



# **2023 APAC Economic Outlook and Impact on Company Valuations and Restructuring**

April 2023

# Stay Ahead with KROLL

Risk and Financial Advisory Solutions

**Unique insights, data and technology**  
Providing foresight clients need to create an enduring competitive advantage

**6,500 professionals worldwide**  
Continuing the firm's nearly 100-year history of trusted expertise

**Valuation**

**Compliance and Regulation**

**Corporate Finance and Restructuring**

**Cyber Risk**

**Environmental, Social and Governance**

**Investigations and Disputes**

**Business Services**

# 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

## ONE TEAM, ONE KROLL 2021-present

- 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
- Acquired Crisp and Resolver risk companies
- Acquires AVC Ltd. to create dedicated energy team within FAAS practice

# Our Values

Our six values are at the core of who we are and how we interact with our people, clients and partners at work and within every community we serve. They describe the expectations our clients should have of us, guide how we work with each other, and hold us accountable to consistently deliver.

## Excellence

Excellence is a mindset – we do challenging work and pursue extraordinary results. We relentlessly focus on excellence – for our clients and colleagues.

## Ambition

We are energized to learn, to teach, to grow. We constantly seek to do better – comfort and excellence rarely co-exist.

## Courage

We make bold decisions, not just the easy ones. We find, reveal and tell the truth. Integrity is the foundation of everything we do.

## Inclusion

We embrace and cultivate diversity – we respect, include and value one another. We support and care about the communities where we live and work.

## Innovation

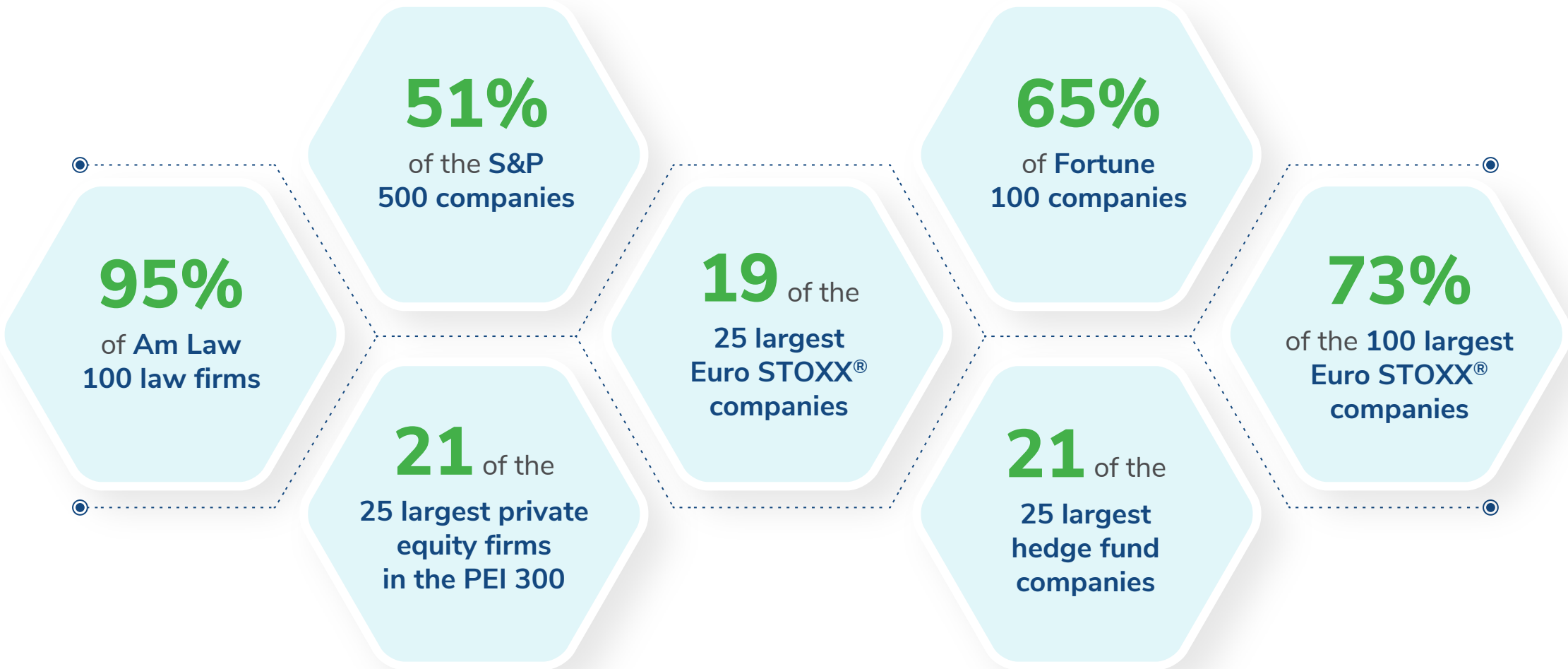
We challenge ourselves to discover new ways to create value. We harness the power of smart data with technology to enable faster decisions and always anticipate what's next for our clients.

## One Team, One Kroll

We are stronger together – always focused on solutions, not silos. We collaborate across borders and disciplines in pursuit of excellence.



# We are proud to work with



# Our Awards and Rankings

## Financial Advisory Recognition



**REFINITIV**   
**Refinitiv Global M&A  
Review 2022**  
**Ranked #1**  
for Global Announced Fairness  
Opinions for Full Year 2022<sup>1</sup>  
<sup>1</sup>Based on 51 Credited Deals per Refinitiv's  
Global Mergers & Acquisitions  
Review Full Year 2022



  
**Private Equity Wire US  
Awards 2022**  
Kroll Wins Best Regulatory and  
Compliance Firm of the Year



  
**Forensic Accountants 2022**  
LEXOLOGY Client Choice  
Awards 2022 - Exclusive Winner  
of Forensic Accountants



  
**Turnaround, Restructuring  
& Insolvency Awards 2021**  
**Winner** - Turnaround Firm  
of the Year

# Our Awards and Rankings

## Risk Advisory Recognition



**WWL**  
**Who's Who Legal (WWL) 2022**  
Experts recognized in WWL Asset Recovery, Construction – Quantum Delay & Technical, Forensic Accountants Quantum of Damages



**GAR** Global Arbitration Review  
**Global Arbitration Review's GAR 100 Expert Witness Firms Power Index - 2022**  
Ranked fifth on the annual list of top expert firms globally.



**GIR** Global Investigations Review  
**Global Investigations Review (GIR) 100 2021**  
Named as one of the top 100 cross-border investigations practices



**FORRESTER**  
**Forrester Wave™ 2022**  
Kroll named a Strong Performer in the Forrester Wave™ Cybersecurity Incident Response Services Q1 2022



**SC 2022 awards EUROPE**  
**SC Awards Europe 2022**  
Winner - Managed Detection and Response Solution  
Finalist - Best Incident Response Solution



**IDC**  
**IDC MarketScape 2021**  
Named a Global Leader in Incident Response Readiness



**Best Support SUMMER 2022**  
**G2 Awards 2022**  
G2 Best Support 2022

# Our locations

Across 32 countries and territories worldwide



**The Americas**

- Atlanta
- Austin
- Bermuda
- Bogota
- Boston
- Buenos Aires
- Chicago
- Dallas
- Diamond Bar
- Ellensburg
- Houston
- Los Angeles
- Mexico City
- Miami
- Minneapolis
- Morristown
- Nashville
- New York
- Philadelphia
- Richardson
- San Francisco
- Sao Paulo
- Seattle
- Secaucus
- Silicon Valley
- Toronto
- Washington, D.C.
- Waterbury

**Caribbean**

- British Virgin Islands
- Cayman Islands

**Europe and Middle East**

- Abu Dhabi
- Agrate Brianza
- Amsterdam
- Barcelona
- Berlin
- Bilbao
- Birmingham
- Brussels
- Channel Islands
- Dubai
- Dublin
- Frankfurt
- Gibraltar
- Guernsey
- Lisbon
- London
- Longford
- Luxembourg
- Madrid
- Manchester
- Milano
- Munich
- Padua
- Paris
- Pesaro
- Riyadh
- Rome
- Tel Aviv
- Turin
- Zurich

**Asia Pacific**

- Beijing
- Guangzhou
- Hanoi
- Hong Kong
- Hyderabad
- Jakarta
- Kuala Lumpur
- Manila
- Mumbai
- New Delhi
- Shanghai
- Shenzhen
- Singapore
- Sydney
- Taipei
- Tokyo



# Agenda

## 2023 APAC Economic Outlook and Impact

**1** Opening Remarks

Srividya Gopal  
Managing Director and Chair of  
APAC Management Committee

**2** Prospects for 2023 Looking Better

Megan Greene  
Global Chief Economist,  
Kroll Institute

**3** Cost of Capital Impact

Carla Nunes  
Managing Director, Office of  
Professional Practice and  
Kroll Institute

**4** APAC Restructuring Updates

Cosimo Borrelli  
Managing Director and Head of  
Asia Pacific and  
Offshore Restructuring

# Speakers' Bio

## Srividya Gopal



CVA, MRICS

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**Managing Director &  
Southeast Asia Leader,  
Valuation Advisory Services**

- Srividya is Managing Director & Southeast Asia Leader, Valuation Advisory Services at Kroll. She set up American Appraisal Singapore operations in 2012, which later got acquired by Duff & Phelps which has now been rebranded as Kroll. She is the Chair for Kroll's Asia Pacific Management Committee and a member of the firm's Global Leadership Team.
- She has 26 years of experience in valuations, transactions and management consulting. She has advised numerous companies on valuations for the purposes of financial reporting, transaction, restructuring, taxation, dispute resolution and financing.
- She is a member of the Business Valuation Board of the International Valuation Standards Council (IVSC), the global standard setter for valuation. She is a former member of the Institute of Valuers & Appraisers of Singapore (IVAS) Council and chaired their Professional Development Working Group. She is a former member of the global Regulatory Board of the Royal Institution of Chartered Surveyors (RICS). She is a member of the Intangible Asset Disclosure Industry Working Group set up by Singapore Government agencies.
- Srividya has advised several global and Asian alternative investment funds including sovereign wealth funds, private equity, private credit and venture capital investors as well as clients across a variety of sectors such as technology, life sciences, manufacturing, consumer products, energy & resources etc.
- Srividya has published various articles on valuation, PE/VC and M&A, and has been interviewed by several television channels, newspapers and magazines. She is a regular speaker at conferences and seminars.
- Srividya is a registered Chartered Valuer & Appraiser (CVA) with IVAS and Member of the RICS (MRICS). She also has a Post Graduate Diploma in Management (equivalent to MBA), is a Graduate of the Institute of Cost & Works Accountants of India and a Bachelor of Commerce.

## Megan Greene



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**Global Chief Economist, Kroll**  
**Senior Fellow, Brown University**  
**Contributing Editor, Financial Times**

- Megan Greene is Global Chief Economist for the Kroll Institute. With a global focus drawn from a career split between the UK and U.S., Megan examines the intersection of macroeconomics, financial markets and politics. She has a breadth of experience working in financial services, academia and policy and tailors her insights and forecasts specifically for her audiences.
- Megan currently serves as a Senior Fellow at the Watson Institute for International and Public Affairs at Brown University.. She is also the first Dame DeAnne Julius Senior Fellow in International Economics at Chatham House.
- She is a frequent keynote speaker for financial services clients, trade associations and policymakers, and has a biweekly column in the Financial Times on global macroeconomics. She also appears regularly on TV and radio outlets such as Bloomberg, CNBC, NPR and BBC.
- Megan serves on the board of directors of the National Association for Business Economists, the Parliamentary Budget Office in Ireland, Rebuilding Macroeconomics and Econofact. In addition, she is an affiliate of the Rhodes Center Brown University and a non-resident fellow at Trinity College Dublin and is a member of the Council on Foreign Relations. She regularly advises governments and central banks in the US, UK, eurozone and Japan.
- Megan was previously global chief economist at John Hancock/Manulife Asset Management, founder and chief economist at Maverick Intelligence, head of European Economics at Roubini Global Economics and the euro crisis expert at the Economist Intelligence Unit. She holds a B.A. from Princeton University and an MSc from University of Oxford.

## Carla S. Nunes



CFA, ABV

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**Managing Director  
Office of Professional Practice  
of Kroll**

**Carla S. Nunes, CFA, ABV** 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, ESG, 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 in business 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.

## Cosimo Borrelli



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### Managing Director and Head of Asia Pacific and Offshore Restructuring

- Cos is a leading restructuring and insolvency practitioner in Asia having worked exclusively in this area since 1990 – being appointed by lenders and financiers, shareholders, distressed companies, secured and unsecured creditors, investors, courts and other stakeholders. Cos' primary focus is large operational and financial restructurings in distressed environments and complex, and often contentious, insolvencies.
- Cos' assignments often have a cross border focus including work in Hong Kong, PRC, Singapore, India, Taiwan, Malaysia, Australia, United States, United Kingdom, Europe, Bermuda, British Virgin Islands, Cayman Islands and Africa and involving the restructuring of private and large publicly listed groups, the investigation and valuation of loan and non-performing loan portfolios for banks and non-bank institutions, the location, retrieval and sale of assets throughout the world, the enforcement of security, audit and director negligence and fraud.
- Cos' strong investigation and forensic background plays a key role in the analysis and execution of restructuring and associated assignments and his wealth of commercial experience means he is well suited to establishing and implementing solutions to complex problems and disputes.
- Cos is also well regarded for his work as an independent director to listed companies internationally, especially those undergoing or targeting turnarounds, mergers and acquisitions, divestments and special situations. Cos is currently an Independent Director of a listed company in Singapore.
- Cos is named in the Thought Leaders Global Elite– Asset Recovery Experts by Who's Who Legal and is also recognised as a leading advisor in the Who's Who Legal: Restructuring & Insolvency Advisors (non-legal). "Sources heap praise on [Cos] for his profound expertise in asset recovery relating to restructuring and insolvency proceedings", and he received "international acclaim for his first-rate insolvency practice". Cos was also previously quoted to be "an absolute must for this list" and that "his knowledge on worldwide insolvency matters is second to none."

#### Qualifications

- Awarded the Hong Kong Institute of Certified Public Accountants' specialist designation in insolvency, SD (Insolvency)
- Licensed Insolvency Practitioner, Singapore
- Fellow of the Hong Kong Institute of Certified Public Accountants
- Member of the Restructuring and Insolvency Faculty of the Hong Kong Institute of Certified Public Accountants
- Registered Appointment Taker with the Official Receiver's Office in Hong Kong
- Member of the Institute of Chartered Accountants Australia and New Zealand
- Member of the Australian Restructuring Insolvency and Turnaround Association (ARITA)
- Bachelor of Arts in Economics, University of Adelaide, Australia



# Prospects for 2023 Looking Better

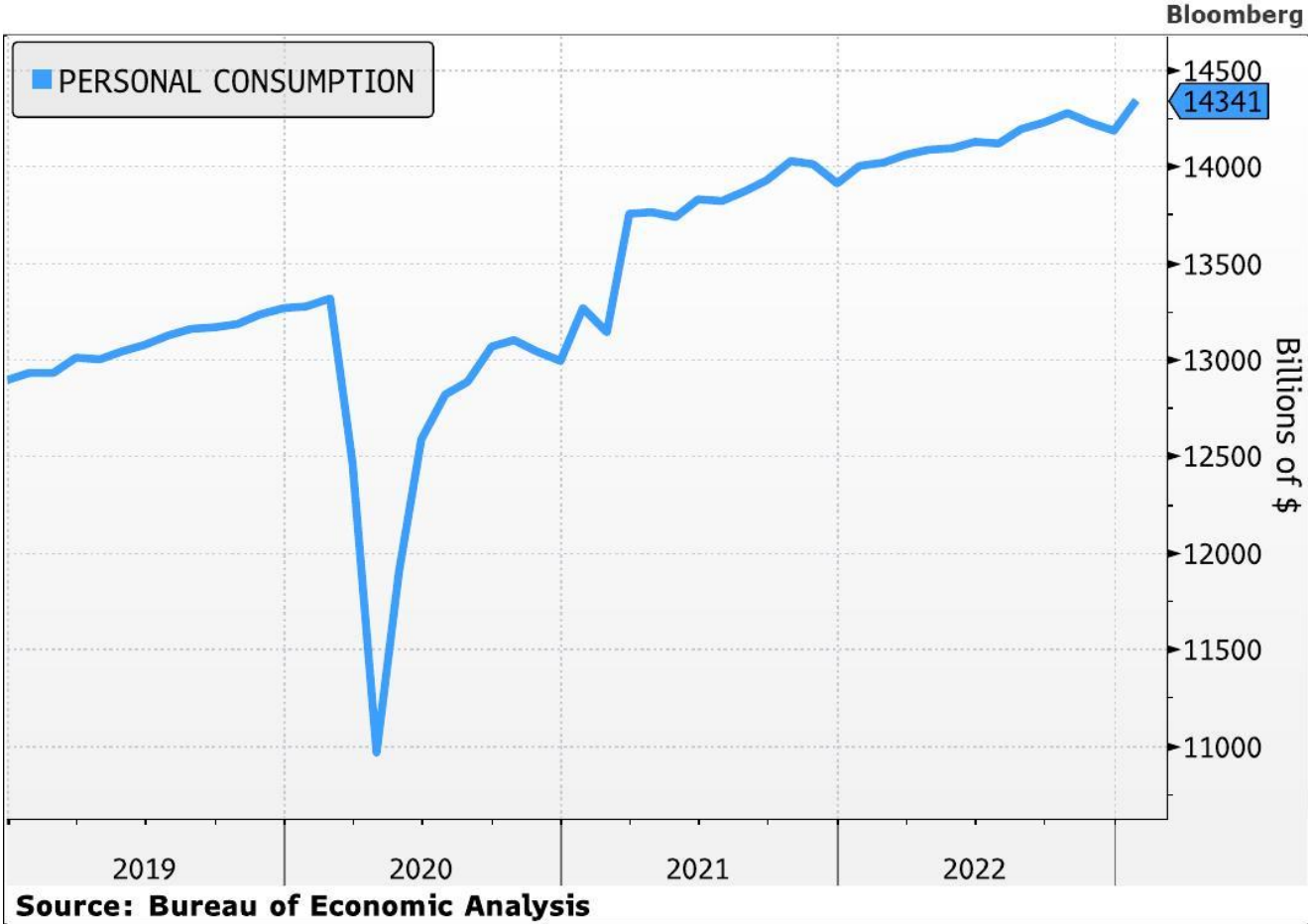


**Megan Greene**

Global Chief Economist, Kroll  
Senior Fellow, Brown University  
Contributing Editor, Financial Times

# US Consumption has rebounded

US personal consumption



Source: Bureau of Economic Analysis

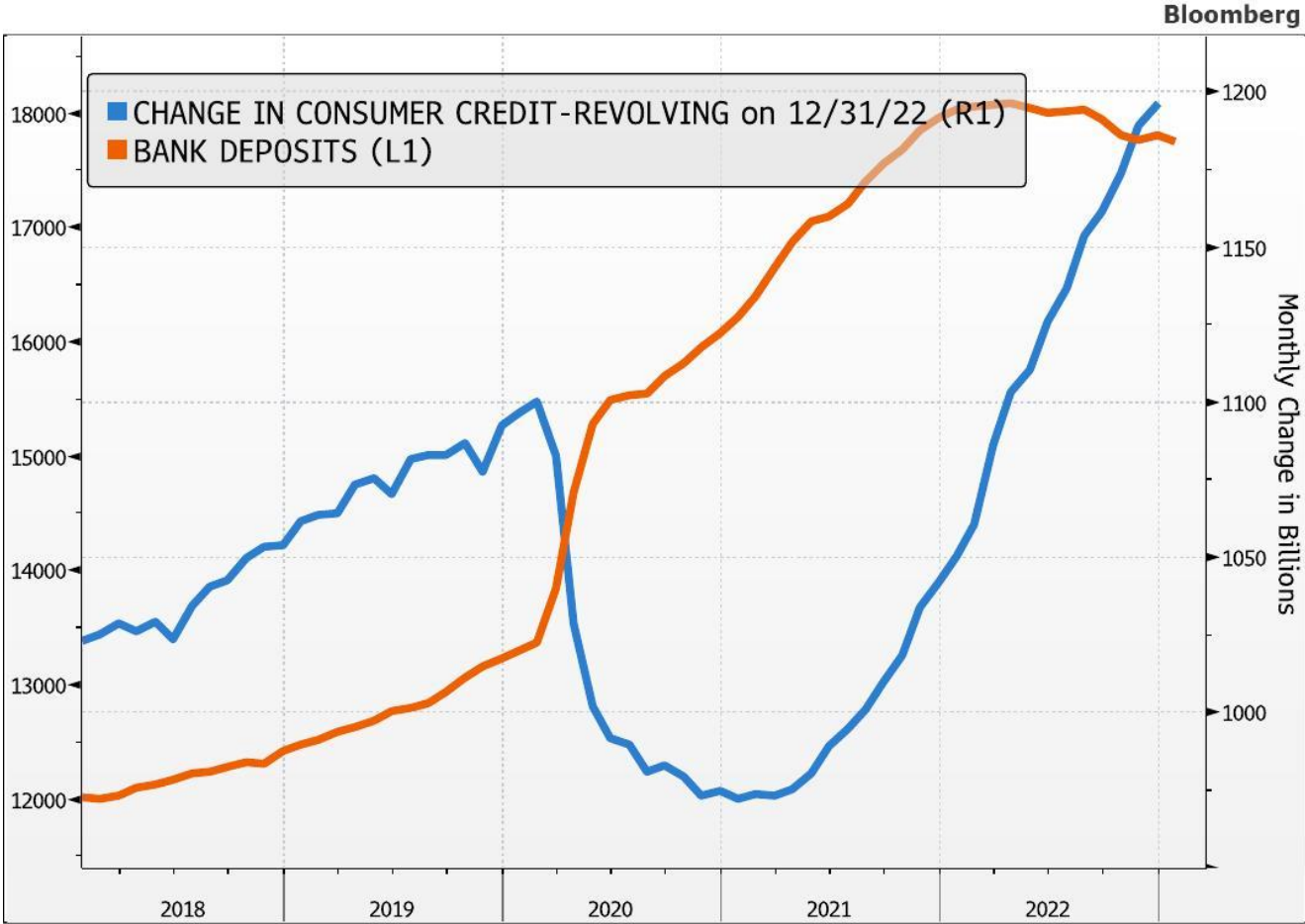
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Source: BEA.



