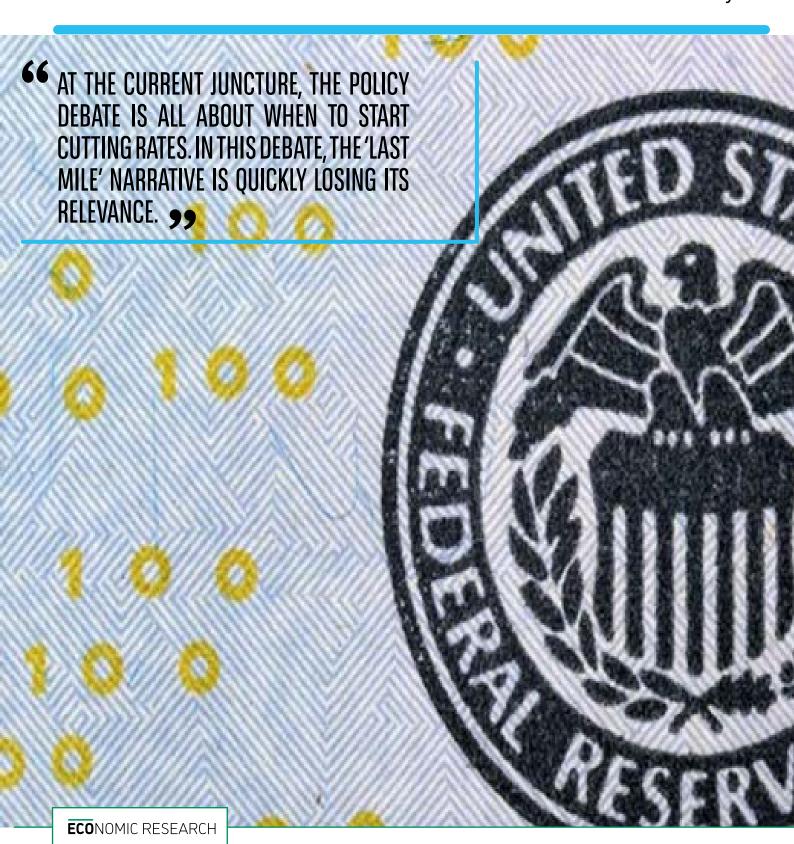
# **ECO**WEEK

**Issue 24.04** 29 January 2024





The bank for a changing world

# TABLE OF CONTENT

3

### **EDITORIAL**

The 'last mile of disinflation', a narrative running on its last legs

4

### **MARKETS OVERVIEW**

Recent market developments (foreign exchange, stock markets, interest rates, commodities, etc.)

6

### **ECONOMIC PULSE**

Analysis of some recent economic data: international trade

7

### **ECONOMIC SCENARIO**

Main economic and financial forecasts

8

### **FURTHER READING**

Latest articles, charts, videos and podcasts of Economic Research



3

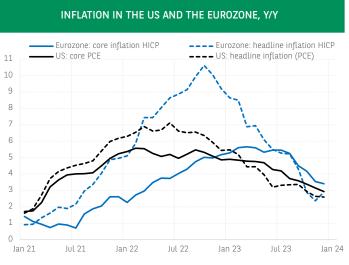
# **EDITORIAL**

### THE 'LAST MILE OF DISINFLATION', A NARRATIVE RUNNING ON ITS LAST LEGS

The narrative of the last mile of disinflation being the hardest, which in 2023 became popular in the world of central banking, reflects concern that after having dropped significantly, further declines in inflation would be more difficult. However, it seems that relevance of this narrative is increasingly being questioned. The account of the December 2023 meeting of the ECB governing council mentions that it has been debated. It seemed that the disinflation of 2023 had been faster than in previous episodes, raising doubts about the relevance of the narrative. A paper of the Federal Reserve Bank of Atlanta analyses this topic for the US. Based on recent research on the Phillips curve, it concludes that the 'last mile' is likely not significantly more arduous than the rest. Before the terminal rate was reached, referring to the 'last mile' was a form of implicit policy guidance: it might be necessary to have more elevated rates or to keep rates high for longer. At the current juncture, the policy debate is all about when to start cutting rates and the 'last mile' narrative is quickly losing its relevance

