

CEPREMAP / DBNOMICS

## Macroeconomic Outlook – January 2023

## DBnomics

- Most data presented in the forthcoming slides are extracted from DBnomics (<https://db.nomics.world/>), an open-sourced databank created at CEPREMAP, and will be updated every Thursday at 6:00pm
- 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 slides have been designed by Daniel Cohen and are updated by Jocelyn Maillard and François Langot at CEPREMAP
- Links to the DBnomics data are available in the Appendix
- All materials presented here can be freely used with proper acknowledgment
- Questions and comments about the presentation can be addressed at [jocelyn.maillard@cepremap.org](mailto:jocelyn.maillard@cepremap.org)

## Executive summary

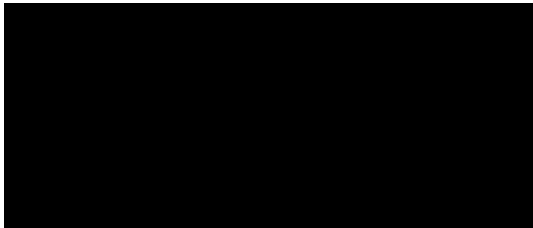
- Markets and policymakers are following in parallel headline inflation, financial market and labor-market trends.
- In response to inflationary pressures, monetary policy has been tightened up to levels unheard of for the last 20 years. However, both the Fed and the ECB have recently paused the hikes. We seem to be at the peak of the tightening cycle. Notably, the Fed Board members expect three 25-bps cuts in 2024. Nevertheless, the Fed and the ECB indicated that cuts should not occur during the first quarter of 2024.
- Headline inflation dropped below 3% in Europe although core inflation remains at high levels. In the US, headline inflation has decreased, but it is now larger than in the Euro Area. The return to the 2% inflation target may be more complex in the US as the Fed must deal with labor-market overheating and financial-market issues.
- Most raw-material prices have come back to their pre-war levels. Oil prices have also been decreasing after their surge in June. Natural-gas-price difference between Europe and the US remains high. Tensions in the Red sea led to a massive rise of transportation costs for containers since the beginning of the year, potentially leading to a new rise of inflation.
- GDP growth beat market expectations in the third quarter in the US. However, it was negative in the main countries of the Euro Area as private consumption dropped. Notably, Germany growth remains low as its manufacturing sector is suffering.
- Sovereign yields are at a high level in the Euro Area as the uncertainty about inflation remains. They have however decreased over the last couple of month. The spreads between core countries and the periphery have also been falling as macroeconomic results have overcome expectations in countries as Spain or Greece.

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# I Growth and inflation in selected G20 countries



## **A The growth slowdown**

# Growth in advanced economies

Growth was higher than expected in the US during the third quarter of 2023 while it was negative in the Euro Area and Japan. The OECD has moderately revised downward its growth projections for 2023 and 2024 for European countries, and upwards for the US.

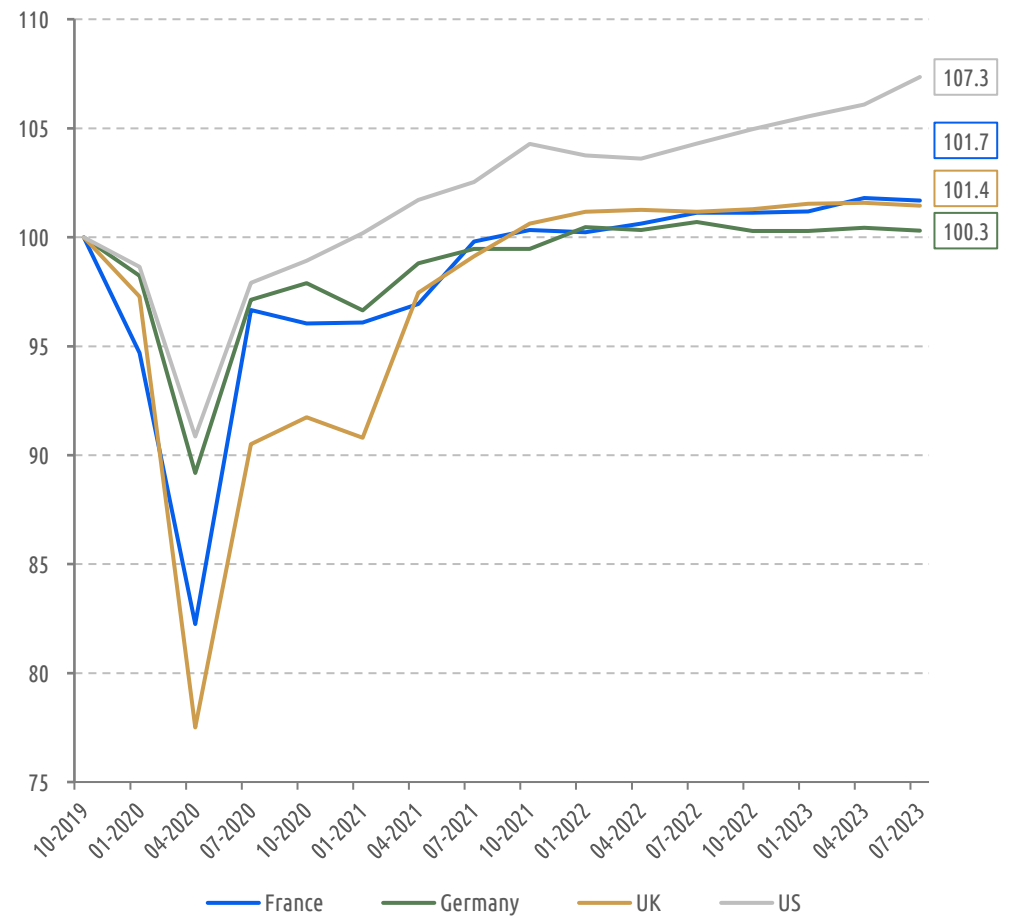
**Yearly GDP growth rate (YoY % change)**

Yearly GDP growth rate %					
Country	2020	2021	2022	2023(E)	2024(P)
<b>Euro Area</b>	(6.1) <sup>1</sup>	5.9	3.5	0.8	1.4
<i>Germany</i>	(3.8)	3.2	1.8	(0.1)	1.1
<i>France</i>	(7.5)	6.4	2.5	0.7	1.3
<i>Italy</i>	(9.0)	8.3	3.7	0.7	0.8
<b>UK</b>	(10.4)	8.7	4.4	(0.3)	1.0
<b>USA</b>	(2.2)	5.8	1.9	1.6	1.1
<b>Japan</b>	(4.2)	2.2	1.1	1.3	1.0

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

Quarterly GDP growth rate %									
Country	21Q3	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3
<b>Euro Area</b>	2.1	0.5	0.7	0.8	0.5	(0.1)	0.1	0.1	(0.1)
<i>France</i>	3.1	0.5	(0.1)	0.4	0.5	(0.0)	0.1	0.6	(0.1)
<i>Germany</i>	0.7	0.0	1.0	(0.1)	0.4	(0.4)	(0.1)	0.0	(0.1)
<i>Italy</i>	2.8	0.8	0.1	1.4	0.3	(0.2)	0.6	(0.4)	0.1
<b>UK</b>	1.7	1.5	0.5	0.1	(0.1)	0.1	0.3	0.0	(0.1)
<b>USA</b>	0.8	1.7	(0.5)	(0.1)	0.7	0.6	0.6	0.5	1.2
<b>Japan</b>	(0.4)	1.1	(0.6)	1.1	(0.1)	0.2	1.2	0.9	(0.7)

**Quarterly GDP (base 100 in 2019-Q4)**



# Growth in emerging countries

India and China are overperforming the other developing countries in 2023. South Africa has had a particularly low growth. However, the OECD has lifted 2023 and 2024 growth for Brazil and Mexico, but they have revised downwards the growth for the main emerging Asian countries.

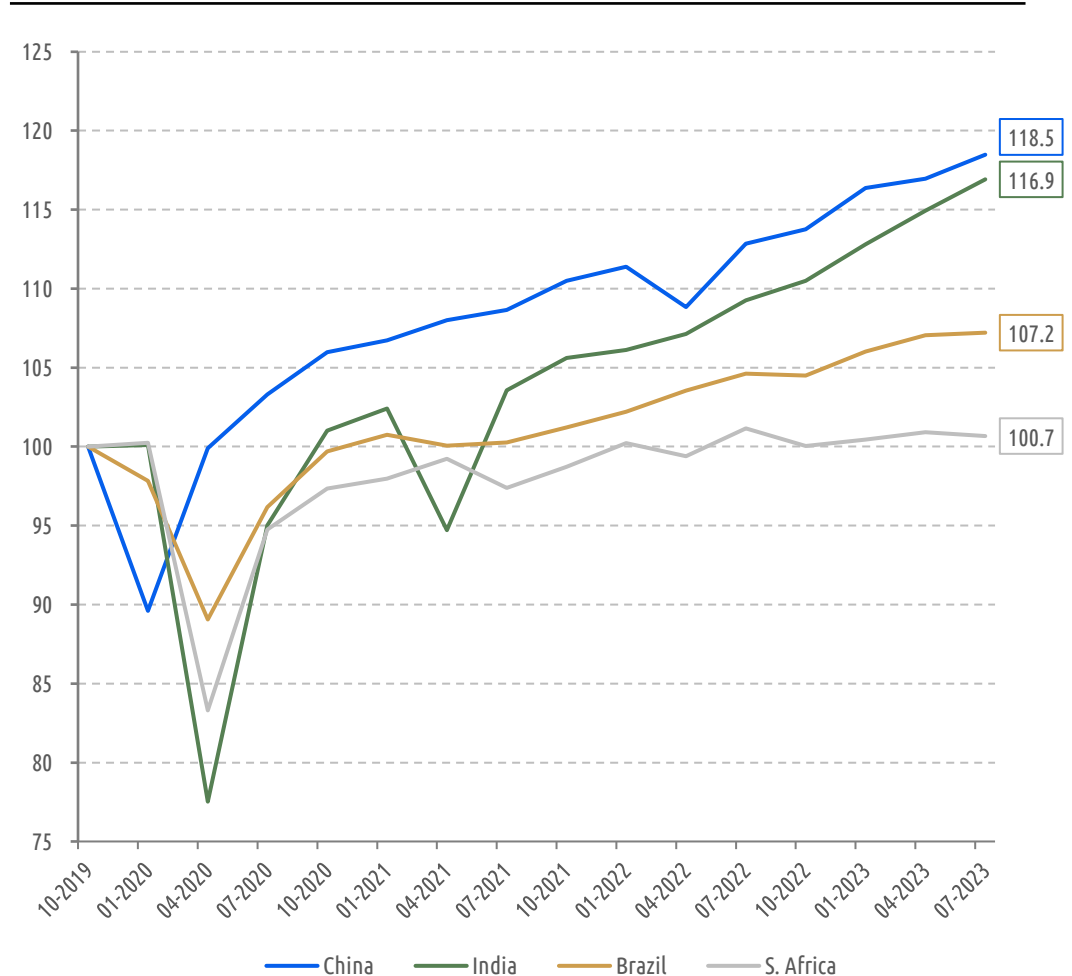
Yearly GDP growth rate (YoY % change)

Yearly GDP growth rate %					
Country	2020	2021	2022	2023(E)	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	21Q3	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	23Q3
China	0.6	1.7	0.8	(2.3)	3.7	0.8	2.3	0.5	1.3
S. Africa	(1.9)	1.4	1.5	(0.8)	1.8	(1.1)	0.4	0.5	(0.2)
Brazil	0.2	1.0	1.0	1.3	1.1	(0.1)	1.4	1.0	0.1
India	9.3	2.0	0.5	0.9	2.0	1.1	2.1	1.9	1.7
Mexico	(0.4)	1.1	1.6	1.0	1.2	0.7	0.6	0.9	1.1
Indonesia	0.1	3.2	1.0	0.9	0.8	2.3	0.8	0.9	0.8

Quarterly GDP (base 100 in 2019-Q4)