# US cash cushion is dwindling – From high levels

US households see cash cushion fall from high levels

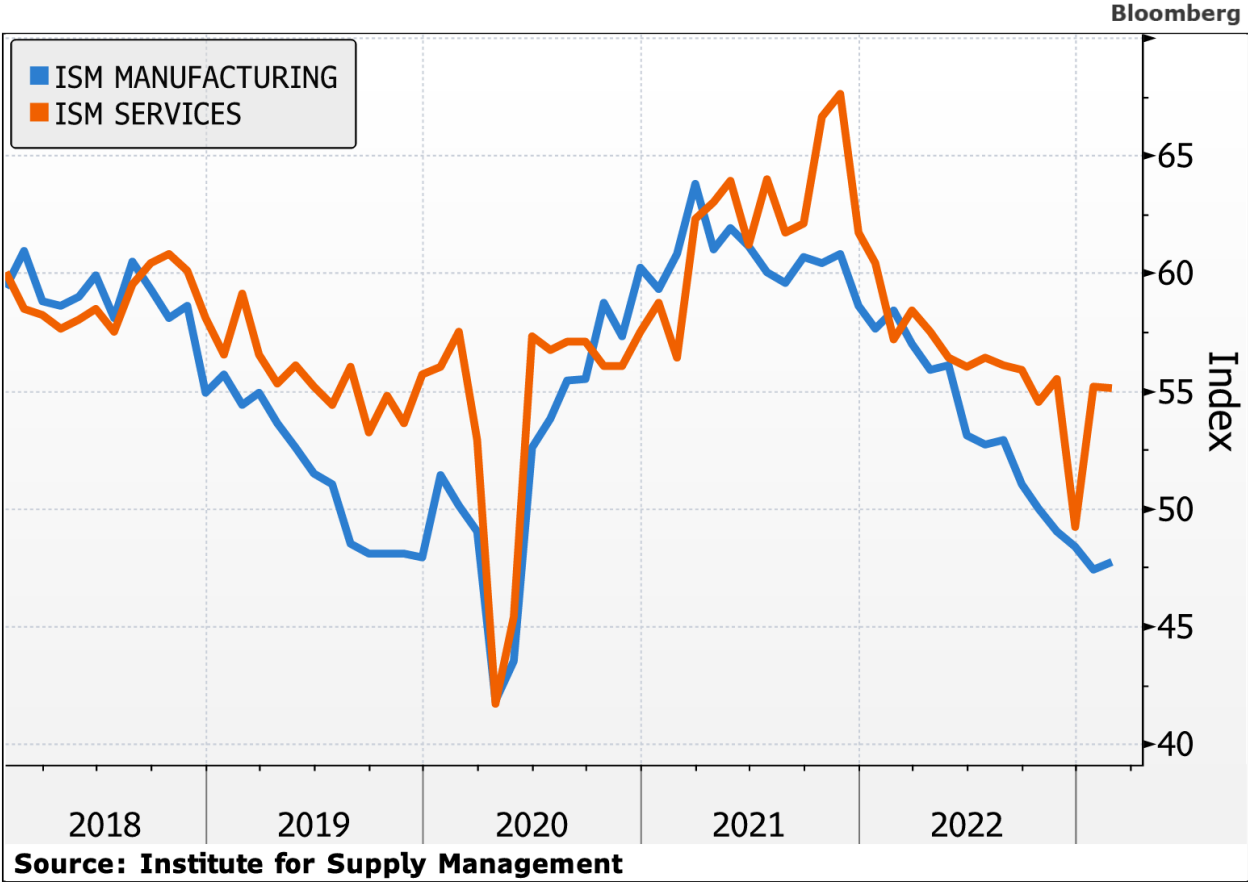


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Source: Bloomberg.

# US PMI data improving

ISM, manufacturing and services

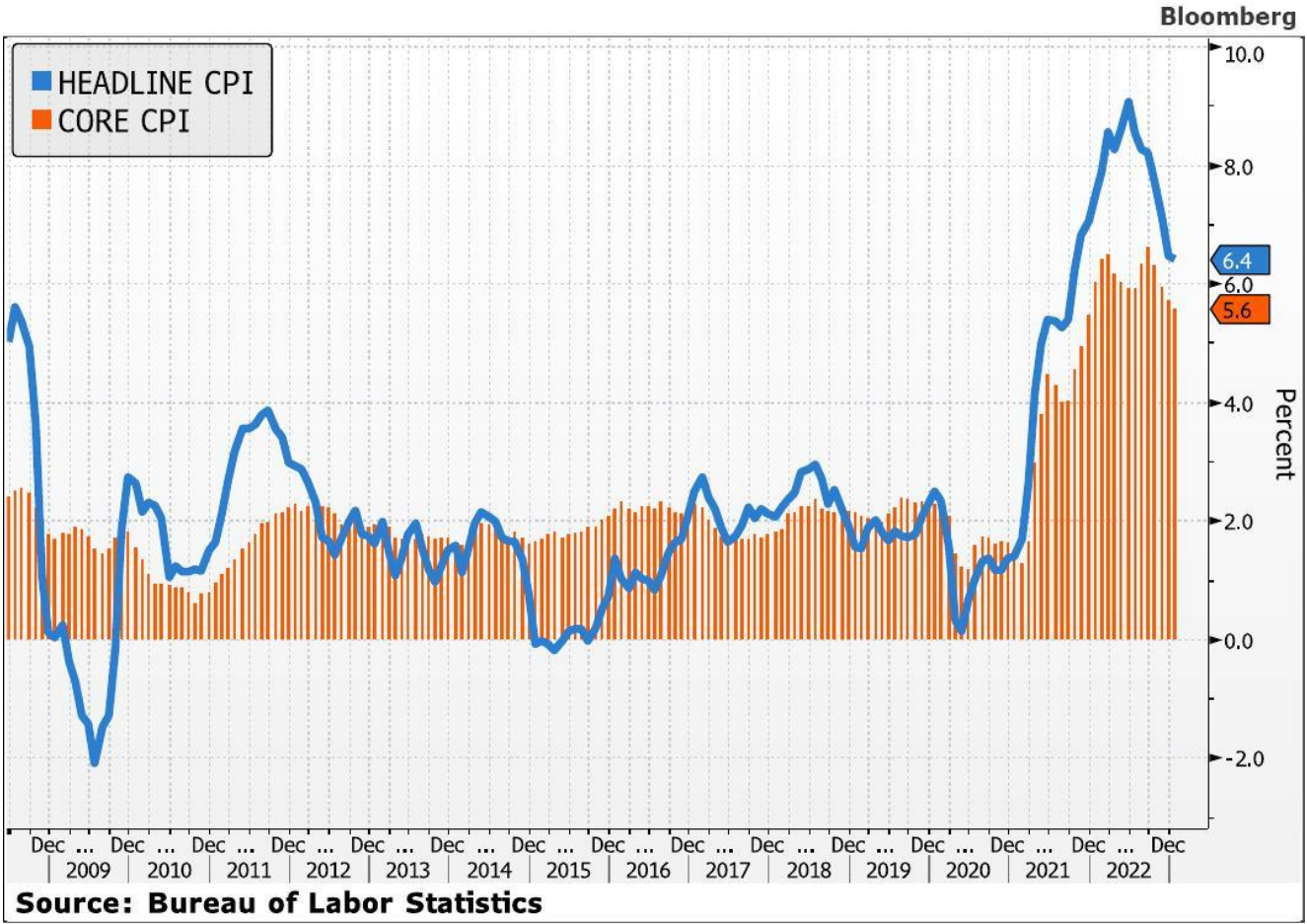


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Source: ISM, Bloomberg.

# US peak inflation behind us

CPI and core CPI, year-on-year

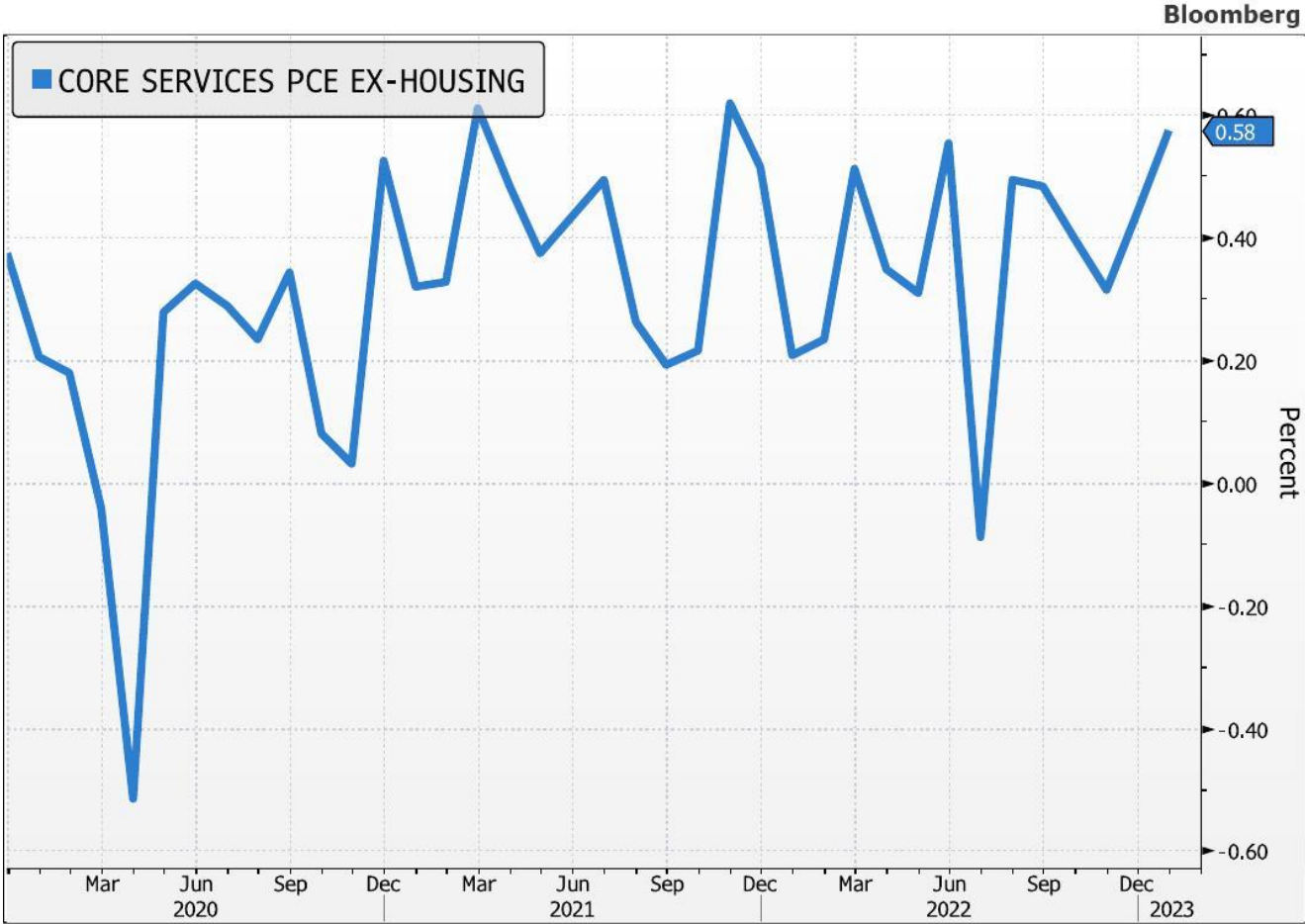


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Source: BLS.

# Core services inflation ex-housing accelerated

Core PCE inflation ex-housing (% change, mom)

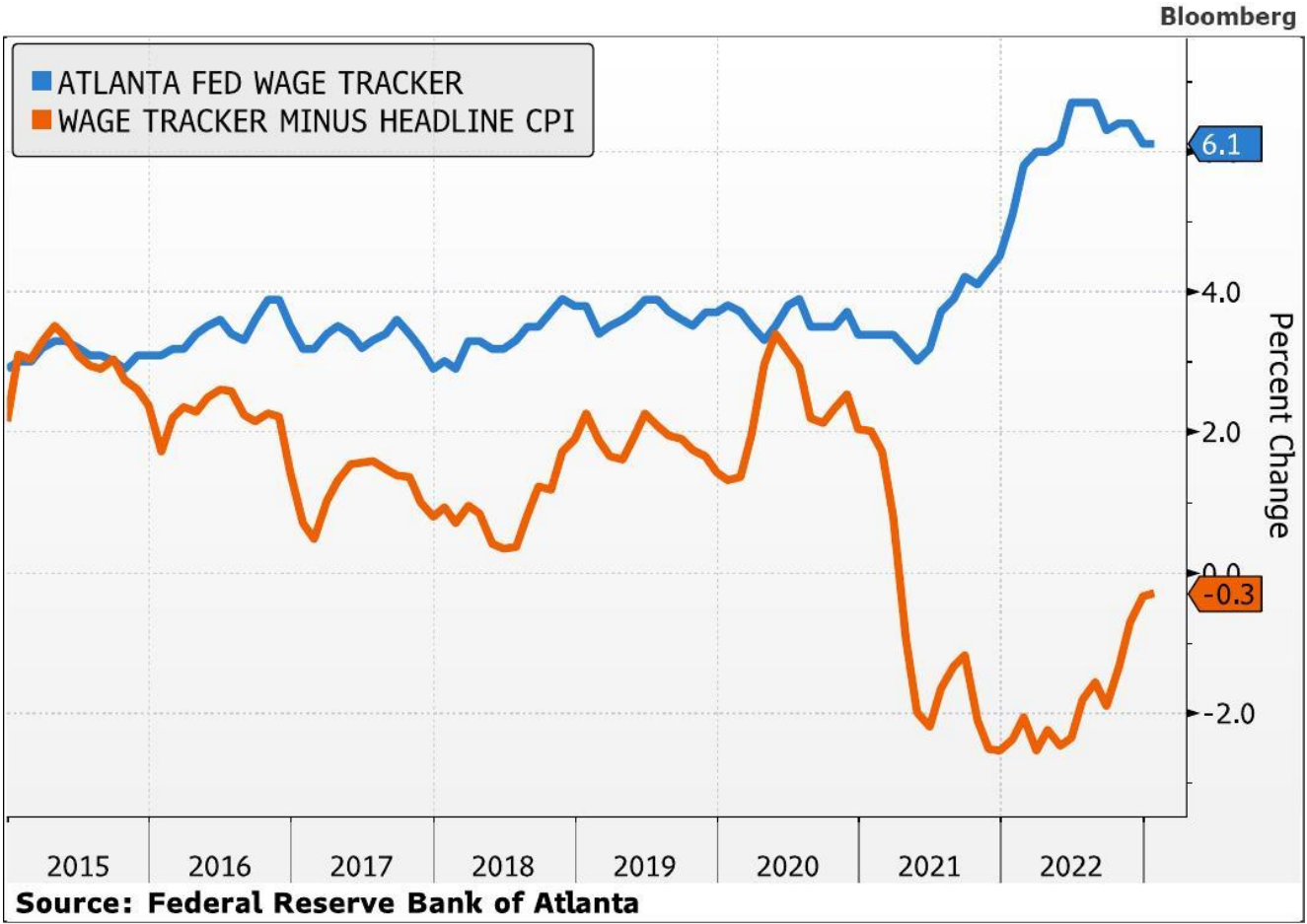


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Source: BLS, Bloomberg.

# Wages coming down but still near historic highs

Atlanta Fed Wage Tracker

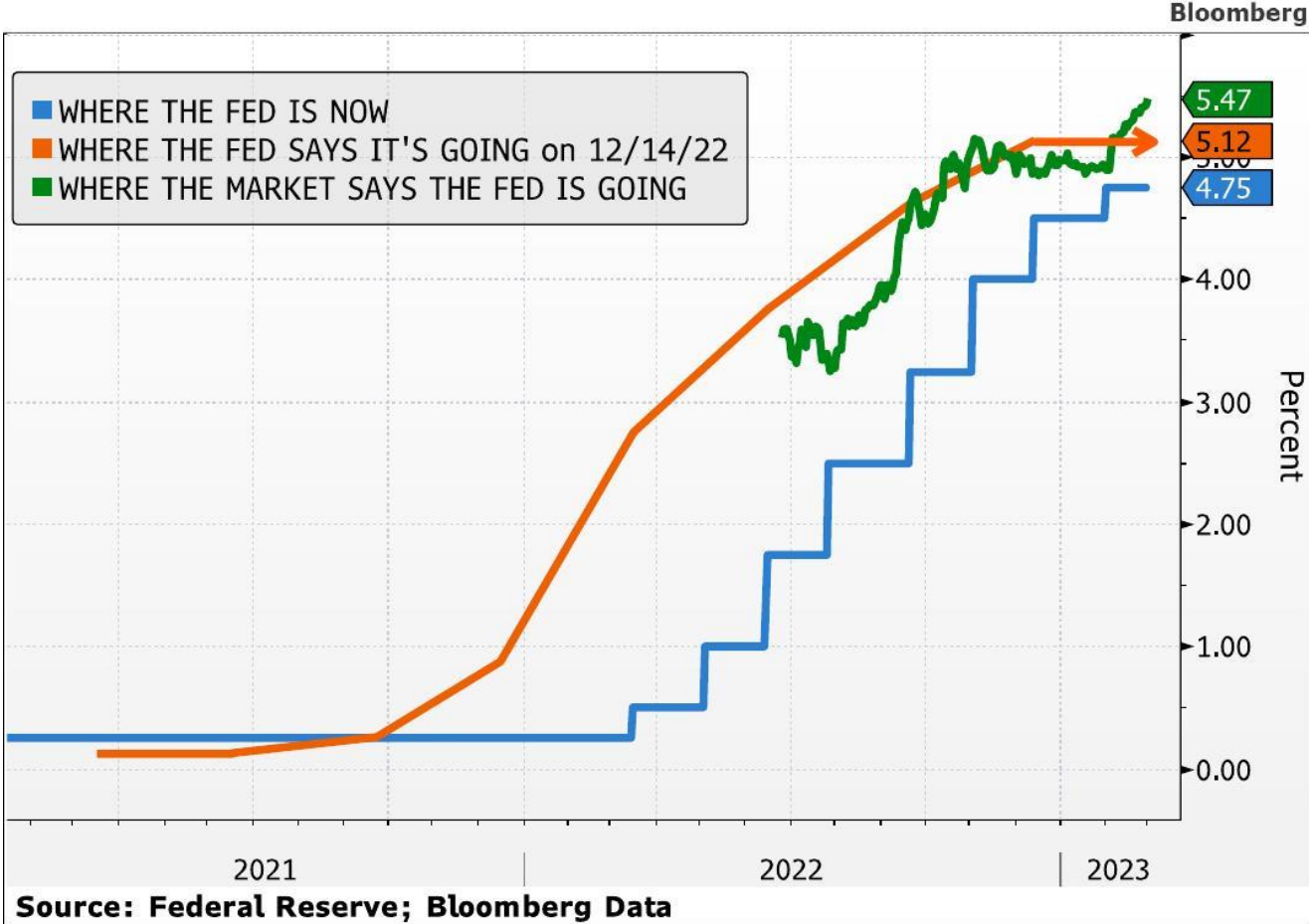


Source: Atlanta Fed.

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# Market based expectations for rates

Market pricing for Fed Funds



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Source: Bloomberg.