In 2023, the narrative of the last mile of disinflation being the hardest became popular amongst central bankers and their watchers<sup>1</sup>. It reflected concern that after having dropped significantly, further declines in inflation would be more difficult. When discussing this with a colleague who is also an experienced long-distance runner, he replied that the last mile was not the most arduous because getting close to the finish provides extra energy. Rather, the ten miles before the last one are the toughest. After all, the metaphor was perhaps not well chosen. Interestingly, it has also come under attack from economists and central bankers. The account of the December 2023 meeting of the ECB governing council mentions that members debated the notion of the 'last mile2'. It was noted that in terms of economic activity, the cost of the disinflation had been relatively mild and that a soft landing remained possible, whilst acknowledging that with services inflation still at 4%, the 'last mile' might be challenging. However, it was also argued that "it was not clear why the nature of the disinflationary process would change as the target drew closer." Moreover, it seemed that the disinflation of 2023 had been faster than in previous episodes, raising doubts about the relevance of the 'last mile' narrative.

A recent paper of the Federal Reserve Bank of Atlanta analyses this topic for the US and concludes that the 'last mile' "is likely not significantly more arduous than the rest3." The author quotes recent research<sup>4</sup> showing that the Phillips curve is nonlinear with a steep, negative slope for relatively high inflation rates before coming rather flat when inflation falls below 2%. This would imply that inflation can move back to target without a large negative impact on the labour market and that the 'last mile' of disinflation before reaching the target is not more arduous<sup>5</sup>. Another potential argument in favour of the 'last mile' narrative would be elevated inflation expectations, through their impact on wage demands and price setting by companies. However, one-year-ahead inflation expectations of US companies<sup>6</sup> have declined from 3.8% in March 2022 to 2.4% in December 2023, so it seems unlikely that they would make the 'last mile' more difficult. The Federal Reserve paper also mentions sticky services prices as a potential reason for slow disinflation arguing that price stickiness does not mean that disinflation becomes more difficult, it simply takes more time and requires more patience from policymakers.



SOURCE: REFINITIV, BNP PARIBAS

This interpretation is debatable: to the extent that services inflation persistence requires official rates to remain high for longer, the detrimental impact on activity, demand and the labour market could be significant. Unsurprisingly, these issues are also debated in the Eurozone. The ECB meeting account mentions that "it was argued that the main condition that would make inflation more persistent in the proximity of the inflation target was if inflation expectations became unanchored, which ultimately depended on the credibility of monetary policy." Interestingly, safeguarding credibility was also used as an argument to stop referring to the 'last mile' because it "might undermine confidence in the ECB's inflation target being achieved in a timely manner." This brings us to the key question of why using the narrative. Before the terminal rate was reached, one can argue that it helped in giving guidance by insisting that the 'last mile' might require more elevated rates or keeping rates high for longer. At the current juncture, the policy debate is all about when to start cutting rates. In this debate, the 'last mile' narrative is quickly losing its relevance.

William De Vijlder

<sup>6</sup> The author refers to the results of the Federal Reserve Bank of Atlanta's business inflation expectations survey



<sup>1 &</sup>lt;u>The last mile of disinflation</u>, BNP Paribas, Ecoweek, 13 November 2023.

<sup>2</sup> Source: ECB, Account of the monetary policy meeting of the Governing Council of the European Central Bank held in Frankfurt am Main on Wednesday and Thursday, 13-14 December 2023, 18 January 2024.

<sup>3</sup> David Rapach, *Is the last mile more arduous?*, Federal Reserve Bank of Atlanta's policy hub, no. 1–2024, January 2024.
4 Erin Crust, Kevin Lansing, and Nicolas Petrosky-Nadeau, *Reducing inflation along a nonlinear Phillips curve*, Federal Reserve Bank of San Francisco Economic Letter, 2023-17.
5 The conclusion would clearly be different if the kink in the estimated Phillips curve would occur when inflation is still well above 2% because this would require more rate hikes -with a detrimental impact on the economy and specifically the labour market- to bring inflation back to target.

