ECOWEEK

Issue 24.10 13 March 2024

66 The quality of the anchoring the commercial bank's money to the central bank's currency is not reflected in the stock of notes and coins but, on the contrary, in the confidence in the money issued by commercial banks, and the use associated with it. 99



ECONOMIC RESEARCH

The bank for a changing world

TABLE OF CONTENT

3

EDITORIAL

The digital euro and the role of central bank currency anchor

5

MARKETS OVERVIEW

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

7

ECONOMIC PULSE

Analysis of some recent economic data: PMI indices

8

ECONOMIC SCENARIO

Main economic and financial forecasts

9

FURTHER READING

Latest articles, charts, videos and podcasts of Economic Research



EDITORIAL

THE DIGITAL EURO AND THE ROLE OF CENTRAL BANK CURRENCY ANCHOR

Monetary anchoring is one of the main arguments put forward by central banks to justify an eponymous digital currency. According to supporters of the digital euro, a reduction in the use of paper money or even its disappearance would be the natural next step and result in the creation of a digital form of central bank currency that would be the only guaranteed way of keeping the currency anchored in the digital era. Nothing could be less obvious.

In November 2021, during a speech on the digital euro, Fabio Panetta, then a member of the ECB's executive board, stated: "People's confidence in private money is underpinned by its convertibility on a oneto-one basis with the safest form of money in the economy - central bank money, the monetary anchor - and hence with other regulated forms of money"1. He added: "Private issuers [of currency, i.e. banks, editor's note] have to rely on convertibility, as their money is exposed to operational, credit, liquidity and market risks," while also noting that "these risks are reduced through public policy safeguards, such as financial supervision, capital requirements and deposit insurance".

In a recent article also addressing concerns – which they believe to be exaggerated - about bank disintermediation as the result of a digital euro, Bindseil, Cipolonne and Schaaf $(2024)^2$ posit the theory that the decline in use of banknotes for daily transactions will also eventually reduce the structural demand for banknotes. To support their claims, they point out that the nominal stock of banknotes decreased in 2023 for the first time since 2002 in the euro area, which they attribute to higher interest rates and the digitalisation of payments. In the light of the supposed risk of the reduced role as anchor coupled with the fall in banknotes in circulation, the ECB needs to ensure that "the money [it issues] maintains its role as a monetary anchor"3.

But the combination of a reduction in use of banknotes as a payment instrument and a decline in banknotes in circulation does not really stand up to the facts. Despite decreased demand for banknotes for retail transactions, banknotes outstanding rose by 2.4x between 2002 and 2022 while, at the same time, its relative size increased from around 10% of household current accounts to 17.5%. These opposing trends are known as the "paradox of banknotes"⁴. Meanwhile, cash is still the most frequently used payment method at the point of sale, despite the sharp decline in use of cash since the Covid pandemic, with 59% of transactions (in terms of the number) still paid in cash in 2022⁵.

According to ECB estimates, demand for banknotes in 2019 was motivated more to keep them as store of value (between 28% and 50%) than to pay for transactions (between 20% and 22%). A large proportion of demand also came from non-EU residents (between 30% and 50%).

In any case, the quality of anchoring of the commercial bank money to the central bank currency is not measured so much on the basis of the amount of the cash currency in the economy as on the basis of use of the commercial bank currency that is anchored to it. Economic agents willingly use the commercial bank currency rather than the central bank currency because they are confident that they will be able to convert deposits held with commercial banks into the central bank currency (hence the risk of a bank run when confidence slips). And this confidence in the value of the commercial bank money cannot be underpinned by just the deposit guarantee. Although this system guarantees reimbursement of a certain amount expressed in the euro unit of account as issued by the central bank (€100,000 since 2014 in the European Union). But the uniqueness of the value of the euro irrespective of the issuer (central bank or commercial banks) is ensured only by the ability to convert the commercial bank currency into the central bank currency at parity (cross-parity of euros from different commercial banks, in some way, by analogy with cross exchange rates). In other words, the ability to go to a bank counter or ATM to get cash in exchange for funds deposited with the bank, at parity. The number of ATMs has been in decline in the eurozone since 2015 but, as the ECB stresses, the density of ATMS is not the most relevant measure of ease of access to cash. The interpretation of this indicator is based on the implied assumption that cash machines' elimination is distributed uniformly across each country and among its population, which is not the actual situation. In this regard, a recent ECB study⁶ states that the proportion of people living within 5 km of the nearest cash access point in 2020 ranged from 77% to 100% in the various countries in the eurozone, with a median of 95% for all countries.

