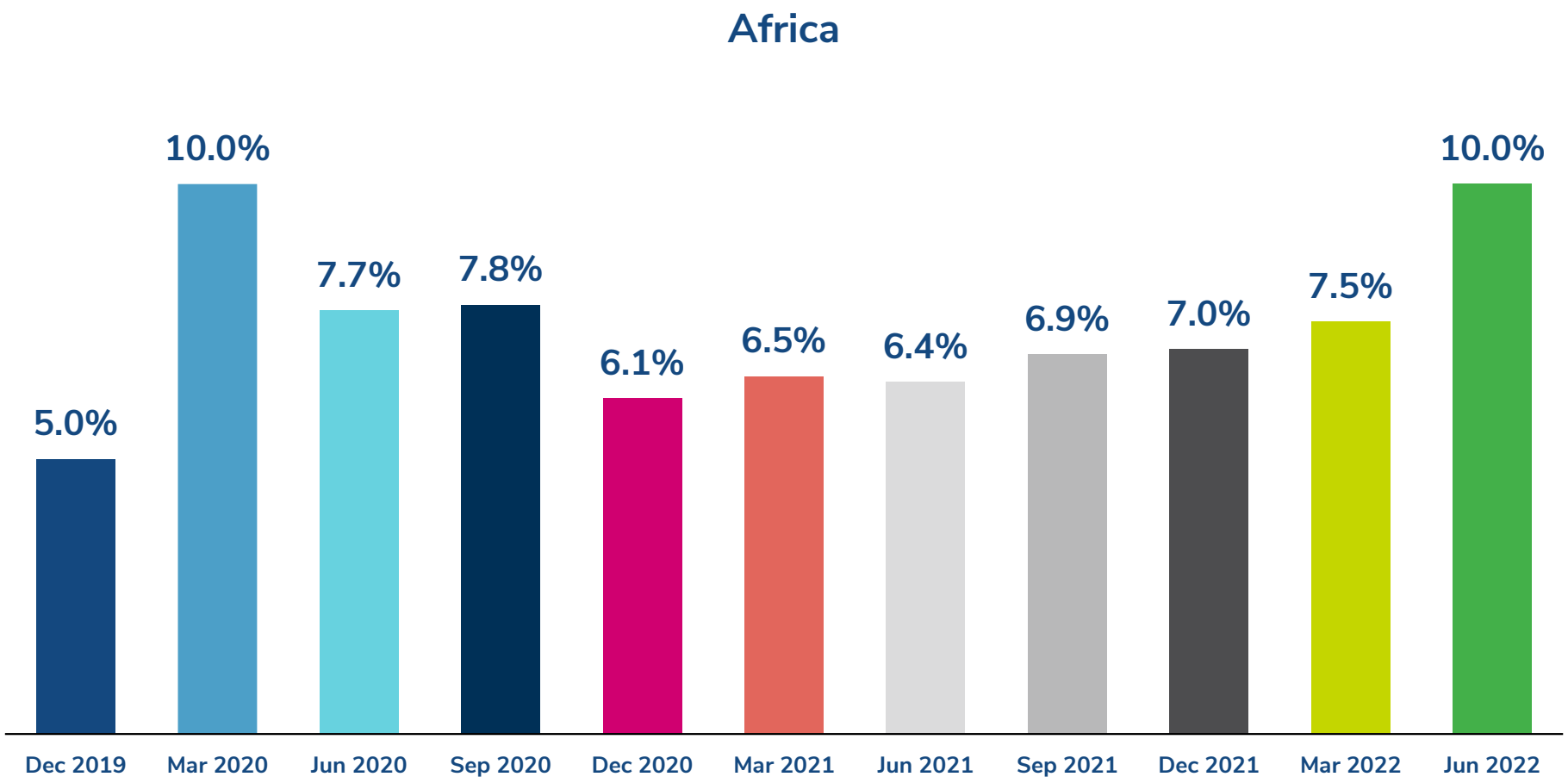
Country Risk Premia Pre-and Post COVID-19

By Geographic Region (Asia-Pacific)



Country Risk Premia Pre-and Post COVID-19

By Geographic Region



International Cost of Capital Module | https://www.kroll.com/en/cost-of-capital/international-cost-of-capital