#### **OVERVIEW**

#### **MONEY & BOND MARKETS**

Week 19-1 24 to 26	-1-24			Interest Rates		highest 24	lowest 24	Yield (%)		highest 24	lowest 24
7 CAC 40	7 372 ▶	7 634	+3.6 %	€ECB	4.50	4.50 at 01/01	4.50 at 01/01	€ AVG 5-7y	2.64	2.64 at 01/01	2.64 at 01/01
<b>⊅</b> S&P 500	4 840 ▶	4 891	+1.1 %	Eonia	-0.51	-0.51 at 01/01	-0.51 at 01/01	Bund 2y	2.91	2.99 at 19/01	2.68 at 01/01
				Euribor 3M	3.89	3.97 at 18/01	3.89 at 26/01	Bund 10y	2.27	2.32 at 23/01	2.02 at 03/01
	13.3 ▶	13.3	-0.0 pb	Euribor 12M	3.60	3.68 at 24/01	3.51 at 01/01	OAT 10y	2.70	2.76 at 18/01	2.47 at 01/01
¥ Euribor 3M (%)	3.96 ▶	3.89	-7.1 bp	\$ FED	5.50	5.50 at 01/01	5.50 at 01/01	Corp. BBB	3.92	4.06 at 17/01	3.75 at 01/01
7 Libor \$ 3M (%)	5.58 ▶	5.58	+0.2 bp	Libor 3M	5.58	5.59 at 01/01	5.56 at 16/01	\$ Treas. 2y	4.45	4.48 at 24/01	4.22 at 15/01
■ OAT 10y (%)	2.75 ▶	2.70	-4.2 bp	Libor 12M	6.04	6.04 at 01/01	6.04 at 01/01	Treas. 10y	4.15	4.18 at 24/01	3.87 at 01/01
■ Bund 10y (%)	2.31 ▶	2.27	-4.0 bp	£ BoE	5.25	5.25 at 01/01	5.25 at 01/01	High Yield	7.85	8.10 at 05/01	7.82 at 01/01
7 US Tr. 10y (%)	4.14 ▶	4.15	+1.1 bp	Libor 3M	5.33	5.33 at 24/01	5.31 at 16/01	£ gilt. 2y	4.35	4.40 at 24/01	3.98 at 01/01
≥ Euro vs dollar	1.09 ▶	1.09	-0.2 %		0.81	0.81 at 01/01	0.81 at 01/01	gilt. 10y At 26-1-24	4.05	4.09 at 24/01	3.60 at 01/01
■ Gold (ounce, \$)	2 027 ▶	2 017	-0.5 %	At 26-1-24				AL 20-1-24			
→ Oil (Brent, \$)	79.1 ▶	82.0	+3.6 %								

#### **EXCHANGE RATES**

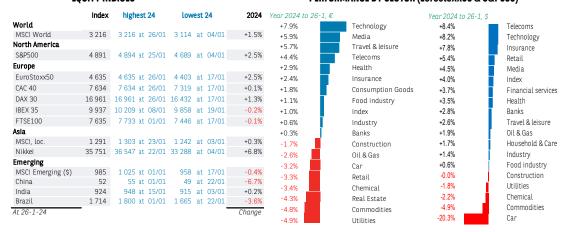
1€ =		high	low	lowest 24				
USD	1.09	1.10	at 01/01	1.08	at	25/01	-1.7%	
GBP	0.85	0.87	at 02/01	0.85	at	25/01	-1.5%	
CHF	0.94	0.95	at 22/01	0.93	at	08/01	+0.9%	
JPY	160.86	161.18	at 19/01	155.33	at	02/01	+3.3%	
AUD	1.65	1.66	at 17/01	1.62	at	02/01	+1.8%	
CNY	7.80	7.86	at 10/01	7.76	at	25/01	-0.4%	
BRL	5.34	5.41	at 22/01	5.32	at	12/01	-0.4%	
RUB	97.68	100.17	at 03/01	95.72	at	19/01	-1.1%	
INR	90.29	91.92	at 01/01	90.02	at	25/01	-1.8%	
At 26-	1-24						Change	

#### COMMODITIES

Spot price, \$		high	highest 24			lowest 24			2024 2024(€)		
Oil, Brent	82.0	82.0	at	26/01	75.8	at	08/01	+5.5%	+7.3%		
Gold (ounce)	2 017	2 067	at	02/01	2 010	at	17/01	-2.4%	-0.7%		
Metals, LMEX	3 736	3 762	at	01/01	3 596	at	17/01	-0.7%	+1.0%		
Copper (ton)	8 448	8 478	at	25/01	8 174	at	17/01	-0.2%	+1.5%		
wheat (ton)	223	2.3	at	01/01	216	at	16/01	-3.9%	-2.3%		
Corn (ton)	167	1.7	at	01/01	163	at	17/01	-0.5%	-2.9%		
At 26-1-24									Change		

