

CEPREMAP / DBNOMICS

# Macroeconomic Outlook – July 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

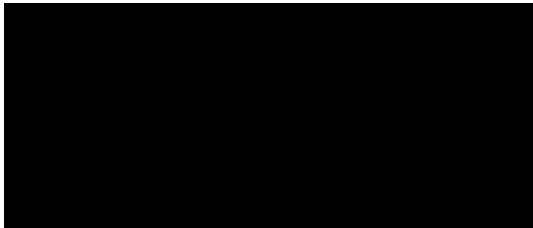
- Markets are following in parallel inflation, financial and labor market trends.
- In response to inflationary pressures, monetary policy has been tightened up to levels unheard of for the last 20 years, the question being up to which point in 2023. Financial stress arising from the bankruptcy of Silicon Valley Bank has put into question the extent to which monetary tightening should continue.
- The fight against inflation may be tougher in the US than in Europe. In the US, policymakers must fight against demand/supply disequilibria and the risk of labor market overheating while in the Euro Area the fight should be mostly focused on core inflation.
- 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.
- Sovereign yields are at a high level in the main European countries as the uncertainty about inflation remains.
- 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.

# Table of Contents

I	GROWTH AND INFLATION IN SELECTED G20 COUNTRIES	2
A	<a href="#">The growth slowdown</a>	3
B	<a href="#">The seeds of inflation</a>	8
C	<a href="#">Inflation unbound</a>	14
II	MONETARY POLICY	18
A	<a href="#">In the US</a>	19
B	<a href="#">In the Euro Area</a>	24
III	IMPACT ON YIELDS AND SPREADS	29
IV	IMPACT ON STOCK MARKETS	33
V	APPENDIX	40



# 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 and the Euro Area, 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

Forecast from OECD Global Economic Outlook, June 2023

### 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	1.9	2.2	0.5	0.7	0.8	0.4	(0.1)	(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	0.1
<b>USA</b>	1.5	1.7	0.7	1.7	(0.4)	(0.1)	0.8	0.6	0.5
<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

## Growth in emerging countries

OECD has lifted up emerging market growth, especially China, India and Indonesia.

### 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

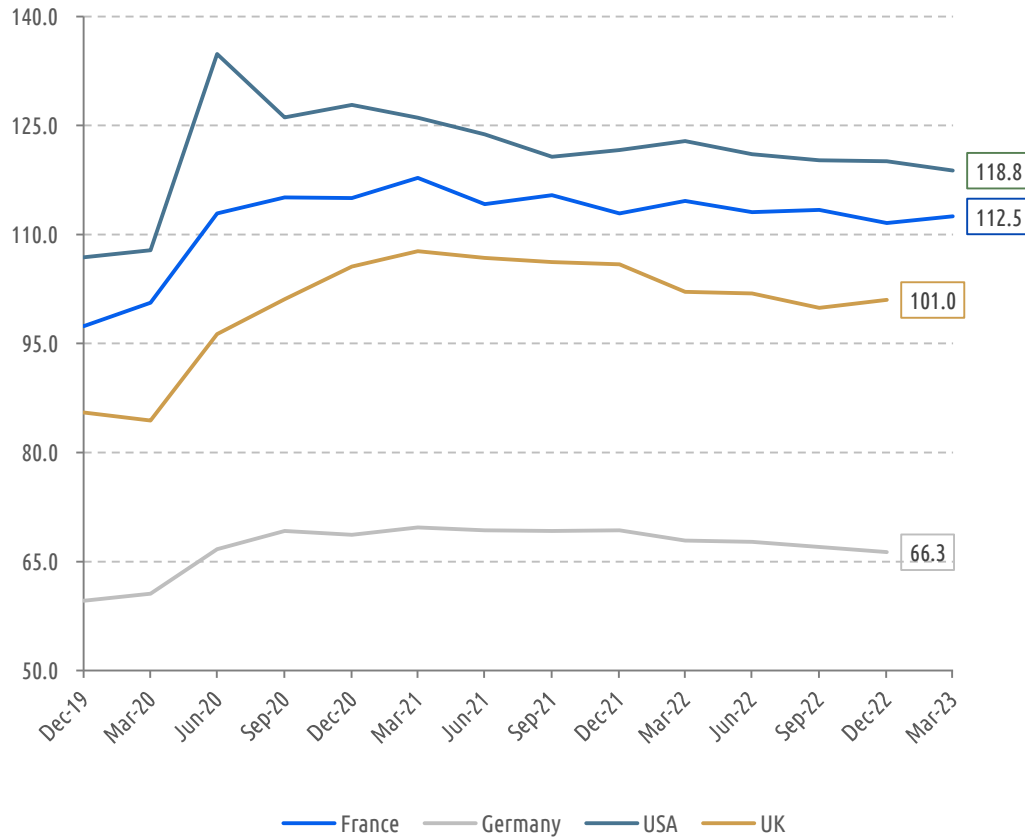
Forecast from OECD Global Economic Outlook June 2023



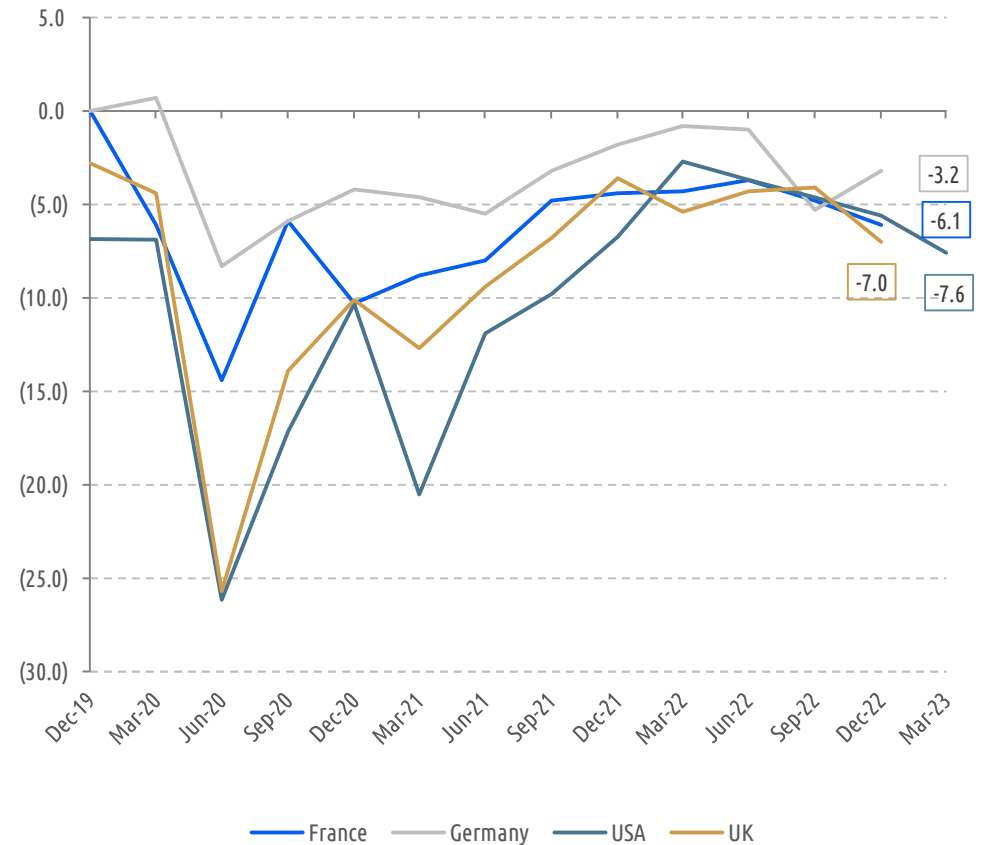
# Government debts have reached a new plateau in the G4 countries<sup>1</sup>

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**



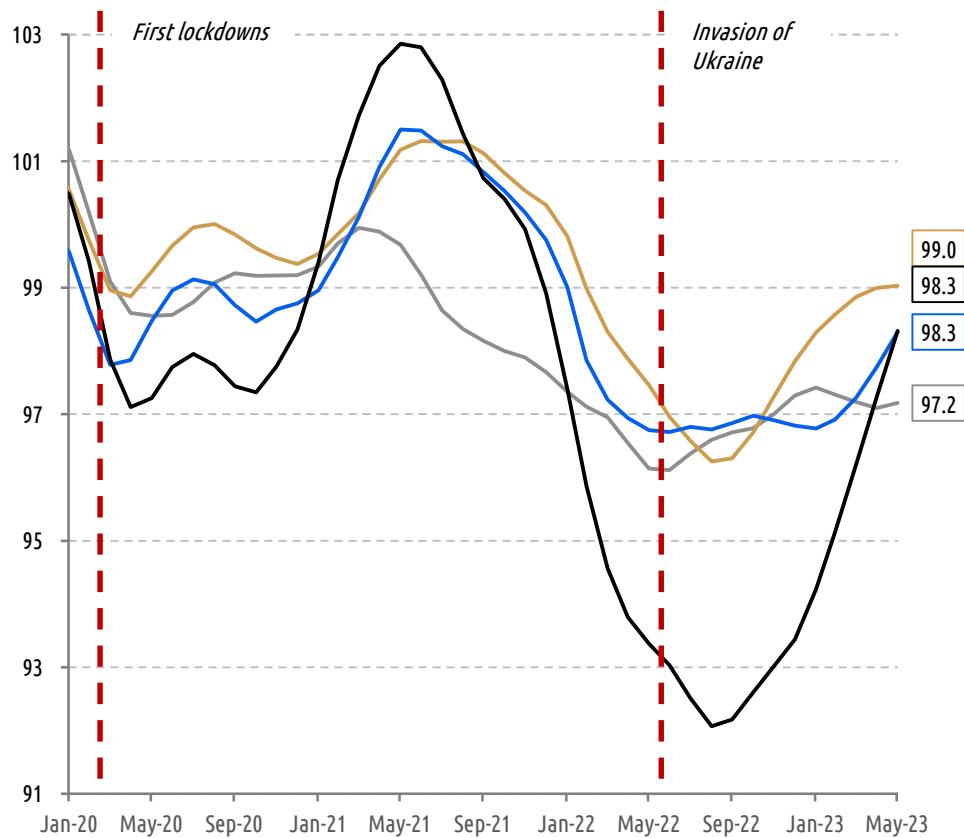
**General Government deficit (% of GDP) – Since 2020**



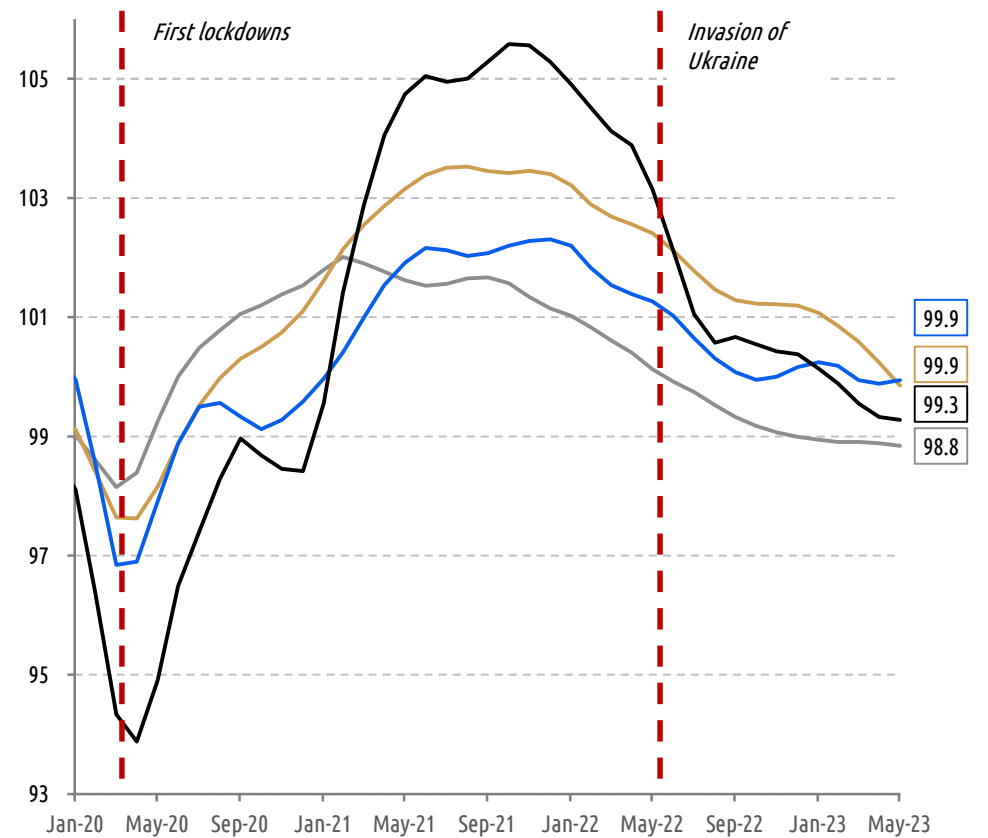
# Consumer confidence increased in May for the main European countries

