CEPREMAP / DBNOMICS

Macroeconomic Outlook – October 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 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 reached lower levels in the US than 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. In September headline inflation fell by 2pp in Germany, driving it down by 1pp in the Euro Area (while no change occurred in France or Italy).
- Most raw-material prices have come back to their pre-war levels. However, oil prices have surged again since June as Saudi Arabia and Russia have cut their supply. The threshold of \$100 a barrel may be reached again soon.
- 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.
- After being lower than the USD, the EUR started appreciated in October 2022. However, high GDP growth and higher sovereign yields have led investors to favor the USD since the beginning of the summer, causing a new appreciation of the USD.



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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 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(P)	2024(P)						
Euro Area	(6.1) ¹	5.4	3.5	0.6	1.1						
Germany	(3.7)	2.6	1.8	(0.2)	0.9						
France	(7.9)	6.8	2.6	1.0	1.2						
Italy	(9.0)	7.0	3.7	0.8	0.8						
UK	(11.0)	7.6	4.0	0.3	0.8						
USA	(2.8)	5.9	2.1	2.2	1.3						
Japan	(4.3)	2.1	1.1	1.8	1.0						

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

Quarterly GDP growth rate %										
Country	21Q2	21Q3	21Q4	22Q1	22Q2	22Q3	22Q4	23Q1	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 OECD Economic Outlook, September 2023



Growth in emerging countries

Economic growth strongly decreased in the second quarter in China, readjusting to the previous high growth. 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(P)	2024(P)						
China	2.2	8.4	3.0	5.1	4.6						
S. Africa	(6.3)	4.9	2.0	0.6	1.1						
Brazil	(3.3)	5.0	2.9	3.2	1.7						
India	(5.8)	9.1	6.8	6.3	6.0						
Mexico	(8.0)	4.7	3.1	3.3	2.5						
Indonesia	(2.1)	3.7	5.3	4.9	5.2						

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			

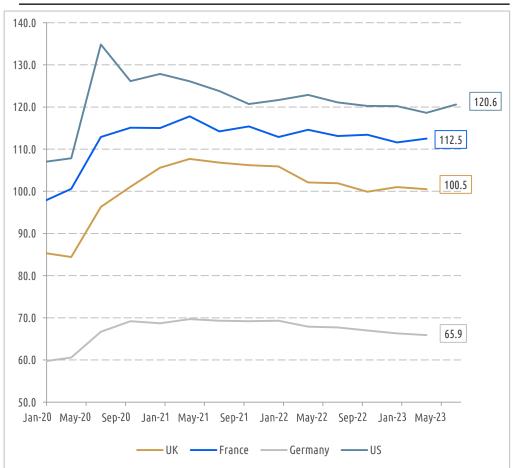
Forecast from OECD Economic Outlook September 2023



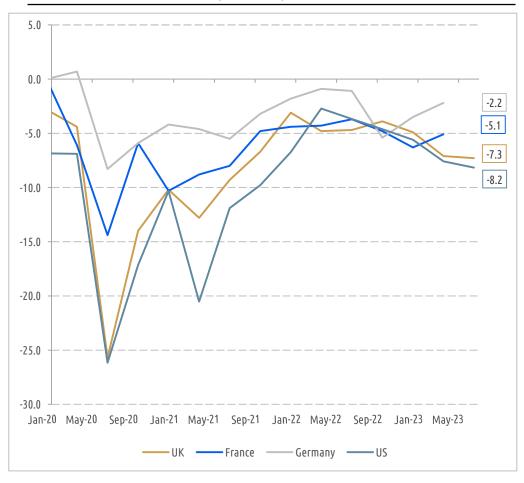
Government debts have reached a new plateau in the G4 countries¹

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 they are increasing in the UK and the US.

General Government debt (% of GDP) - Since 2020



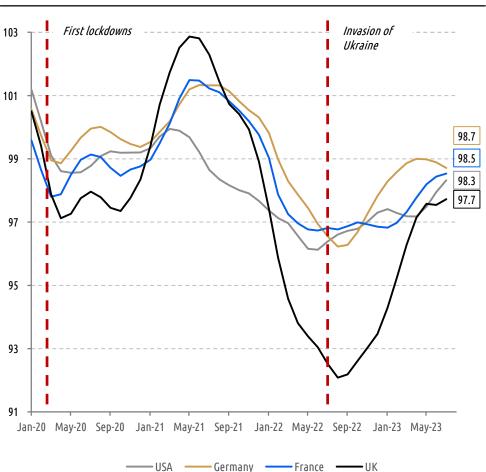
General Government deficit (% of GDP) - Since 2020



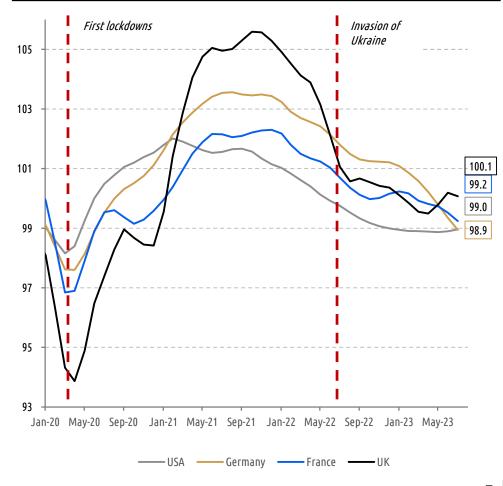
Consumer confidence is on an upward path for the main European countries but remaining at rather low levels.