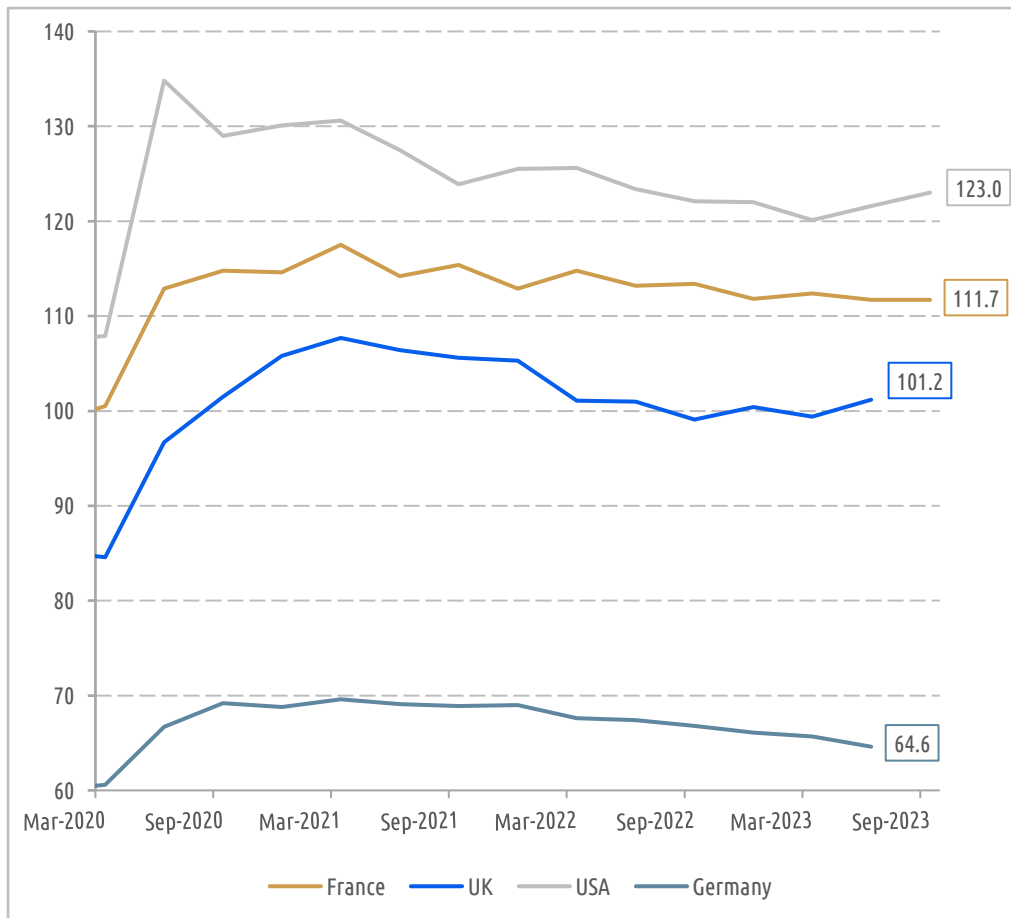




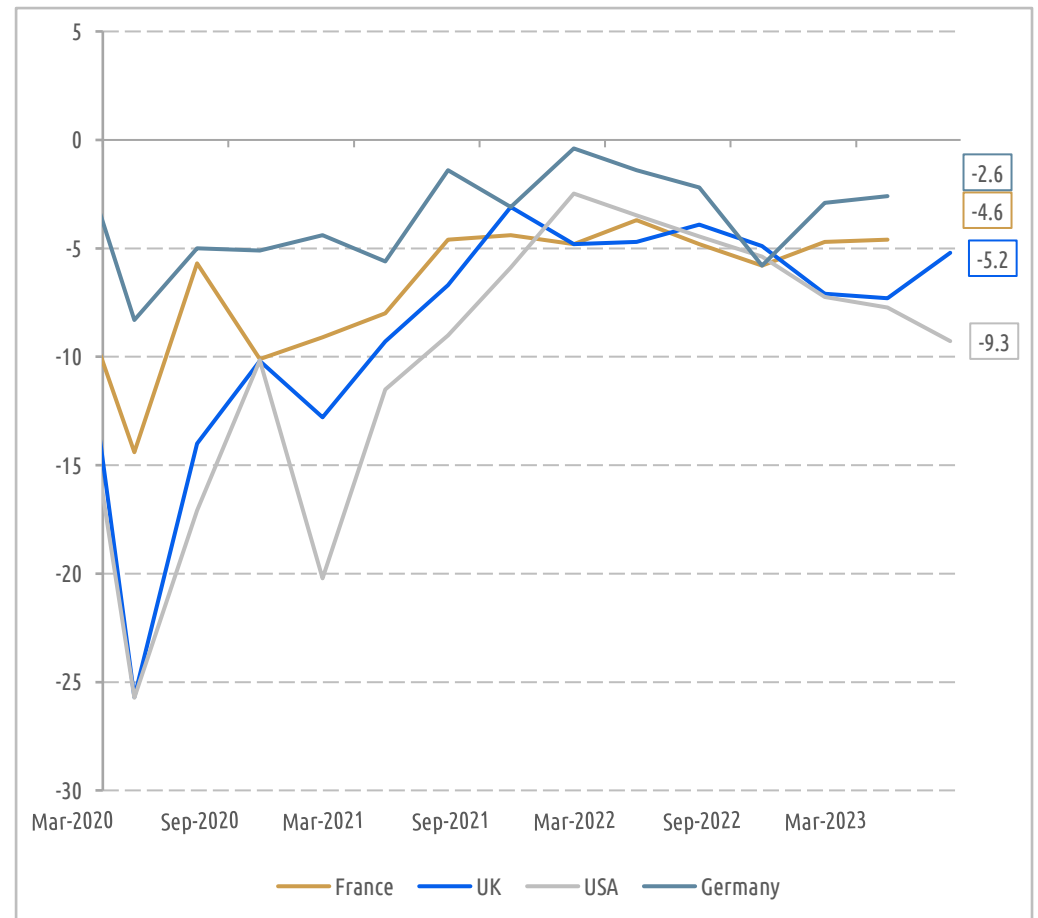
# Government debts have reached a new plateau in G4 countries<sup>1</sup>

Inflation acted as a moderating factor on the evolution on debt ratios. Deficits decreased in France and Germany in the first two quarters of 2023 while they keep increasing in the US.

General Government debt (% of GDP) – Since 2020



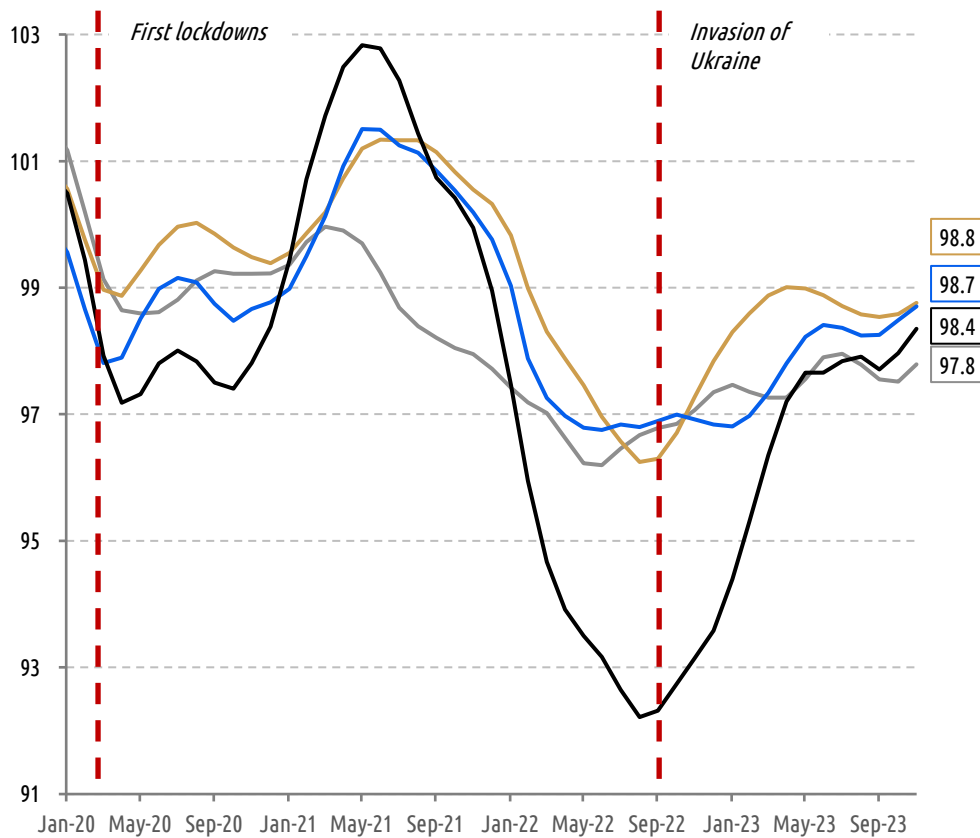
General Government deficit (% of GDP) – Since 2020



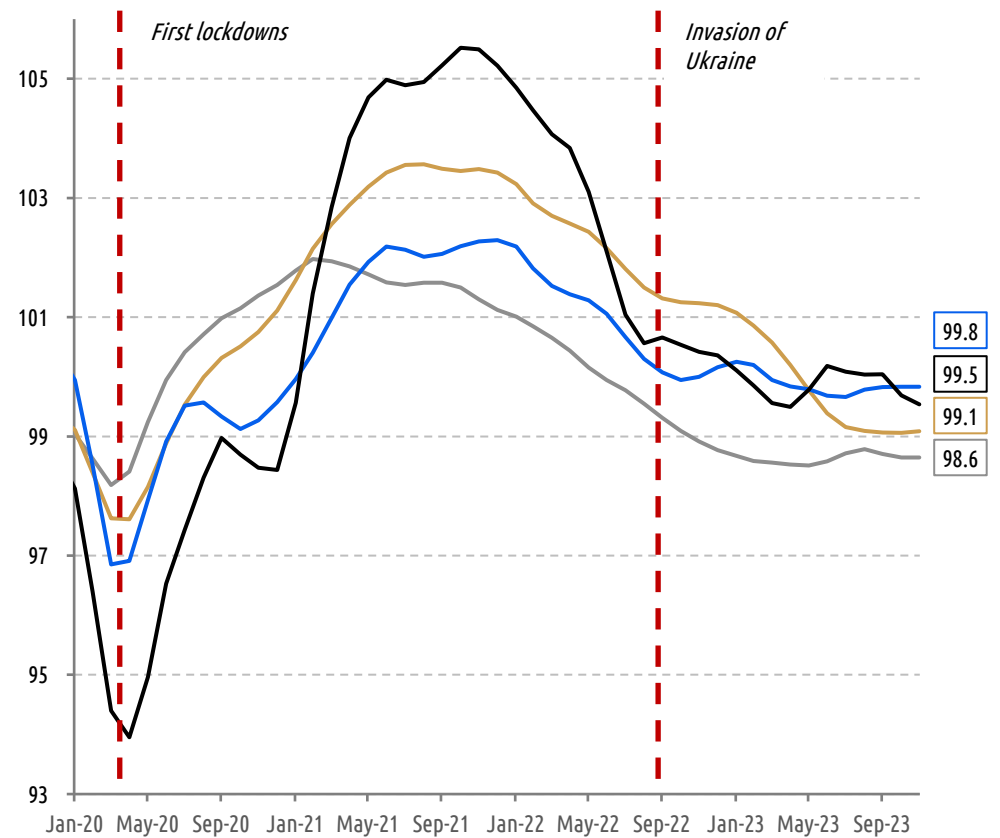
# Consumer and business confidences remain slightly below their pre-covid levels.

France is the only country with an increase in both indicators in December.

Consumer confidence indicator – Since Jan. 2020

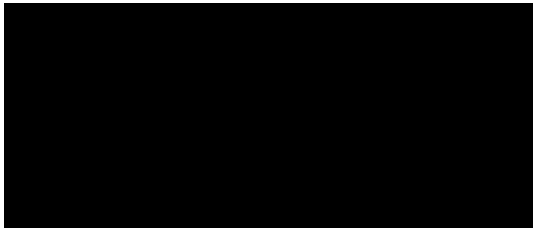


Business confidence indicator – Since Jan. 2020



— USA — Germany — France — UK

— USA — Germany — France — UK

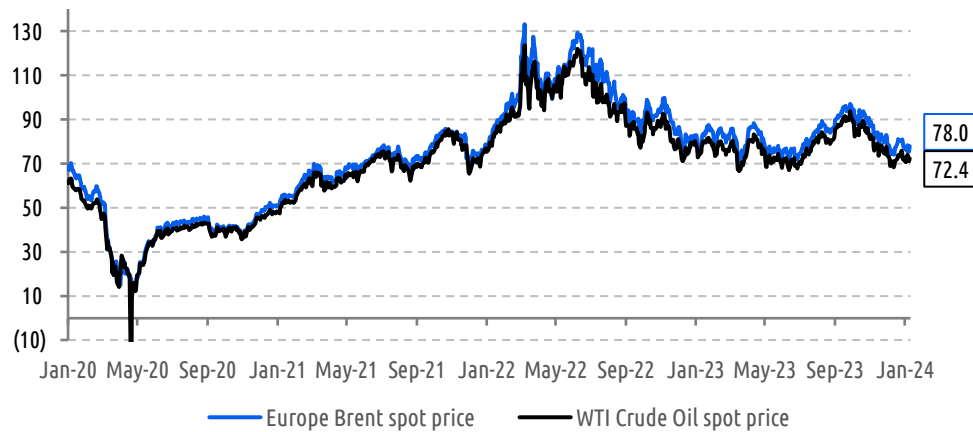


## **B The seeds of inflation**

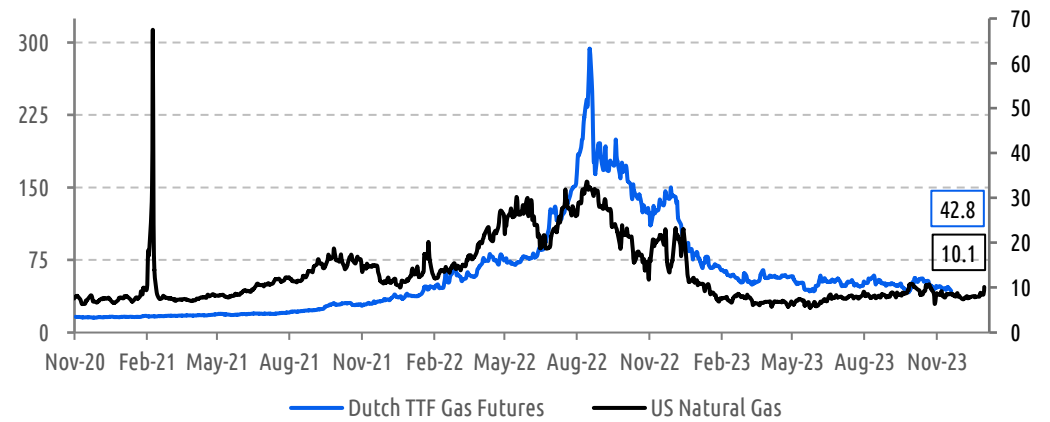
# Russian invasion added inflationary pressure. Yet, prices of raw materials have mostly returned to their pre-war range.

Despite the increase in the US over the last couple of months, a one-to-four price difference remains on the natural-gas markets between the US and Europe. Copper prices have been rather stable while wheat prices have strongly decreased to reach their pre-COVID level.

