

CEPREMAP / DBNOMICS

## Macroeconomic Outlook – June 2023

## DBnomics

- All data presented in the forthcoming slides are extracted from DBnomics (<https://db.nomics.world/>), an open-sourced databank created at CEPREMAP, and will be automatically updated every Friday at 2:00pm
- The project has been financed by generous grants from Banque de France, AFD, DG Trésor, France Stratégie and OECD
- The executive director of the DBnomics project is Christophe Benz
- The comments on the slides have been written by Daniel Cohen and Jocelyn Maillard at CEPREMAP
- Links to the DBnomics data are available in the Appendix
- All materials presented here can be freely used with proper acknowledgment

## Executive summary

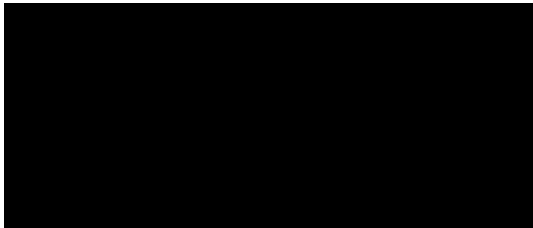
- In response to inflationary pressures, monetary policy has been tightened up to levels unheard of for the last 20 years, the question being up to which point in 2023. Financial stress arising from the bankruptcy of Silicon Valley Bank has put into question the extent to which monetary tightening should continue.
- The sheer threat of a recession should have reduced the price of energy, potentially cooling down inflationary pressures. The OPEC+ decision to curtail production, has lifted up prices, but only temporarily.
- Markets are following in parallel financial trends, inflation trends and labor market evolutions.
- The discrepancy between the tightening pace in the US and in the Euro Area has led, in 2022, to an appreciation of the USD against the EUR. The expectation that US inflation may peak before the EZ is reversing this trend this year.

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# I Growth and inflation in selected G20 countries



## **A The growth slowdown**

## Growth in advanced economies

The first quarter of 2023 has brought low but positive economic growth in all major advanced economies while the OECD has moderately revised upward its growth projections. Germany however experienced two consecutive negative quarterly growth rates.

### Yearly GDP growth rate (YoY % change)

Yearly GDP growth rate %					
Country	2020	2021	2022	2023(P)	2024(P)
<b>Euro Area</b>	(6.1) <sup>1</sup>	5.4	3.5	0.8	1.4
<i>Germany</i>	(3.7)	2.6	1.8	(0.1)	1.1
<i>France</i>	(7.9)	6.8	2.6	0.7	1.3
<i>Italy</i>	(9.0)	7.0	3.7	0.7	0.8
<b>UK</b>	(11.0)	7.6	4.0	(0.3)	1.0
<b>USA</b>	(2.8)	5.9	2.1	1.6	1.1
<b>Canada</b>	(5.1)	5.0	3.4	1.5	1.5
<b>Japan</b>	(4.3)	2.1	1.1	1.3	1.0

### Quarterly GDP growth rate (% change over the previous period)

Quarterly GDP growth rate %									
Country	21Q1	21Q2	21Q3	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1
<b>Euro Area</b>	0.0	2.0	2.3	0.6	0.6	0.9	0.4	(0.0)	0.1
<i>France</i>	0.0	1.0	3.1	0.5	(0.1)	0.5	0.2	(0.0)	0.2
<i>Germany</i>	(1.5)	1.9	0.8	(0.0)	1.0	(0.1)	0.5	(0.5)	(0.3)
<i>Italy</i>	0.5	2.5	2.9	0.9	0.1	1.0	0.4	(0.1)	0.6
<b>UK</b>	(1.1)	6.5	1.7	1.5	0.5	0.1	(0.1)	0.1	-
<b>USA</b>	1.5	1.7	0.7	1.7	(0.4)	(0.1)	0.8	0.6	0.3
<b>Canada</b>	1.3	(0.6)	1.4	1.7	0.6	0.9	0.6	(0.0)	0.8
<b>Japan</b>	(0.3)	0.4	(0.4)	1.2	(0.7)	1.4	(0.4)	0.1	0.7

Forecast from OECD Global Economic Outlook, June 2023

## Growth in emerging countries

OECD has lifted up emerging market growth.

### Yearly GDP growth rate (YoY % change)

Yearly GDP growth rate %					
Country	2020	2021	2022	2023(P)	2024(P)
China	2.2	8.4	3.0	5.2	4.5
S. Africa	(6.3)	4.9	2.0	0.1	1.8
Brazil	(3.3)	5.0	2.9	0.9	1.5
India	(5.8)	9.1	6.8	5.9	6.3
Mexico	(8.0)	4.7	3.1	1.8	1.6
Indonesia	(2.1)	3.7	5.3	5.0	5.1

### Quarterly GDP growth rate (% change over the previous period)

Quarterly GDP growth rate %									
Country	21Q1	21Q2	21Q3	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1
China	0.7	1.6	0.4	1.6	0.8	(2.3)	3.9	0.6	2.2
S. Africa	0.6	1.3	(1.9)	1.4	1.5	(0.8)	1.8	(1.1)	0.4
Brazil	0.9	(0.2)	0.4	1.0	1.0	1.1	0.5	(0.1)	1.9
India	1.4	(7.5)	9.3	2.0	0.5	1.1	1.9	1.0	1.9
Mexico	0.3	0.8	(1.1)	1.2	1.0	1.1	0.9	0.6	1.0
Indonesia	1.1	0.2	0.1	3.3	1.0	1.0	0.7	2.2	0.7

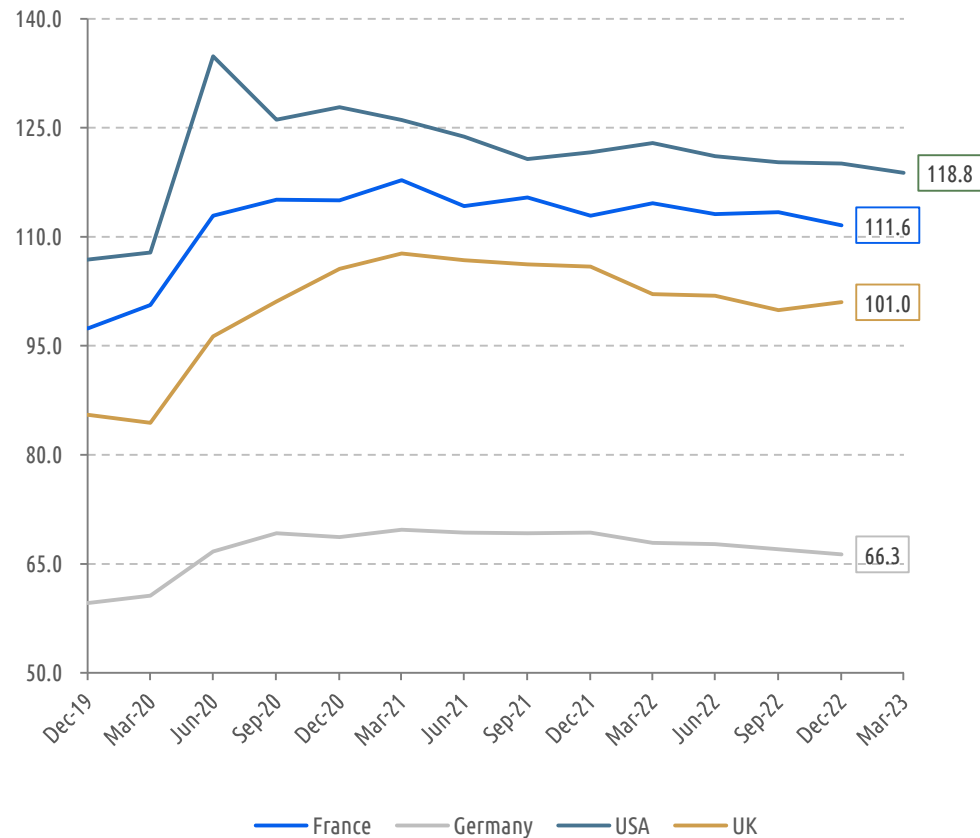
Forecast from OECD Global Economic Outlook June 2023



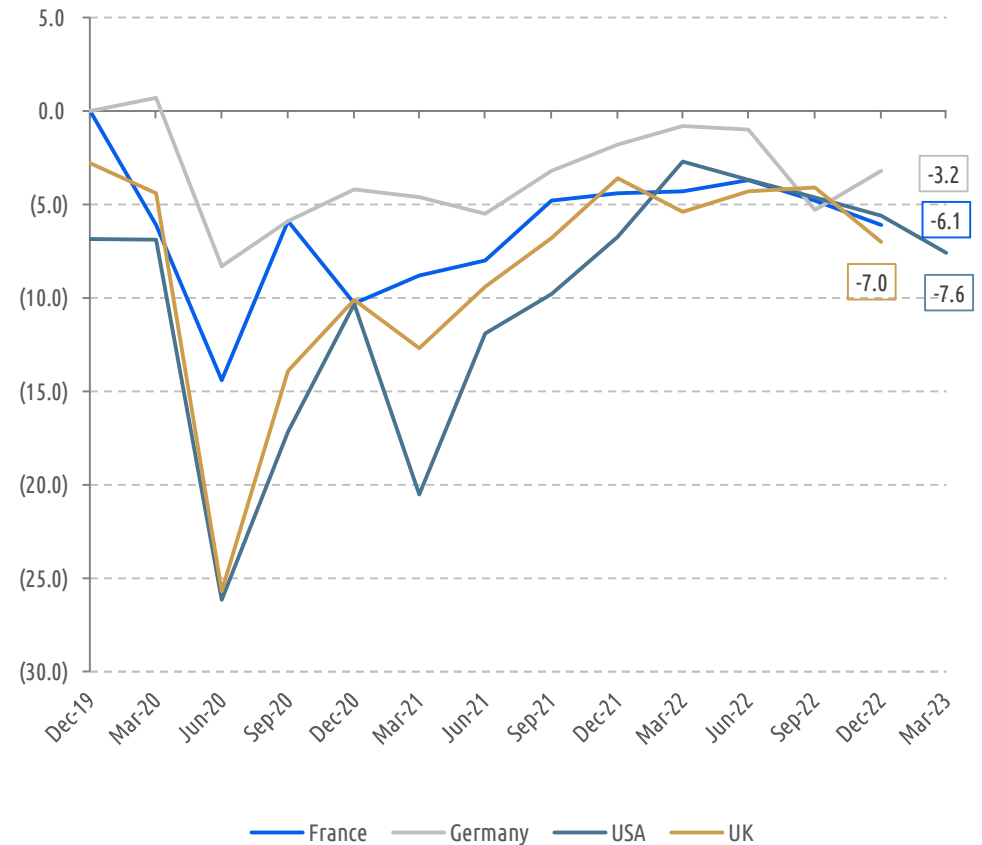
# Government debts have reached a new plateau in the G4 countries<sup>1</sup>

Despite rising deficits, however, inflation acted as a moderating factor on the evolution on debt ratios. Germany's deficit is shrinking much faster than in the other countries.

General Government debt (% of GDP) – Since 2020



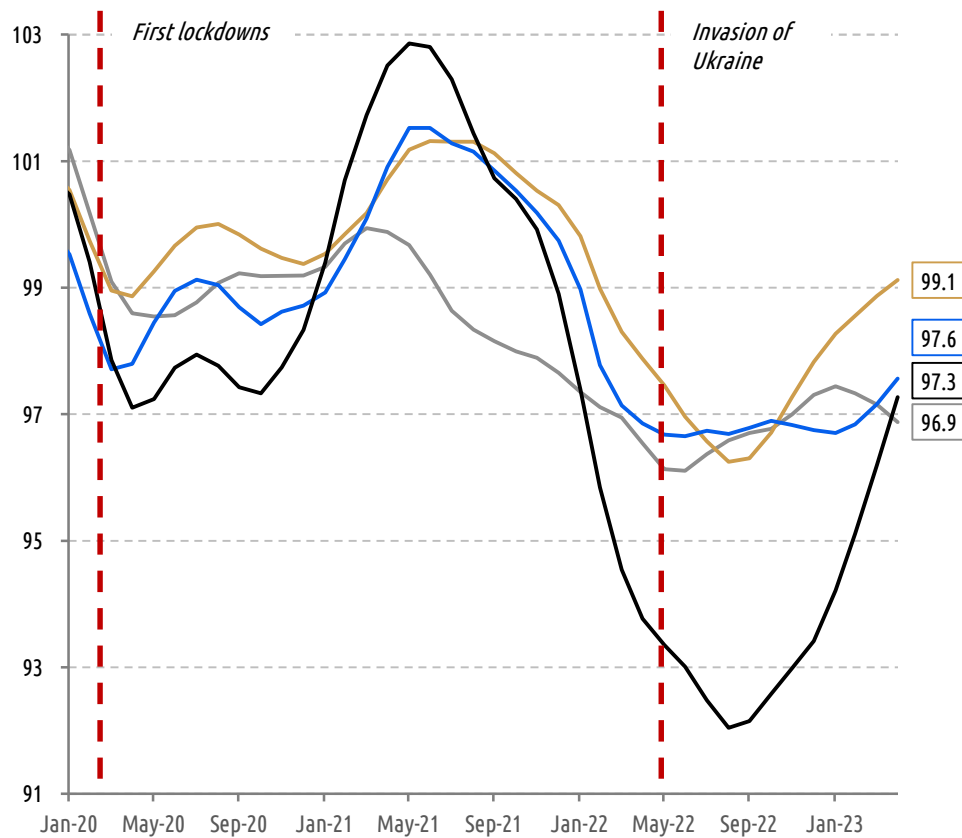
General Government deficit (% of GDP) – Since 2020



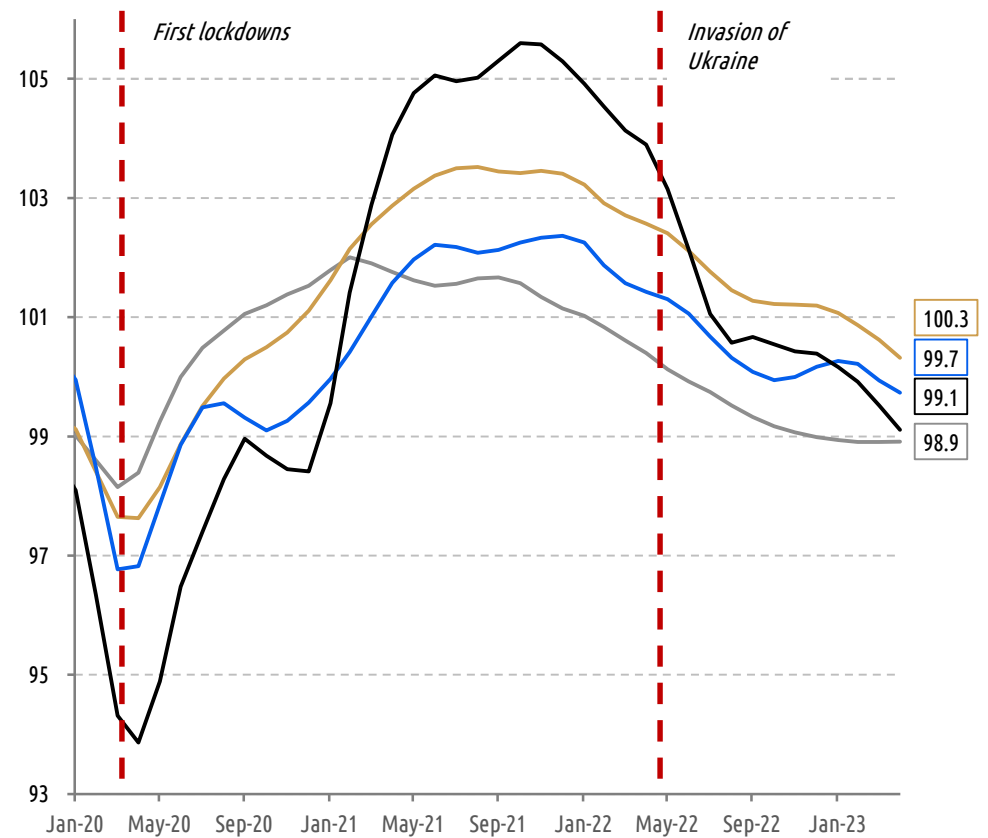
# Except for Germany, consumer confidence in G4 economies is around their pre-war levels

Business confidence, however, still decreasing in all four countries.