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

Consumer confidence indicator - Since Jan. 2020



Business confidence indicator – Since Jan. 2020



7



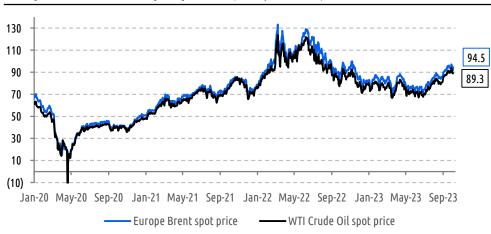
B The seeds of inflation



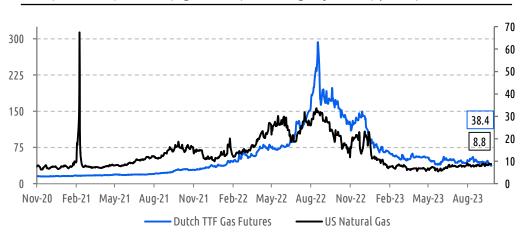
Russian invasion added inflationary pressure. Yet, prices of raw materials have mostly returned to their pre-war range.

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 June.

Oil prices in historical perspective (USD per barrel)



EU (left scale) and US (right scale) natural gas prices (\in /MWh)



Copper prices in historical perspective (USD/tonne)



CBOT Wheat (USD/Bushel)



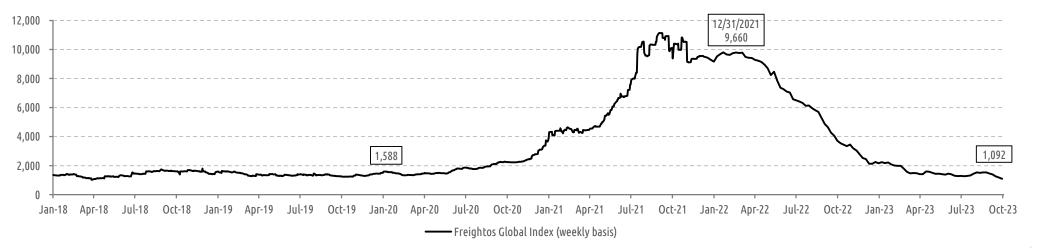
Supply chain disruptions are easing up significantly

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



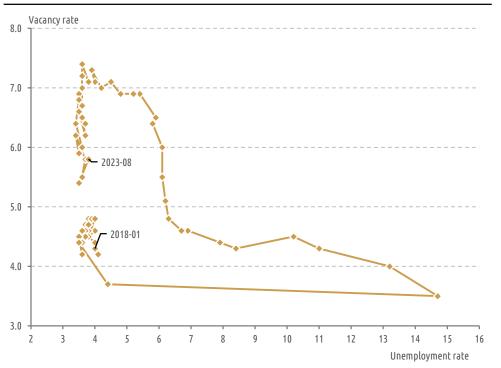
Shipping Container Index (based on spot rate for 40 feet containers)



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

The unemployment rate, both in the US and the EZ, remain at very low levels. In the US, after falling for a few months, the vacancy/unemployment ratio seems to be stabilizing above pre-covid levels.

Beveridge curve - USA, Monthly



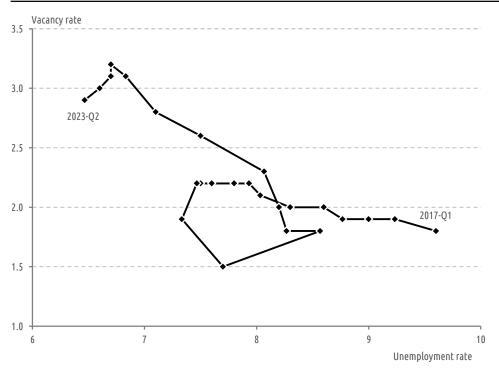
Unemployment rate (% of labor force) - Monthly

Civilian unemployment rate - Total - USA - Seasonally adjusted

Indicator | 09-22 | 10-22 | 11-22 | 12-22 | 01-23 | 02-23 | 03-23 | 04-23 | 05-23 | 06-23 | 07-23 | 08-23

Rate | 3.5 | 3.7 | 3.6 | 3.5 | 3.4 | 3.6 | 3.5 | 3.4 | 3.7 | 3.6 | 3.5 | 3.8

Beveridge curve – Euro Area, Quarterly



Unemployment rate (% of labor force) - Monthly

 Unemployment according to ILO definition - Total - Euro area - Seasonally adjusted

