



ECOCHARTS

May 2024

INFLATION TRACKER



BNP PARIBAS

The bank for a changing world

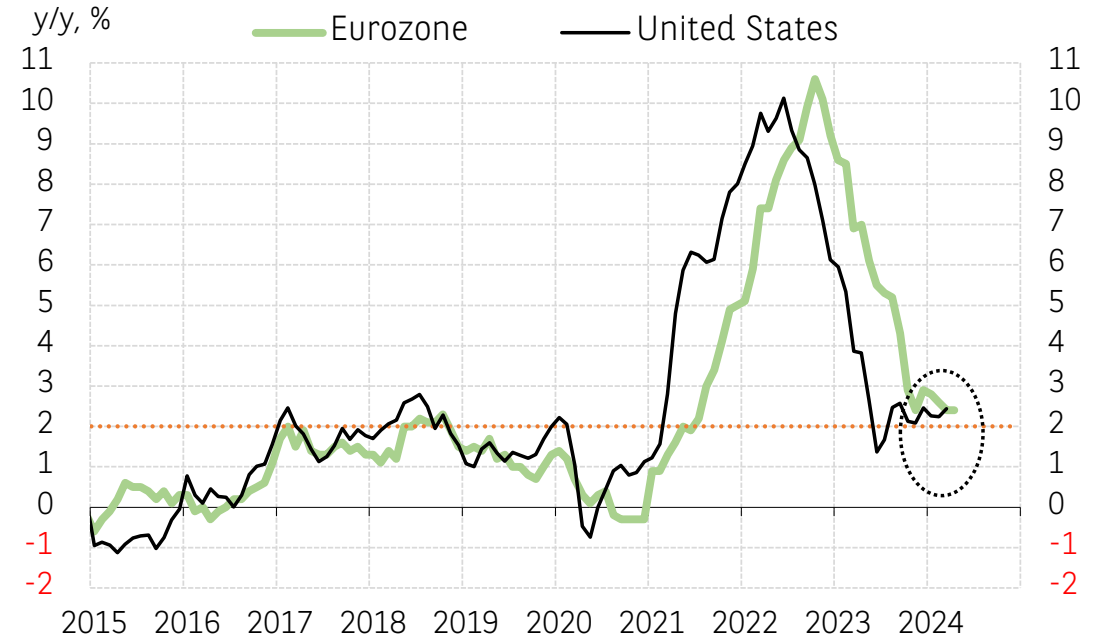
CHART OF THE MONTH - United States – Eurozone: inflation harmonisation

According to the best-known measures, US headline inflation is 1 percentage point higher than in the euro area. It was 3.4% year-on-year in April 2024 according to the Consumer Price Index (CPI) published by the BLS, while Eurozone inflation was 2.4% according to the Harmonized Index of Consumer Prices (HICP) published by Eurostat (final estimate unchanged from the preliminary published in late April). In addition to a lower figure, the inflation trend is more favourable in the euro area because it remains downward-oriented, although disinflation has slowed in recent months, while US inflation has been more or less stable since October 2023, hovering around 3.3% on average. It should be noted that behind the significant decline in euro area inflation over the past year (down almost 5 percentage points), food inflation has fallen the most (by 13 percentage points, contributing 2.2 percentage points to disinflation). Lower goods inflation contributed 1.4 points to this disinflation, while that in services and energy contributed respectively to 0.6 points and 0.4 points.

The situation on the inflation front appears more concerning on the US side, if we stick to the traditional BLS measure. However, it is not the measure favoured by the US Federal Reserve which prefers the Consumer Expenditure Price Index (PCE) published by the BEA. Without going into the details of the methodological differences and the reasons for this gap, according to this indicator, US inflation is slightly better oriented and significantly lower (2.7% y/y in March, the last point available). It should also be borne in mind too that the current gap between the two measures (close to 1 percentage point) is larger than its average level (half a point since 1987).

In addition, the BLS also publishes an HCPI comparable to that of the euro area¹: as shown in our monthly graph. According to the latest available figures, (March 2024), US and Eurozone inflation were identical, at 2.4% y/y. While disinflation has become more asymptotic on both sides of the Atlantic, inflation seems much closer to its 2% target.

Harmonized inflation in the United States and the Eurozone



Source: BLS, Eurostat, Macrobond, BNP Paribas

Hélène BAUDCHON

helene.baudchon@bnpparibas.com

1 Methodology: [R-HICP Homepage](#) : U.S. Bureau of Labor Statistics ([bls.gov](#)).



BNP PARIBAS

The bank for a changing world

KEY POINTS: Inflation has plateaued

- Some common inflation trajectories emerge between the different economic blocs: disinflation of food and manufactured goods continues, while energy deflation has largely abated, except in the United Kingdom. Apart from Japan, price pressure indicators (supply side) have rebounded in recent months (page 19) while wage growth is currently higher than inflation in all the regions (page 27).
- In the United States, CPI inflation fell slightly, from 3.5% in year-on-year terms in March to 3.4% in April, while the core rate fell from 3.8% to 3.6%. Deflation in used vehicles (from -2.2% in March to -6.9%) contributed mainly to this decline. On the other hand, services inflation remained stable at 5.3%. However, this figure masks contrasting dynamics, since the housing component has been decelerating, slowly but continuously for the past year (+5.5% y/y in April), while inflation in non-housing services (+4.9% y/y in April) has accelerated since September 2023.
- In April, core inflation in the euro area fell again, from 2.9% to 2.7%. This reinforced expectations of a first ECB rate cut in June. The latter will also welcome the decline in alternative measures of inflation: two new measures (weighted median, 10% trimmed mean) fell back below 3% in March. Belgium, however, saw a fairly sharp rebound in inflation (4.9% in April compared with deflation of -1.7% in October 2023).
- In the United Kingdom, headline inflation remained stable at 3.8% in March. Energy deflation eased but remained strong (from -13.8% to -12.7%) and core inflation slowed significantly (4.5% to 4.2%). However, the landing phase towards the 2% target will come up against sustained and slightly higher base wage growth in March at 6.2% (compared to 5.9% in February). Moreover, tensions in the housing market are increasing. The actual rent index reached a new high in March, with a year-on-year increase of more than 7%, for the first time in 30 years. The owner-equivalent rent index follows a similar path but shows a lower increase (6.3% y/y). This explains the large increase in the share of CPI components with a rise above 6% (inflation generalisation chart on page 13).
- In Japan, core inflation (excluding energy and fresh food) fell below 3% in March for the first time since November 2022. At 2.0%, services inflation remained stable, but the 3m/3m annualised rate fell to 0%, the lowest in two years. That said, the breakeven inflation (page 25) started to rise again, after a downturn at the end of last year. Despite a significant rise in wages (page 27), domestic demand remains very fragile and contributes to limiting inflation dynamics. According to preliminary results, Japanese GDP fell by 0.5% q/q in Q1, driven down by household consumption (-0.7 q/q).

Hélène Baudchon

helene.baudchon@bnpparibas.com

Guillaume Derrien

guillaume.a.derrien@bnpparibas.com

Veary Bou

veary.bou@bnpparibas.com



BNP PARIBAS

The bank for a changing world

General dynamics of inflation

Inflation and survey data

Inflation expectations (households, forecasters, markets)

Inflation-wage dynamics

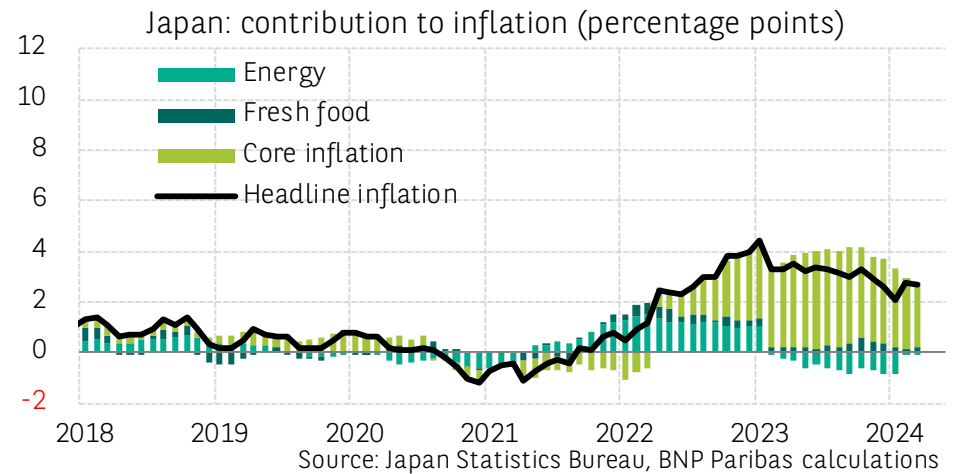
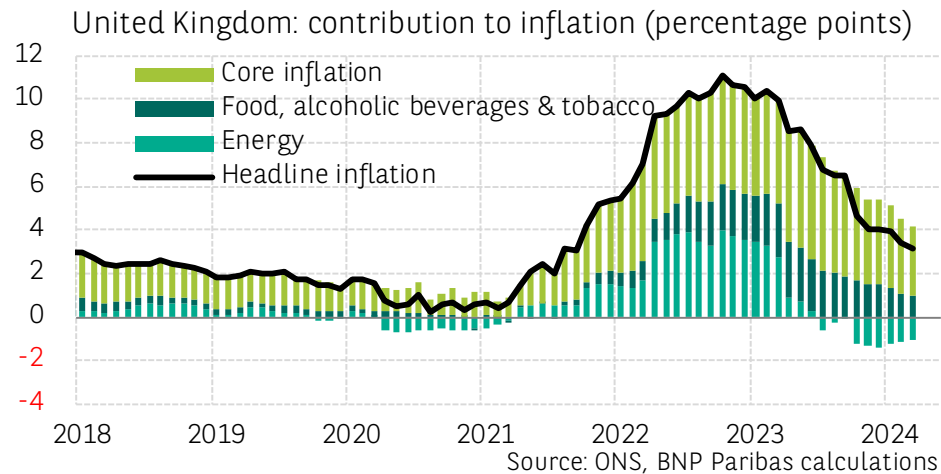
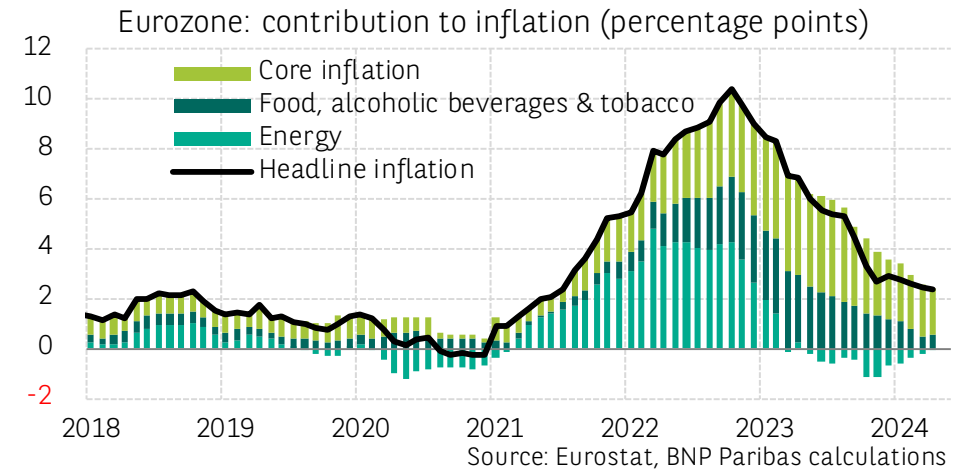
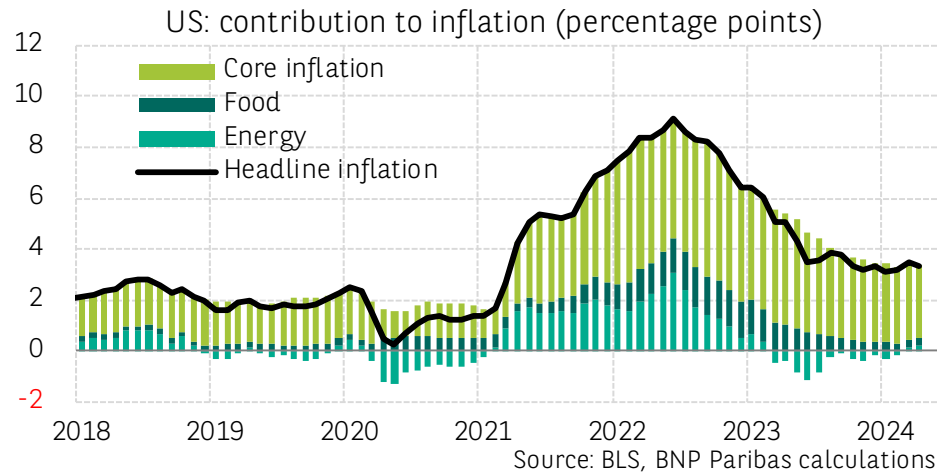
Raw materials



