BAIN & COMPANY

Recession Watch

ISSUE 4: MAY 2023

Scenarios and strategies
for an unstable environment

Executive Summary

- The world has moved past the era of COVID lockdowns and massive stimulus but has **entered a period of high economic uncertainty** – inflation in the US and Europe hit levels of the early ’80s, central bank moves are shifting consumers from eagerness to caution, Europe is experiencing the deadliest military conflict since 1945, and geopolitical and trade tensions are reaching high levels
- **Recession fears dominate the news cycle**, and, unusually, key recession indicators have been flashing for nearly a year without US or eurozone recessions: the US yield curve has been inverted since July 2022, economists have predicted a >40% likelihood of recession since June 2022, US Federal Reserve and European Central Bank (ECB) have increased rates steeply since May/June 2022
- **Inflation in the US and Europe continues to fall from its peak**, but slowly, and uncertainty remains on how long it will take to get back to central bank targets and how high interest rates might need to go to achieve that, with both the Fed and ECB emphasizing their commitments to fight inflation
- It is critical that **business leaders prepare plans to handle a wide variety of risks** – both economic (inflation, recession, and capital costs) and geopolitical (trade tensions, sanctions, and war) – that could threaten many business models
- No one can say with a high degree of certainty the exact timing, depth, or length of the next recession – and those who claim to should be treated skeptically – but this document aims to provide a framing for the risk and context against other recent recessions, to **help companies understand the variety of scenarios to plan for and what the latest data says**
- **Several key developments in the last month**

The US debt ceiling negotiations are creating risk of a highly damaging debt default, and the banking crisis has exposed fragility in some financial institutions, including SVB, First Republic, and Credit Suisse	US inflation has fallen from its 9.1% year-over-year (YOY) peak in June 2022 to 4.9% in April 2023, below consensus estimates and down from 5.0% in March 2023, but well above the 1990-2020 average of 2.4%	The eurozone similarly has fallen from its 10.6% YOY peak in October 2022 to 7.0% in April 2023. It is up slightly from 6.9% in March 2023	The Fed and ECB have both signaled a continued focus on inflation, but markets are anticipating a pause in rate increases in the US	China continues to have very low inflation, unlike the US and Europe, but its snap back from Covid restrictions has been disappointing	Geopolitical tensions remain high. Companies with significant operations that could be disrupted by an escalation should carefully play out scenarios

Sources: Refinitiv; OECD; US Bureau of Labor Statistics (BLS); IMF

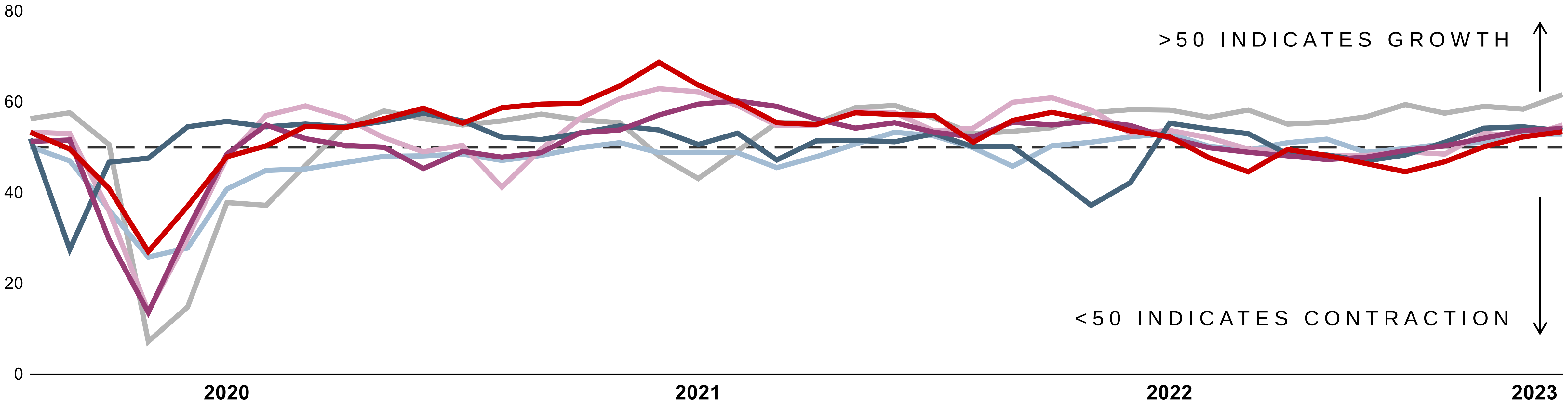
We will continue to refresh this view periodically as new data becomes available

AGENDA

Recession Watch

Major economy PMIs are above 50, up further from Q1 2023

Purchasing Managers' Index (PMI), seasonally adjusted, monthly



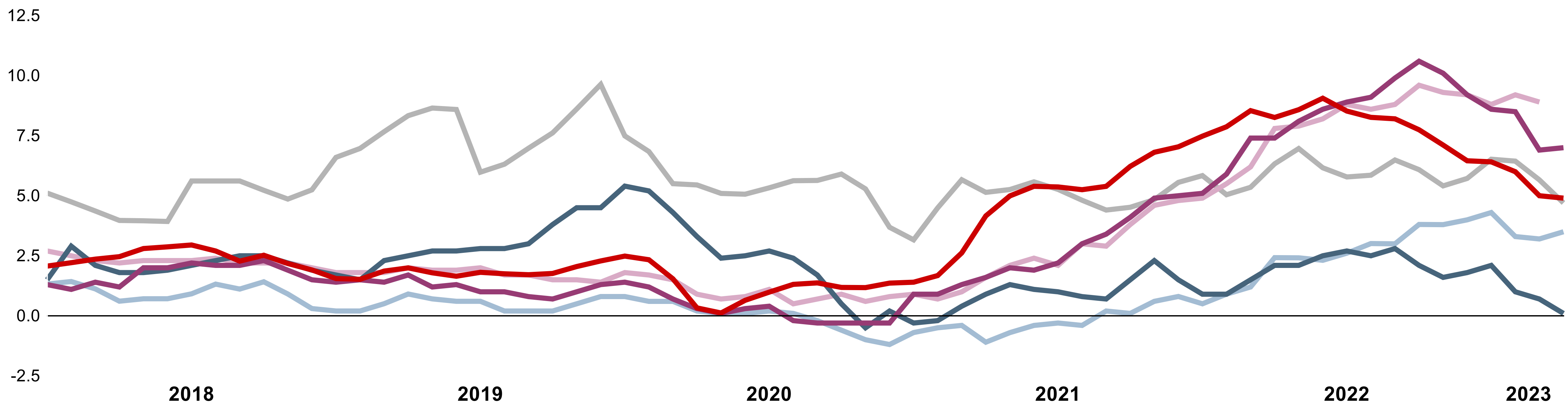
MOST RECENT DATA

53.4	54.1	53.6	54.9	52.9	61.6
US (APR)	EUROZONE (APR)	CHINA (APR)	UK (APR)	JAPAN (APR)	INDIA (APR)

Source: S&P Global (from Macrobond)

While US, eurozone, and UK inflation rates peaked last year, they have not yet fallen to central bank targets