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

Consumer confidence indicator – Since Jan. 2020

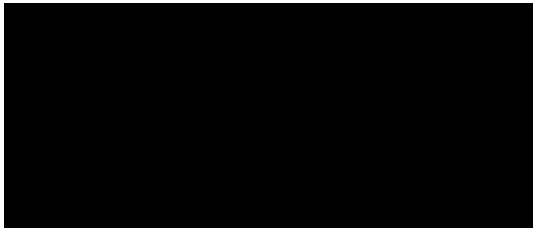


Business confidence indicator – Since Jan. 2020



— USA — Germany — France — UK

— USA — Germany — France — UK

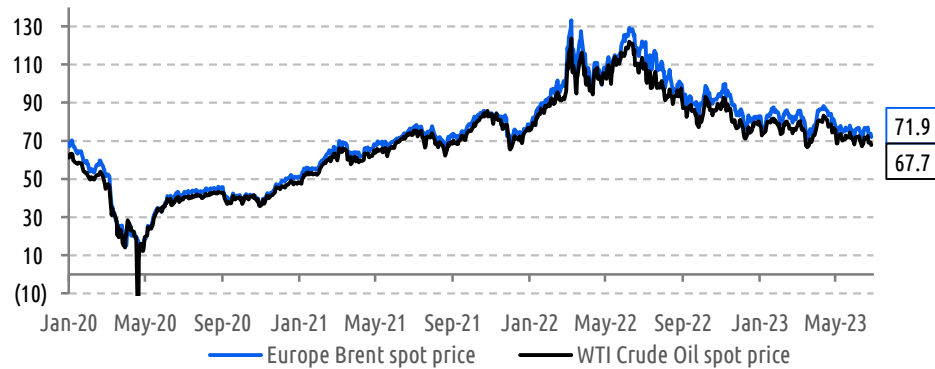


## **B The seeds of inflation**

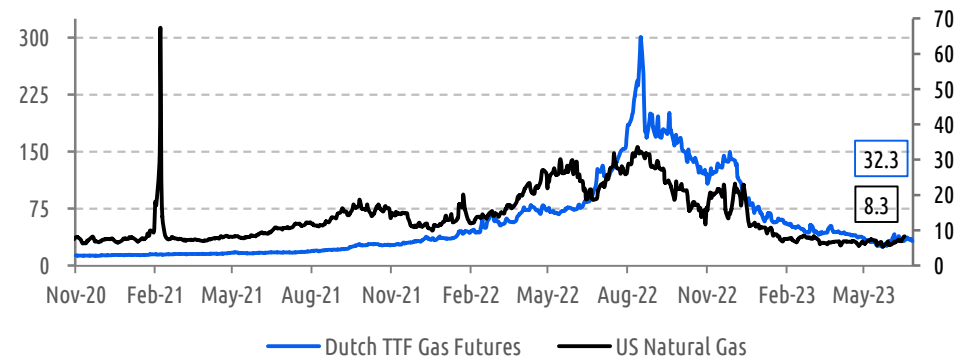
# Russian invasion added inflationary pressure. Yet despite OPEC decision to cut supply, prices remain in the pre-war range.

Natural gas prices are now quite different in the US and in Europe, with a one to four 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)



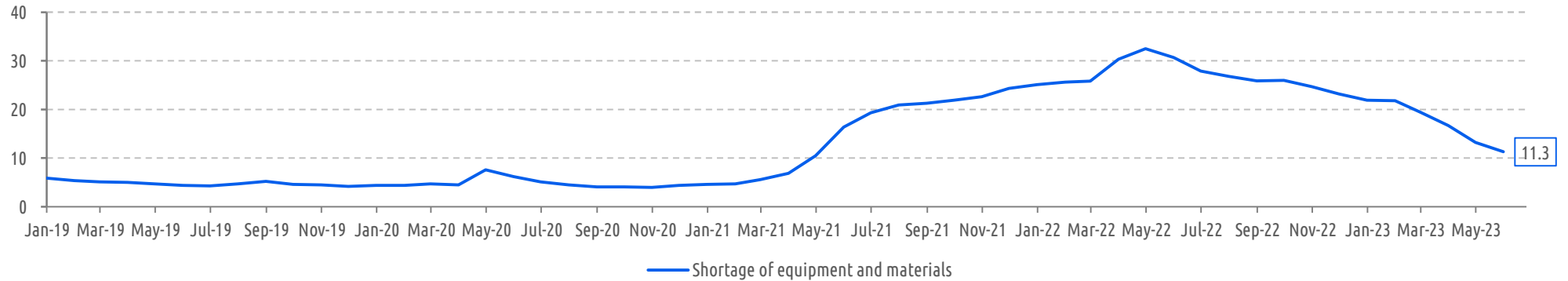
CBOT Wheat (USD/Bushel)



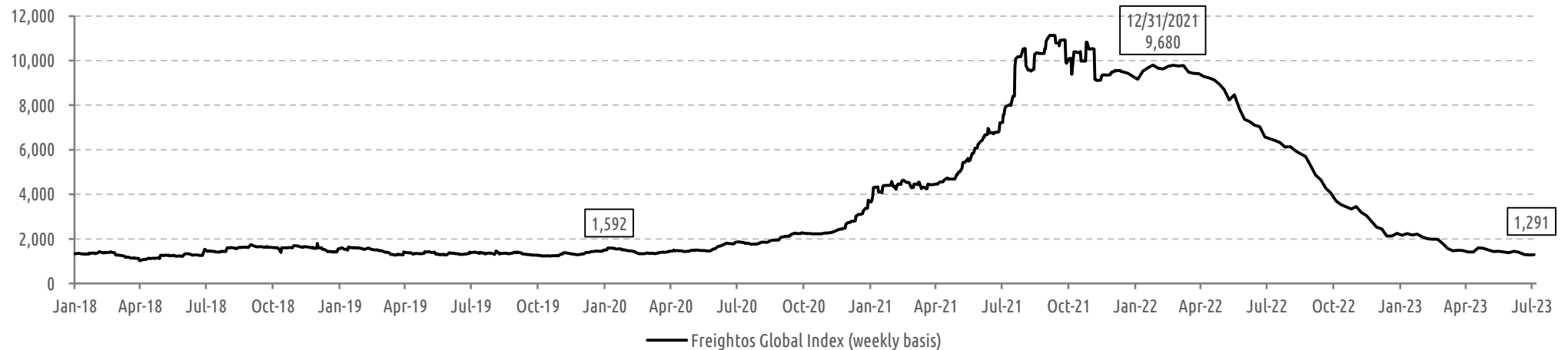
# Supply chain disruptions are easing up significantly

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**



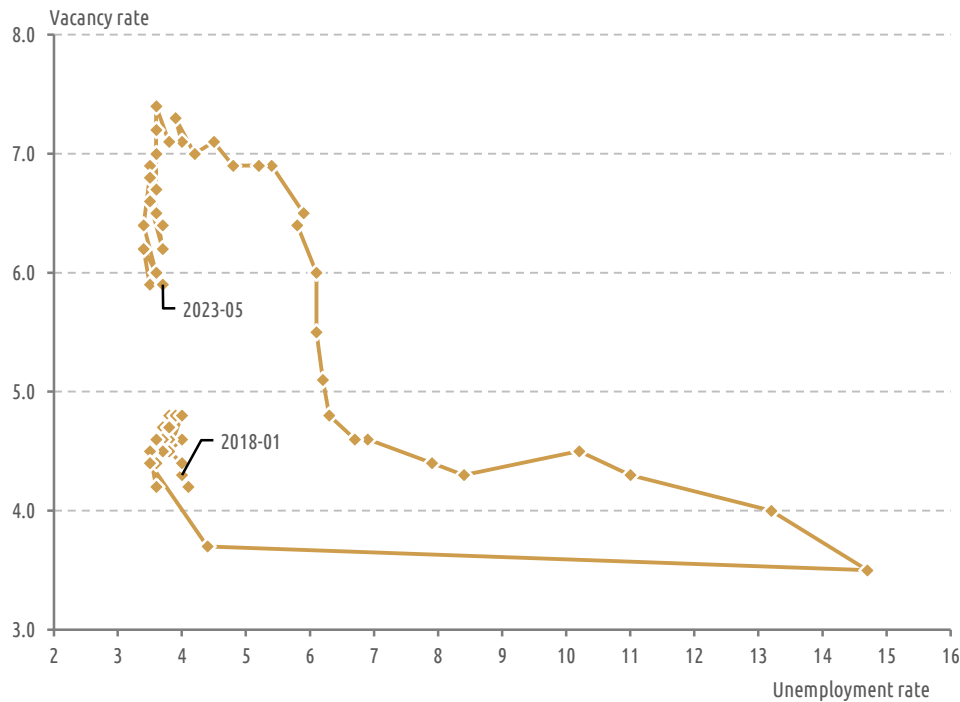
**Shipping Container Index (based on spot rate for 40 feet containers)**



# 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).

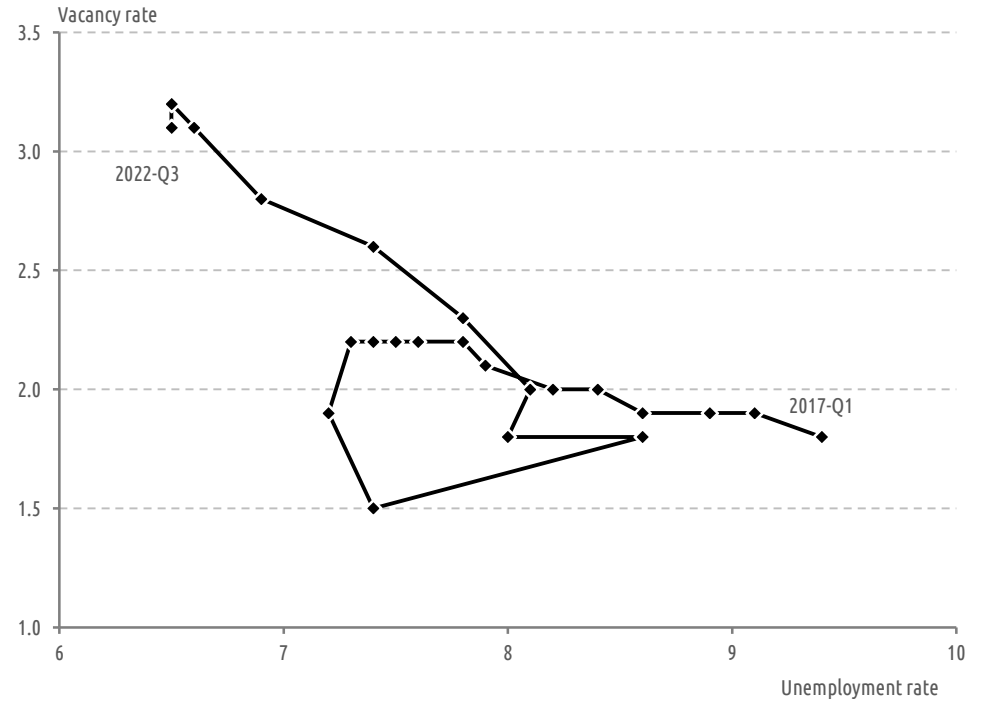
**Beveridge curve - USA (01-2018 – 02-2023), Monthly**