Consumer confidence indicator – Since Jan. 2020

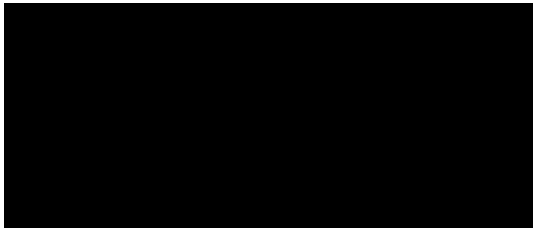


Business confidence indicator – Since Jan. 2020



— USA — Germany — France — UK

— USA — Germany — France — UK

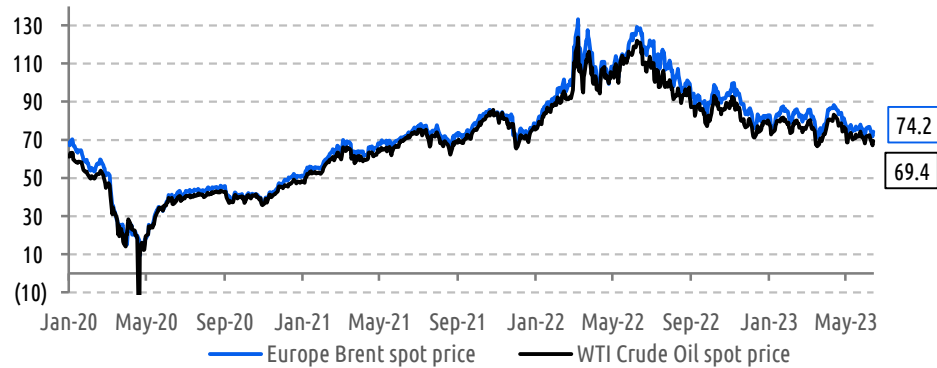


## **B The seeds of inflation**

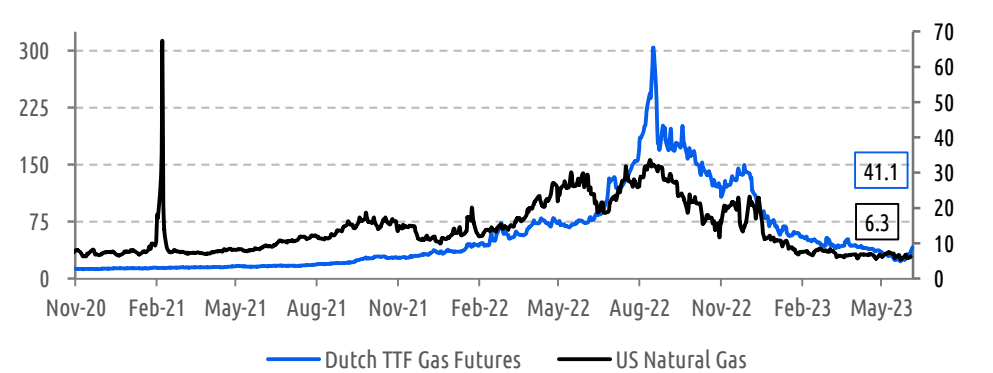
# Energy prices have sharply increased over the last 2 years

Russian invasion added inflationary pressure. Yet despite OPEC decision to cut supply, prices remain in the pre-war range. Natural gas prices are now quite different in the US and in Europe, more than one to six discrepancy between the two markets.

**Oil prices in historical perspective (USD per barrel)**



**EU (left scale) and US (right scale) natural gas prices<sup>1</sup> (€/MWh)**



**Copper prices in historical perspective (USD/tonne)**



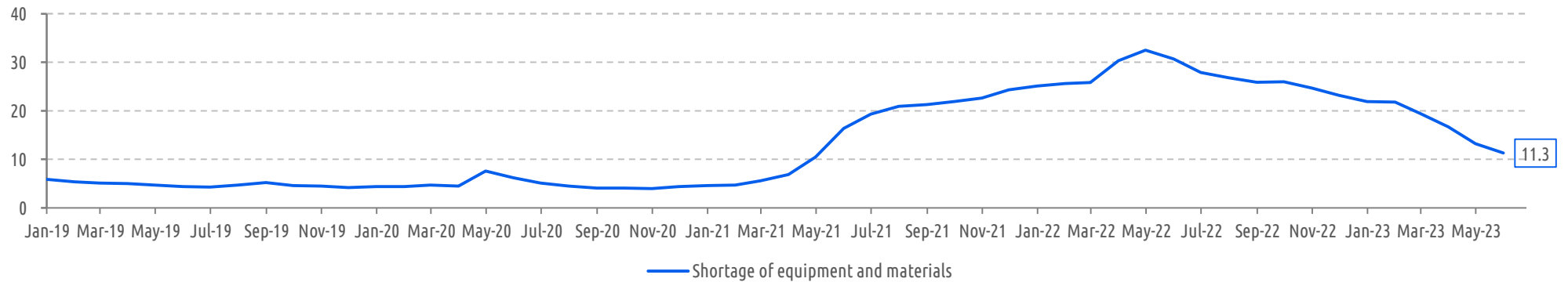
**CBOT Wheat (USD/Bushel)**



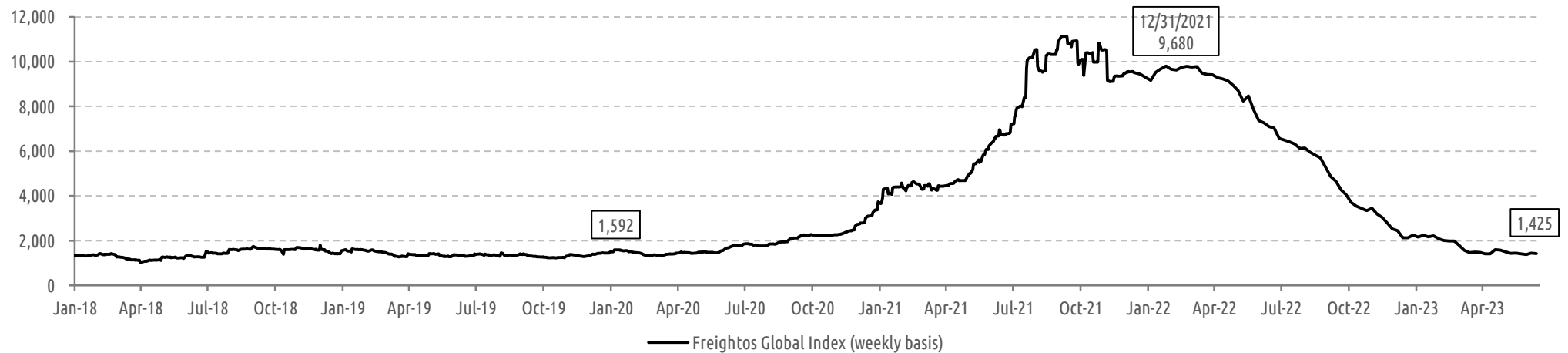
# Supply chain disruptions are easing up significantly

Transportation costs returned to their pre-crisis level

**% of EU business reporting shortages of materials and equipment in the construction industry as a limiting production factor**



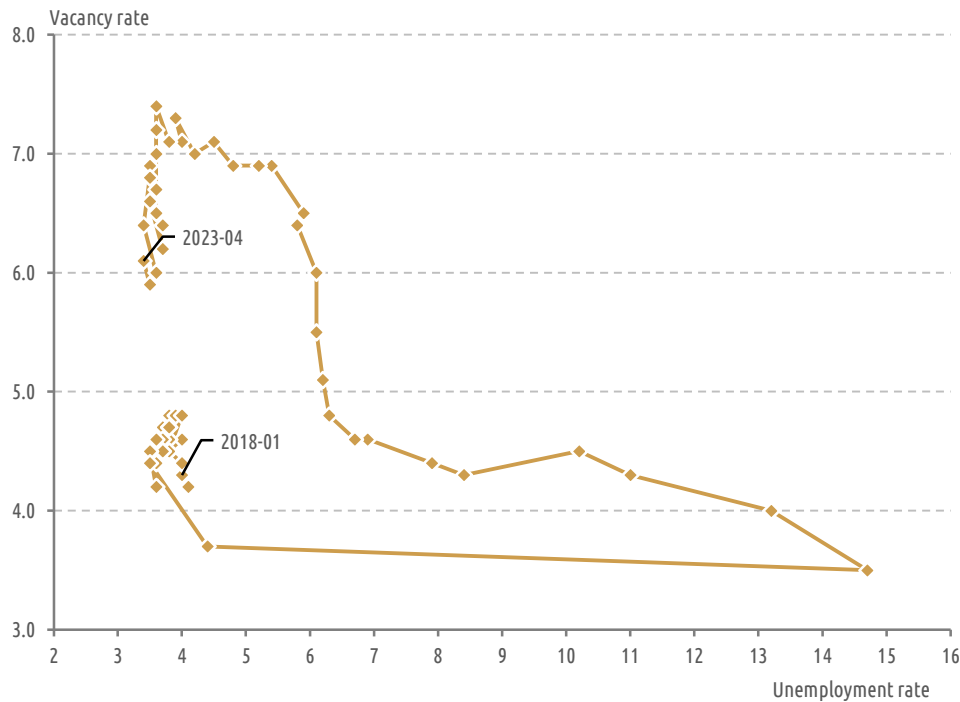
**Shipping Container Index (based on spot rate for 40 feet containers)**



# Labor markets remain tight... (1/2)

The unemployment rate, both in the US and the EZ, remain at very low levels. In the US, the vacancy/unemployment ratio, however, fell abruptly since February, easing up recruitment constraints (assuming, however, that the vacancy rate is properly measured).

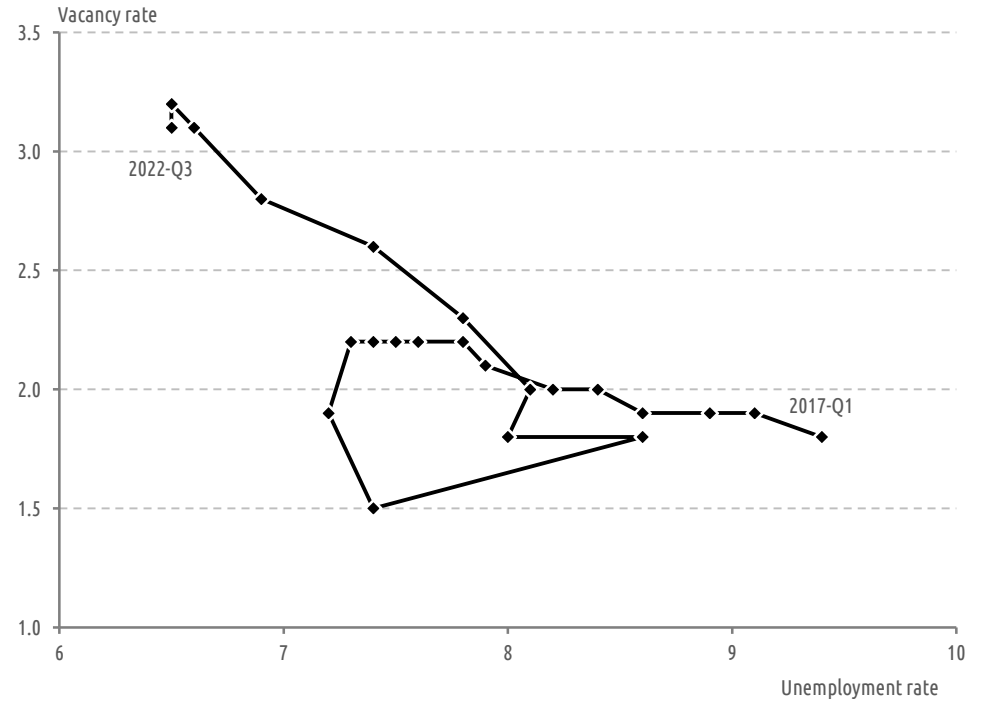
**Beveridge curve - USA (01-2018 – 02-2023), Monthly**



**Unemployment rate (% of labor force) - Monthly**

Civilian unemployment rate – Total – USA - Seasonally adjusted												
Indicator	06-22	07-22	08-22	09-22	10-22	11-22	12-22	01-23	02-23	03-23	04-23	05-23
Rate	3.6	3.5	3.7	3.5	3.7	3.6	3.5	3.4	3.6	3.5	3.4	3.7

**Beveridge curve – Euro Area (Q1-17 – Q3-22), Quarterly**



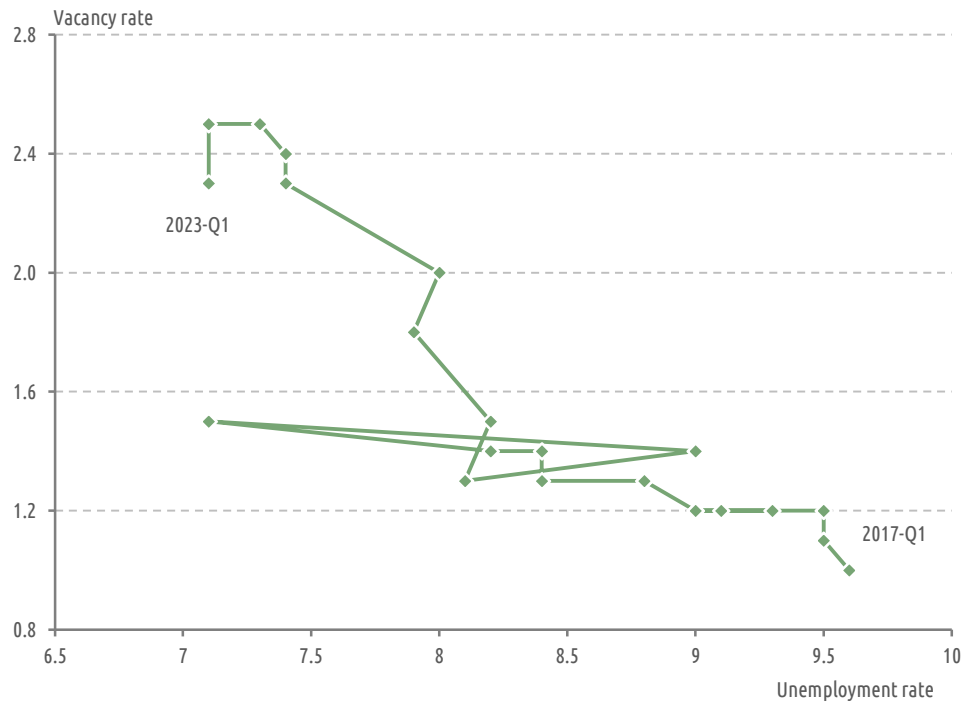
**Unemployment rate (% of labor force) - Monthly**

Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted												
Indicator	05-22	06-22	07-22	08-22	09-22	10-22	11-22	12-22	01-23	02-23	03-23	04-23
Rate	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.5

# Labor markets remain tight... (2/2)

The vacancy/unemployment ratio still at record high levels in France.