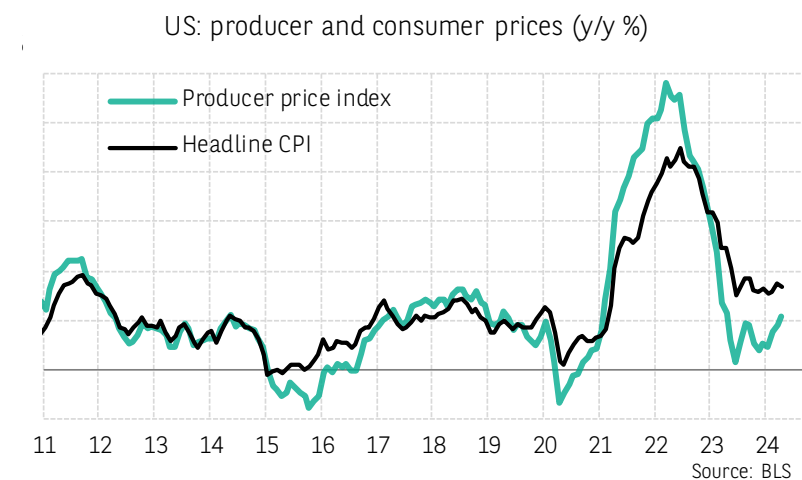
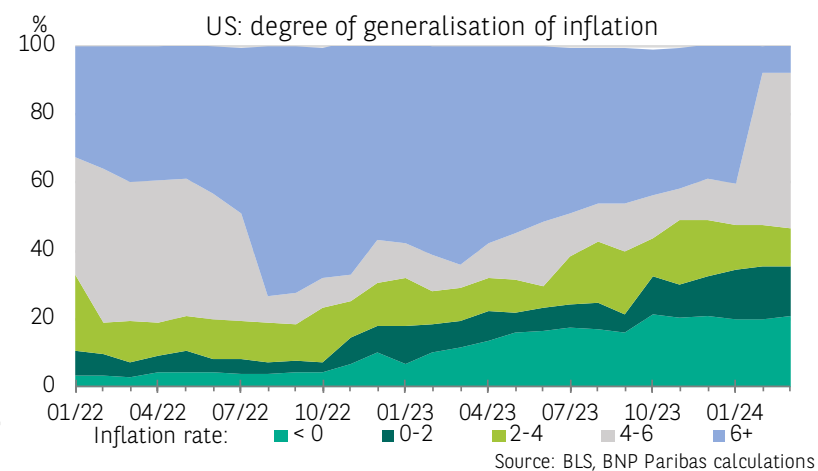
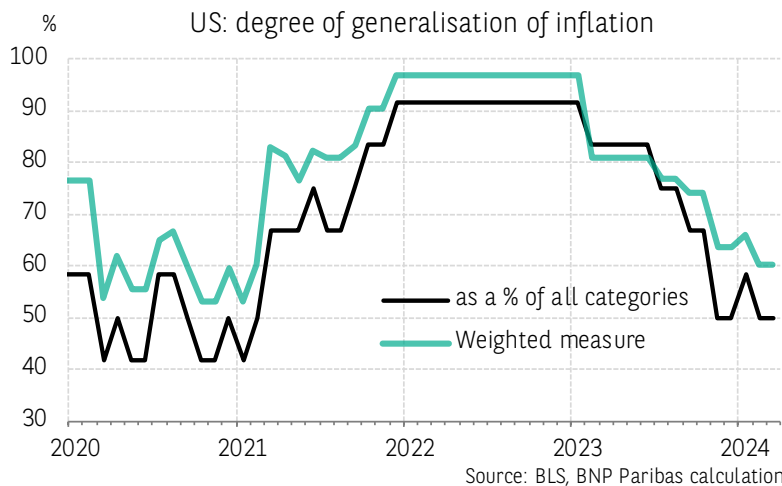
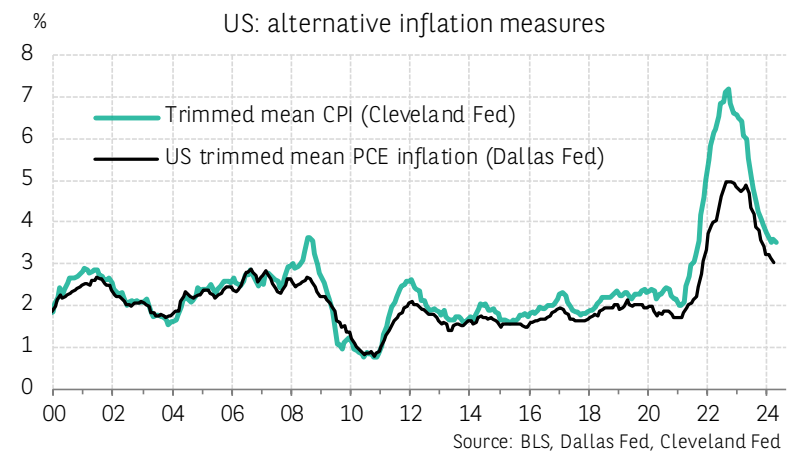
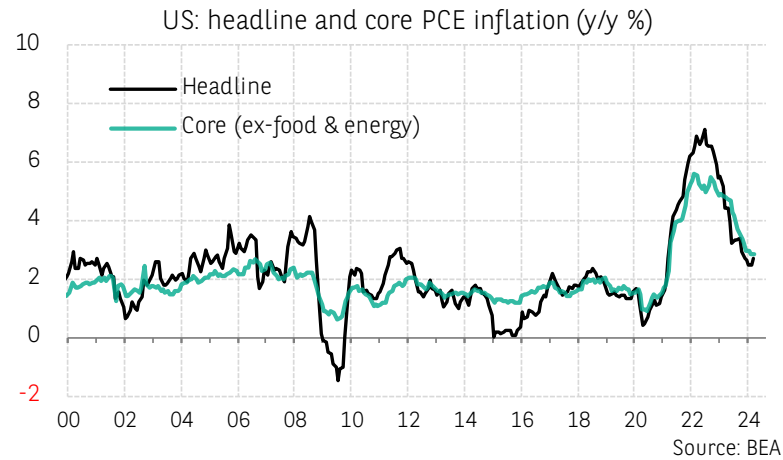
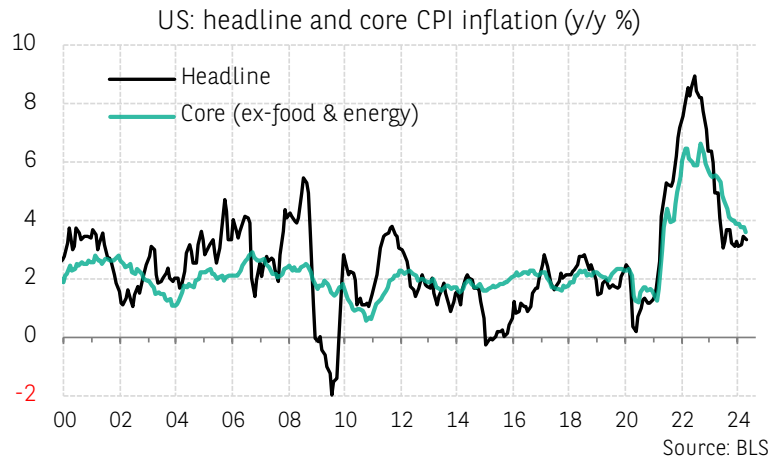
General dynamics of inflation



General dynamics of inflation: decomposition of inflation



Inflation dynamics in the United States: different metrics and degree of generalisation



Note: the black line represents the % of CPI components whose increase is greater than, or equal, to 2%. The hatched green line weights the results by the share of each component in the CPI.





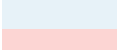



United States inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Total	100	3.16	3.17	2.35	1.28	1.50	1.95	1.92	1.47	1.37	1.55	1.33	1.39	1.70
Food and non-alcoholic beverages	8.3	7.13	5.82	4.45	3.39	2.29	1.70	1.18	0.85	0.41	-0.03	-0.01	-0.23	-0.04
Alcoholic beverages, tobacco and narcotics	1.1	2.95	2.68	2.68	2.08	1.96	1.56	1.86	2.52	2.17	2.02	1.85	2.05	1.82
Clothing and footwear	2.4	2.53	2.88	2.90	2.26	2.21	2.45	2.19	2.32	0.89	0.58	-0.13	0.19	0.40
Housing, water, electricity, gas and other fuels	36.4	5.54	5.28	4.69	4.18	4.11	3.72	3.45	3.30	3.34	2.99	2.75	2.78	2.98
Furnishings, household equipment and routine household maintenance	4.1	5.22	4.90	3.72	2.97	2.21	1.44	1.13	1.20	0.70	0.28	0.28	-0.43	-0.46
Health	7.1	-0.30	-0.18	0.10	0.07	-0.10	-0.08	0.13	0.17	0.66	0.58	1.23	1.14	1.46
Transports	16.2	-3.82	-2.51	-5.20	-8.66	-6.47	-1.72	-0.72	-2.82	-2.78	-0.81	-2.23	-1.79	-2.04
Communications	3.1	1.67	1.87	1.73	1.39	1.61	1.62	1.67	1.63	-0.13	-0.21	-0.59	-0.44	-0.71
Recreation and culture	5.9	4.20	4.45	4.02	3.74	3.35	2.96	3.13	2.43	1.78	1.91	2.04	0.94	0.64
Education	2.4	0.14	0.03	-0.39	-0.85	-0.64	-0.59	-1.55	-1.70	-2.05	-2.13	-0.48	-0.22	-0.55
Restaurants and hotels	6.5	4.04	3.43	2.81	2.49	2.41	2.33	2.52	2.08	2.67	2.69	2.59	2.06	1.73
Miscellaneous goods and services	6.5	3.80	3.60	3.53	2.76	2.26	1.99	1.35	2.28	2.70	3.72	4.53	4.61	6.11