Inflation (YOY % change), not seasonally adjusted, monthly

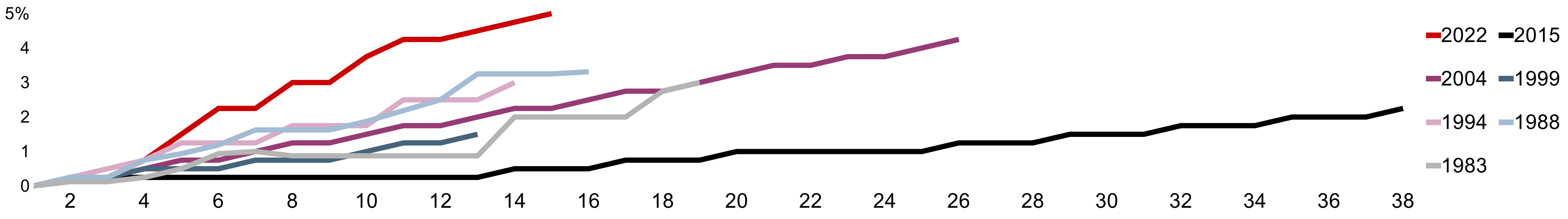


MOST RECENT DATA					
4.9%	**7.0%**	**0.1%**	**8.9%**	**3.5%**	**4.7%**
US (APR)	EUROZONE (APR)	CHINA (APR)	UK (MAR)	JAPAN (APR)	INDIA (APR)

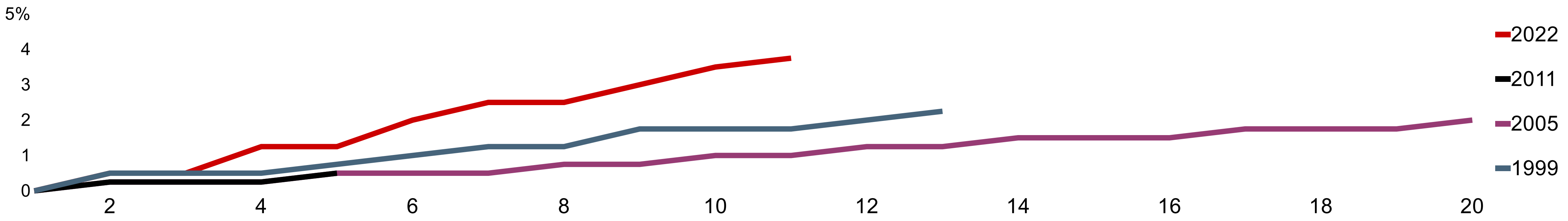
Note: UK data refers to Consumer Prices Index including owner occupiers' housing costs (CPIH)
Sources: Indian Ministry of Statistics; Japanese Statistics Bureau; UK Office of National Statistics; China National Bureau of Statistics; Eurostat; US Bureau of Labor Statistics (from Macrobond)

Central bank rate increases have occurred at the steepest rate in recent history in the US and EU

US Federal Funds Rate, months after first increase



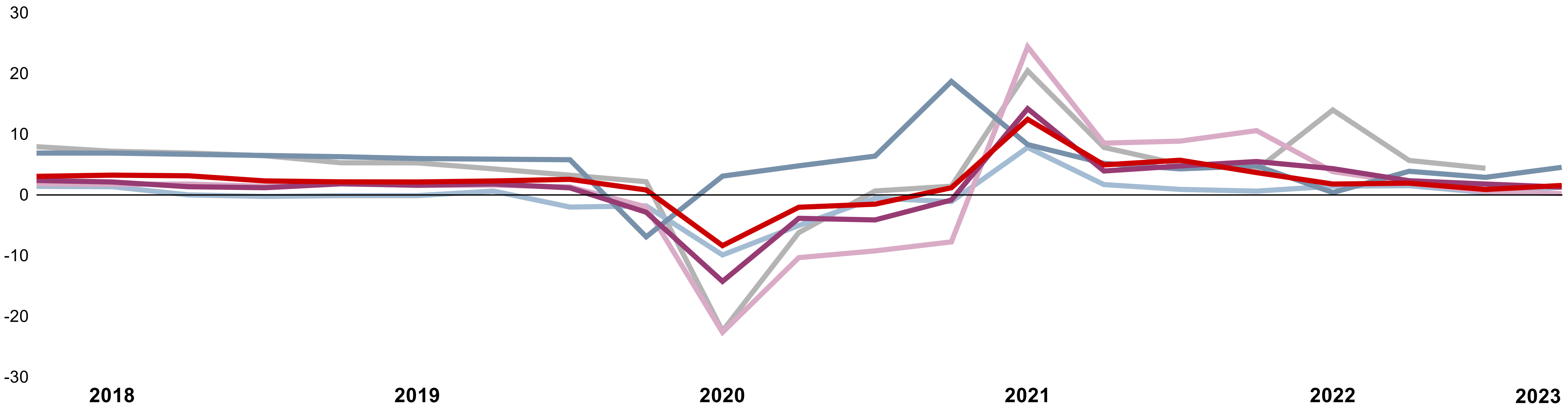
EU Main Refinancing Operations rate, months after first increase



Note: 2005 and 2011 rates tracked each other through month 5
Sources: US Federal Reserve; European Central Bank (ECB, from Macrobond)

The post-COVID rebound has receded, though major economies have maintained positive YOY growth

Real GDP (YOY % change), quarterly



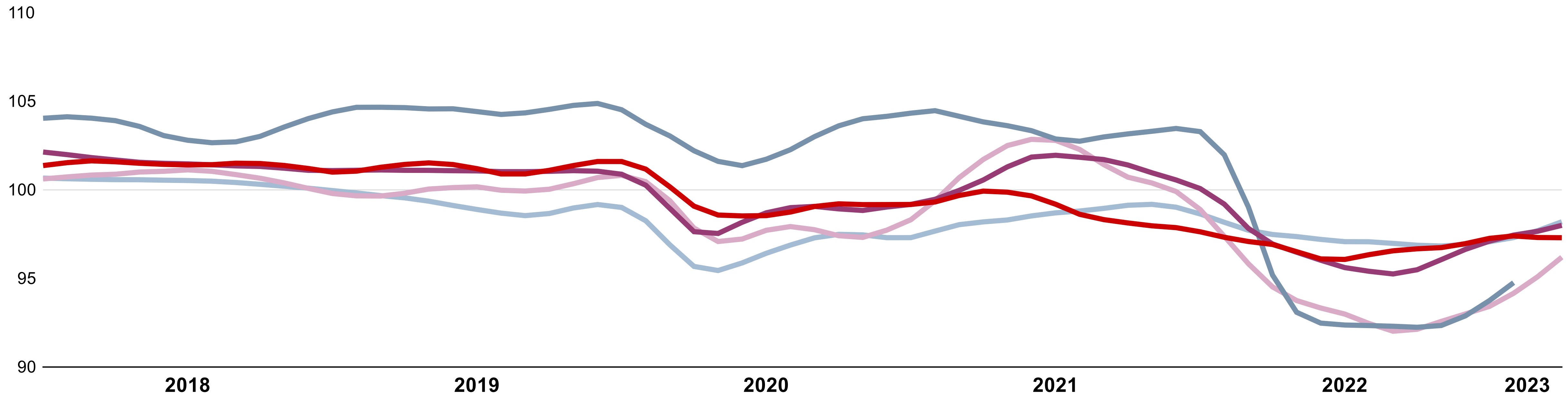
MOST RECENT DATA

1.6%	1.3%	4.5%	0.2%	1.3%	4.4%
US (Q1)	EUROZONE (Q1)	CHINA (Q1)	UK (Q1)	JAPAN (Q1)	INDIA (Q4)