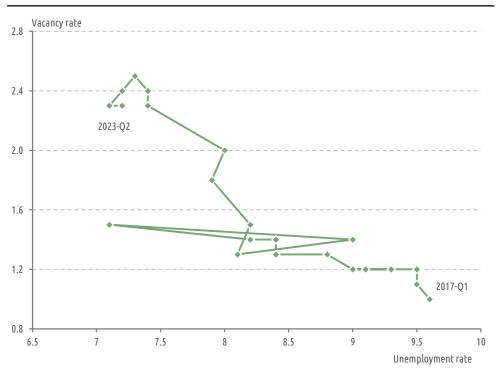
 Indicator
 09-22
 10-22
 11-22
 12-22
 01-23
 02-23
 03-23
 04-23
 05-23
 06-23
 07-23
 08-23

 Rate
 6.7
 6.7
 6.7
 6.7
 6.6
 6.5
 6.5
 6.5
 6.4
 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



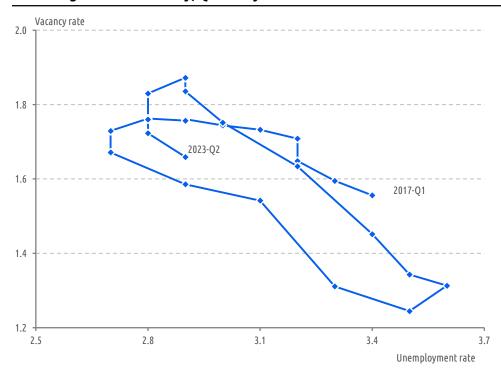
Unemployment rate (% of labor force) – Monthly (Eurostat)

Unemployment rate – Total – France- Seasonally adjusted
Indicator | 09-22 | 10-22 | 11-22 | 12-22 | 01-23 | 02-23 | 03-23 | 04-23 | 05-23 | 06-23 | 07-23 | 08-23

Rate 7.1 7.2 7.2 7.2 7.1 7.1 7.1 7.3 7.3 7.3 7.4 7.3

CEPREMAP DB • NOMICS the world's economic database

Beveridge curve - Germany, Quarterly



Unemployment rate (% of labor force) - Monthly

 Unemployment according to ILO definition - Total - Germany - Seasonally adjusted

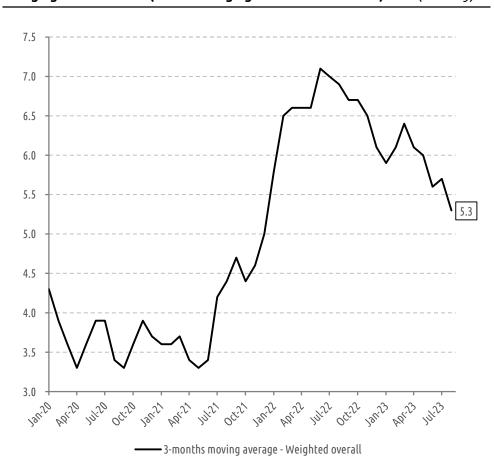
 Indicator
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 08-23

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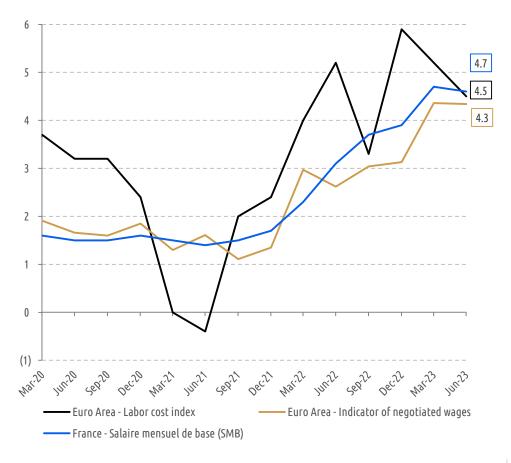
The verdict on wage inflation in 2023, both in the US and the EZ, is still open

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.

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



Indicator of negotiated wages¹ in the Euro Area (Quarterly)





C Inflation unbound

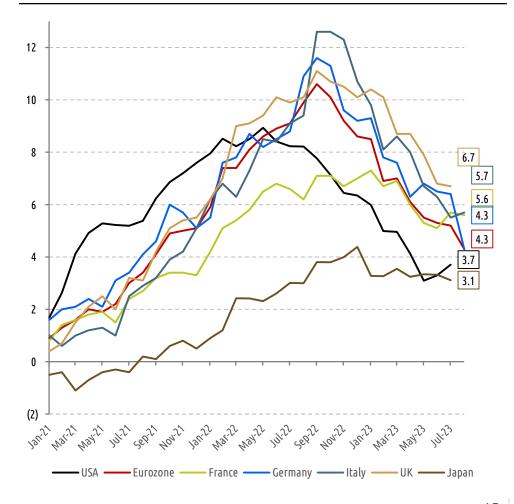
Inflation is coming down from its peak both in Europe and the US

Headline inflation has decreased more rapidly in the US (despite a rebound in August). Core and Headline inflation fell, however, in the Euro Area in September, driven by a 2pp fall in Germany.