Source: BLS, OECD

Difference with the 2010-2019 average

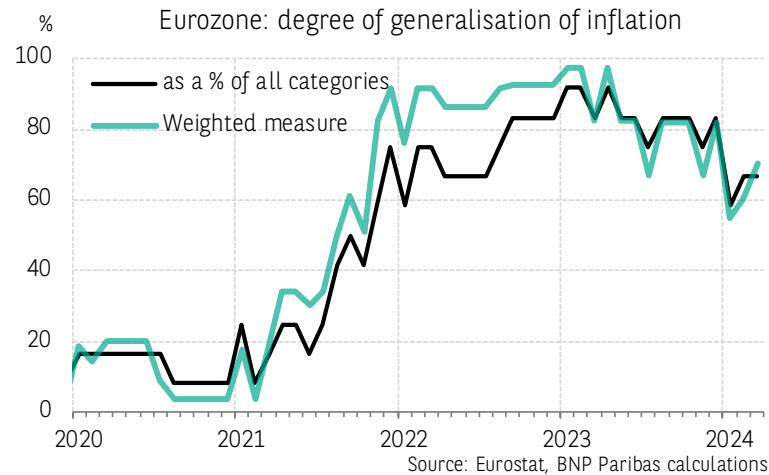
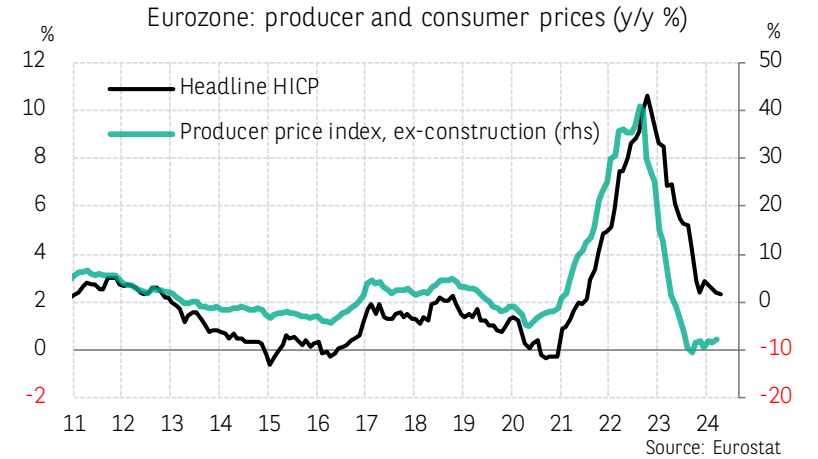
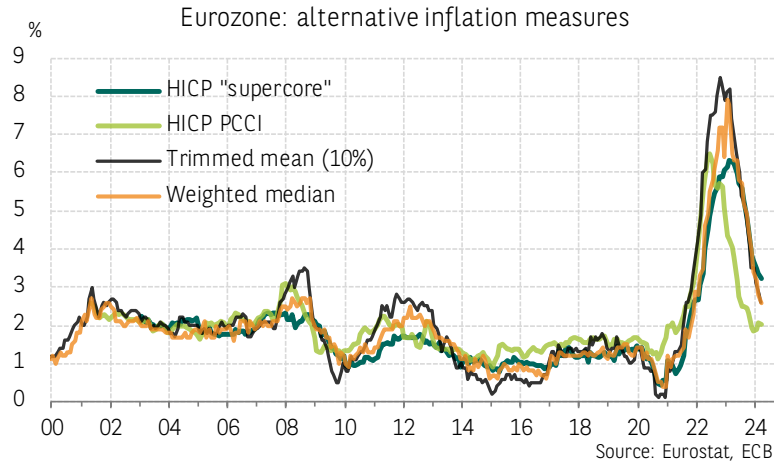
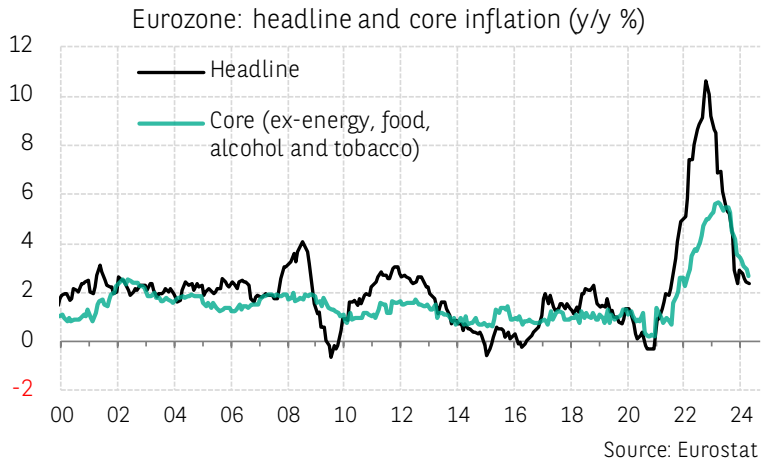
Less than 0	
Between 0 and 1	
Between 1 and 2	
Between 2 and 4	
Between 4 and 7	
Greater than 7	



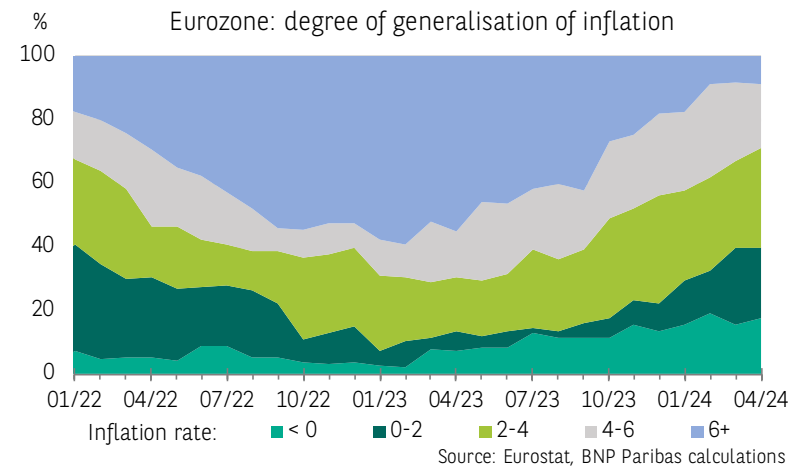
BNP PARIBAS

The bank for a changing world

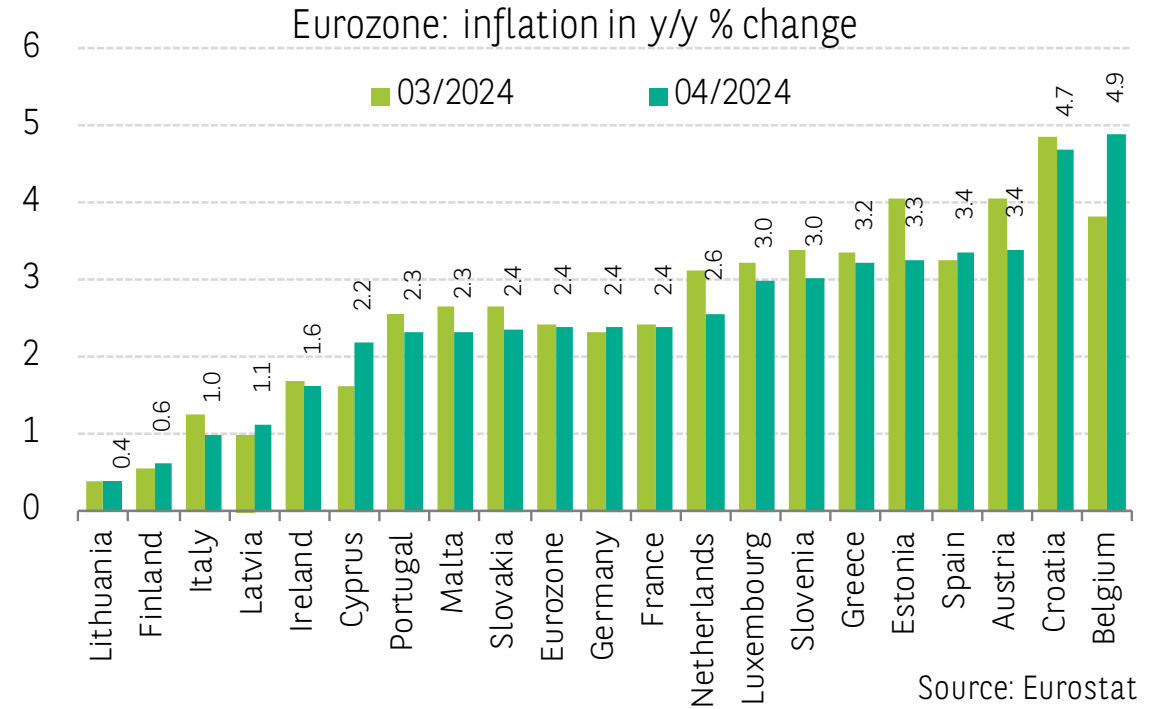
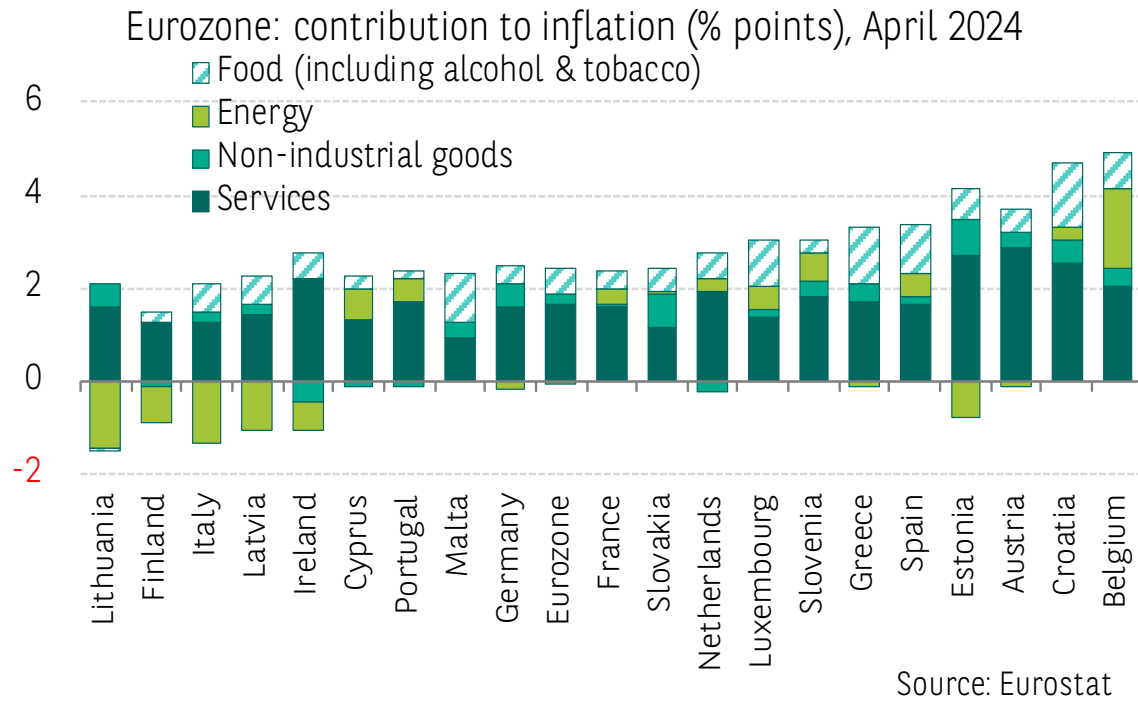
Inflation dynamics in the Eurozone: different metrics and degree of generalisation