#### **EQUITY INDICES**

#### PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)



SOURCE: REFINITIV, BNP PARIBAS



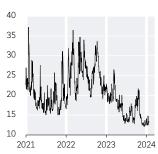
# **MARKETS OVERVIEW**

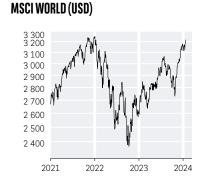




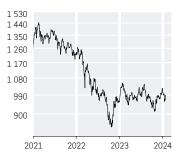


# VOLATILITY (VIX, S&P500)

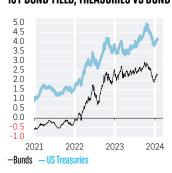


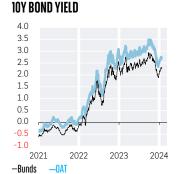


MSCI EMERGING (USD)

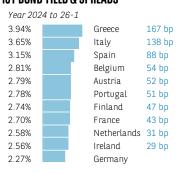


**10Y BOND YIELD, TREASURIES VS BUND** 

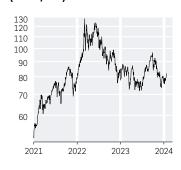




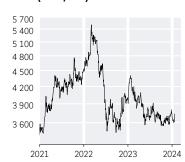
**10Y BOND YIELD & SPREADS** 



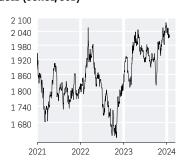
OIL (BRENT, USD)



METALS (LMEX, USD)



**GOLD (OUNCE, USD)** 



SOURCE: REFINITIV, BNP PARIBAS



# **ECONOMIC PULSE**

6

### INTERNATIONAL TRADE: MARITIME TRANSPORT FACES A NEW SHOCK

The Red Sea conflict has already had a substantial impact on global shipping. While maritime freight prices are, at this stage, still well below the levels seen in 2021, when the global economy was recovering post-lockdown, they have spiked in January 2024. The Freightos index (chart 5) shows that transportation costs have tripled on average compared to the end of last year. Due to their geographical locations, China and Europe have been the regions most directly affected by these disruptions, and are already facing threefold (China-Europe route) to fivefold (Europe-China route) increases in transportation costs. However, the effects are gradually being felt on all global shipping routes. For example, according to Freightos data, transportation costs between China and the west coast of the United States have more than doubled in January.

In addition, the PMI indices for January point to longer shipping times for goods in most regions, with a major deterioration in some cases (chart 6). This has been particularly true for the United Kingdom, where the PMI delivery times index has plummeted 8 points in January (a drop indicates that delivery times are rising), the biggest decline ever recorded in a month, excluding the lockdown period. The New York Federal Reserve's supply chain pressures index (chart 3) fell slightly in December, but it is very likely to rebound in January.

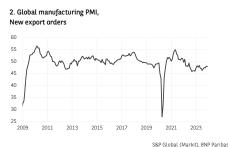
However, it should be noted that not all indicators are deteriorating significantly yet. The Baltic Dry index (chart 4), which measures dry bulk transportation costs, has remained stable in January. The price of container ships (Harpex index) is also still at an all-time low, as a result of a persistently high excess capacity for this type of infrastructure.

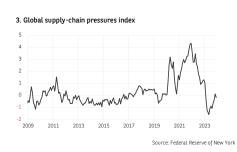
The beginning of 2024 has seen further global trade tensions emerge, even though global trade had already declined in 2023. According to the CPB (chart 1), cumulatively over the first eleven months of the year, export volumes fell by 0.9% compared to the same period in 2022. Most regions recorded a decline (-2.7% in the euro zone, -1.8% in Japan, -1.4% in Latin America and Africa/Middle East, and -4.0% in Asia excluding China), with the exceptions of the United States and China, where exports were up 3.4 and 2.3% respectively.

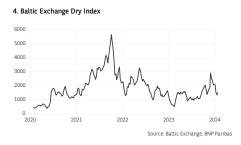
Guillaume Derrien

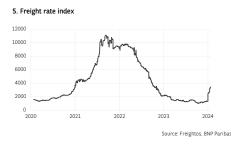
#### INDICATORS OF INTERNATIONAL TRADE

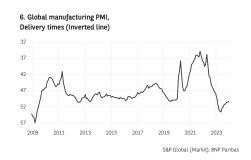














# **ECONOMIC SCENARIO**

### **UNITED STATES**

The possibility of a US recession triggered by monetary tightening is looking less and less likely given the resilience of an economy that continued to grow by 0.8% q/q in Q4 2023 and by 2.5% on average over the year, thanks to the resilience of household consumption and the strength of nonresidential investment. Our central scenario is now that of a marked slowdown albeit without an economic recession in H1 2024. The peak in inflation was reached in mid-2022, and core disinflation is becoming more significant. Inflation should approach the 2% target in 2024. Progress on that front should be considered as sufficient by the Fed to now look forward to a soft landing and start cutting rates progressively, from May 2024.