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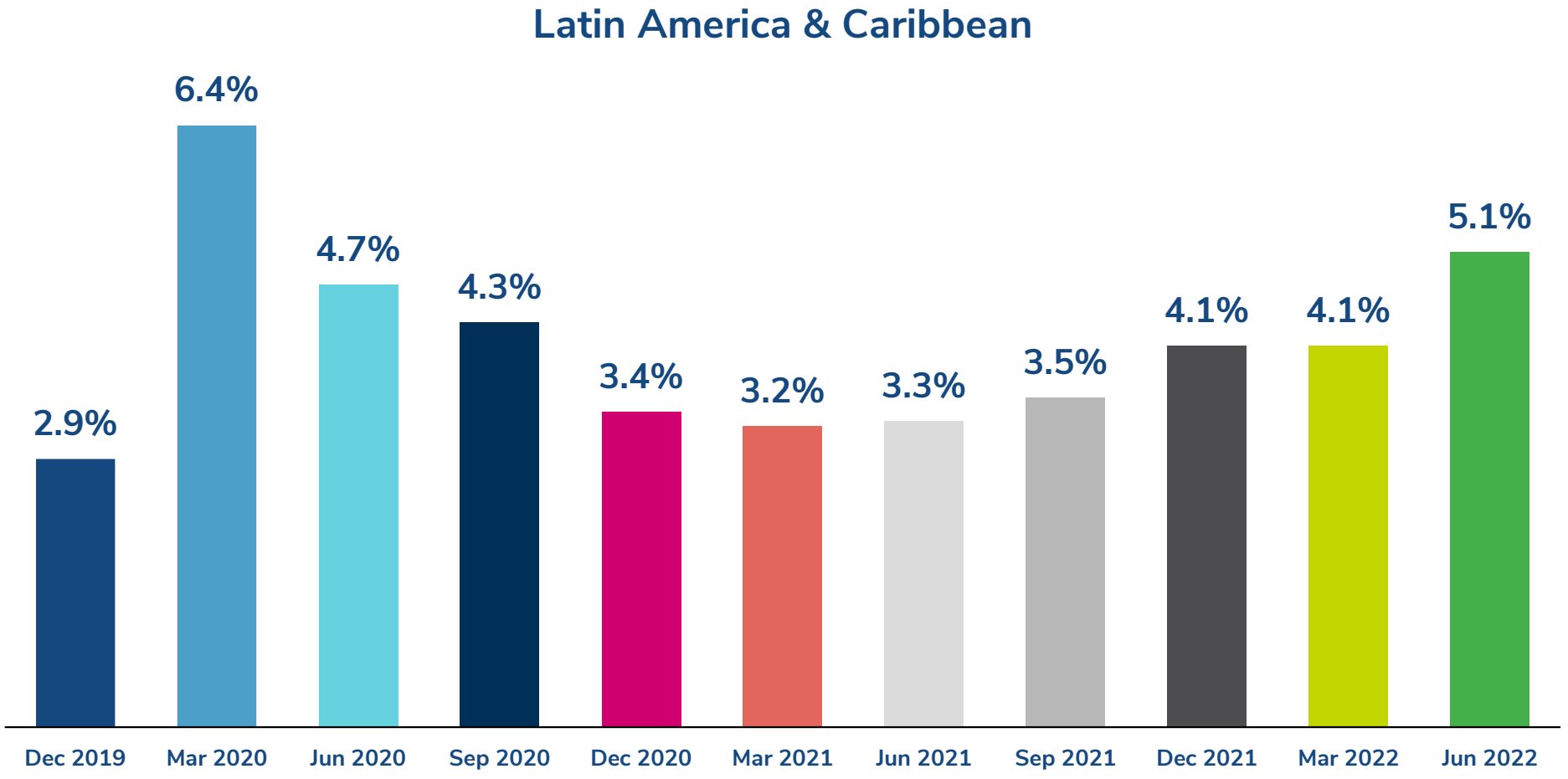
Country Risk Premia Pre-and Post COVID-19