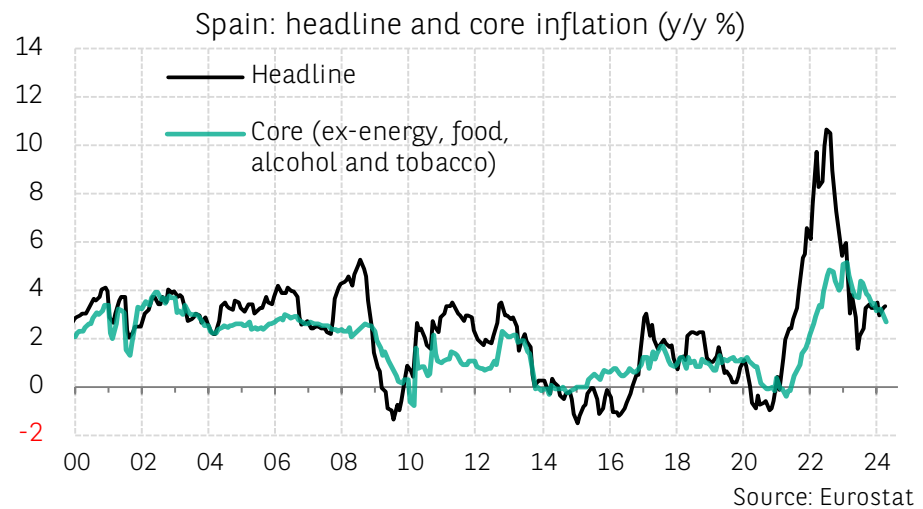
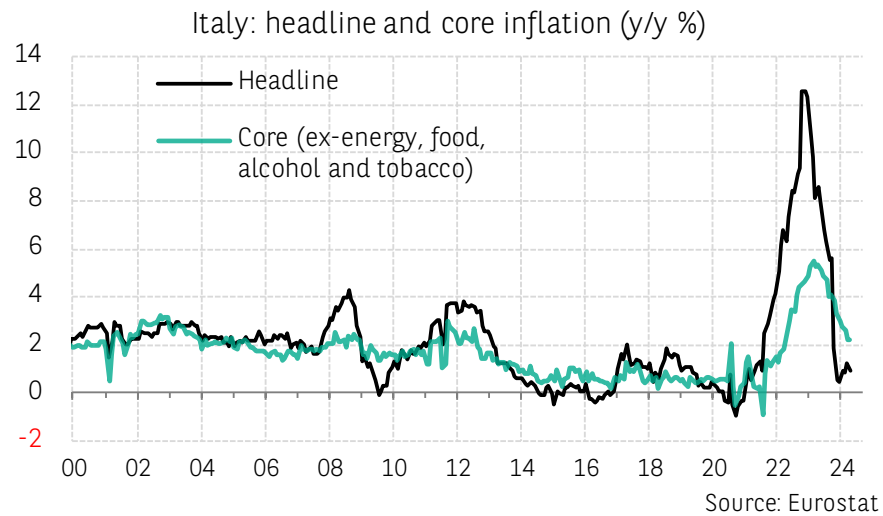
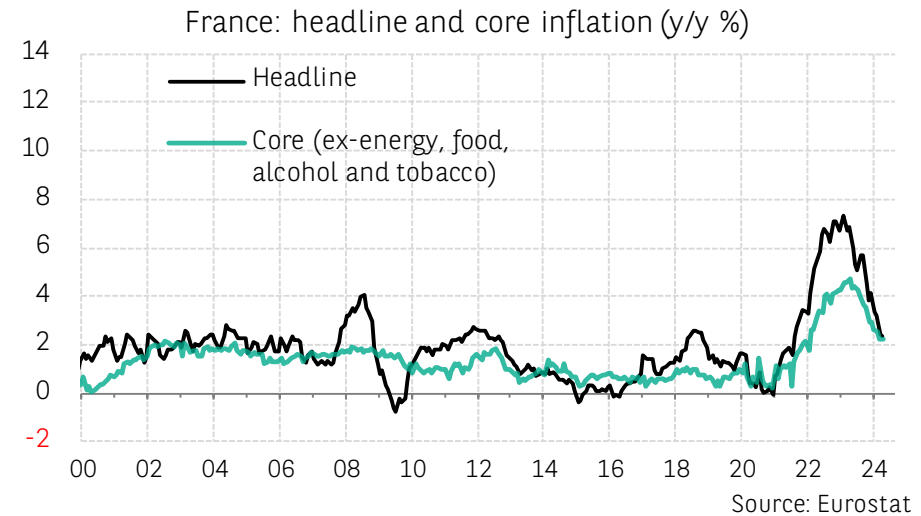
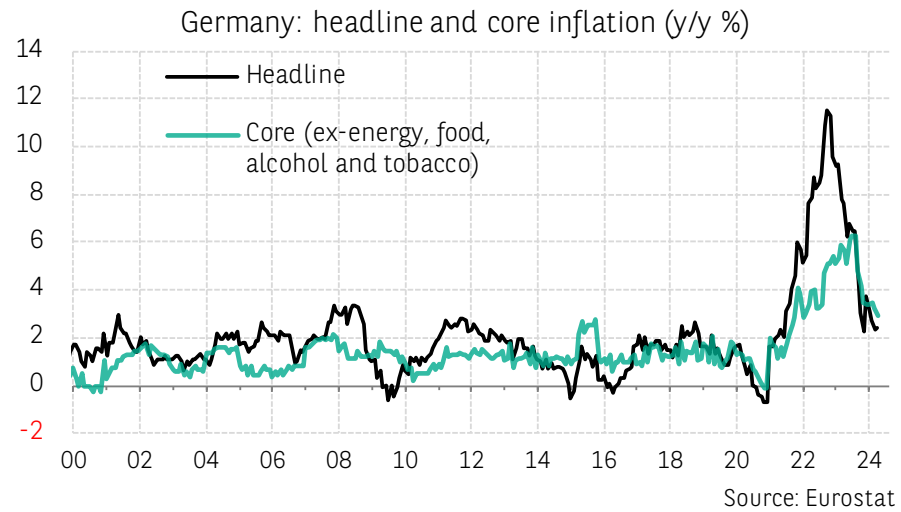
Note: the black line represents the % of CPI components whose increase is greater than, or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.



Inflation dynamics in the Eurozone by country (1)



Inflation dynamics in the Eurozone by country (2)





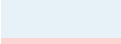



Eurozone inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Total	100	5.53	5.61	4.75	4.17	3.96	3.89	2.98	1.55	1.04	1.58	1.42	1.23	1.07
Food and non-alcoholic beverages	16	16.08	13.54	12.25	11.12	10.13	8.84	7.71	6.10	5.44	4.64	3.98	1.86	0.59
Alcoholic beverages, tobacco and narcotics	4	4.23	4.51	4.46	4.56	4.47	4.39	4.22	3.94	3.76	2.95	3.44	3.51	2.12
Clothing and footwear	5	4.19	3.59	3.66	3.74	3.27	3.37	2.44	2.03	1.69	1.75	1.35	1.68	0.86
Housing, water, electricity, gas and other fuels	15	2.79	2.98	2.23	0.72	-1.02	-2.50	-4.17	-7.90	-7.38	-4.62	-2.98	-2.24	-1.28
Furnishings, household equipment and routine household maintenance	7	7.98	7.52	6.69	6.06	5.50	4.85	4.27	3.39	2.67	2.11	1.32	0.58	0.29
Health	5	1.62	1.78	1.83	1.96	1.99	2.01	1.90	1.93	1.95	1.95	1.87	1.91	1.92
Transports	15	-1.24	1.24	-1.75	-2.42	-1.02	2.41	1.74	0.48	-1.03	0.63	-0.95	-0.21	0.33
Communications	3	2.02	2.04	2.25	1.46	1.66	1.74	1.48	1.52	1.35	1.41	0.55	0.20	-0.15
Recreation and culture	9	5.58	4.89	5.02	5.12	5.84	5.87	4.89	4.13	3.33	2.56	2.62	2.35	2.01
Education	1	3.59	3.68	3.64	3.75	3.68	3.68	2.37	3.05	3.06	3.08	3.26	3.18	3.24
Restaurants and hotels	10	6.68	7.02	6.55	5.86	5.85	5.47	4.94	4.85	4.18	3.73	3.59	3.50	3.50
Miscellaneous goods and services	10	3.86	3.86	3.87	4.11	3.95	3.87	3.76	3.31	2.90	2.75	2.87	2.74	2.62

Source: Eurostat

Difference with the 2010-2019 average

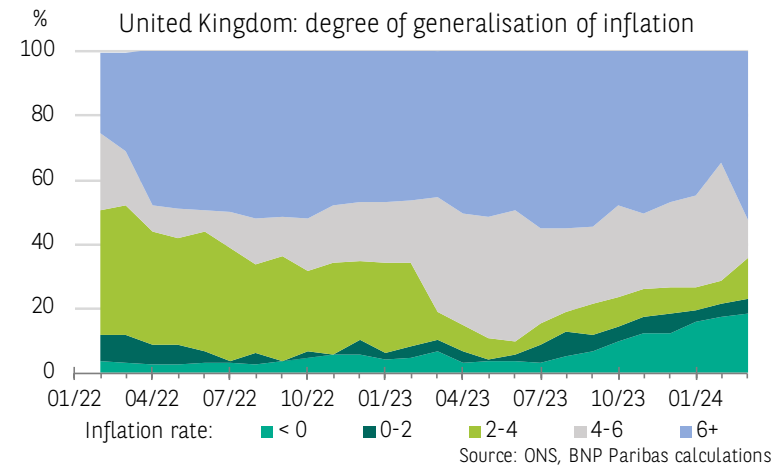
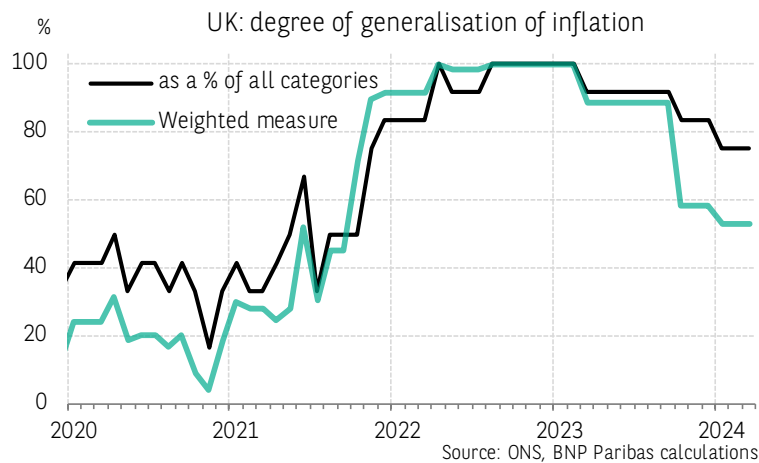
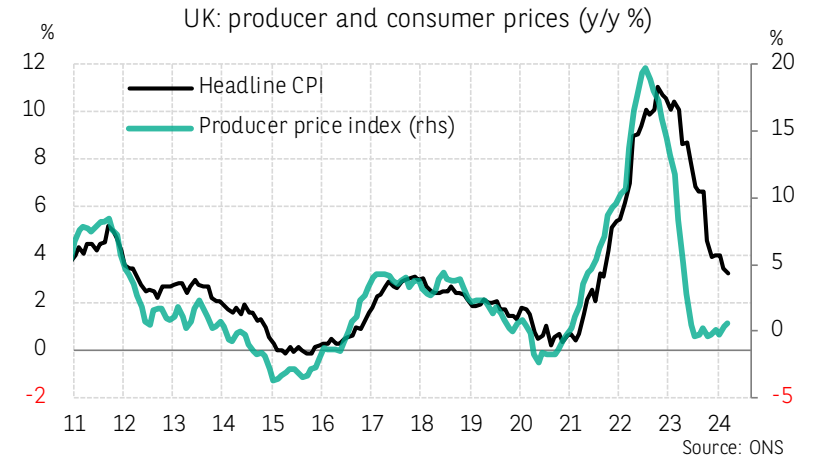
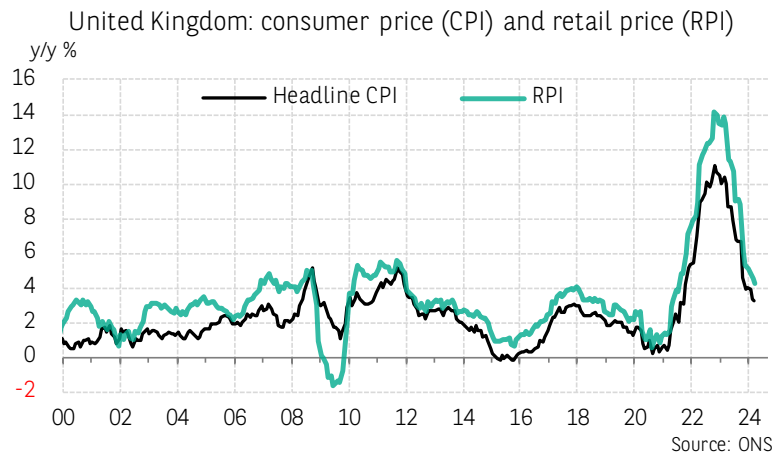
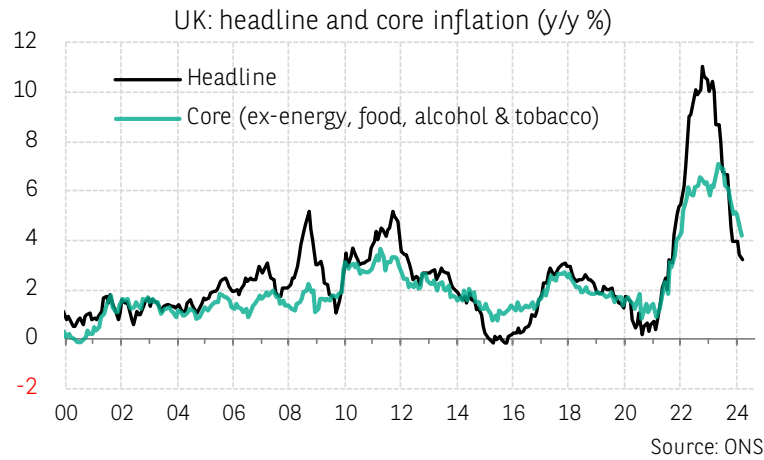
Less than 0	
Between 0 and 1	
Between 1 and 2	
Between 2 and 4	
Between 4 and 7	
Greater than 7	



BNP PARIBAS

The bank for a changing world

Inflation dynamics in the United Kingdom: different metrics and degree of generalisation



Note: the black line represents the % of CPI components whose increase is greater than or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.