### **CHINA**

The post-Covid rebound in economic growth weakened rapidly in 2023 and proved to be weaker than initially expected. Domestic demand has remained held back by a significant loss in consumer and investor confidence. The crisis in the property sector has persisted, with the continued fall in sales, defaults of developers and growing difficulties of certain financial institutions. Export momentum stalled last year due to the weakening in global demand and tensions with the US. Yet, Chinese exports have recently regained strength and this trend is expected to continue in the short term. Moreover, the government and the central bank have implemented new policy stimulus measures since last summer. Economic activity has strengthened slightly while consumer price inflation has remained very low. The authorities will keep an accommodative policy mix in the short term, still being constrained by the debt excess of the economy and the weak financial situation of local governments.

### **EUROZONE**

According to the first estimate, real GDP in the Eurozone contracted slightly in Q3 (-0.1% q/q) after two quarters of stagnation. The negative effects of monetary tightening are expected to continue to weigh on economic activity this winter. Apart from the possibility of a small technical recession in the second half of 2023, activity is expected to stabilize in the first quarter of 2024, before a more pronounced recovery from spring onwards. This would be underpinned by a first rate cut by the ECB, which we expect to happen in April. This monetary easing would accompany the inflation decline, which is expected to come close to the 2% target during the second quarter. Disinflation, along with the dynamism of wages, is expected to support household purchasing power and consumption. Growth should also be supported by NGEU disbursements and its deployment on the ground.

### FRANCE

French growth was negative in Q3 2023 (-0.1% q/q) after a short-lived acceleration in Q2 2023 (+0,6% t/t, driven by exceptional factors, such as aeronautics). While household consumption has surprised on the upside in Q3, it has remained depressed. In parallel, corporate investment, has reached a new high (+0.5% q/q). Disinflation is now visible (the harmonized index grew by 4.1% y/y in December, compared to 5.7% y/y in December), but the impact of higher interest rates should continue to be felt. As a result, we except 0% growth q/q during the Q4. Going forward, we expect no clear growth acceleration next year (0.6% in 2024 after 0.8% in 2023).

### RATES AND EXCHANGE RATES

The last meetings of 2023 confirmed that the 25bp rate hike of the Fed funds in July and of the ECB policy rates in September (deposit rate at 4.00%, refinancing rate at 4.50%) was very likely to be the last of an exceptional tightening cycle. The possibility of a further monetary tightening has still not completely and officially disappeared, but it has been a lot reduced by the fall in inflation, which is getting closer more visibly to the 2% target. Positive developments on the inflation front, together with the expected weakening of growth, pave the way for the first rates cuts in April for the ECB and May for the Fed. However, on both sides of the Atlantic, policy rates in real terms and the degree of monetary restriction would remain about unchanged. And the induced decline in long-term rates should be limited by the importance of bond issuance against a background of quantitative tightening. In this regard, we expect a halt in the spring of 2024 to the ECB's reinvestments under the PEPP.

On 31 October, the Bank of Japan (BoJ) adjusted its yield curve control policy (YCC) by allowing a wider fluctuation in 10-year sovereign interest rates around the target of 1%. Further adjustments to monetary policy are likely, given that the country currently faces the fastest rate of inflation since the early 1990s. We expect the BoJ to end its negative interest rate policy in March or April, while significantly easing its yield curve control policy. We remain bearish regarding the US dollar, particularly from Q2 2024 and especially versus the euro, given that we expect fewer rate cuts by the ECB than the Fed. We also expect the yen to strengthen versus the USD, based on the combination of the start of BoJ tightening, of the repatriation by Japanese investors of their foreign holdings, and of the fall in US bond yields.

