22 SEPTEMBER 2023

### CEPREMAP / DBNOMICS

# Macroeconomic Outlook – September 2023



### **DBnomics**

- Most data presented in the forthcoming slides are extracted from DBnomics (<u>https://db.nomics.world/</u>), an open-sourced databank created at CEPREMAP, and will be updated every Friday 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 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



### **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. This month the ECB raised again the interest rate to 4.00%, at the surprise of investors. The Fed paused its hikes but signaled that a last 25-bps increase should occur before the end of the year.
- Inflation has been decreasing in the US while it remains high in Europe. However, the returns to the 2% inflation target may be complex in the US as the Fed must deal with labor-market overheating and financial-market issues.
- 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 Euro Area as the uncertainty about inflation remains. However, the spreads between core countries and the periphery have been decreasing. Indeed, macroeconomic results have overcome expectations in countries as Spain or Greece while Germany's growth has been particularly low for the past year.
- 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. However, as US inflation seems to have peaked before the EZ, this trend has reversed since October 2022.



### **Table of Contents**

Ι	GR	OWTH AND INFLATION IN SELECTED G20 COUNTRIES	2
	Α	The growth slowdown	3
	В	The seeds of inflation	8
	С	Inflation unbound	14
II	МО	NETARY POLICY	18
	Α	In the US	19
	В	In the Euro Area	24
III	IIM	PACT ON YIELDS AND SPREADS	29
IV	IMF	PACT ON STOCK MARKETs	33
V	AP	PENDIX	39





### Growth and inflation in selected G20 countries





# A The growth slowdown



### Growth in advanced economies

The second quarter of 2023 has brought low but positive economic growth in all major advanced economies but Italy. France's growth was notably higher than expected. The IMF has moderately revised upward its growth projections for 2023 and 2024.

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

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

Overheider CDD security sets %									
Quarterly GDP growth rate %   Country 21Q2 21Q3 21Q4 22Q1 22Q2 22Q3 22Q4 23Q									23Q2
Euro Area	2.0	2.1	0.5	0.7	0.8	0.3	(0.1)	0.1	0.1
France	0.9	3.0	0.6	(0.1)	0.4	0.3	0.1	0.0	0.5
Germany	2.2	0.7	0.0	1.0	(0.1)	0.4	(0.4)	(0.1)	0.0
Italy	2.5	2.9	0.8	0.1	1.2	0.3	(0.2)	0.6	(0.4)
UK	6.5	1.7	1.5	0.5	0.1	(0.1)	0.1	0.1	0.2
USA	1.7	0.7	1.7	(0.4)	(0.1)	0.8	0.6	0.5	0.5
Japan	0.5	(0.4)	1.1	(0.6)	1.3	(0.3)	0.1	0.8	1.2

Forecast from IMF World Economic Outlook, July 2023



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

### Growth in emerging countries

Economic growth strongly decreased in the second quarter in China, readjusting to the previous high growth. The IMF has lifted up 2023 emerging market growth, especially for India, Brazil and Mexico.

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

	Yea	rly GDP grow	th 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)

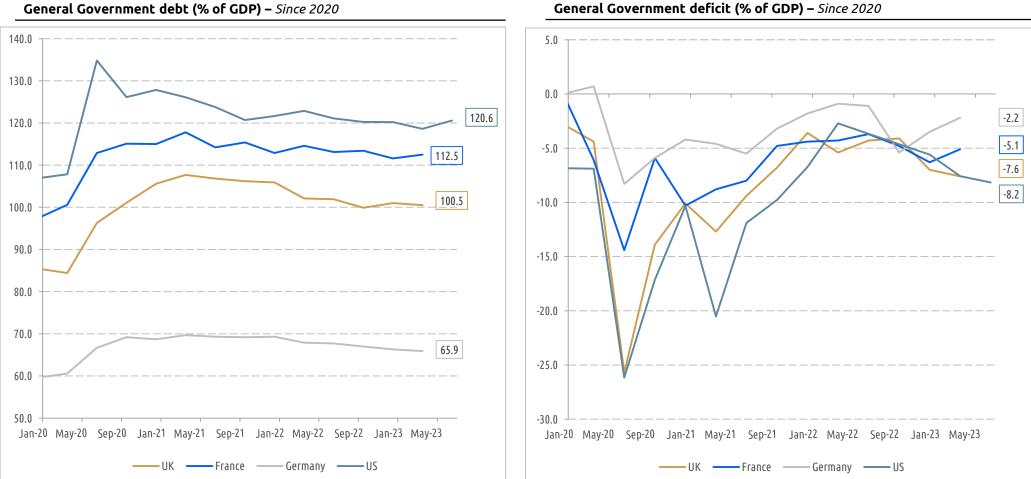
	Quarterly GDP growth rate %									
Country	21Q2	21Q3	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	23Q2	
China	1.3	0.7	1.6	1.0	(1.9)	3.2	0.5	2.2	0.8	
S. Africa	1.3	(1.9)	1.4	1.5	(0.8)	1.8	(1.1)	0.4	0.6	
Brazil	(0.2)	0.4	1.1	0.9	1.0	0.4	0.1	1.8	0.9	
India	(7.5)	9.3	2.0	0.5	0.9	2.0	1.1	2.1	1.9	
Mexico	0.7	(0.6)	1.4	1.4	1.0	1.2	0.6	0.8	0.8	
Indonesia	0.3	0.0	3.2	1.0	0.9	0.8	2.3	0.8	0.8	

Forecast from IMF World Economic Outlook July 2023



### Government debts have reached a new plateau in the 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 quarter of 2023 while it kept increasing in the UK and the US.



General Government deficit (% of GDP) - Since 2020



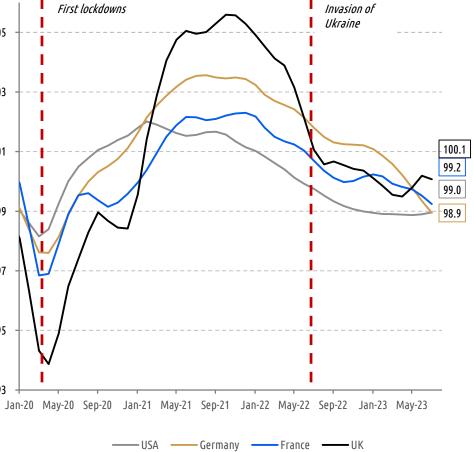
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### Consumer confidence is on an upward path for the main European countries but remaining at rather low levels.

Consumer confidence indicator – Since Jan. 2020 Business confidence indicator – Since Jan. 2020 First lockdowns First lockdowns Invasion of 103 Ukraine 105 101 103 98.7 98.5 99 101 98.3 97.7 97 99 95 97 93 95 91 93 Jan-20 May-20 Sep-20 Jan-21 May-21 Sep-21 Jan-22 May-22 Sep-22 Jan-23 May-23 – USA – Germany – France – UK

Business confidence, however, has been on a decreasing path for the last year.