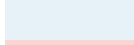



United Kingdom inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Total	100	7.83	6.43	6.45	5.72	4.60	4.43	4.42	2.37	1.71	1.77	1.75	1.18	1.00
Food and non-alcoholic beverages	9.5	17.51	17.40	16.66	15.68	13.19	11.94	10.50	8.47	7.59	6.38	5.31	3.32	2.38
Alcoholic beverages, tobacco and narcotics	3.4	0.59	4.42	4.58	4.54	4.70	5.83	6.47	6.29	5.50	8.21	7.66	7.22	7.37
Clothing and footwear	4.9	6.53	6.15	6.42	6.59	5.95	6.36	6.29	5.59	5.07	5.78	4.94	4.39	3.31
Housing, water, electricity, gas and other fuels	30.0	23.61	9.86	9.68	9.50	4.33	4.52	4.45	-5.96	-5.87	-5.83	-4.51	-4.20	-4.08
Furnishings, household equipment and routine household maintenance	5.6	6.31	5.73	5.78	4.80	4.51	3.33	1.92	1.36	0.52	0.72	-1.30	-1.74	-2.67
Health	1.8	4.53	4.42	5.72	5.54	6.30	5.84	5.59	5.41	4.83	4.69	4.27	3.92	3.95
Transports	11.5	-2.11	-1.45	-1.72	-4.69	-4.95	-3.47	-2.22	-2.48	-4.41	-4.00	-3.19	-3.07	-2.78
Communications	1.9	0.88	5.06	6.26	6.67	4.28	5.41	5.31	5.29	5.27	5.72	5.40	2.84	4.74
Recreation and culture	11.1	3.53	5.18	5.59	5.61	5.47	4.72	4.93	5.28	4.23	4.62	4.65	4.31	4.23
Education	2.2	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82	-2.86	-2.52	-2.52	-2.52	-2.52	-2.52	-2.52
Restaurants and hotels	11.3	8.47	7.36	7.46	6.69	6.78	5.51	5.75	4.71	4.71	4.21	4.18	3.17	3.00
Miscellaneous goods and services	6.8	5.51	5.58	5.54	5.32	4.76	4.38	4.08	3.91	3.58	3.04	3.27	2.43	2.15

Source : ONS

Difference with the 2010-2019 average

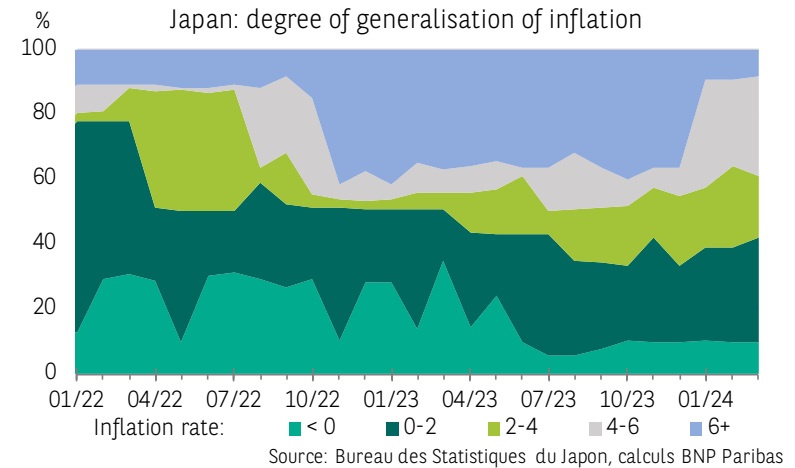
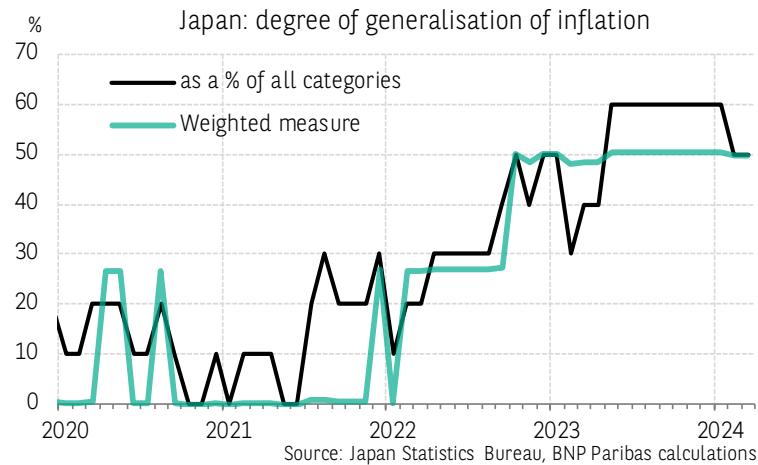
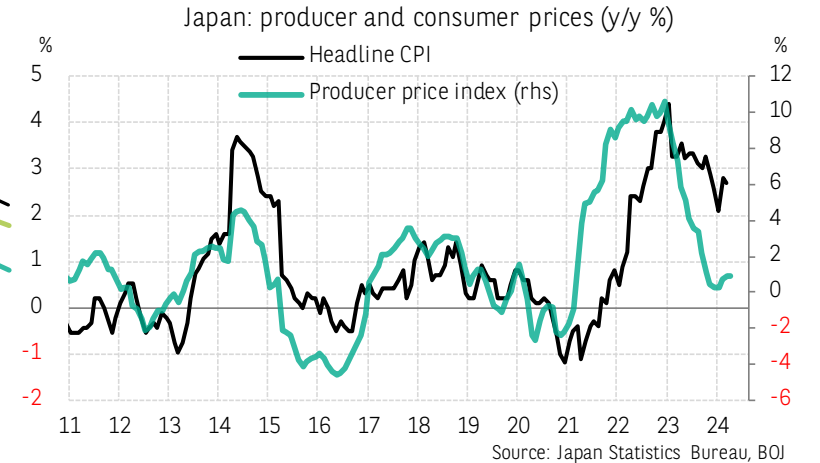
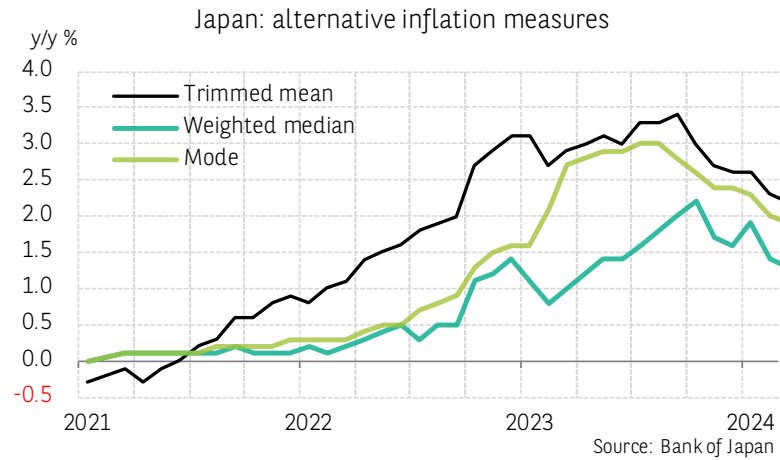
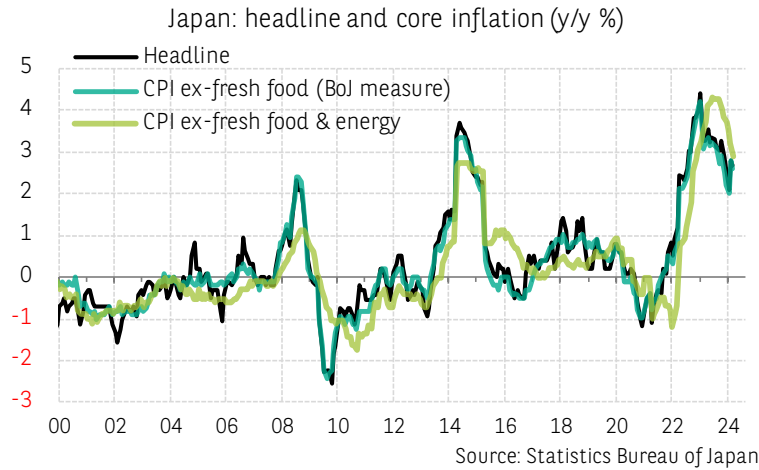
Less than 0	
Between 0 and 1	
Between 1 and 2	
Between 2 and 4	
Between 4 and 7	
Greater than 7	



BNP PARIBAS

The bank for a changing world

Inflation dynamics in Japan: different metrics and degree of generalisation



Note: the black line represents the % of CPI components whose increase is greater than or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.



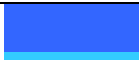

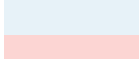



Japan inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
Total	100	2.79	3.08	2.77	2.87	2.85	2.65	2.54	2.81	2.42	2.12	1.63	2.32	2.21
Food	9.5	6.66	7.40	7.46	7.25	7.70	7.56	7.85	7.54	6.19	5.72	4.61	3.77	3.75
Clothing and footwear	3.4	3.08	3.22	3.22	3.33	3.48	3.83	2.79	2.38	2.17	2.48	2.43	2.03	1.70
Housing	4.9	1.43	1.33	1.33	1.23	1.33	1.23	1.32	0.83	0.83	0.73	0.83	0.83	0.83
Fuel, light and water charges	30.0	-4.43	-5.53	-10.03	-8.33	-11.33	-14.03	-16.03	-11.73	-13.13	-14.83	-15.63	-4.83	-3.43
Furniture and household utensils	5.6	10.39	10.99	10.57	9.57	9.43	8.08	7.05	7.86	7.07	7.50	7.50	6.09	4.10
Medical care	1.8	0.98	1.39	1.79	1.99	1.89	1.99	2.09	1.98	2.18	2.08	2.08	1.46	1.16
Transportation and communication	11.5	1.14	1.36	1.90	1.79	1.87	2.93	3.04	2.82	2.40	2.50	2.61	2.50	2.07
Culture and recreation	1.9	2.14	2.99	3.27	3.41	4.64	4.85	4.51	6.30	7.37	7.64	6.69	7.24	7.16
Education	11.1	1.50	1.89	1.89	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.88	1.88
Miscellaneous goods and services	2.2	0.15	-0.04	0.05	0.25	0.05	0.44	0.54	0.34	0.24	0.04	-0.05	-0.15	-0.16

Source : Statistics Bureau of Japan

Difference with the 2010-2019 average

Less than 0	
Between 0 and 1	
Between 1 and 2	
Between 2 and 4	
Between 4 and 7	
Greater than 7	