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)



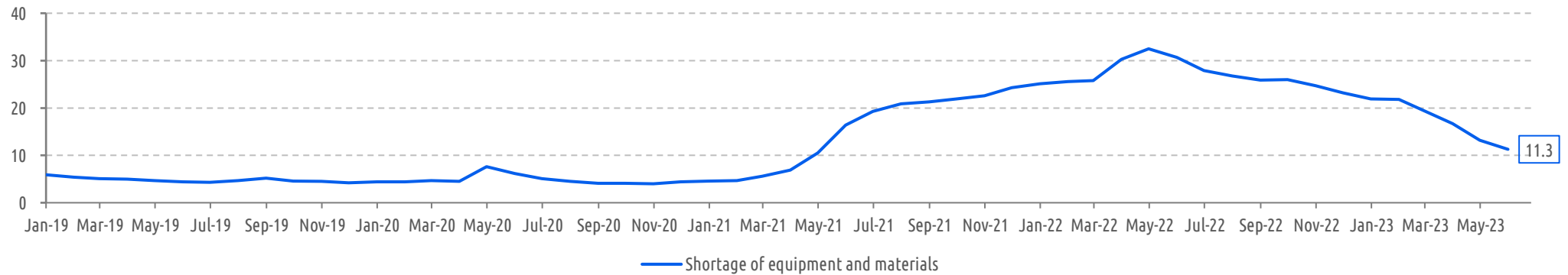
CBOT Wheat (USD/Bushel)



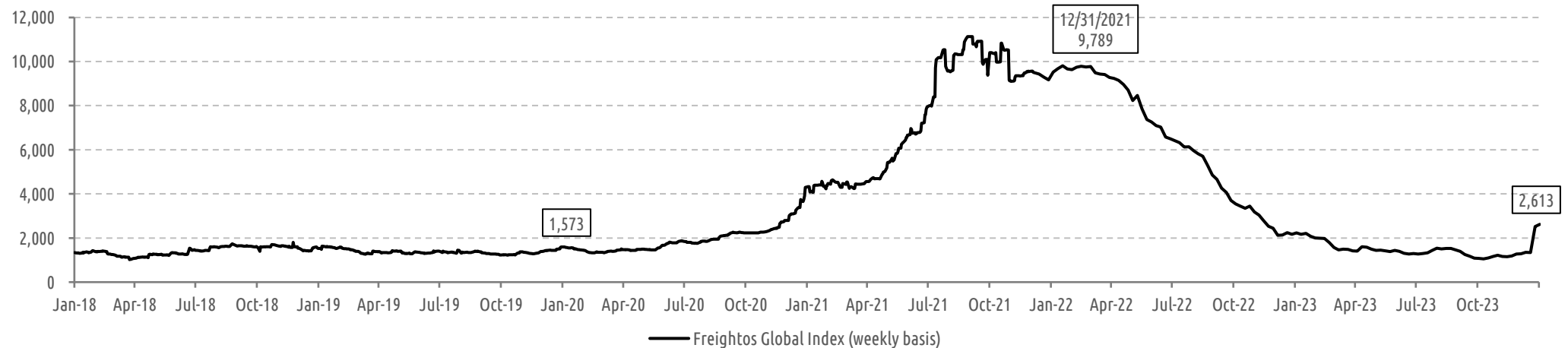
# New supply chain disruptions are appearing in 2024

While transportation costs had returned to their pre-crisis level, they have almost doubled since the beginning of the year because of tensions in the Red Sea.

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



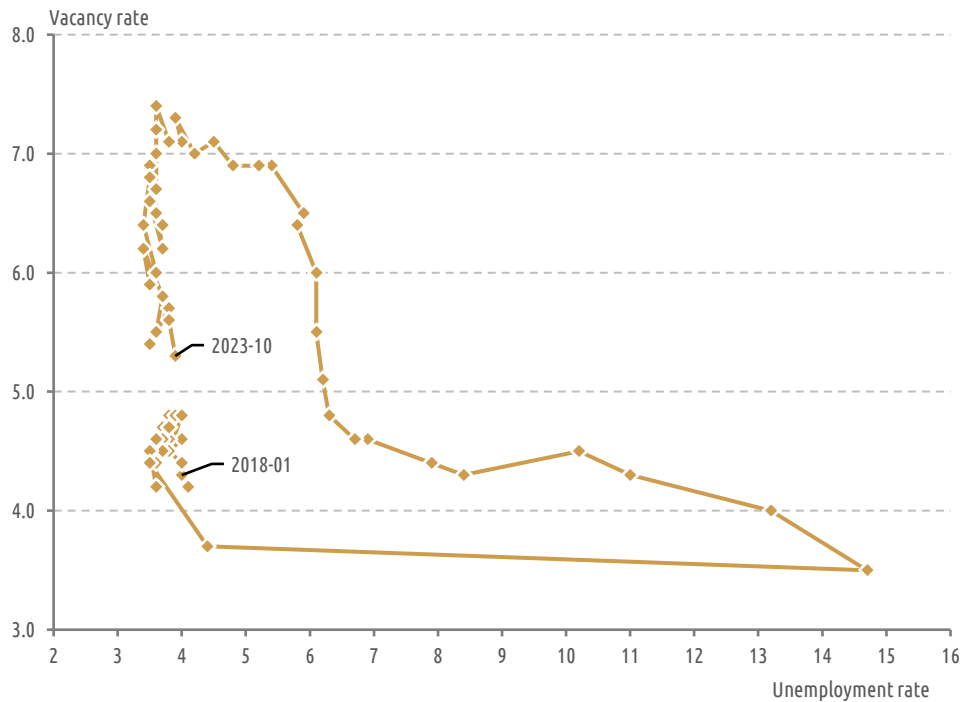
**Shipping Container Index (based on spot rate for 40 feet containers)**



# 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 is falling, getting closer to its pre-covid level.

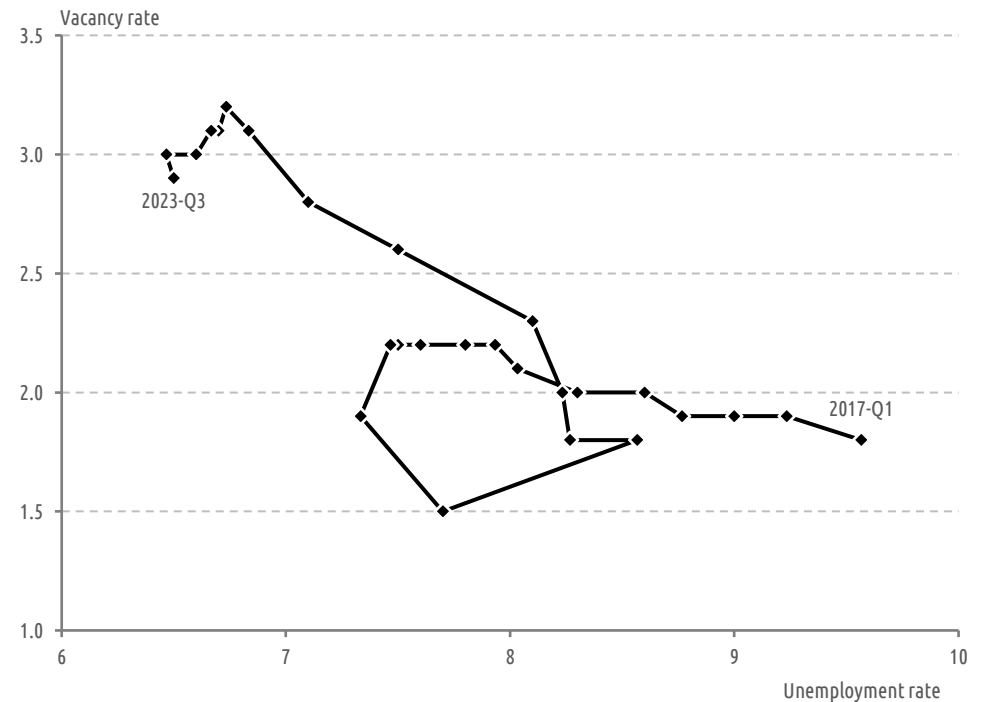
**Beveridge curve - USA, Monthly**



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

Civilian unemployment rate – Total – USA - Seasonally adjusted												
Indicator	12-22	01-23	02-23	03-23	04-23	05-23	06-23	07-23	08-23	09-23	10-23	11-23
Rate	3.5	3.4	3.6	3.5	3.4	3.7	3.6	3.5	3.8	3.8	3.9	3.7

**Beveridge curve – Euro Area, Quarterly**



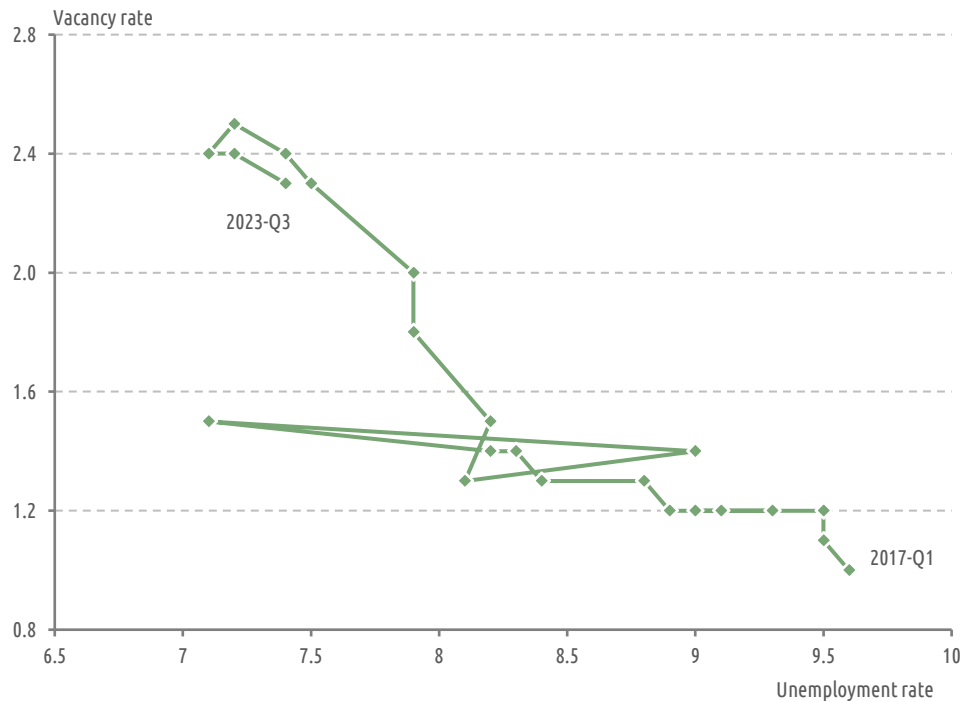
**Unemployment rate (% of labor force) - Monthly**

Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted												
Indicator	12-22	01-23	02-23	03-23	04-23	05-23	06-23	07-23	08-23	09-23	10-23	11-23
Rate	6.7	6.7	6.6	6.5	6.5	6.5	6.4	6.5	6.5	6.5	6.5	6.4

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

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

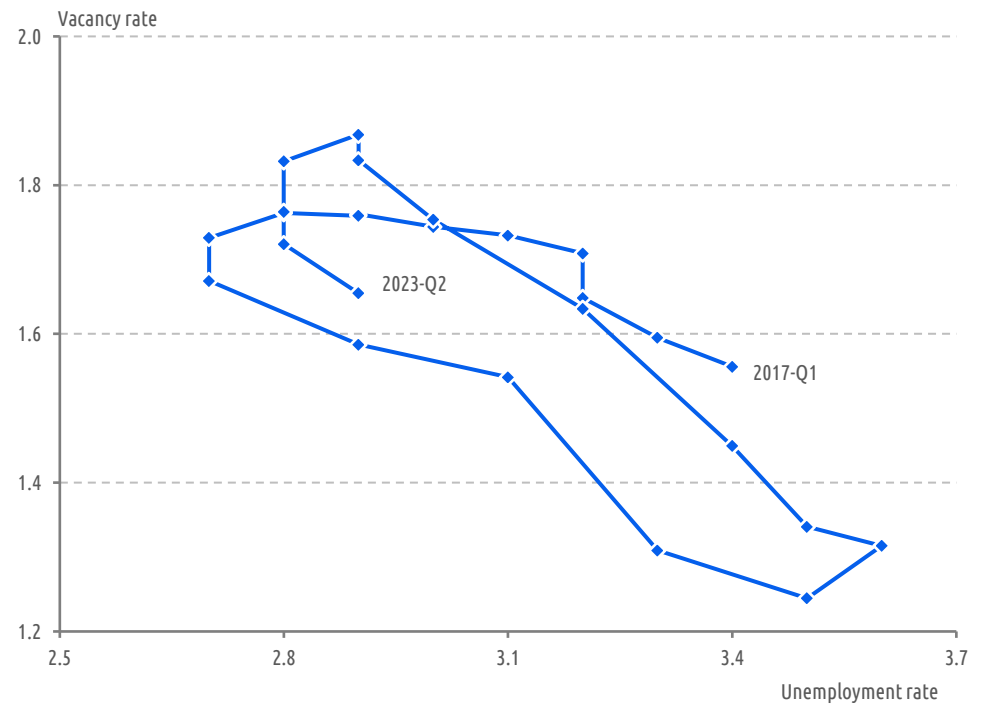
**Beveridge curve - France, Quarterly**



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

Unemployment rate – Total – France- Seasonally adjusted												
Indicator	12-22	01-23	02-23	03-23	04-23	05-23	06-23	07-23	08-23	09-23	10-23	11-23
Rate	7.2	7.1	7.1	7.1	7.2	7.3	7.3	7.4	7.4	7.3	7.3	7.3