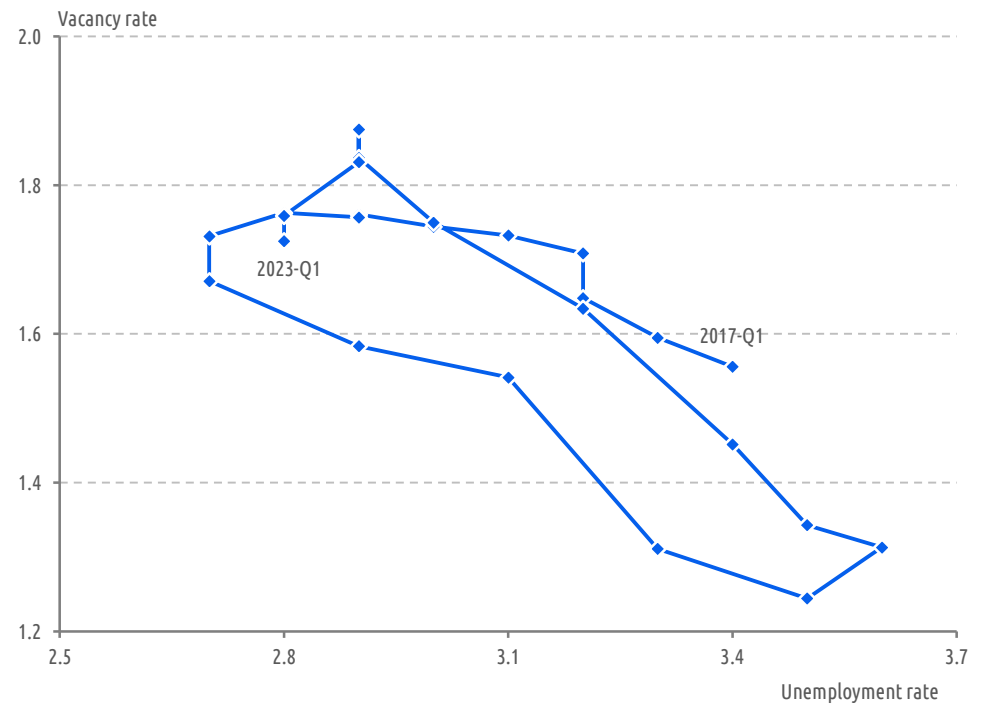
**Beveridge curve - France (Q1-17 – Q4-22), Quarterly**



**Unemployment rate (% of labor force) – Monthly (Eurostat)**

Unemployment rate – Total – France- Seasonally adjusted												
Indicator	05-22	06-22	07-22	08-22	09-22	10-22	11-22	12-22	01-23	02-23	03-23	04-23
Rate	7.5	7.5	7.3	7.2	7.1	7.2	7.2	7.2	7.1	7.0	7.0	7.0

**Beveridge curve - Germany (Q1-17 – Q4-22), Quarterly**

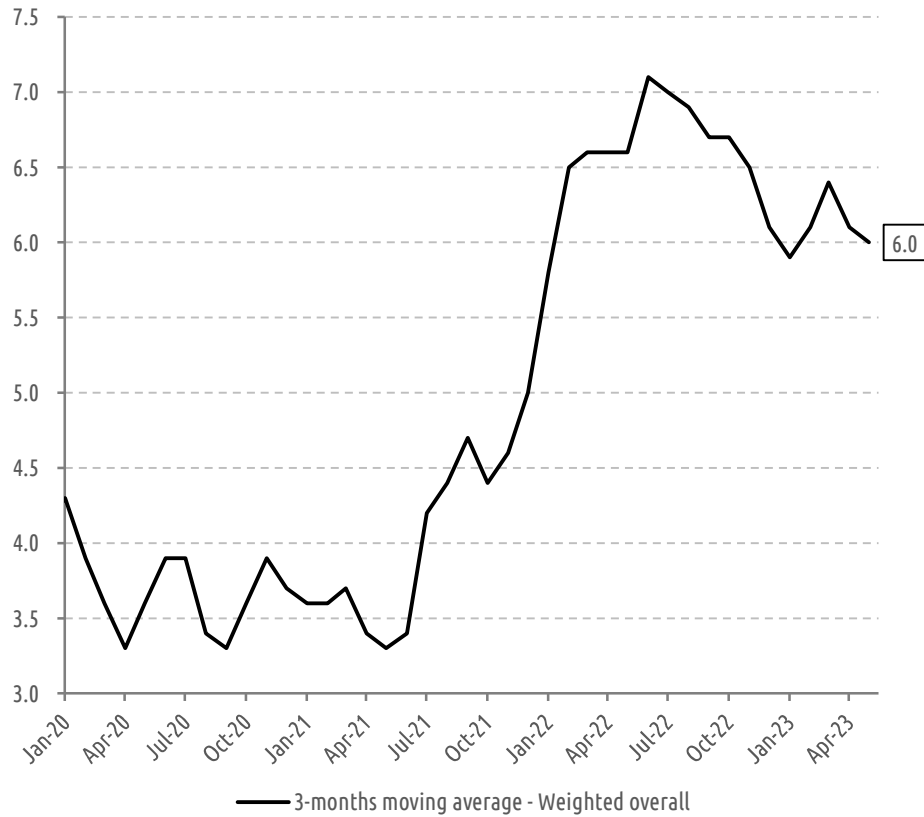


**Unemployment rate (% of labor force) - Monthly**

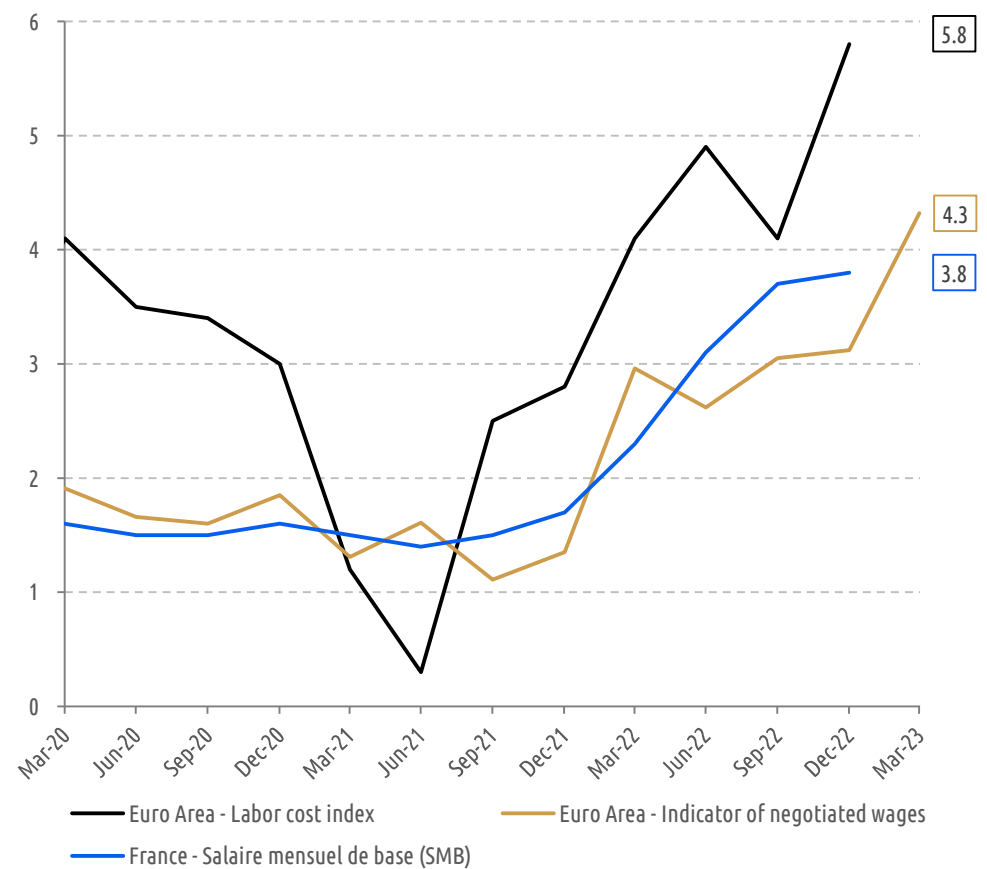
Unemployment according to ILO definition - Total – Germany – Seasonally adjusted												
Indicator	05-22	06-22	07-22	08-22	09-22	10-22	11-22	12-22	01-23	02-23	03-23	04-23
Rate	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.0	3.0	3.0	2.9	2.9

# The verdict on wage inflation in 2023, both in the US and the EZ, is still open

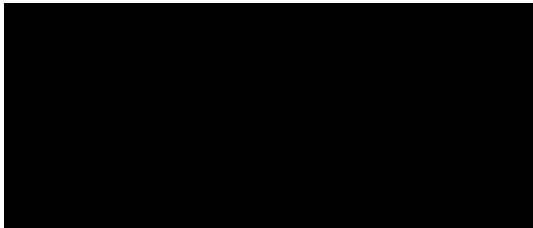
Wage growth tracker (nominal wage growth of individuals) – US (Monthly)



Indicator of negotiated wages<sup>1</sup> in the Euro Area (Quarterly)







## **C Inflation unbound**

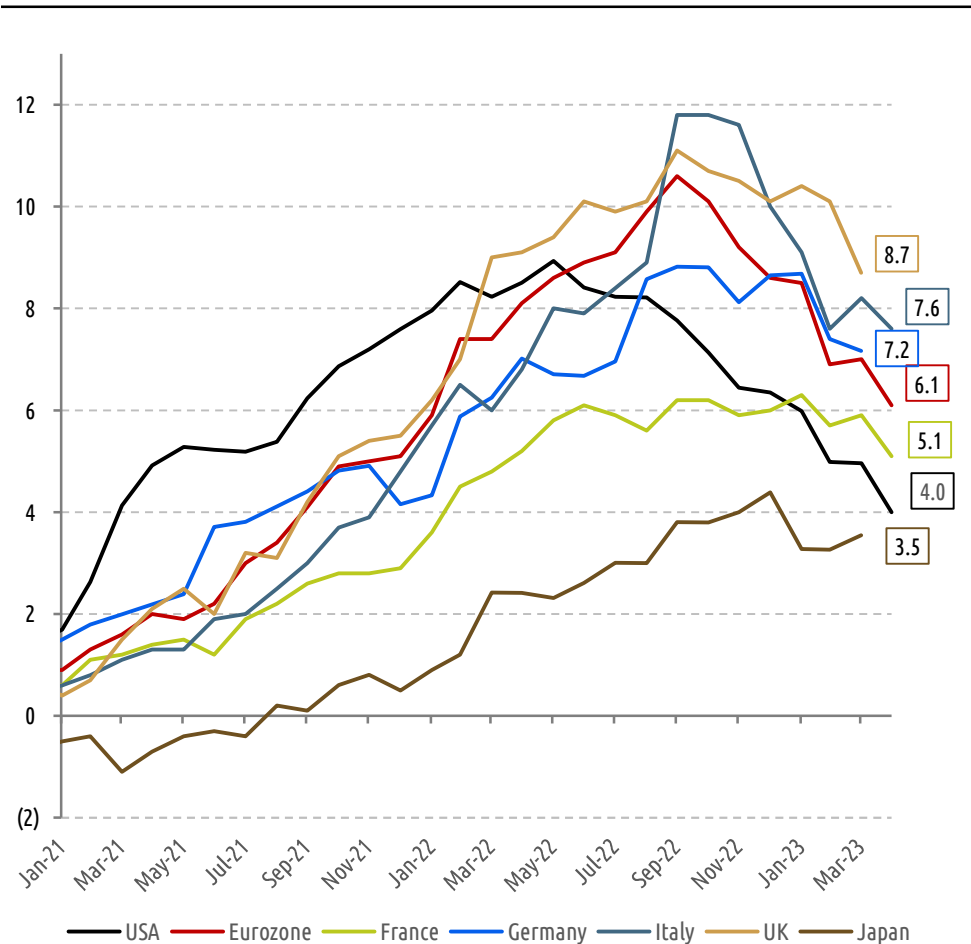
# Inflation is coming down from its peak both in Europe and the US

Yet core inflation remains above 5% both in the US and the Euro area, and above 6% in France.