# EZ consumer confidence rebounding (from low levels)

Consumer confidence



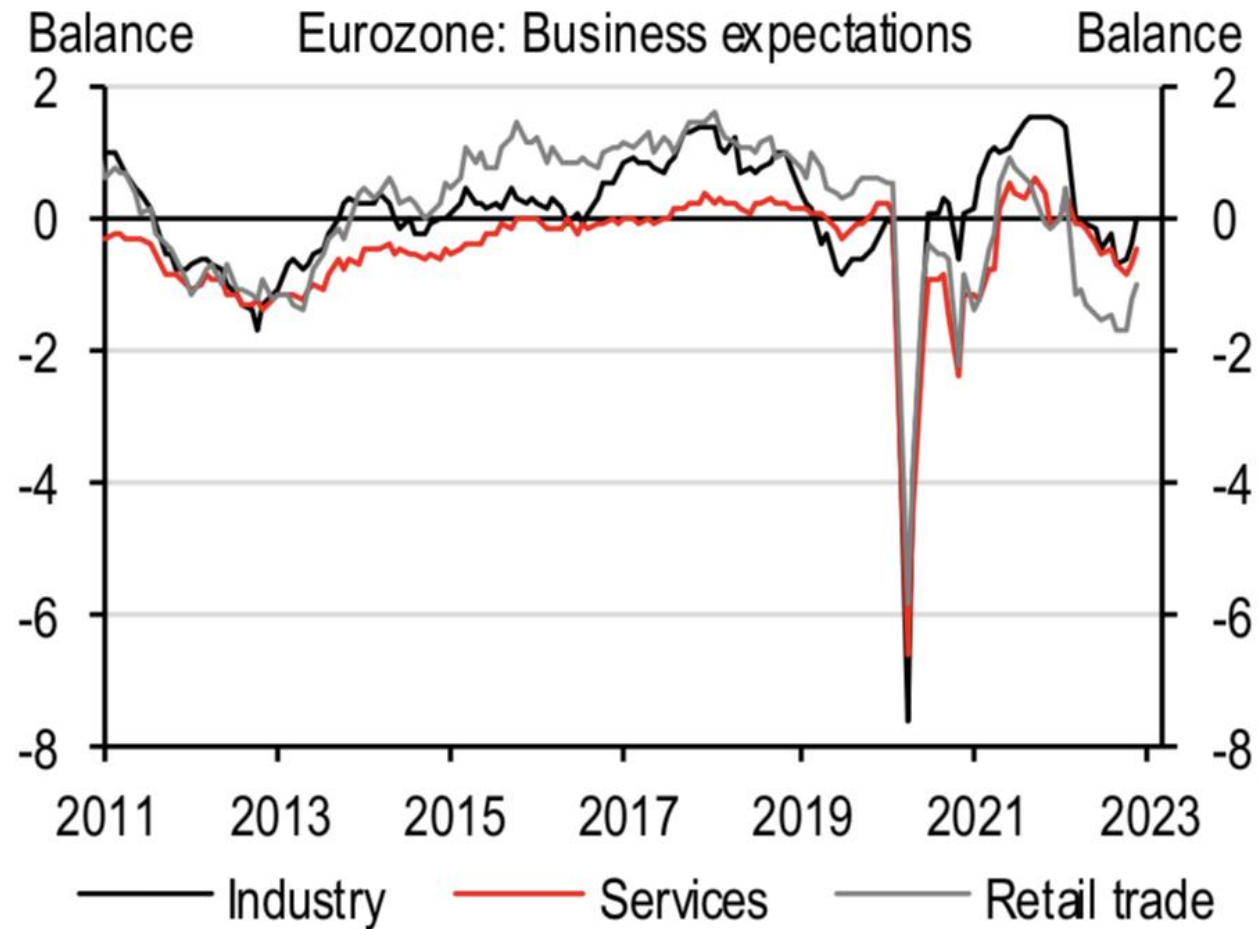
Source: European Commission

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Source: European Commission.

# EZ business expectations have improved as well

EZ business confidence

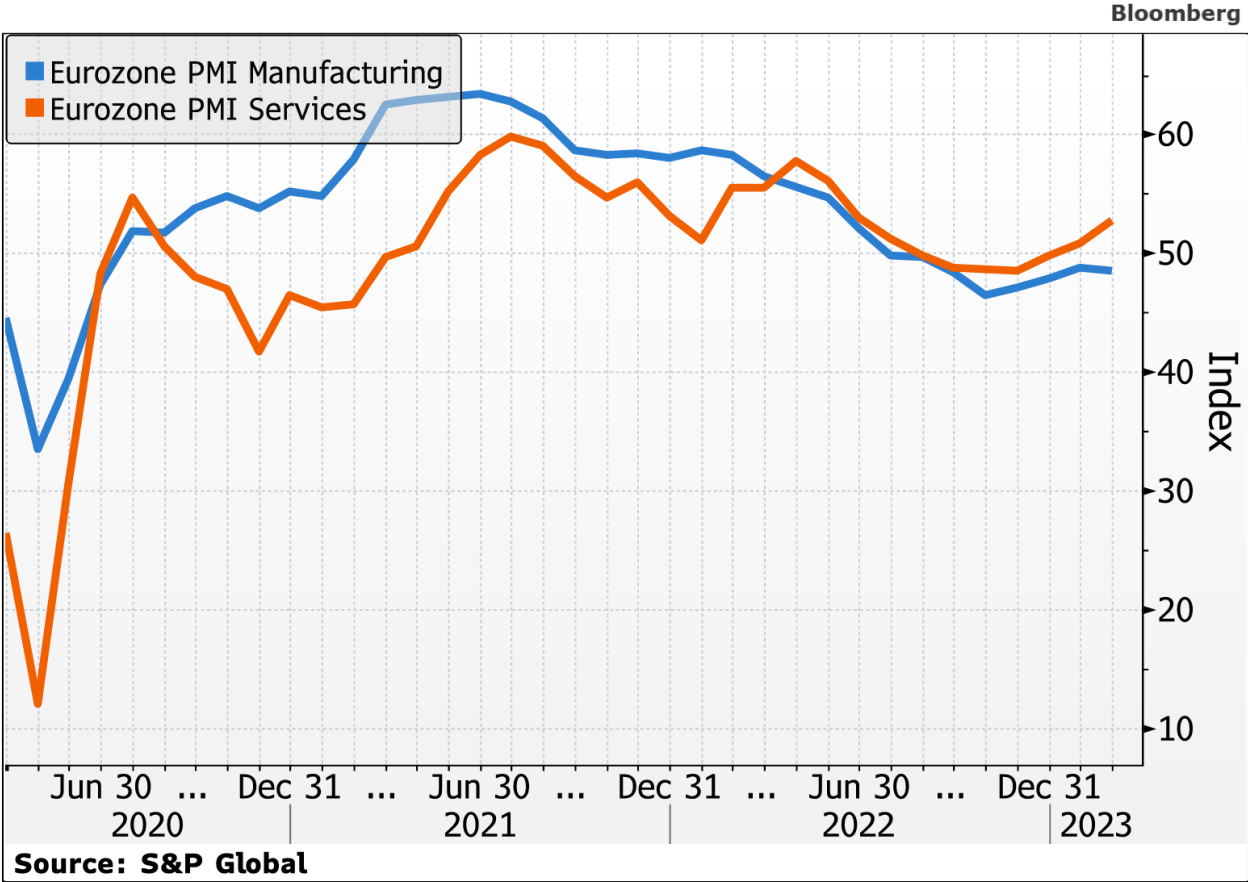


Source: European Commission.



# EZ PMI data recovering

EZ PMI data



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Source: S&P Global.

# EZ peak core inflation still ahead

Eurozone inflation



ECCPEMUY Index (Euro Area MUICP All Items YoY NSA) EZ inflation Monthly 01JAN2008-02MAR2023 Copyright© 2023 Bloomberg Finance L.P. 02-Mar-2023 06:15:26

Source: Eurostat.

# EZ wage growth has been robust

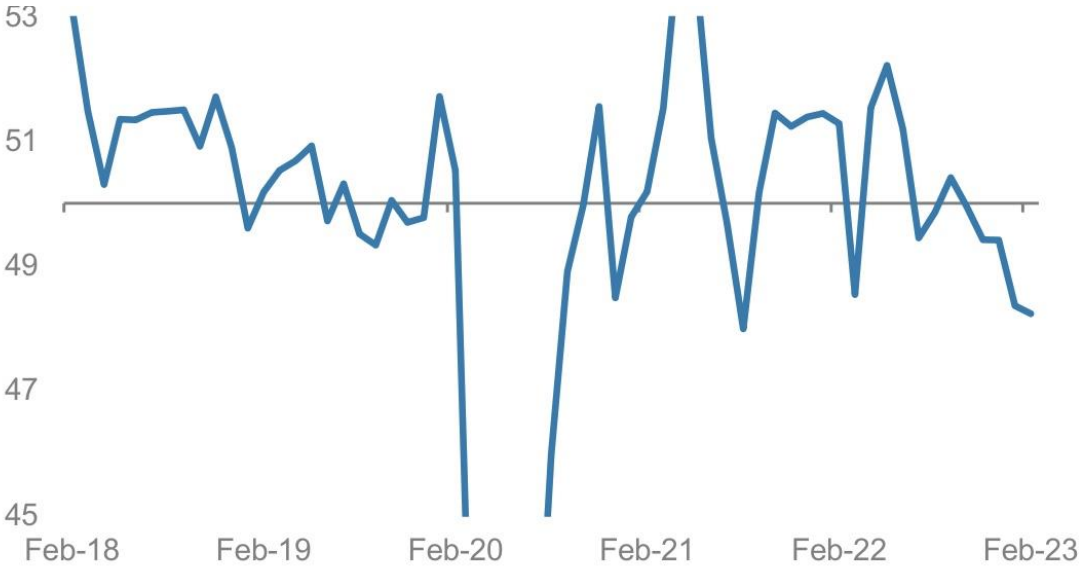
Negotiated wages are picking up



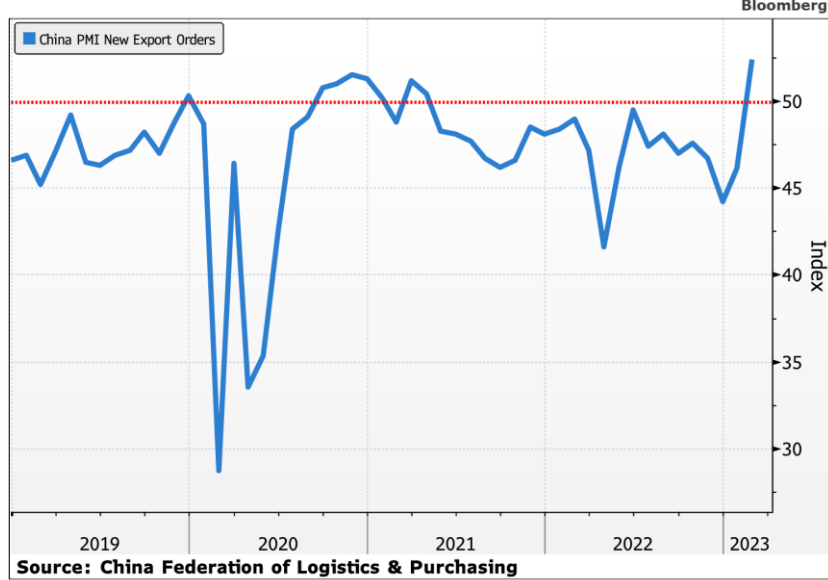
Source Speech by ECB Board Member Fabio Panetta, 17. Feb 2023. HSBC.

# External demand for Asian manufacturing weak

Asia ex-China new export orders



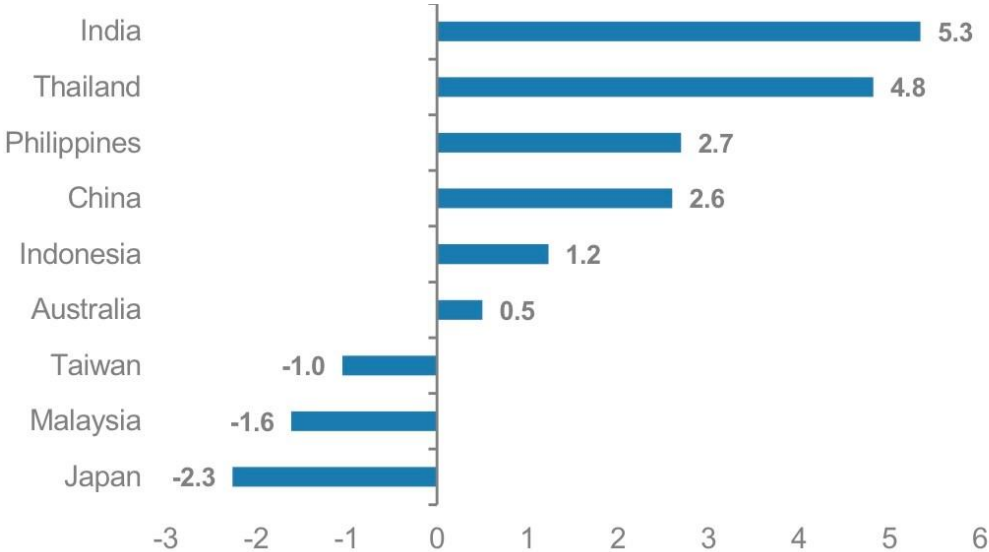
China new export orders expanding



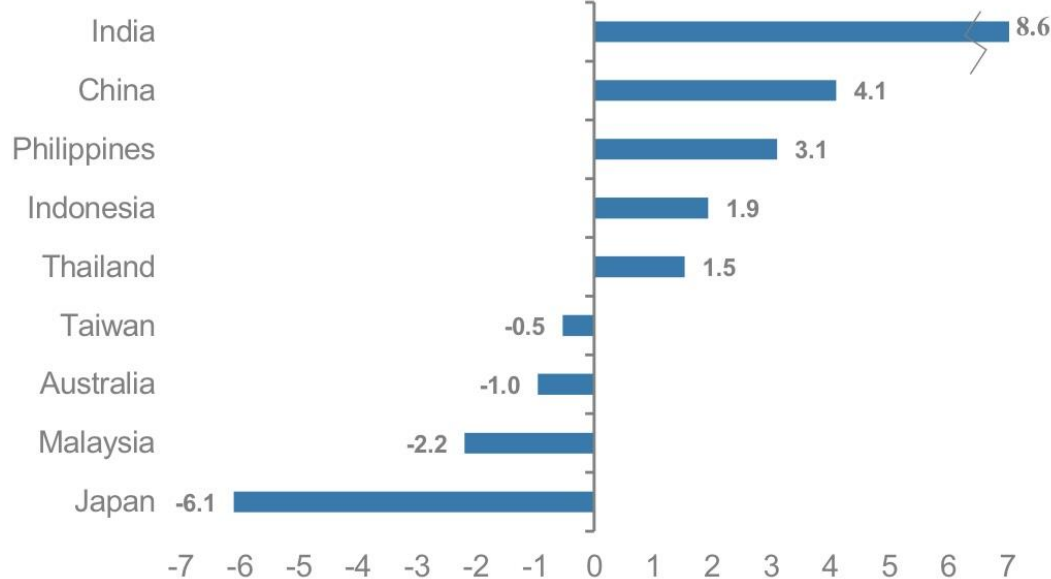
Source: Markit, IMF, national sources, Bloomberg.

# Manufacturing winners and losers in Asia

Headline manufacturing PMI, deviation from 50



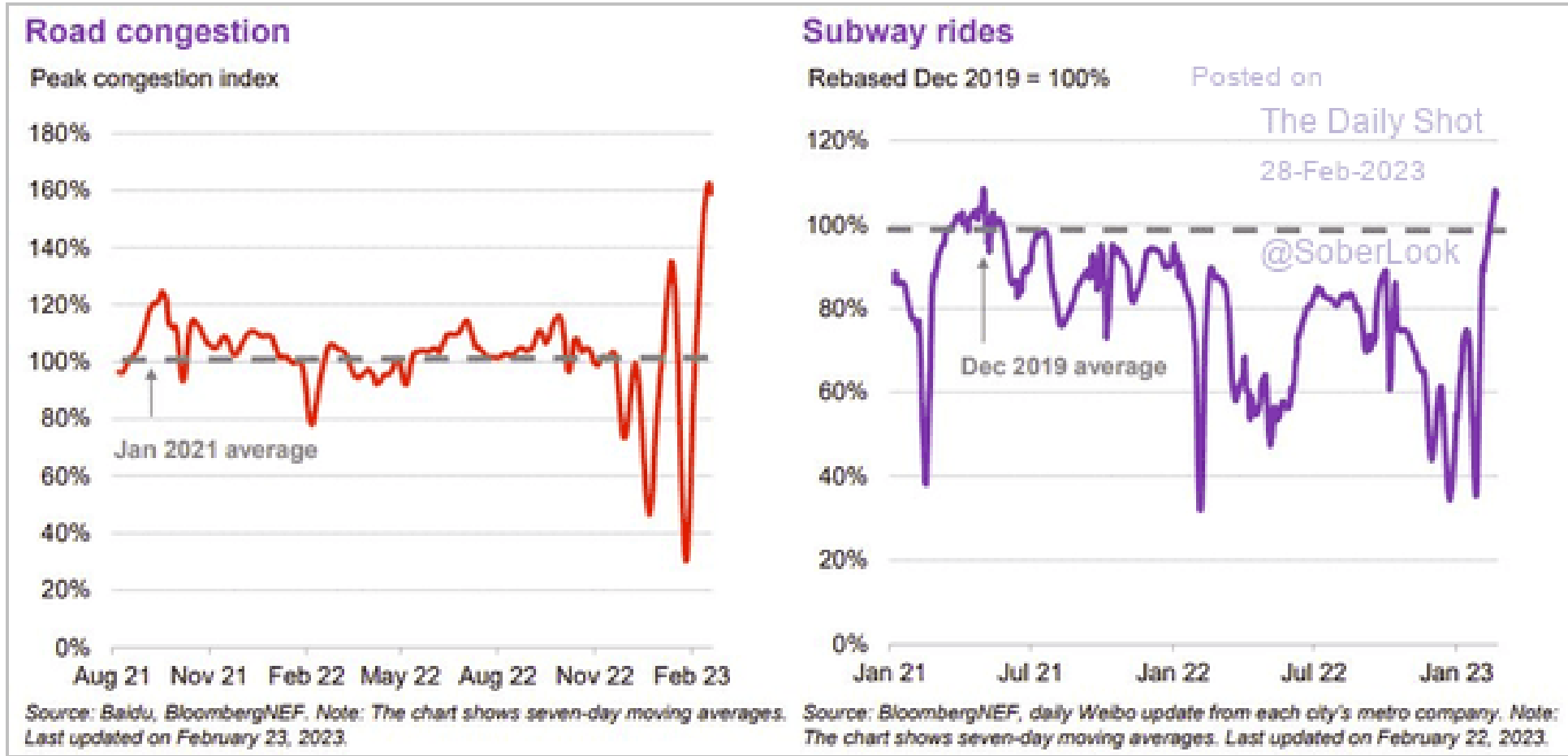
New Orders PMI, deviation from 50



Source: Markit, IMF, National sources.

# Chinese mobility indicators have rebounded

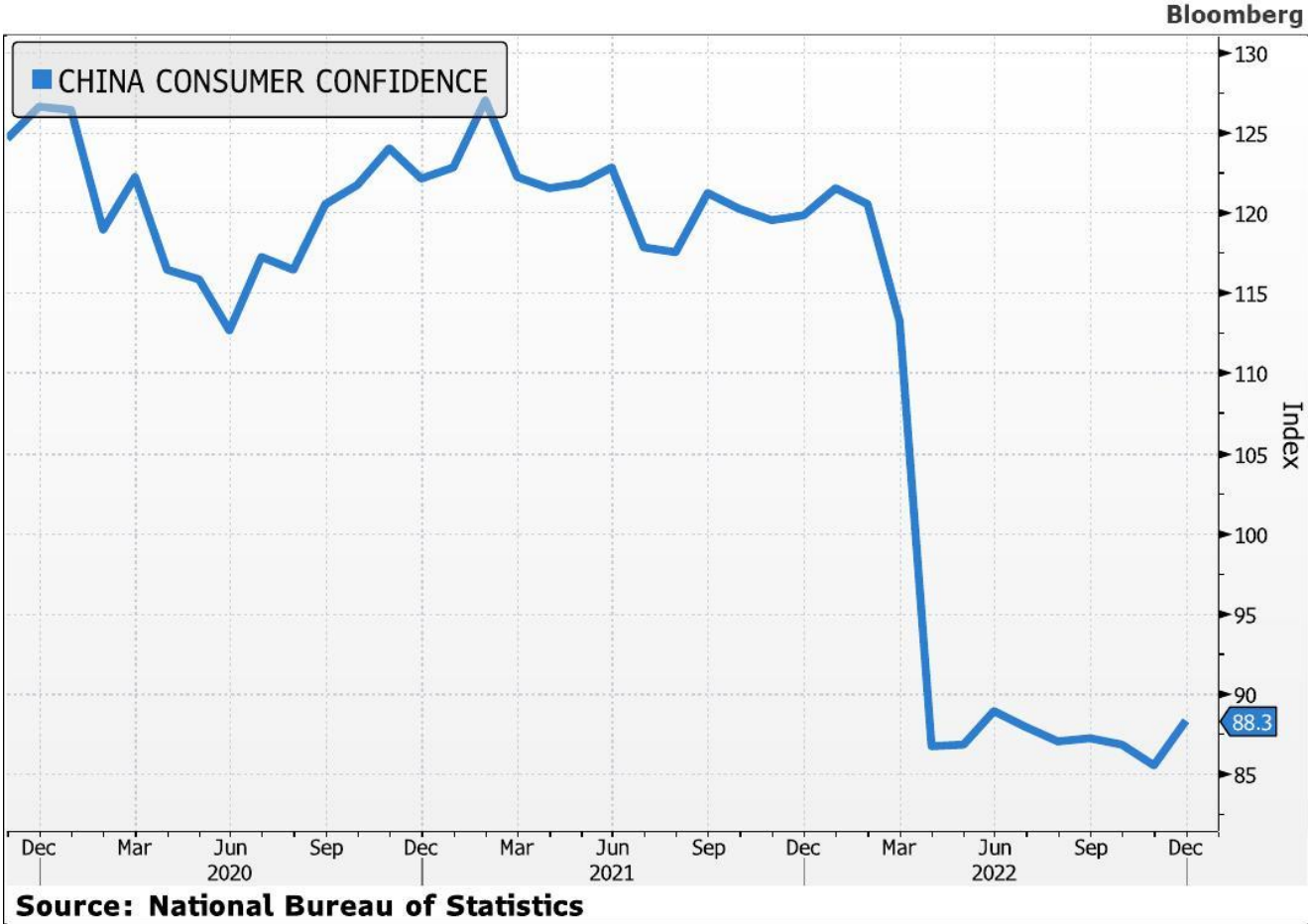
Mobility indicators in China



Source: Bloomberg.