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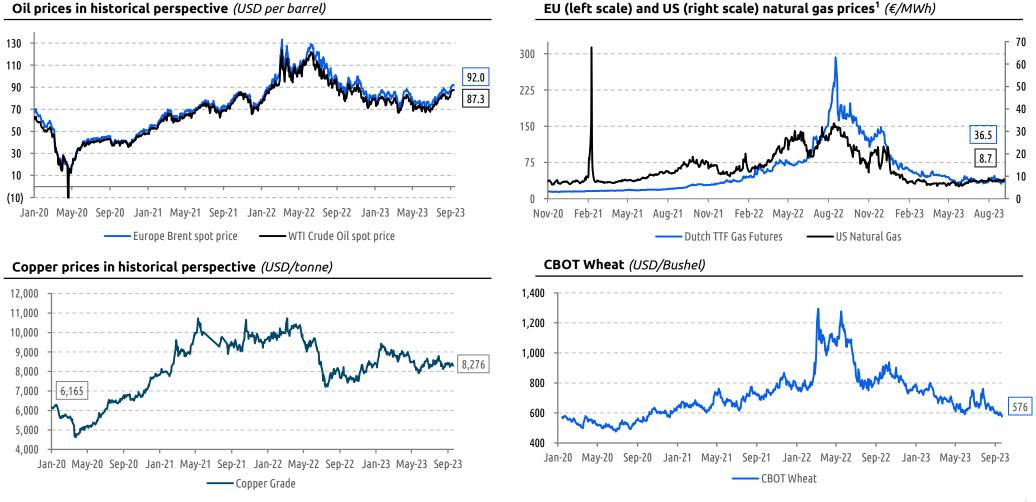


## B The seeds of inflation



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

Natural-gas-price difference between the US and Europe has decreased but a one to four discrepancy remains between the two markets. Wheat price is slowly decreasing, almost reaching its pre-COVID level. However, oil prices have been increasing again since May.



### **CEPREMAP DB** • NOMICS

Source: Nasdaq, ICE, NYSE as of 22/09/2023 Note: (1) Conversion from \$/MMBTu → €/MWh

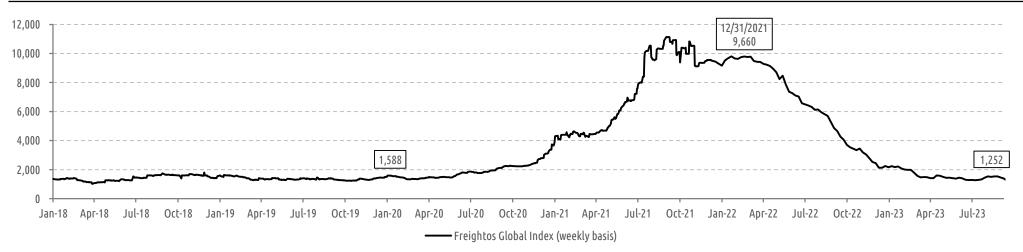
### Supply chain disruptions are easing up significantly

### Transportation costs have returned to their pre-crisis level.

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



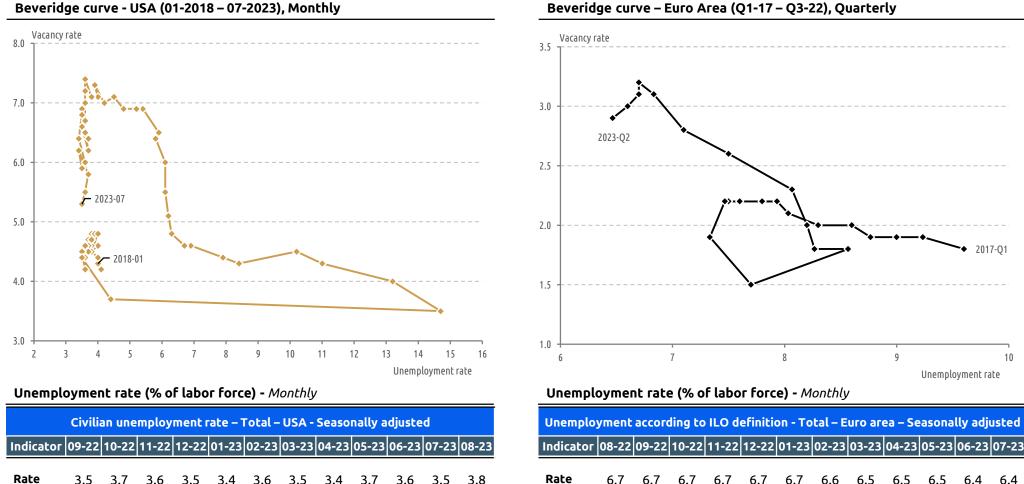
#### Shipping Container Index (based on spot rate for 40 feet containers)





### 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, is falling since February, easing up recruitment constraints.

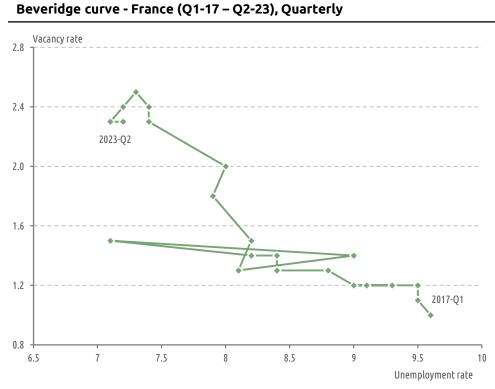


#### Beveridge curve – Euro Area (Q1-17 – Q3-22), Quarterly



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

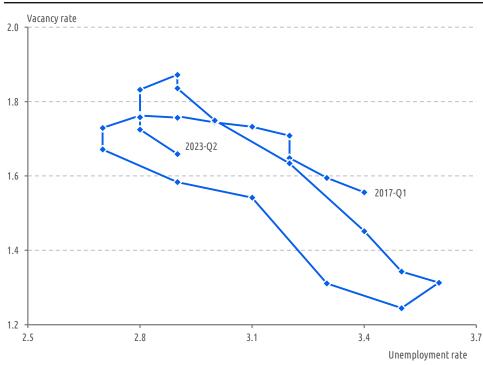
The vacancy/unemployment ratio still at record high levels in France.



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

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





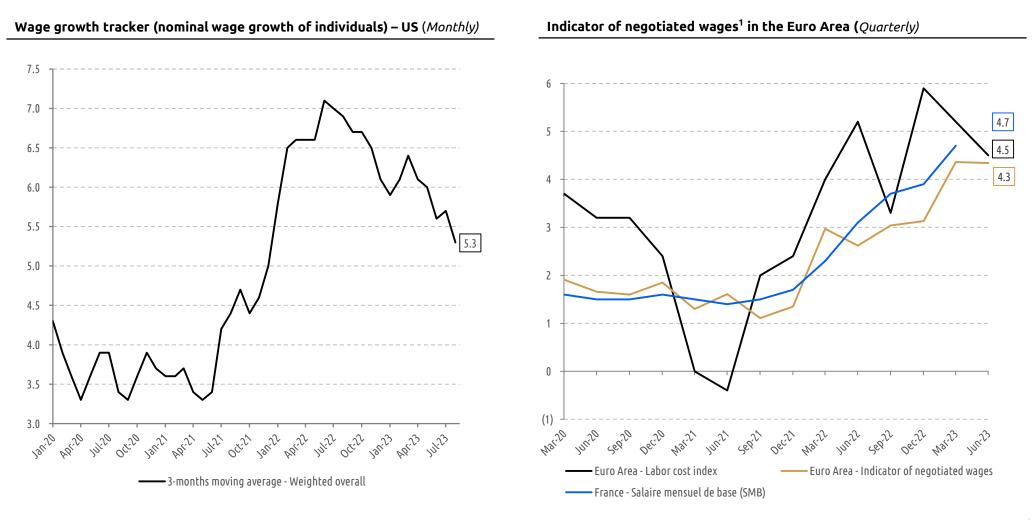
### Beveridge curve - Germany (Q1-17 – Q2-23), Quarterly