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

CPI and core inflation in advanced economies (YoY % change)												
Mon	thly Y	ear-c		_				<u> – 202</u>	22/20	23		
Country	Oct	Nov	Dec	Jan	Feb	Маг	Арг	May	Jun	Jul	Aug	Sep
US	7.8	7.1	6.4	6.3	6.0	5.0	5.0	4.1	3.1	3.3	3.7	-
US core	6.3	6.0	5.7	5.5	5.5	5.6	5.5	5.3	4.9	4.7	4.4	-
Euro Area*	10.6	10.1	9.2	8.6	8.5	6.9	7.0	6.1	5.5	5.3	5.2	4.3
Euro Area core*	5.0	5.0	5.2	5.3	5.6	5.7	5.6	5.3	5.5	5.5	5.3	4.5
France*	7.1	7.1	6.7	7.0	7.3	6.7	6.9	6.0	5.3	5.1	5.7	5.6
France core*	4.1	4.2	4.2	4.2	4.6	4.6	4.7	4.4	4.4	4.3	4.0	3.6
France INSEE	6.2	6.2	5.9	6.0	6.3	5.7	5.9	5.1	4.5	4.3	4.9	4.9
France core INSEE	5.0	5.3	5.3	5.6	6.1	6.2	6.3	5.8	5.7	5.0	4.6	4.6
Germany*	11.6	11.3	9.6	9.2	9.3	7.8	7.6	6.3	6.8	6.5	6.4	4.3
Germany core*	5.1	5.1	5.4	5.1	5.4	5.9	5.6	5.1	6.1	6.2	6.3	4.8
Italy*	12.6	12.6	12.3	10.7	9.8	8.1	8.6	8.0	6.7	6.3	5.5	5.7
Italy core*	4.6	4.7	4.8	5.2	5.5	5.3	5.3	5.1	4.9	4.7	4.0	4.1
UK	11.1	10.7	10.5	10.1	10.4	10.1	8.7	8.7	7.9	6.8	6.7	-
UK core	6.5	6.3	6.3	5.8	6.2	6.2	6.8	7.1	6.9	6.9	6.2	-
Japan	3.8	3.8	4.0	4.4	3.3	3.3	3.5	3.2	3.3	3.3	3.1	-
Japan core	2.5	2.8	3.0	3.2	3.4	3.7	4.1	4.2	4.3	4.3	4.3	-

CPI Inflation (YoY % change) - since January 2021



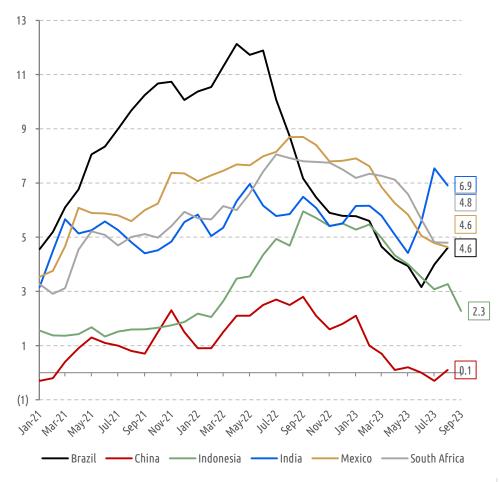
Inflation in emerging economies is slowly cooling, except for India

China remains an extraordinary exception with extremely low inflation levels

CPI inflation in advanced economies (YoY % change)

	Monthly Year-on-Year inflation rates (%) – 2022/2023											
	Mon	thly Y	'еаг-о	n-Yea	ır infl	ation	rates	(%) –	2022	/2023		
Country	Oct	Nov	Dec	Jan	Feb	Маг	Арг	May	Jun	Jul	Aug	Sep
China	2.1	1.6	1.8	2.1	1.0	0.7	0.1	0.2	0.0	(0.3)	0.1	-
India	6.1	5.4	5.5	6.2	6.2	5.8	5.1	4.4	5.6	7.5	6.9	-
South Africa	7.8	7.7	7.5	7.2	7.3	7.3	7.1	6.6	5.7	4.8	4.8	-
Brazil	6.5	5.9	5.8	5.8	5.6	4.7	4.2	3.9	3.2	4.0	4.6	-
Mexico	8.4	7.8	7.8	7.9	7.6	6.8	6.3	5.8	5.1	4.8	4.6	-
Indonesia	5.7	5.4	5.5	5.3	5.5	5.0	4.3	4.0	3.5	3.1	3.3	2.3