By Geographic Region



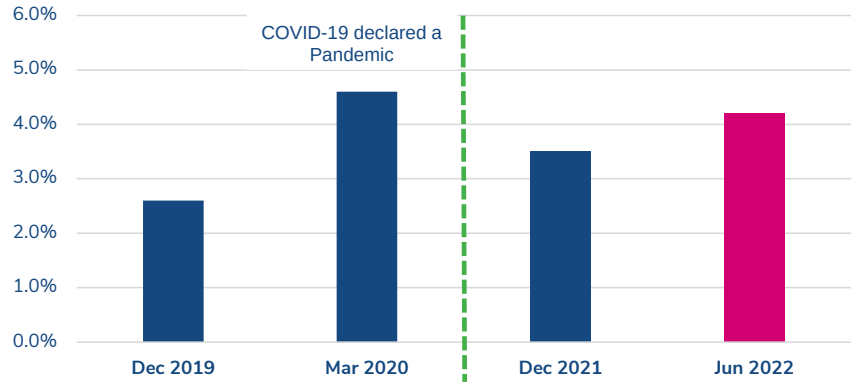
International Cost of Capital Module | https://www.kroll.com/en/cost-of-capital/international-cost-of-capital

Get insights like these and more in the Cost of Capital Navigator.

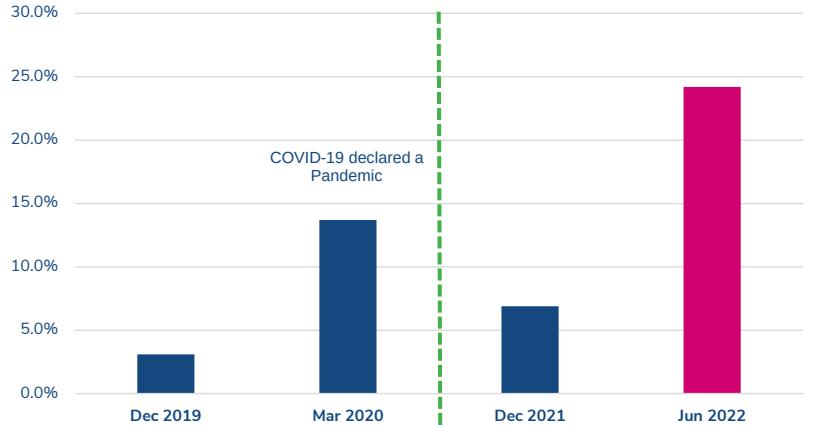
Country Risk Premium Before and After COVID-19 (USD)