Unemployment rate (% of labor force) - Monthly

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







# C Inflation unbound

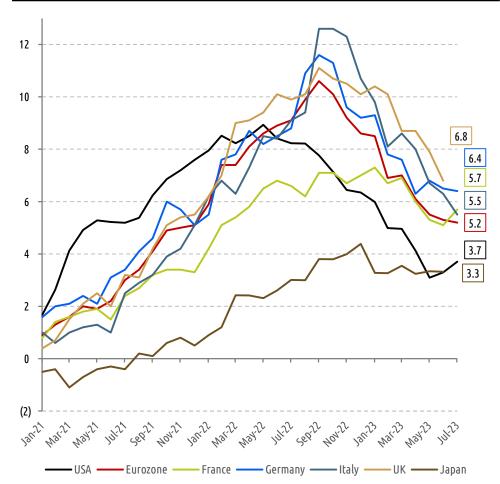


### Inflation is coming down from its peak both in Europe and the US

Headline inflation is decreasing quickly in the US (despite a rebound in August) while remaining at high levels in Europe. Germany and the UK have particularly high inflation levels. Core inflation remains at high levels in the US and the EZ, making it difficult to speculate about the course of monetary policy.

CPI and core inflation in advanced economies (YoY % change) Monthly Year-on-Year inflation rates (%) - 2022/2023 Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug Country US 8.2 7.8 7.1 6.4 6.3 6.0 5.0 5.0 4.1 3.1 3.3 3.7 US core 5.5 5.3 4.7 6.6 6.3 6.0 5.7 5.5 5.5 5.6 4.9 4.4 Euro Area\* 10.6 10.1 9.2 8.6 8.5 6.9 7.0 6.1 5.5 53 5.2 99 Euro Area core\* 5.0 5.0 5.2 5.3 5.6 5.7 5.6 5.3 5.5 5.5 4.8 5.3 France\* 62 7.1 7.1 6.7 7.0 7.3 6.7 6.9 6.0 5.3 5.1 5.7 France core\* 4.2 4.6 3.7 4.1 4.2 4.2 4.6 4.7 4.4 4.4 4.3 4.0 France INSEE 6.3 5.7 5.9 5.1 4.5 4.3 4.9 5.6 6.2 6.2 5.9 6.0 France core INSEE 4.5 5.0 5.3 5.3 5.6 6.1 6.2 6.3 5.8 5.7 5.0 4.6 Germany\* 10.9 11.6 11.3 9.6 9.2 9.3 7.8 7.6 6.3 6.8 6.5 6.4 Germany core\* 4.7 5.1 5.1 5.4 5.1 5.4 5.9 5.6 5.1 6.1 6.2 6.3 Italy\* 9.4 12.6 12.6 12.3 10.7 9.8 8.1 8.6 8.0 6.7 6.3 5.5 Italy core\* 4.4 4.6 4.7 4.8 5.2 5.5 5.3 5.3 5.1 4.9 4.7 4.0 UK 10.1 11.1 10.7 10.5 10.1 10.4 10.1 8.7 8.7 7.9 6.8 UK core 6.5 6.5 6.3 6.3 5.8 6.2 6.2 6.8 7.1 6.9 6.9 Japan 3.0 3.8 3.8 4.0 4.4 3.3 3.3 3.5 3.2 3.3 3.3 Japan core 2.5 2.8 3.0 3.2 3.4 3.7 4.1 4.2 4.3 4.3 1.8

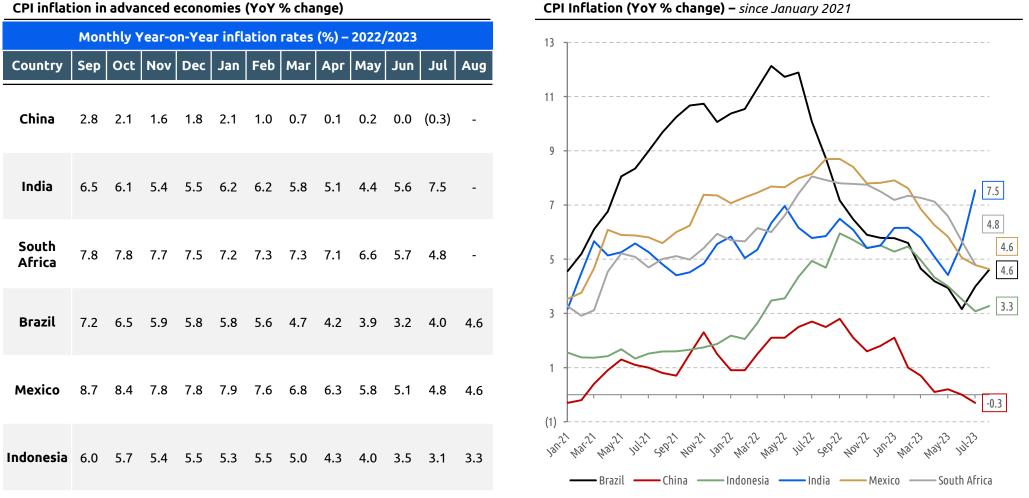
CPI Inflation (YoY % change) – since January 2021



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### Inflation in emerging economies is slowly cooling, except for India

China remains an extraordinary exception with extremely low inflation levels



CPI inflation in advanced economies (YoY % change)

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# Implied GDP deflators appear to be converging towards headline inflation in G4 countries<sup>1</sup>

GDP deflators are at high levels in Europe while it is decreasing in the US.