Sources: Indian Ministry of Statistics; Japanese Cabinet Office; UK Office of National Statistics; China National Bureau of Statistics; Eurostat; US Bureau of Economic Analysis (from Macrobond)

Consumer confidence levels remain below the long-term average globally, but have risen somewhat in recent months

OECD Consumer Confidence Index, seasonally adjusted, monthly (100 = long-term average)



MOST RECENT DATA

97	98	95	96	98
US (APR)	EUROZONE (APR)	CHINA (FEB)	UK (APR)	JAPAN (APR)

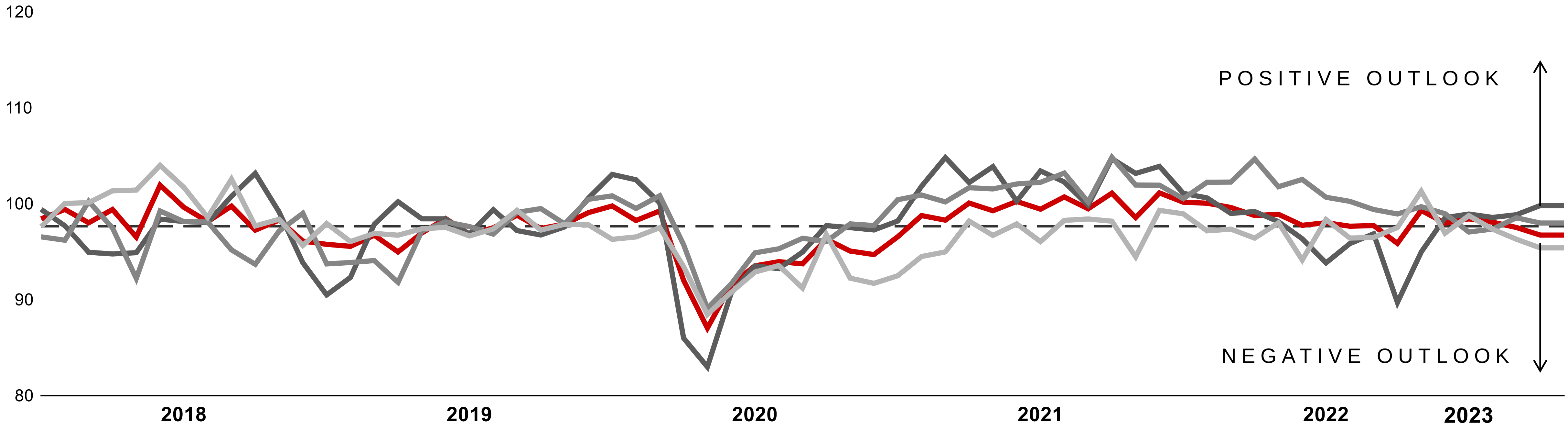
Source: OECD (from Macrobond)

AGENDA

Recession Watch

Our proprietary Bain Consumer Health Index shows a composite outlook slightly below the 5-year average

US CHI by household income, seasonally adjusted, monthly

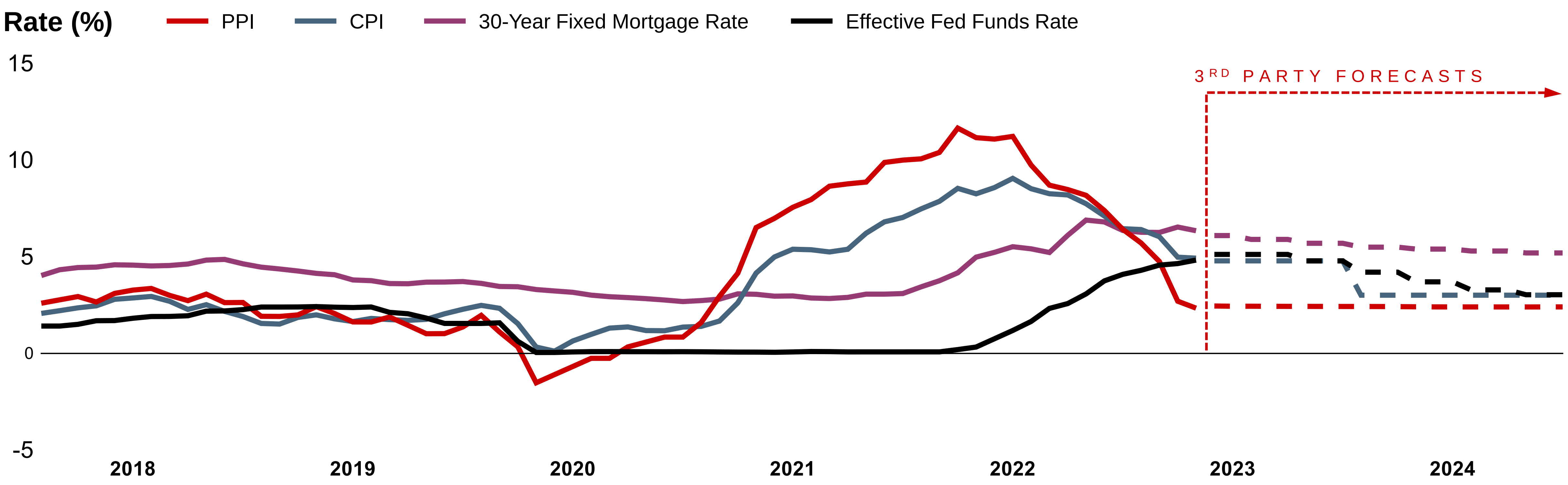


MOST RECENT DATA

96.7	99.8	98.0	95.4	97.7
COMPOSITE	UPPER	MIDDLE	LOWER	AVERAGE (18-23)

Note: Average CHI from January 2018 to April 2023
Source: Bain CHI

Post-pandemic inflationary pressure continues despite a potential pause in US monetary policy tightening