# Consumption-led recovery (rather than investment-led)

Chinese consumer confidence



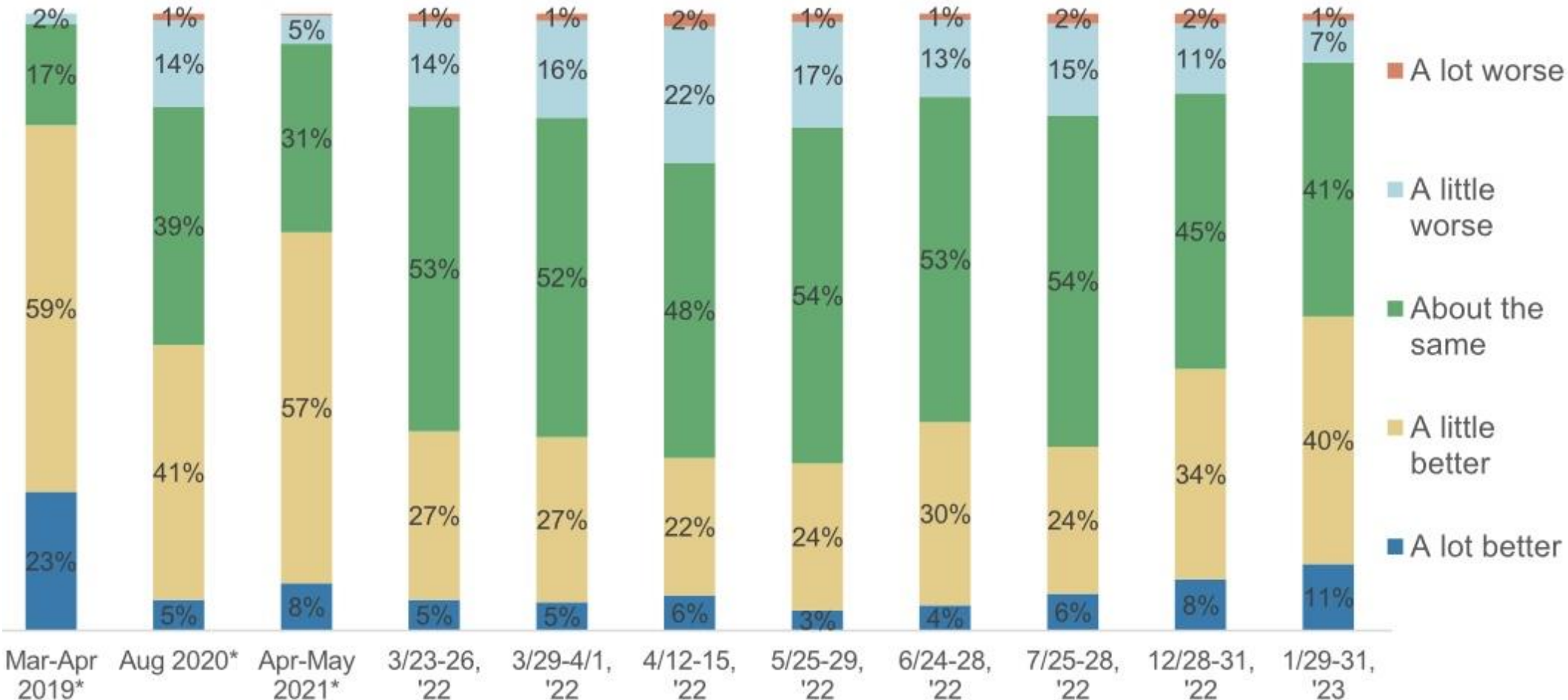
Source: National Bureau of Statistics

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Source: Bloomberg.

# Chinese consumers turning more positive on HH situation

Perception of household financial situation over the near future

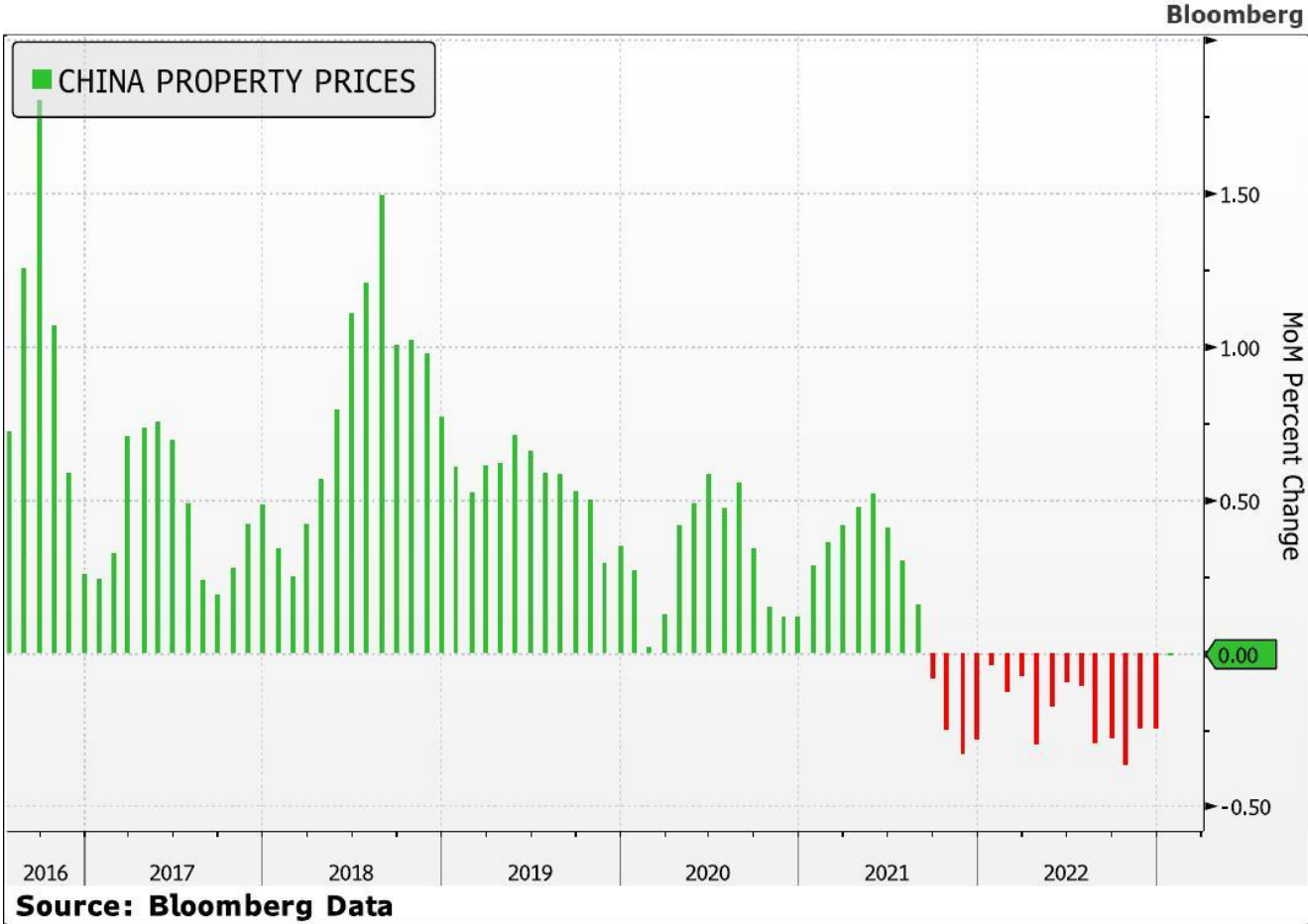


Source: AlphaWise Survey.



# Risk in the property sector

Chinese property prices

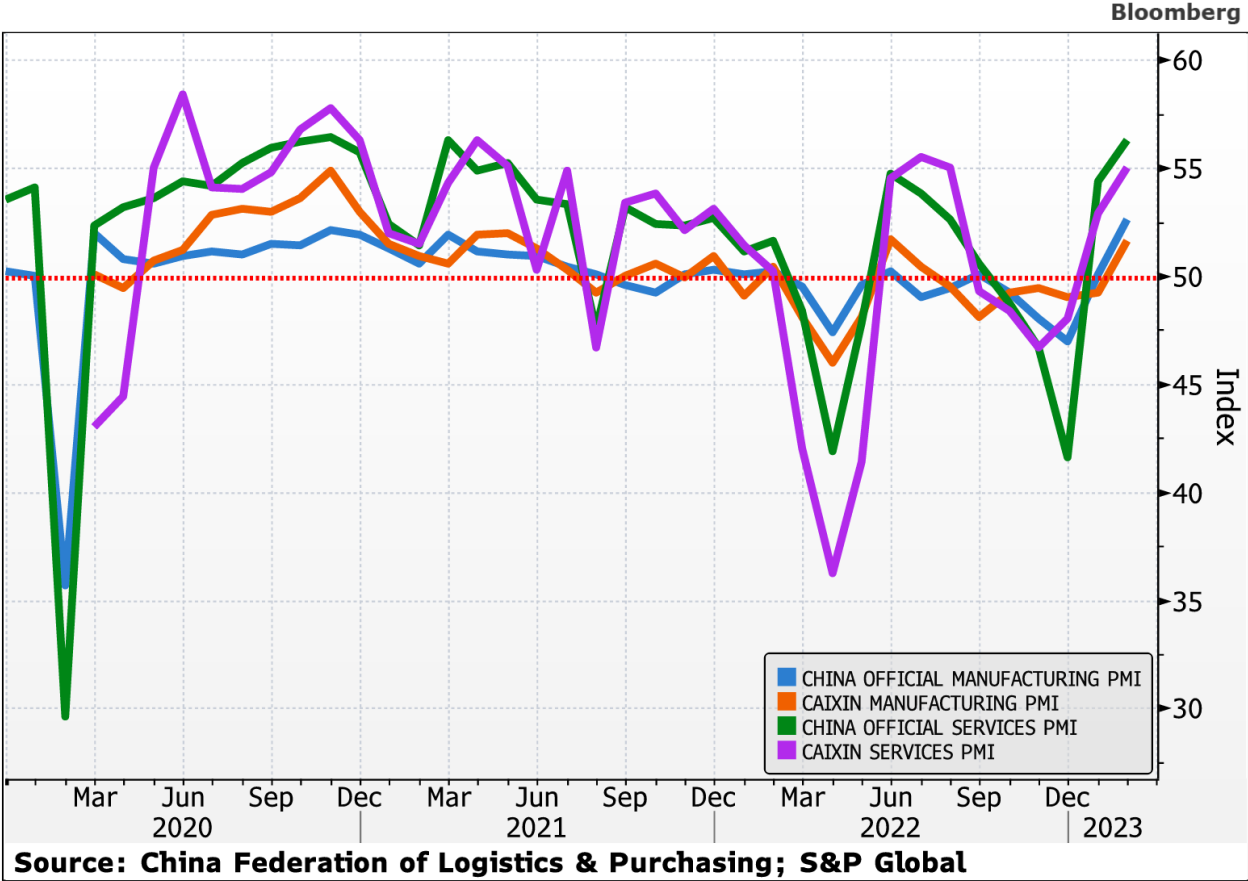


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Source: Bloomberg.

# Chinese manufacturing and services expansionary

China Manufacturing and Services PMI

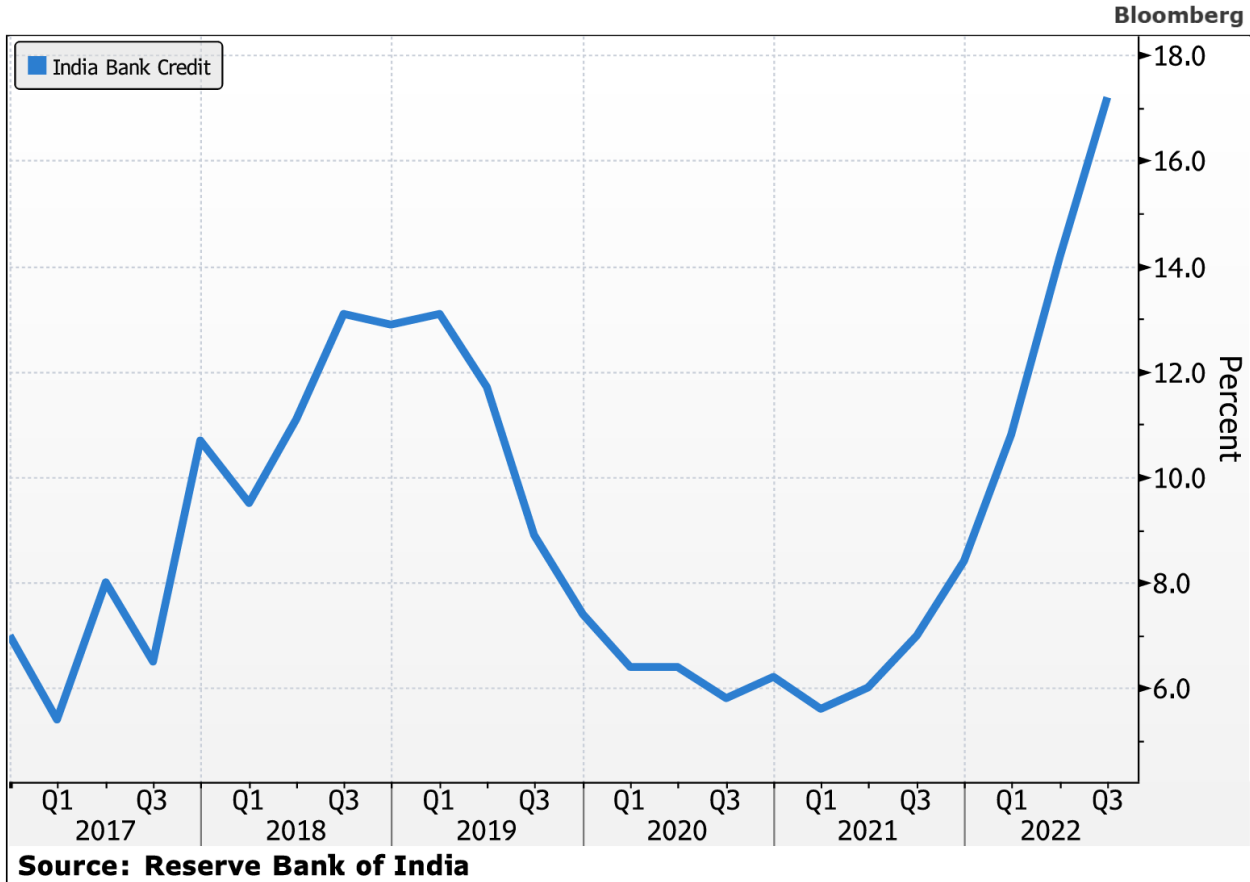


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Source: China Federation of Logistics, S&P Global, Bloomberg.

# India credit growth reflects healthy domestic demand

Bank credit growth, % change (yoy)



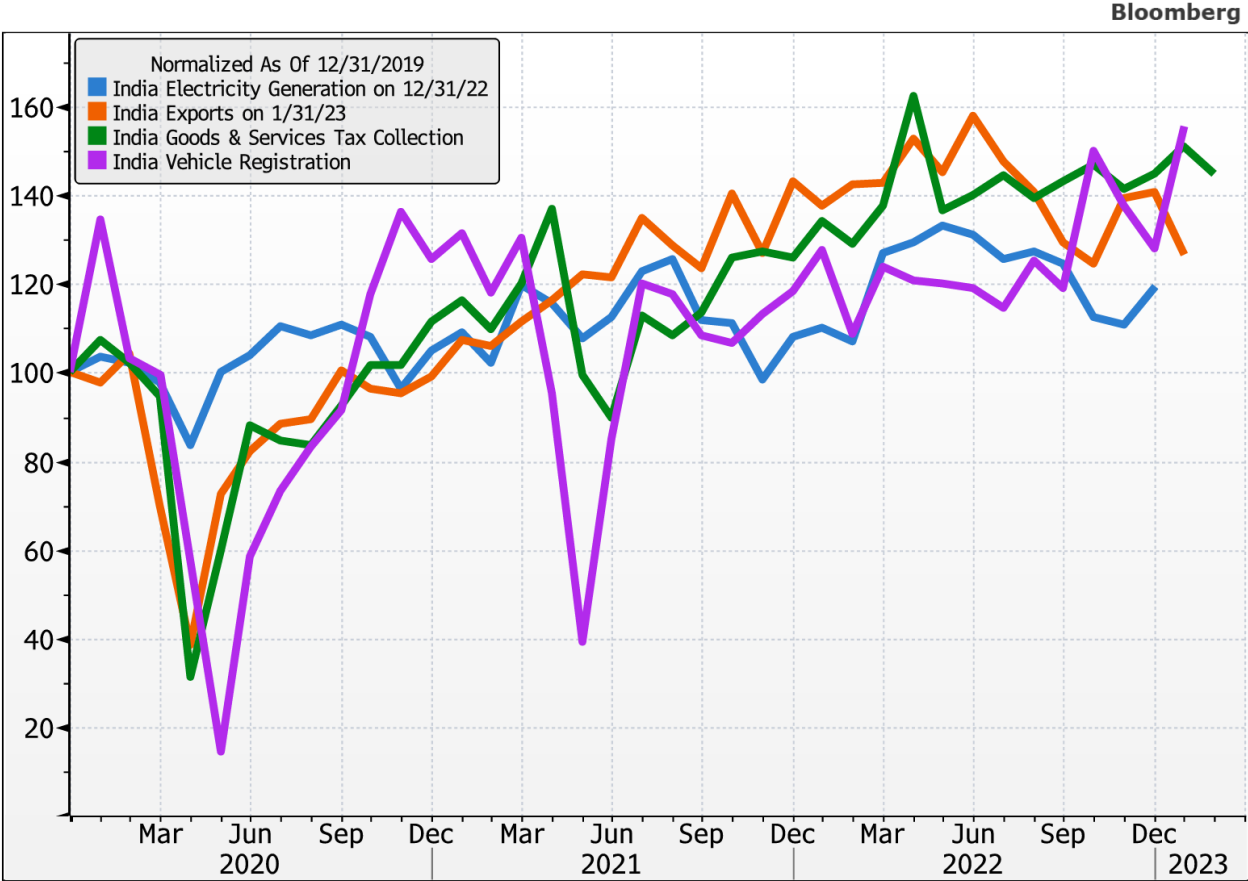
Source: Reserve Bank of India

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Source: RBI.

# India high-frequency indicators improving

High-frequency indicators (indexed Dec 31, 2019=100)

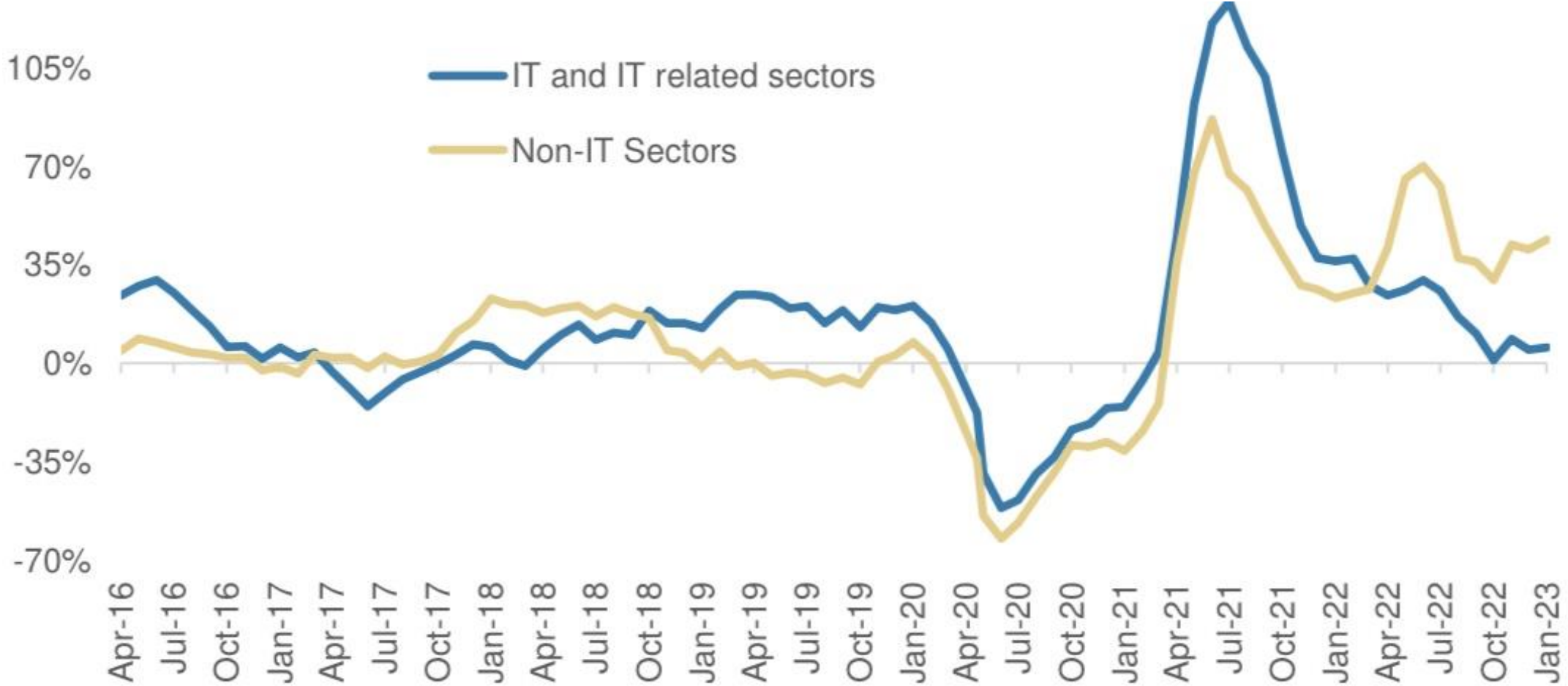


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Source: Ministry of Power, CEIC, Bloomberg.