CPI and core inflation in advanced economies (YoY % change)

Monthly Year-on-Year inflation rates (%) – 2022/2023												
Country	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
<b>US</b>	8.9	8.4	8.2	8.2	7.8	7.1	6.4	6.3	6.05	5.0	5.0	4.0
<i>US core</i>	5.9	5.9	6.3	6.6	6.3	6.0	5.7	5.5	5.5	5.6	5.5	5.3
<b>Euro Area</b>	8.6	8.9	9.1	9.9	10.6	10.1	9.2	8.6	8.5	6.9	7.0	6.1
<i>Euro Area core</i>	3.7	4.0	4.3	4.8	5.0	5.0	5.2	5.3	5.6	5.7	5.6	5.3
<b>France</b>	5.8	6.1	5.9	5.6	6.2	6.2	5.9	6.0	6.3	5.7	5.9	5.1
<i>France core</i>	3.7	4.3	4.7	4.5	5.0	5.3	5.3	5.6	6.1	6.2	6.3	-
<b>Germany</b>	6.7	6.7	7.0	8.6	8.8	8.8	8.1	8.7	8.7	7.4	7.2	-
<i>Germany core</i>	3.3	3.5	3.7	4.6	4.8	5.0	5.2	5.6	5.7	5.8	5.8	-
<b>Italy</b>	8.0	7.9	8.4	8.9	11.8	11.8	11.6	10.0	9.1	7.6	8.2	7.6
<i>Italy core</i>	3.8	4.1	4.4	5.0	5.3	5.6	5.8	6.0	6.3	6.3	6.2	6.1
<b>UK</b>	9.4	10.1	9.9	10.1	11.1	10.7	10.5	10.1	10.4	10.1	8.7	-
<i>UK core</i>	5.8	6.2	6.3	6.5	6.5	6.3	6.3	5.8	6.2	6.2	6.8	-
<b>Canada</b>	5.1	5.7	6.7	6.8	7.7	8.1	7.6	7.0	6.9	6.9	6.8	6.3
<i>Canada core</i>	3.5	3.9	4.7	4.6	5.2	5.3	5.5	5.3	5.4	5.3	5.4	5.3
<b>Japan</b>	2.3	2.6	3.0	3.0	3.8	3.8	4.0	4.4	3.3	3.3	3.5	-
<i>Japan core</i>	0.9	1.2	1.6	1.8	2.5	2.8	3.0	3.2	3.4	3.7	4.1	-

CPI Inflation (YoY % change) – since January 2021



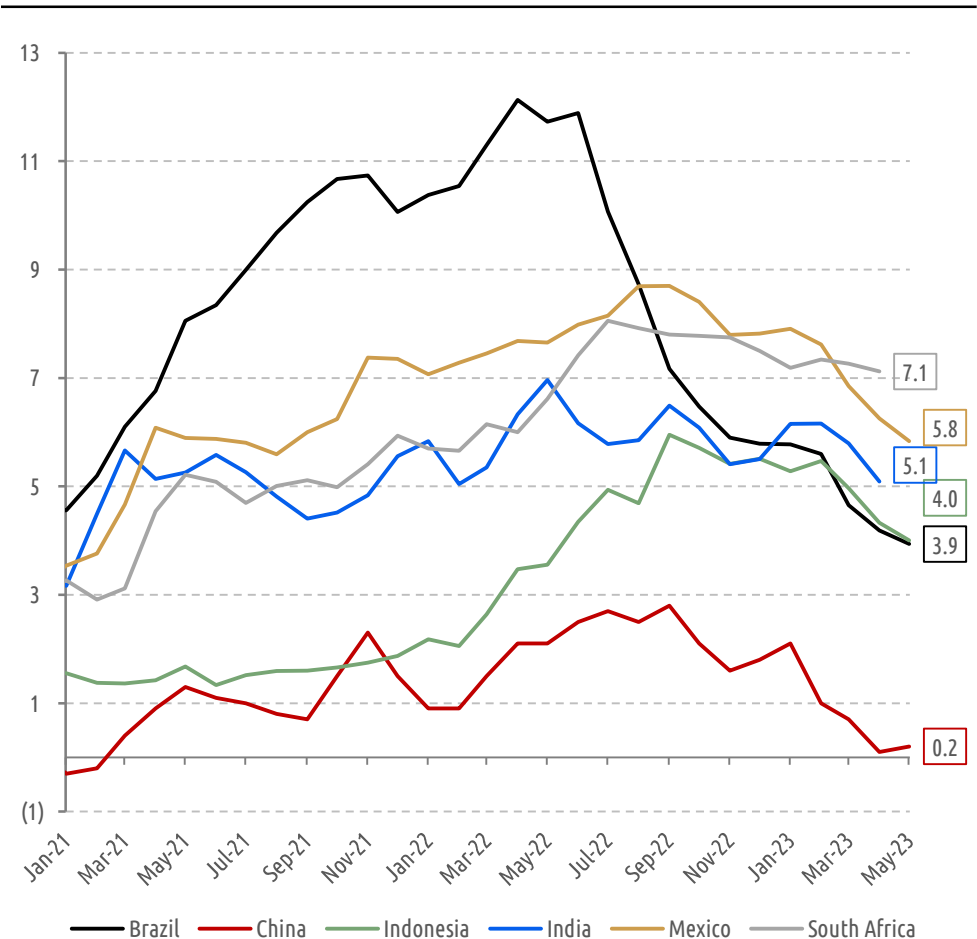
# Inflation in emerging economies

In most emerging countries, inflationary pressures are cooling down except for South Africa. China remains an extraordinary exception with a very low level.

CPI inflation in advanced economies (YoY % change)

Monthly Year-on-Year inflation rates (%) – 2022/2023												
Country	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
<b>China</b>	2.5	2.7	2.5	2.8	2.1	1.6	1.8	2.1	1.0	0.7	0.1	0.2
<b>India</b>	6.2	5.8	5.9	6.5	6.1	5.4	5.5	6.2	6.2	5.8	5.1	-
<b>South Africa</b>	7.4	8.1	7.9	7.8	7.8	7.7	7.5	7.2	7.3	7.3	7.1	-
<b>Brazil</b>	11.9	10.1	8.7	7.2	6.5	5.9	5.8	5.8	5.6	4.7	4.2	3.9
<b>Mexico</b>	8.0	8.2	8.7	8.7	8.4	7.8	7.8	7.9	7.6	6.8	6.3	5.8
<b>Indonesia</b>	4.3	4.9	4.7	6.0	5.7	5.4	5.5	5.3	5.5	5.0	4.3	4.0

CPI Inflation (YoY % change) – since January 2021



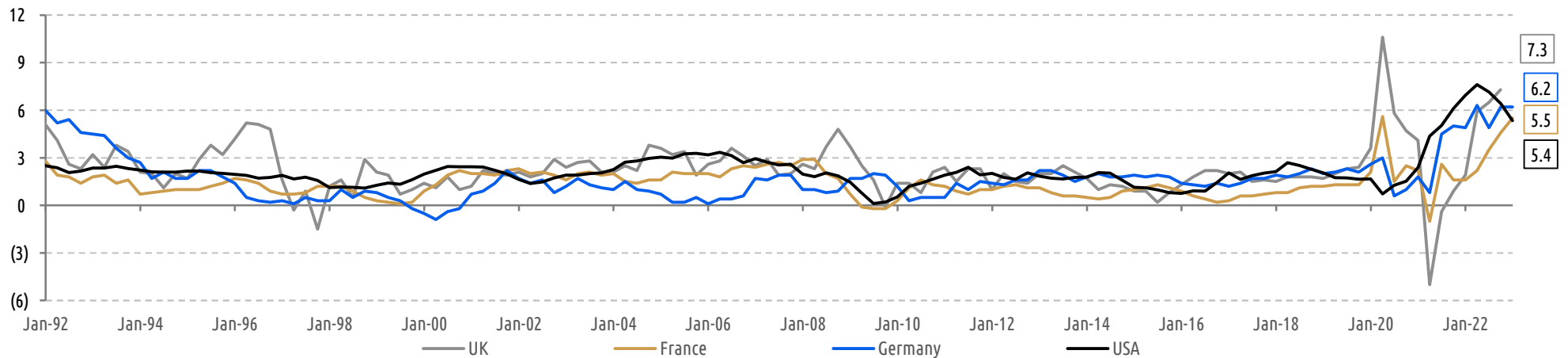
# Implied GDP deflator in G4 countries<sup>1</sup>

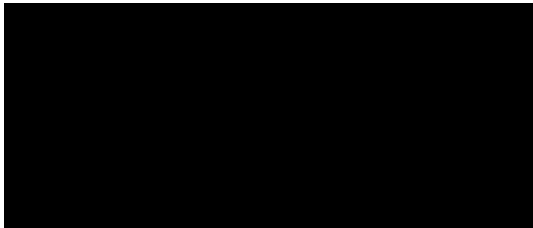
Implied GDP deflators appear to be converging towards headline inflation.

Quarterly implied GDP deflator – Since Q1-2021

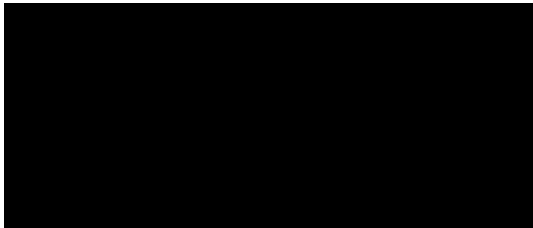
Implied GDP deflator (YoY % change) – Since Q1-2021								
Country	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23
USA	4.4	5.0	6.1	6.9	7.6	7.1	6.4	5.4
Germany	0.8	4.5	5.0	4.9	6.3	4.9	6.2	6.2
France	(1.0)	2.6	1.6	1.6	2.2	3.5	4.6	5.5
UK	(5.0)	(0.4)	0.9	1.9	5.9	6.5	7.3	-

Quarterly implied GDP deflator – Since Q1-1992





## II Monetary policy



## **A In the US**

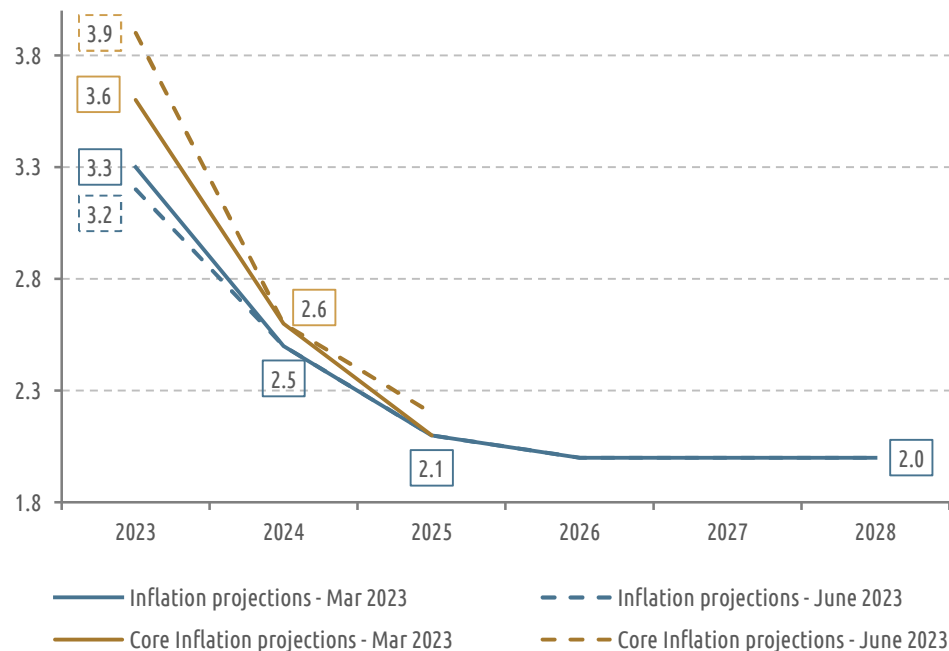
# Monetary Policy Decisions from the Fed (1/2)

The Fed decided to stop momentarily its interest rate hike. However, it has revised its interest rate provisions, implying a two-quarter increase before the end of the year.

## Personal consumption expenditures (PCE) – Monthly (YoY % change)

Price indexes for Personal Consumption Expenditures							
Indicator	10-22	11-22	12-22	01-23	02-23	03-23	04-23
PCE inflation	6.1	5.7	5.3	5.4	5.1	4.2	4.4

## PCE Inflation Projections as of March 2023 (%)



## Key considerations

- The target range of the federal fund rates was maintained at 5.00%-5.25% on June 14<sup>th</sup>.
- As expected by the market, this pause in the hikes comes after 10 consecutive interest rate increases.
- The Fed said that it was waiting to see the impact of the previous increases. However, they consider that the strong labor market offers them more room to limit inflation, pushing their expectations to 5.6% at the end of the year.
- Next meeting will be on July 26<sup>th</sup> The key issue is whether a new hike will occur.

## Federal Reserve economic projections as of 22 March 2023

Indicator	2023	2024	2025	Longer run
Change in real GDP	1.0	1.1	1.8	1.8
Unemployment rate	4.1	4.5	4.5	4.0
Inflation	3.2	2.5	2.1	2.0
Federal funds rate	5.6	4.6	3.4	2.5

“Nearly all Committee participants view it as likely that some further rate increases will be appropriate this year to bring inflation down to 2 percent over time.”

Sources: Fed as of 14/06/2023, Bureau of Economic Analysis

JEROME POWELL, PRESS CONFERENCE, JUNE 14<sup>TH</sup>, 2023





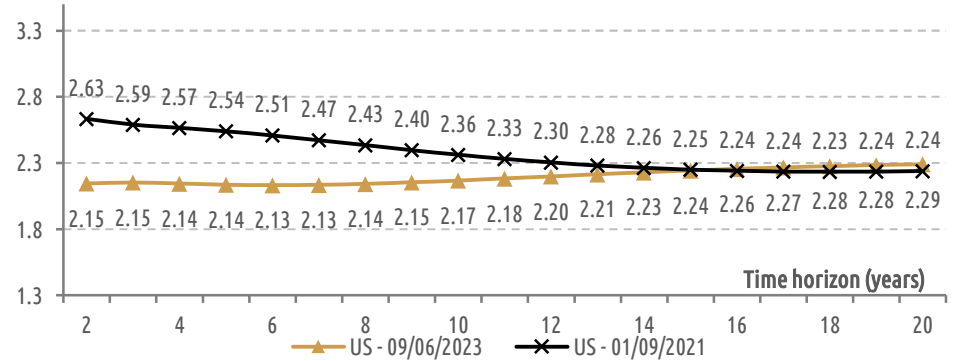
# Long-term rates fell after the banking crisis, but are slowly recovering

Real rate however are expected to stay around 2% in real terms

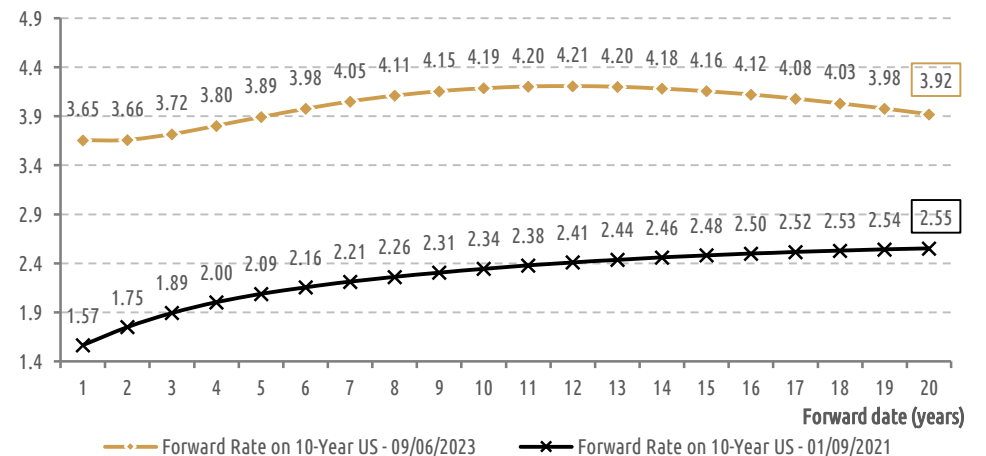
10-Y Nominal yield – US



Inflation Expectations – US (%)



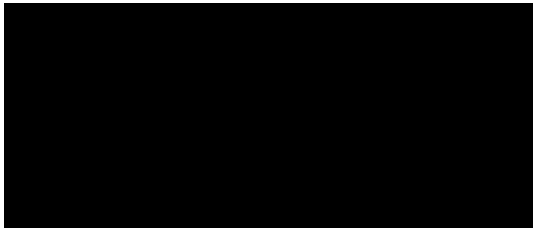
Forward Rates on 10-Year U.S. Treasuries (%)