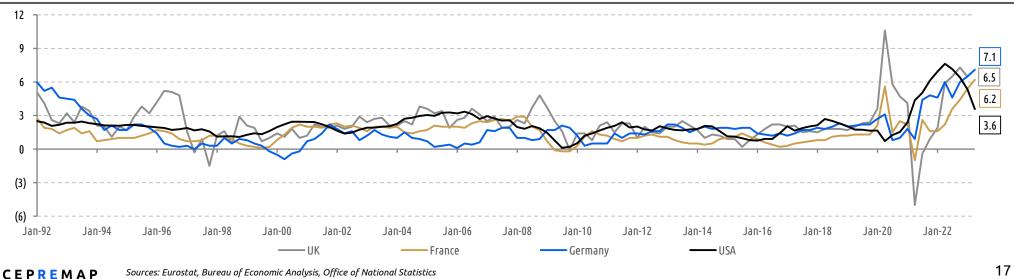
Note: G4 includes France, Germany, US and UK

Quarterly implied GDP deflator – Since Q1-2021

Implied GDP deflator (YoY % change) – Since Q1-2021										
Country	Q3-21	Q4-21	Q1-22	Q2-22	Q3-22	Q4-22	Q1-23	Q2-23		
USA	5.0	6.1	6.9	7.6	7.1	6.4	5.3	3.6		
Germany	4.4	4.8	4.6	6.0	4.6	6.0	6.5	7.1		
France	2.6	1.6	1.6	2.2	3.6	4.4	5.4	6.2		
υκ	(0.4)	0.9	1.9	5.9	6.5	7.3	6.5	-		

#### Quarterly implied GDP deflator – Since Q1-1992

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### II Monetary policy





### A In the US



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

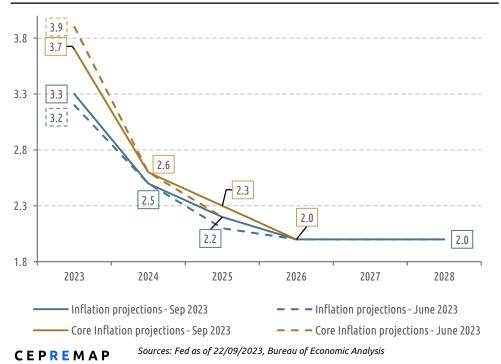
The Fed decided to pause its hikes in September. However, another 25-bps increase is expected before the end of the year.

Price indexes for Personal Consumption Expenditures									
Indicator	01-23	02-23	03-23	04-23	05-23	06-23	07-23		
PCE inflation	5.4	5.0	4.2	4.3	3.8	3.0	3.3		

Personal consumption expenditures (PCF) – Monthly ( $V_0V$  % change)

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

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#### **Key considerations**

- The target range of the federal fund rates was maintained at 5.25%-5.50% on September 20<sup>th</sup>.
- The pause comes after an increase of 25 bps in July. Interest rates are at their highest levels since 2001.
- The Fed revised up GDP growth from 1% to 2.1%. However, it anticipates that labor market will rebalance, cooling down pressures on prices.
- Next meeting will be on October 31<sup>th</sup> The key issue is whether a new hike will occur.

Federal Reserv	Federal Reserve economic projections as of 20th September 2023									
Indicator	2023	2024	2025	Longer run						
Change in real GDP	2.1	1.5	1.8	1.8						
Unemployment rate	3.8	4.1	4.1	4.0						
Inflation	3.3	2.5	2.2	2.0						
Federal funds rate	5.6	5.1	3.9	2.5						

""We remain committed to bringing inflation back down to our 2 percent goal and to keeping longer-term inflation expectations well anchored. Reducing inflation is likely to require a period of below-trend growth and some softening of labor market conditions."

21

### 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 remain close to the previous ones in June.

FOMC participants' assessments of appropriate monetary policy: Midpoint of target range or target level for the federal funds rate as of 20th September

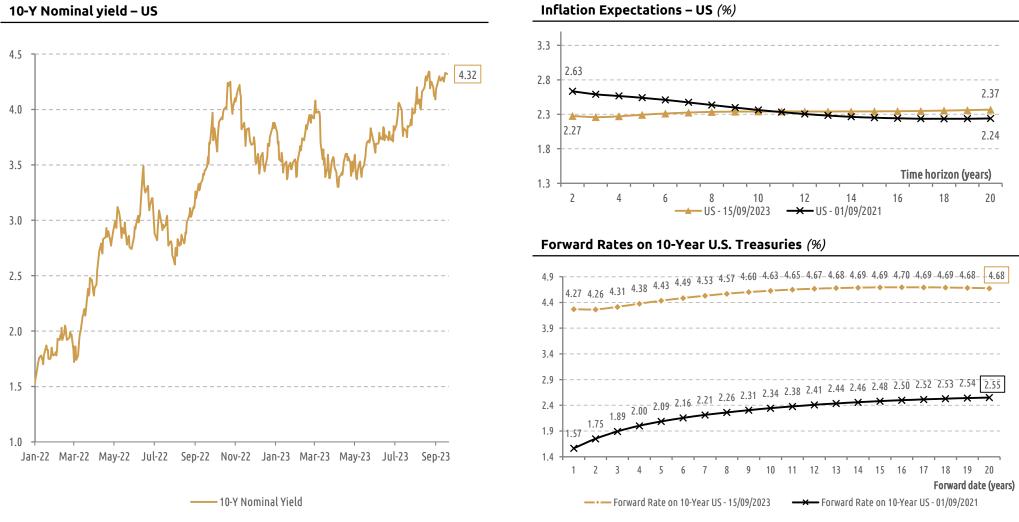
6.50 6.25				
6.00		•		
5.75 5.50		•		
5.25	• • • • • •	• • •		
5.00			• •	
4.75 4.50		•••	•	
4.25		• •	• •	
4.00 3.75			•	•-•
3.50				• • • • • • • • • • • • • • • • • • • •
3.25 3.00			• •	· · · · · · · · · · · · · · · · · · ·
2.75			•••	• •
2.50 2.25			• • •	
2.00				
1.75 1.50				
1.25				
1.00 0.75				
0.50				
0.25 0.00				
0.00	2023	2024	2025	Longer run

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#### Source: Fed as of 22/09/2023

Note: Each shaded circle indicates the value (rounded to the nearest 1/8 percentage point) of an individual participant's judgment of the midpoint of the appropriate target range for the federal funds rate or the appropriate target level for the federal funds rate at the end of the specified calendar year or over the longer run. One participant did not submit longer-run projections for the federal funds rate.

### Nominal long-term rates fell after the banking crisis, but have recovered



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

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Note: Inflation expectations are derived from US indexed bonds (TIPS) and US nominal bonds

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

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





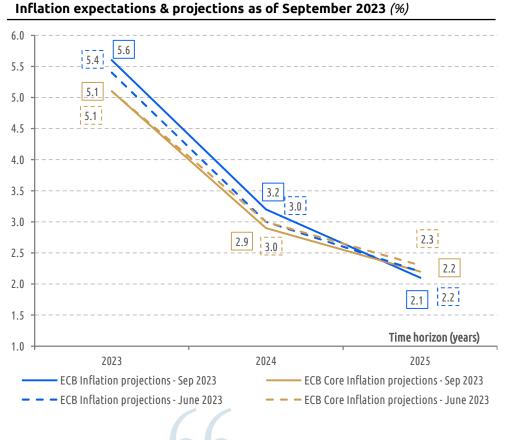


### B In the Euro Area



### The ECB raised its interest rates by 25 bps in September, surprising investors

President Lagarde signaled that despite a decrease of headline inflation over the last few months, this rise of interest rate was 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.



#### **Key considerations**

- The Governing Council decided to raise the three key ECB interest rates by 25 basis points, following other 25-bps increase in May, June and July and several previous 50-bps increases.
- Looking ahead, ECB staff have slightly revised their inflation projections up. Headline inflation is now expected to average 5.6% in 2023 while core inflation should reach 5.1%.
- The benchmark deposit rate is now set at 4%, coming from minus 0.5% a year and a half ago. It is the highest level since 2000.
- The next meeting is set on October 26<sup>th</sup> The ECB hinted at a probable long pause in the hikes.