⁶ Zamora-Pérez (2022), "Guaranteeing freedom of payment choice: access to cash in the euro area", ECB Economic Bulletin, Issue 5/2022.



The quality of the anchoring of the commercial bank's money to the central bank's currency is not reflected in the stock of notes and coins but, on the contrary, in the confidence in the money issued by commercial banks, and the use stemming from it.



¹ Panetta F. (2021), "Central bank digital currencies: a monetary anchor for digital innovation", Speech by Fabio Panetta, Member of the Executive Board of the ECB, at the Elcano Royal Institute, Madrid, 5 November.

² Bindseil U., Cipollone P., Schaaf J. (2024), "The digital euro after the investigation phase: Demystifying fears about bank disintermediation," VoxEU/VoxEU - CEPR's policy portal, 19 February.

³ Panetta F. (2023), "A digital euro: widely available and easy to use", Introductory statement by Fabio Panetta, Member of the Executive Board of the ECB, at the Committee on Economic and Monetary Affairs of the European Parliament, Brussels, 24 April 2023
4 Zamora-Pérez A. (2021), "The paradox of banknotes: understanding the demand for cash beyond the transactional use", ECB Economic Bulletin, Issue 2/2021.
5 ECB (2022), Studyon the Payment Attitudes of Consumers in the Euro area (SPACE), December.

Furthermore, in 2019, 89% of citizens of the eurozone considered it "easy" or "very easy" to access an ATM, while just 2% considered it "very difficult". Furthermore, it should be noted that the withdrawal of cash at some merchants (cashback) sometimes supplements the ATMs in areas with low density levels.

The ECB is presenting the digital euro as the digital counterpart to coins and banknotes. However, there is a real risk that consumers will regard it more as a substitute for bank accounts, particularly due to the similarity in means of payment and means of holding money between the digital euro and euros held in a commercial bank account (which, incidentally, has been a kind of "digital euro" since the euro was created in 1999). Importantly, there is the risk of an increase in the cost of banking resources (with the need to replace customer deposits with more expensive refinancing) and hence of bank loans. We believe that the only characteristics of the digital euro that could stem this risk would be a very low holding limit – comparable to the amount of cash reasonably held by each citizen for transaction purposes (a few hundred euros at the very most) – or an exclusively "offline" digital euro held in the form of a digital token stored on a mobile phone, the loss or theft of which would be final, as is the case with... cold, hard cash.

According to Aristotle, the three functions of money are as a medium of exchange, a store of value and a unit of account. These three functions, which are still relevant today, cannot be separated. It is up to the user rather than the issuer of the money to decide the main function they want to attribute in practice to each form of money. For example, we have seen that demand for banknotes was motivated more by the function of money as a store of value rather than as a payment instrument. Despite its clear and justified desire to restrict the "digital counterpart of banknotes" to its role as a medium of exchange, the ECB would be risking creating a new kind of store of value to rival banknotes... and bank deposits, to the detriment of financing the economy, monetary policy transmission, and financial stability."