**Beveridge curve - Germany, Quarterly**



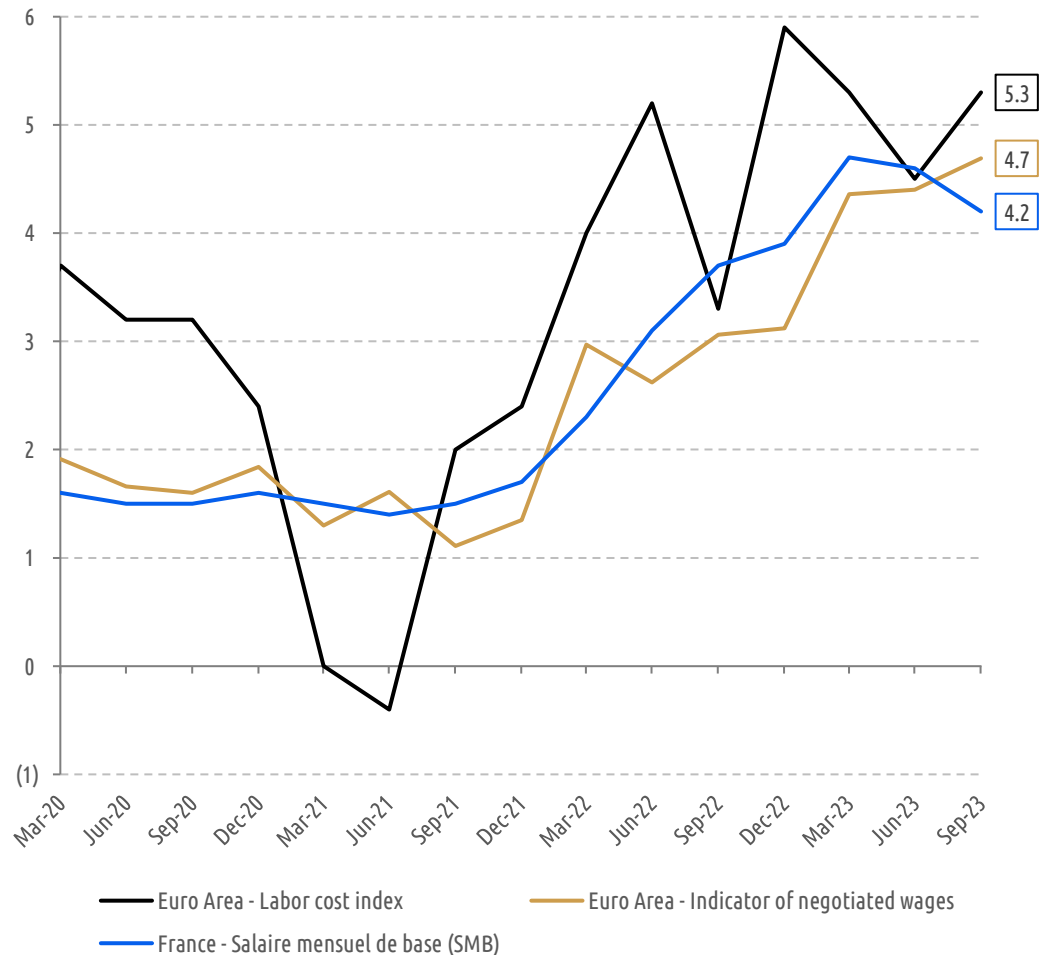
**Unemployment rate (% of labor force) - Monthly**

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

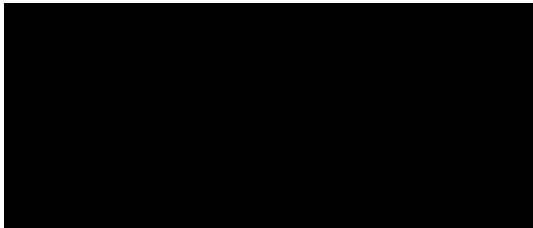
# The verdict on wage inflation in 2023, both in the US and the EZ, is still open

Wage inflation is stabilizing at a high level in the US. It increased in the third quarter for the Euro Area as a whole, however, it decreased for France.

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







## **C Inflation unbound**

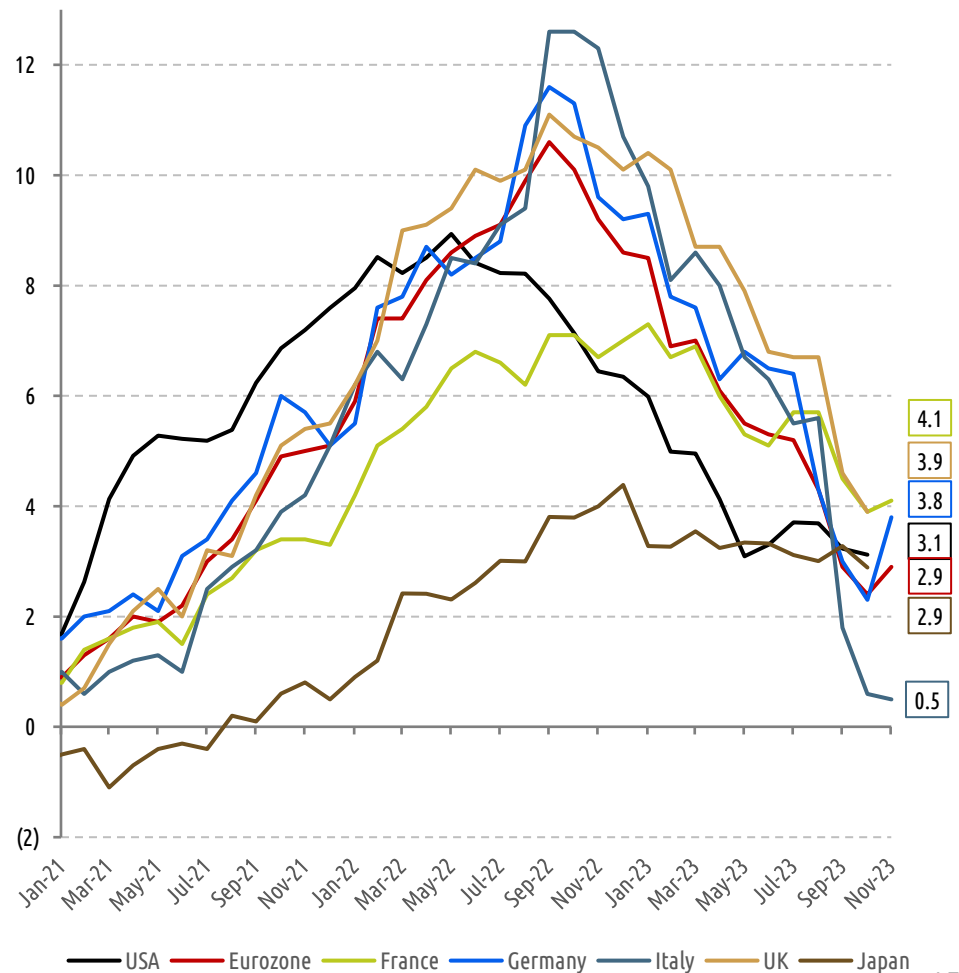
# Inflation is coming down from its peak both in Europe and the US

After the huge drop in October and November, headline inflation rose in the Euro Area in December to reach 2.9% (it was above 4% for France but as low as 0.5% in Italy). Inflation remained above 3% in the US in November. Core inflation is at high levels for most countries.

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

Monthly Year-on-Year inflation rates (%) – 2022/2023												
Country	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>US</b>	6.3	6.0	5.0	5.0	4.1	3.1	3.3	3.7	3.7	3.2	3.1	-
<i>US core</i>	5.5	5.5	5.6	5.5	5.3	4.9	4.7	4.4	4.1	4.0	4.0	-
<b>Euro Area*</b>	8.6	8.5	6.9	7.0	6.1	5.5	5.3	5.2	4.3	2.9	2.4	2.9
<i>Euro Area core*</i>	5.3	5.6	5.7	5.6	5.3	5.5	5.5	5.3	4.5	4.2	3.6	3.4
<b>France*</b>	7.0	7.3	6.7	6.9	6.0	5.3	5.1	5.7	5.7	4.5	3.9	4.1
<i>France core*</i>	4.2	4.6	4.6	4.7	4.4	4.4	4.3	4.0	3.6	3.5	2.9	2.9
<b>France INSEE</b>	6.0	6.3	5.7	5.9	5.1	4.5	4.3	4.9	4.9	4.0	3.5	3.7
<i>France core INSEE</i>	5.6	6.1	6.2	6.3	5.8	5.7	5.0	4.6	4.6	4.2	3.6	3.4
<b>Germany*</b>	9.2	9.3	7.8	7.6	6.3	6.8	6.5	6.4	4.3	3.0	2.3	3.8
<i>Germany core*</i>	5.1	5.4	5.9	5.6	5.1	6.1	6.2	6.3	4.8	4.2	3.5	3.4
<b>Italy*</b>	10.7	9.8	8.1	8.6	8.0	6.7	6.3	5.5	5.6	1.8	0.6	0.5
<i>Italy core*</i>	5.2	5.5	5.3	5.3	5.1	4.9	4.7	4.0	4.1	3.8	3.3	3.0
<b>UK</b>	10.1	10.4	10.1	8.7	8.7	7.9	6.8	6.7	6.7	4.6	3.9	-
<i>UK core</i>	5.8	6.2	6.2	6.8	7.1	6.9	6.9	6.2	6.1	5.7	5.1	-
<b>Japan</b>	4.4	3.3	3.3	3.5	3.2	3.3	3.3	3.1	3.0	3.3	2.9	-
<i>Japan core</i>	3.2	3.4	3.7	4.1	4.2	4.3	4.3	4.3	4.3	4.0	3.8	-

CPI Inflation (YoY % change) – since January 2021



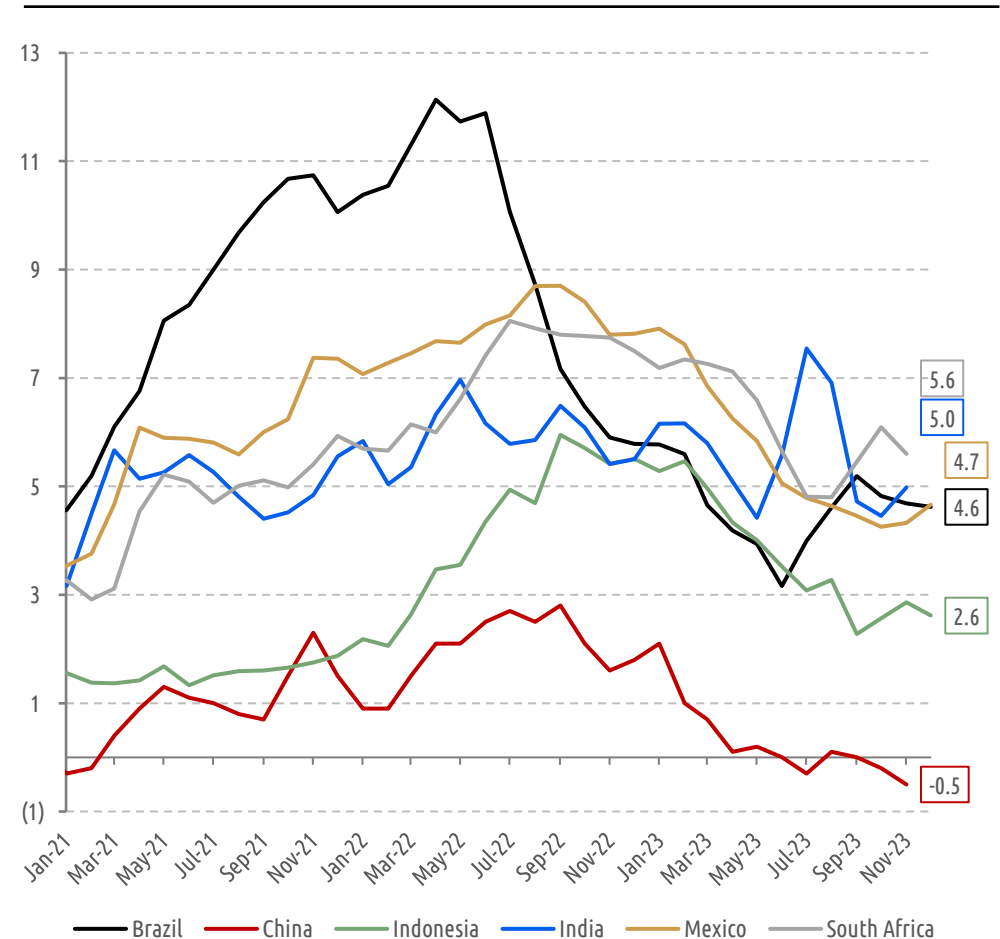
# Inflation in emerging economies is slowly cooling but remains at high levels

China remains an extraordinary exception with extremely low inflation levels

CPI inflation in advanced economies (YoY % change)

Monthly Year-on-Year inflation rates (%) – 2022/2023												
Country	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>China</b>	2.1	1.0	0.7	0.1	0.2	0.0	(0.3)	0.1	0.0	(0.2)	(0.5)	-
<b>India</b>	6.2	6.2	5.8	5.1	4.4	5.6	7.5	6.9	4.7	4.5	5.0	-
<b>South Africa</b>	7.2	7.3	7.3	7.1	6.6	5.7	4.8	4.8	5.5	6.1	5.6	-
<b>Brazil</b>	5.8	5.6	4.7	4.2	3.9	3.2	4.0	4.6	5.2	4.8	4.7	4.6
<b>Mexico</b>	7.9	7.6	6.8	6.3	5.8	5.1	4.8	4.6	4.5	4.3	4.3	4.7
<b>Indonesia</b>	5.3	5.5	5.0	4.3	4.0	3.5	3.1	3.3	2.3	2.6	2.9	2.6

CPI Inflation (YoY % change) – since January 2021



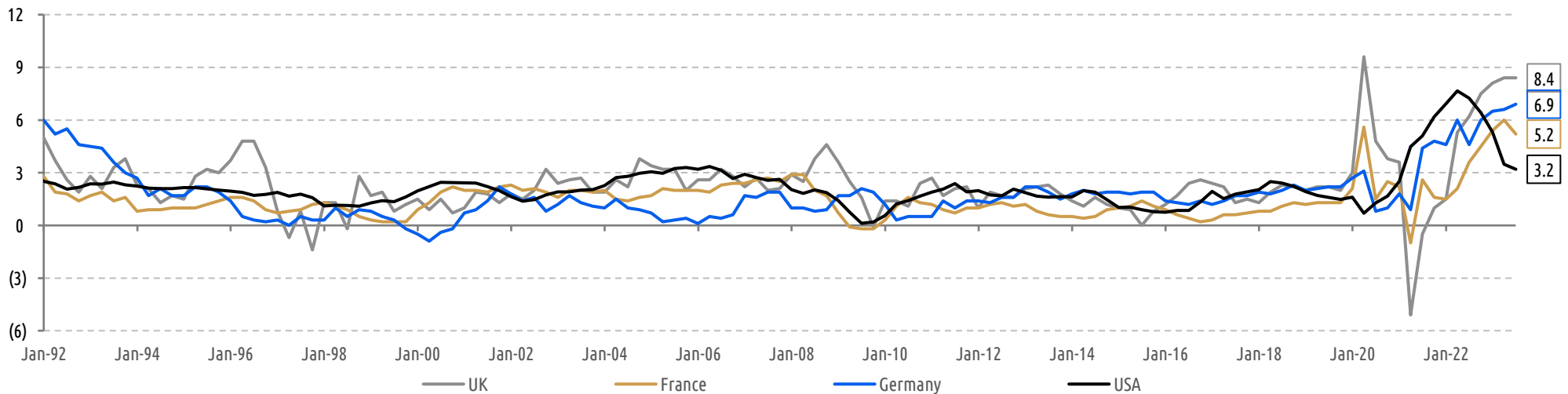
# Implied GDP deflators remain at high levels in Europe

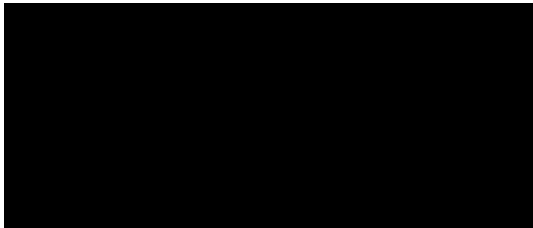
In the US it is lower, close to headline inflation levels.