# Indian labour market is stabilising

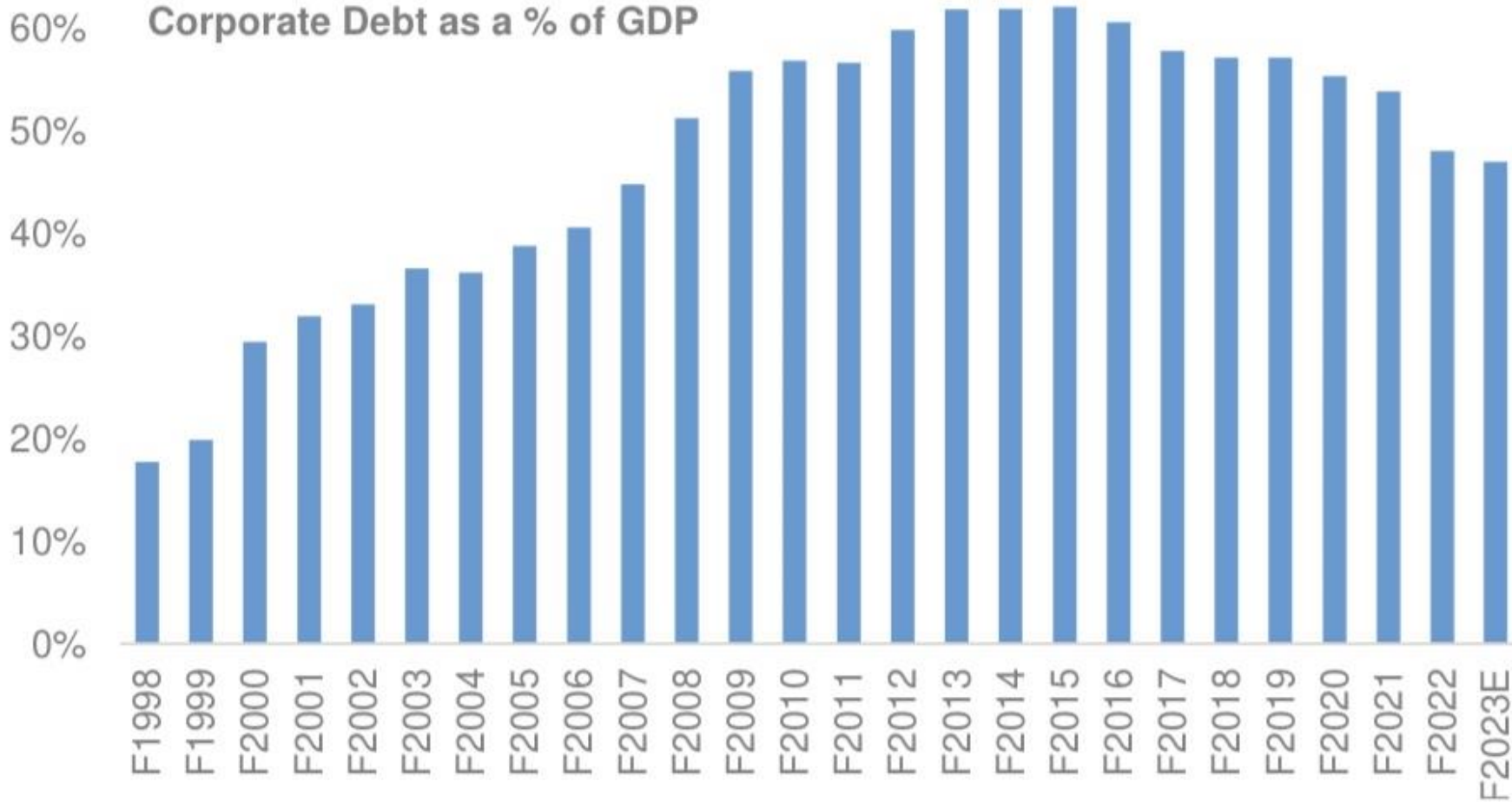
Nakuri jobspeak index, % change (yoy), 3MMA



Source: Nakuri jobspeak report.

# India corporate debt/GDP on track to hit 16yr low

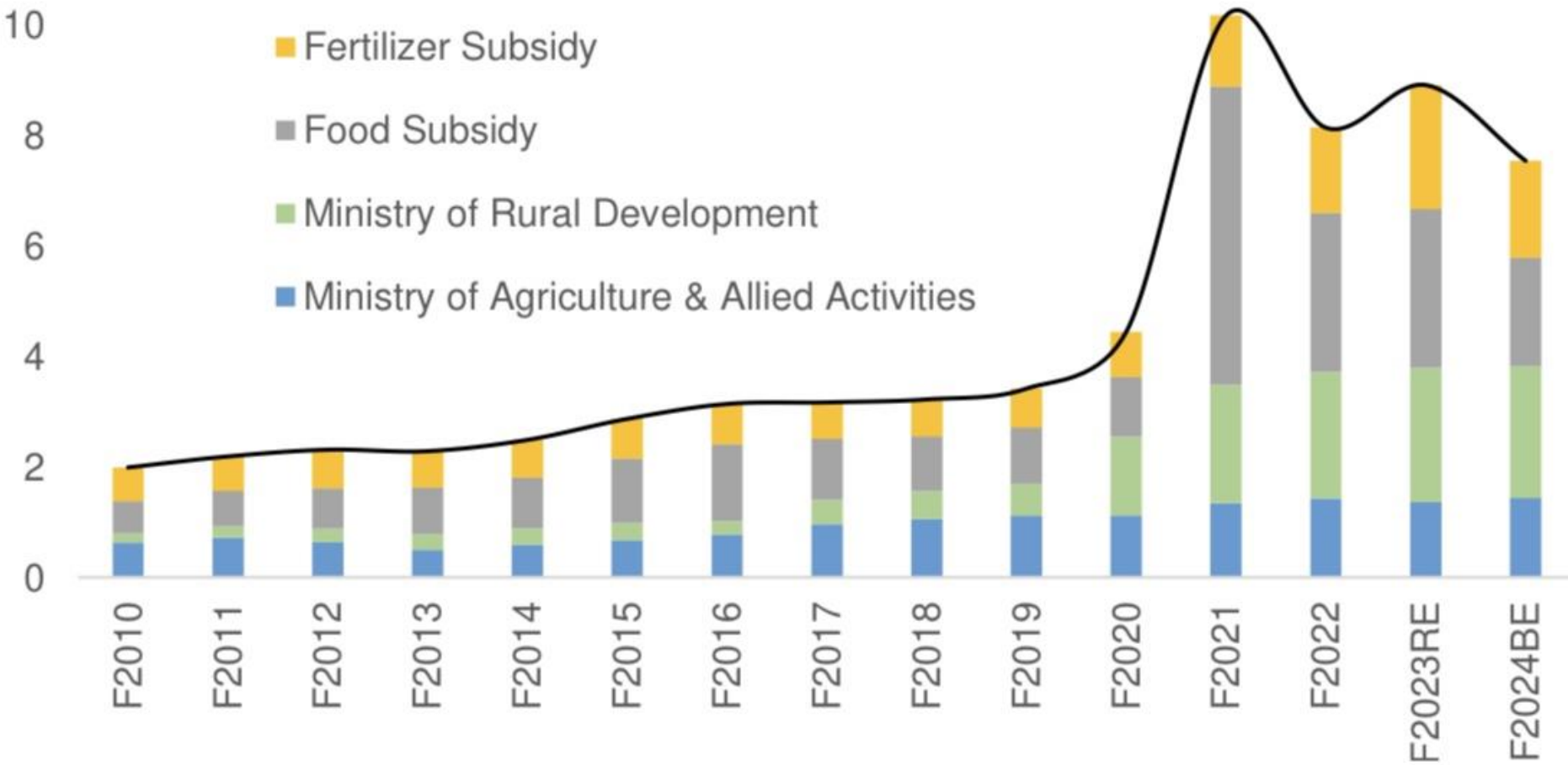
India corporate debt/GDP



Source: RBI, CEIC, MS estimate.

# Indian govt support still well above pre-pandemic levels

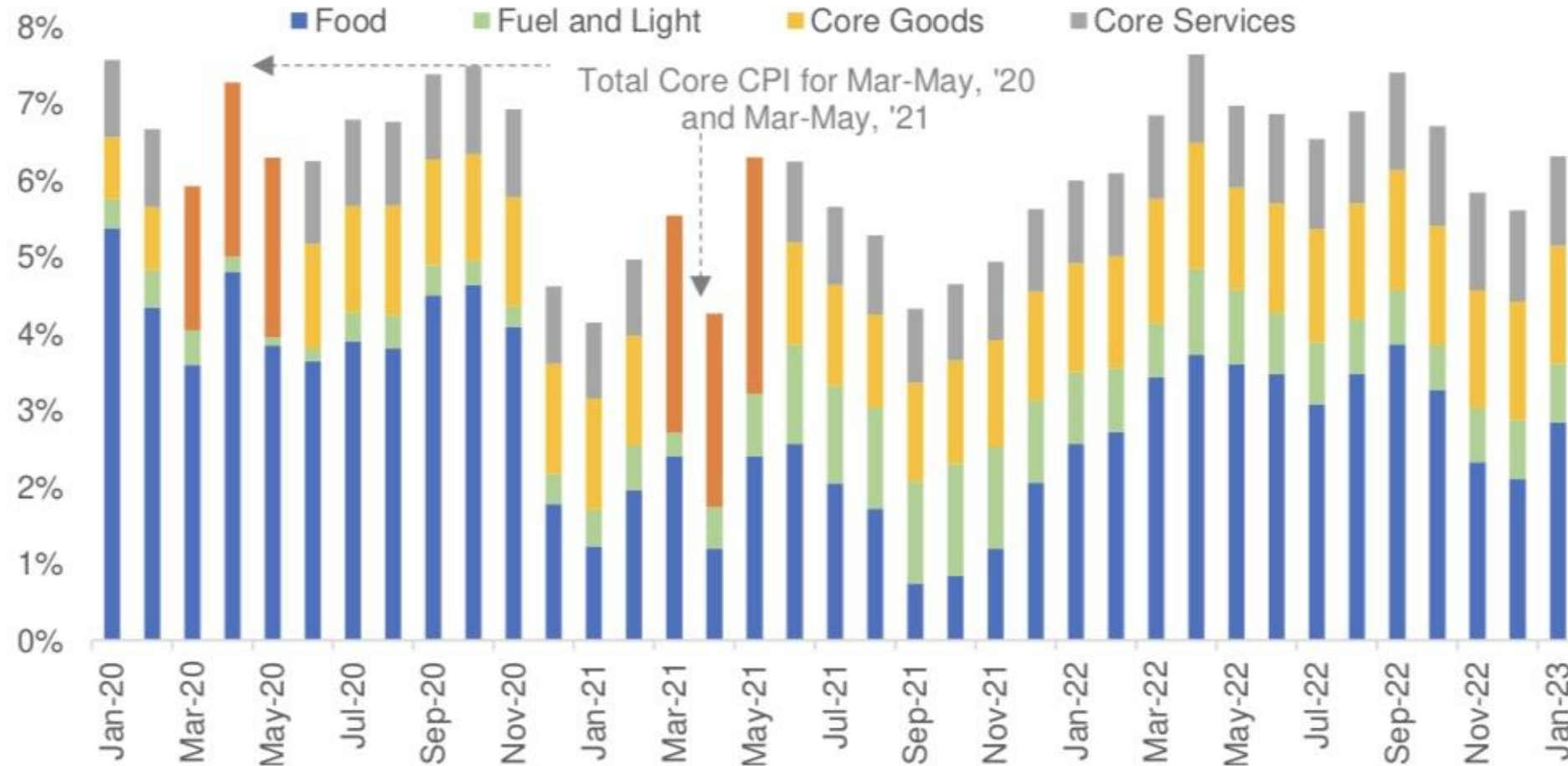
Central government rural spending, IND tn



Source: Budget documents, Ministry of Agriculture, Ministry of Rural Development, Food and Fertiliser Subsidies.

# India inflation driven largely by food and fuel

Contribution to inflation, % change (yoy), pts



Source: CEIC, Morgan Stanley.





# Cost of Capital Update



**Carla S. Nunes, CFA, ABV**

Managing Director

Office of Professional Practice of Kroll

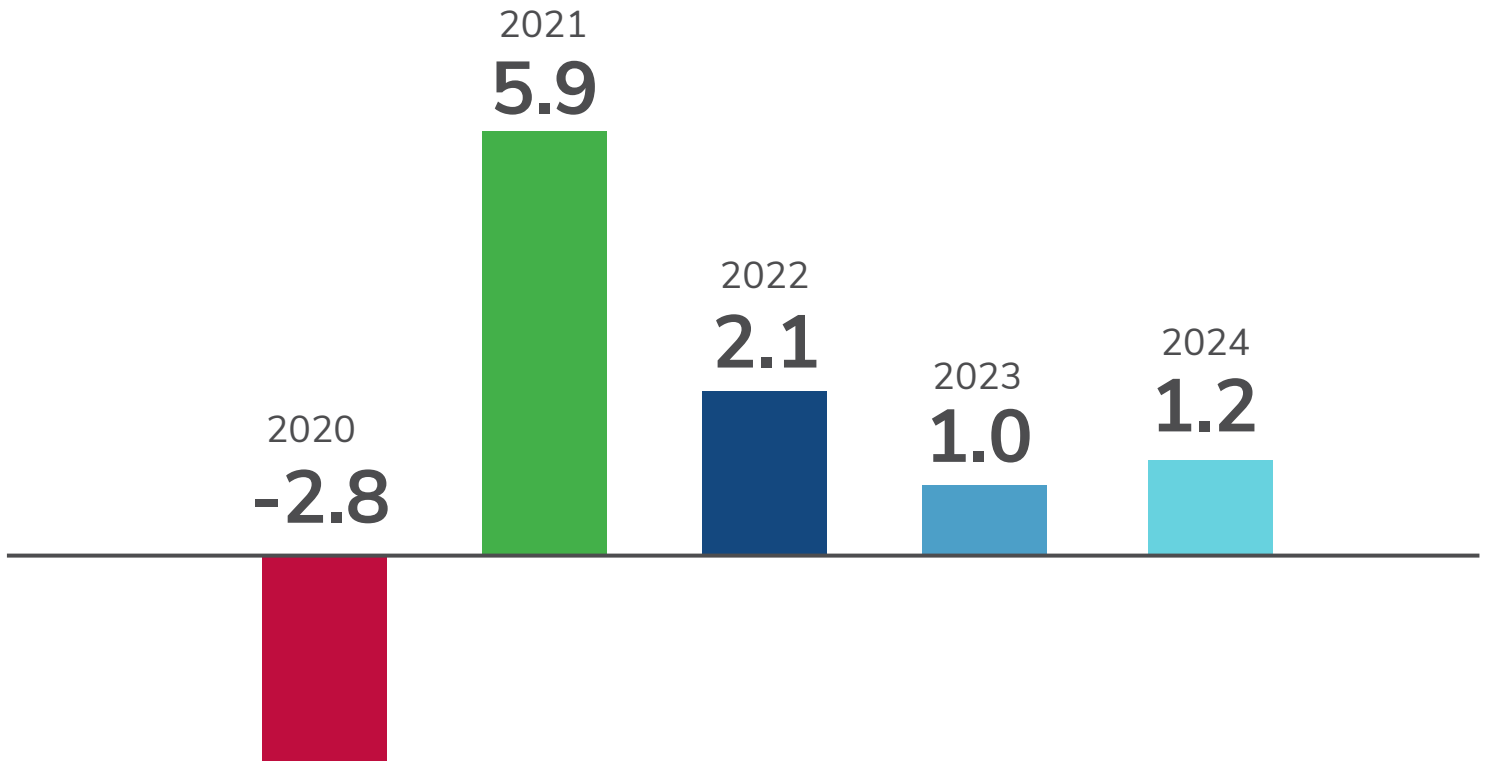
# Real GDP Growth – Source of Estimates

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

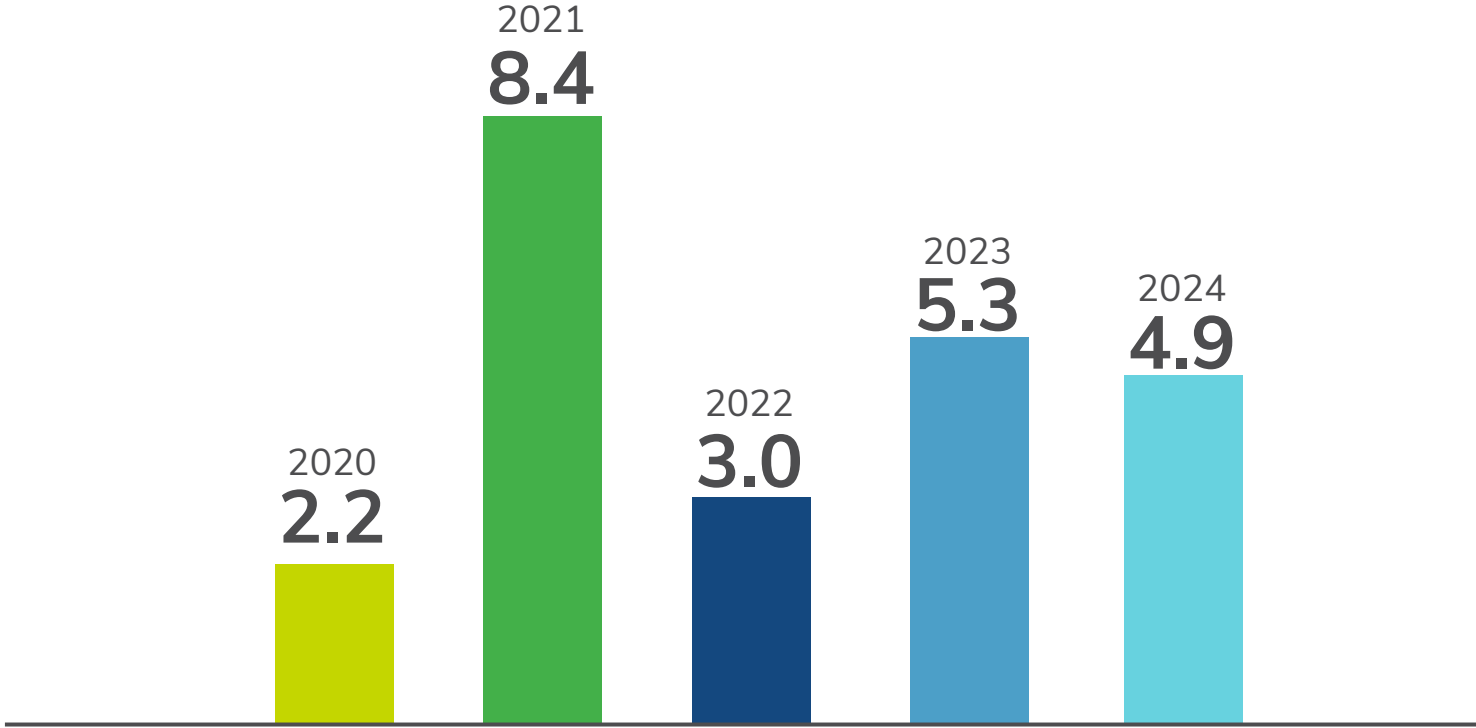
# Real GDP Growth (%) Estimates by Region: United States