Laurent Quignon

MARKETS OVERVIEW

OVERVIEW

MONEY & BOND MARKETS

Week 1-3 24 to 8-3-	-24			Interest Rates		highest 24	lowest 24	Yield (%)		highest 24	lowest 24
7 CAC 40	7 934 ▶	8 028	+1.2 %	€ ECB	4.50		4.50 at 01/01	€ AVG 5-7y	2.64	2.64 at 01/01	2.64 at 01/01
≥ S&P 500	5 137 ▶	5 124	-0.3 %	Eonia	-0.51	-0.51 at 01/01	-0.51 at 01/01	Bund 2y	2.87	3.03 at 27/02	2.53 at 01/02
				Euribor 3M	3.94	3.97 at 18/01	3.88 at 01/02	Bund 10y	2.25	2.44 at 28/02	2.02 at 03/01
Volatility (VIX)	13.1 ▶	14.7	+1.6 pb	Euribor 12M	3.75	3.75 at 05/03	3.51 at 01/02	OAT 10y	2.71	2.88 at 01/03	2.47 at 01/01
■ Euribor 3M (%)	3.94 ▶	3.94	+0.2 bp	\$ FED	5.50	5.50 at 01/01	5.50 at 01/01	Corp. BBB	3.86	4.06 at 28/02	3.75 at 01/01
Libor \$ 3M (%)	5.59 ▶	5.58	-1.0 bp	Libor 3M	5.58	5.60 at 27/02	5.53 at 01/02	\$ Treas. 2y	4.53	4.72 at 27/02	4.22 at 15/01
■ OAT 10y (%)	2.88 ▶	2.71	-17.1 bp	Libor 12M	6.04	6.04 at 01/01	6.04 at 01/01	Treas. 10y	4.09	4.34 at 21/02	3.86 at 01/02
■ Bund 10y (%)	2.40 ▶	2.25	-14.9 bp	£ BoE	5.25	5.25 at 01/01	5.25 at 01/01	High Yield	7.75	8.10 at 05/01	7.75 at 08/03
■ US Tr. 10y (%)	4.19 ▶	4.09	-10.1 bp	Libor 3M	5.33	5.33 at 06/03	5.31 at 16/01	£ gilt. 2y	4.55	4.68 at 13/02	3.98 at 01/01
₱ Euro vs dollar	1.08 ▶	1.10	+1.1 %	Libor 12M	0.81	0.81 at 01/01	0.81 at 01/01	gilt. 10y At 8-3-24	3.98	4.22 at 13/02	3.60 at 01/01
对 Gold (ounce, \$)	2 074 ▶	2 173	+4.8 %	At 8-3-24				ML 0-3-24			
→ Oil (Brent, \$)	84.2	82.2	-2.4 %								

EXCHANGE RATES

1€ =		high	est 24	low	2024		
USD	1.10	1.10	at 01/01	1.07	at	13/02	-0.8%
GBP	0.85	0.87	at 02/01	0.85	at	13/02	-1.8%
CHF	0.96	0.96	at 06/03	0.93	at	08/01	+3.2%
JPY	161.16	163.58	at 26/02	155.33	at	02/01	+3.5%
AUD	1.65	1.67	at 28/02	1.62	at	02/01	+2.0%
CNY	7.88	7.88	at 08/03	7.71	at	13/02	+0.6%
BRL	5.45	5.45	at 08/03	5.31	at	13/02	+1.5%
RUB	99.82	102.67	at 23/02	95.72	at	19/01	+1.1%
INR	90.74	91.92	at 01/01	88.97	at	13/02	-1.3%
At 8-3	-24						Change

COMMODITIES

Spot price, \$		high	est	24	lov	vest	24	2024	2024(€)
Oil, Brent	82.2	84.2	at	01/03	75.8	at	08/01	+5.8%	+6.6%
Gold (ounce)	2 173	2 173	at	08/03	1 989	at	14/02	+5.2%	+6.0%
Metals, LMEX	3 739	3 762	at	01/01	3 558	at	09/02	-0.6%	+0.2%
Copper (ton)	8 487	8 546	at	07/03	8 065	at	09/02	+0.3%	+1.1%
wheat (ton)	200	2.3	at	01/01	200	at	08/03	-14.1%	-13.4%
Corn (ton)	161	1.7	at	01/01	148	at	23/02	-0.8%	-7.2%
At 8-3-24	•								Change

EQUITY INDICES

PERFORMANCE BY SECTOR (Eurostoxx50 & S&P500)



SOURCE: REFINITIV, BNP PARIBAS



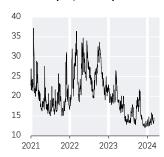
MARKETS OVERVIEW



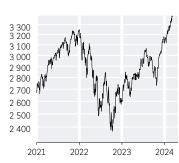




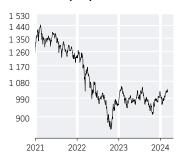
VOLATILITY (VIX, S&P500)



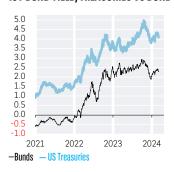




MSCI EMERGING (USD)



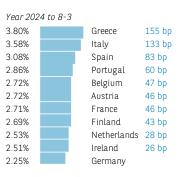
10Y BOND YIELD, TREASURIES VS BUND



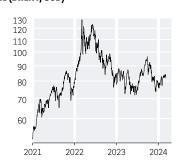
10Y BOND YIELD



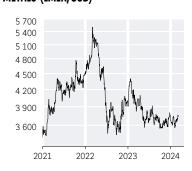
10Y BOND YIELD & SPREADS



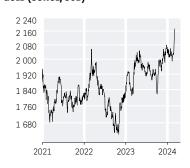
OIL (BRENT, USD)



METALS (LMEX, USD)



GOLD (OUNCE, USD)