## Quarterly implied GDP deflator

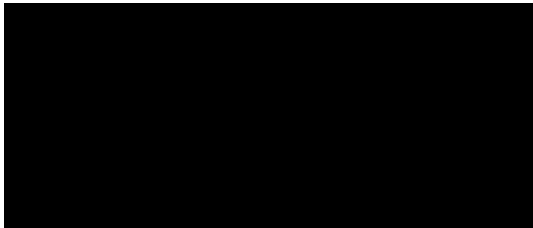
Implied GDP deflator (YoY % change) – Since Q1-2021								
Country	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23	Q3-23
USA	6.2	6.9	7.7	7.3	6.4	5.3	3.5	3.2
Germany	4.8	4.6	6.0	4.6	6.0	6.5	6.6	6.9
France	1.6	1.5	2.1	3.6	4.5	5.4	6.0	5.2
UK	1.0	1.5	5.3	6.2	7.5	8.1	8.4	8.4

## Quarterly implied GDP deflator – Since Q1-1992





## II Monetary policy



## **A In the US**

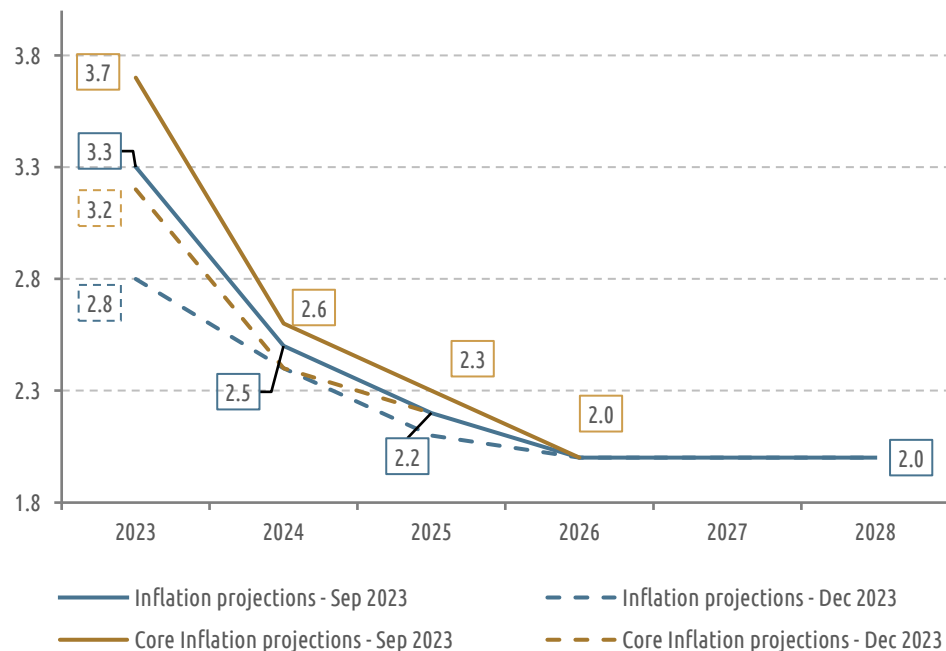
# Monetary policy decisions from the Fed (1/2)

The Fed decided to maintain interest rates at their levels in December despite the plateauing of inflation and a stronger-than-expected economic growth. Fed Board members notably consider that the labor market is slowing down and that the cooling down of the economy will soon follow.

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

Price indexes for Personal Consumption Expenditures							
Indicator	05-23	06-23	07-23	08-23	09-23	10-23	11-23
PCE inflation	4.0	3.2	3.3	3.3	3.4	2.9	2.6

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



## Key considerations

- The target range of the federal fund rates was maintained at 5.25%-5.50% on December 13<sup>th</sup>.
- The decision comes after already two pauses in the hikes in September and November. Interest rates are at their highest levels since 2001.
- The Fed revised up GDP growth for 2023 from 2.1% to 2.6% and the inflation down from 3.3% to 2.8%.
- Next meeting will be on January 31<sup>st</sup>. The key issue is whether a first cut will occur.

## Federal Reserve economic projections as of 13th December 2023

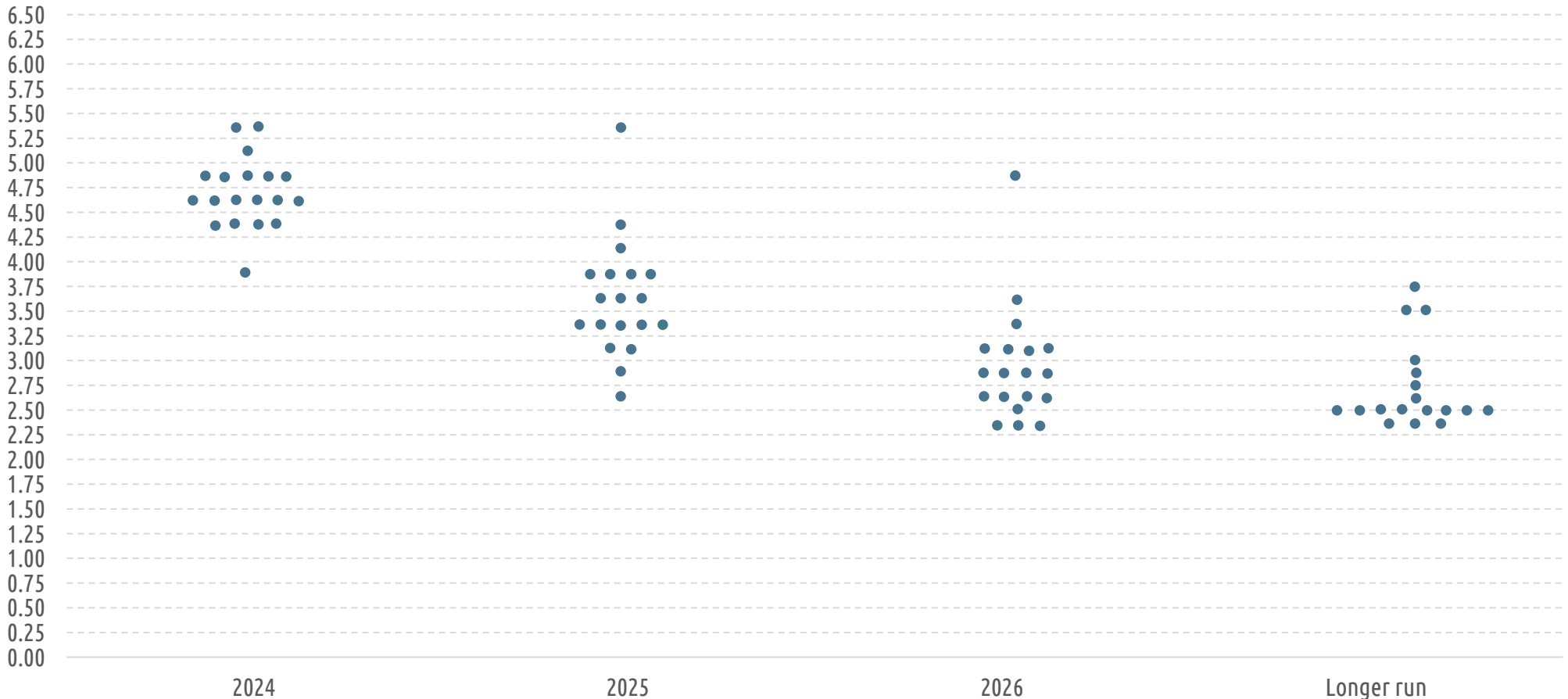
Indicator	2023	2024	2025	Longer run
Change in real GDP	2.6	1.4	1.8	1.8
Unemployment rate	3.8	4.1	4.1	4.1
Inflation	2.8	2.4	2.1	2.0
Federal funds rate	5.4	4.6	3.6	2.5

“While we believe that our policy rate is likely at or near its peak for this tightening cycle, the economy has surprised forecasters in many ways since the pandemic, and ongoing progress toward our 2 percent inflation objective is not assured.”

# Monetary policy decisions from the Fed (2/2)

The Federal Reserve’s so-called dot plot shows the median year-end projection for the federal fund rates. The estimates in December are lower than the previous ones in September. It notably implies that Fed members consider that three 25-bps cuts will occur in 2024.

FOMC participants’ assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate as of 13<sup>th</sup> December





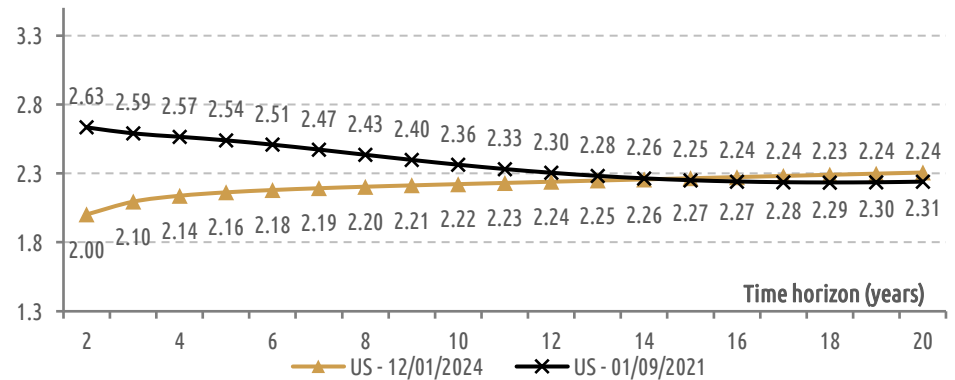
# Nominal long-term rates are at high levels but have been decreasing for the last couple of months.

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

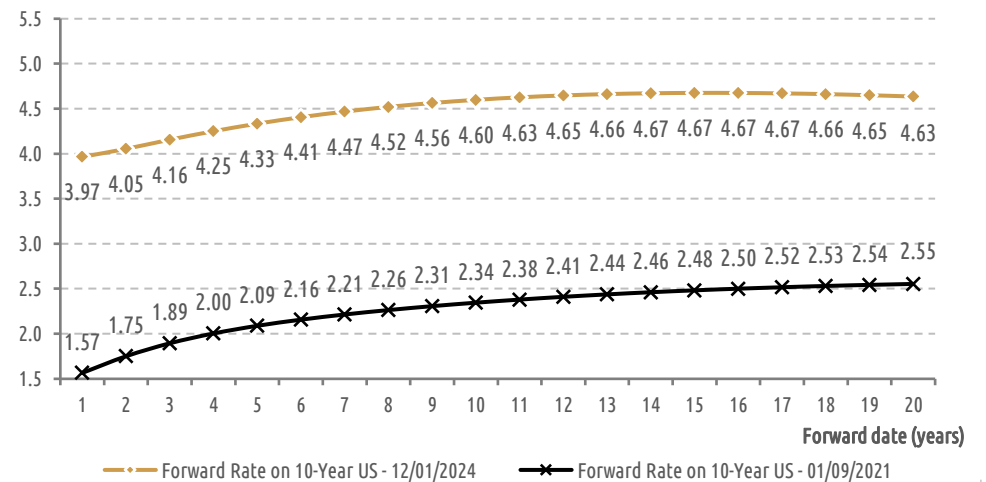
10-Y Nominal yield – US



Inflation Expectations – US (%)



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

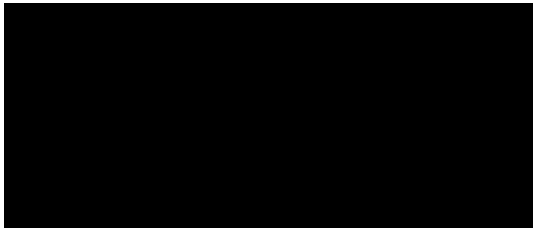


# The US yield curve has been inverted for more than a year

It has, however, been getting closer to zero over the last few months.

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



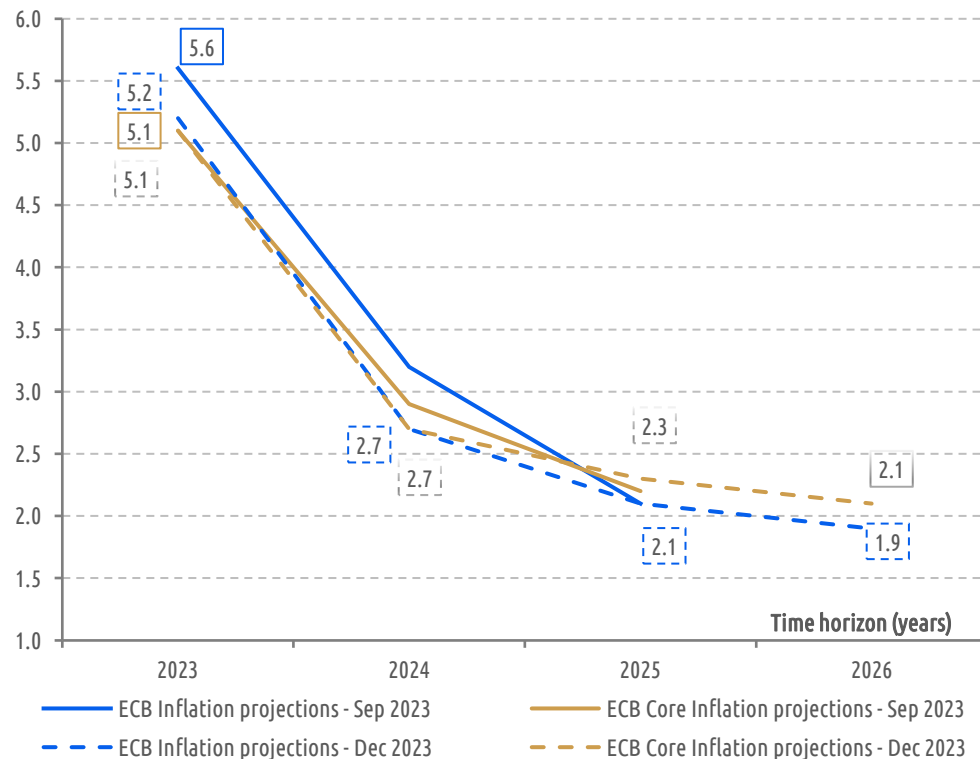


## **B In the Euro Area**

# The ECB decided to keep its interest rates unchanged in its December meeting

President Lagarde explained that the ECB staff expect inflation to slowly decline in 2024 but that price pressures remain strong for the moment.