GDP GROWTH AND INFLATION										
		GDP Growth					Inflation			
%	2022	2023 e	2024 e	2025 e		2022	2023 e	2024 e	2025 e	
United-States	1,9	2.5	2.0	1.4		8,0	4,1	2,7	2,3	
Japan	0,9	2,1	0,8	0,9		2,5	3,3	2,1	1,9	
United-Kingdom	4,4	0,3	-0,1	1,1		9,1	7,3	2,2	2,3	
Euro Area	3,4	0,5	0,6	1,6		8,4	5,4	2,0	1,9	
Germany	1,9	-0,1	0,3	1,3		8,7	6,0	2.0	2.1	
France	2,5	0,8	0,6	1,4		5,9	5.7	2.2	1.6	
Italy	3,9	0,7	0,9	1,5		8,7	5,9	1.4	2.0	
Spain	5,8	2,3	1,5	2,1		8,3	3.4	1.8	1.9	
China	3,0	5,2	4,5	4,3		2,0	0,4	1,5	1,7	
India*	7,2	7,5	7,0	6,5		6,7	5,8	5,7	4,5	
Brazil	2,9	3,1	1,8	1,8		9,3	4,6	3,6	3,9	

Source : BNP Paribas (e: Estimates & forecasts)

Last update: 29 January 2024

	INTEREST A	ND EXC	HANGE	RATES		
Interest rates, % End of period		01 2024	02 2024	03 2024	Q4 2024	Q4 2025
US	Fed Funds (upper limit)	5.50	5.00	4.50	4.00	2.75
	T-Note 10y	4.15	4.00	3.95	3.95	4.00
Eurozone	deposit rate	4.00	3.50	3.00	2.75	2.50
	Bund 10y	2.45	2.35	2.20	2.20	2.50
	OAT 10y	3.02	2.91	2.75	2.75	3.05
	BTP 10y	4.25	4.00	3.95	3.90	4.20
	B0N0 10y	3.45	3.25	3.10	3.05	3.30
UK	Base rate	5.25	5.00	4.75	4.25	3.00
	Gilts 10y	3.90	3.75	3.65	3.55	3.65
Japan	BoJ Rate	0.10	0.10	0.25	0.25	0.75
	JGB 10y	0.95	1.20	1.35	1.35	1.35
Exchange Rates		,				
End of period		Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q4 2025
USD	EUR / USD	1.10	1.12	1.14	1.15	1.18
	USD / JPY	145	141	138	135	130
	GBP / USD	1.26	1.29	1.31	1.32	1.36
EUR	EUR / GBP	0.87	0.87	0.87	0.87	0.87
	EUR / JPY	160	158	157	155	153
Brent						•
Quarter Average		Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q4 2025
Brent	LISD/bbl	78	81	86	83	82

Sources: BNP Paribas (Market Economics, Interest Rate Strategy, FX Strategy, Commodities Desk Strategy)

Last update: 18 January 2024



<sup>\*</sup> Fiscal year from 1st April of year n to March 31st of year n+1

# **FURTHER READING**

8

France: a business climate survey in line with continued disinflation	EcoBrief	25 January 2024
<u>France: Household financial savings rate remains high despite the sharp contraction in financial investment flows</u>	Chart of the Week	24 January 2024
Central banks: no hurry, no worry	EcoWeek	22 January 2024
EcoTV The Graph · Electricity: France goes to 2024 in an Olympic shape	EcoTV	22 January 2024
FRENCH ECONOMY POCKET ATLAS - JANUARY 2024	EcoCharts	19 January 2024
"Lenders of next-to-last resort": too big a role for the Federal Home Loan Banks?	EcoFlash	19 January 2024
2024: two anniversaries - And hopes for an inversion of the emissions curve	Chart of the Week	17 January 2024
Global economy : the year has changed, the economic situation remains mixed	EcoWeek	15 January 2024
<u>Inflation tracker - January 2024   Inflation picked up in the euro area and the United States in December</u>	EcoCharts	12 January 2024
Outlook 2024: decline of inflation and policy rates to support growth	EcoTV	12 January 2024
Recruitment difficulties intensify in Japan	Chart of the Week	10 January 2024
Global economy - 2024: lower central bank rates and then what?	EcoWeek	10 January 2024
<u>December issue</u>	EcoPulse	22 December 2023
Global economy: 2023: a year of transition with many surprises	EcoWeek	21 December 2023
Sub-Saharan Africa: multilateral creditors have redoubled their efforts to finance the region	Chart of the Week	19 December 2023
Housing supply challenges in France: an unsolvable issue?	EcoConjoncture	19 December 2023
Episode 1- Geopolitical Uncertainty: Economic Consequences	Podcast - Macro Waves	19 December 2023
2023, a surprising year until the end	EcoTVWeek	15 December 2023
US: Santa Claus is coming to town	EcoWeek	15 December 2023
Eurozone: for the ECB, time for relaxation has not come yet	EcoBrief	14 December 2023