**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**



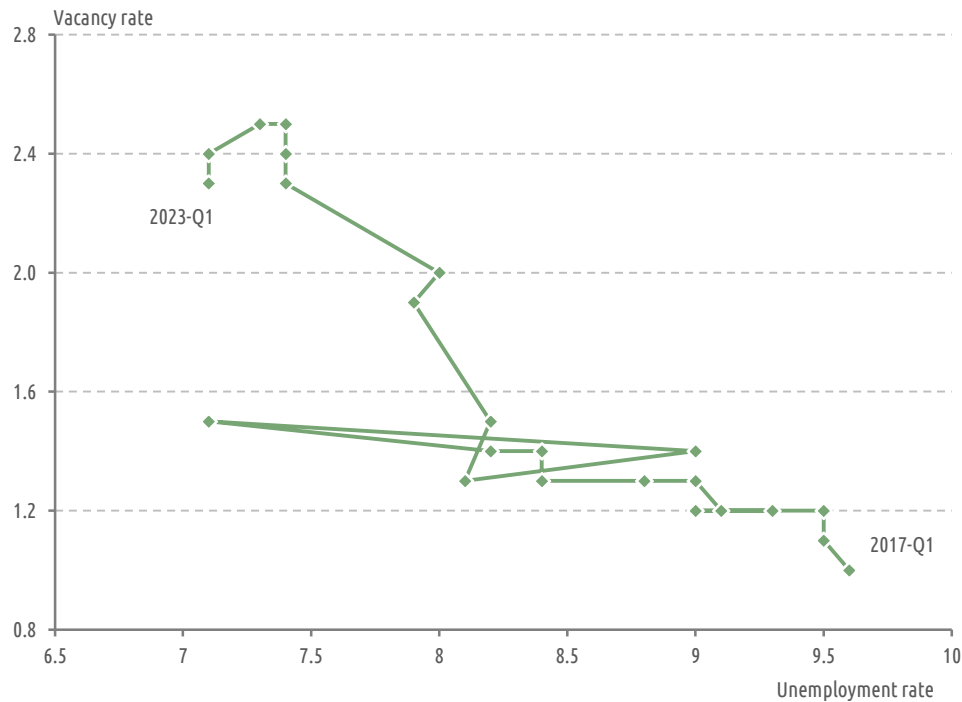
**Unemployment rate (% of labor force) - Monthly**

Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted												
Indicator	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	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.5	6.5

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

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

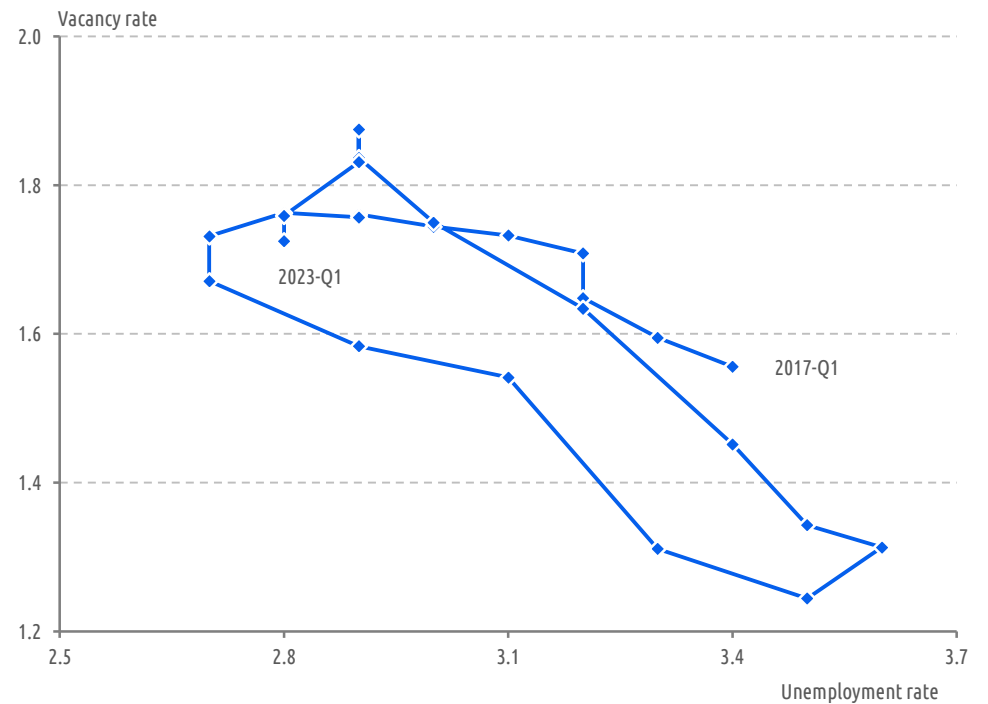
**Beveridge curve - France (Q1-17 – Q4-22), Quarterly**



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

Unemployment rate – Total – France- Seasonally adjusted												
Indicator	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	7.5	7.3	7.2	7.1	7.2	7.2	7.2	7.1	7.1	7.0	7.0	7.0

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



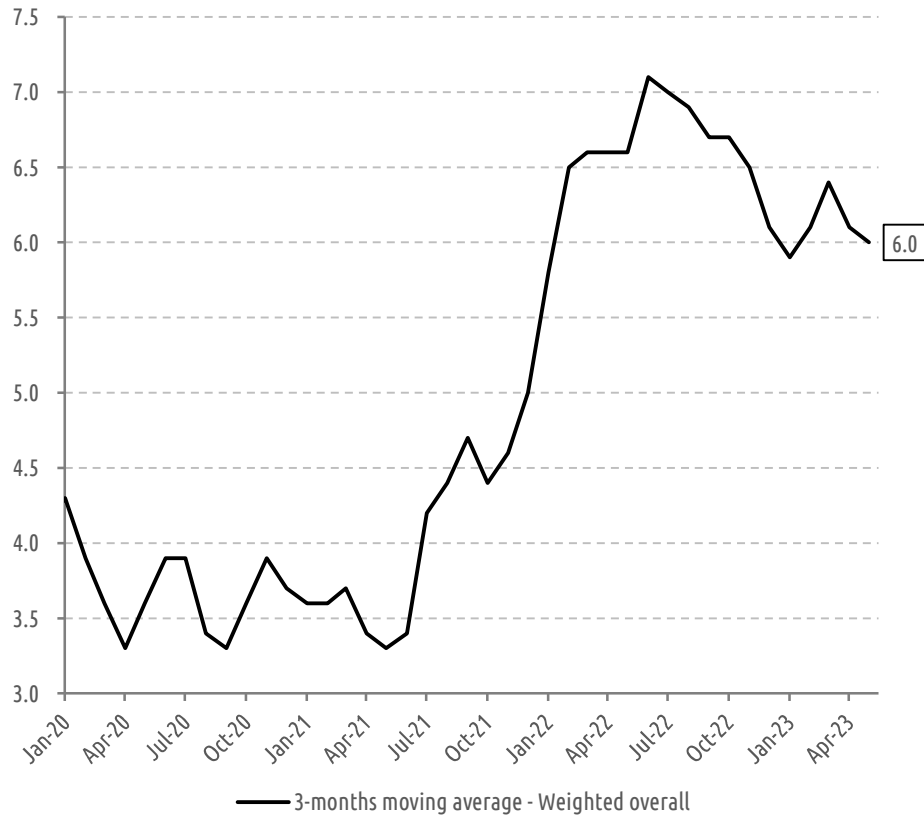
**Unemployment rate (% of labor force) - Monthly**

Unemployment according to ILO definition - Total – Germany – Seasonally adjusted												
Indicator	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	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	2.9	2.9

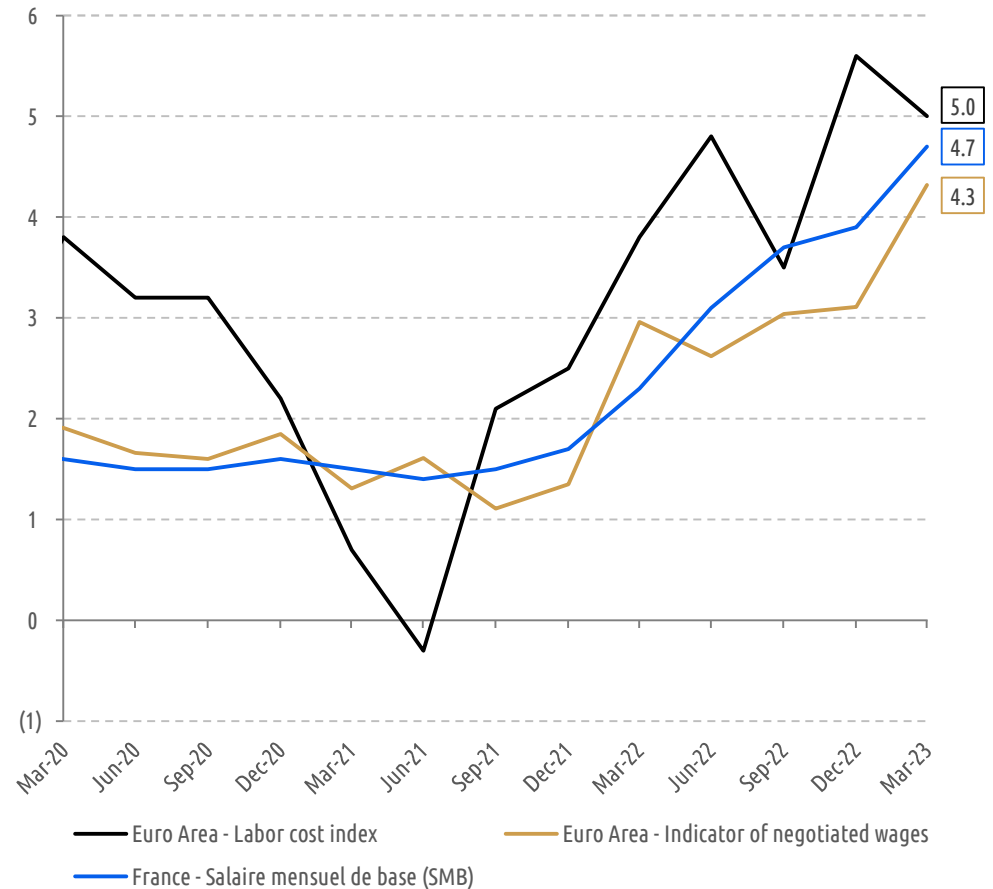
# The verdict on wage inflation in 2023, both in the US and the EZ, is still open

Although wage inflation is lower in the Euro Area, it may not have reached its peak yet, leaving open the question of the extend of monetary tightening in Europe and in the US.