**Inflation expectations & projections as of December 2023 (%)**



## Key considerations

- **The Governing Council decided to maintain the three key ECB interest rates at their November value. It is the second meeting without interest rate changes, after continuous hikes for more than 18 months.**
- Looking ahead, ECB staff have slightly revised their inflation projections down. Headline inflation is now expected to average 5.4% in 2023 while core inflation should reach 5.0%.
- The benchmark deposit rate is now set at 4%, coming from minus 0.5% a year and a half ago. It is its highest level since 2000.
- **The next meeting is set on January 25<sup>th</sup>. The ECB hinted that the interest rate will probably remain unchanged.**

ECB economic projections as of 14 December 2023				
Indicator	2023	2024	2025	2026
<b>Change in real GDP</b>	0.7	0.8	1.5	1.5
<b>Unemployment rate</b>	6.5	6.6	6.5	6.4
<b>Inflation</b>	5.2	2.7	2.1	1.9

“The Governing Council’s future decisions will ensure that its policy rates will be set at sufficiently restrictive levels for as long as necessary.”

CHRISTINE LAGARDE, MONTERAY POLICY DECISION, DECEMBER 14<sup>TH</sup> 2023

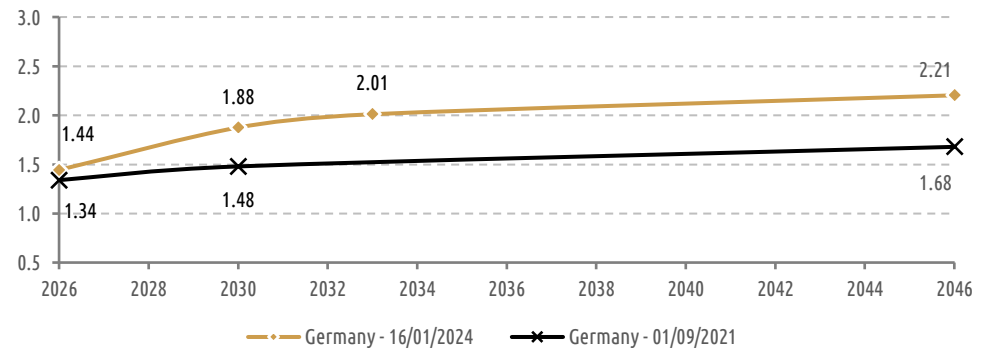
# In the Eurozone, nominal rates have been decreasing over the last six months following the fall of inflation

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

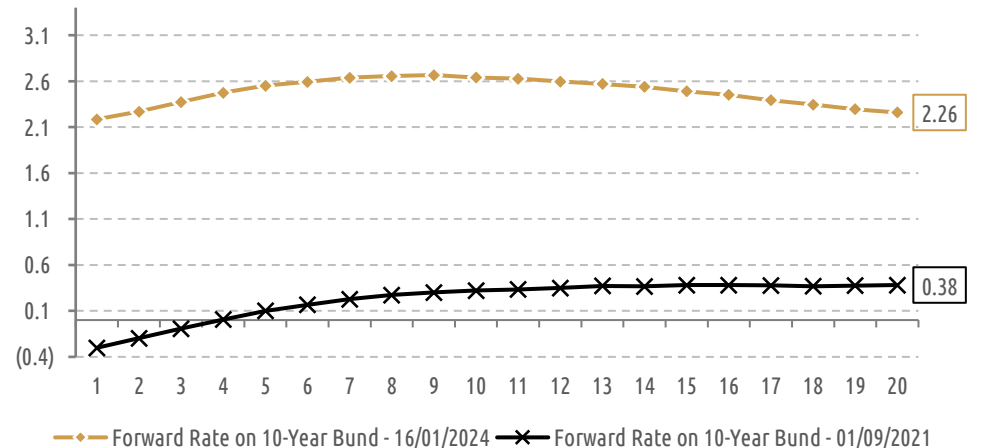
10-Y Nominal yield – German Bund



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



Forward Rates on 10-Year German Bund (%)



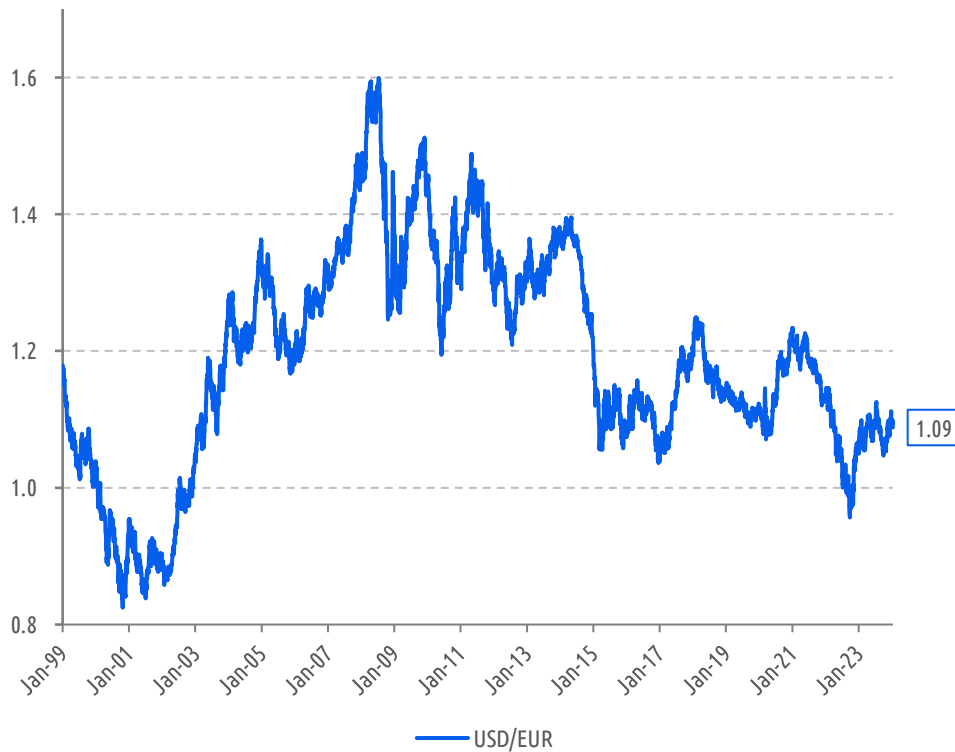
# The German yield curve is inverted for the first time since 2008, reflecting risk of recession/sluggish growth

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

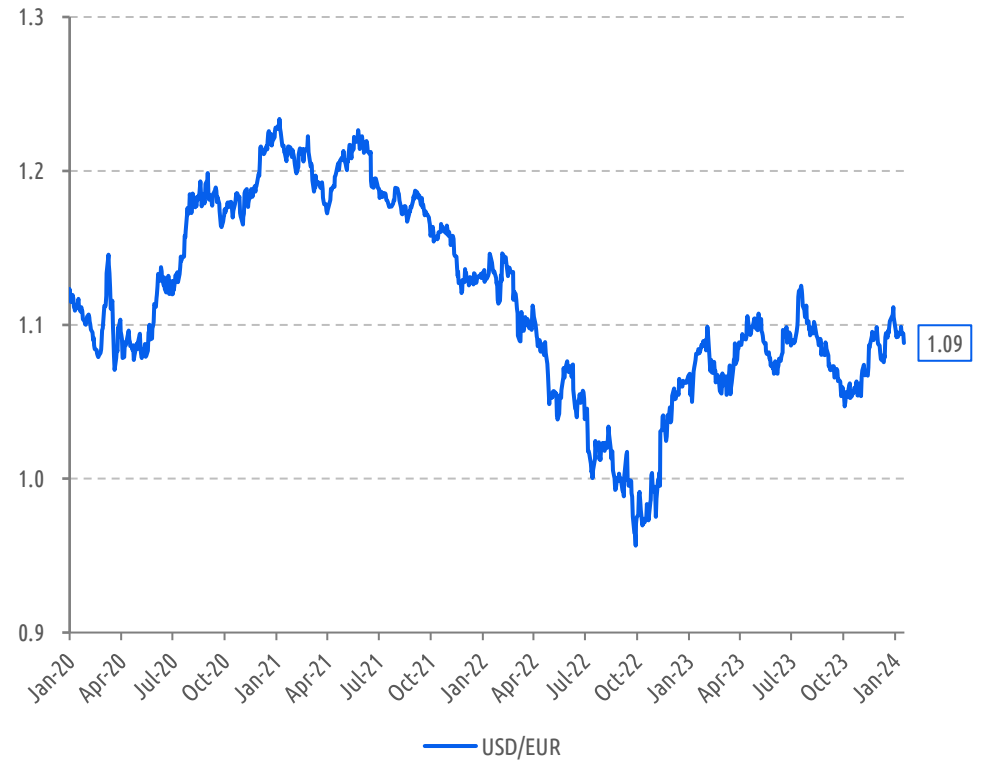


# After an appreciation at the end of 2022, the Euro has been rather stable in 2023.

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

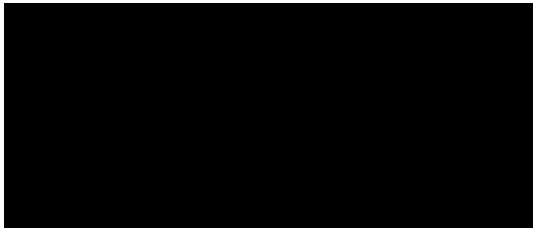


Nominal Foreign exchange rate in historical perspective – Since Jan. 2020



“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 are at particularly high levels

They have, however, been going down for the last few months

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

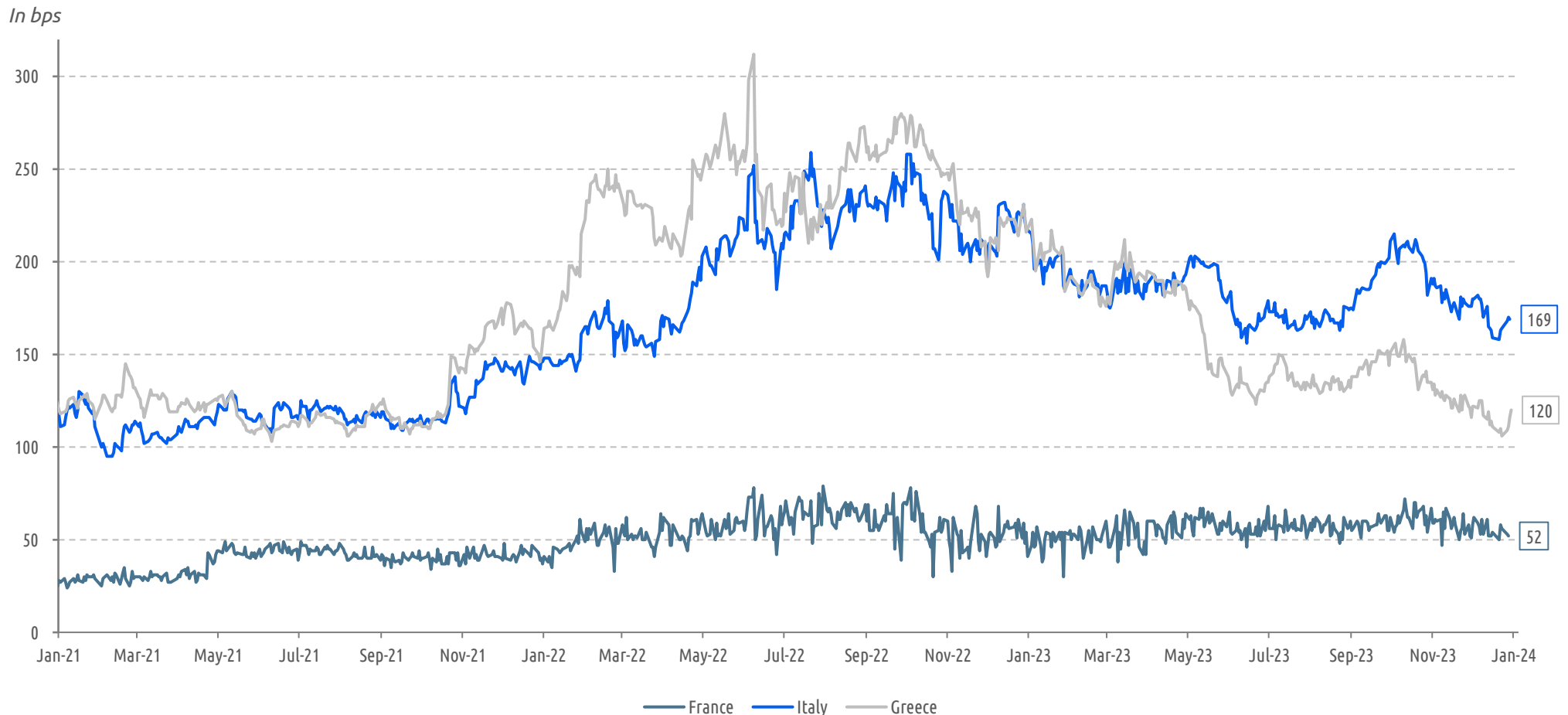


Sources: Eurostat as of 17/01/2024

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

Except for Italy where spreads are now way higher than in Greece, notably due to fears over larger-than-expected public deficits.