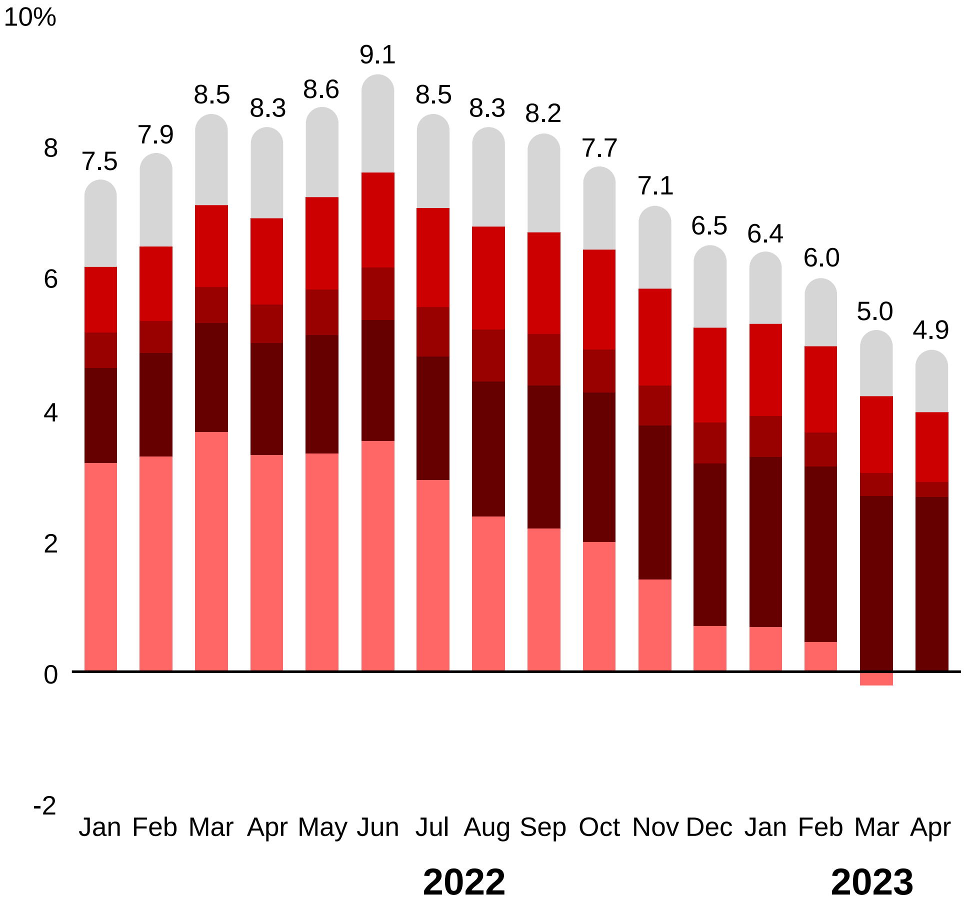
MOST RECENT DATA

2.3%	**4.9%**	**6.4%**	**5.25%**
PRODUCER PRICE INDEX (PPI - APR)	CONSUMER PRICE INDEX (CPI - APR)	30-YEAR FIXED MORTGAGE RATE (AS OF 5/11)	FED FUNDS RATE, UPPER TARGET (MAY)

Sources: Board of Governors of the Federal Reserve System; US Bureau of Labor Statistics (BLS); Freddie Mac, Fannie Mae (30-year mortgage forecast); Congressional Budget Office (Fed funds effective rate & inflation forecast); EIA (PPI forecast) (from Macrobond)

Inflation has continued to decline materially in every category except shelter

Key components of US CPI, monthly (pp contribution to YOY inflation)



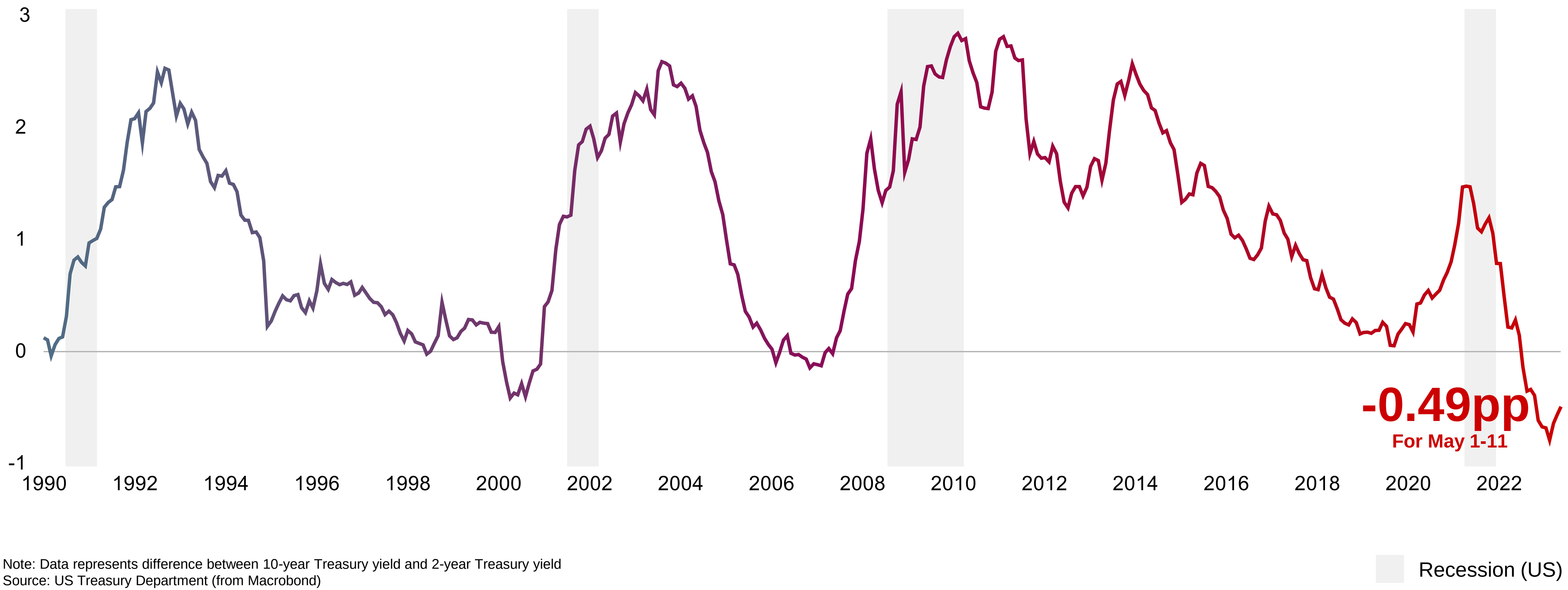
	Weight	April YOY inflation	Commentary
All other	**30%**	**2.8%**	This category (includes medical, personal care, apparel, education, etc.) has seen relatively low and consistent inflation on an annual basis
Food	**14%**	**7.5%**	Food has continued to be a significant inflation driver, though grocery prices have declined YOY
Utilities	**5%**	**4.8%**	While utilities continue to have significant inflation, they have declined YOY
Shelter	**34%**	**8.1%**	Now the largest contributor to overall inflation at >50%, rent and Owners' Equivalent Rent (OER) inflation have risen, from ~4% YOY in January 2022 to ~8% YOY in April 2023
Transportation	**17%**	**0.2%**	Transportation was the largest component of inflation until October 2022. Price of gas and used cars spiked from March/April 2021 to April/May 2022, and gradually declined since. YOY inflation in this category turned negative in March 2023 but rebounded in April

Source: Bureau of Labor Statistics (BLS, from Macrobond)

US TRENDS | US TREASURY SPREAD

The 10-2 Treasury spread has remained negative since July 2022, though it narrowed in recent months