# The US yield curve is inverted at levels unheard of since 1982

U.S. 10Yr/2Yr Spread – Since Jan. 1978



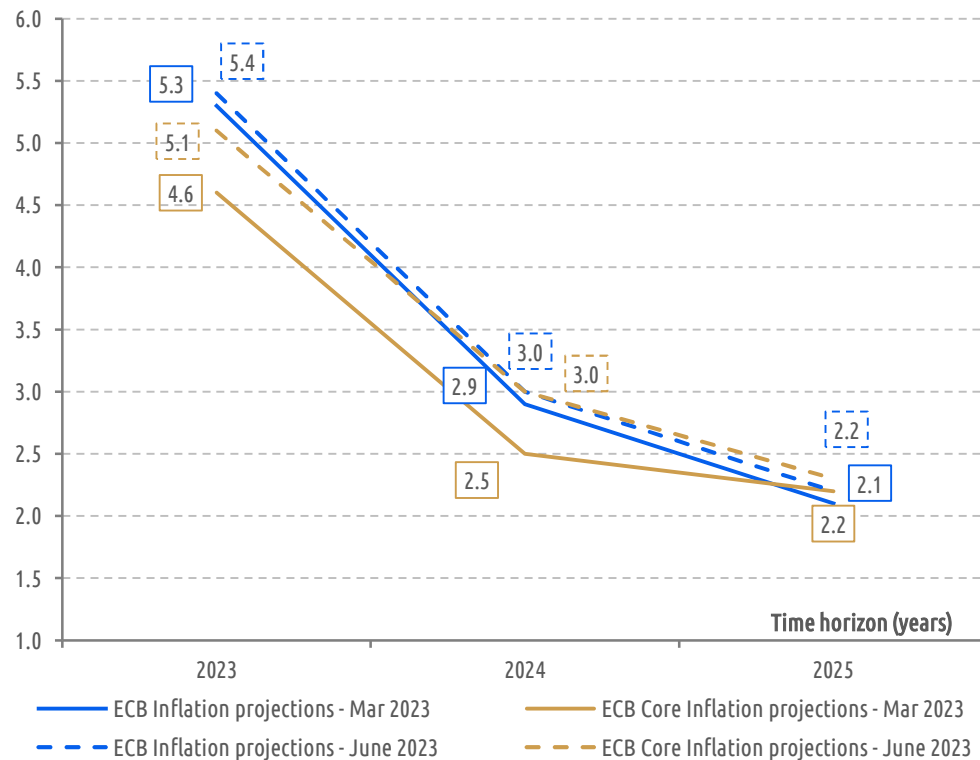


## **B In the Euro Area**

# The ECB has raised its interest rates by 25 bps in June as expected

President Lagarde signaled that despite a decrease of headline inflation over the last couple of months, further rises of interest rate are required to ensure a timely return of inflation to the 2% target.

CPI and core inflation expectations & projections as of July 2022 (%)



## Key considerations

- The Governing Council decided to raise the three key ECB interest rates by 25 basis points, following another 25-bps increase in May and several previous 50-bps increases.
- Looking ahead, ECB staff have slightly revised their inflation projections up. Headline inflation is now expected to average 5.4% in 2023 while core inflation should reach 5.1%.
- The interest rate on the main refinancing operations has been lifted-up to 4%. The benchmark deposit rate is set at 3.5%, its highest level since the 2008 global financial crisis
- The next meeting is set on June 15<sup>th</sup>

ECB economic projections as of 14 June 2023			
Indicator	2023	2024	2025
Change in real GDP	0.9	1.5	1.6
Unemployment rate	6.5	6.4	6.3
Inflation	5.4	3.0	2.3

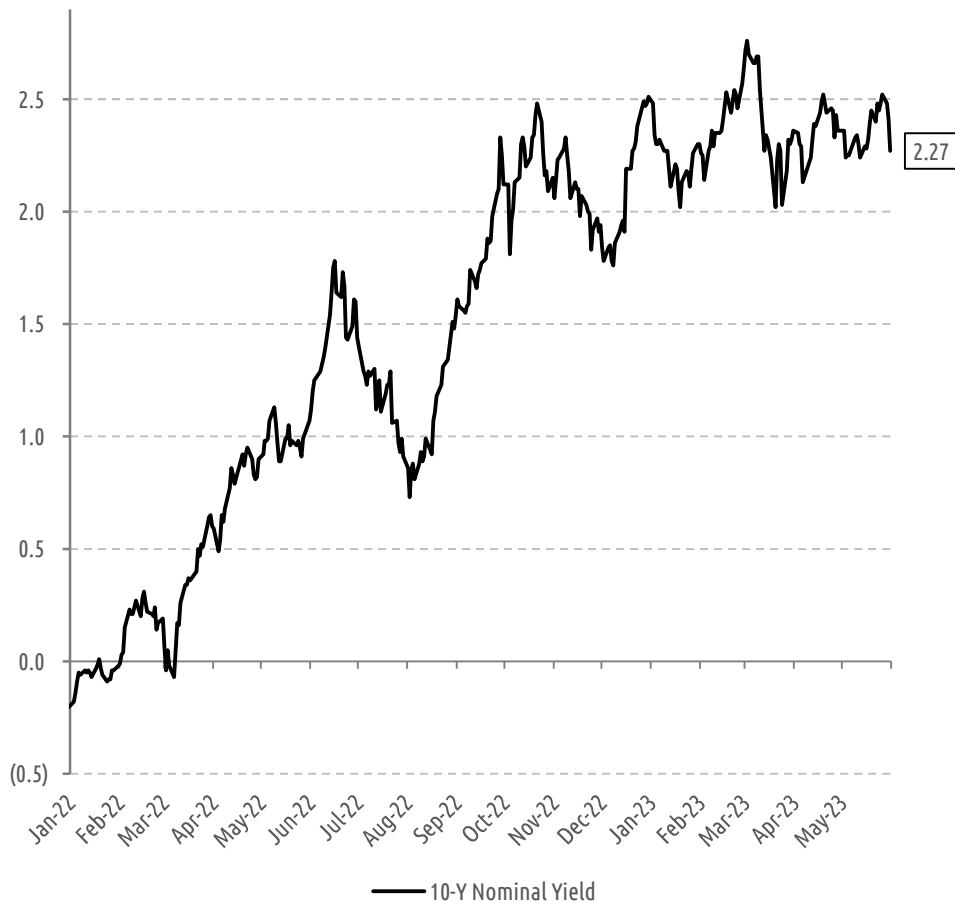
“Inflation has been coming down but is projected to be too high, for too long.”

CHRISTINE LAGARDE, MONTERAY POLICY DECISION, JUNE 15<sup>TH</sup> 2023

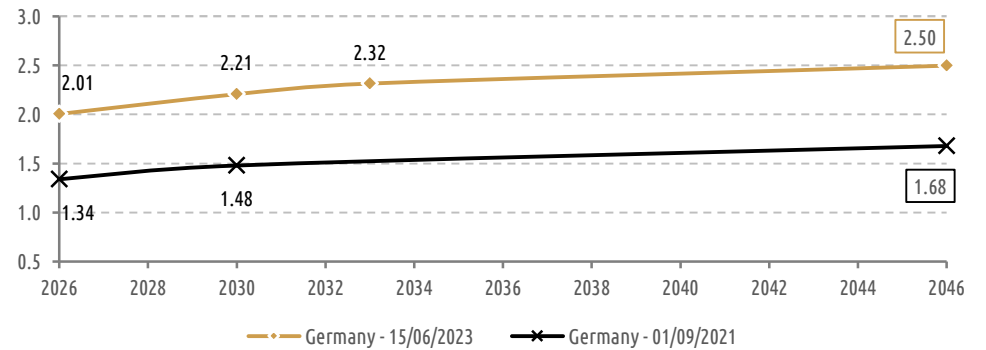
# In the Eurozone, the banking crisis had no lasting effect on long-term rates

Expected real rates, however, near zero in the longer run

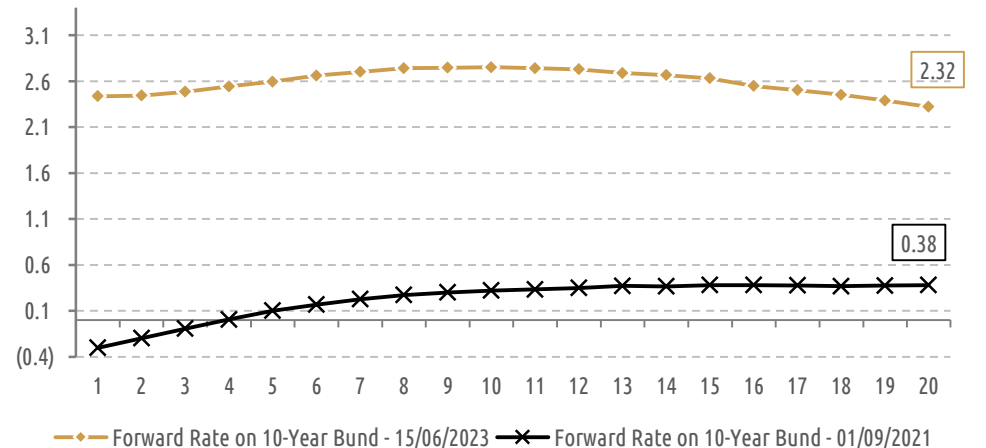
10-Y Nominal yield – German Bund



Inflation Expectations<sup>1</sup> - Germany (%)



Forward Rates on 10-Year German Bund (%)



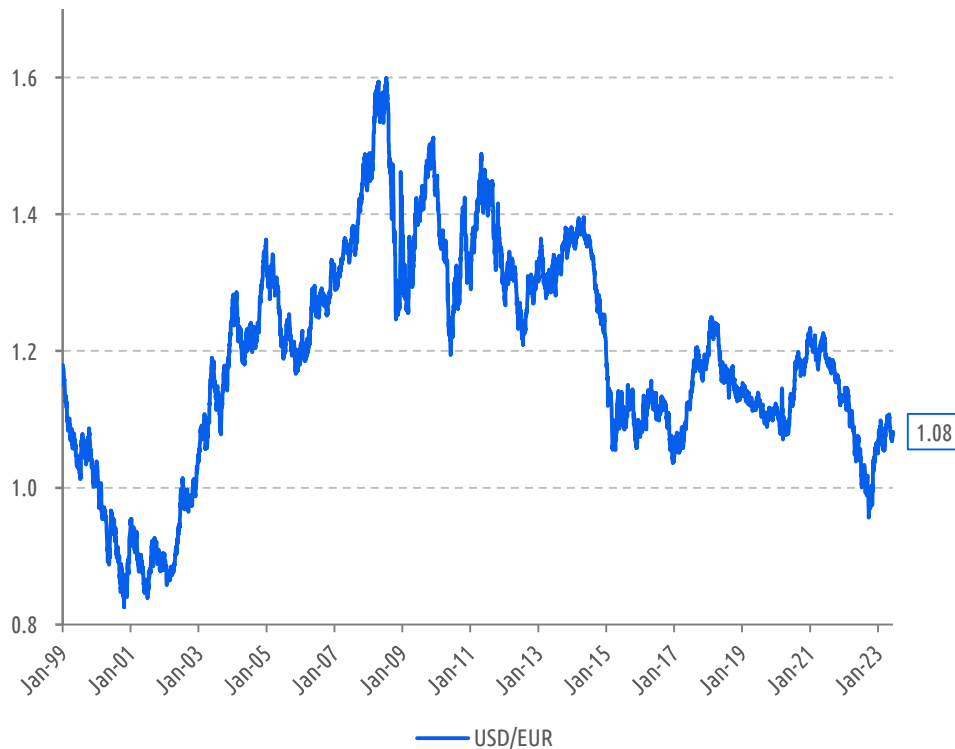
# The German yield curve is inverted for the first time since 2008, reflecting risk of recession/sluggish growth in 2023

**Bund 2Yr/10Yr Spread – Since Jan 1998**



# After 18 months of a weakening euro, the trend has reversed since October 2022

Nominal Foreign exchange rate in historical perspective – Since Jan. 1999

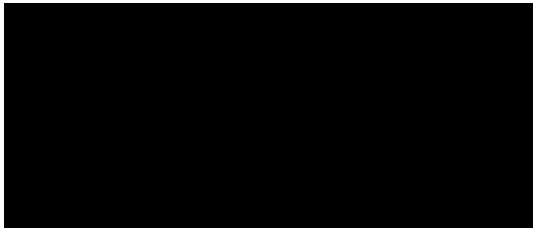


Nominal Foreign exchange rate in historical perspective – Since Jan. 2020



“The level of the euro matters significantly for imported inflation, [...]. A euro that is too weak would go against our price stability objective”