SOURCE: REFINITIV, BNP PARIBAS



ECONOMIC PULSE

7

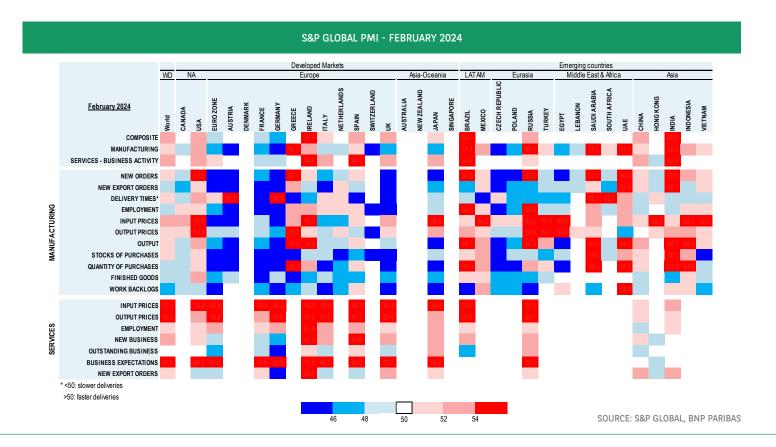
AN ENCOURAGING SIGNAL FOR GLOBAL ACTIVITY IN Q1 2024

In February, the S&P Global Composite PMI improved for the fourth consecutive month (+0.3 points), to 52.1, its highest level since June 2023. This is a fairly clearly encouraging signal for Q1 global growth, especially as this improvement is being driven both by the manufacturing and services sectors. In February, the global PMI index in these two sectors reached its highest level since August 2022 and July 2023, at 50.3 and 52.4 respectively.

22 out of the 30 countries for which February data are available showed an improvement in the manufacturing sector, driven by the "new orders" and "output" components, especially in France, Ireland, Spain, Canada, South Africa and the United States. Conversely, Germany's manufacturing PMI index was down sharply compared to the previous month, because of a further sharp decrease in these two sub-components. In China, the manufacturing index recovered very slightly again, posting its fourth consecutive month in the expansion zone. The news on prices and supply was a little better. The global PMI for delivery times in the manufacturing sector fell slightly compared to January, its first drop since May 2023. The input price index and the output price index in the manufacturing sector stopped rising and fell marginally. On the employment side, the news is also improving: the index is closer to the 50s threshold, supported by a rise in Canada, the United States, France, Spain and Italy. However, the sharp drop in this component in Germany offset the improvement in the other Eurozone countries.

In the services sector, half of the countries in our sample showed an improvement in the index in comparison to the previous month. The rise was marked in France, Ireland, Spain and, to a lesser extent, in Italy, Germany and the Eurozone, where the index is notably back in the expansion zone. The index, on the other hand, fell slightly in the United States, Japan, the United Kingdom, and China, and sharply in Russia. Overall, only two components were up, those relating to "output prices" and, to a lesser extent, "new business".

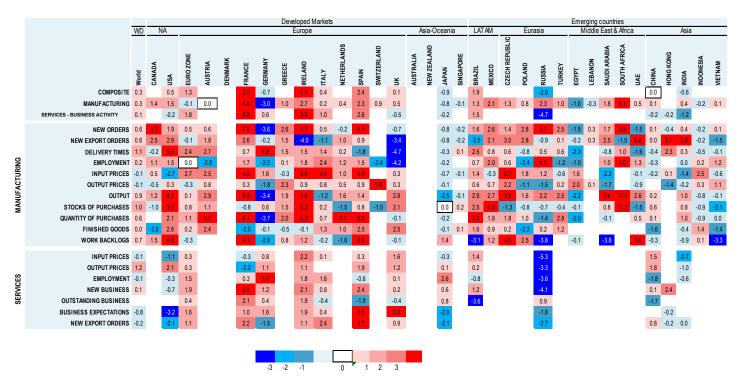
Tarik Rharrah





ECONOMIC PULSE

S&P GLOBAL PMI (FEBRUARY 2024 VERSUS JANUARY 2024)