Data as of June 30, 2022

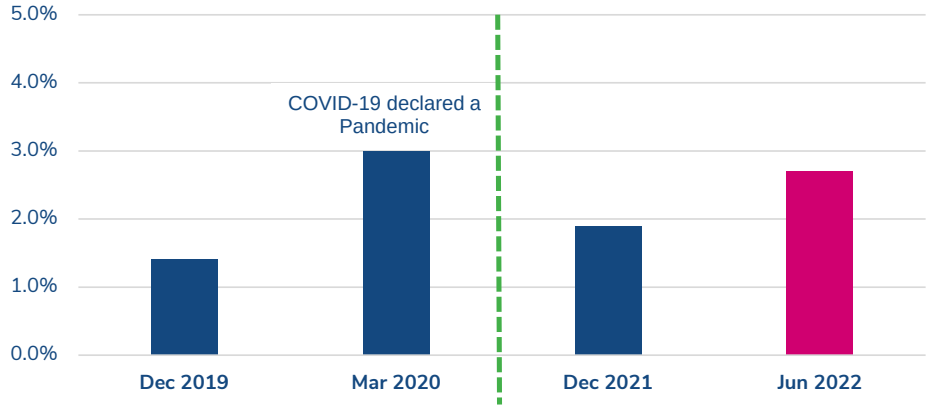
Brazil



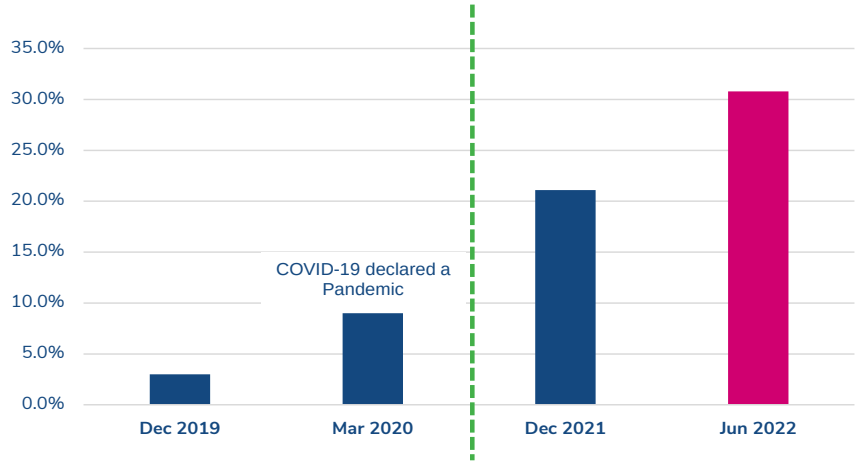
Ghana



Mexico



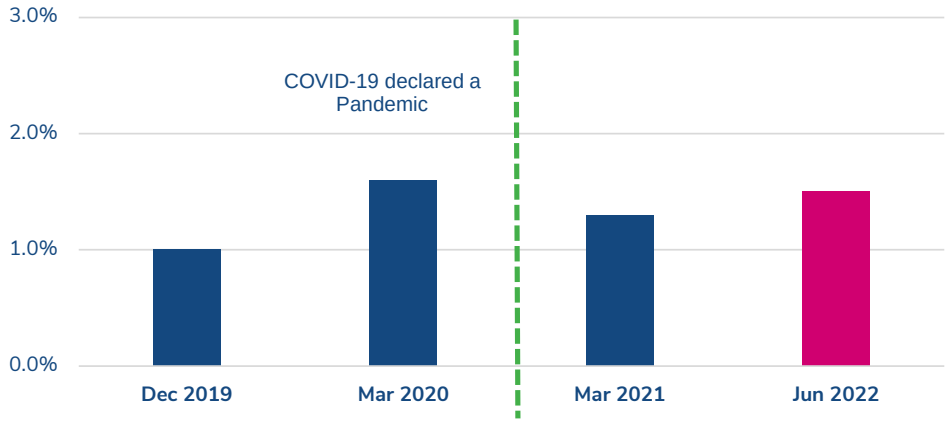
Ethiopia



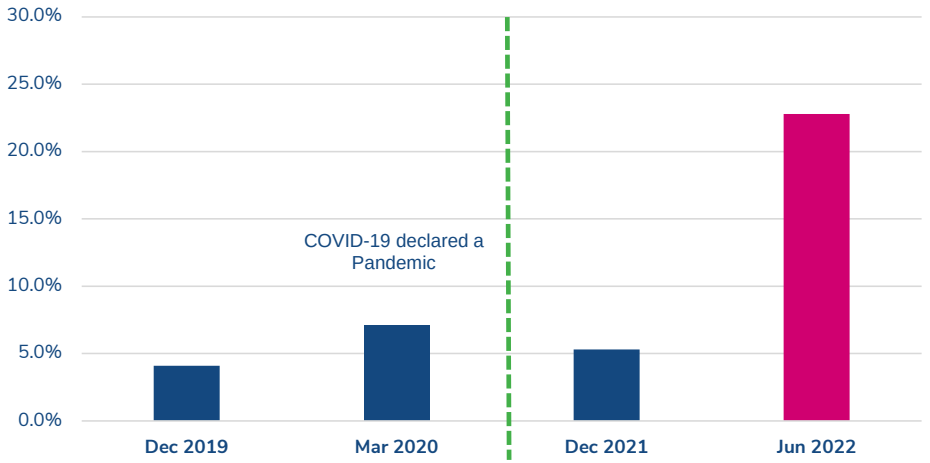
Country Risk Premium Before and After COVID-19 (EUR)