BANQUE DE FRANCE VILLEROY DE GALHAU, 06 MAY 2022

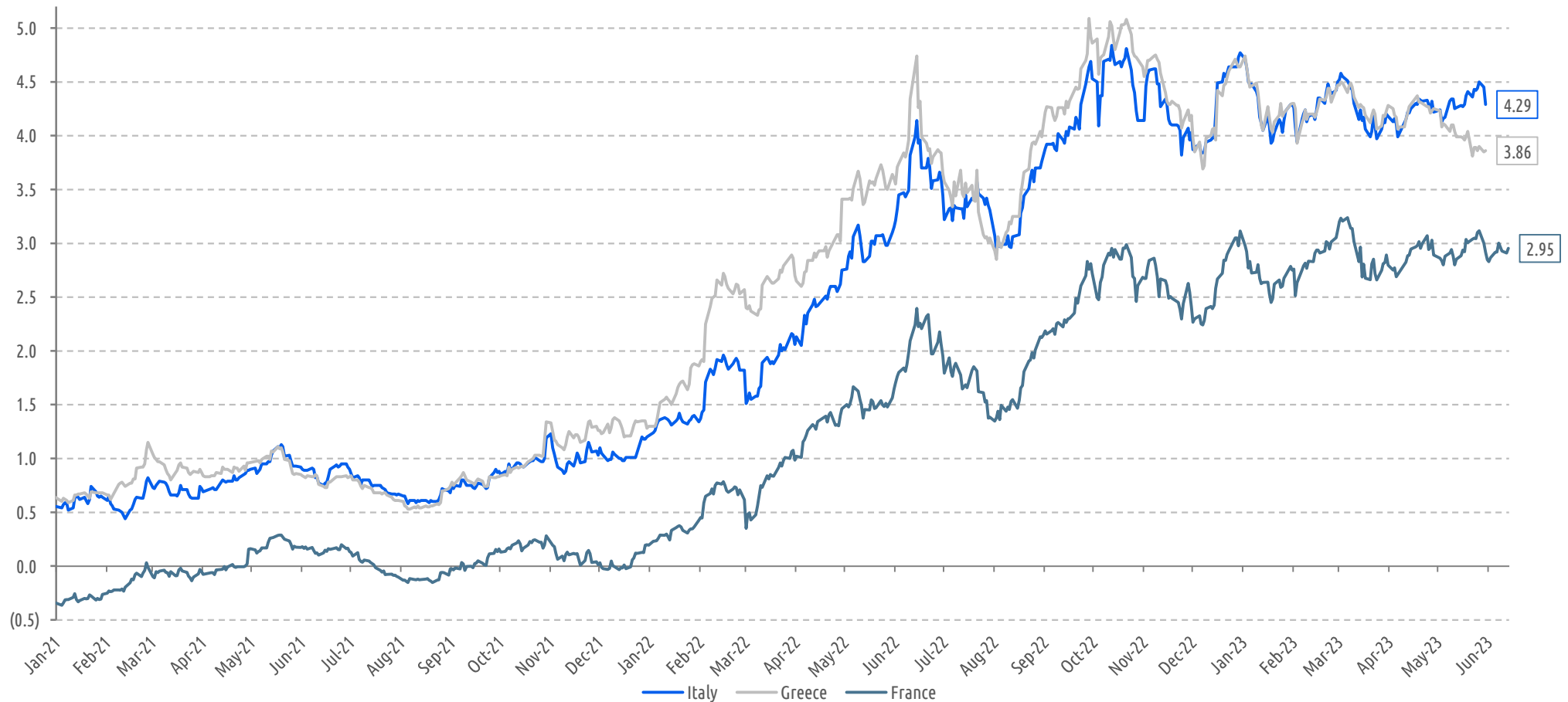


### **III Impact on yields and spreads**



# In Europe, sovereign yields remain at high levels

Italian, Greek and French 10-Y yields – Since Jan. 2021

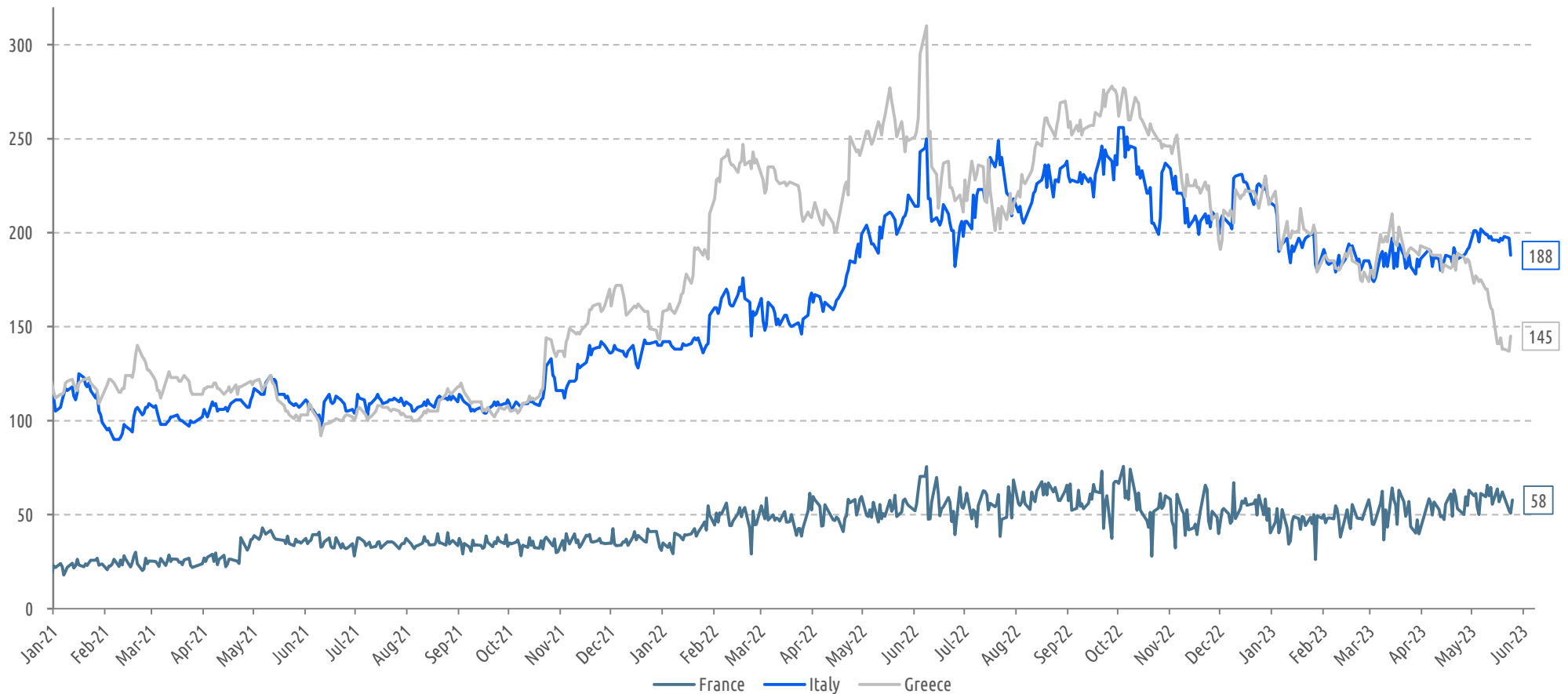


# Tensions on spreads have slightly eased off since their peak late 2022

In spite of new financial uncertainties. Greece in particular benefit from a strong revival of investors' confidence, especially compared to Italy.

Italian, Greek and French spreads over 10Y German bund – Since Jan. 2021

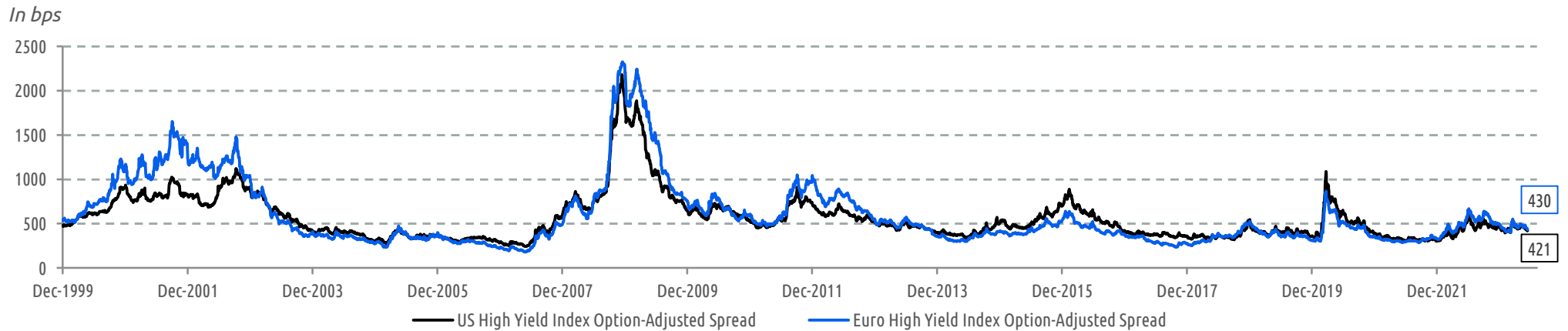
In bps



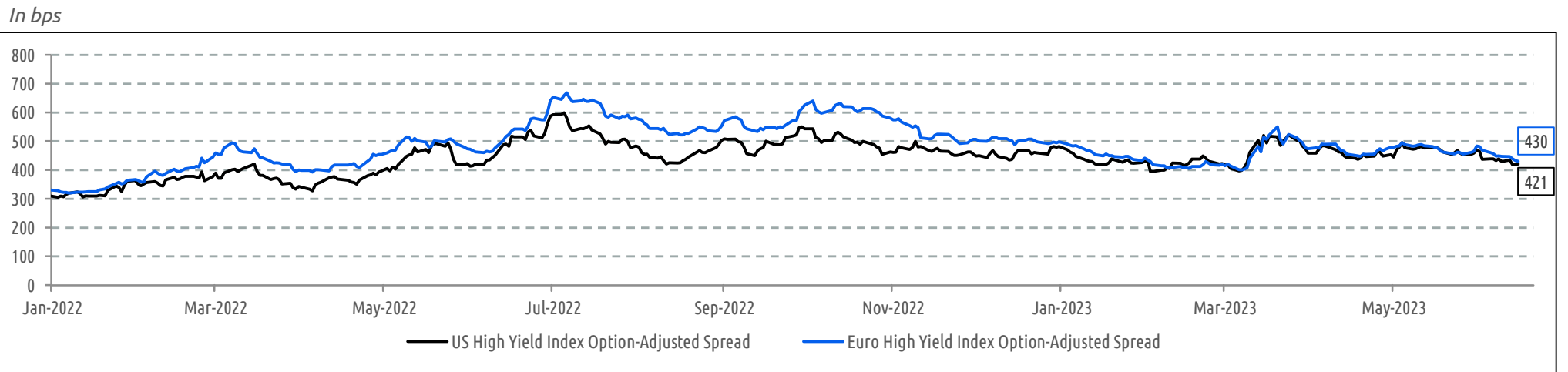
# High yield corporate bond spreads rose in the wake of SVB bankruptcy

Remaining above pre-war levels

High yield corporate bond spreads – Since 2000



High yield corporate bond spreads – Since 2022



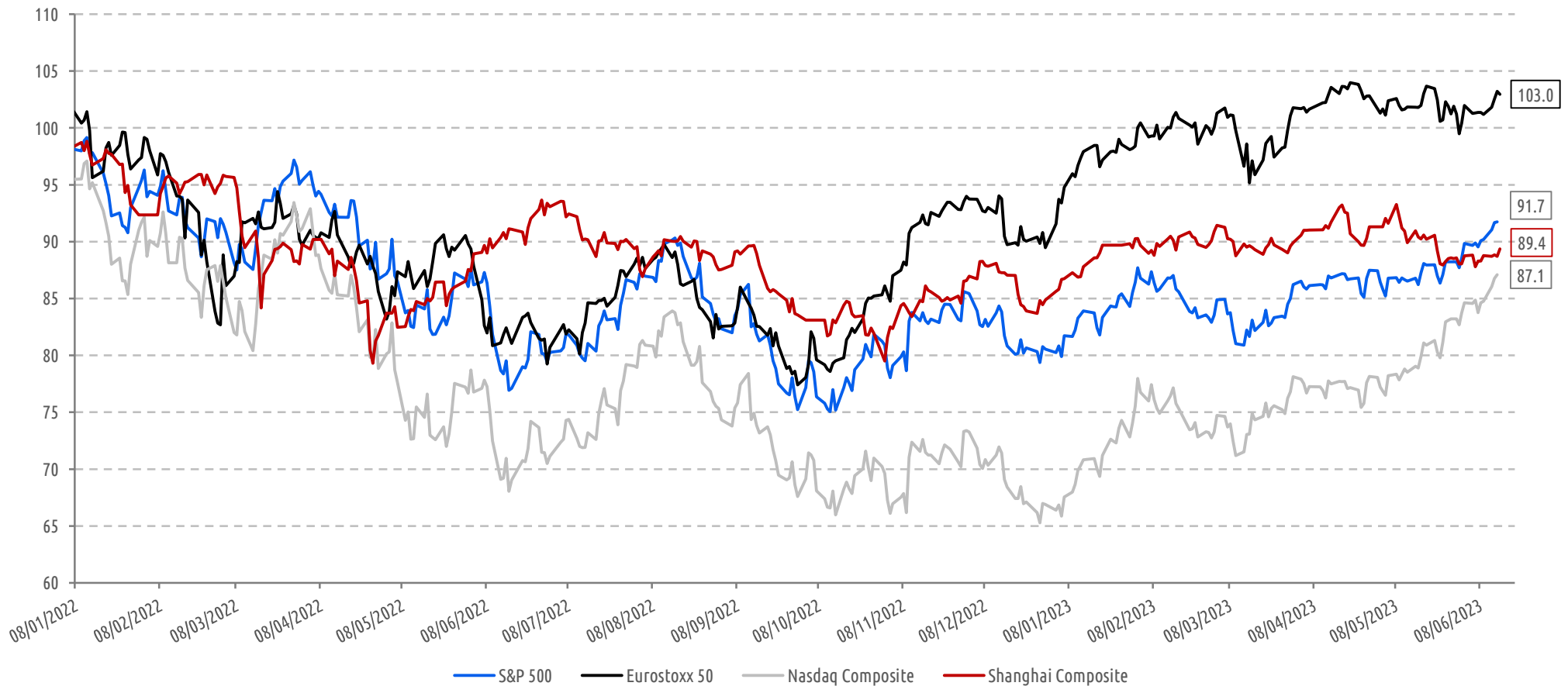


## **IV Impact on stock markets**

# Except for Eurostoxx 50, prices remain, below pre-war levels

The Nasdaq index is staging an impressive recovery (due to tech-hungry investors)

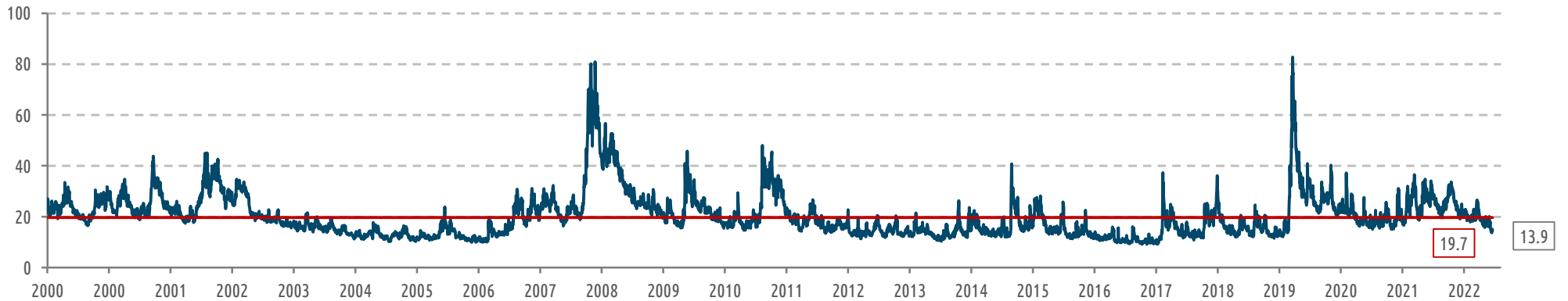
Nasdaq Composite, S&P 500, Shanghai Composite and Eurostoxx 50 indices – Jan. 2022 = 100



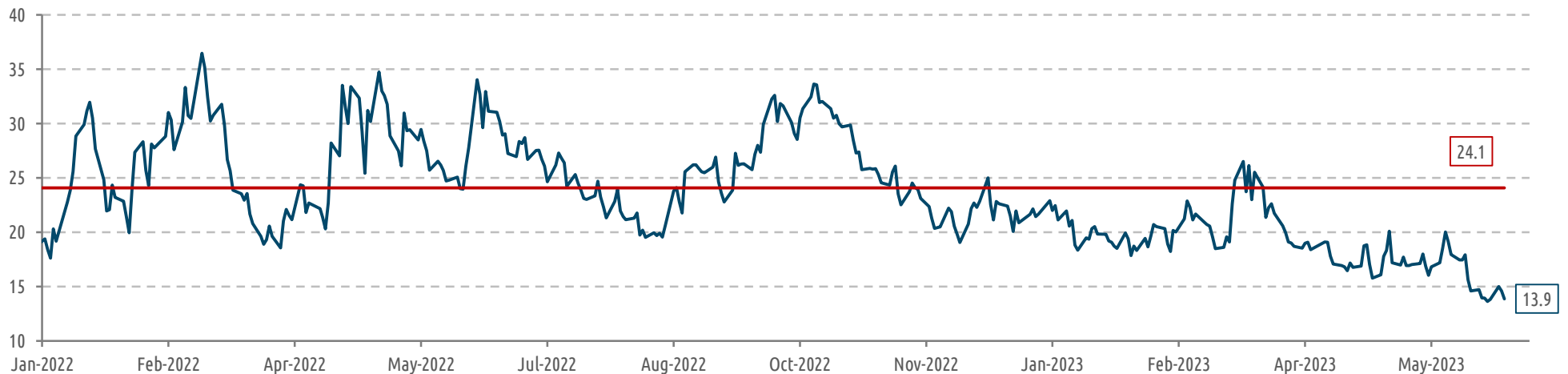
# Volatility on US financial markets has returned to its historical average level

Ignoring the consequences of the banking crisis.