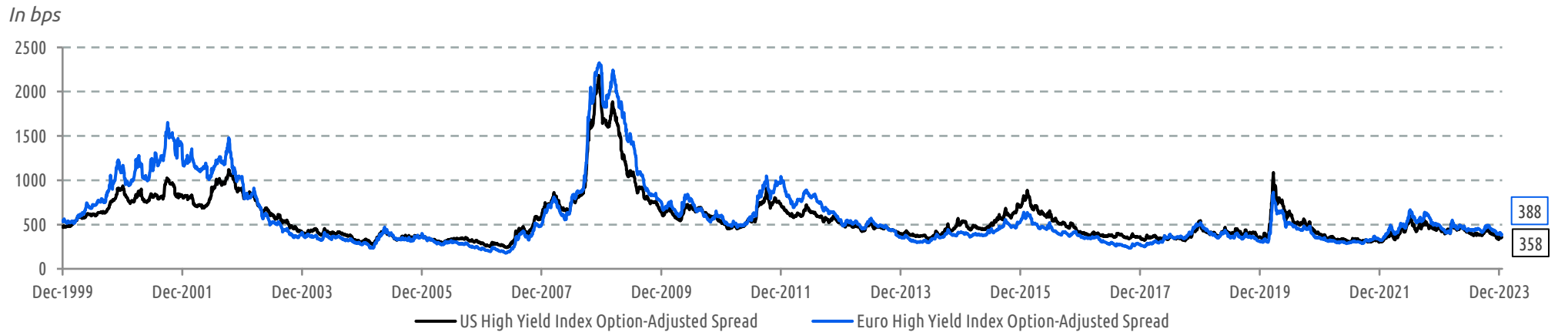
Italian, Greek and French spreads over 10Y German bund – Since Jan. 2021



# High yield corporate bond spreads have been decreasing in the last few months both in the US and the Euro Area.

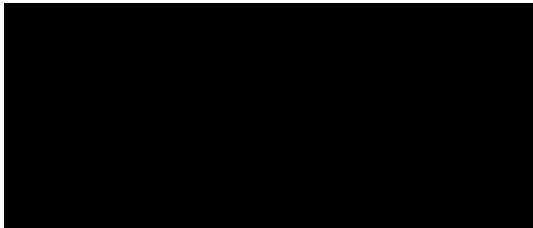
They reached their lowest levels since the beginning of 2022.

High yield corporate bond spreads – Since 2000



High yield corporate bond spreads – Since 2022



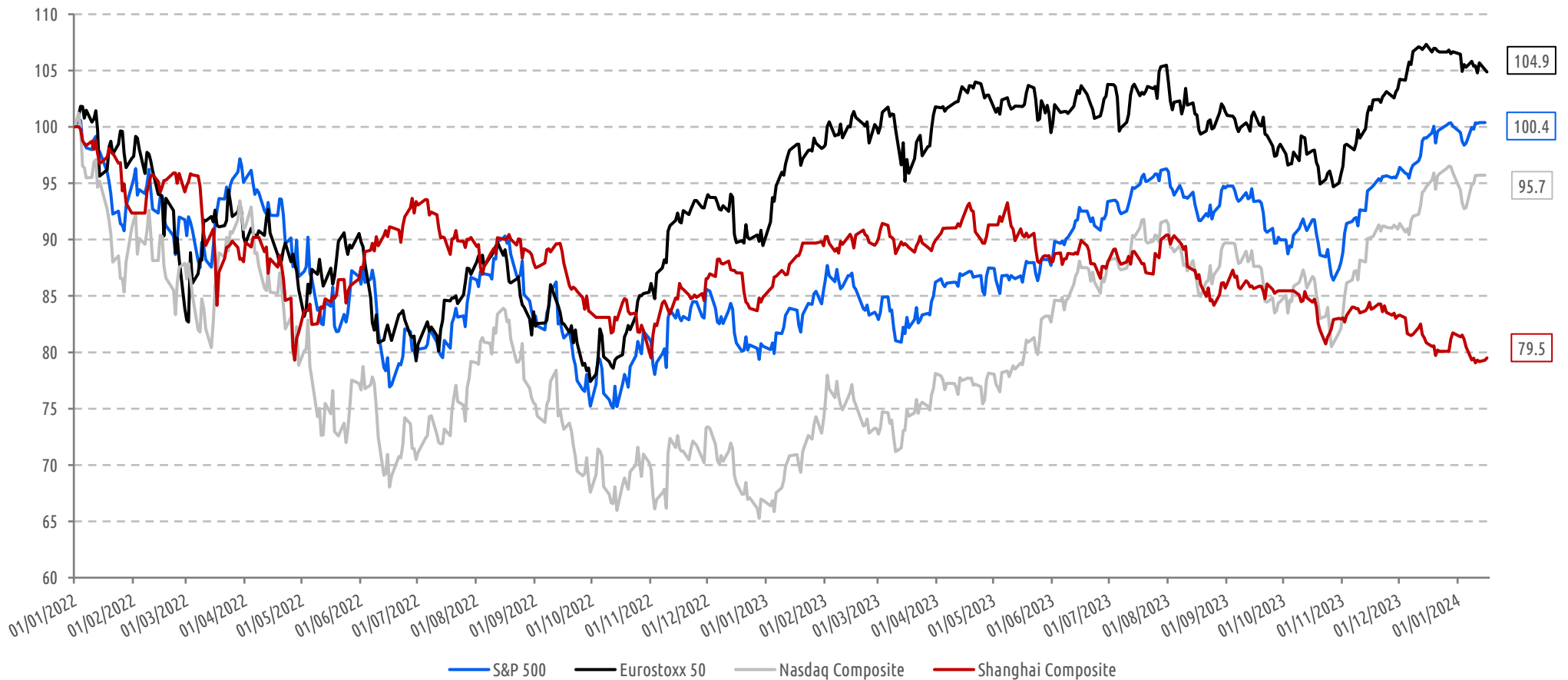


## **IV Impact on stock markets**

# Stock-market indices strongly increased during the last couple of months, except for the Shanghai Composite

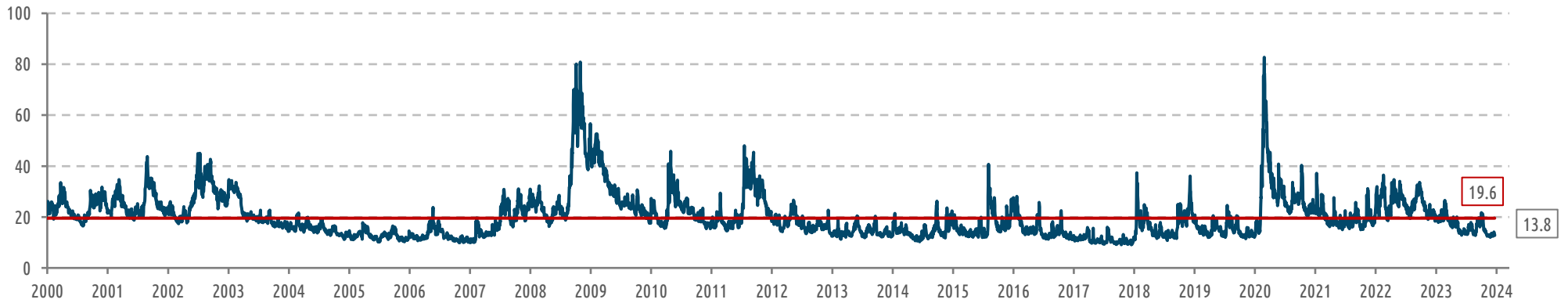
The Shanghai composite remains 20% lower than its pre-war level while the other indices are at a similar level than at the beginning of 2022.

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

VIX index – Since 2000



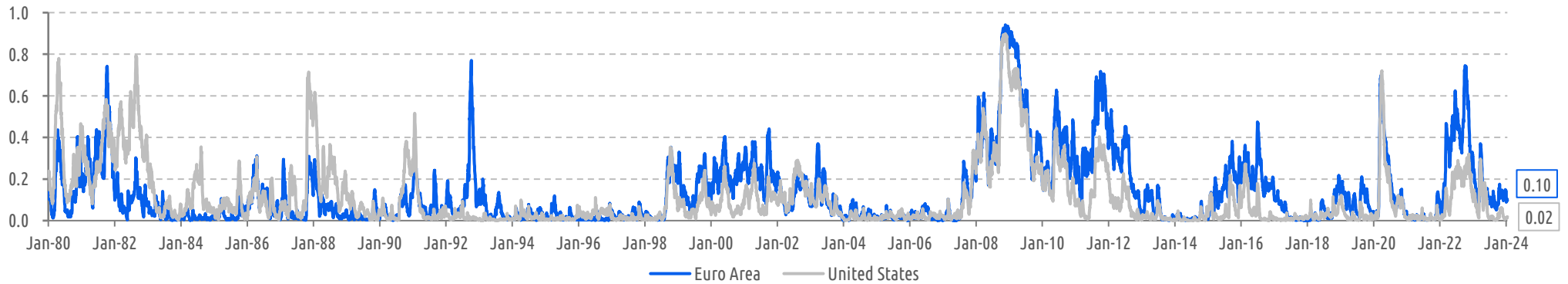
VIX index – Since 2022



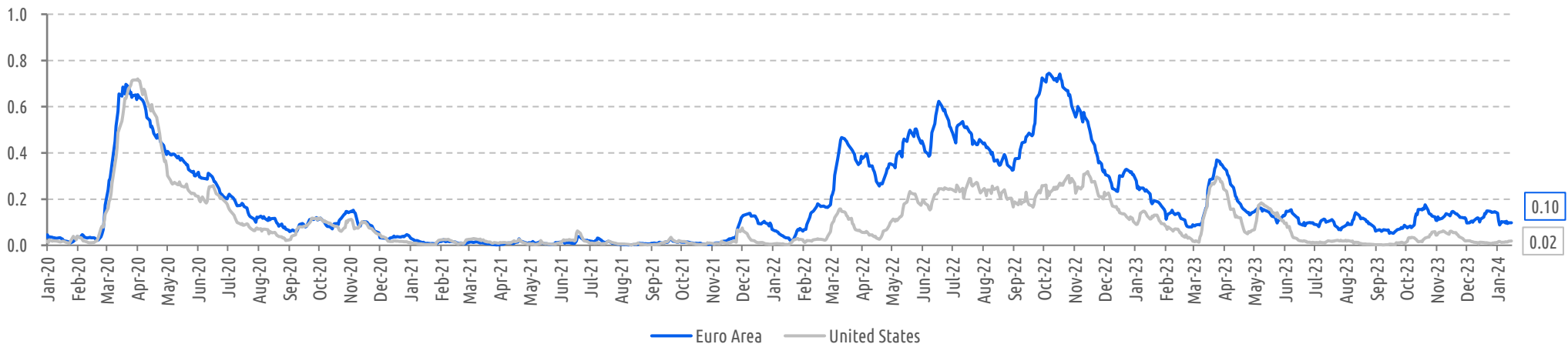
# Financial stress indicators returned to pre-war levels

The index, however, is higher in Europe.

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



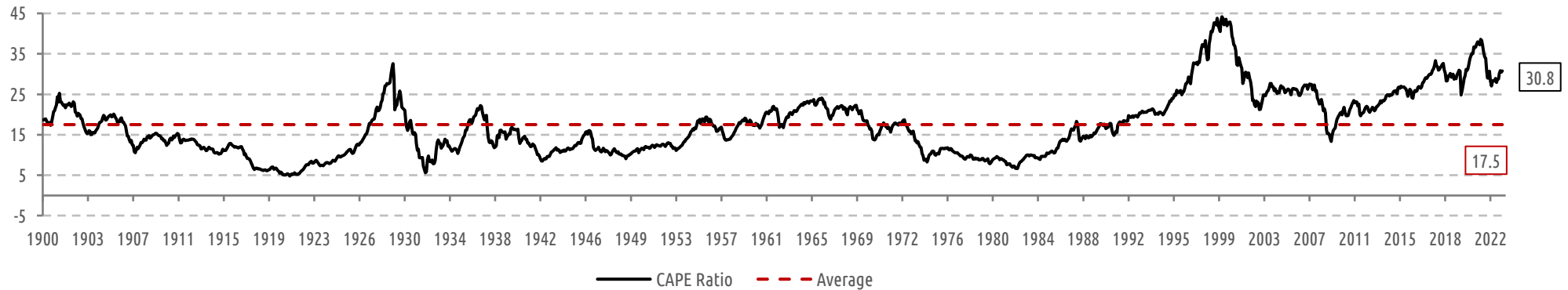
**Composite Indicator of Systemic Stress (daily) – Since Jan. 2020**



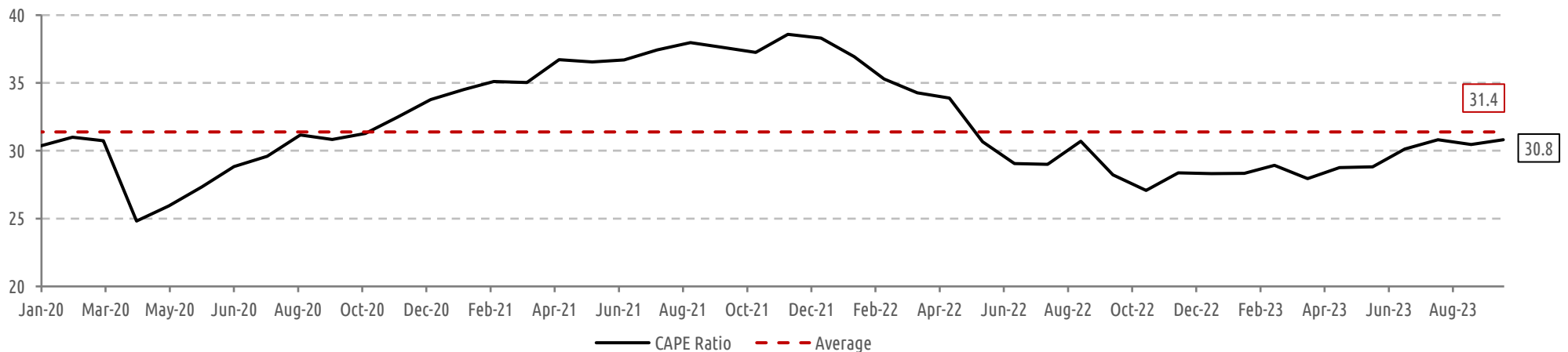
# US Shiller Cyclically Adjusted Price to Earnings ratio (CAPE ratio)<sup>1</sup>

Shiller CAPE ratio remains at record high level in historical perspective and back to its pre-covid level.