Data as of June 30, 2022

Spain



Belarus



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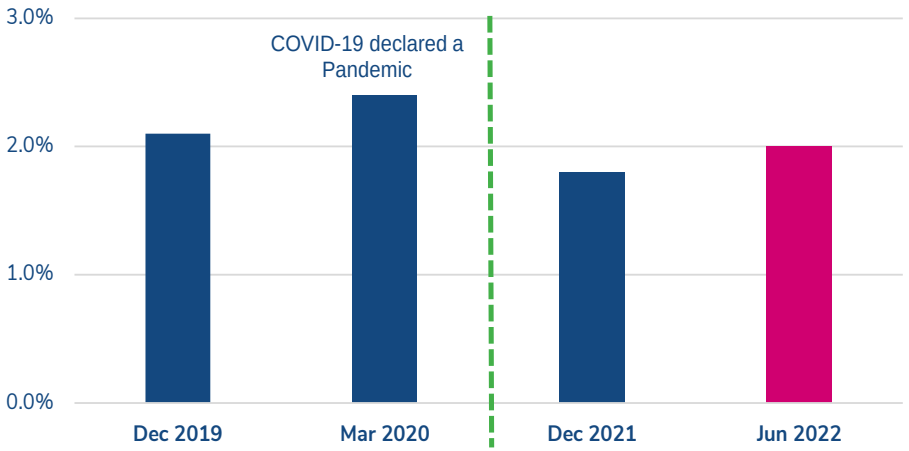

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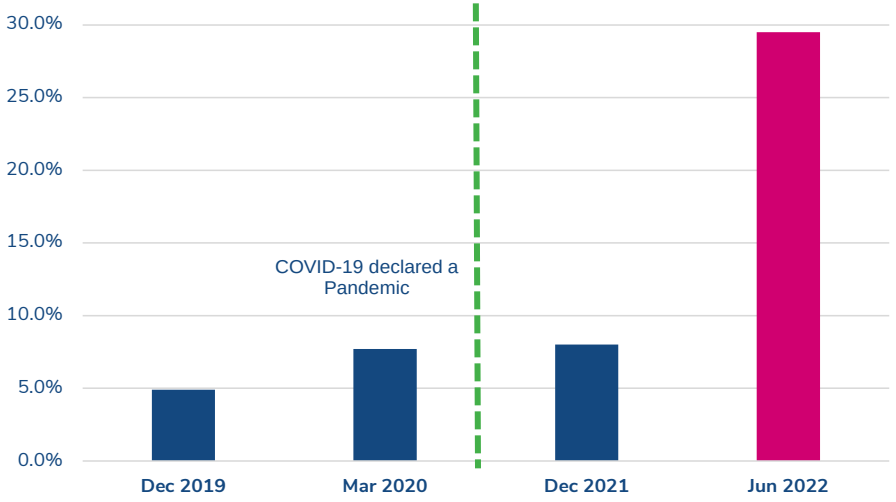


International Cost of Capital Module | https://www.kroll.com/en/cost-of-capital/international-cost-of-capital

Takeaways of Today's Presentation

Record high inflation is profoundly changing key value drivers:

- Projected Growth Rates and operating margins
- Discount Rates

Need to adjust cash flow projections for information known as of the valuation date:

- Use multiple sources of data, particularly when there is a heighted level of uncertainty
- Scenario Analyses will likely be a better way to capture some of that uncertainty.
- Discount rates cannot solve all the issues

Interest rates of safe-haven countries are still relatively low from an historical perspective, but are rising rapidly and significantly due to Central Banks actions in their attempt to tame inflationary pressures. **Cost of debt** is increasing accordingly.

Equity Risk Premium is cyclical

- Historical measures are countercyclical and used without further adjustments may lead to the wrong conclusion