ECB economic projections as of 14 September 2023								
Indicator	2023	2024	2025					
Change in real GDP	0.7	1.0	1.5					
Unemployment rate	6.5	6.7	6.7					
Inflation	5.6	3.2	2.1					

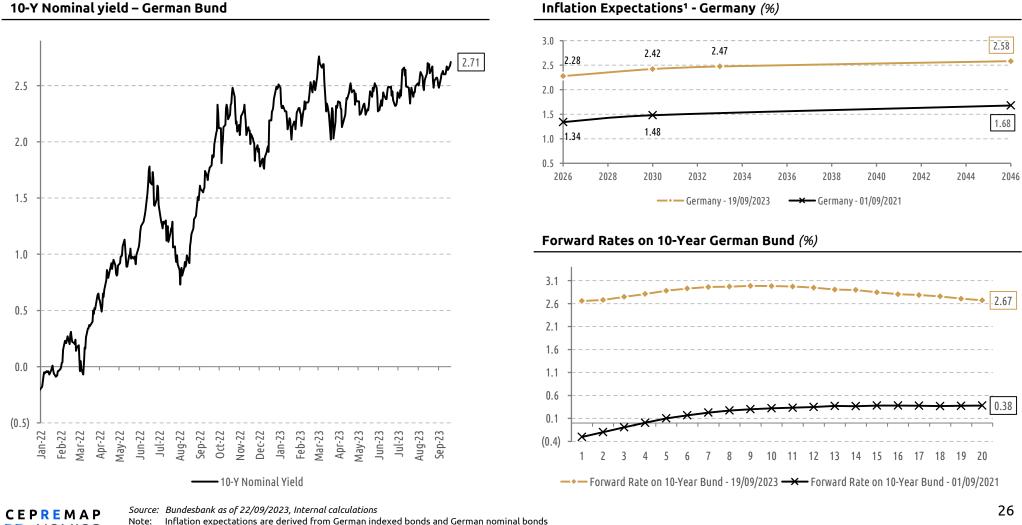
"Based on our current assessment, we consider that the key ECB interest rates have reached levels that, maintained for a sufficiently long duration, will make a substantial contribution to the timely return of inflation to our target."



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

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



Inflation expectations are derived from German indexed bonds and German nominal bonds

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

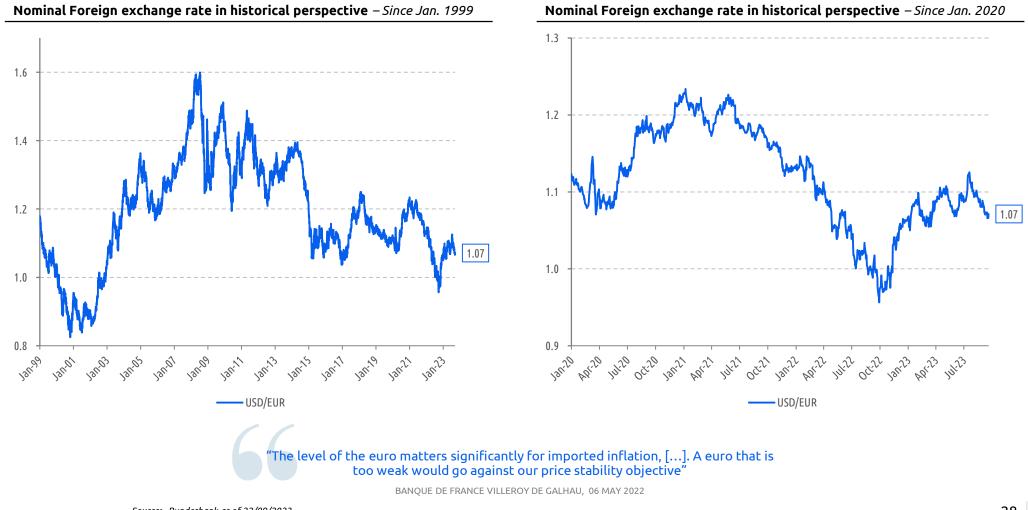
In bps 250 200 150 100 97 50 0 -51 (50) (100)Jan-98 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 Jan-12 Jan-13 Jan-14 Jan-15 Jan-16 Jan-17 Jan-18 Jan-20 Jan-20 Jan-22 Jan-22 Jan-23

Bund 2Yr/10Yr Spread – Since Jan 1998

- Spread between 10Y & 2Y Bund — — Average



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







# III Impact on yields and spreads



### In Europe, sovereign yields remain at high levels

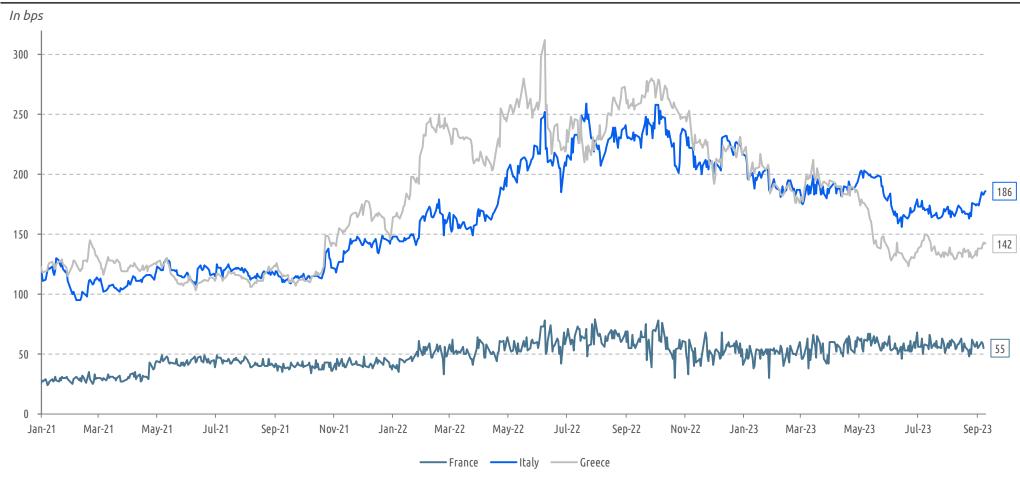
Italian, Greek and French 10-Y yields – Since Jan. 2021



### Tensions on spreads have moderately 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.

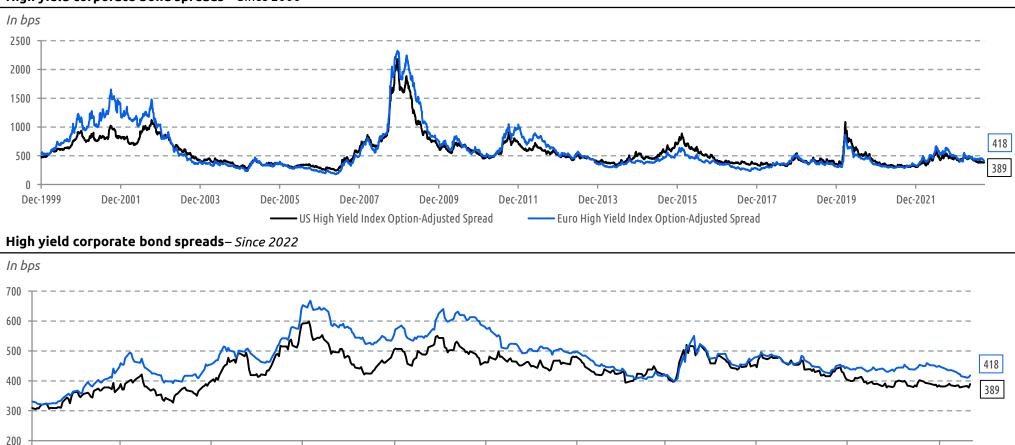
Italian, Greek and French spreads over 10Y German bund – Since Jan. 2021