# **GROUP ECONOMIC RESEARCH**

William De Vijlder Chief Economist	+33 1 55 77 47 31	william.devijlder@bnpparibas.com
DECD ECONOMIES AND STATISTICS		
Hélène Baudchon Deputy chief economist, Head - United States	+33 1 58 16 03 63	helene.baudchon@bnpparibas.com
Stéphane Colliac France, Germany	+33 1 42 98 43 86	stephane.colliac@bnpparibas.com
Guillaume Derrien Eurozone, Southern Europe, Japan, United Kingdom - Global trade	+33 1 55 77 71 89	guillaume.a.derrien@bnpparibas.com
Veary Bou, Tarik Rharrab Statistics		
ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FRENC	H NETWORK	
Jean-Luc Proutat Head	+33 1 58 16 73 32	jean-luc.proutat@bnpparibas.com
BANKING ECONOMICS		
Laurent Quignon Head	+33 1 42 98 56 54	laurent.quignon@bnpparibas.com
Céline Choulet	+33 1 43 16 95 54	celine.choulet@bnpparibas.com
Thomas Humblot	+33 1 40 14 30 77	thomas.humblot@bnpparibas.com
Marianne Mueller	+33 1 40 14 48 11	marianne.mueller@bnpparibas.com
EMERGING ECONOMIES AND COUNTRY RISK		
François Faure Head – Argentina, Turkey – Methodology, Modelling	+33 1 42 98 79 82	francois.faure@bnpparibas.com
Christine Peltier Deputy Head – Greater China, Vietnam – Methodology	+33 1 42 98 56 27	christine.peltier@bnpparibas.com
Stéphane Alby Africa (French-speaking countries)	+33 1 42 98 02 04	stephane.alby@bnpparibas.com
Pascal Devaux Middle East, Balkan countries	+33 1 43 16 95 51	pascal.devaux@bnpparibas.com
Hélène Drouot South Korea, Philippines, Thailand, Andean countries	+33 1 42 98 33 00	helene.drouot@bnpparibas.com
Salim Hammad Latin America	+33 1 42 98 74 26	salim.hammad@bnpparibas.com
Cynthia Kalasopatan Antoine Jkraine, Central European countries	+33 1 53 31 59 32	cynthia.kalasopatan.antoine@bnpparibas.com
ohanna Melka ndia, South Asia, Russia, Kazakhstan	+33 1 58 16 05 84	johanna.melka@bnpparibas.com
Lucas Plé Africa (Portuguese & English-speaking countries)	+33 1 40 14 50 18	lucas.ple@bnpparibas.com
CONTACT MEDIA		
Mickaelle Fils Marie-Luce	+33 1 42 98 48 59	mickaelle.filsmarie-luce@bnpparibas.com



# **GROUP ECONOMIC RESEARCH**

### **ECO**CONJONCTURE

Structural or thematic topics.

# **ECO**EMERGING

Analyses and forecasts for a selection of emerging economies.

### **ECO**PERSPECTIVES

Analyses and forecasts with a focus on developed countries.

### **ECO**FLASH

Data releases, major economic events.

### **ECOWFFK**

Recent economic and policy developments, data comments, economic calendar, forecasts.

### **ECO**CHARTS

Easy-to-read monthly overview of inflation dynamics in the main developed economies.

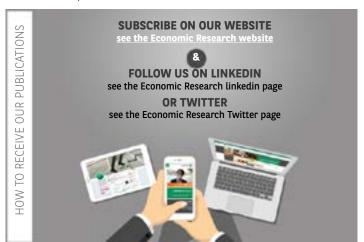
### **ECOPULSE**

Monthly barometer of key economic indicators of the main OECD

### **ECO**TV WFFK

## **MACROWAVES**

Our economic podcast



Published by BNP PARIBAS Economic Research

Head office: 16 boulevard des Italiens – 75009 Paris France / Phone : +33 (0) 1.42.98.12.34 Internet: www.group.bnpparibas - www.economic-research.bnpparibas.com