CPI Inflation (YoY % change) - since January 2021





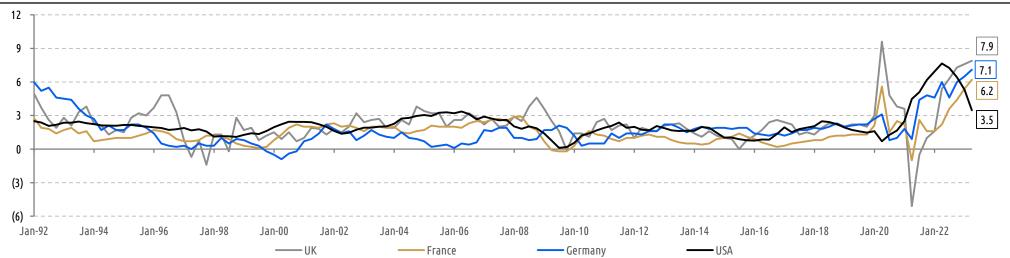
Implied GDP deflators appear to be converging towards headline inflation in G4 countries¹

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

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	5.1	6.2	6.9	7.7	7.3	6.4	5.3	3.5			
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			
UK	(0.5)	1.0	1.6	5.4	6.3	7.3	7.6	7.9			

Quarterly implied GDP deflator – Since Q1-1992







II Monetary policy



A In the US



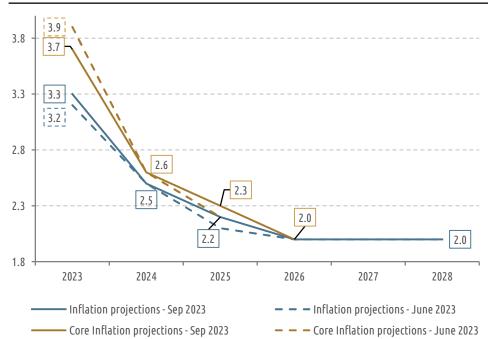
Monetary policy decisions from the Fed (1/2)

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

Personal consumption expenditures (PCE) - Monthly (YoY % change)

Price indexes for Personal Consumption Expenditures										
Indicator	02-23	03-23	04-23	05-23	06-23	07-23	08-23			
PCE inflation	5.2	4.4	4.4	4.0	3.2	3.4	3.5			

PCE Inflation Projections as of September 2023 (%)



Key considerations

- The target range of the federal fund rates was maintained at 5.25%-5.50% on September 20th.
- 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 31th The key issue is whether a new hike will occur.

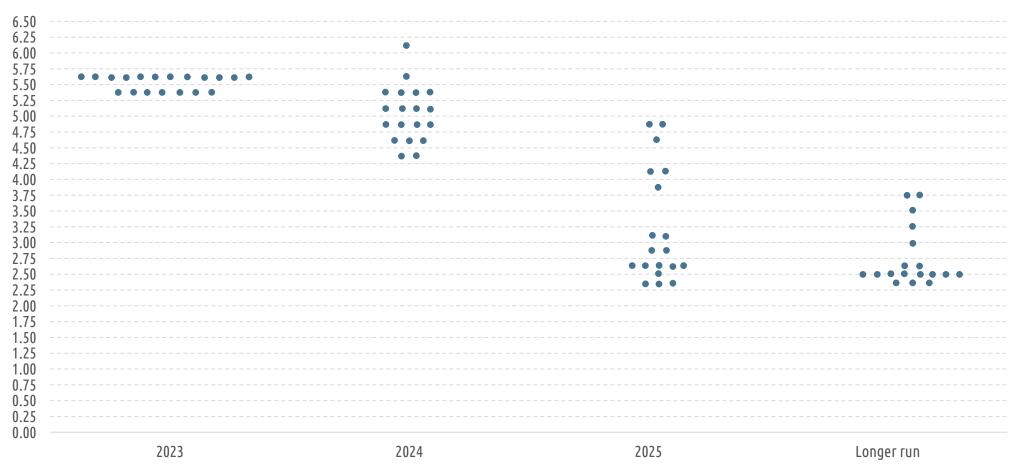
Federal Reserve economic projections as of 20th September 2023										
Indicator	2023	2024	2025	Longer run						
Change in real GDP	2.1	1.5	1.8	1.8						
Unemployment rate	3.8	4.1	4.1	4.0						
Inflation	3.3	2.5	2.2	2.0						
Federal funds rate	5.6	5.1	3.9	2.5						

""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."

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



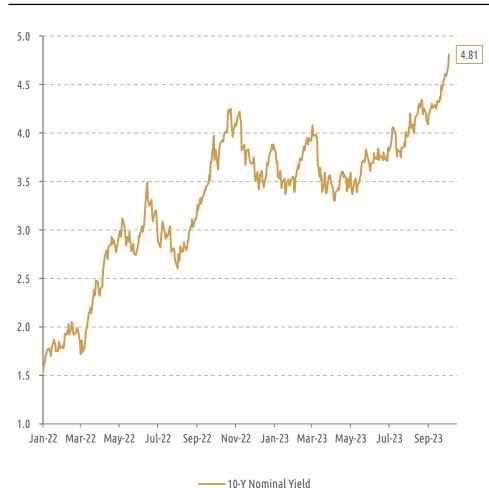


Source: Fed as of 06/10/2023

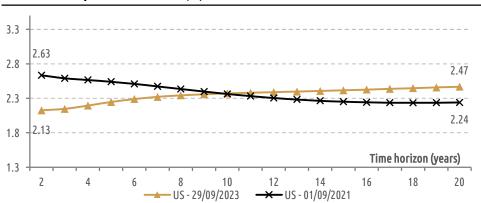
Nominal long-term rates are at their highest level since the Great Recession