Data as of March 31, 2023



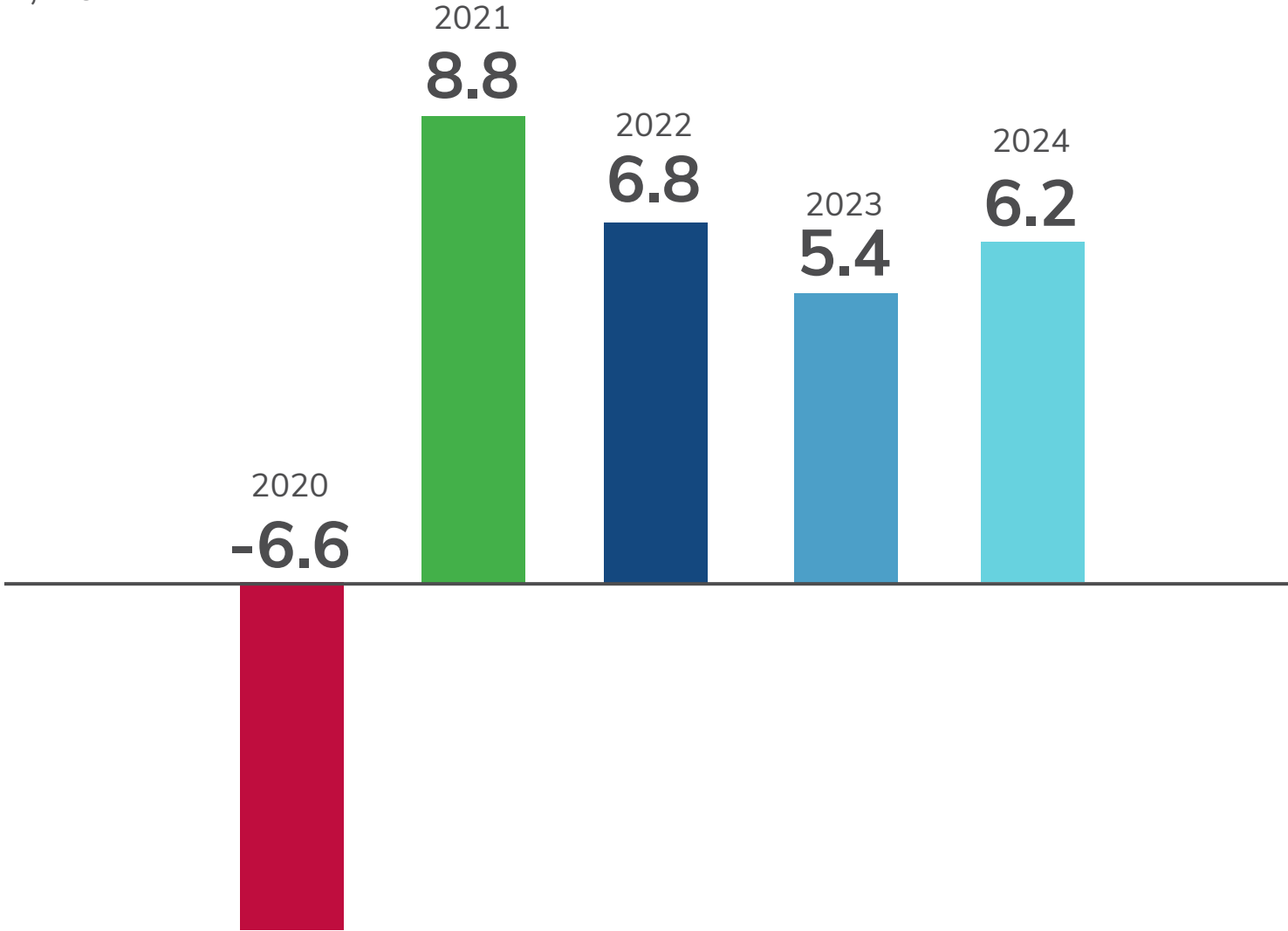
# Real GDP Growth (%) Estimates by Region: China

Data as of March 31, 2023



# Real GDP Growth (%) Estimates by Region: India

Data as of March 31, 2023



# Long-Term Projected Real GDP Growth (%)

Estimates as of March 2023 (approximately)



SOURCE	Long-Term Average (%)
Blue Chip Economic Indicators	1.7
Blue Chip Financial Forecasts	1.8
Consensus Economics	1.7
IHS Markit	1.6
Livingston Survey	2.1
Oxford Economics	1.5
Survey of Professional Forecasters	2.0
	<b>1.5% – 2.1%</b>
<b>Median</b> ▶	<b>1.7%</b>

# g = Long-Term Growth Rate (Nominal)

Estimates as of March 2023 (approximately)

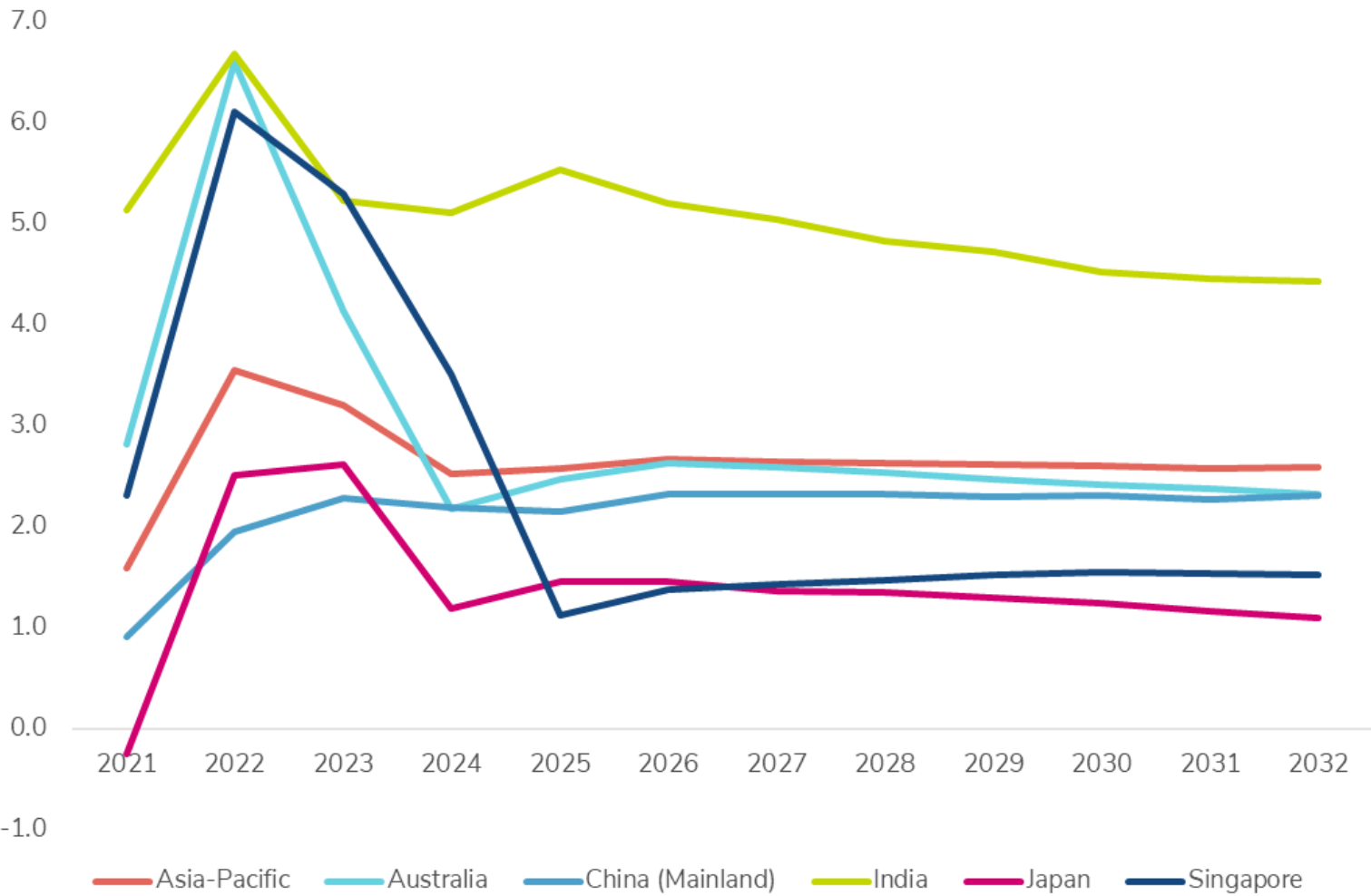


Long-Term Growth Rate is calculated using the following formula:

$$\begin{aligned} & \text{Long-Term Growth Rate (Median)} = (1 + \text{Long-Term Real GDP Forecast}) \times (1 + \text{Long-Term Inflation Forecast}) - 1 \\ & 4.1\% = (1 + 1.7\%) \times (1 + 2.4\%) - 1 \end{aligned}$$

# APAC Historical & Projected Consumer Price Inflation (%)

2021-2032



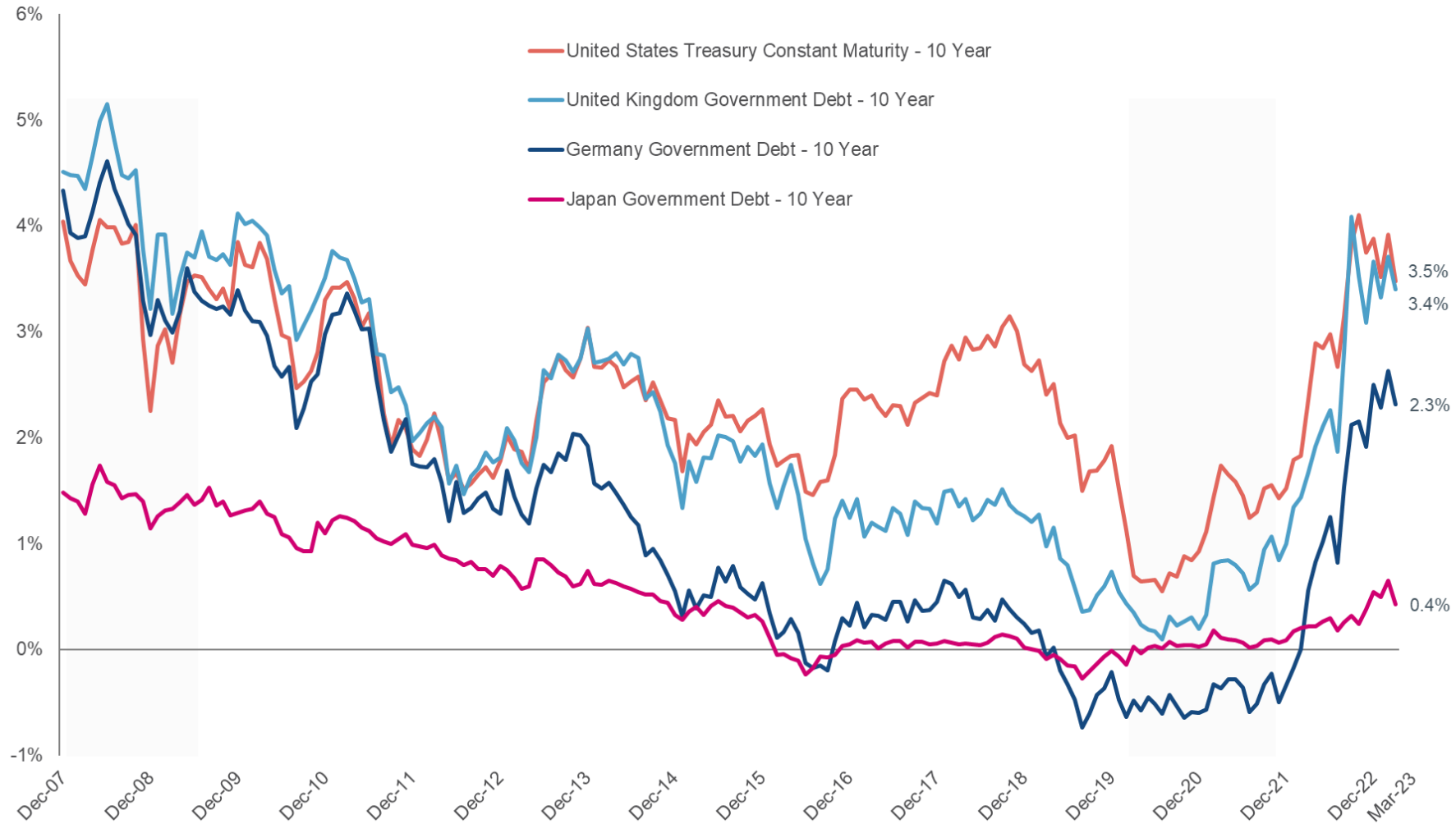
2023-2032 Average	
Asia-Pacific	2.7%
Australia	2.6%
China (Mainland)	2.3%
India	4.9%
Japan	1.4%
Singapore	2.0%

Source: S&P Global – IHS Market, April 3, 2023



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

December 31, 2007 – March 31, 2023



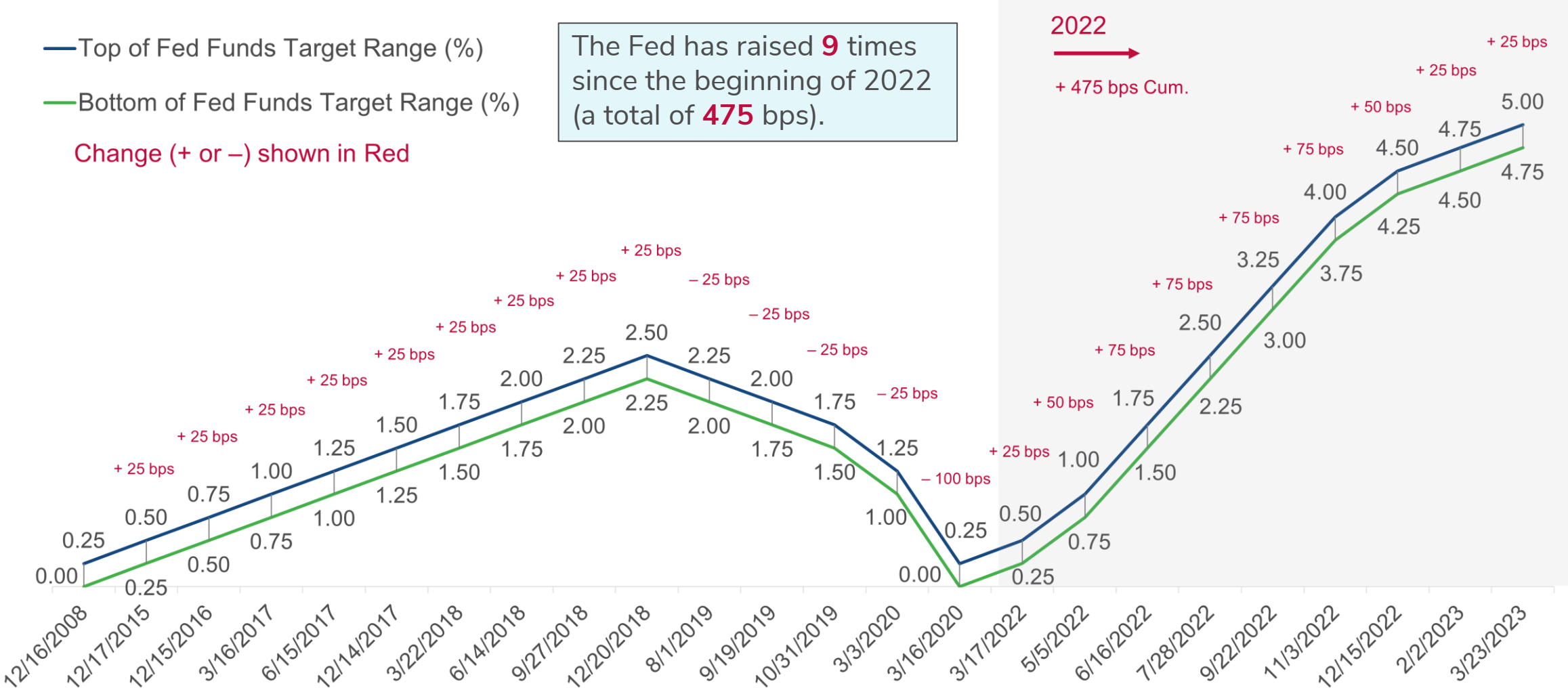
# Fed Funds Target Range (Dec 2008 – Mar 2023)

— Top of Fed Funds Target Range (%)

— Bottom of Fed Funds Target Range (%)

Change (+ or –) shown in Red

The Fed has raised **9** times since the beginning of 2022 (a total of **475** bps).



Date the Federal Open Market Committee (FOMC) Announced the Change to 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

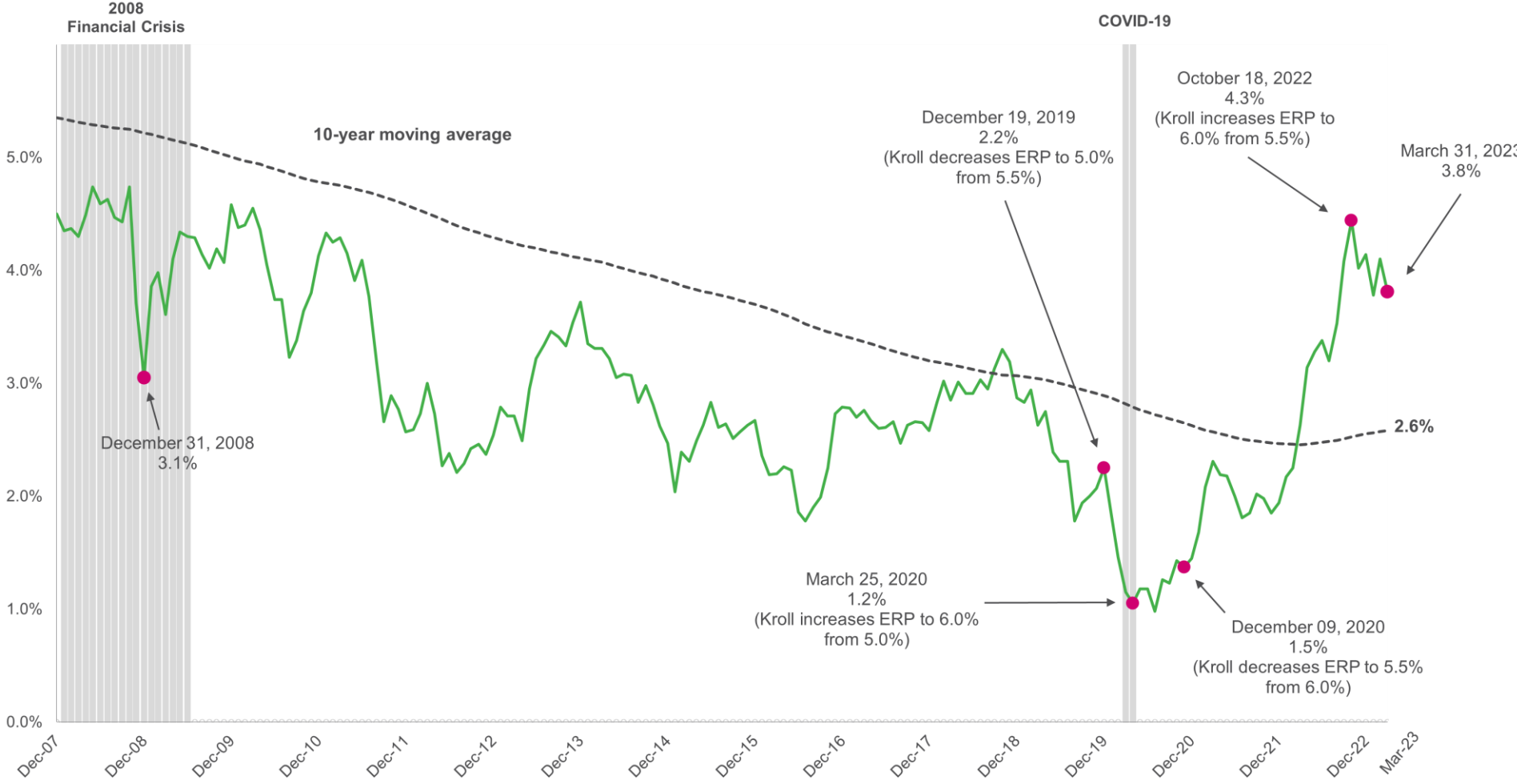
# The Risk-free Rate ( $R_f$ ) – Spot Rate or Normalized Rate or “Normalized” Rate?

Normalization can be accomplished in several ways, including:

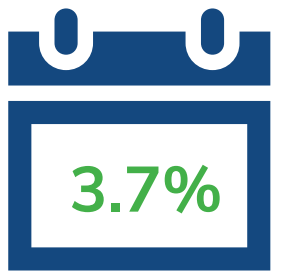
1. Simple averaging
2. Various “buildup” methods

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

December 31, 2007 – March 31, 2023



What is it as of 5 Apr 2023?



Source: 20-year U.S. government bond series. Federal Reserve Board

# 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  $(1 + \text{Nominal Rate}) = (1 + \text{Real Rate}) \times (1 + \text{Expected Inflation})$ . 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% for the 2015-2023 period, but in a narrower range since 2022. The studies are 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 \*



\* Based on academic studies issued in 2022 and 2023. In academic literature, this is also sometimes called the natural rate of interest, the neutral rate, or the equilibrium rate.