VIX index – Since 2000



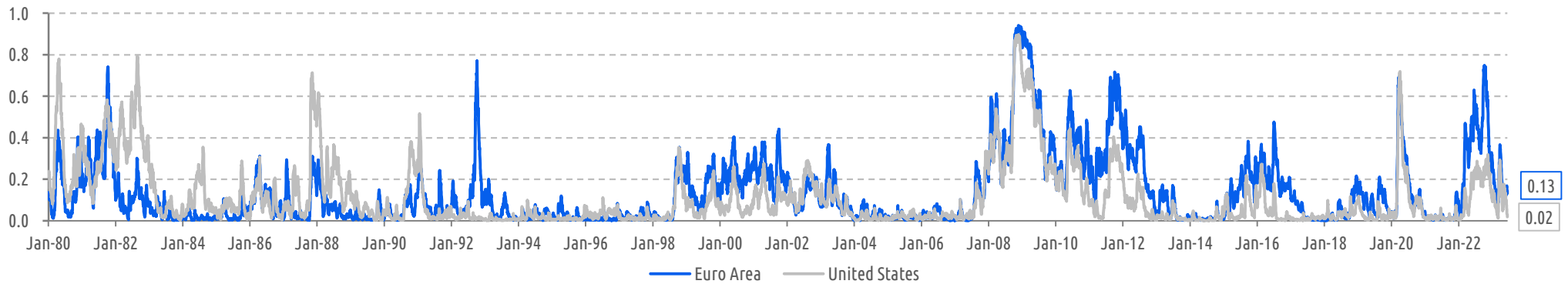
VIX index – Since 2022



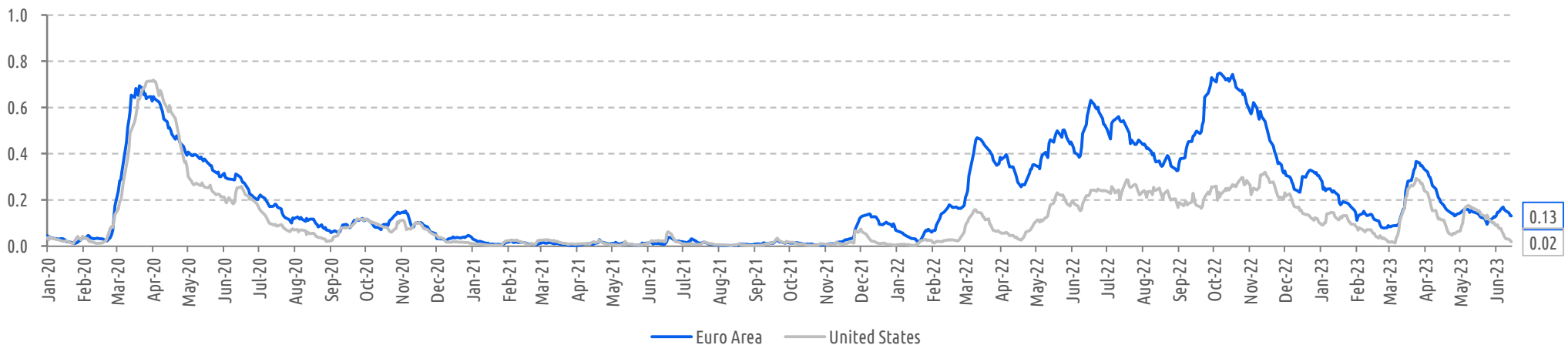
# Financial stress indicators returned to pre-war levels

The index, however, is higher in Europe than in the US.

**Composite Indicator of Systemic Stress (daily) – Since Jan. 1980**



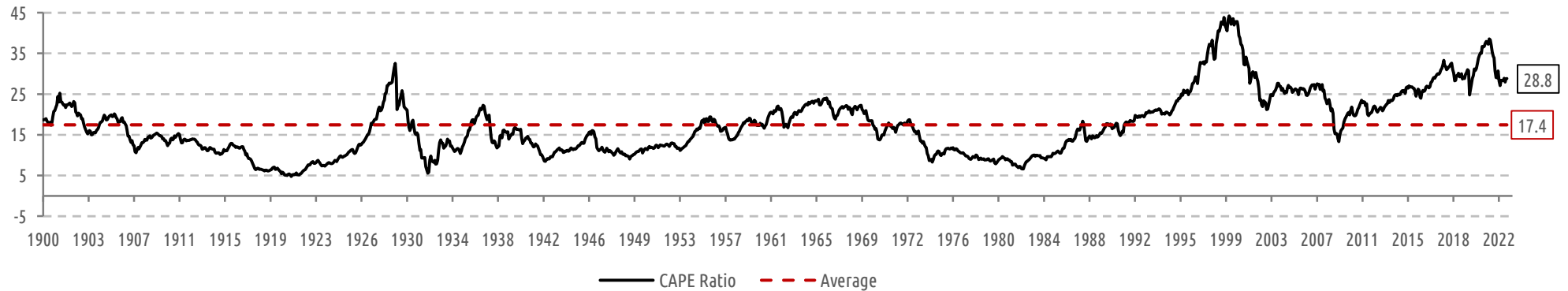
**Composite Indicator of Systemic Stress (daily) – Since Jan. 2020**



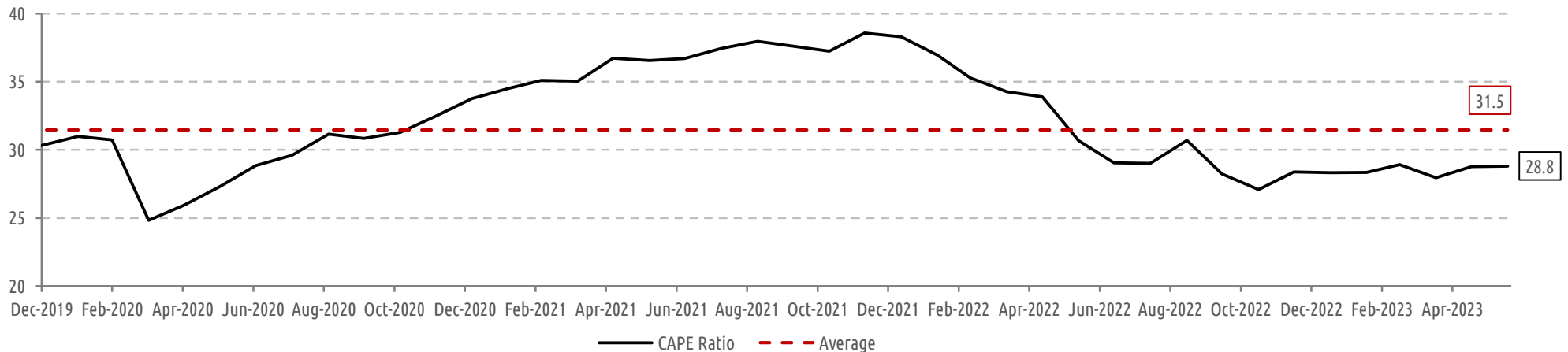
# US Shiller Cyclically Adjusted Price to Earnings ratio (CAPE ratio)<sup>1</sup>

Shiller CAPE ratio remains at record high level in historical perspective but still below pre-crisis level

Cyclically Adjusted Price Earnings ratio – Since 1900



Cyclically Adjusted Price Earnings ratio – Since 2020

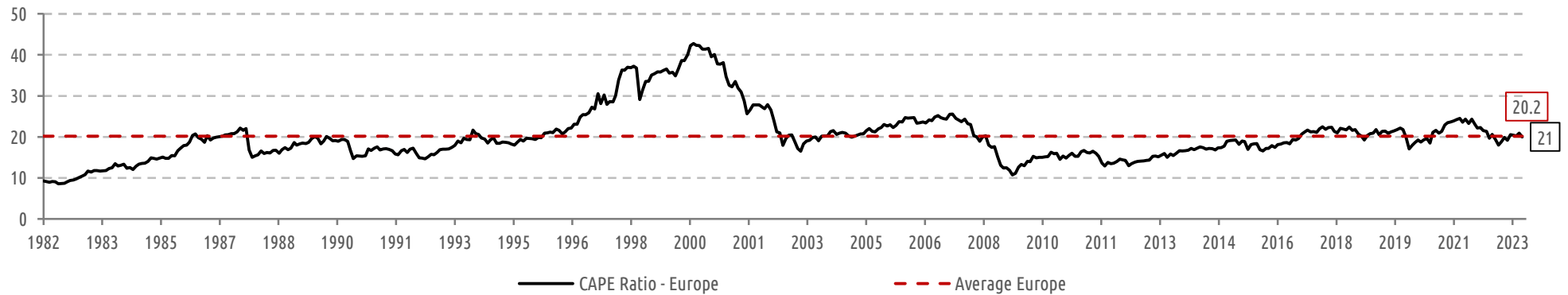




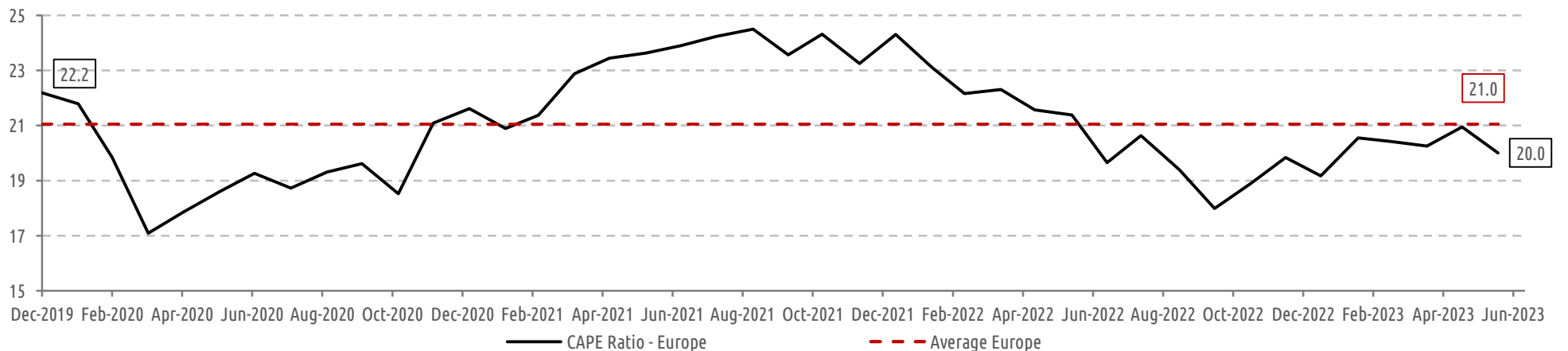
# Shiller CAPE ratio in Europe

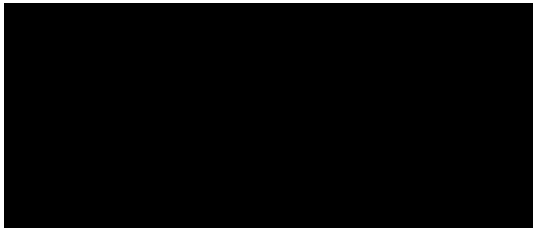
Shiller CAPE ratio is still close to its pre-Covid level and to its historical average

Cyclically Adjusted Price Earnings ratio – Since 1982



Cyclically Adjusted Price Earnings ratio – Since 2020





## V Appendix

## Links to DBnomics data

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4	Quarterly GDP growth (% change over the previous period) – Canada	<a href="https://data.oecd.org/kei/naexkp01.can.gp.q">OECD/KEI/NAEXKP01.CAN.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Germany	<a href="https://data.oecd.org/kei/naexkp01.deu.gp.q">OECD/KEI/NAEXKP01.DEU.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Eurozone	<a href="https://data.oecd.org/kei/naexkp01.ea19.gp.q">OECD/KEI/NAEXKP01.EA19.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – France	<a href="https://data.oecd.org/kei/naexkp01.fra.gp.q">OECD/KEI/NAEXKP01.FRA.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – UK	<a href="https://data.oecd.org/kei/naexkp01.gbr.gp.q">OECD/KEI/NAEXKP01.GBR.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Italy	<a href="https://data.oecd.org/kei/naexkp01.ita.gp.q">OECD/KEI/NAEXKP01.ITA.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Japan	<a href="https://data.oecd.org/kei/naexkp01.jpn.gp.q">OECD/KEI/NAEXKP01.JPN.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – US	<a href="https://data.oecd.org/kei/naexkp01.usa.gp.q">OECD/KEI/NAEXKP01.USA.GP.Q</a>
4	Yearly GDP growth rate (YoY % change) – Canada	<a href="https://www.imf.org/en/Data/2023-04/CAN.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/CAN.NGDP_RPCH.pcent_change</a>
4	Yearly GDP growth rate (YoY % change) – Germany	<a href="https://www.imf.org/en/Data/2023-04/DEU.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/DEU.NGDP_RPCH.pcent_change</a>
4	Yearly GDP growth rate (YoY % change) – France	<a href="https://www.imf.org/en/Data/2023-04/FRA.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/FRA.NGDP_RPCH.pcent_change</a>
4	Yearly GDP growth rate (YoY % change) – UK	<a href="https://www.imf.org/en/Data/2023-04/GBR.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/GBR.NGDP_RPCH.pcent_change</a>
4	Yearly GDP growth rate (YoY % change) – Italy	<a href="https://www.imf.org/en/Data/2023-04/ITA.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/ITA.NGDP_RPCH.pcent_change</a>
4	Yearly GDP growth rate (YoY % change) – Japan	<a href="https://www.imf.org/en/Data/2023-04/JPN.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/JPN.NGDP_RPCH.pcent_change</a>