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

### They are now decreasing in the US, coming slowly back to pre-war levels



Nov-2022

#### High yield corporate bond spreads – Since 2000

Mar-2023

May-2023

Jul-2023

Jan-2023



Mar-2022

Jan-2022

May-2022

Note: High yield corporate bond spreads include BB-rated and lower corporate bonds

Jul-2022

Sep-2022

US High Yield Index Option-Adjusted Spread

Sep-2023

<sup>—</sup> Euro High Yield Index Option-Adjusted Spread



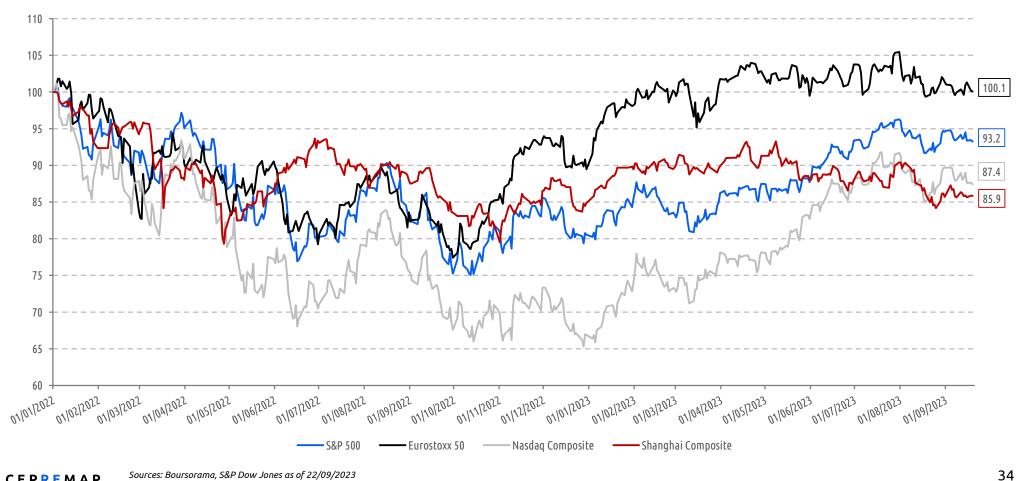
### IV Impact on stock markets



## 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



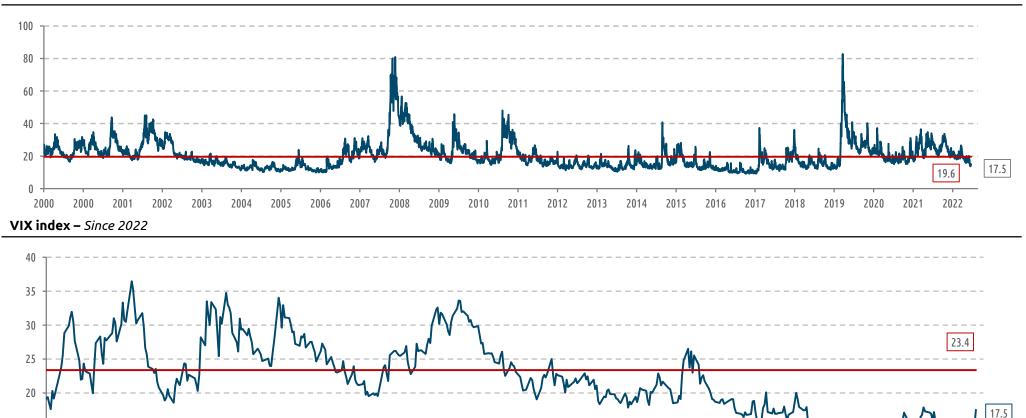
## Volatility on US financial markets has fallen below its historical average level

Ignoring the consequences of the banking crisis.

May-2022

Jul-2022

VIX index – Since 2000



Nov-2022

Feb-2023

Арг-2023

Jan-2023

Oct-2022

Aug-2022

Jan-2022

Feb-2022

Арг-2022

Source: CBOE as of 22/09/2023

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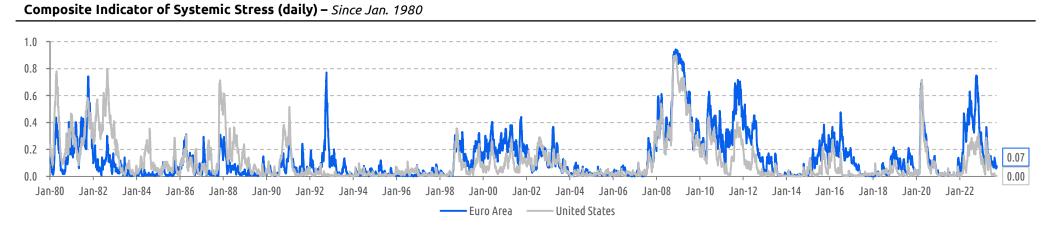
Jul-2023

Aug-2023

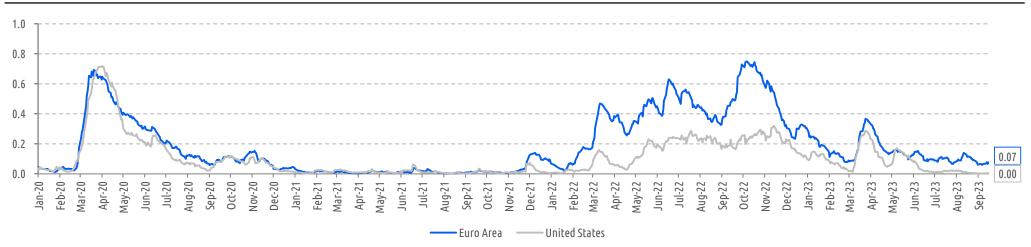
May-2023

### 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. 2020





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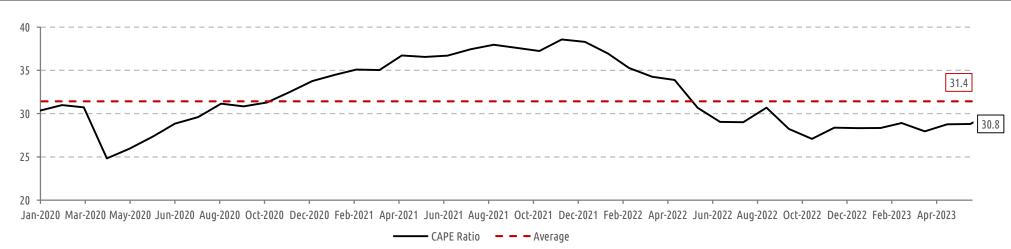
# US Shiller Cyclically Adjusted Price to Earnings ratio (CAPE ratio)<sup>1</sup>