SOURCE: S&P GLOBAL, BNP PARIBAS

ECONOMIC SCENARIO

UNITED STATES

The US economy has shown a surprising vigour in 2023, illustrated by the +0.8% q/q advance in Q4 GDP and a +2,5% yearly annual growth driven by the resilience of household consumption and the good figures of business investment. Thus, we have gradually ruled out the event of a recession induced by the cumulative monetary tightening. Our baseline scenario implies a +2.8% rate of growth for 2024, enabled by factors such as the carryover effect from 2023 and an expected increase in real incomes, with a slowdown over S2. The inflation peak was reached in mid-2022, and the latter is expected to approach the 2% target in 2024. This picture paves the way for an easing of its monetary policy by the Fed, which can foresee a soft landing of the US economy and start cutting rates progressively as from June 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

The euro area GDP slightly contracted in the second half of 2023 according to the latest Eurostat data. Annual growth was only 0.5% in 2023. The negative effects of monetary tightening are expected to continue to weigh on economic activity this winter. Activity is expected to inch higher 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 June. 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

France experienced 0% q/q growth in Q3 and 0.1% q/q growth in Q4 2023 after a short-lived acceleration in Q2 2023 (+0.6% t/t, driven by exceptional factors, such as aeronautics). In Q4, corporate investment has decreased for the first time (after significant growth). In parallel, household consumption was stable and household investment decreased markedly. Disinflation is now visible (the harmonized index grew by 3.1% y/y in February 2024, compared to 5.7% y/y in September 2023), but the impact of higher interest rates should continue to be felt. As a result, we except 0.1% growth q/q during the Q1 2024. Going forward, we expect no clear growth acceleration this year (0.7% in 2024 after 0.9% in 2023).

RATES AND EXCHANGE RATES

The first policy rate cuts are taking shape somewhat more clearly. They would, according to our forecasts, occur in June for the Federal Reserve, the ECB, and the Bank of England. In particular, the Federal Reserve and the ECB declare they are about to have the necessary data and confidence to be in a position to estimate that inflation is heading sustainably towards the 2% target. The most prominent risk, however, is that inflation proves to be stickier than anticipated, which would delay the monetary easing. We expect three 25-basis-point rate cuts from the Fed by the end of 2024, four for the ECB and the Bank of England. On both sides of the Atlantic, policy rates in real terms and the degree of monetary restriction would remain about unchanged. The induced decline in long-term rates should be limited by the importance of bond issuance against a background of quantitative tightening.

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 this Spring (most likely in March), while keeping a loose approach to its yield curve control policy. We remain fundamentally bearish regarding the US dollar, but the still-strong US growth pushes back and moderates its expected depreciation, especially versus the euro. The yen is expected to strengthen more significantly versus the USD, based on the combination of the start of BoJ tightening and of the repatriation by Japanese investors of their foreign holdings.

GDP GROWTH AND INFLATION									
	GDP Growth						Infla	ition	
%	2022	2023	2024 e	2025 e		2022	2023	2024 e	2025 e
United-States	1.9	2.5	2.8	1.8		8.0	4.1	3.1	2.8
Japan	0.9	1.9	0.4	0.9		2.5	3.2	2.2	2.0
United-Kingdom	4.4	0.1	0.1	1.2		9.1	7.4	2.2	2.3
Euro Area	3.4	0.5	0.7	1.7		8.4	5.4	2.3	2.1
Germany	1.9	-0.1	0.0	1.4		8.7	6.0	2.3	2.1
France	2.5	0.9	0.7	1.4		5.9	5.7	2.4	1.8
Italy	3.9	0.9	0.9	1.4		8.7	5.9	1.2	1.8
Spain	5.8	2.5	2.0	2.1		8.3	3.4	2.7	2.0
China	3.0	5.2	4.5	4.3		2.0	0.2	-0.1	1.2
India*	7.2	7.5	8.1	7.1		6.7	6.7	5.5	4.8
Brazil	2.9	2.9	1.8	1.8		9.3	4.6	3.9	3.8

Source: BNP Paribas (e: Estimates & forecasts)

Last update: 12 March 2024

^{*} Fiscal year from 1st April of year n to March 31st of year n+1

	INTERE	ST AND EX	CHANGE	RATES		
Interest rates, S End of period	%	Q2 2024	Q3 2024	Q4 2024	Q2 2025	Q4 2025
US	Fed Funds (upper limit)	5.25	5.00	4.75	4.25	4.00
	T-Note 10y	4.25	4.20	4.20	4.20	4.20
Eurozone	deposit rate	3.75	3.25	3.00	2.50	2.50
	Bund 10y	2.35	1.95	2.00	2.25	2.50
	OAT 10y	2.87	2.50	2.52	2.80	3.05
	BTP 10y	3.70	3.35	3.45	3.80	4.00
	BONO 10y	3.19	2.82	2.85	3.15	3.38
UK	Base rate	5.00	4.50	4.25	3.75	3.25
	Gilts 10y	4.00	3.80	3.70	3.55	3.65
Japan	BoJ Rate	0.10	0.25	0.25	0.50	0.75
	JGB 10y	0.90	1.00	1.20	1.40	1.35