For two months, the nominal rate has increased continuously. Real rate however are expected to stay around 2% in real terms

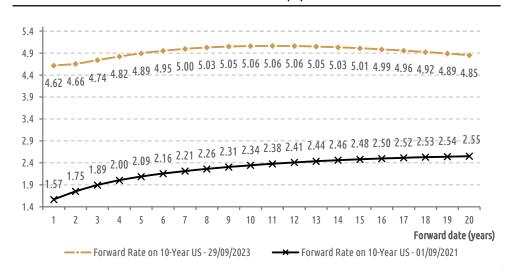
10-Y Nominal yield – US



Inflation Expectations – US (%)



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





Source: Fed as of 06/10/2023, Internal calculations

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

It has, however, increased in the last few weeks

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





Source: Fed as of 06/10/2023



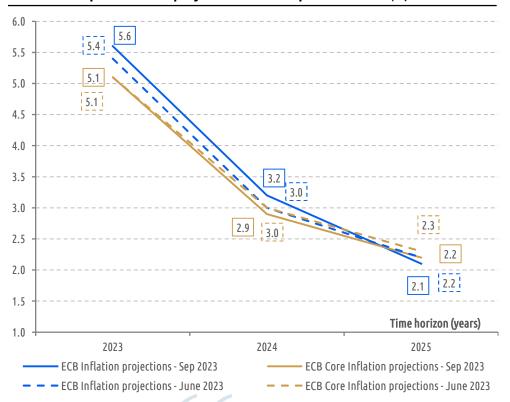
B In the Euro Area



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.

Inflation expectations & projections as of September 2023 (%)



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 26th The ECB hinted at a probable long pause in the hikes.

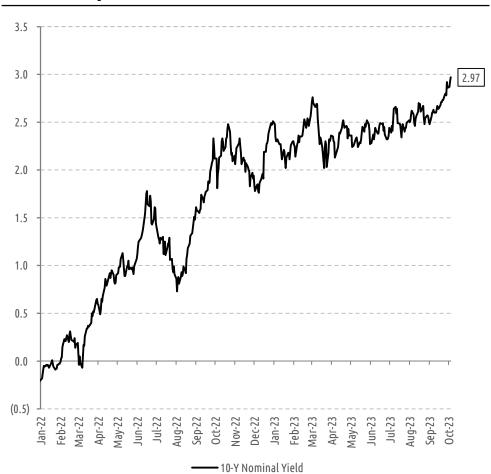
ECB economic projections as of 14 September 2023										
Indicator	2023	2024	2025							
Change in real GDP	0.7	1.0	1.5							
Unemployment rate	6.5	6.7	6.7							
Inflation	5.6	3.2	2.1							

"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."

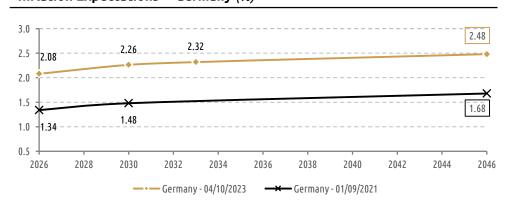
In the Eurozone, the banking crisis had no lasting effect on long-term rates

Nominal rates keep increasing despite the decrease of inflation by two points in Germany. Expected real rates, however, are near zero in the longer run.

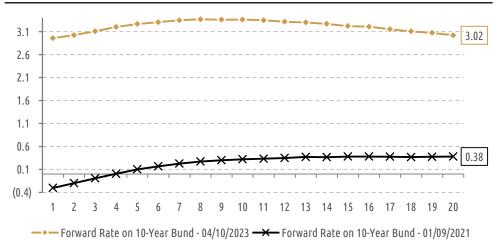
10-Y Nominal yield – German Bund



Inflation Expectations¹ - 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

It is, however, coming closer to zero.

Bund 2Yr/10Yr Spread - Since Jan 1998



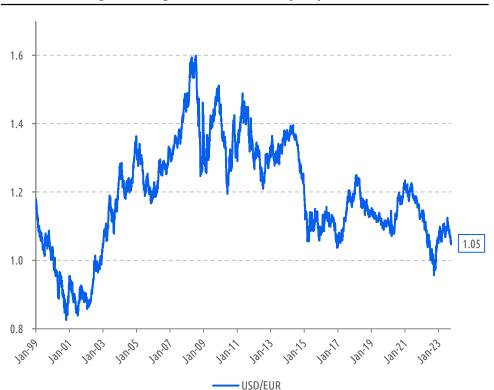


Source: Bundesbank as of 06/10/2023

After an appreciation since the end of 2022, the Euro has been weakening since June

Current and expected growth differentials are causing investors to favor the USD.