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

45 35 30.8 25 17.5 15 5 -5 1900 1903 1965 1969 1972 1976 1980 1984 1988 1992 1995 1999 2003 2007 2011 2015 2018 2022 1907 1911 1915 1919 1923 1926 1930 1934 1938 1942 1946 1949 1953 1957 1961 CAPE Ratio — — — Average

Cyclically Adjusted Price Earnings ratio – Since 1900

Cyclically Adjusted Price Earnings ratio - Since 2020





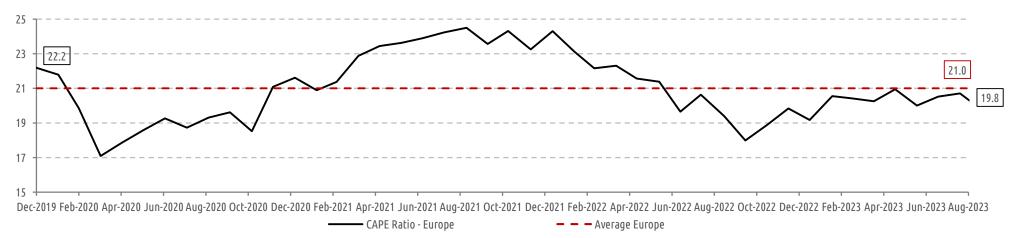
## Shiller CAPE ratio in Europe

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





Cyclically Adjusted Price Earnings ratio – Since 2020





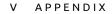
MACROECONOMIC OUTLOOK - SEPTEMBER 2023



# V Appendix



Page #	Graph / Table	Web link
4	Quarterly GDP growth (% change over the previous period) – Canada	OECD/KEI/NAEXKP01.CAN.GP.Q
4	Quarterly GDP growth (% change over the previous period) – Germany	OECD/KEI/NAEXKP01.DEU.GP.Q
4	Quarterly GDP growth (% change over the previous period) – Eurozone	OECD/KEI/NAEXKP01.EA19.GP.Q
4	Quarterly GDP growth (% change over the previous period) – France	OECD/KEI/NAEXKP01.FRA.GP.Q
4	Quarterly GDP growth (% change over the previous period) – UK	OECD/KEI/NAEXKP01.GBR.GP.Q
4	Quarterly GDP growth (% change over the previous period) – Italy	OECD/KEI/NAEXKP01.ITA.GP.Q
4	Quarterly GDP growth (% change over the previous period) – Japan	OECD/KEI/NAEXKP01.JPN.GP.Q
4	Quarterly GDP growth (% change over the previous period) – US	OECD/KEI/NAEXKP01.USA.GP.Q
4	Yearly GDP growth rate (YoY % change) – Canada	IMF/WEO:2023-04/CAN.NGDP_RPCH.pcent_change
4	Yearly GDP growth rate (YoY % change) – Germany	IMF/WEO:2023-04/DEU.NGDP_RPCH.pcent_change
4	Yearly GDP growth rate (YoY % change) – France	IMF/WEO:2023-04/FRA.NGDP_RPCH.pcent_change
4	Yearly GDP growth rate (YoY % change) – UK	IMF/WEO:2023-04/GBR.NGDP_RPCH.pcent_change
4	Yearly GDP growth rate (YoY % change) – Italy	IMF/WEO:2023-04/ITA.NGDP_RPCH.pcent_change
4	Yearly GDP growth rate (YoY % change) – Japan	IMF/WEO:2023-04/JPN.NGDP_RPCH.pcent_change





Page #	Graph / Table	Weblink
4	Yearly GDP growth rate (YoY % change) – US	IMF/WEO:2023-04/USA.NGDP_RPCH.pcent_change
4	Yearly GDP growth rate (YoY % change) – Eurozone	IMF/WEOAGG:2023-04/163.NGDP_RPCH.pcent_change
5	Quarterly GDP growth (% change over the previous period) – China	OECD/DP_LIVE/CHN.QGDP.TOT.PC_CHGPP.Q
5	Quarterly GDP growth (% change over the previous period) – Brazil	OECD/KEI/NAEXKP01.BRA.GP.Q
5	Quarterly GDP growth (% change over the previous period) – Mexico	OECD/KEI/NAEXKP01.MEX.GP.Q
5 (	Quarterly GDP growth (% change over the previous period) – South Africa	OECD/KEI/NAEXKP01.ZAF.GP.Q
5	Quarterly GDP growth (% change over the previous period) – Indonesia	OECD/KEI/NAEXKP01.IDN.GP.Q
5	Quarterly GDP growth (% change over the previous period) – India	OECD/KEI/NAEXKP01.IND.GP.Q
5	Yearly GDP growth rate (YoY % change) – Brazil	IMF/WEO:2023-04/BRA.NGDP_RPCH.pcent_change
5	Yearly GDP growth rate (YoY % change) – Mexico	IMF/WEO:2023-04/MEX.NGDP_RPCH.pcent_change
5	Yearly GDP growth rate (YoY % change) – South Africa	IMF/WEO:2023-04/ZAF.NGDP_RPCH.pcent_change
5	Yearly GDP growth rate (YoY % change) – Indonesia	IMF/WEO:2023-04/IDN.NGDP_RPCH.pcent_change
5	Yearly GDP growth rate (YoY % change) – India	IMF/WEO:2023-04/IND.NGDP_RPCH.pcent_change
5	Yearly GDP growth rate (YoY % change) – China	IMF/WEO:2023-04/CHN.NGDP_RPCH.pcent_change

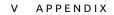
**DB** • NOMICS the world's economic database

Page #	Graph / Table	Weblink
5	OECD Weekly growth tracker – Brazil	OECD/GDP_GROWTH/W.BRA.tracker_yoy
5	OECD Weekly growth tracker – Mexico	OECD/GDP_GROWTH/W.MEX.tracker_yoy
5	OECD Weekly growth tracker – South Africa	OECD/GDP_GROWTH/W.ZAF.tracker_yoy
5	OECD Weekly growth tracker – Indonesia	OECD/GDP_GROWTH/W.IDN.tracker_yoy
5	OECD Weekly growth tracker – India	OECD/GDP_GROWTH/W.IND.tracker_yoy
6	General government debt - Germany	Eurostat/gov 10g ggdebt/Q.GD.S13.PC GDP.DE
6	General government debt – France	Eurostat/gov 10g_ggdebt/Q.GD.S13.PC_GDP.FR
6	General government debt – United Kingdom	ONS/EDP1/YEQJ.Q
6	General government debt – Italy	Eurostat/gov 10dd edpt1/A.PC GDP.S13.GD.IT
6	General government deficit – Germany	Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.DE
6	General government deficit – France	Eurostat/teina205/Q.B9.S13.PC_GDP_SCA.FR
6	General government deficit – United Kingdom	ONS/UKEA/CT8O.Q
6	General government deficit – Italy	OECD/DP_LIVE/ITA.GGNLEND.TOT.PC_GDP.A
6	General government deficit – United States	BEA/NIPA-T30100/AD01RC-Q
CEPREMAP		42