Cyclically Adjusted Price Earnings ratio – Since 1900



Cyclically Adjusted Price Earnings ratio – Since 2020

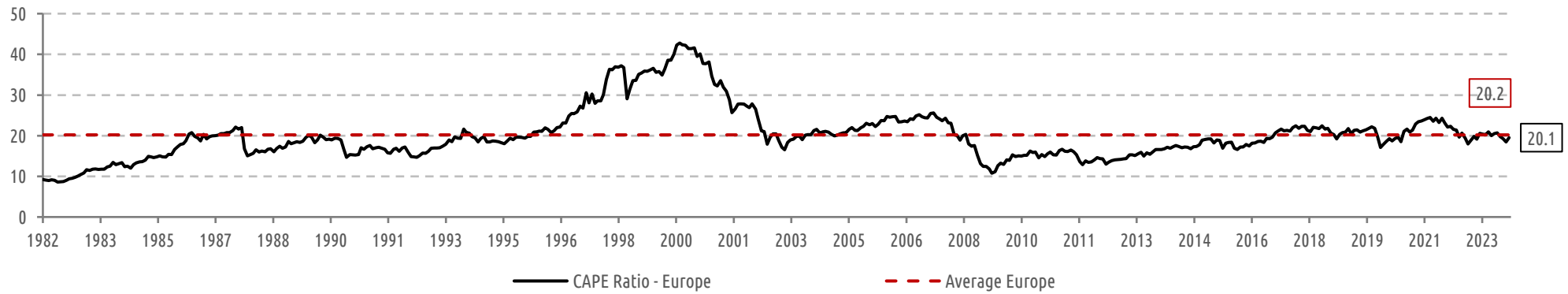




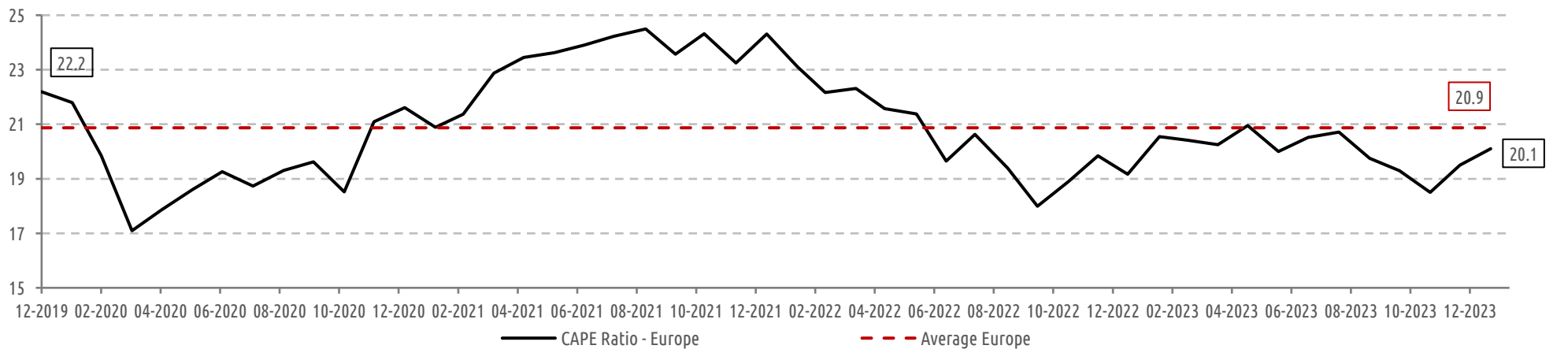
# Shiller CAPE ratio in Europe

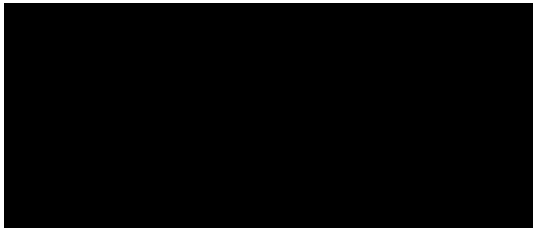
Shiller CAPE ratio is still close to its pre-Covid level and to its historical average in Europe.

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) – Germany	<a href="https://data.oecd.org/naexkp/germany-gdp-growth">OECD/KEI/NAEXKP01.DEU.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Eurozone	<a href="https://data.oecd.org/naexkp/eurozone-gdp-growth">OECD/KEI/NAEXKP01.EA19.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – France	<a href="https://data.oecd.org/naexkp/france-gdp-growth">OECD/KEI/NAEXKP01.FRA.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – UK	<a href="https://data.oecd.org/naexkp/uk-gdp-growth">OECD/KEI/NAEXKP01.GBR.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Italy	<a href="https://data.oecd.org/naexkp/italy-gdp-growth">OECD/KEI/NAEXKP01.ITA.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – Japan	<a href="https://data.oecd.org/naexkp/japan-gdp-growth">OECD/KEI/NAEXKP01.JPN.GP.Q</a>
4	Quarterly GDP growth (% change over the previous period) – US	<a href="https://data.oecd.org/naexkp/usa-gdp-growth">OECD/KEI/NAEXKP01.USA.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – China	<a href="https://data.oecd.org/naexkp/china-gdp-growth">OECD/DP LIVE/CHN.QGDP.TOT.PC_CHGPP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – Brazil	<a href="https://data.oecd.org/naexkp/brazil-gdp-growth">OECD/KEI/NAEXKP01.BRA.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – Mexico	<a href="https://data.oecd.org/naexkp/mexico-gdp-growth">OECD/KEI/NAEXKP01.MEX.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – South Africa	<a href="https://data.oecd.org/naexkp/south-africa-gdp-growth">OECD/KEI/NAEXKP01.ZAF.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – Indonesia	<a href="https://data.oecd.org/naexkp/indonesia-gdp-growth">OECD/KEI/NAEXKP01.IDN.GP.Q</a>
5	Quarterly GDP growth (% change over the previous period) – India	<a href="https://data.oecd.org/naexkp/india-gdp-growth">OECD/KEI/NAEXKP01.IND.GP.Q</a>

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6	General government debt – France	<a href="https://ec.europa.eu/eurostat/tgm/table.do?tab=table&amp;init=1&amp;language=en&amp;code=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://www.ons.gov.uk/economy/governmentanddepartments/departmentforworkandpensions/indicators/ONS/EDP1/YEQJ.Q">ONS/EDP1/YEQJ.Q</a>
6	General government deficit – United States	<a href="https://www.bea.gov/data/government/deficit-and-debt/GDP/NIPA-T30100/AD01RC-Q">BEA/NIPA-T30100/AD01RC-Q</a>
6	General government deficit – Germany	<a href="https://ec.europa.eu/eurostat/tgm/table.do?tab=table&amp;init=1&amp;language=en&amp;code=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://ec.europa.eu/eurostat/tgm/table.do?tab=table&amp;init=1&amp;language=en&amp;code=teina205/Q.B9.S13.PC_GDP_SCA.FR">Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.FR</a>
6	General government deficit – United Kingdom	<a href="https://www.ons.gov.uk/economy/governmentanddepartments/departmentforworkandpensions/indicators/ONS/UKEA/CT8O.Q">ONS/UKEA/CT8O.Q</a>
7	Consumer confidence index – United States	<a href="https://www.oecd.org/economy/indicators/CLI/CSCICP03.USA.M">OECD/MEI CLI/CSCICP03.USA.M</a>
7	Consumer confidence index – Germany	<a href="https://www.oecd.org/economy/indicators/CLI/CSCICP03.DEU.M">OECD/MEI CLI/CSCICP03.DEU.M</a>
7	Consumer confidence index – France	<a href="https://www.oecd.org/economy/indicators/CLI/CSCICP03.FRA.M">OECD/MEI CLI/CSCICP03.FRA.M</a>
7	Consumer confidence index – United Kingdom	<a href="https://www.oecd.org/economy/indicators/CLI/CSCICP03.GBR.M">OECD/MEI CLI/CSCICP03.GBR.M</a>
7	Business confidence index – United States	<a href="https://www.oecd.org/economy/indicators/CLI/BSCICP03.USA.M">OECD/MEI CLI/BSCICP03.USA.M</a>
7	Business confidence index – Germany	<a href="https://www.oecd.org/economy/indicators/CLI/BSCICP03.DEU.M">OECD/MEI CLI/BSCICP03.DEU.M</a>
7	Business confidence index – France	<a href="https://www.oecd.org/economy/indicators/CLI/BSCICP03.FRA.M">OECD/MEI CLI/BSCICP03.FRA.M</a>
7	Business confidence index – United Kingdom	<a href="https://www.oecd.org/economy/indicators/CLI/BSCICP03.GBR.M">OECD/MEI CLI/BSCICP03.GBR.M</a>



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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) – France INSEE	<a href="https://www.insee.fr/fr/statistiques/1515151?geo=FRANCE&amp;ts=2015&amp;ds=IPC&amp;ds2=SO&amp;ds3=4035&amp;ds4=GLISSEMENT_ANNUEL_ENSEMBLE_FE_POURCENT_BRUT_SO_FALSE">INSEE/IPC-2015/M.IPC.SO.SO.4035.GLISSEMENT_ANNUEL.ENSEMBLE.FE.POURCENT.BRUT.SO.FALSE</a> <a href="https://www.insee.fr/fr/statistiques/1515151?geo=FRANCE&amp;ts=2015&amp;ds=IPC&amp;ds2=SO&amp;ds3=4035&amp;ds4=GLISSEMENT_ANNUEL_ENSEMBLE_FM_POURCENT_CVS_FISC_SO_FALSE">INSEE/IPC-2015/M.ISJ.SO.SO.4035.GLISSEMENT_ANNUEL.ENSEMBLE.FM.POURCENT.CVS-FISC.SO.FALSE</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-survey/cpi-inflation/cpi-inflation-d7g7">ONS/MM23/D7G7.M</a> <a href="https://www.ons.gov.uk/employment-and-labour/market-survey/cpi-inflation/cpi-inflation-dko8">ONS/MM23/DKO8.M</a>
15	CPI Inflation (YoY % change) – Japan	<a href="https://www.stat.go.jp/english/press/cpi/cpi001.htm">STATJP/CPIm/001</a> <a href="https://www.stat.go.jp/english/press/cpi/cpi0740.htm">STATJP/CPIm/740</a>
16	CPI Inflation (YoY % change) – South Africa	<a href="https://data.oecd.org/cpi/cpi-pal-tt01-zaf-gy-m">OECD/KEI/CPALTT01.ZAF.GY.M</a>
16	CPI Inflation (YoY % change) - Brazil	<a href="https://data.oecd.org/cpi/cpi-pal-tt01-bra-gy-m">OECD/KEI/CPALTT01.BRA.GY.M</a>
16	CPI Inflation (YoY % change) – China	<a href="https://data.oecd.org/cpi/cpi-pal-tt01-chn-gy-m">OECD/KEI/CPALTT01.CHN.GY.M</a>
16	CPI Inflation (YoY % change) – Indonesia	<a href="https://data.oecd.org/cpi/cpi-pal-tt01-idn-gy-m">OECD/KEI/CPALTT01.IDN.GY.M</a>
16	CPI Inflation (YoY % change) – India	<a href="https://data.oecd.org/cpi/cpi-pal-tt01-ind-gy-m">OECD/KEI/CPALTT01.IND.GY.M</a>
16	CPI Inflation (YoY % change) – Mexico	<a href="https://data.oecd.org/cpi/cpi-pal-tt01-mex-gy-m">OECD/KEI/CPALTT01.MEX.GY.M</a>

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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/nipaweb/tables?nips=1&amp;table=NIPAT10109&amp;series=A191RD-Q&amp;unit=1">BEA/NIPA-BEA/NIPA-T10109/A191RD-Q/A191RD-Q</a>
20	Personal consumption expenditures (PCE)	<a href="https://www.bea.gov/nipaweb/tables?nips=1&amp;table=NIPAT20804&amp;series=DPCERG-M&amp;unit=1">BEA/NIPA-T20804/DPCERG-M</a>
23	10-Y Nominal yield – US	<a href="https://www.federalreserve.gov/releases/h15/riflfgcy10">FED/H15/RIFLGFCY10_N.B</a>
24	Yield curve – US	<a href="https://www.federalreserve.gov/releases/h15/riflfgcm03">FED/H15/RIFLGFCM03_N.B</a>
27	10-Y Nominal yield – German Bund	<a href="https://www.buba.de/BBK01/WT1010">BUBA/BBK01/WT1010</a>
27	Inflation Expectations - Germany	<a href="https://www.buba.de/BBSSY/D.KCP.EUR.A607.DE0001102523.A">BUBA/BBSSY/D.KCP.EUR.A607.DE0001102523.A</a>
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>
27	Yield curve – Germany	<a href="https://www.buba.de/BBSSY/D.KCP.EUR.A607.DE0001102523.A">BUBA/BBSSY/D.KCP.EUR.A607.DE0001102523.A</a>

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30	Greek 10-Y yield	<a href="#">Eurostat/irt_lt_mcpy_d/D.MCBY.EL</a>
30	French 10-Y yield	<a href="#">Eurostat/irt_lt_mcpy_d/D.MCBY.FR</a>
30	German 10-Y yield	<a href="#">Eurostat/irt_lt_mcpy_d/D.MCBY.DE</a>
36	Composite Indicator of Systemic Stress (daily) – Euro Area	<a href="#">ECB/CISS/D.U2.Z0Z.4F.EC.SS_CIN.IDX</a>
36	Composite Indicator of Systemic Stress (daily) – United States	<a href="#">ECB/CISS/D.US.Z0Z.4F.EC.SS_CIN.IDX</a>