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 high levels

They have even been increasing in the last month.

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

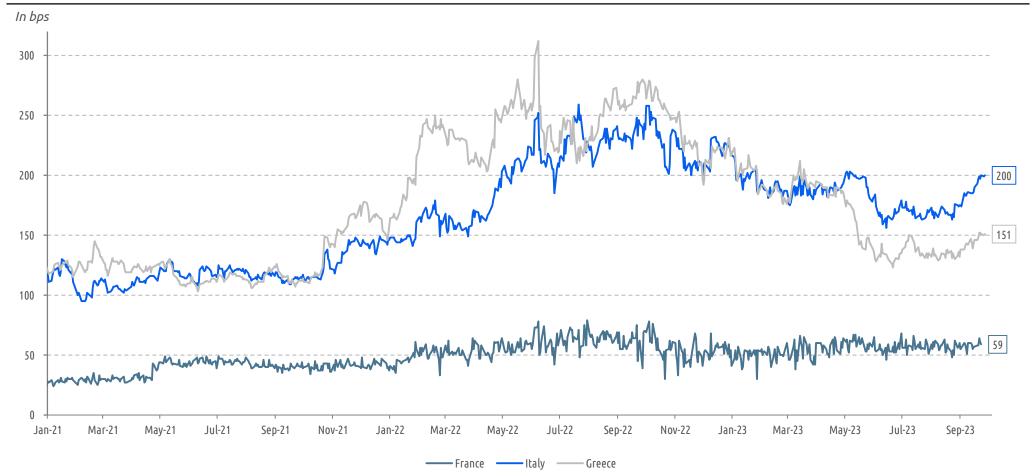




Tensions on spreads have moderately eased off since their peak late 2022

However, Italy's spreads have been increasing over the last month notably due to fears over new financial laws.

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





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

Then, they have slowly decreased both in the US and the Euro Area.

High yield corporate bond spreads - Since 2000



High yield corporate bond spreads-Since 2022





Source: ICE BofA Indices as of 06/10/2023

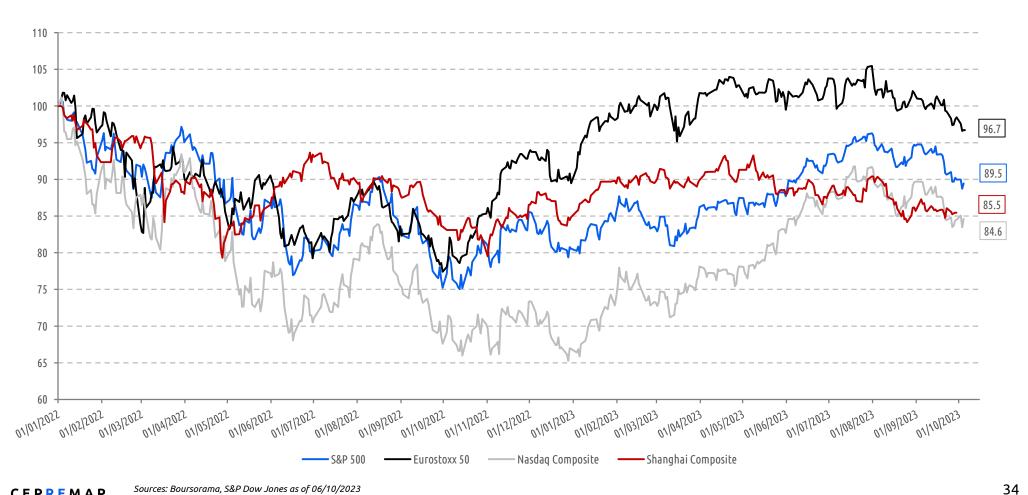


IV Impact on stock markets

Prices remain below pre-war levels

After increasing since the end of October, all indices have been going down for the last two months over the risk of persistent high inflation.