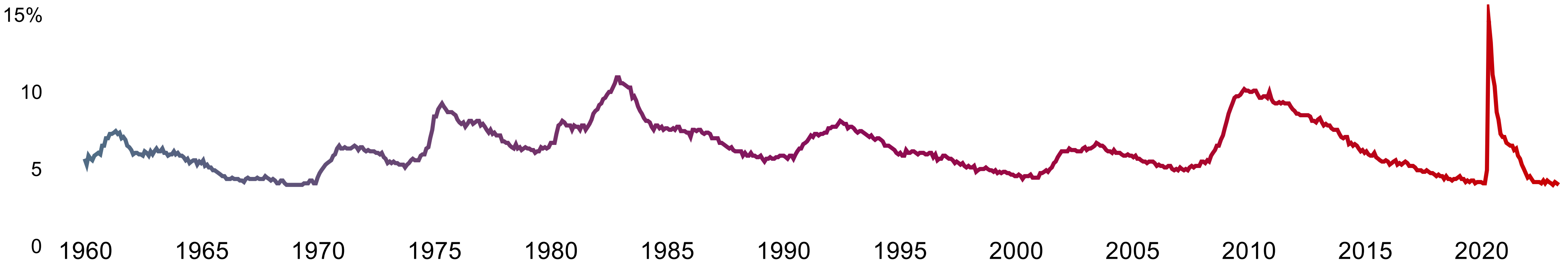
10-year minus 2-year US Treasury yield spread, monthly average (pp)



Note: Data represents difference between 10-year Treasury yield and 2-year Treasury yield
Source: US Treasury Department (from Macrobond)

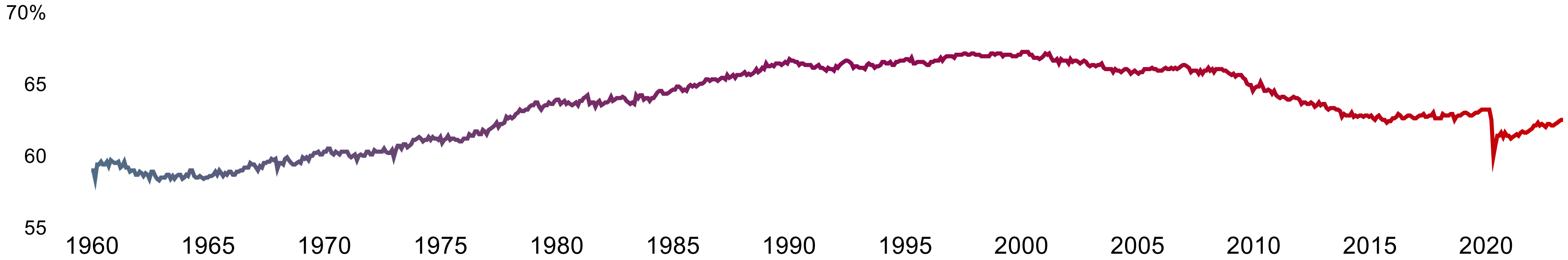
Unemployment has returned to historical lows with labor force participation trending toward pre-COVID levels

Unemployment rate, monthly, seasonally adjusted



3.4%

Labor force participation rate, monthly, seasonally adjusted



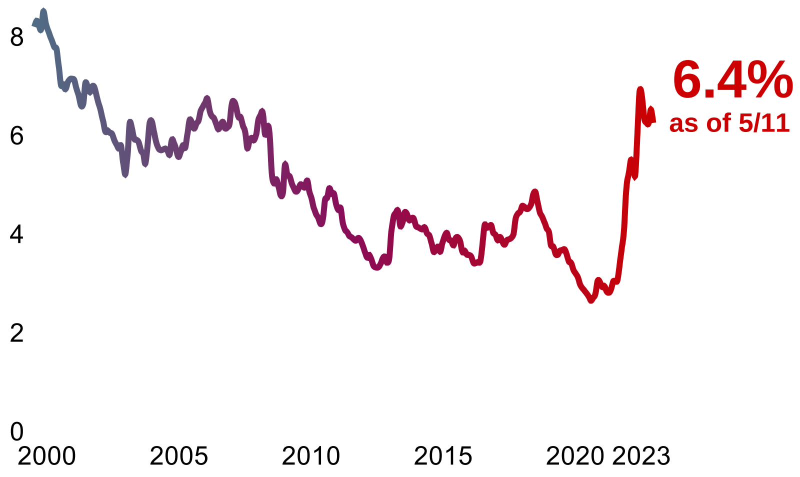
62.6%

Notes: U-3 unemployment shown for US; CIVPART shown for labor participation rate
Source: US Bureau of Labor Statistics (BLS, from Macrobond)

Housing market continues to show signs of softness amid sharp rise in interest rates

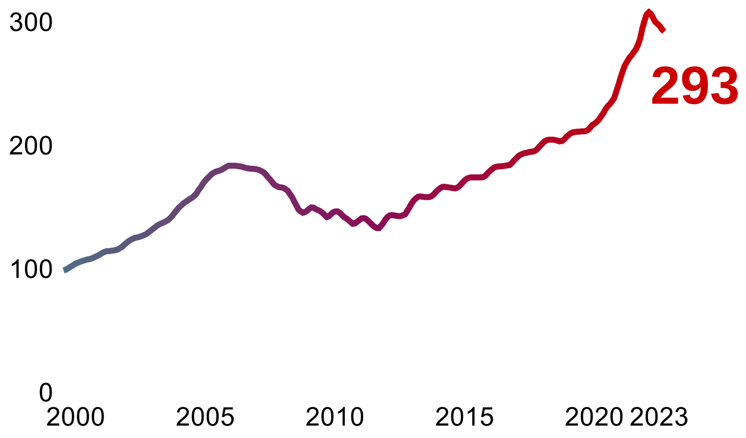
30-year fixed mortgage rate

30-year fixed rate mortgage average in US, monthly (%)



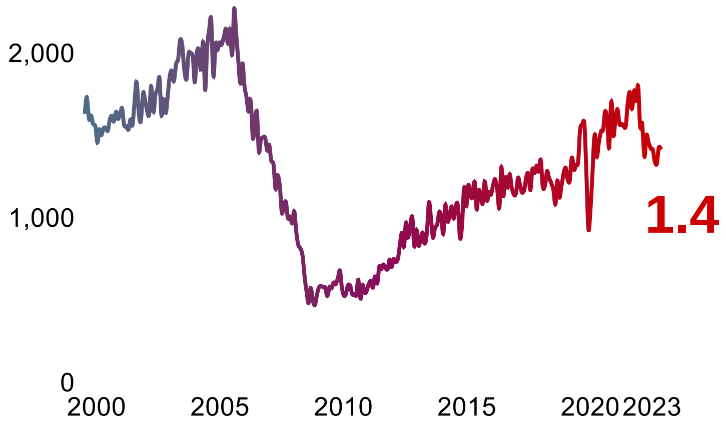
Housing prices

Case-Shiller US national home price index, monthly (2000 prices = 100, not seasonally adjusted)



Housing starts

New privately owned housing units started in US, monthly (millions of units, seasonally adjusted)



YOY CHANGE

+20%

+2%

-22%

Sources: US Census Bureau; HUD; Freddie Mac; S&P Dow Jones Indices (from Macrobond)