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4	Yearly GDP growth rate (YoY % change) – US	<a href="https://www.imf.org/en/Data/2023/04/USA.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/USA.NGDP_RPCH.pcent_change</a>
4	Yearly GDP growth rate (YoY % change) – Eurozone	<a href="https://www.imf.org/en/Data/2023/04/163.NGDP_RPCH.pcent_change">IMF/WEOAGG:2023-04/163.NGDP_RPCH.pcent_change</a>
4	OECD Weekly growth tracker – Eurozone	<a href="https://www.oecd.org/gdp/growth/W.Eurozone.tracker_yoy">OECD/GDP_GROWTH/W.Eurozone.tracker_yoy</a>
4	OECD Weekly growth tracker – United States	<a href="https://www.oecd.org/gdp/growth/W.USA.tracker_yoy">OECD/GDP_GROWTH/W.USA.tracker_yoy</a>
5	Quarterly GDP growth (% change over the previous period) – China	<a href="https://www.oecd.org/dp/live/chn.qgdp.tot.pc_chgpp.q">OECD/DP_LIVE/CHN.QGDP.TOT.PC_CHGPP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – Brazil	<a href="https://www.oecd.org/kei/naexkp01.bra.gp.q">OECD/KEI/NAEXKP01.BRA.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – Mexico	<a href="https://www.oecd.org/kei/naexkp01.mex.gp.q">OECD/KEI/NAEXKP01.MEX.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – South Africa	<a href="https://www.oecd.org/kei/naexkp01.zaf.gp.q">OECD/KEI/NAEXKP01.ZAF.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – Indonesia	<a href="https://www.oecd.org/kei/naexkp01.idn.gp.q">OECD/KEI/NAEXKP01.IDN.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – India	<a href="https://www.oecd.org/kei/naexkp01.ind.gp.q">OECD/KEI/NAEXKP01.IND.GP.Q</a>
5	Yearly GDP growth rate (YoY % change) – Brazil	<a href="https://www.imf.org/en/Data/2023/04/BRA.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/BRA.NGDP_RPCH.pcent_change</a>
5	Yearly GDP growth rate (YoY % change) – Mexico	<a href="https://www.imf.org/en/Data/2023/04/MEX.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/MEX.NGDP_RPCH.pcent_change</a>
5	Yearly GDP growth rate (YoY % change) – South Africa	<a href="https://www.imf.org/en/Data/2023/04/ZAF.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/ZAF.NGDP_RPCH.pcent_change</a>
5	Yearly GDP growth rate (YoY % change) – Indonesia	<a href="https://www.imf.org/en/Data/2023/04/IDN.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/IDN.NGDP_RPCH.pcent_change</a>

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5	Yearly GDP growth rate (YoY % change) – India	<a href="https://data.dbnomics.com/IMF/WEO:2023-04/IND.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/IND.NGDP_RPCH.pcent_change</a>
5	Yearly GDP growth rate (YoY % change) – China	<a href="https://data.dbnomics.com/IMF/WEO:2023-04/CHN.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/CHN.NGDP_RPCH.pcent_change</a>
5	OECD Weekly growth tracker – Brazil	<a href="https://data.dbnomics.com/OECD/GDP_GROWTH/W.BRA.tracker_yoy">OECD/GDP_GROWTH/W.BRA.tracker_yoy</a>
5	OECD Weekly growth tracker – Mexico	<a href="https://data.dbnomics.com/OECD/GDP_GROWTH/W.MEX.tracker_yoy">OECD/GDP_GROWTH/W.MEX.tracker_yoy</a>
5	OECD Weekly growth tracker – South Africa	<a href="https://data.dbnomics.com/OECD/GDP_GROWTH/W.ZAF.tracker_yoy">OECD/GDP_GROWTH/W.ZAF.tracker_yoy</a>
5	OECD Weekly growth tracker – Indonesia	<a href="https://data.dbnomics.com/OECD/GDP_GROWTH/W.IDN.tracker_yoy">OECD/GDP_GROWTH/W.IDN.tracker_yoy</a>
5	OECD Weekly growth tracker – India	<a href="https://data.dbnomics.com/OECD/GDP_GROWTH/W.IND.tracker_yoy">OECD/GDP_GROWTH/W.IND.tracker_yoy</a>
6	General government debt - Germany	<a href="https://data.dbnomics.com/Eurostat/gov_10q_ggdebt/Q.GD.S13.PC_GDP.DE">Eurostat/gov_10q_ggdebt/Q.GD.S13.PC_GDP.DE</a>
6	General government debt – France	<a href="https://data.dbnomics.com/Eurostat/gov_10q_ggdebt/Q.GD.S13.PC_GDP.FR">Eurostat/gov_10q_ggdebt/Q.GD.S13.PC_GDP.FR</a>
6	General government debt – United Kingdom	<a href="https://data.dbnomics.com/ONS/EDP2/YEQJ.Q">ONS/EDP2/YEQJ.Q</a>
6	General government debt – Italy	<a href="https://data.dbnomics.com/Eurostat/gov_10dd_edpt1/A.PC_GDP.S13.GD.IT">Eurostat/gov_10dd_edpt1/A.PC_GDP.S13.GD.IT</a>
6	General government debt – United States	<a href="https://data.dbnomics.com/OECD/DP_LIVE/USA.GGDEBT.TOT.PC_GDP.A">OECD/DP_LIVE/USA.GGDEBT.TOT.PC_GDP.A</a>
6	General government deficit – Germany	<a href="https://data.dbnomics.com/Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.DE">Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.DE</a>
6	General government deficit – France	<a href="https://data.dbnomics.com/Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.FR">Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.FR</a>

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6	General government deficit – Italy	<a href="https://data.oecd.org/govt-debt/ITA.GGNLEND.TOT.PC.GDP.A">OECD/DP_LIVE/ITA.GGNLEND.TOT.PC_GDP.A</a>
6	General government deficit – United States	<a href="https://www.bea.gov/data/government/deficit/BEA/NIPA-T30100/AD01RC-Q">BEA/NIPA-T30100/AD01RC-Q</a>
7	Consumer confidence index – United States	<a href="https://data.oecd.org/consumer-confidence/CLI/CSCICP03.USA.M">OECD/MEI_CLI/CSCICP03.USA.M</a>
7	Consumer confidence index – Germany	<a href="https://data.oecd.org/consumer-confidence/CLI/CSCICP03.DEU.M">OECD/MEI_CLI/CSCICP03.DEU.M</a>
7	Consumer confidence index – France	<a href="https://data.oecd.org/consumer-confidence/CLI/CSCICP03.FRA.M">OECD/MEI_CLI/CSCICP03.FRA.M</a>
7	Consumer confidence index – United Kingdom	<a href="https://data.oecd.org/consumer-confidence/CLI/CSCICP03.GBR.M">OECD/MEI_CLI/CSCICP03.GBR.M</a>
7	Business confidence index – United States	<a href="https://data.oecd.org/business-confidence/CLI/BSCICP03.USA.M">OECD/MEI_CLI/BSCICP03.USA.M</a>
7	Business confidence index – Germany	<a href="https://data.oecd.org/business-confidence/CLI/BSCICP03.DEU.M">OECD/MEI_CLI/BSCICP03.DEU.M</a>
7	Business confidence index – France	<a href="https://data.oecd.org/business-confidence/CLI/BSCICP03.FRA.M">OECD/MEI_CLI/BSCICP03.FRA.M</a>
7	Business confidence index – United Kingdom	<a href="https://data.oecd.org/business-confidence/CLI/BSCICP03.GBR.M">OECD/MEI_CLI/BSCICP03.GBR.M</a>
9	Natural Gas (Dutch TTF) prices in historical perspective (€/MWh)	<a href="https://www.ice.com/markets/energy/natural-gas/futures/D.5477499">ICE/DUTCH_TTF_GAS_FUTURES/D.5477499</a>
10	% of EU business reporting shortages of materials and equipment in the construction industry as a limiting production factor	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=ec.construction.tot.2.f55.eu.m">EC/CONSTRUCTION/TOT.2.F55.EU.M</a>
11	Beveridge curve – Euro Area (Q1-17 – Q2-22), Quarterly	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=une_rt_q.nsa.y20-64.pc.pop.t.ea19">Eurostat/une_rt_q/Q.NSA.Y20-64.PC_POP.T.EA19</a> <a href="https://ec.europa.eu/eurostat/tgm/table.do?code=ivs_q.nace2/q.nsa.b-s.total.jobrate.ea19">Eurostat/ivs_q_nace2/Q.NSA.B-S.TOTAL.JOBRATE.EA19</a>

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11	Civilian unemployment rate – Total – USA - Seasonally adjusted	<a href="https://www.bls.gov/ltn/lns14000000">BLS/ltn/LNS14000000</a>
11	Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=unem_1000000000&amp;plugin=1">Eurostat/ei_lmhr_m/M.PC_ACT.SA.LM-UN-T-TOT.EA20</a>
12	Beveridge curve - France (Q1-17 – Q2-22), Quarterly	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=jvs_q_nace2/Q.NSA.B-S.GE10.JOBRATE.FR">Eurostat/jvs_q_nace2/Q.NSA.B-S.GE10.JOBRATE.FR</a> <a href="https://www.insee.fr/fr/statistiques/1214147?geo=FRANCE&amp;ts=2022-02-28&amp;ds=CHOMAGE-TRIM-NATIONAL&amp;ds2=T.CTTXC.TAUX.FR-D976.0.00-.POURCENT.CVS.FALSE">INSEE/CHOMAGE-TRIM-NATIONAL/T.CTTXC.TAUX.FR-D976.0.00-.POURCENT.CVS.FALSE</a>
12	Unemployment according to ILO definition - Total – France – Seasonally adjusted	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=unem_1000000000&amp;plugin=1">Eurostat/une_rt_m/M.SA.TOTAL.PC_ACT.T.FR</a>
12	Unemployment according to ILO definition - Total – Germany – Seasonally adjusted	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=unem_1000000000&amp;plugin=1">Eurostat/une_rt_m/M.SA.TOTAL.PC_ACT.T.DE</a>
13	Wage growth tracker – France (Quarterly)	<a href="https://www.insee.fr/fr/statistiques/1214147?geo=FRANCE&amp;ts=2022-02-28&amp;ds=ICT-2016&amp;ds2=T.BDM_EUR.ICT.A21-BTN.INDICE.SSE.FE.SO.CVS-CJO.2016">INSEE/ICT-2016/T.BDM_EUR.ICT.A21-BTN.INDICE.SSE.FE.SO.CVS-CJO.2016</a>
15	CPI Inflation (YoY % change) – United States	<a href="https://www.bls.gov/cu/cusr0000sa0">BLS/cu/CUSR0000SA0</a> <a href="https://www.bls.gov/cu/cusr0000sa0l1e">BLS/cu/CUSR0000SA0L1E</a>
15	CPI Inflation (YoY % change) – Eurozone	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.CP00.EA">Eurostat/prc_hicp_manr/M.RCH_A.CP00.EA</a> <a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.EA">Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.EA</a>
15	CPI Inflation (YoY % change) – France	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.CP00.FR">Eurostat/prc_hicp_manr/M.RCH_A.CP00.FR</a> <a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.FR">Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.FR</a>
15	CPI Inflation (YoY % change) – Germany	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.CP00.DE">Eurostat/prc_hicp_manr/M.RCH_A.CP00.DE</a> <a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.DE">Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.DE</a>
15	CPI Inflation (YoY % change) – Italy	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.CP00.IT">Eurostat/prc_hicp_manr/M.RCH_A.CP00.IT</a> <a href="https://ec.europa.eu/eurostat/tgm/table.do?code=prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.IT">Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.IT</a>
15	CPI Inflation (YoY % change) – United Kingdom	<a href="https://www.ons.gov.uk/methodologies/priceindex/tables/2023/d7g7m">ONS/MM23/D7G7.M</a> <a href="https://www.ons.gov.uk/methodologies/priceindex/tables/2023/dk08m">ONS/MM23/DK08.M</a>
15	CPI Inflation (YoY % change) – Japan	<a href="https://www.stat.go.jp/data/cpi/">STATJP/CPIm/001</a> <a href="https://www.stat.go.jp/data/cpi/">STATJP/CPIm/740</a>
16	CPI Inflation (YoY % change) - Brazil	<a href="https://data.oecd.org/kei/cpaltt01-bra-gy-m">OECD/KEI/CPALTT01.BRA.GY.M</a>
16	CPI Inflation (YoY % change) – China	<a href="https://data.oecd.org/kei/cpaltt01-chn-gy-m">OECD/KEI/CPALTT01.CHN.GY.M</a>

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16	CPI Inflation (YoY % change) – India	<a href="https://data.oecd.org/kei/cpaltt01.ind.gy.m">OECD/KEI/CPALTT01.IND.GY.M</a>
16	CPI Inflation (YoY % change) – Mexico	<a href="https://data.oecd.org/kei/cpaltt01.mex.gy.m">OECD/KEI/CPALTT01.MEX.GY.M</a>
16	CPI Inflation (YoY % change) – South Africa	<a href="https://data.oecd.org/kei/cpaltt01.zaf.gy.m">OECD/KEI/CPALTT01.ZAF.GY.M</a>
17	Quarterly implied GDP deflator – Germany	<a href="https://ec.europa.eu/eurostat/tgm/table.do?tab=table&amp;init=1&amp;language=en&amp;code=namq_10_gdp/Q.PD_PCH_SM_NAC.SCA.B1GQ.DE">Eurostat/namq_10_gdp/Q.PD_PCH_SM_NAC.SCA.B1GQ.DE</a>
17	Quarterly implied GDP deflator – France	<a href="https://ec.europa.eu/eurostat/tgm/table.do?tab=table&amp;init=1&amp;language=en&amp;code=namq_10_gdp/Q.PD_PCH_SM_NAC.SCA.B1GQ.FR">Eurostat/namq_10_gdp/Q.PD_PCH_SM_NAC.SCA.B1GQ.FR</a>
17	Quarterly implied GDP deflator - United Kingdom	<a href="https://www.ons.gov.uk/economy/inflationandcosts/quarterlyimpliedgdpdeflator">ONS/QNA/IHYU.Q</a>
17	Quarterly implied GDP deflator - United States	<a href="https://www.bea.gov/nipa/t10109/a191rd-q">BEA/NIPA-T10109/A191RD-Q</a>
20	Personal consumption expenditures (PCE)	<a href="https://www.bea.gov/nipa/t20804/dpcerg-m">BEA/NIPA-T20804/DPCERG-M</a>
23	10-Y Nominal yield – US	<a href="https://www.federalreserve.gov/h15/riflgf10_n_b">FED/H15/RIFLGFCY10_N.B</a>
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27	10-Y Nominal yield – German Bund	<a href="https://www.buba.de/bbk01/wt1010">BUBA/BBK01/WT1010</a>
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27	Forward Rates on 10-Year German Bund	<a href="https://www.buba.de/bbsis/d.i.zar.zi.eur.s1311.b.a604.r10xx.r.a.a.z.z.a">BUBA/BBSIS/D.I.ZAR.ZI.EUR.S1311.B.A604.R10XX.R.A.A. Z. Z.A</a>



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28	Nominal Foreign exchange rate in historical perspective	<a href="https://dbnomics.com/BUBA/BBEX3/D.USD.EUR.BB.AC.000">BUBA/BBEX3/D.USD.EUR.BB.AC.000</a>
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