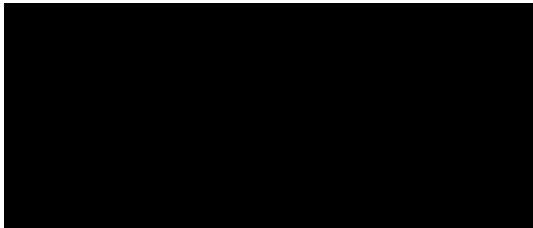
**Wage growth tracker (nominal wage growth of individuals) – US (Monthly)**



**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 making it difficult to speculate the course of monetary policy.

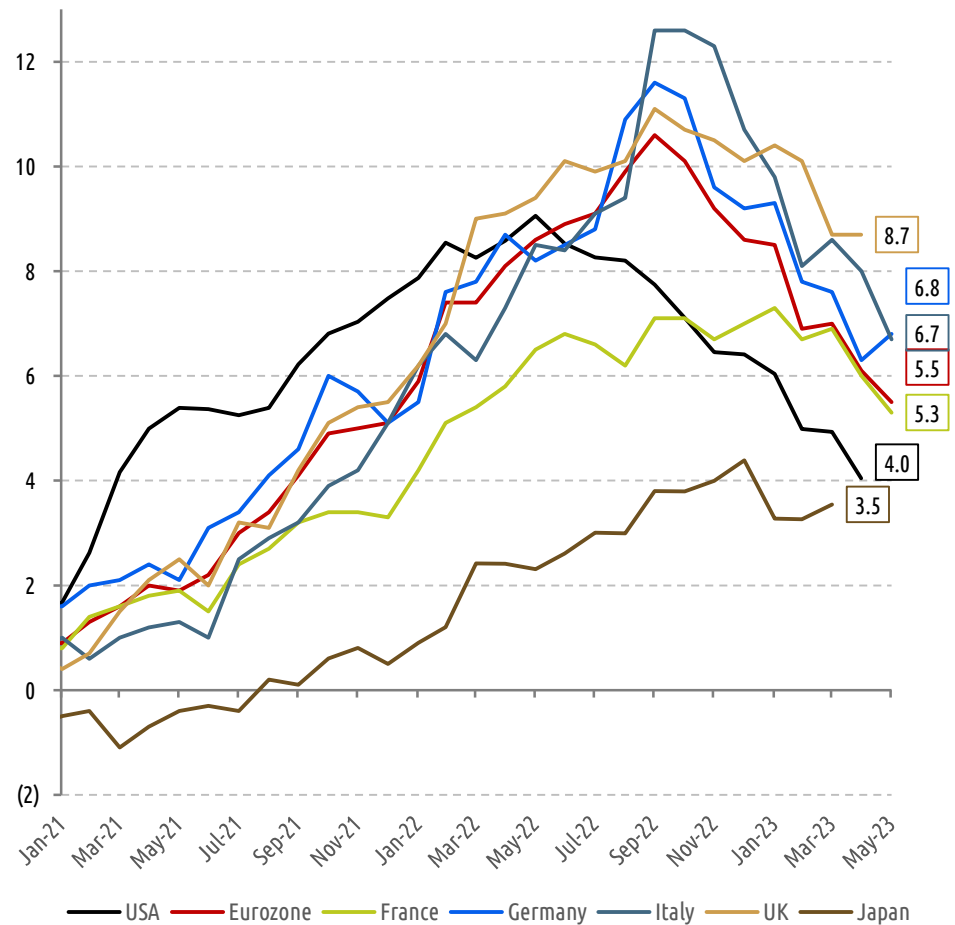
CPI and core inflation in advanced economies (YoY % change)

Monthly Year-on-Year inflation rates (%) – 2022/2023												
Country	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>US*</b>	8.5	8.3	8.2	7.7	7.1	6.5	6.4	6.0	5.05	4.9	4.0	-
<i>US core</i>	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>	8.9	9.1	9.9	10.6	10.1	9.2	8.6	8.5	6.9	7.0	6.1	5.5(e)
<i>Euro Area core *</i>	4.0	4.3	4.8	5.0	5.0	5.2	5.3	5.6	5.7	5.6	5.3	5.4(e)
<b>France*</b>	6.8	6.6	6.2	7.1	7.1	6.7	7.0	7.3	6.7	6.9	6.0	5.3(e)
<i>France core*</i>	4.0	4.1	3.7	4.1	4.2	4.2	4.2	4.6	4.6	4.7	4.4	4.4(e)
<b>France INSEE</b>	6.1	5.9	5.6	6.2	6.2	5.9	6.0	6.3	5.7	5.9	5.1	4.5(e)
<i>France core INSEE</i>	4.3	4.7	4.5	5.0	5.3	5.3	5.6	6.1	6.2	6.3	5.8	-
<b>Germany*</b>	8.5	8.8	10.9	11.6	11.3	9.6	9.2	9.3	7.8	7.6	6.3	6.8(e)
<i>Germany core*</i>	3.2	3.4	4.7	5.1	5.1	5.4	5.1	5.4	5.9	5.6	5.1	6.1(e)
<b>Italy*</b>	8.4	9.1	9.4	12.6	12.6	12.3	10.7	9.8	8.1	8.6	8.0	6.7(e)
<i>Italy core*</i>	3.4	4.1	4.4	4.6	4.7	4.8	5.2	5.5	5.3	5.3	5.1	4.8(e)
<b>UK</b>	10.1	9.9	10.1	11.1	10.7	10.5	10.1	10.4	10.1	8.7	8.7	-
<i>UK core</i>	6.2	6.3	6.5	6.5	6.3	6.3	5.8	6.2	6.2	6.8	7.1	-
<b>Japan*</b>	2.6	3.0	3.0	3.8	3.8	4.0	4.4	3.3	3.3	3.5	-	-
<i>Japan core</i>	1.2	1.6	1.8	2.5	2.8	3.0	3.2	3.4	3.7	4.1	4.2	-

Notes: (e) expected value  
\* Harmonized measures

Sources: Eurostat, INSEE, Bureau of Labor Statistics, Office of National Statistics, Statistics of Japan, OECD, Statcan

CPI Inflation (YoY % change) – since January 2021



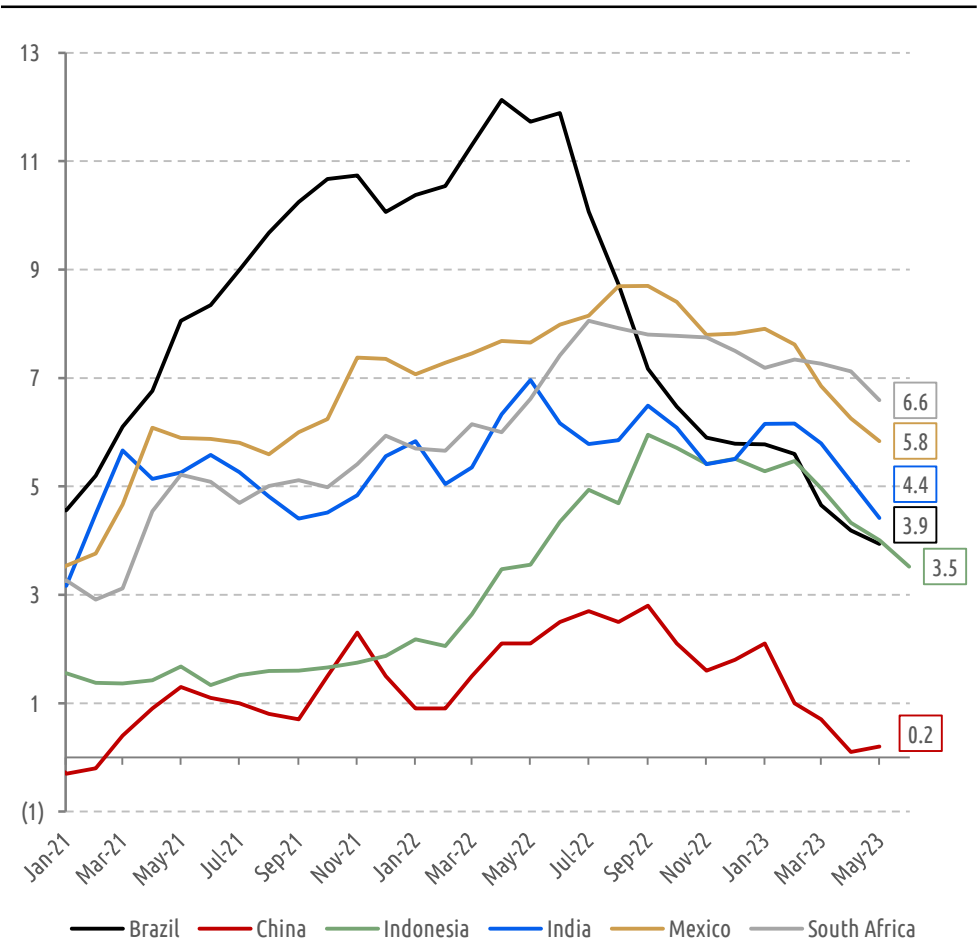
# Inflation in emerging economies

In most emerging countries, inflationary pressures are cooling down except for South Africa. China, however, 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	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
<b>China</b>	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>	5.8	5.9	6.5	6.1	5.4	5.5	6.2	6.2	5.8	5.1	4.4	-
<b>South Africa</b>	8.1	7.9	7.8	7.8	7.7	7.5	7.2	7.3	7.3	7.1	6.6	-
<b>Brazil</b>	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>	8.2	8.7	8.7	8.4	7.8	7.8	7.9	7.6	6.8	6.3	5.8	-
<b>Indonesia</b>	4.9	4.7	6.0	5.7	5.4	5.5	5.3	5.5	5.0	4.3	4.0	3.5(e)

CPI Inflation (YoY % change) – since January 2021



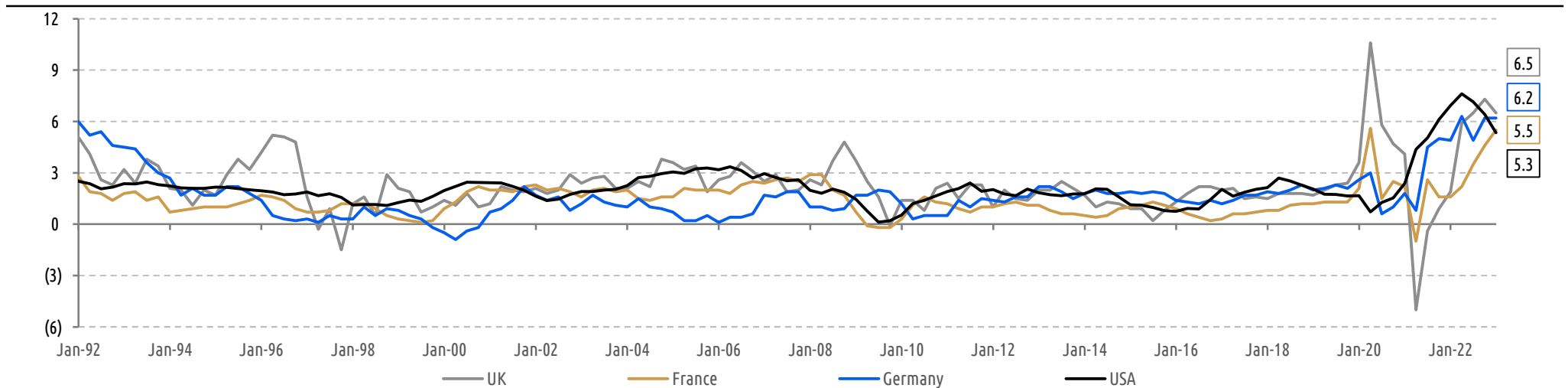
# Implied GDP deflator in G4 countries<sup>1</sup>

Implied GDP deflators appear to be converging towards headline inflation.