Key economic indicators

Indicator	Latest: Value	Latest: Period	Latest: Release	Next release	Commentary
Real GDP (YOY % change)	**1.6%**	**Q1** 2023	**Apr 27** 2023 (1st estimate)	**May 25** 2023 (2nd estimate)	Below the 2010-19 average of 2.3% but above the Q4 2022 figure of 0.9%; the annualized growth rate was 1.1%
10-year minus 2-year US Treasury yield spread	**-0.5pp**	**May 11** 2023	Traded on open market	Traded on open market	The Treasury curve has been inverted since Jul 2022, a strong historic indicator of a recession within 12 months; however, the spread has narrowed amid banking sector difficulties, from -0.79 in Feb to -0.49 through the second week of May
Composite PMI	**53.4**	**Apr** 2023	**May 3** 2023	**Jun 5** 2023	Has continued to increase; now above 50 and up significantly from Dec 2022 low of 45, indicative of growth
Unemployment rate	**3.4%**	**Apr** 2023	**May 5** 2023	**Jun 2** 2023	Continues to be at near-historical lows, similar to 2020 before COVID, but creates some concern over potential wage inflation
Labor force participation	**62.6%**	**Apr** 2023	**May 5** 2023	**Jun 2** 2023	Stable at ~63% from 2015-20; reached lows of ~60% during COVID but moved steadily back to ~63% starting Nov 2022
Bain Consumer Health Index	**96.7**	**Apr** 2023	Updated weekly	Updated weekly	Consumer composite outlook below the 5-year average of 97.7, a moderate decline relative to Mar (97.5); the spread between upper- and lower-income respondents is widening
Real advance retail sales and food services (YOY % change)	**-3.2%**	**Apr** 2023	**May 16** 2023	**Jun 15** 2023	After a strong recovery from Jun 2020-Feb 2022, averaged 0% from Mar-Dec 2022 (vs. 2.5% 2010-19); Feb 2023 returned to negative YOY change that declined even further in Apr
Case-Shiller housing index (YOY % change)	**2.0%**	**Feb** 2023	**Apr 26** 2023	**May 31** 2023	Although positive in YOY terms, the index has fallen from its peak in Jun 2022 by ~5%, the biggest fall since 2011
Housing starts, total units (YOY % change)	**-22.3%**	**Apr** 2023	**May 17** 2023	**Jun 20** 2023	New housing starts have fallen by ~20% from their Apr 2022 peak (though that peak was still ~20% below Jan 2006 level)
Consumer Price Index, urban consumers (CPI-U) (YOY % change)	**4.9%**	**Apr** 2023	**May 10** 2023	**Jun 13** 2023	Peaked at 9.1% YOY in Jun 2022 (highest level since 1981); headline figures have continued to slowly decline
Producer Price Index, final demand (PPI) (YOY % change)	**2.3%**	**Apr** 2023	**May 11** 2023	**Jun 14** 2023	Peaked at 11.7% YOY in Mar 2022 (highest level since the index began in 2010); it has slowed rapidly since Jun 2022
30-year fixed mortgage rate, average monthly	**6.4%**	**May 11** 2023	Updated weekly	Updated weekly	Reached an all-time low of 2.65% in Jan 2021; most recently peaked at a weekly rate of 7.08% in Nov 2022
Federal funds rate, upper target	**5.25%**	N/A	**May 3** 2023	**Jun 14** 2023	Having lowered rates to near zero in Mar 2020, the Fed aggressively raised rates throughout 2022, slowing the magnitude of increases in Feb 2023 to 25bps; US rate increases expected to moderate in near-term FOMC meetings

Sources: Bureau of Economic Analysis (BEA); US Bureau of Labor Statistics (BLS); US Census Bureau; S&P Global; Bain CHI; US Treasury Department; Federal Reserve Bank of St. Louis; S&P Dow Jones Indices; Freddie Mac; Board of Governors of the Federal Reserve System (from Macrobond)

AGENDA

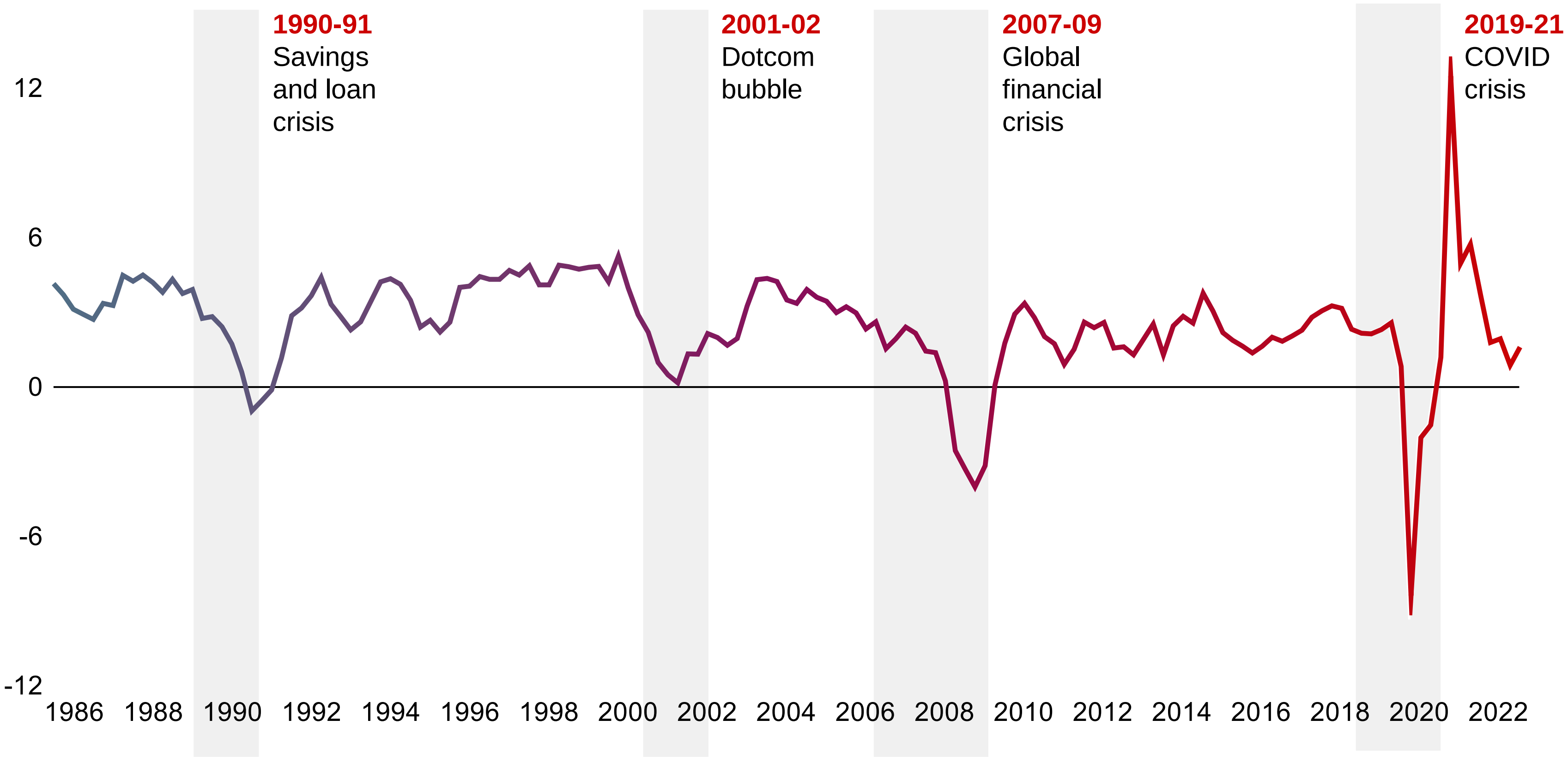
Recession Watch

RECESSION CONTEXT

Recessions are a certainty; only the timing and depth are unpredictable

US real GDP growth, quarterly

YOY % CHANGE



Sources: US Federal Reserve; OECD

The world's economy is on a razor's edge

and could easily fall into recession if financial conditions tighten

AYHAN KOSE
Chief Economist Equitable Growth, Finance, and Institutions (EFI), World Bank