Head of publication: Jean Lemierre / Chief editor: William De Vijlder

Copyright: Anna Bohdan

The information and opinions contained in this document have been obtained from, or are based The information and opinions contained in this document have been obtained from, or are based on, public sources believed to be reliable, but there is no guarantee of the accuracy, completeness or fitness for any particular purpose of such information and such information may not have been independently verified by BNPP or by any person. None of BNPP, any of its subsidiary undertakings or affiliates or its members, directors, officers, agents or employees accepts any responsibility or liability whatsoever or makes any representation or warranty, express or implied, as to the accuracy and completeness of the information or any opinions based thereon and contained in this document and it should not be relied upon as such. This document does not constitute research, as defined under MIFID II, or form any part of any offer to sell or issue and is not a solicitation of any offer to purchase any financial instrument, nor shall it or any part of it nor the fact of its distribution form the basis of, or be relied on, in connection with any contract or investment decision. Information and opinions contained in this document are published for the information of recipients, but are not to be relied upon as authoritative or any contract or investment decision. Information and opinions contained in this document are published for the information of recipients, but are not to be relied upon as authoritative or taken in substitution for the exercise of judgment by any recipient, are subject to change without notice. In providing this document, BNPP does not offer investment, financial, legal, tax or any other type of advice to, nor has any fiduciary duties towards, recipients. Any reference to past performance is not indicative of future performance, which may be better or worse than prior results. Any hypothetical, past performance simulations are the result of estimates made by BNPP, as of a given moment, on the basis of parameters, market conditions, and historical data selected by BNPP, and should not be used as guidance, in any way, of future performance. To the fullest extent permitted by law, no BNPP group company accepts any liability whatsoever (including in negligence) for any direct or consequential loss arising from any use of or reliance on material contained in this document even when advised of the possibility of such losses. All estimates and opinions included in this document are made as of the date of this document. Unless otherwise indicated in this document. BNPP less otherwise indicated in this document there is no intention to update this document. BNPP may make a market in, or may, as principal or agent, buy or sell securities of any issuer or person mentioned in this document or derivatives thereon. Prices, yields and other similar information included in this document are included for information purposes however numerous factors will affect market pricing at any particular time, such information may be subject to rapid change and there is no certainty that transactions could be executed at any specified price. BNPP may have a financial interest in any issuer or person mentioned in this document, including a long or short position in their securities and/or options, futures or other derivative instruments based or short position in their securities and/or options, futures or other derivative instruments based thereon, or vice versa. BNPP, including its officers and employees may serve or have served as an officer, director or in an advisory capacity for any person mentioned in this document. BNPP may, from time to time, solicit, perform or have performed investment banking, underwriting or other services (including acting as adviser, manager, underwriter or lender) within the last 12 months for any person referred to in this document. BNPP may be a party to an agreement with any person relating to the production of this document. BNPP may to the extent permitted by law, have acted upon or used the information contained herein or in the document, or the analysis on which it was based, before the document was published. BNPP may receive or intend to seek compensation for investment banking services in the next three months from or in relation to any person mentioned in this document. Any person mentioned in this document may have been provided with relevant sections of this document or its publication in order. may have been provided with relevant sections of this document prior to its publication in order to verify its factual accuracy

This document was produced by a BNPP group company. This document is for the use of intended recipients and may not be reproduced (in whole or in part) or delivered or transmitted to any other person without the prior written consent of BNPP. By accepting or accessing this

BNP Paribas is a société anonyme incorporated in France, licensed and supervised as a credit institution by the European Central Bank (ECB) and as an investment services provider by the Autorité de contrôle prudentiel et de résolution (ACPR) and Autorité des marches financiers (AMF), and having its registered office at 16, boulevard des Italiens, 75009 Paris, France

Some or all of the information contained in this document may already have been published on <a href="https://globalmarkets.bnpparibas.com">https://globalmarkets.bnpparibas.com</a>.

For country-specific disclaimers (United States, Canada, United Kingdom, Germany, Belgium, Ireland, Italy, Netherlands, Portugal, Spain, Switzerland, Brazil, Turkey, Israel, Bahrain, South Africa, Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Singapore, South Korea, Taiwan, Thailand, Vietnam) please type the following URL to access the applicable legal notices: <a href="https://globalmarkets.bnpparibas.com/gm/home/Markets\_360\_Country\_Specific\_Notices.pdf">https://globalmarkets.bnpparibas.com/gm/home/Markets\_360\_Country\_Specific\_Notices.pdf</a>

© BNP Paribas (2023). All rights reserved.