Quarterly implied GDP deflator – Since Q1-2021

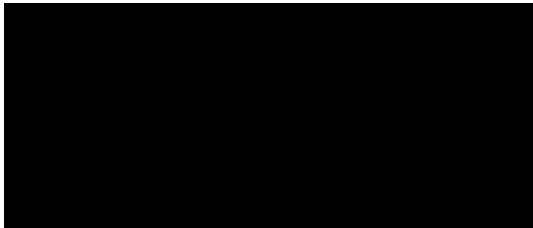
Implied GDP deflator (YoY % change) – Since Q1-2021								
Country	Q2-21	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23
USA	4.4	5.0	6.1	6.9	7.6	7.1	6.4	5.3
Germany	0.8	4.5	5.0	4.9	6.3	4.9	6.2	6.2
France	(1.0)	2.6	1.6	1.6	2.2	3.5	4.6	5.5
UK	(5.0)	(0.4)	0.9	1.9	5.9	6.5	7.3	6.5

Quarterly implied GDP deflator – Since Q1-1992





## II Monetary policy



**A In the US**

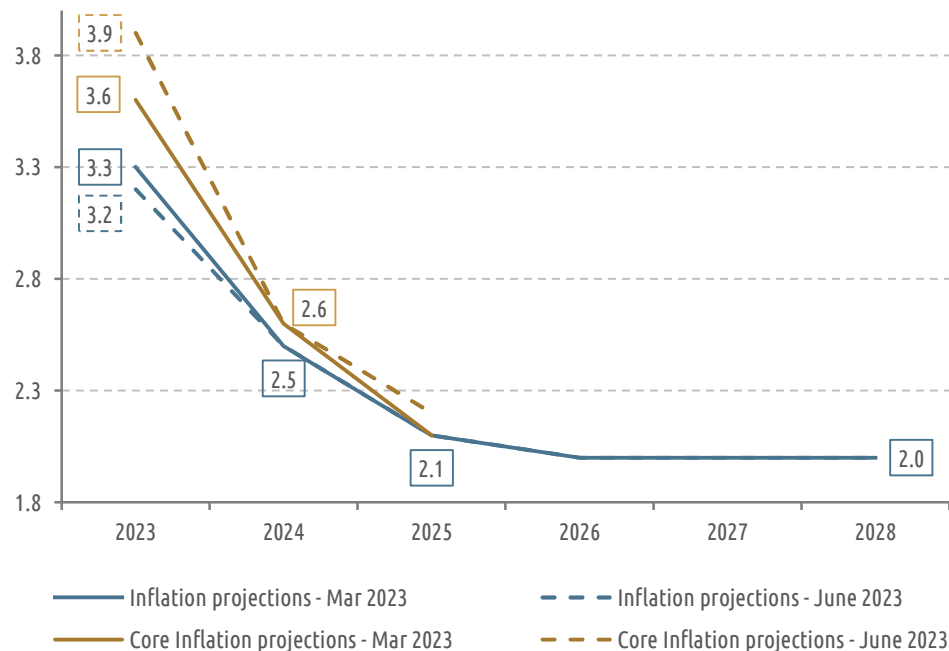
# Monetary Policy Decisions from the Fed (1/2)

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

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

Price indexes for Personal Consumption Expenditures							
Indicator	11-22	12-22	01-23	02-23	03-23	04-23	05-23
PCE inflation	5.7	5.3	5.4	5.0	4.2	4.3	3.8

## 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 will push up inflation, pushing their interest rate 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.”

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





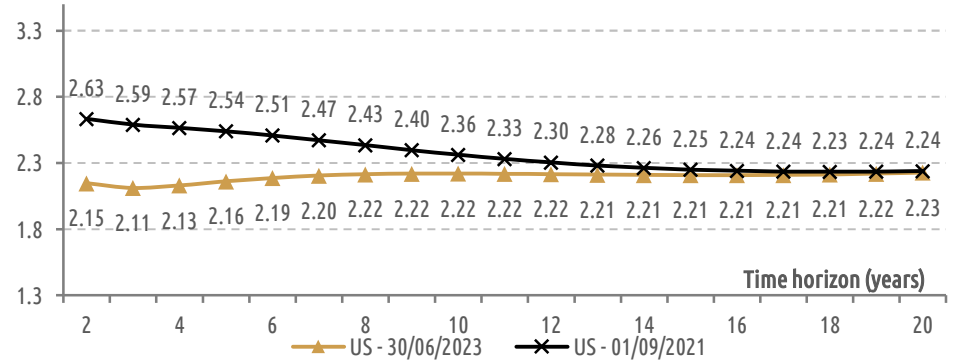
# Long-term rates fell after the banking crisis, but are slowly recovering

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

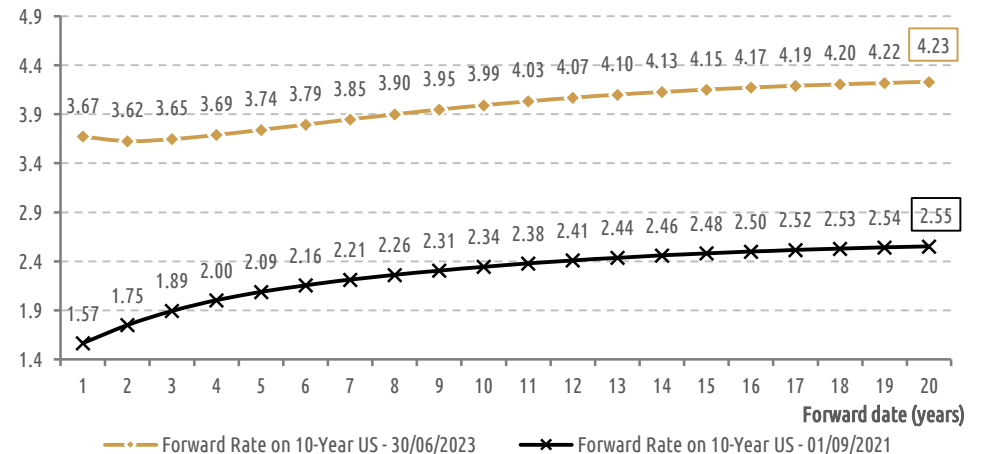
10-Y Nominal yield – US



Inflation Expectations – US (%)



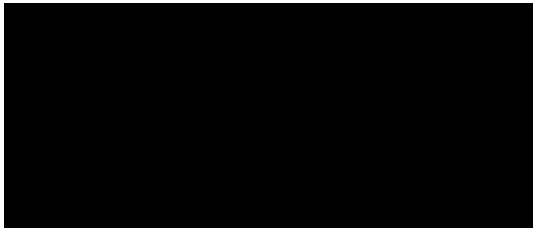
Forward Rates on 10-Year U.S. Treasuries (%)



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

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



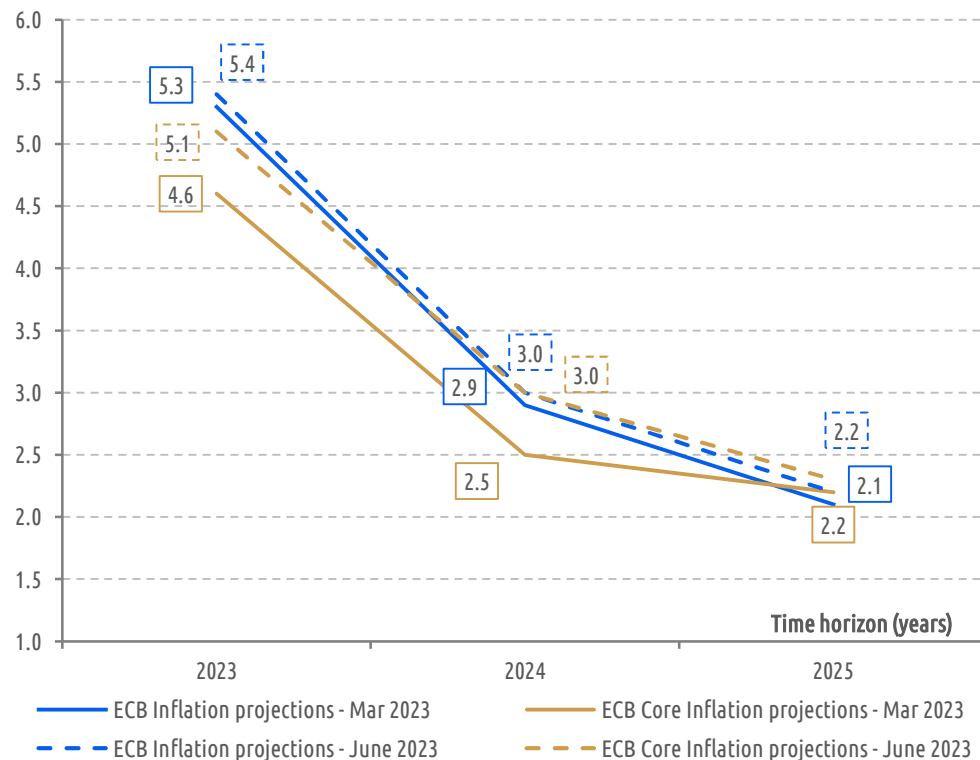


## **B In the Euro Area**

# 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. The required time to reach that target remains highly uncertain given the open questions regarding wage inflation.

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 July 27<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

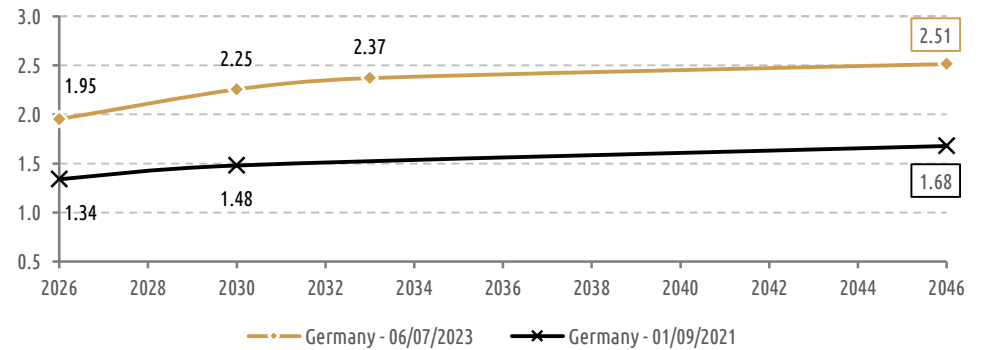
# In the Eurozone, the banking crisis had no lasting effect on long-term rates

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

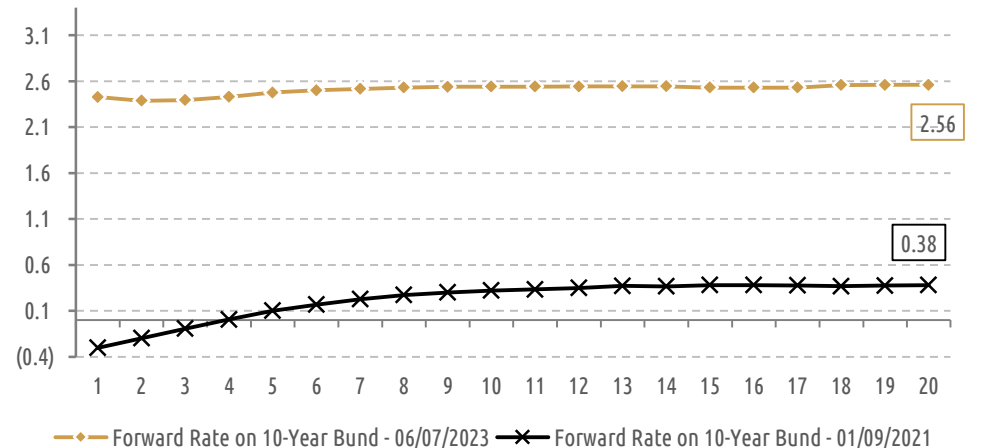
10-Y Nominal yield – German Bund



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



Forward Rates on 10-Year German Bund (%)



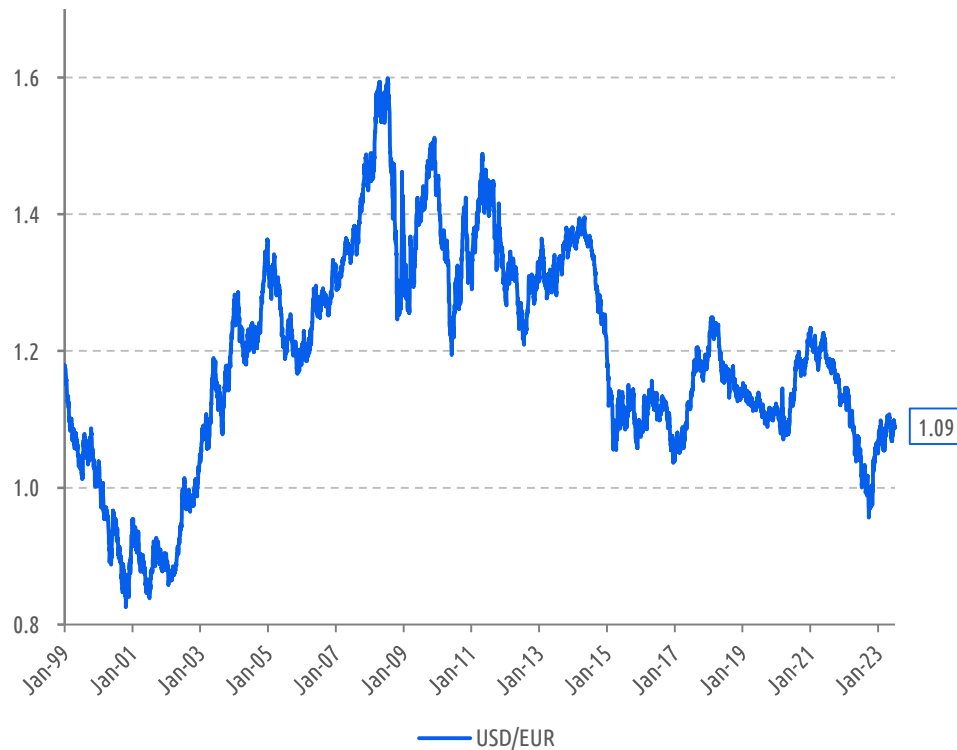
# The German yield curve is inverted for the first time since 2008, reflecting risk of recession/sluggish growth in 2023