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



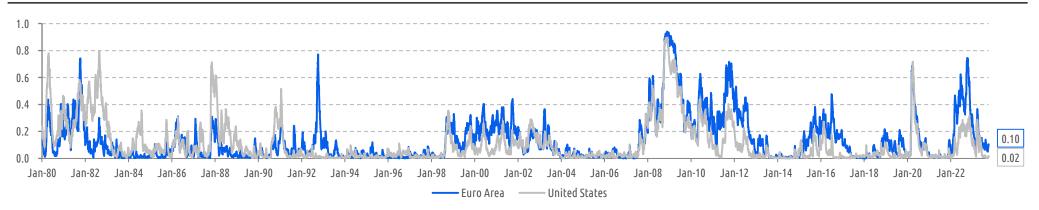




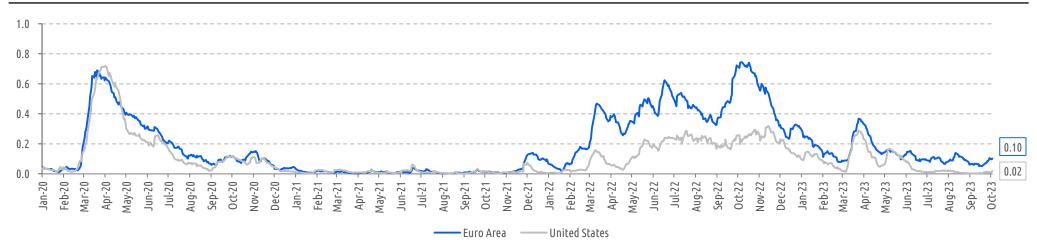
Financial stress indicators returned to pre-war levels

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



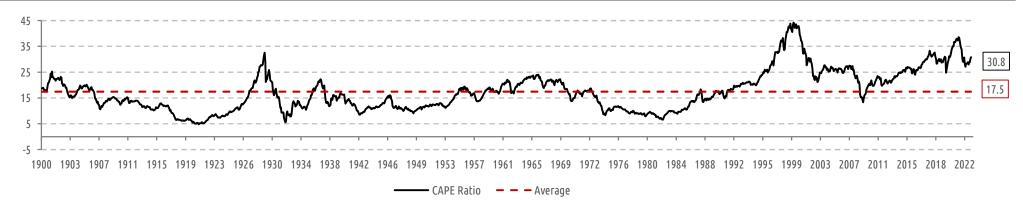


Source: ECB as of 06/10/2023

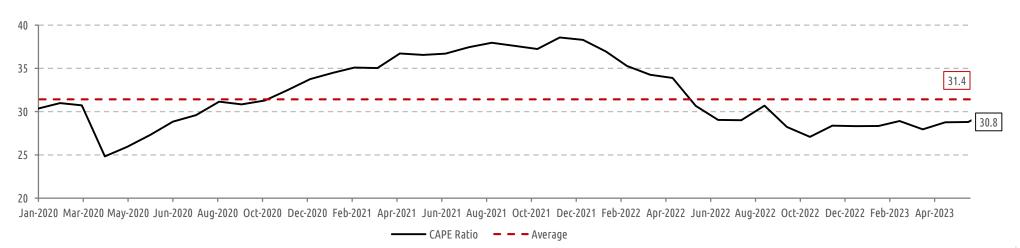
US Shiller Cyclically Adjusted Price to Earnings ratio (CAPE ratio)¹

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





Source: Robert Shiller (last data available – July 23)

Note: CAPE divide current prices to 10Y average of earnings (adjusted for inflation)

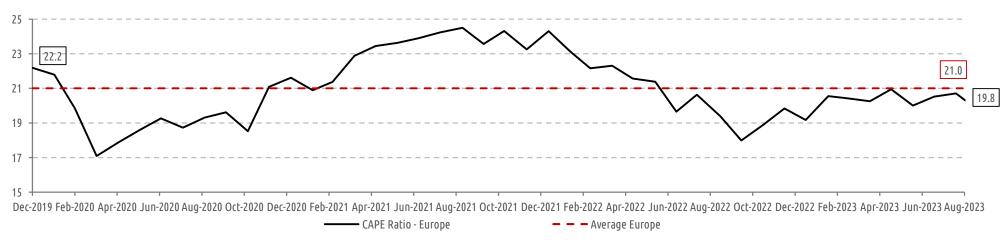
Shiller CAPE ratio in Europe

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



Source: Barclays (last data available – August 23)



V Appendix



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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



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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



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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 10q ggdebt/Q.GD.S13.PC GDP.DE
6	General government debt – France	Eurostat/gov 10q 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
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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	OECD/MEI/EA20.LRHUTTTT.STSA.Q Eurostat/jvs q nace2/Q.NSA.B-S.TOTAL.JOBRATE.EA19
11	Beveridge curve – United States (Q1-17 – Q2-22), Monthly	BLS/ln/LNS14000000 BLS/jt/JTS0000000000000JOR
11	Unemployment according to ILO definition - Total – Euro area – Seasonally adjusted, Monthly	Eurostat/ei lmhr m/M.PC ACT.SA.LM-UN-T-TOT.EA20



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12	Beveridge curve - France, Quarterly	Eurostat/jvs_q_nace2/Q.NSA.B-S.GE10.JOBRATE.FR 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	Eurostat/prc hicp manr/M.RCH A.CP00.EA 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> <u>Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.FR</u>
15	CPI Inflation (YoY % change) – France INSEE	INSEE/IPC- 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> <u>Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.DE</u>
15	CPI Inflation (YoY % change) – Italy	<u>Eurostat/prc_hicp_manr/M.RCH_A.CP00.IT</u> <u>Eurostat/prc_hicp_manr/M.RCH_A.TOT_X_NRG_FOOD.IT</u>
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



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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	ONS/QNA/IHYU.Q
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



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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



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