Page #	Graph / Table	Web link
7	Consumer confidence index – United States	OECD/MEI_CLI/CSCICP03.USA.M
7	Consumer confidence index – Germany	OECD/MEI CLI/CSCICP03.DEU.M
7	Consumer confidence index – France	OECD/MEI_CLI/CSCICP03.FRA.M
7	Consumer confidence index – United Kingdom	OECD/MEI CLI/CSCICP03.GBR.M
7	Business confidence index – United States	OECD/MEI_CLI/BSCICP03.USA.M
7	Business confidence index – Germany	OECD/MEI_CLI/BSCICP03.DEU.M
7	Business confidence index – France	OECD/MEI CLI/BSCICP03.FRA.M
7	Business confidence index – United Kingdom	OECD/MEI_CLI/BSCICP03.GBR.M
9	Natural Gas (Dutch TTF) prices in historical perspective (€/MWh)	ICE/DUTCH_TTF_GAS_FUTURES/D.5614690
10	% of EU business reporting shortages of materials and equipment in the construction industry as a limiting production factor	EC/CONSTRUCTION/TOT.2.F5S.EU.M
11	Beveridge curve – Euro Area (Q1-17 – Q2-22), Quarterly	<u>OECD/MEI/EA20.LRHUTTTT.STSA.Q</u> Eurostat/jvs_q_nace2/Q.NSA.B-S.TOTAL.JOBRATE.EA19
11	Beveridge curve – United States (Q1-17 – Q2-22), Monthly	<u>BLS/ln/LNS14000000</u> BLS/jt/JTS000000000000JOR
11	Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted, Monthly	<u>Eurostat/ei_lmhr_m/M.PC_ACT.SA.LM-UN-T-TOT.EA20</u>

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Page #	Graph / Table	Weblink
12	Beveridge curve - France, Quarterly	<u>Eurostat/jvs_q_nace2/Q.NSA.B-S.GE10.JOBRATE.FR</u> INSEE/CHOMAGE-TRIM-NATIONAL/T.CTTXC.TAUX.FR-D976.0.00- .POURCENT.CVS.FALSE
12	Beveridge curve - Germany, Quarterly	Eurostat/jvs_q_nace2/Q.NSA.B-S.GE10.JOBRATE.DE DESTATIS/81000BV001/DG.BV4SB.ERW089
12	Unemployment according to ILO definition - Total – France – Seasonally adjusted, Monthly	Eurostat/une_rt_m/M.SA.TOTAL.PC_ACT.T.FR
12	Unemployment according to ILO definition - Total – Germany – Seasonally adjusted, Monthly	Eurostat/une_rt_m/M.SA.TOTAL.PC_ACT.T.DE
13	Wage growth tracker – France (Quarterly)	INSEE/ICT-2016/T.BDM_EUR.ICT.A21-BTN.INDICE.SSE.FE.SO.CVS-CJO.2016
15	CPI Inflation (YoY % change) – United States	BLS/cu/CUSR0000SA0 BLS/cu/CUSR0000SA0L1E
15	CPI Inflation (YoY % change) – Eurozone	<u>Eurostat/prc_hicp_manr/M.RCH_A.CP00.EA</u> Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.EA
15	CPI Inflation (YoY % change) – France	<u>Eurostat/prc_hicp_manr/M.RCH_A.CP00.FR</u> Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.FR
15	CPI Inflation (YoY % change) – France INSEE	<u>INSEE/IPC-</u> 2015/M.IPC.SO.SO.4035.GLISSEMENT_ANNUEL.ENSEMBLE.FE.POURCENT.BRUT.SO.FALSE INSEE/IPC-2015/M.ISJ.SO.SO.4035.GLISSEMENT_ANNUEL.ENSEMBLE.FM.POURCENT.CVS- FISC.SO.FALSE
15	CPI Inflation (YoY % change) – Germany	<u>Eurostat/prc_hicp_manr/M.RCH_A.CP00.DE</u> Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.DE
15	CPI Inflation (YoY % change) – Italy	<u>Eurostat/prc_hicp_manr/M.RCH_A.CP00.IT</u> Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.IT
15	CPI Inflation (YoY % change) – United Kingdom	<u>ONS/MM23/D7G7.M</u> <u>ONS/MM23/DKO8.M</u>
15	CPI Inflation (YoY % change) – Japan	STATJP/CPIm/001 STATJP/CPIm/740
CEPR		44



Page #	Graph / Table	Web link
16	CPI Inflation (YoY % change) – South Africa	OECD/KEI/CPALTT01.ZAF.GY.M
16	CPI Inflation (YoY % change) - Brazil	OECD/KEI/CPALTT01.BRA.GY.M
16	CPI Inflation (YoY % change) – China	OECD/KEI/CPALTT01.CHN.GY.M
16	CPI Inflation (YoY % change) – Indonesia	OECD/KEI/CPALTT01.IDN.GY.M
16	CPI Inflation (YoY % change) – India	OECD/KEI/CPALTT01.IND.GY.M
16	CPI Inflation (YoY % change) – Mexico	OECD/KEI/CPALTT01.MEX.GY.M
17	Quarterly implied GDP deflator – France	Eurostat/namq 10 gdp/Q.PD PCH SM NAC.SCA.B1GQ.FR
17	Quarterly implied GDP deflator - United Kingdom	<u>ONS/QNA/IHYU.Q</u>
17	Quarterly implied GDP deflator - United States	BEA/NIPA-T10109/A191RD-Q
20	Personal consumption expenditures (PCE)	BEA/NIPA-T20804/DPCERG-M
23	10-Y Nominal yield – US	FED/H15/RIFLGFCY10_N.B
24	Yield curve – US	FED/H15/RIFLGFCM03 N.B

Page #	Graph / Table	Web link
27	10-Y Nominal yield – German Bund	BUBA/BBK01/WT1010
27	Inflation Expectations - Germany	BUBA/BBSSY/D.KCP.EUR.A607.DE0001102523.A
27	Forward Rates on 10-Year German Bund	BUBA/BBSIS/D.I.ZAR.ZI.EUR.S1311.B.A604.R10XX.R.A.A. Z. Z.A
27	Yield curve – Germany	BUBA/BBSSY/D.KCP.EUR.A607.DE0001102523.A
28	Nominal Foreign exchange rate in historical perspective	BUBA/BBEX3/D.USD.EUR.BB.AC.000
30	Italian10-Y yield	Eurostat/irt_lt_mcby_d/D.MCBY.IT
30	Greek 10-Y yield	Eurostat/irt_lt_mcby_d/D.MCBY.EL
30	French 10-Y yield	Eurostat/irt_lt_mcby_d/D.MCBY.FR
30	German 10-Y yield	Eurostat/irt_lt_mcby_d/D.MCBY.DE
36	Composite Indicator of Systemic Stress (daily) – Euro Area	ECB/CISS/D.U2.Z0Z.4F.EC.SS_CIN.IDX
36	Composite Indicator of Systemic Stress (daily) – United States	ECB/CISS/D.US.Z0Z.4F.EC.SS_CIN.IDX