**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

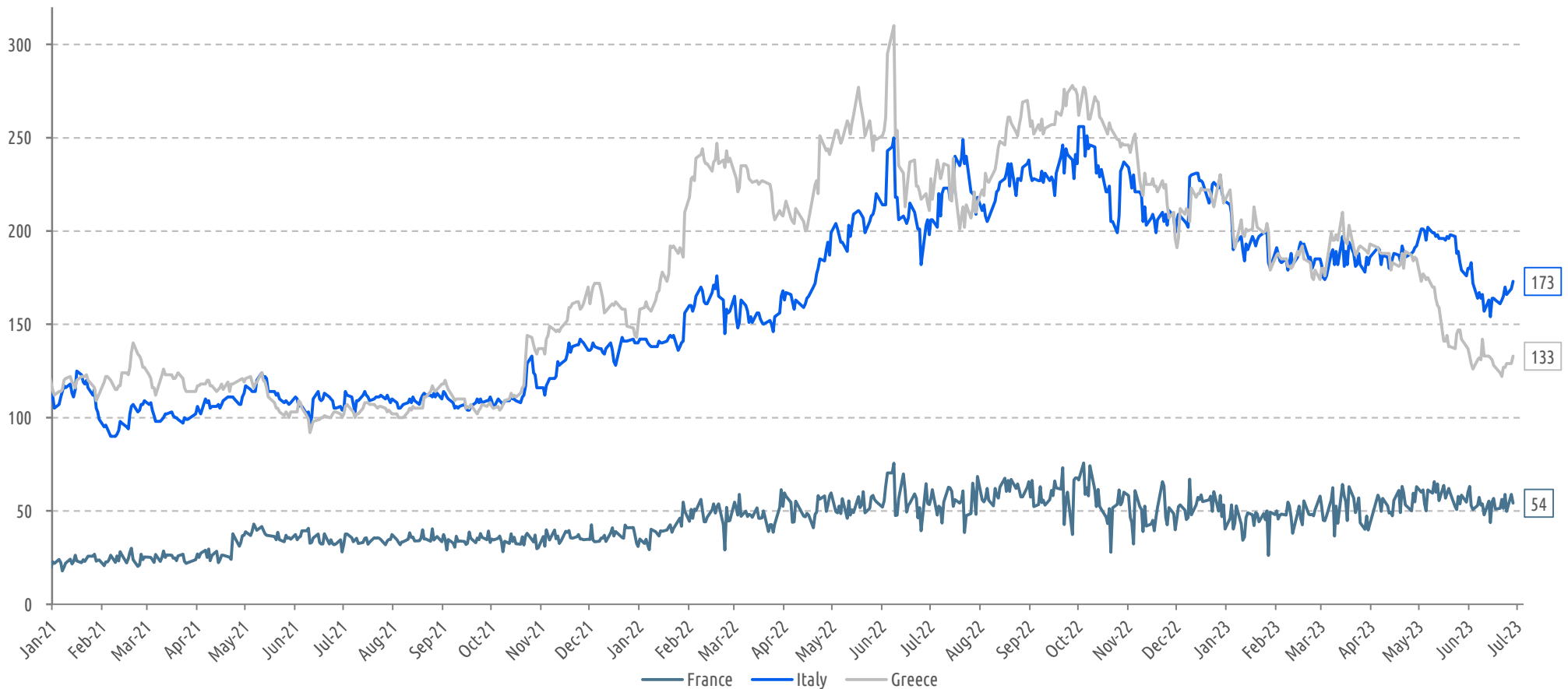


# Tensions on spreads have slightly eased off since their peak late 2022

In spite of new financial uncertainties. Greece benefit from a strong revival of investors' confidence, especially compared to Italy. France is slightly up compared to pre-war levels.

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

In bps

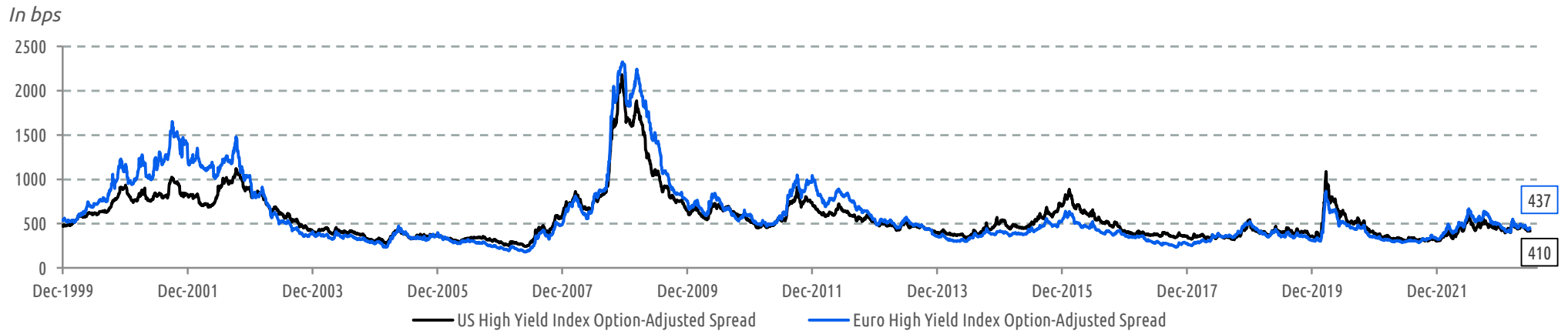


Sources: Banque de France, Bundesbank and Eurostat as of 07/07/2023, Internal calculations

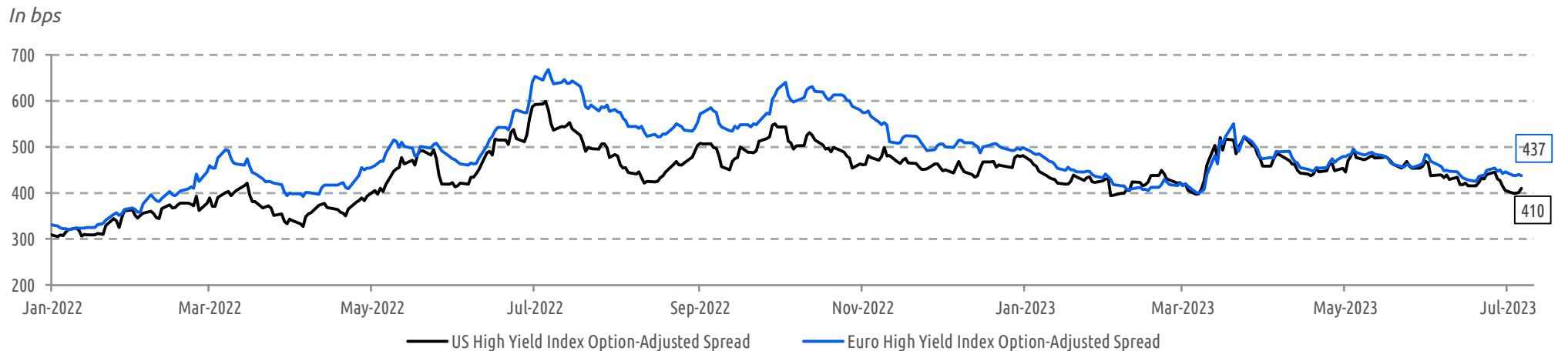
# High yield corporate bond spreads rose in the wake of SVB bankruptcy

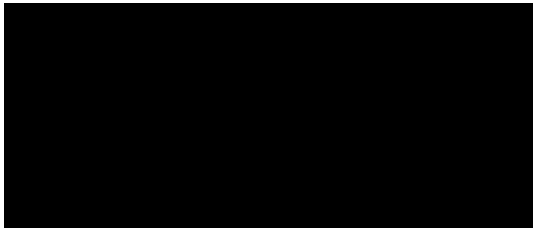
Remaining above pre-war levels

High yield corporate bond spreads – Since 2000



High yield corporate bond spreads – Since 2022



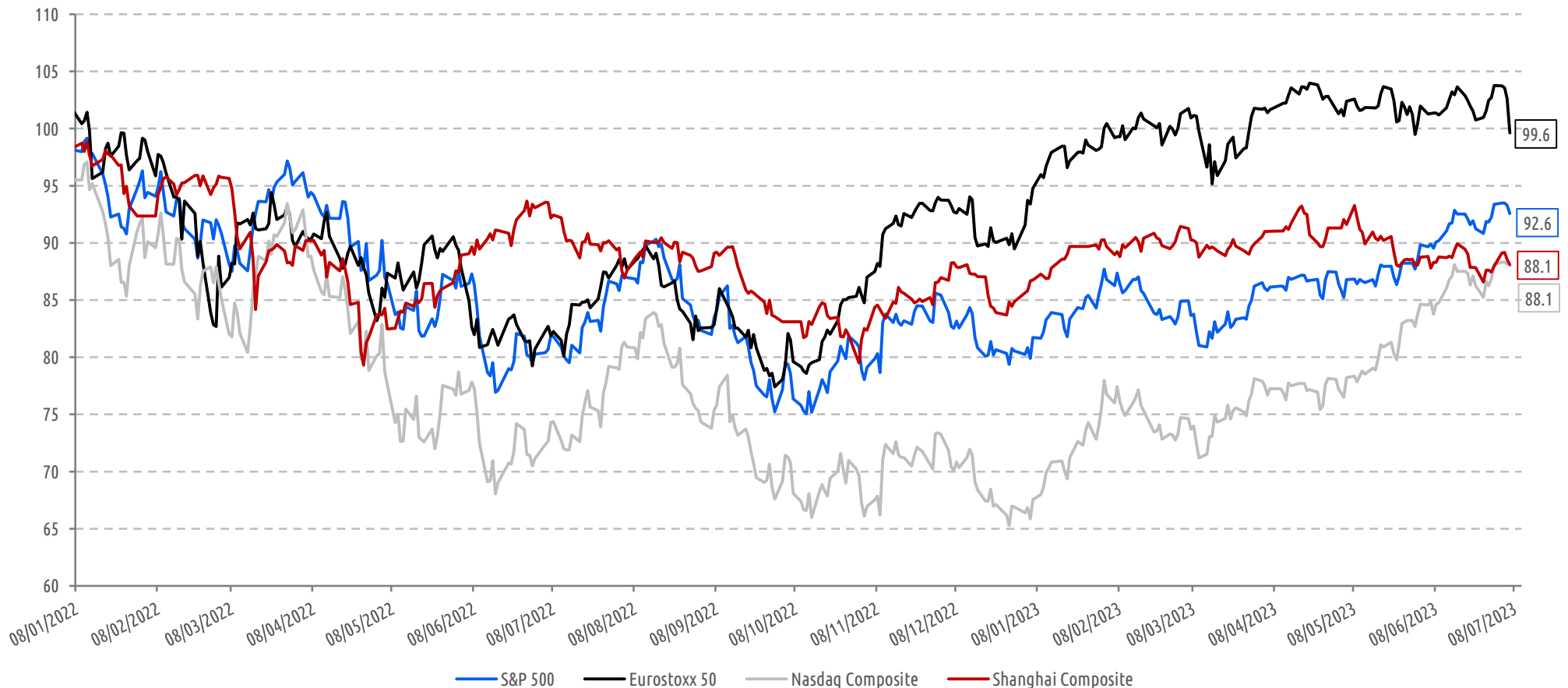


## **IV Impact on stock markets**

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

The Nasdaq index is staging an impressive recovery (due to tech-hungry investors) despite relatively low interest rates