BNP PARIBAS

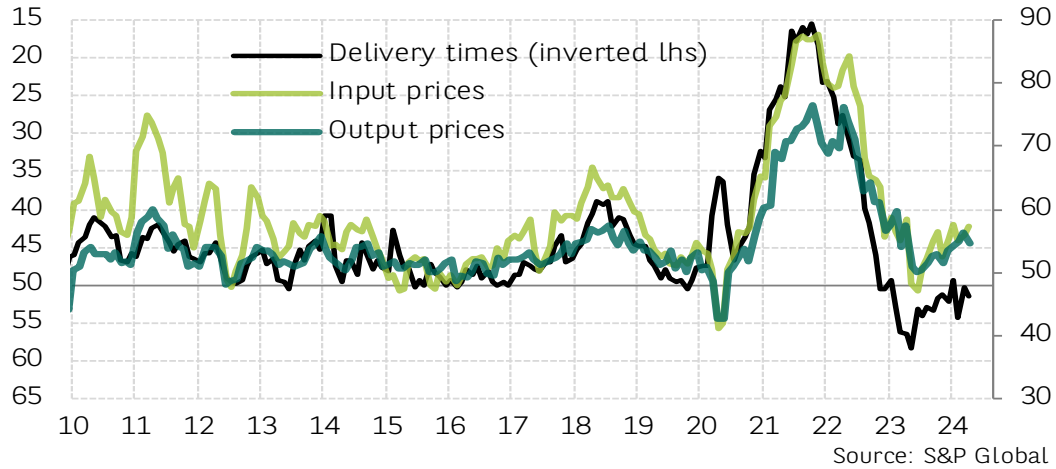
The bank for a changing world

Inflation and survey data

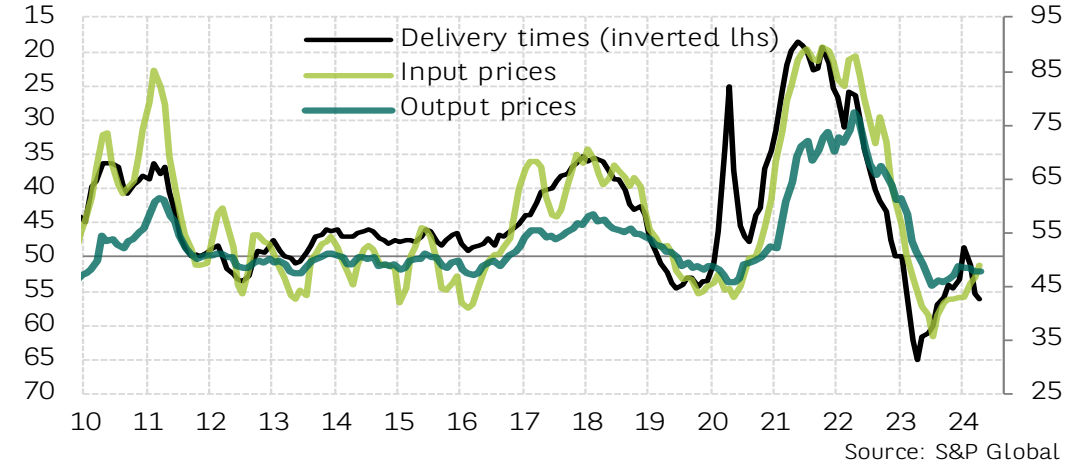


PMI surveys: an indication of inflationary pressures (1)

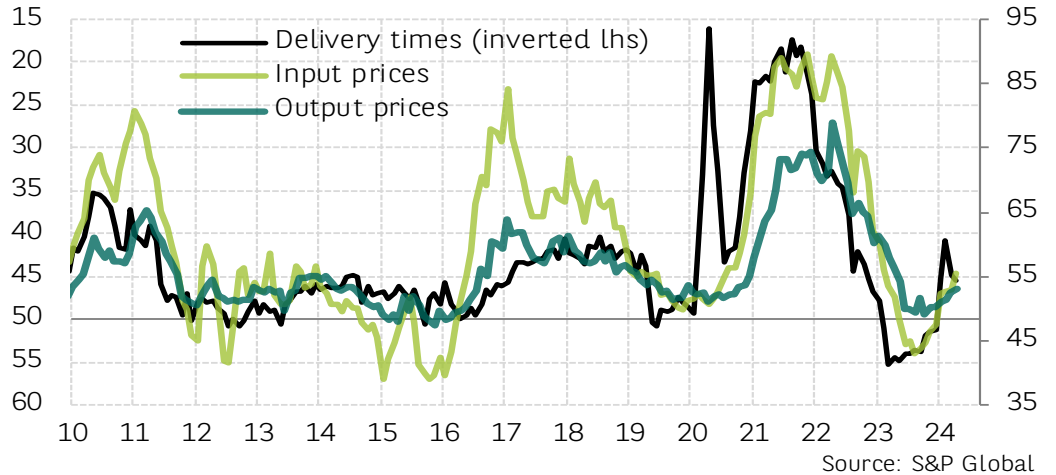
United States: manufacturing PMI indices



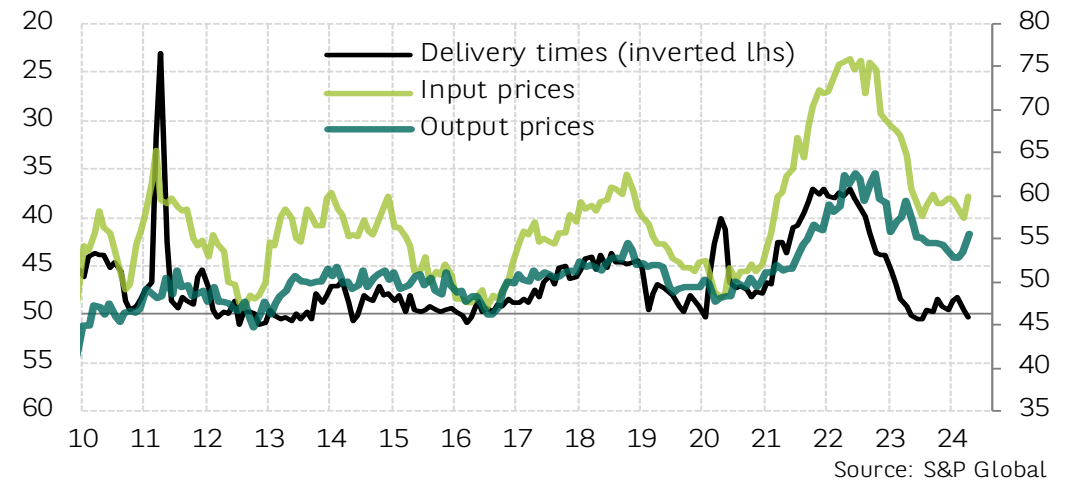
Eurozone: manufacturing PMI indices



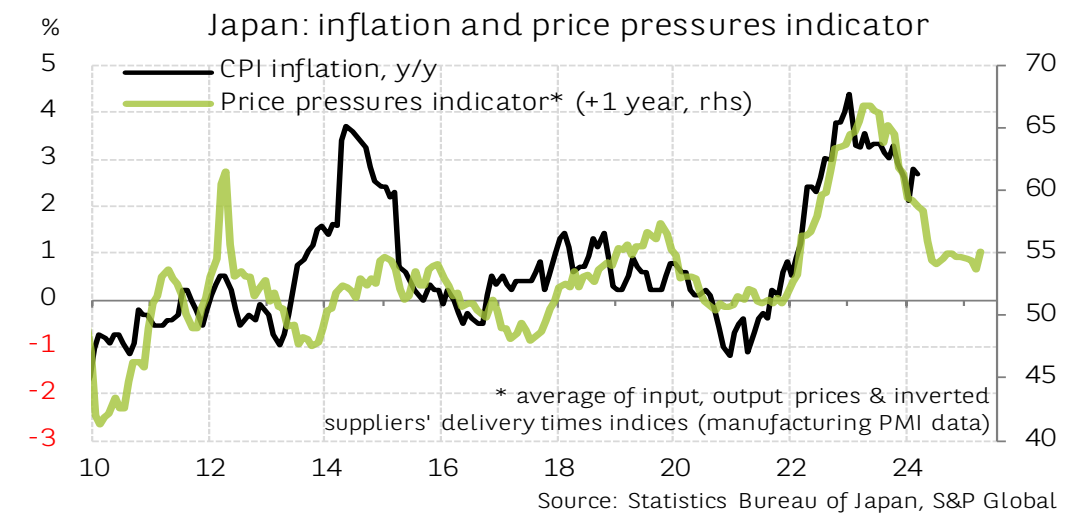
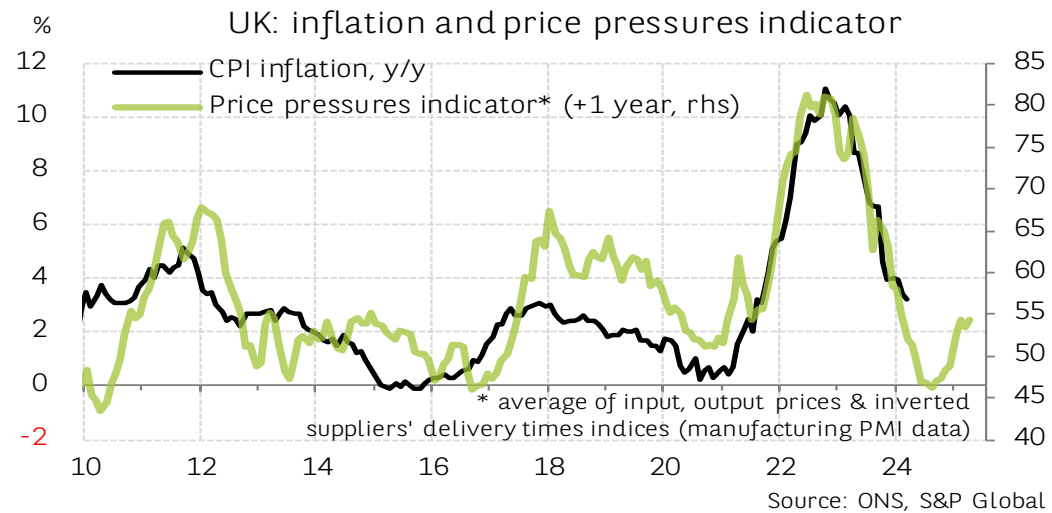
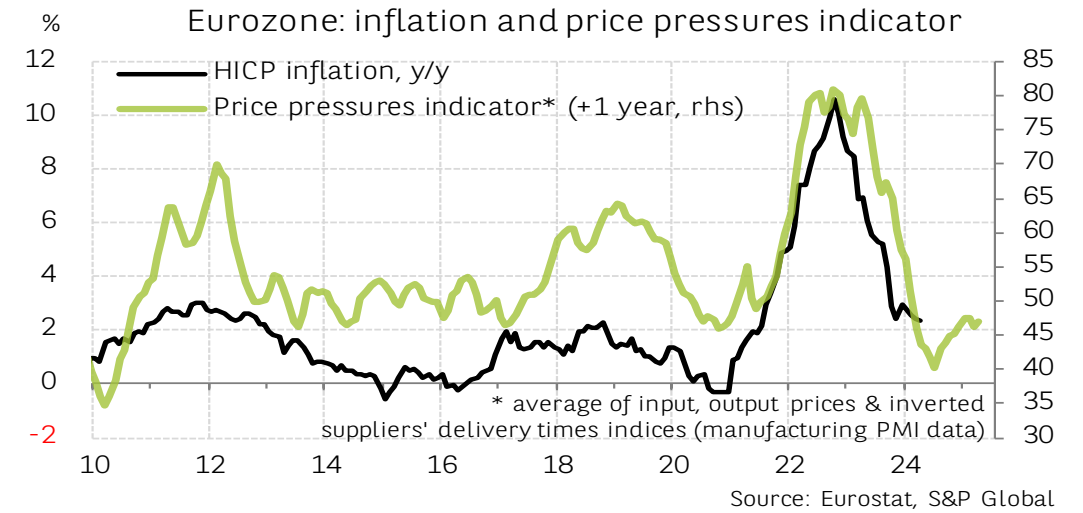
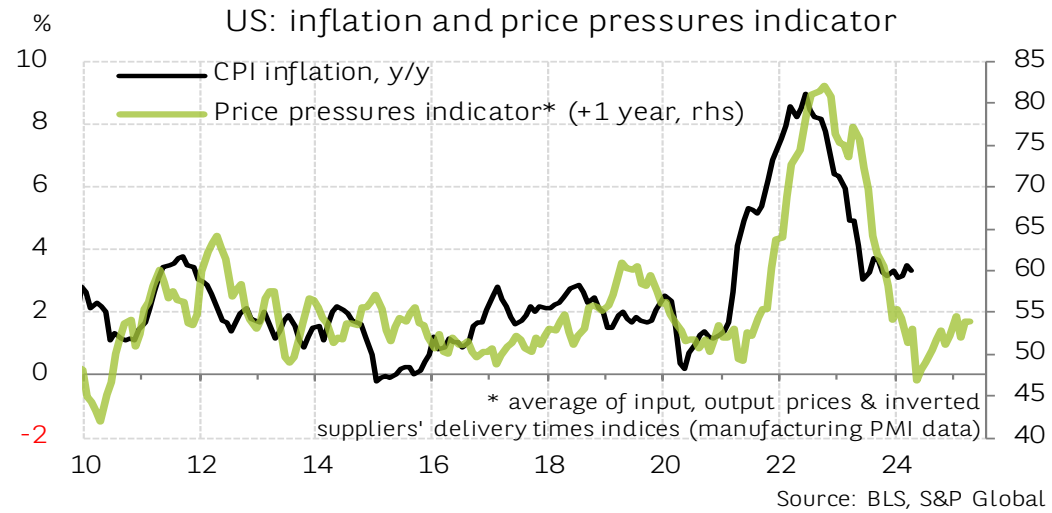
United Kingdom: manufacturing PMI indices