A US or European recession may take several different forms in the near term (examples)

Perfect landing

- Central banks raise interest rates just enough to stall an inflationary spiral while short-term pressures are resolved
- Demand remains robust enough to avoid a meaningful recession
- Inflation expectations stay within an acceptable range of 2% target

Market correction

- Central banks tighten rates until they induce a financial crisis
- Market values are hit hard, disproportionately impacting top income earners
- A rush to quality in the US dollar leads to debt-driven crises in overexposed emerging markets

Inflation fatigue

- A gentle recession happens without sharp central bank rate rises, driven by consumer fatigue
- Recession lasts about 2-3 quarters with a moderate drop

Stagflation

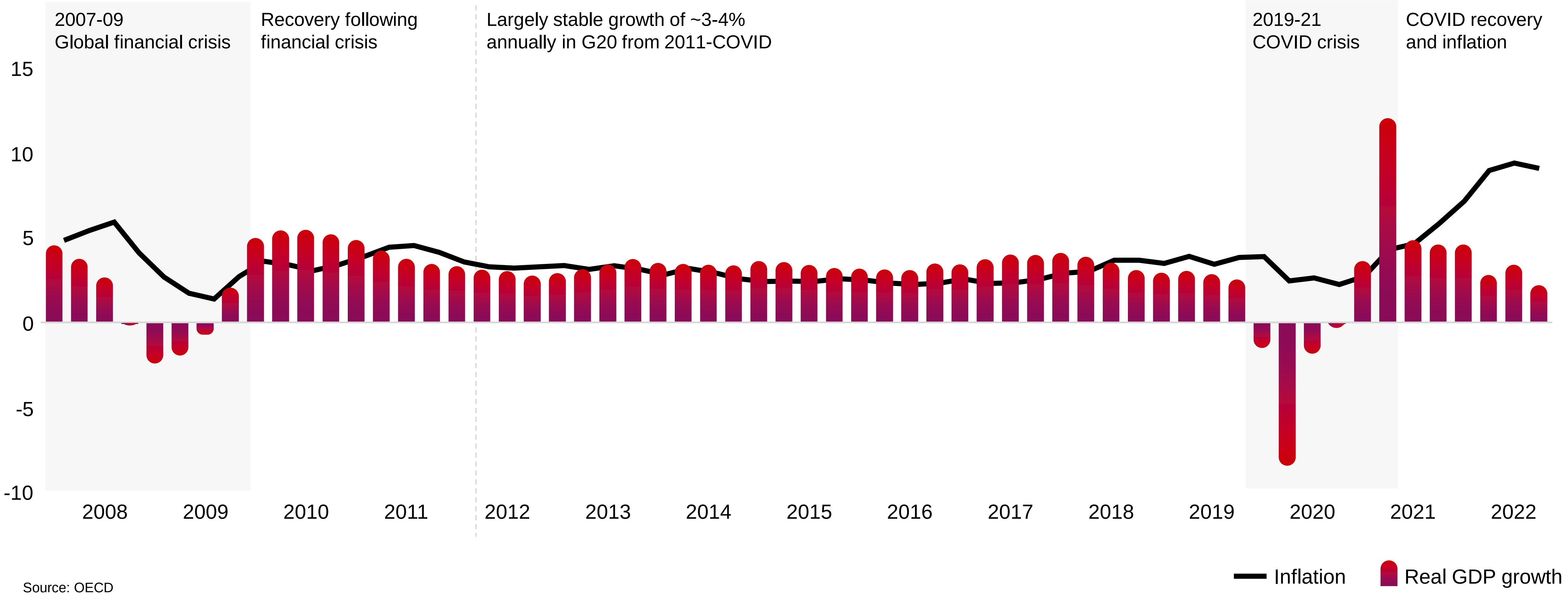
- Insufficient action raising interest rates and/or sustained higher energy prices
- Declining consumer confidence and spending power push the economy into recession or stagnation

RECESSION CONTEXT

Pandemic era stimulus, global supply shocks, and rising international tensions led to high inflation

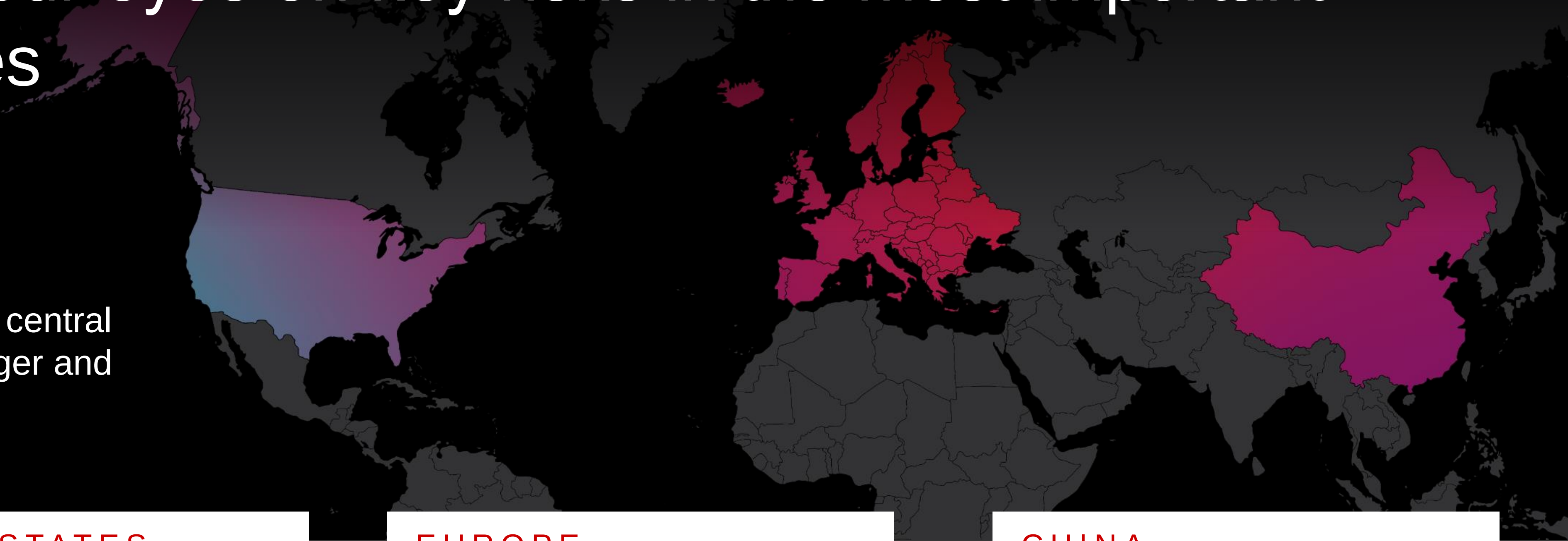
G20 real GDP growth and inflation, quarterly