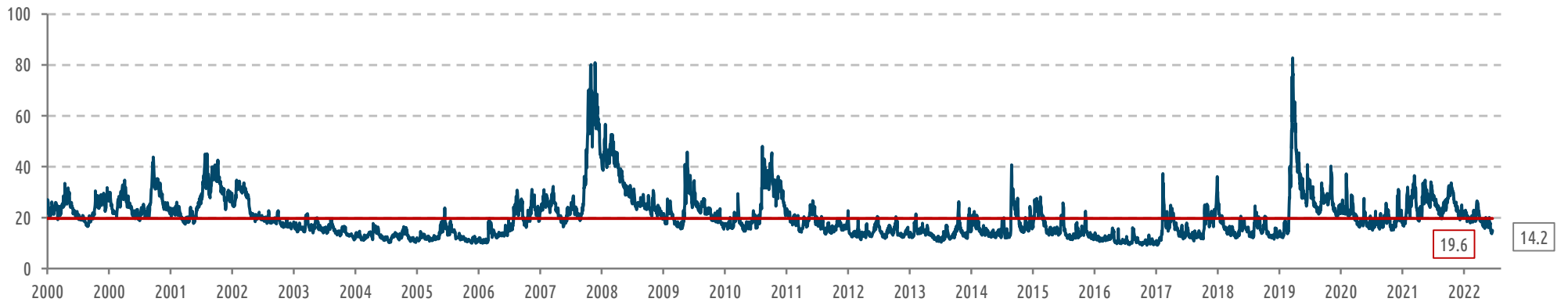
Nasdaq Composite, S&P 500, Shanghai Composite and Eurostoxx 50 indices – Jan. 2022 = 100



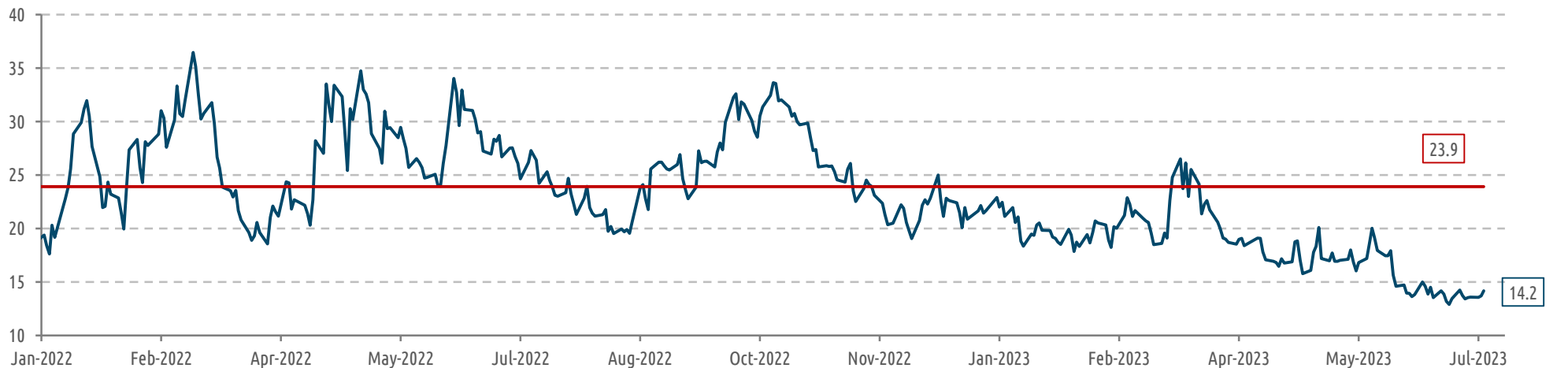
# Volatility on US financial markets has fallen below its historical average level

Ignoring the consequences of the banking crisis.

VIX index – Since 2000



VIX index – Since 2022

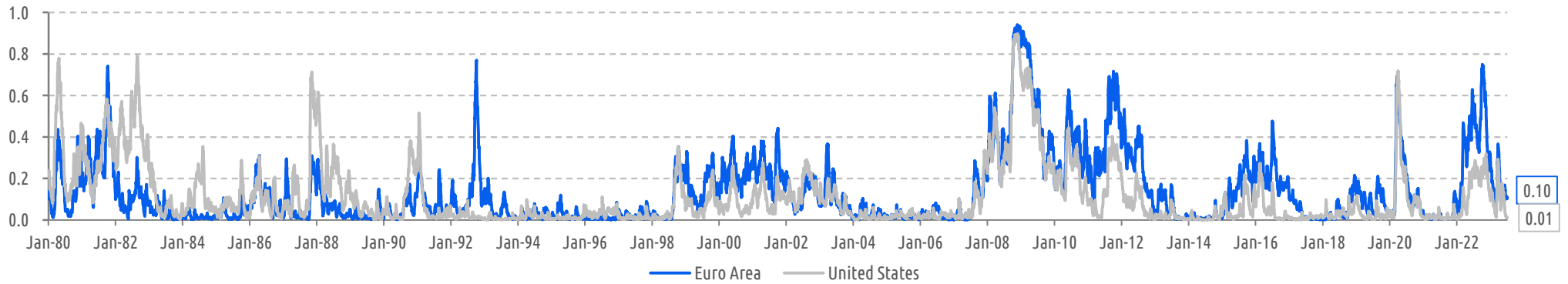


Source: CBOE as of 07/07/2023

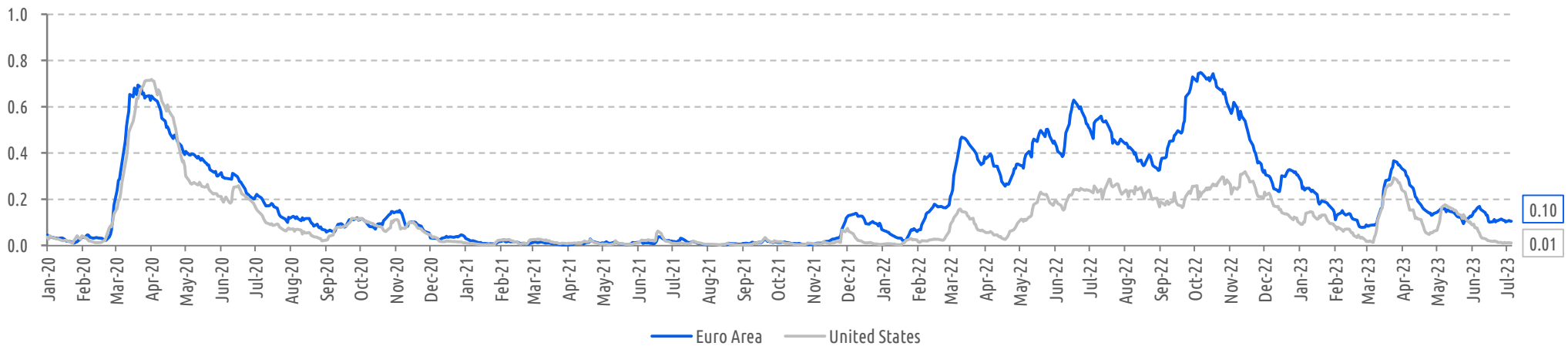
# Financial stress indicators returned to pre-war levels

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

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



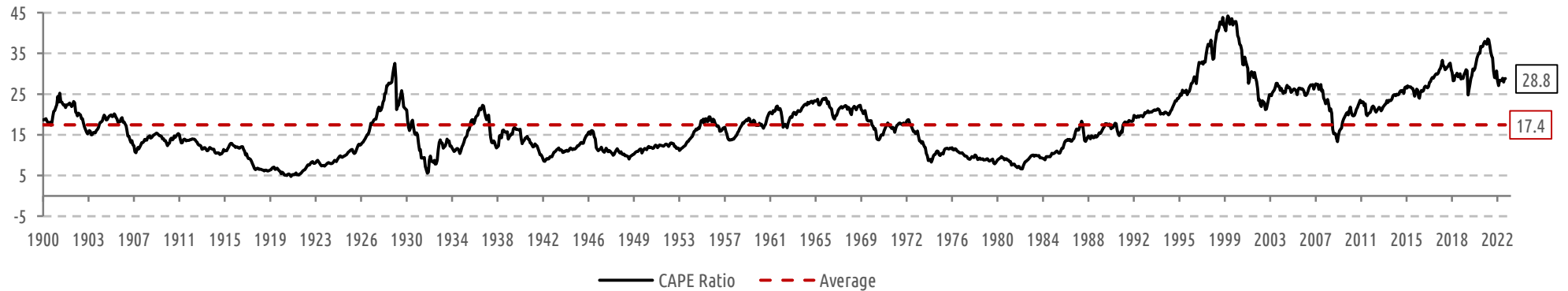
**Composite Indicator of Systemic Stress (daily) – Since Jan. 2020**



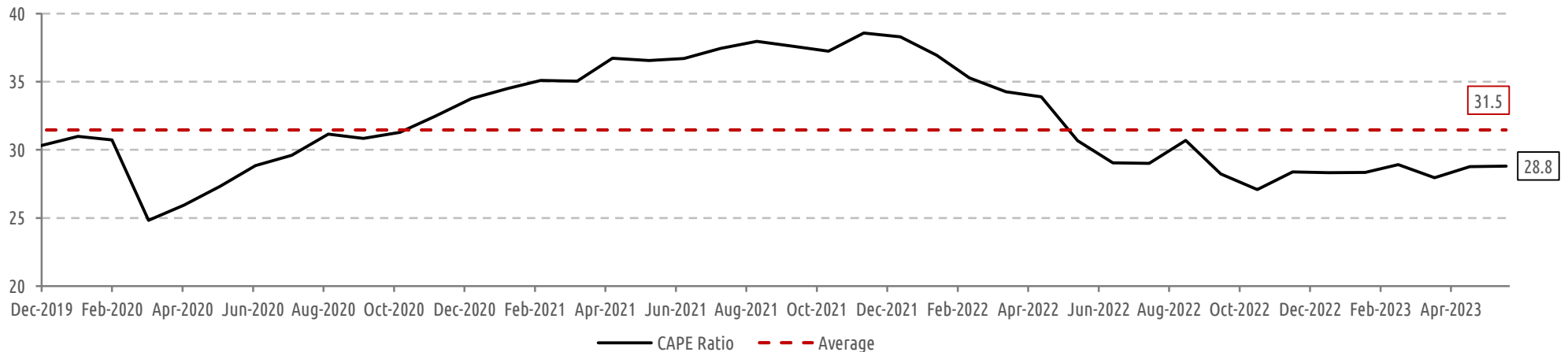
# US Shiller Cyclically Adjusted Price to Earnings ratio (CAPE ratio)<sup>1</sup>