	Jub 10y	i	0.50	1.00	1.20	1.40	1.55
Exchange Rates							
End of period			Q2 2024	Q3 2024	Q4 2024	Q2 2025	Q4 2025
USD	EUR / USD		1.10	1.10	1.10	1.12	1.14
	USD / JPY		146	144	142	137	133
	GBP / USD		1.31	1.33	1.33	1.35	1.37
EUR	EUR / GBP		0.84	0.83	0.83	0.83	0.83
	EUR / JPY		161	158	156	153	152
Brent							
Quarter Average			Q2 2024	Q3 2024	Q4 2024	Q2 2025	Q4 2025
Brent	USD/bbl		80	85	83	81	82
						1	

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

Strategy, Commodities Desk Strategy)

Last update: 12 March 2024



FURTHER READING

10

European Union: a future between ageing and greening	Chart of the Week	6 March 2024
February's issue	EcoPulse	5 March 2024
Eurozone: Economic spring will come, but slowly	EcoWeek	4 March 2024
Tunisia: gloomy outlook	Chart of the Week	28 February 2024
United States: the economic consequences of political polarization	EcoWeek	26 February 2024
UK: a Spring budget with no room for maneuver	EcoTV	23 February 2024
France: some large companies switching to market financing	Chart of the Week	21 February 2024
Addressing the public debt challenge in the EU: the role of the new economic governance	EcoWeek	20 February 2024
Eurozone : positive momentum of business sentiment but pay attention to prices	EcoTV	15 February 2024
European electricity: greening gathers pace	Chart of the Week	14 February 2024
The German debt brake: the merits and limitations of fiscal rules	EcoWeek	13 February 2024
A selective appetite for EM debt	EcoEmerging	13 February 2024
Inflation tracker - January 2024 Disinflation likely to continue	EcoCharts	9 February 2024
Will Africa see free trade take off in 2024?	EcoTV	8 February 2024
Sovereign risk in Emerging Markets: the usual suspects under pressure	EcoWeek	5 February 2024
French trade balance in 2023: the deficit is narrowing, including in volume terms	EcoBrief	5 February 2024
2024: a critical year	EcoPerspectives	1 February 2024
Sri Lanka: FX reserves have increased but the situation remains fragile	Chart of the Week	31 January 2024
The 'last mile of disinflation', a narrative running on its last legs	EcoWeek	30 January 2024
Eurozone: no recession in 2023 but mixed fortunes among Member States	EcoBrief	30 January 2024
France: a business climate survey in line with continued disinflation	EcoBrief	25 January 2024



GROUP ECONOMIC RESEARCH

William De Vijlder Chief Economist	+33 1 55 77 47 31	william.devijlder@bnpparibas.com
OECD 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
Anis Bensaidani United States, Japan	+33 187740151	anis.bensaidani@bnpparibas.com
Lucie Barette Southern Europe	+33 1 87 74 02 08	lucie.barette@bnpparibas.com
Veary Bou, Tarik Rharrab Statistics		
ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FREM	ICH 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 Ukraine, Central European countries	+33 1 53 31 59 32	cynthia.kalasopatan.antoine@bnpparibas.com
Johanna Melka India, 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

ECOCONJONCTURE

Structural or thematic topics.

ECOEMERGING

Analyses and forecasts for a selection of emerging economies.

ECOPERSPECTIVES

Analyses and forecasts with a focus on developed countries.

ECOFLASH

Data releases, major economic events.

ECOWFFK

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

ECOCHARTS

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

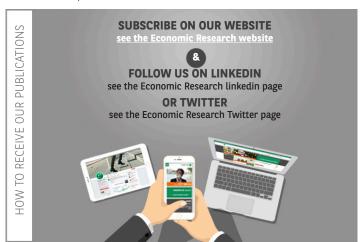
ECOPULSE

Monthly barometer of key economic indicators of the main OECD

ECOTV 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: Niyazz

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 for to 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 https://globalmarkets.bnpparibas.com.

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: https://globalmarkets.bnpparibas.com/gm/home/Markets_360_Country_Specific_Notices.pdf © BNP Paribas (2023). All rights reserved.