YOY % CHANGE



Source: OECD

We’re keeping our eyes on key risks in the most important world economies



Across economies

GDP, inflation, exchange rates, central bank moves, purchasing manager and consumer confidence indices

	UNITED STATES	EUROPE	CHINA
Key economic drivers	○ Housing market ○ Banking system	○ Energy prices ○ German / Italian bond spread	○ Housing market ○ Local government finances
Domestic and geopolitical risks	○ Debt ceiling and budget passage ○ Tensions over trade with China	○ Tensions over energy prices and debt ○ Russia-Ukraine war ○ Intra-EU tensions	○ Tensions over trade with US/EU ○ Tensions with Taiwan

Five trends will continue to shape the world

	Thesis	2020-22 developments	Near-term path
POST-GLOBALIZATION	Reemergence of great power rivalry and heightened levels of political, trade, and military conflict will end the United States' 'unipolar moment' (since the 1991 collapse of the Soviet Union)	Mounting tensions between world powers, with the largest war in Europe since 1945, fast-escalating trade tensions between China and the US, and protectionist industrial policies all combining to make geopolitics center stage	Fundamental tensions are likely to only grow, with complex global trading systems continuing to decouple, and ongoing risks of kinetic and other conflicts (e.g., cyber)
LABOR AUTOMATION	Large investments in automation as technology improves and the labor force ages, adding to inequality and creating new challenges for governments	The sudden supply constraint on labor and attendant rise in cost amid COVID turbocharged the economics of automation. Innovation in robotics and AI has also increased the scope of what can be automated while decreasing the cost of automation	Automation will continue to spread turbocharged by AI, amid aging demographics and improving technology. This will particularly disrupt middle-income jobs

RECESSION CONTEXT

Five trends will continue to shape the world

	Thesis	2020-22 developments	Near-term path
EX-URBANIZATION	Technology has reduced the 'cost of distance,' giving people greater choice of where they live and work	COVID and remote work have caused a step change in how people work. Some who could afford it wanted more space, moving farther from city centers	The pre-COVID working norms will not return. A portion of those who can work remotely will, accelerating migration to the outer suburbs/exurbs
CAPITAL RATIONALIZATION	The era of capital superabundance is drawing to a close, as the population of much of the world shifts from working savers to retired spenders	A massive surge of post-COVID inflation in the US and Europe became the key focus of policymakers amid supply constraints and strong demand, though it has passed its peak	Inflation will likely continue to decline from its peak. Ultimately, nominal interest rates will depend on central bank moves, but underlying pressures will be more inflationary than in the 2010s
ENERGY TRANSITION	Reducing carbon emissions will require large-scale investments at a global level and will likely raise the cost of energy throughout the period of transition	The Russia-Ukraine war and the global energy crunch that preceded it are causing a rethink of Europe's, Japan's, and the developing world's energy approach, alongside energy investments in the US spurred by the Inflation Reduction Act (IRA)	A global transition will take more time and money than the public realizes, and no country has made the long-term commitments needed to achieve it. Progress is likely to be highly fragmented and slower, rather than globally coordinated and faster

AGENDA

Recession Watch

RECESSION APPROACH

Critical choices in the past have been made by

LOSERS

TRAP 1: BURN THE FURNITURE

Misconceived that aggressive cost-cutting is crucial to winning in a recession

Examples: ruled out acquisitions, slashed R&D and spending on S&M activities key to growth, let go of valuable talent

TRAP 2: TRY EVERYTHING

Strayed from company's core with desperate bid for growth by betting on everything

Examples: invested in 'what's hot,' simultaneously expanded in multiple directions without a well-thought-out strategy

TRAP 3: LATE TO THE PARTY

Waited too long before taking action, took a reactive (vs. proactive) approach to ride out the downturn

Examples: overlooked opportunity to leverage unstable period to leapfrog competitors, failed to set up signposts to act ahead and take no-regret moves swiftly

WINNERS

Restructured costs before the downturn, without cutting muscle

Put the financial house in order: diligently managed **liquidity** and **balance sheet**

Played offense by reinvesting selectively for **competitive outperformance**

Pursued a proactive **M&A pipeline**

Robust pre-recession planning helps companies prepare

Pre-recession planning

Where we are today

- Which **areas of your business have been most impacted** by disruptions today? To what extent?
- **What actions have you taken** to limit recession risk, counter cost increases, and manage cash flow?
- **What quick wins** can you implement around products, pricing, procurement, eliminating work, etc. to reduce costs and maintain top line in a recession?

Stress testing

- What areas of the business are **most exposed** to and **at risk** in an economic downturn? To what extent?
- What are the **trigger points for further actions** to be taken? Which actions come first, second,...?
- What are **signposts for** different degrees of an **economic slowdown**? What **other disruptions** will be at play?

Key competitor & customer trends

- How will **customer needs/ preferences** evolve with persistent disruptions coupled with a slowdown?
- What are our **competitors' responses** to disruption and how will this change the competitive landscape?
- How will a **reinvented supply chain** look – one that is disruption-proof, flexible against customer needs, and contains costs?
- How should we **redesign how work gets done** to meet changing talent landscape and scale a self-funding automation program?

Resilience

- How do we create **business resiliency** and control costs in the face of likely continued disruptions and a downturn?
- In which areas do we want to **outperform and build competitive advantage?**

New recession playbook exists for today's environment with an initial focus on recession and stress testing

PRE-RECESSION SCENARIO PLANNING

Use stress testing to gain clarity on response plan in different scenarios based on signposts and triggers

Create high-resolution visibility on spend and key response areas to support better decision-making

Strengthen balance sheet management ahead of a downturn to position for liquidity and M&A investments

Reset the cost base, prioritizing automation

- Simplify the work and prioritize automation to mitigate labor constraints
- Create fuel to invest in key priorities (e.g., growth, ESG) through the downturn

Solidify new pricing & portfolio management capabilities

- Streamline the product offering and optimize mix to mitigate supply shocks and drive growth
- Keep SKU-level pricing plans and capabilities evergreen

Win on purpose through sustained customer relationship building

- Enhance growth/share through superior customer engagement
- Build business intelligence to target customer segments based on recessionary impact, competitive vulnerability

Double down on operational resiliency and traceability

- Execute on quick response actions to mitigate current disruptions
- Build evergreen supply chain risk assessment and mitigation capabilities

Strategically allocate CAPEX, R&D, and M&A funding

- Take prudent decisions on CAPEX and R&D: where to cut and where to invest
- Proactively pursue M&A and selectively exit businesses that no longer fit strategically, or are unprofitable