Betas for certain industries may be distorted

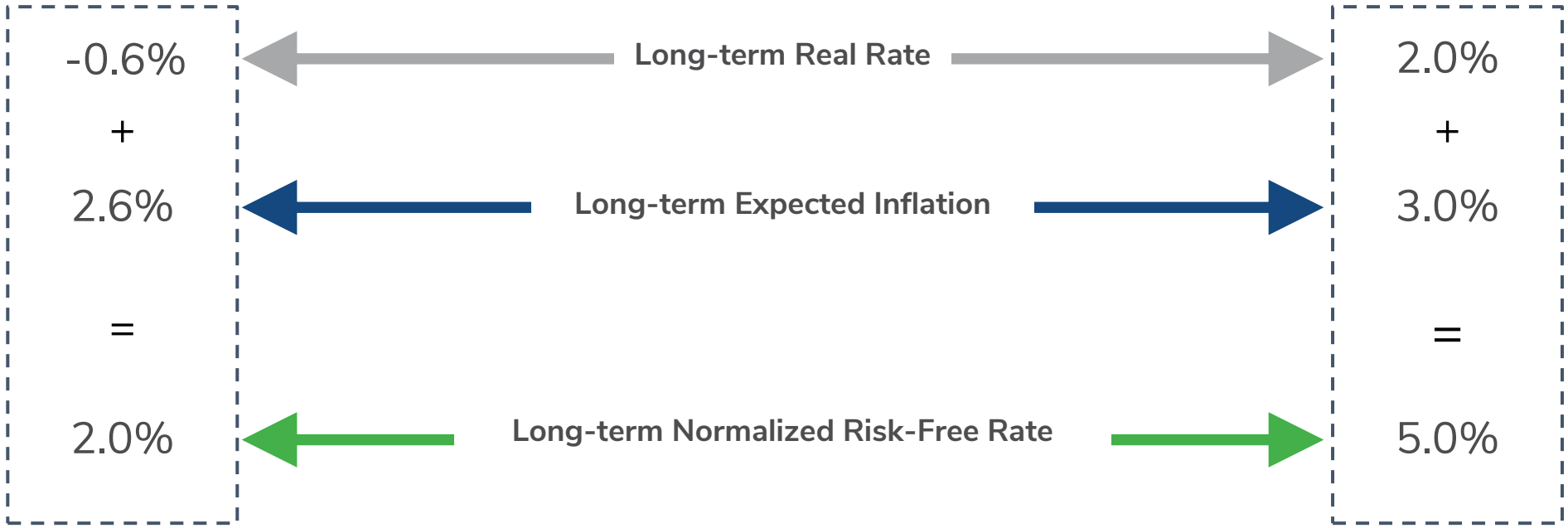
Country Risk changes over time to reflect current economic and market conditions

Extra Resources

KROLL

Risk-Free Rate Normalization – Canada

As of Sept 15, 2022



- **Fisher Equation:** Midpoint = 3.5% / Median = 3.8%
- **LT Average:** 10-Year Trailing Average of *Canada Benchmark Bond Yields – Long Term* = 2.2%

Concluded Normalized R_f = 3.5%

Cost of Capital Thought Leadership

As the world's premier valuation firm, we are a trusted expert in the field of cost of capital. For more than two decades, our professionals have published books, conducted studies, provided recommendations and built digital tools to help businesses and valuation professionals calculate cost of capital. Our databases are developed with rigorous analysis and based on the latest trends and insights.

Subject Matter Experts

Our Valuation Digital Solutions experts strive to empower companies and finance professionals with cost of capital thought leadership and high-quality valuation data that enables them to make sound business decisions.

Cost of Capital Navigator

Cost of Capital Navigator

Our industry-leading Cost of Capital Navigator digital platform is built upon decades of valuation data and relies on established cost of capital theory and methodologies.

Key Cost of Capital Recommendations

R_f + ERP

Kroll regularly reviews fluctuations in global economic and financial market conditions that warrant a periodic reassessment of the equity risk premium and accompanying risk-free rate for the United States and Eurozone. We also provide support for normalized risk-free rates for Canada and the UK.

2021 Savvy Investor Awards

In the latest collaboration under our partnership with the CFA Institute Research Foundation, our two Summary Edition publications, the *International Guide to Cost of Capital* and the *Stocks, Bonds, Bills and Inflation Yearbook*, have been recognized with a "Highly Commended" award in the Best Asset Allocation Paper category of the 2021 Savvy Investor Awards.

Webinars and Conferences

With deep technical expertise, our team continually presents virtually, live at conferences, and hosts webinars on latest trends for the global economy and financial markets, industry developments impacting cost of capital, impact of COVID-19 on valuations, and much more.

Cost of Capital Infographic, Country Risk Heatmap and Other Tools

We provide insights and tools to assist users quantify risk during uncertain times, when performing cross-border valuations and more.