Japan: manufacturing PMI indices



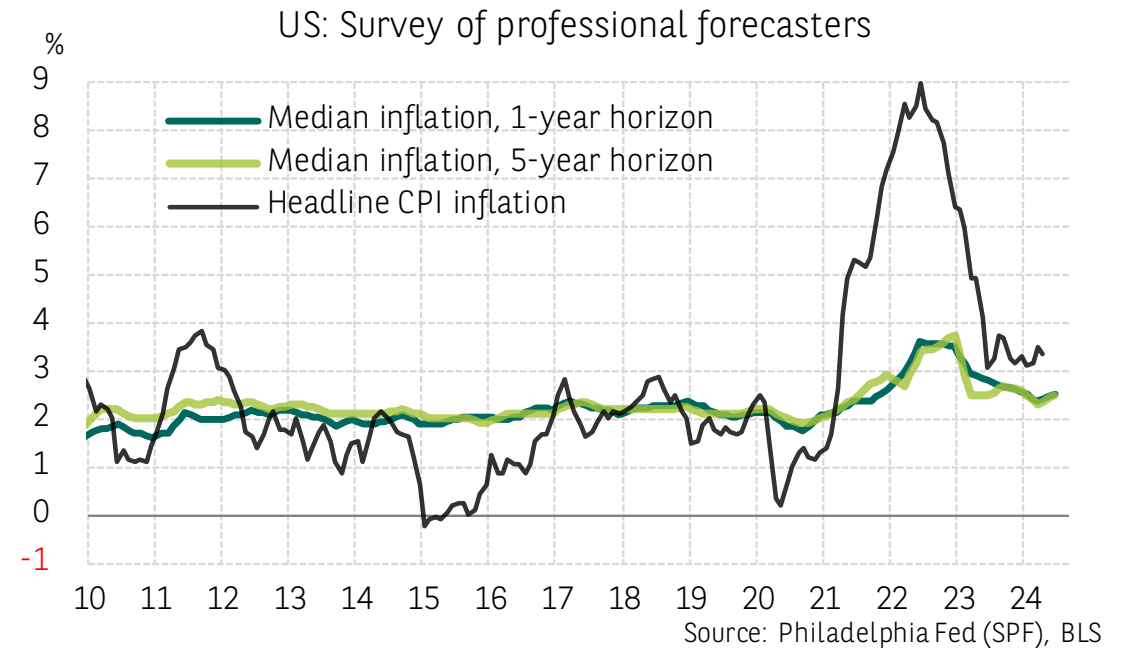
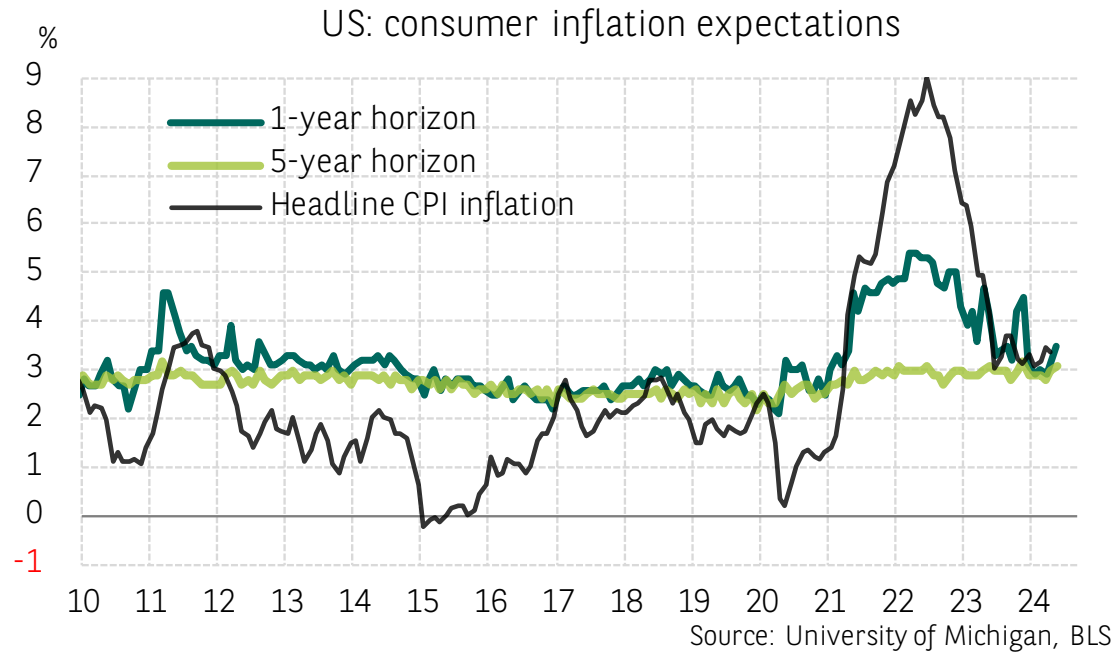
PMI surveys: an indication of inflationary pressures (2)



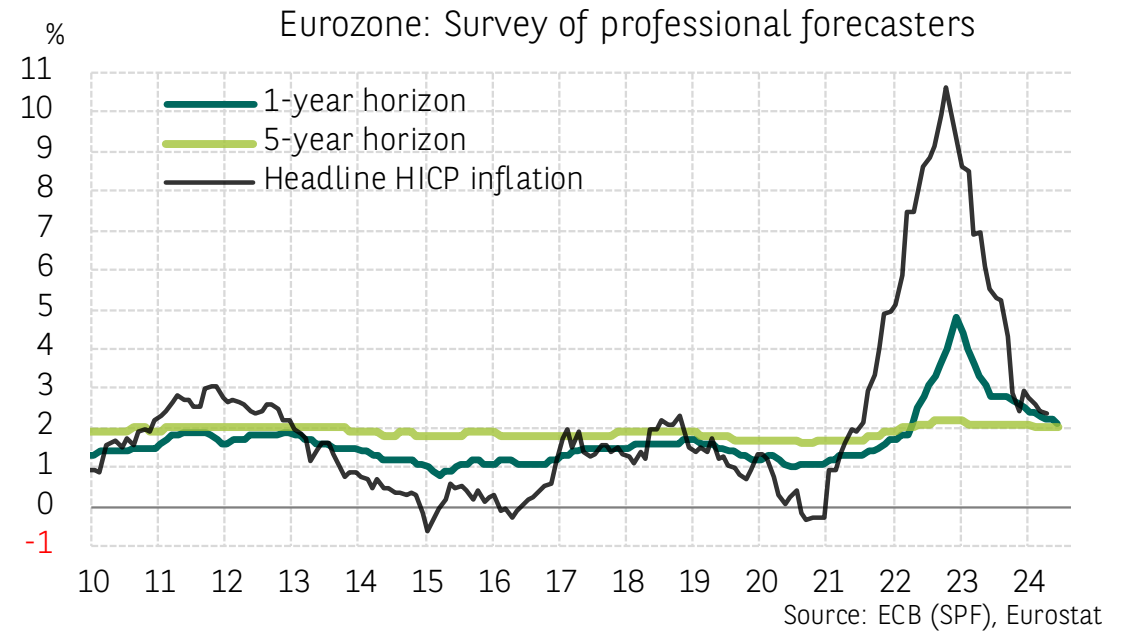
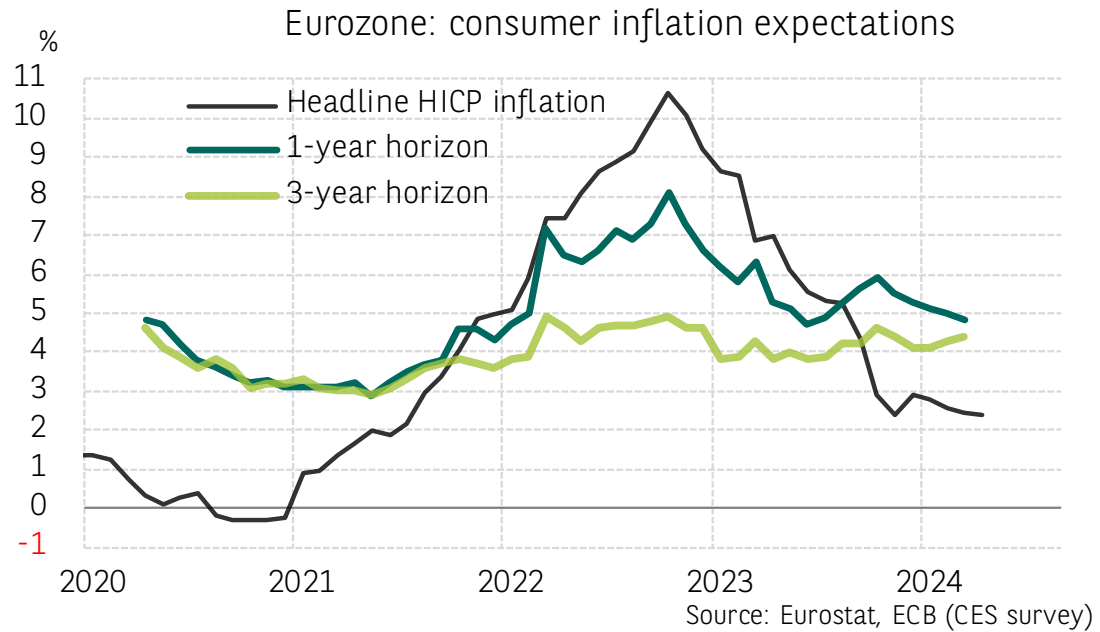
Inflation expectations (households, forecasters, markets)