OLG = Overlapping Generational Model

DSGE = Dynamic Stochastic General Equilibrium Model

# Long-Term Inflation Expectations

Estimates as of March 2023 (approximately)



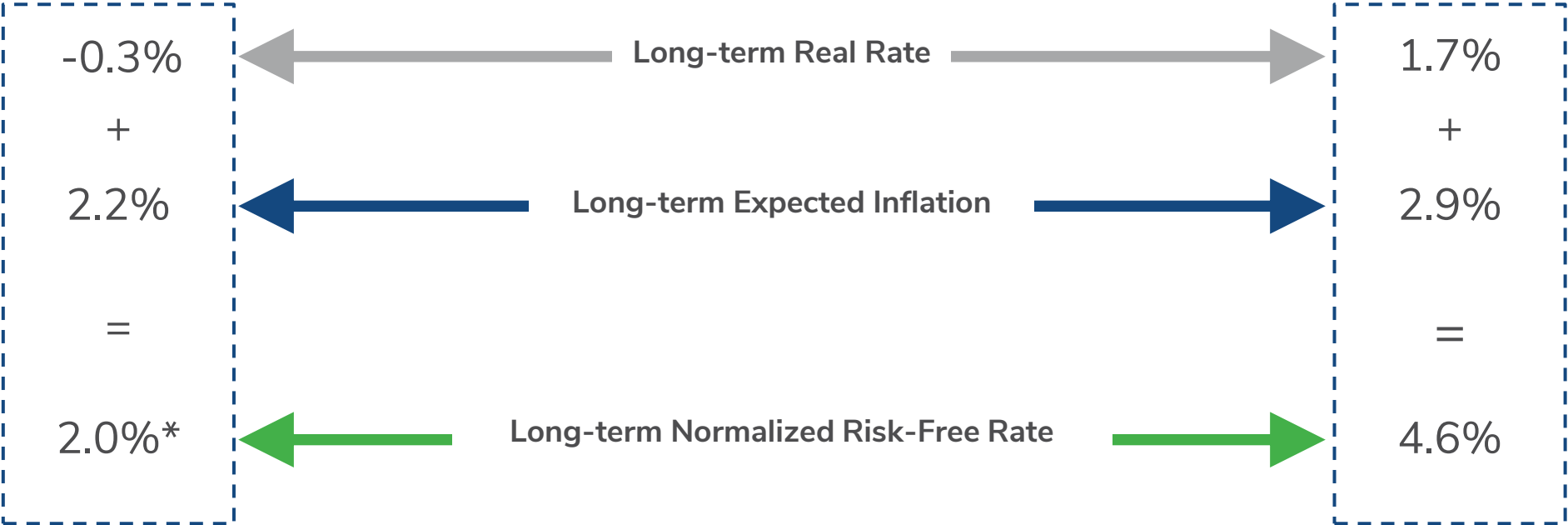
SOURCES	Long-Term Average (%)
Aruoba Term Structure of Inflation Expectations	2.2
Blue Chip Economic Indicators	2.3
Blue Chip Financial Forecasts	2.3
Consensus Economics	2.5
Federal Reserve Bank of Cleveland	2.3
IHS Markit	2.4
Livingston Survey (Federal Reserve Bank of Philadelphia)	2.5
Oxford Economics	2.4
Survey of Professional Forecasters (Federal Reserve Bank of Philadelphia)	2.4
University of Michigan Survey 5-10 Year Ahead Inflation Expectations	2.9
<b>Range of Inflation Estimates</b>	<b>2.2% – 2.9%</b>
	<b>Median</b> 2.4%



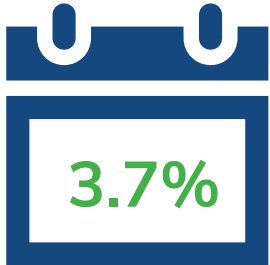
# Risk-Free Rate Normalization – United States



As of March 2023



What is the spot 20-year yield as of 5 April 2023?



- **Fisher Equation:** Midpoint = 3.3% / Median = 3.4%
- **LT Average:** 10-Year Trailing Average of 20-Year U.S. Treasury Yield = 2.6%

**Concluded Normalized  $R_f$  = 3.5%**

\* Differences due to rounding.

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

# The Kroll Recommended ERP is a Two-Step Process

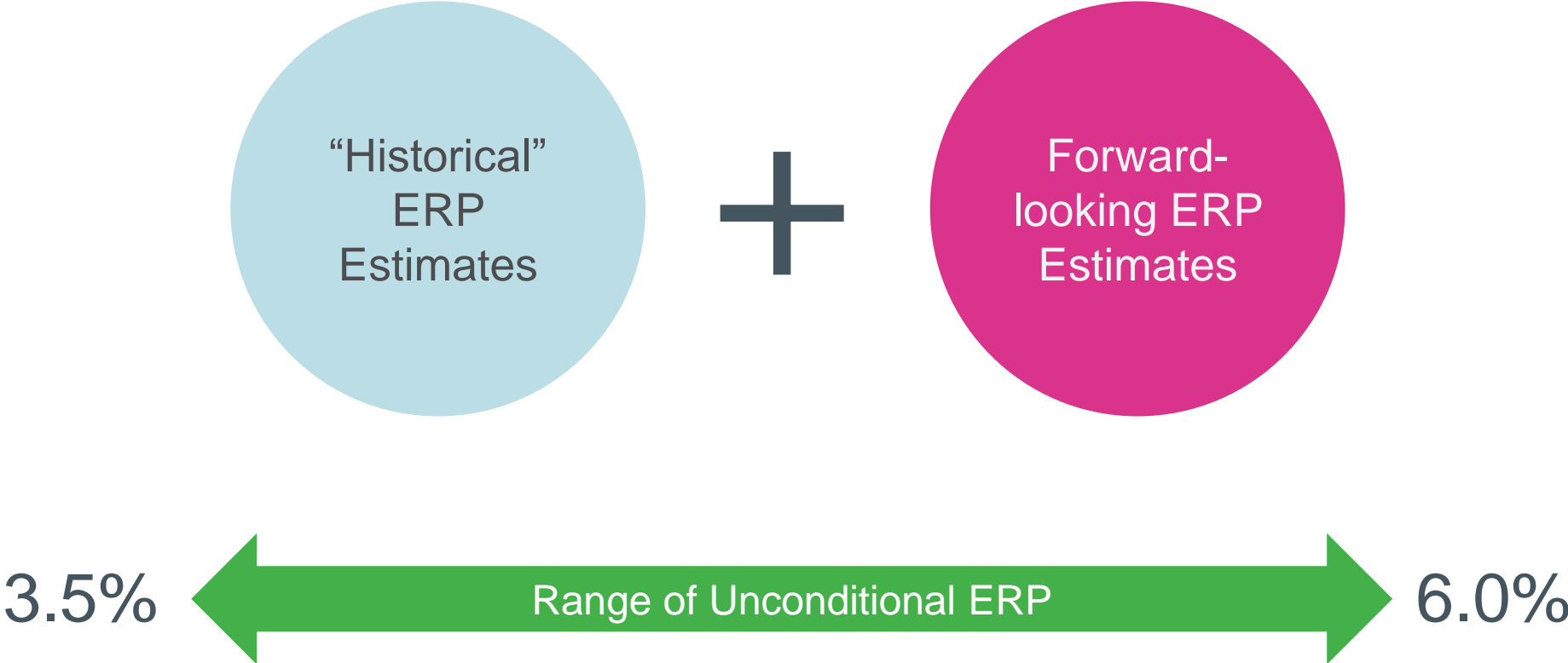
**STEP 1:** What is a reasonable range of unconditional ERP that can be expected over an entire business cycle?

*“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

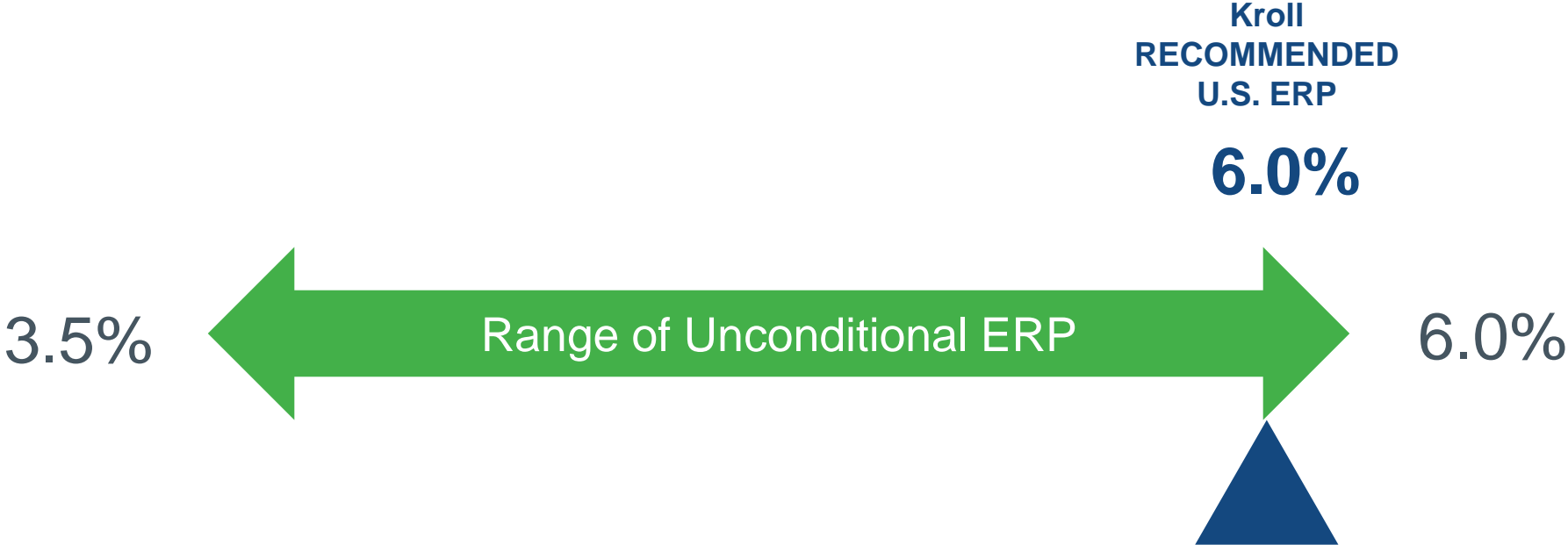


# Factors Considered in ERP Recommendation – Summary Table

Changes from October 18, 2022 to March 31, 2023

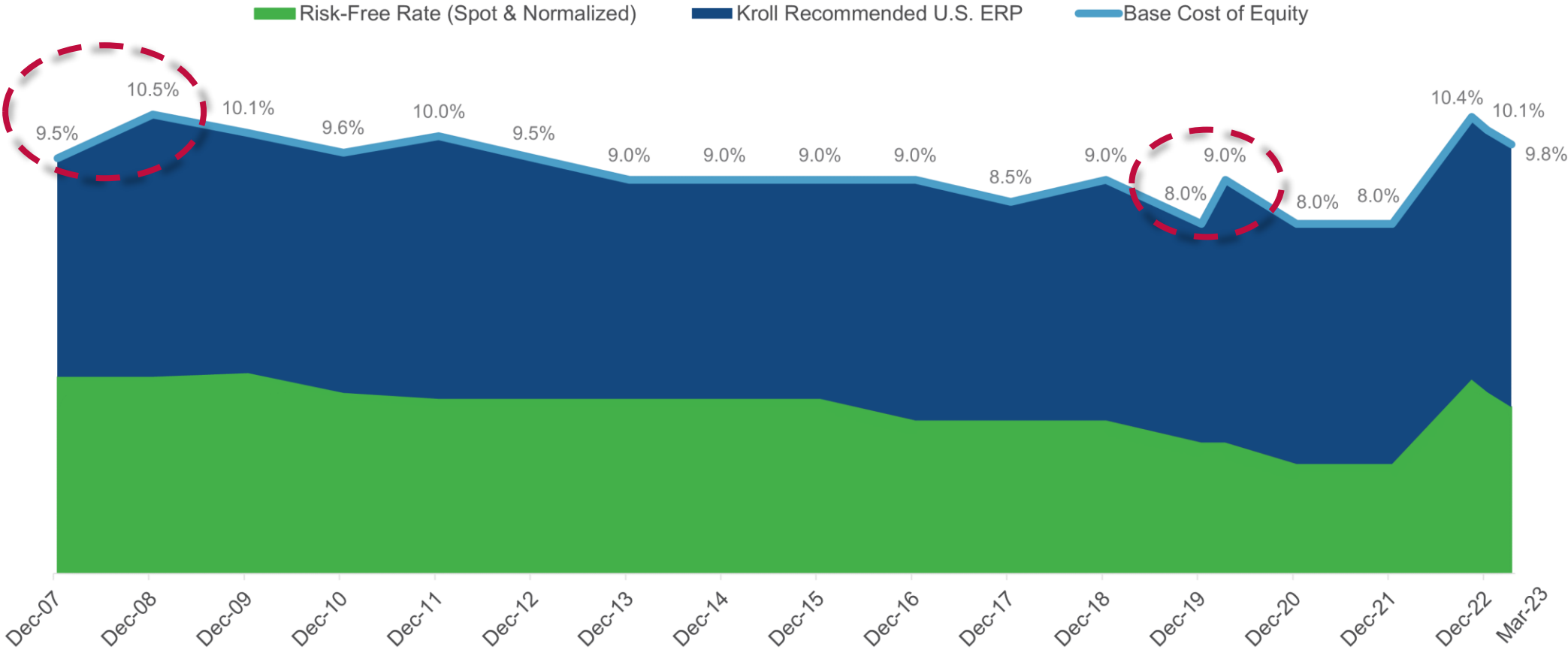
	Factor	Change	Effect on ERP
Financial Markets	U.S. Equity Markets	▲	▼
	Implied Equity Market Volatility	▼	▼
	Corporate Credit Spreads	▼	▼
	Damodaran Implied ERP Model	▼	▼
	Default Spread Model	▼	▼
	U.S. Equity Market Uncertainty Index	▲	▲
Economic Indicators	Current Year Projected Real GDP Growth	▼	▲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

# Kroll Considers Multiple Models to Estimate U.S. ERP



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

As of March 31, 2023



# Cost of Debt Considerations:

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

December 2007 – March 2023

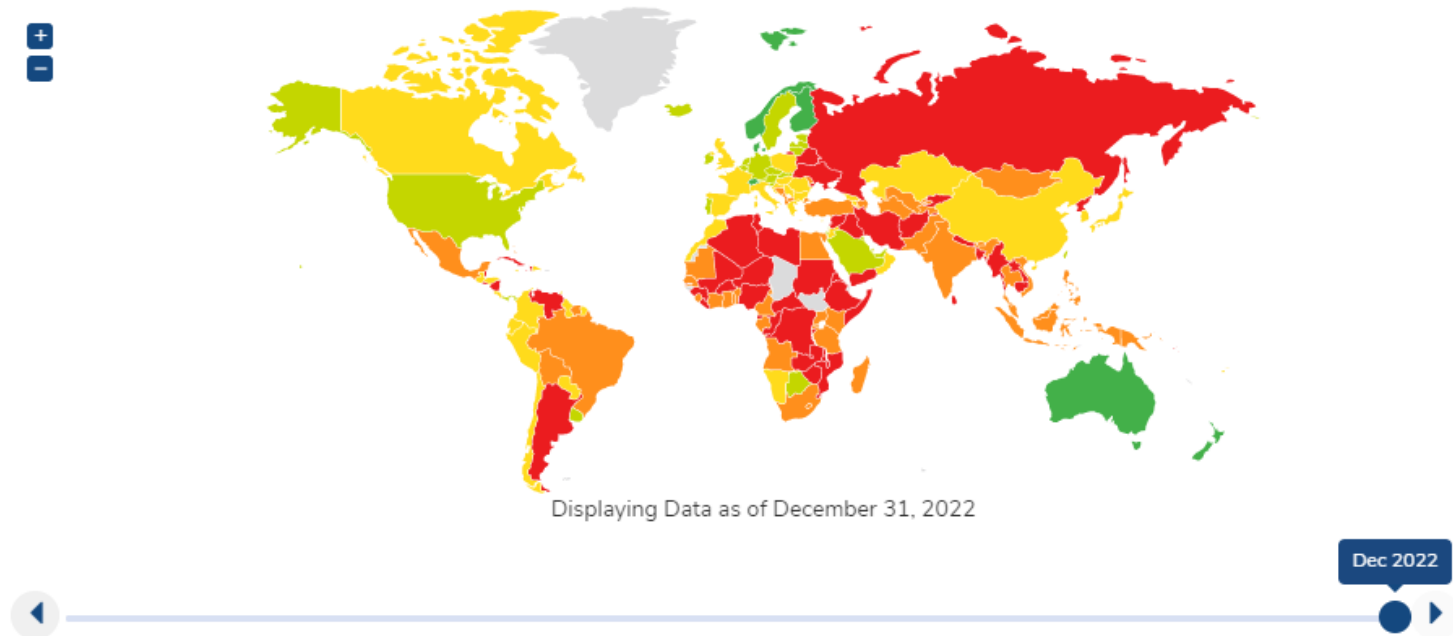


Source: Federal Reserve Bank of St. Louis. Based on the effective yields of the ICE BofA U.S. Corporate Index (investment grade) and the ICE BofA U.S. High Yield Index

# Kroll Country Risk Data Analysis

## Global Heat Map - Country Risk

Our global heat map illustrates risk across all countries, as well as a summary of country risk data by region from our three country risk models. Hover over the map to get a risk rating by country, slide the bar to see how by country risk changes over the time, or [click here](#) to get full country risk premia data by country in the International Cost of Capital Module.



- Very High Risk
- High Risk
- Medium Risk
- Low Risk
- Very Low Risk
- Data not Available

\*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\*

Region	CYS	CCR	RV
<b>North America</b>	0.0%	0.0%	1.0
<b>Latin America and Caribbean</b>	3.8%	2.8%	1.4
<b>Europe</b>	1.2%	1.3%	1.1
<b>Africa</b>	7.1%	6.1%	1.2
<b>Middle East</b>	4.1%	1.3%	1.0
<b>Asia-Pacific</b>	2.5%	3.2%	1.1

CYS = Country Yield Spread Model

CCR = Country Credit Rating Model

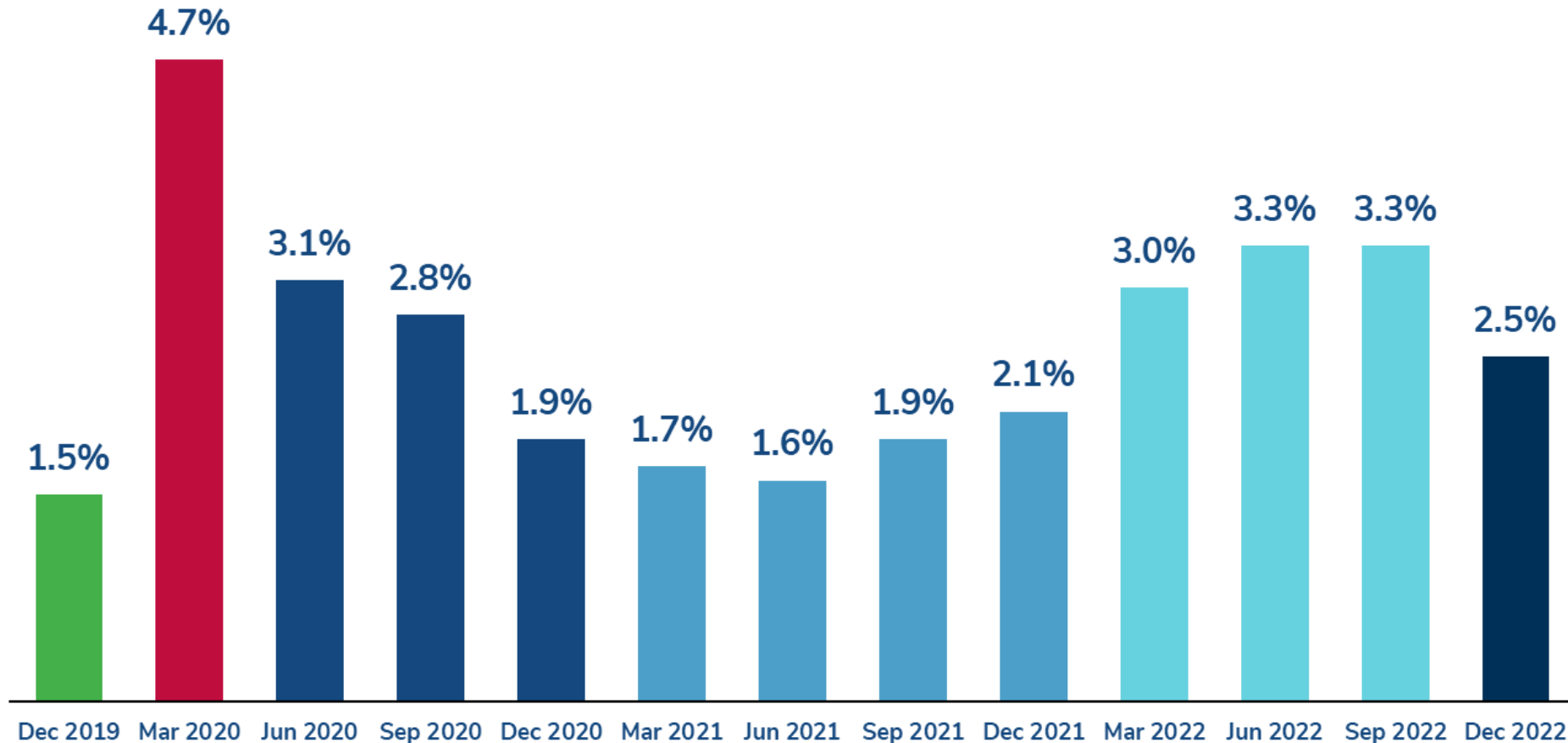
RV = Relative Volatility Model



# Country Risk Premia Pre-and Post COVID-19

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

## Asia-Pacific



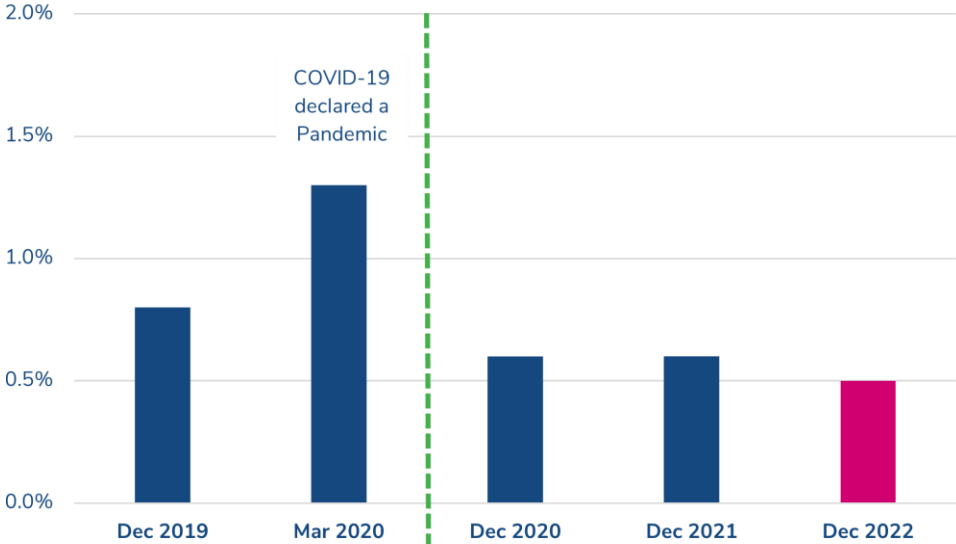
# Country Risk Premium Before and After COVID-19 (USD)