Kroll (formerly Duff & Phelps) Recommended ERP is the benchmark reference in valuation

58%

of participants said that they use our recommended U.S. ERP*

*Based on polling during our May 2021 webinar, *COVID-19 One Year Later – Impact on Cost of Capital* of ~600 external live participants.

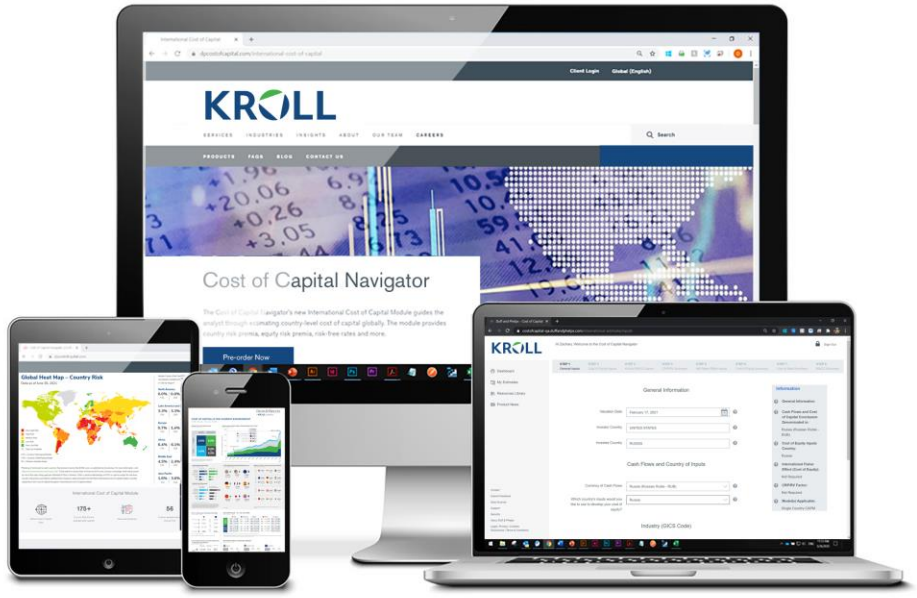
www.kroll.com/cost-of-capital-resource-center

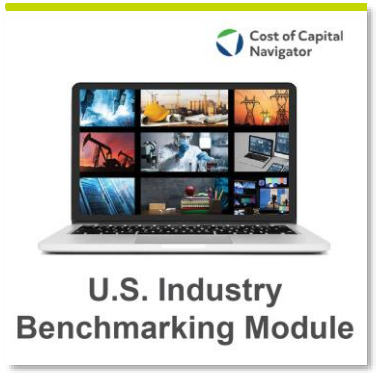
Cost of Capital Navigator Overview

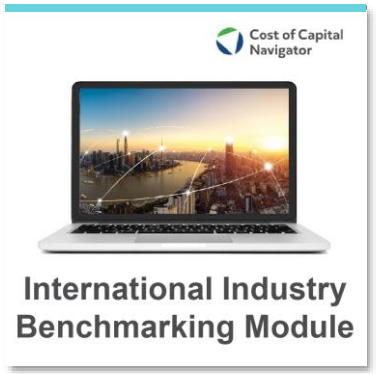
The Cost of Capital Navigator is an online platform that guides you through the process of developing and supporting global cost of capital estimates, a key component of any valuation analysis.

We have four modules available for 1-year subscriptions:

- U.S. Cost of Capital – **Module 1**
- U.S. Industry Benchmarking – **Module 2**
- International Cost of Capital – **Module 3**
- International Industry Benchmarking – **Module 4**







Cost of Capital Navigator

To learn more about the Cost of Capital Navigator, or Kroll's Cost of Capital practice, visit:

Kroll.com/CostofCapitalNavigator

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About Kroll

Kroll is the world's premier provider of services and digital products related to valuation, governance, risk and transparency. We work with clients across diverse sectors in the areas of valuation, expert services, investigations, cyber security, corporate finance, restructuring, legal and business solutions, data analytics and regulatory compliance. Our firm has nearly 5,000 professionals in 30 countries and territories around the world. For more information, visit www.kroll.com.