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

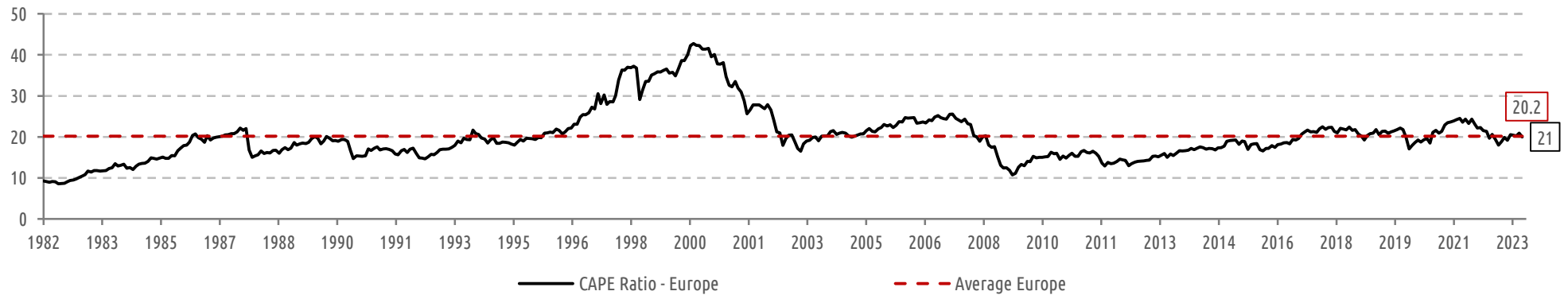




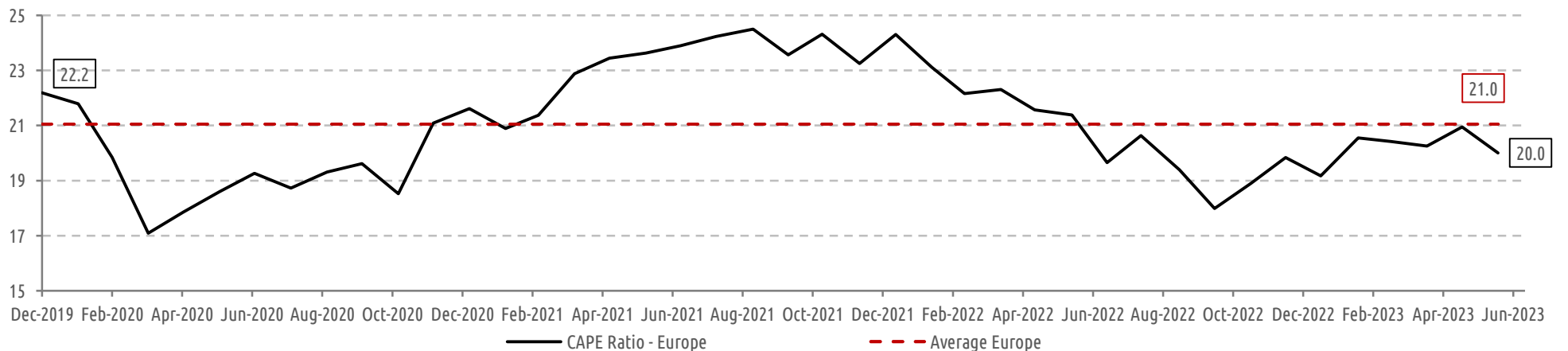
# Shiller CAPE ratio in Europe

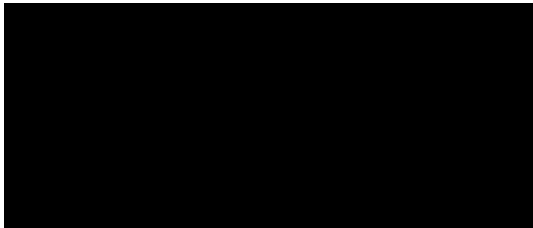
Shiller CAPE ratio is still close to its pre-Covid level and to its historical average

Cyclically Adjusted Price Earnings ratio – Since 1982



Cyclically Adjusted Price Earnings ratio – Since 2020





## V Appendix

## Links to DBnomics data

Page #	Graph / Table	Web link
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>

## Links to DBnomics data

Page #	Graph / Table	Web link
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>
5	Quarterly GDP growth (% change over the previous period) – China	<a href="https://www.oecd.org/dataoecd/2023/04/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/dataoecd/2023/04/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/dataoecd/2023/04/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/dataoecd/2023/04/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/dataoecd/2023/04/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/dataoecd/2023/04/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>
5	Yearly GDP growth rate (YoY % change) – India	<a href="https://www.imf.org/en/Data/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://www.imf.org/en/Data/2023-04/CHN.NGDP_RPCH.pcent_change">IMF/WEO:2023-04/CHN.NGDP_RPCH.pcent_change</a>

## Links to DBnomics data

Page #	Graph / Table	Web link
5	OECD Weekly growth tracker – Brazil	<a href="#">OECD/GDP_GROWTH/W.BRA.tracker_yoy</a>
5	OECD Weekly growth tracker – Mexico	<a href="#">OECD/GDP_GROWTH/W.MEX.tracker_yoy</a>
5	OECD Weekly growth tracker – South Africa	<a href="#">OECD/GDP_GROWTH/W.ZAF.tracker_yoy</a>
5	OECD Weekly growth tracker – Indonesia	<a href="#">OECD/GDP_GROWTH/W.IDN.tracker_yoy</a>
5	OECD Weekly growth tracker – India	<a href="#">OECD/GDP_GROWTH/W.IND.tracker_yoy</a>
6	General government debt - Germany	<a href="#">Eurostat/gov_10q_ggdebt/Q.GD.S13.PC_GDP.DE</a>
6	General government debt – France	<a href="#">Eurostat/gov_10q_ggdebt/Q.GD.S13.PC_GDP.FR</a>
6	General government debt – United Kingdom	<a href="#">ONS/EDP2/YEQJ.Q</a>
6	General government debt – Italy	<a href="#">Eurostat/gov_10dd_edpt1/A.PC_GDP.S13.GD.IT</a>
6	General government deficit – Germany	<a href="#">Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.DE</a>
6	General government deficit – France	<a href="#">Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.FR</a>
6	General government deficit – United Kingdom	<a href="#">ONS/UKEA/CT8O.Q</a>
6	General government deficit – Italy	<a href="#">OECD/DP_LIVE/ITA.GGNLEND.TOT.PC_GDP.A</a>
6	General government deficit – United States	<a href="#">BEA/NIPA-T30100/AD01RC-Q</a>

## Links to DBnomics data

Page #	Graph / Table	Web link
7	Consumer confidence index – United States	<a href="#">OECD/MEI CLI/CSCICP03.USA.M</a>
7	Consumer confidence index – Germany	<a href="#">OECD/MEI CLI/CSCICP03.DEU.M</a>
7	Consumer confidence index – France	<a href="#">OECD/MEI CLI/CSCICP03.FRA.M</a>
7	Consumer confidence index – United Kingdom	<a href="#">OECD/MEI CLI/CSCICP03.GBR.M</a>
7	Business confidence index – United States	<a href="#">OECD/MEI CLI/BSCICP03.USA.M</a>
7	Business confidence index – Germany	<a href="#">OECD/MEI CLI/BSCICP03.DEU.M</a>
7	Business confidence index – France	<a href="#">OECD/MEI CLI/BSCICP03.FRA.M</a>
7	Business confidence index – United Kingdom	<a href="#">OECD/MEI CLI/BSCICP03.GBR.M</a>
9	Natural Gas (Dutch TTF) prices in historical perspective (€/MWh)	<a href="#">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="#">EC/CONSTRUCTION/TOT.2.F5S.EU.M</a>
11	Beveridge curve – Euro Area (Q1-17 – Q2-22), Quarterly	<a href="#">Eurostat/une rt q/Q.NSA.Y20-64.PC POP.T.EA19</a> <a href="#">Eurostat/jvs q nace2/Q.NSA.B-S.TOTAL.JOBRATE.EA19</a>
11	Civilian unemployment rate – Total – USA - Seasonally adjusted	<a href="#">BLS/ln/LNS1400000</a>
11	Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted	<a href="#">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="#">Eurostat/jvs q nace2/Q.NSA.B-S.GE10.JOBRATE.FR</a> <a href="#">INSEE/CHOMAGE-TRIM-NATIONAL/T.CTXXC.TAUX.FR-D976.0.00-.POURCENT.CVS.FALSE</a>

## Links to DBnomics data

Page #	Graph / Table	Web link
12	Unemployment according to ILO definition - Total – France – Seasonally adjusted	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=une_rt_m/M.SA.TOTAL.PC.ACT.T.FR">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=une_rt_m/M.SA.TOTAL.PC.ACT.T.DE">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/2016/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/charts/current-inflation/cusr000sa0">BLS/cu/CUSR000SA0</a> <a href="https://www.bls.gov/charts/current-inflation/cusr000sa0l1e">BLS/cu/CUSR000SA0L1E</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/employment-and-labour-market/employment-and-unemployment/cpi-inflation/ons/mm23/d7g7.m">ONS/MM23/D7G7.M</a> <a href="https://www.ons.gov.uk/employment-and-labour-market/employment-and-unemployment/cpi-inflation/ons/mm23/dko8.m">ONS/MM23/DKO8.M</a>
15	CPI Inflation (YoY % change) – Japan	<a href="https://www.stat.go.jp/data/cpi/cpi001.htm">STATJP/CPI001</a> <a href="https://www.stat.go.jp/data/cpi/cpi0740.htm">STATJP/CPI0740</a>
16	CPI Inflation (YoY % change) - Brazil	<a href="https://www.oecd.org/kei/cpalTT01.BRA.GY.M">OECD/KEI/CPALTT01.BRA.GY.M</a>
16	CPI Inflation (YoY % change) – China	<a href="https://www.oecd.org/kei/cpalTT01.CHN.GY.M">OECD/KEI/CPALTT01.CHN.GY.M</a>
16	CPI Inflation (YoY % change) – Indonesia	<a href="https://www.oecd.org/kei/cpalTT01.IDN.GY.M">OECD/KEI/CPALTT01.IDN.GY.M</a>
16	CPI Inflation (YoY % change) – India	<a href="https://www.oecd.org/kei/cpalTT01.IND.GY.M">OECD/KEI/CPALTT01.IND.GY.M</a>
16	CPI Inflation (YoY % change) – Mexico	<a href="https://www.oecd.org/kei/cpalTT01.MEX.GY.M">OECD/KEI/CPALTT01.MEX.GY.M</a>

## Links to DBnomics data

Page #	Graph / Table	Web link
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?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?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/qna/ihyu.q">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>
24	Yield curve – US	<a href="https://www.federalreserve.gov/h15/riflgfcm03.n.b">FED/H15/RIFLGFCM03_N.B</a>
27	10-Y Nominal yield – German Bund	<a href="https://www.buba.de/bba/bba01/wt1010">BUBA/BBK01/WT1010</a>
27	Inflation Expectations - Germany	<a href="https://www.buba.de/bba/bba01/wt1010">BUBA/BBSSY/D.KCP.EUR.A607.DE0001102523.A</a>
27	Forward Rates on 10-Year German Bund	<a href="https://www.buba.de/bba/bba01/wt1010">BUBA/BBSSIS/D.I.ZAR.ZI.EUR.S1311.B.A604.R10XX.R.A.A. Z. Z.A</a>
27	Yield curve – Germany	<a href="https://www.buba.de/bba/bba01/wt1010">BUBA/BBSSY/D.KCP.EUR.A607.DE0001102523.A</a>
28	Nominal Foreign exchange rate in historical perspective	<a href="https://www.buba.de/bba/bba01/wt1010">BUBA/BBEX3/D.USD.EUR.BB.AC.000</a>
30	Italian 10-Y yield	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=irt_lt_mcby_d/D.MCXY.IT">Eurostat/irt_lt_mcby_d/D.MCXY.IT</a>



## Links to DBnomics data

Page #	Graph / Table	Web link
30	Greek 10-Y yield	<a href="https://ec.europa.eu/eurostat/tgm/table.do?code=irt.lt.mcby.d&amp;lang=en">Eurostat/irt.lt.mcby.d/D.MCBY.EL</a>
30	French 10-Y yield	<a href="https://www.banquefrance.fr/fr/indicateurs/taux/taux-10ans">BDF/FM/FM.D.FR.EUR.FR2.BB.FR10YT_RR.YLD</a>
36	Composite Indicator of Systemic Stress (daily) – Euro Area	<a href="https://www.ecb.europa.eu/press/pr/20220727/ciss_en.htm">ECB/CISS/D.U2.Z0Z.4F.EC.SS_CIN.IDX</a>
36	Composite Indicator of Systemic Stress (daily) – United States	<a href="https://www.ecb.europa.eu/press/pr/20220727/ciss_en.htm">ECB/CISS/D.US.Z0Z.4F.EC.SS_CIN.IDX</a>