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

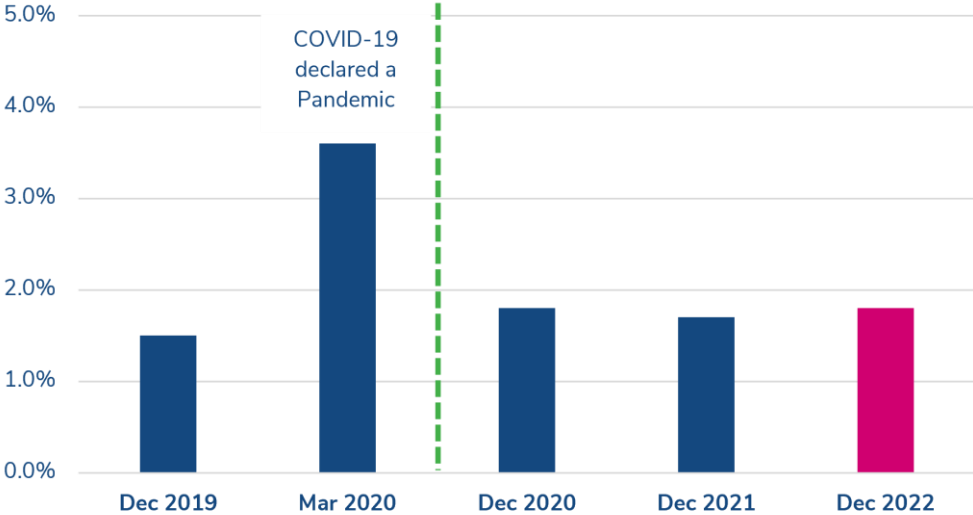
Data as of December 31, 2022



China



India



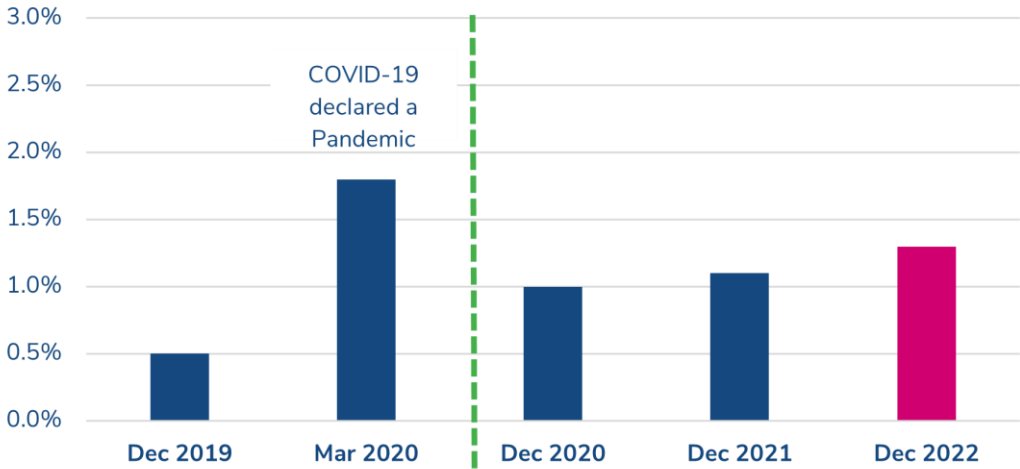
# Country Risk Premium Before and After COVID-19 (USD)

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

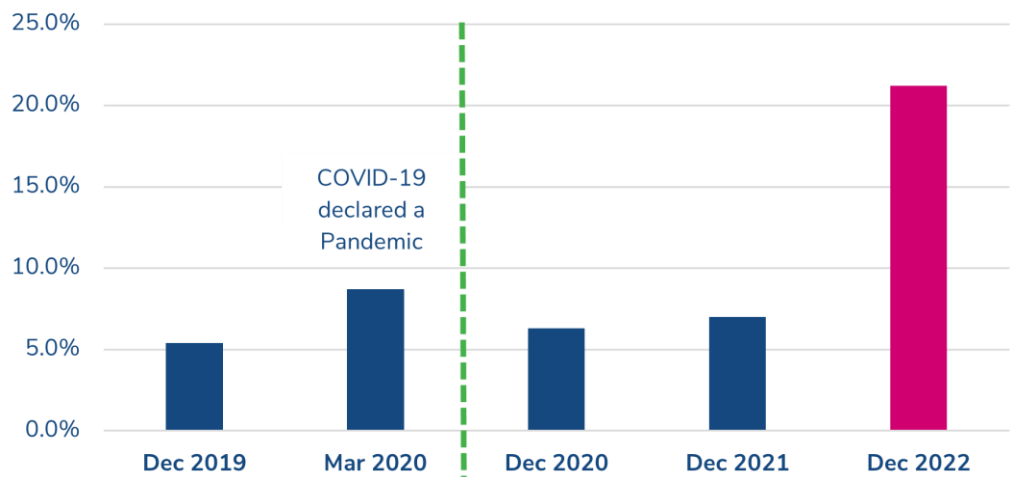
Data as of December 31, 2022



Philippines



Pakistan

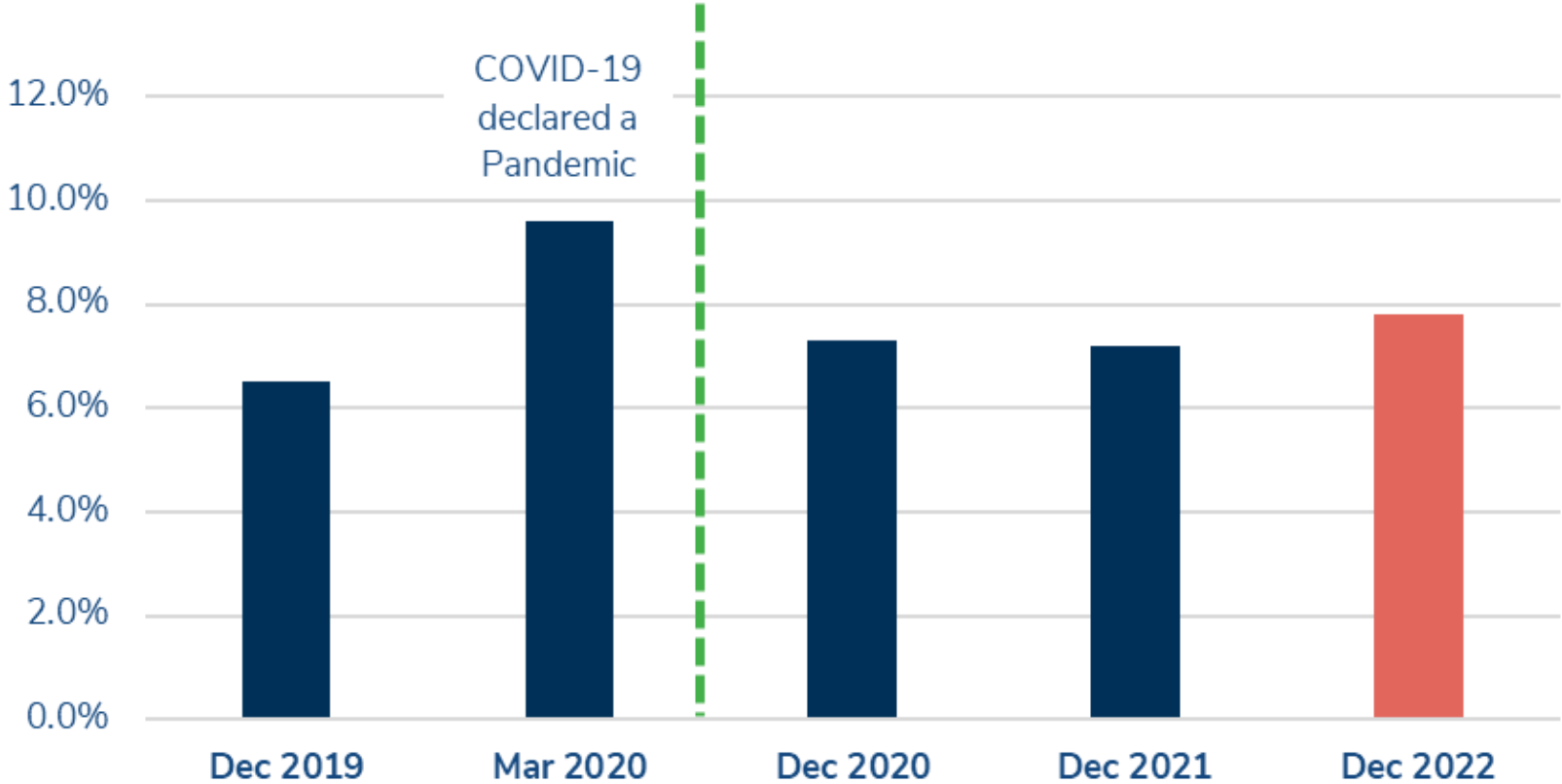


# India Equity Risk Premium in USD = U.S. ERP + Country Risk Premium

Data as of December 31, 2022



India (in USD)



# Impact of Currency on the Discount Rate and Valuation

Applying the International Fisher Effect: *Cost of Equity*

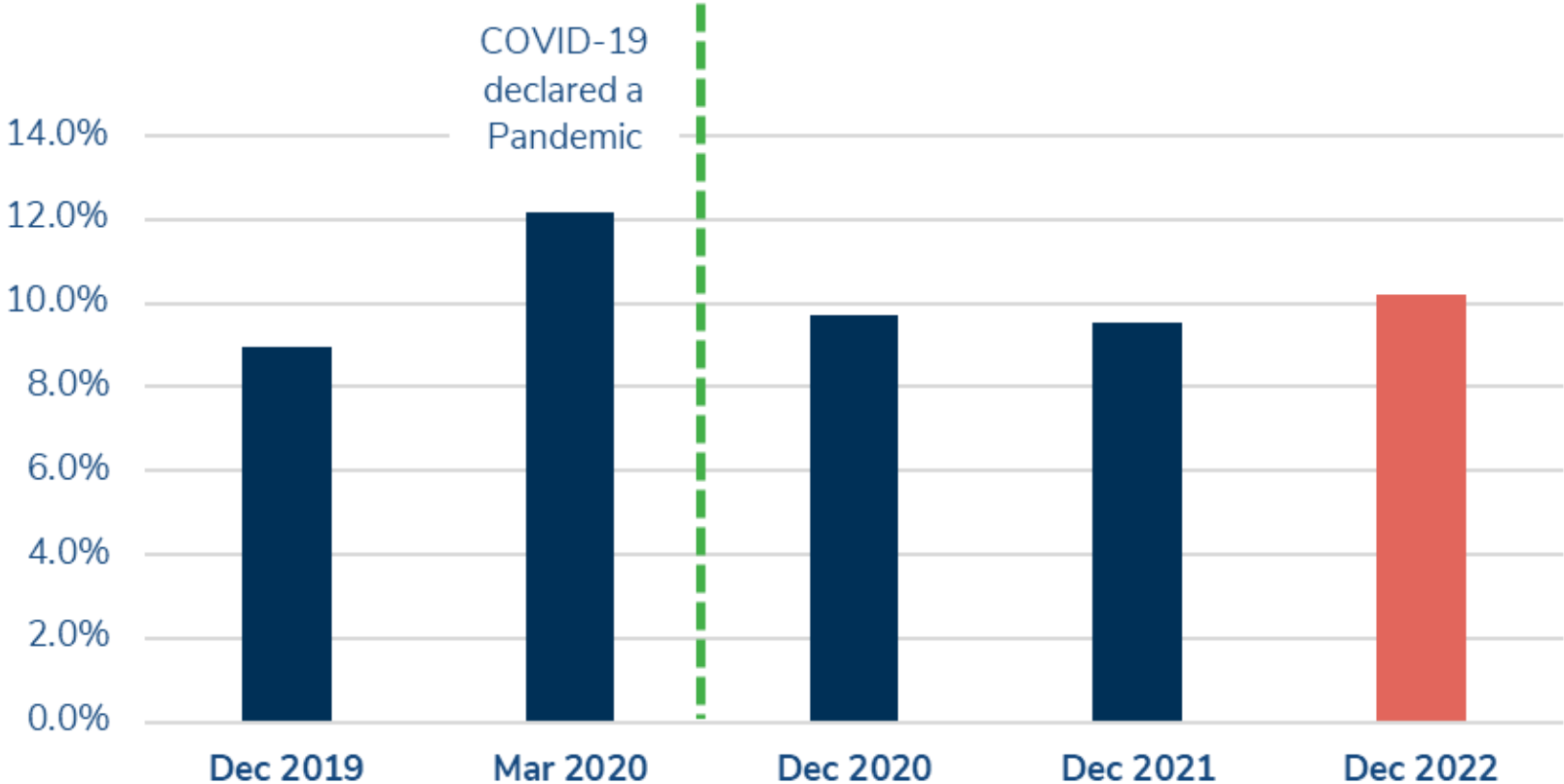
$$\begin{array}{c} \text{Cost of} \\ \text{Equity} \\ \text{Local} \\ \text{Currency} \end{array} = \begin{array}{c} (1 + \text{Cost of Equity} \\ \text{Home Currency}) \end{array} \times \frac{\begin{array}{c} (1 + \text{Expected Inflation} \\ \text{Local Country}) \end{array}}{\begin{array}{c} (1 + \text{Expected Inflation} \\ \text{Home Country}) \end{array}} - 1$$

# India Equity Risk Premium in INR = U.S. ERP + Country Risk Premium

Data as of December 31, 2022



India (in INR)





# APAC Restructuring Updates



**Cosimo Borrelli**

Managing Director and  
Head of Asia Pacific and  
Offshore Restructuring

# Restructuring in Asia and Caribbean – 3 key factors:

- Current status
- Macro-economic trends and valuation
- Country and restructuring specific

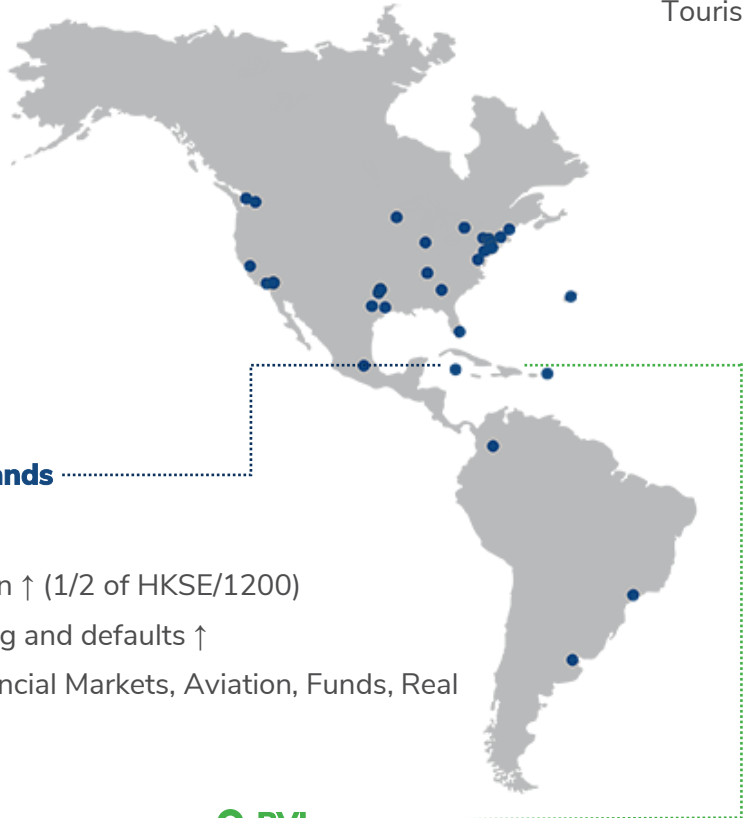
## Key restructuring jurisdictions:

APAC
China Indonesia Hong Kong Singapore

Caribbean
BVI Carribbean



# Country and Industries



## ○ Cayman Islands

- GDP ↑
- Incorporation ↑ (1/2 of HKSE/1200)
- Restructuring and defaults ↑
- Crypto, Financial Markets, Aviation, Funds, Real Estate

## ○ BVI

- GDP ↑
- Incorporations ↓ (lifespan increase)
- Restructuring and defaults ↑
- Crypto, Real Estate (PRC)

## ○ Hong Kong

- GDP ↑
- Recession risk ↓
- Restructuring and defaults ↑
- Real Estate, Retail, Aviation, Tourism and Hospitality.



## ○ Singapore

- GDP ↑
- Recession risk ↑
- Restructuring and defaults ↑
- Construction, Crypto, V/C and Funds (Vietnam)

## ○ China

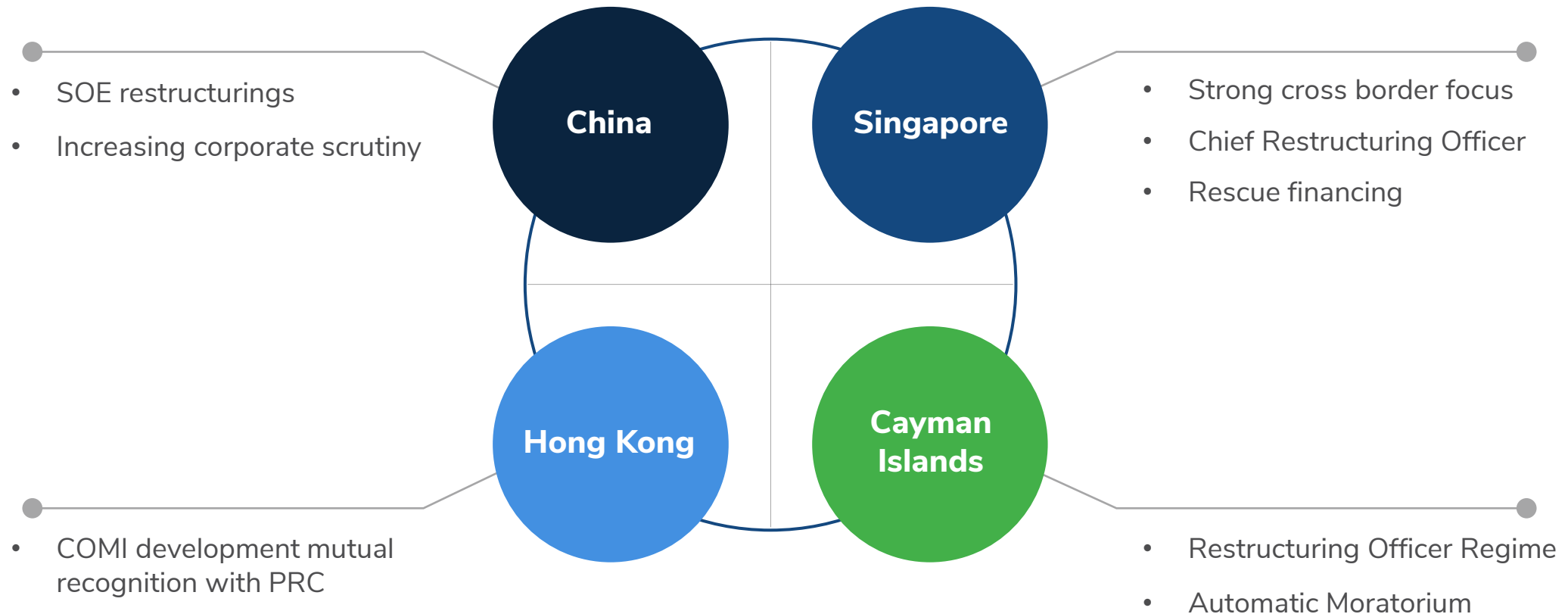
- GDP ↑
- Foreign manufacturing demand ↓
- Restructuring and defaults ↑
- Real Estate, Aviation, Financial Institutions, Tourism and Hospitality

## ○ Indonesia

- GDP ↑ (high)
- High commodity prices and related investment
- Restructuring and defaults ↓
- Real estate, SOEs, Tech and V/C

## 4th Factor – increasingly user friendly

- Legislation
- Economic and Financial Tools



# 2023 and 2024?

- No big waves of restructurings
- Macro economic developments will drive steady increase in restructurings across the jurisdictions
- Close ties and collaboration will continue in Asia and Caribbean
- Industry focus will remain consistent across jurisdictions – especially real estate and construction, crypto, tech and VC
- New entrants?

# Q&A