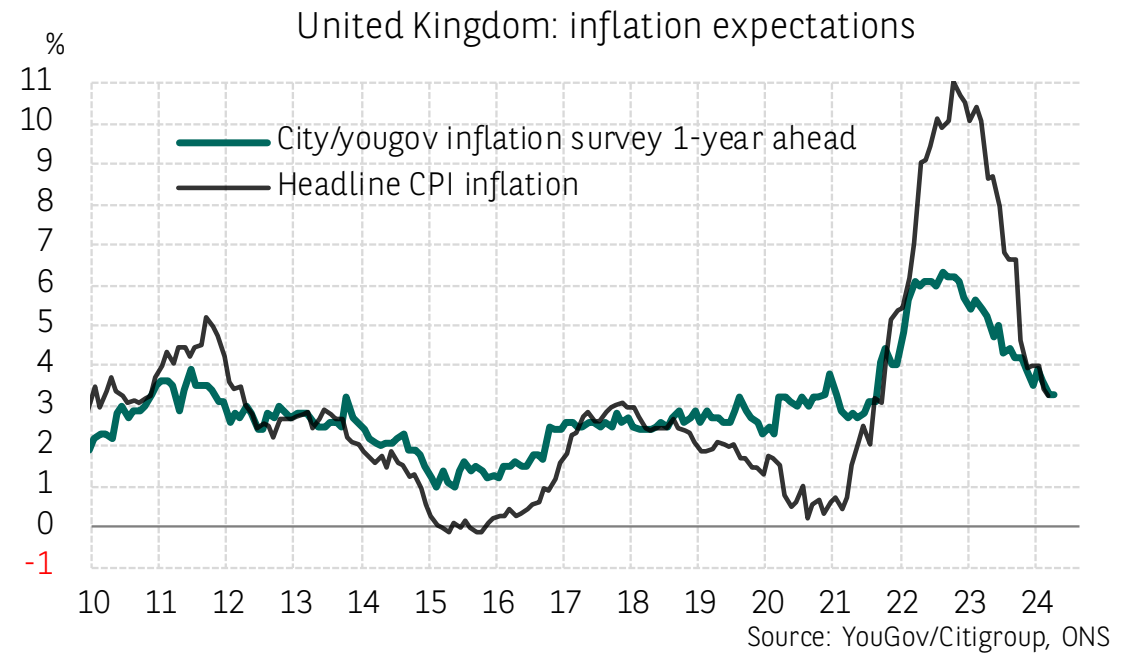
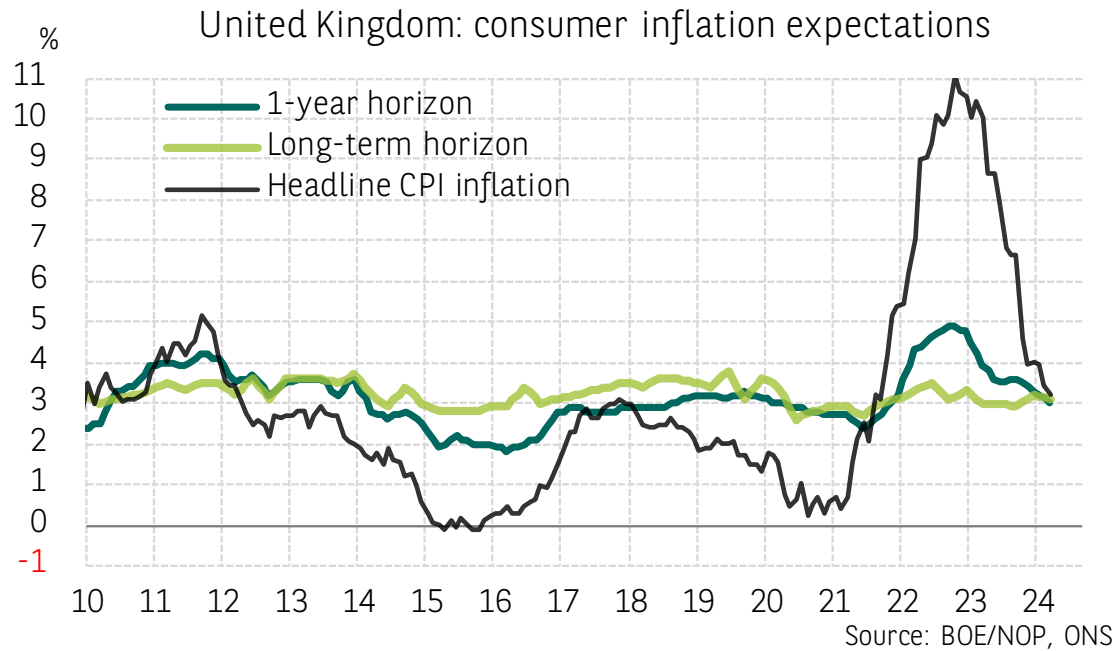
Inflation expectations in the United States



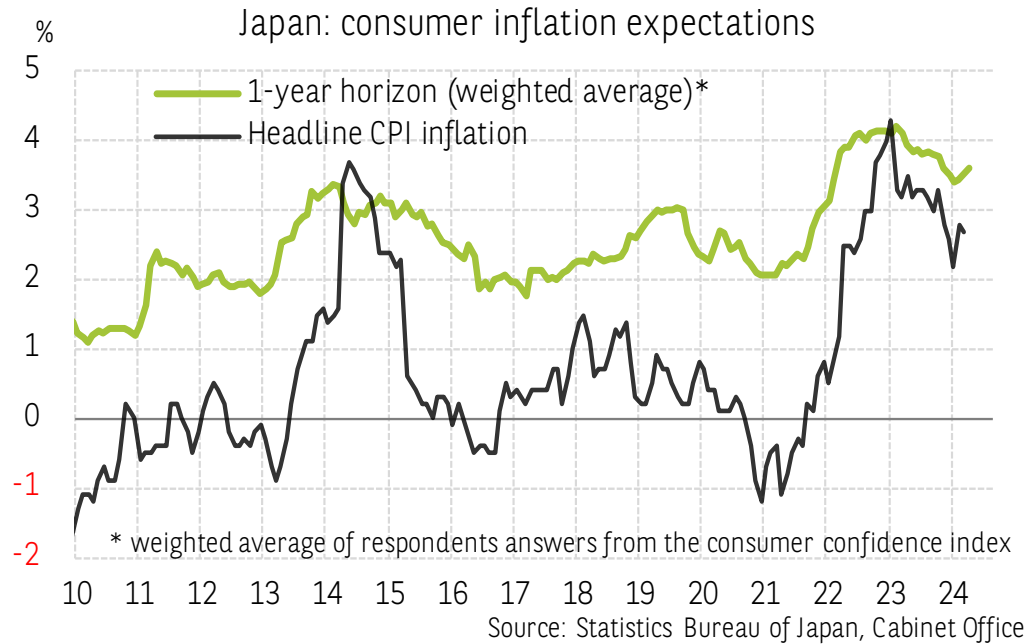
Inflation expectations in the Eurozone



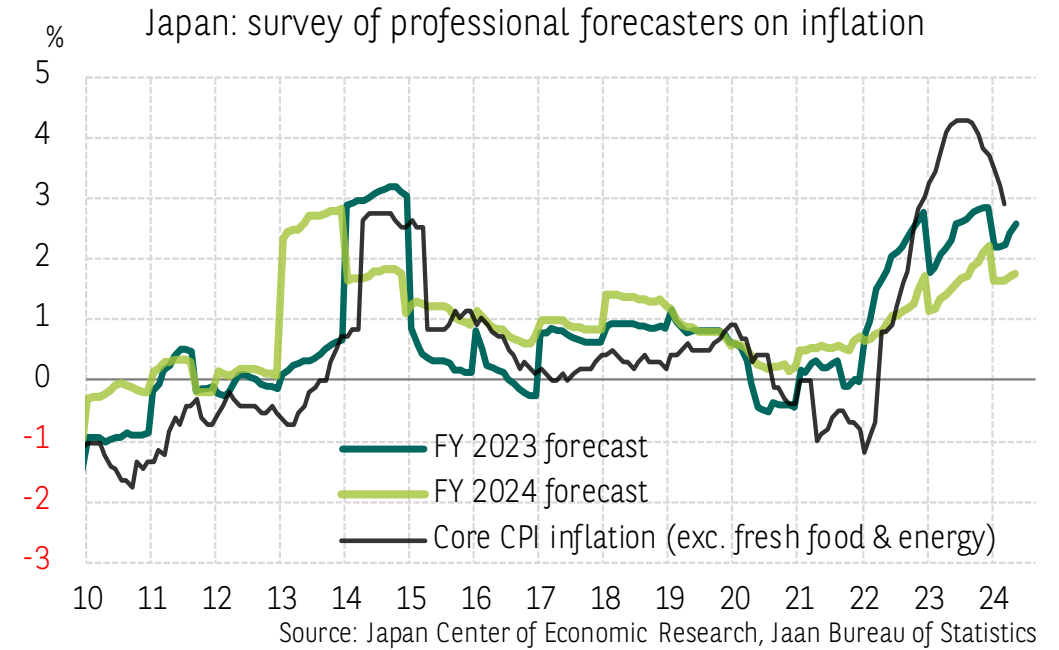
Inflation expectations in the United Kingdom



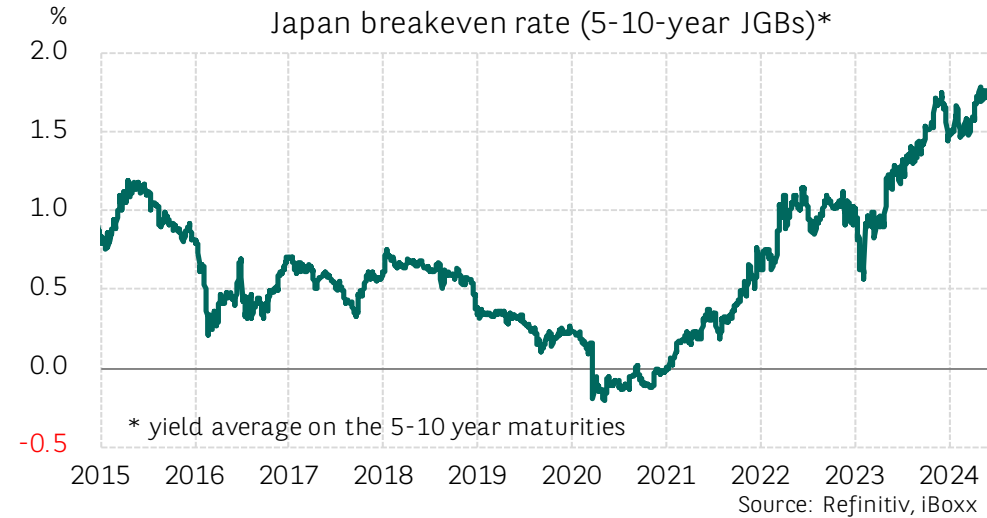
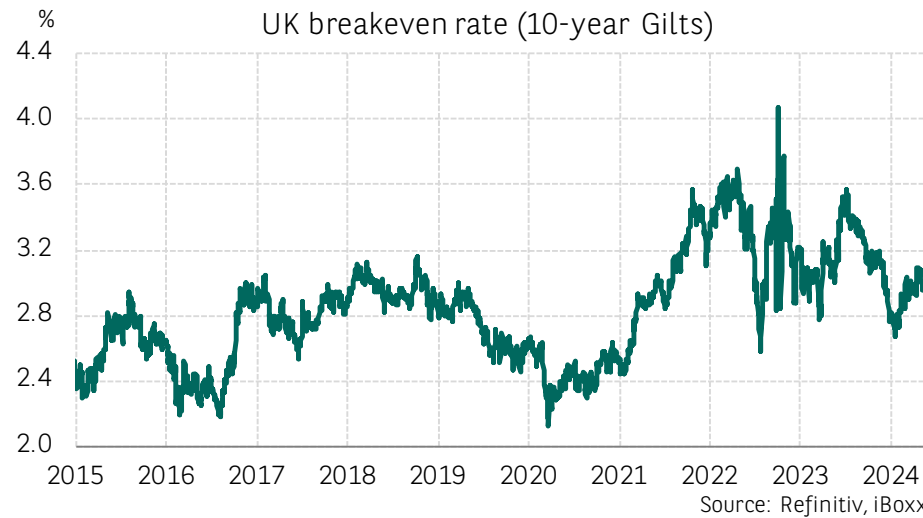
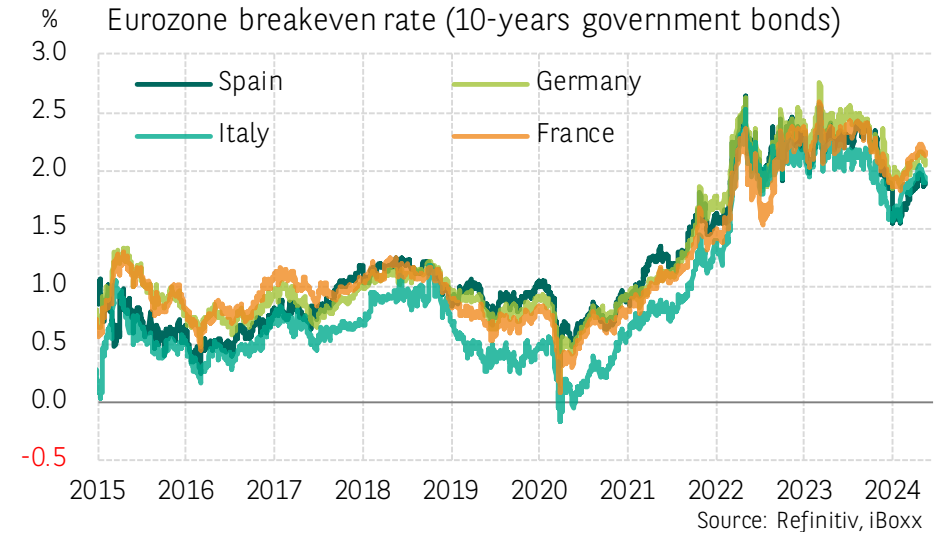
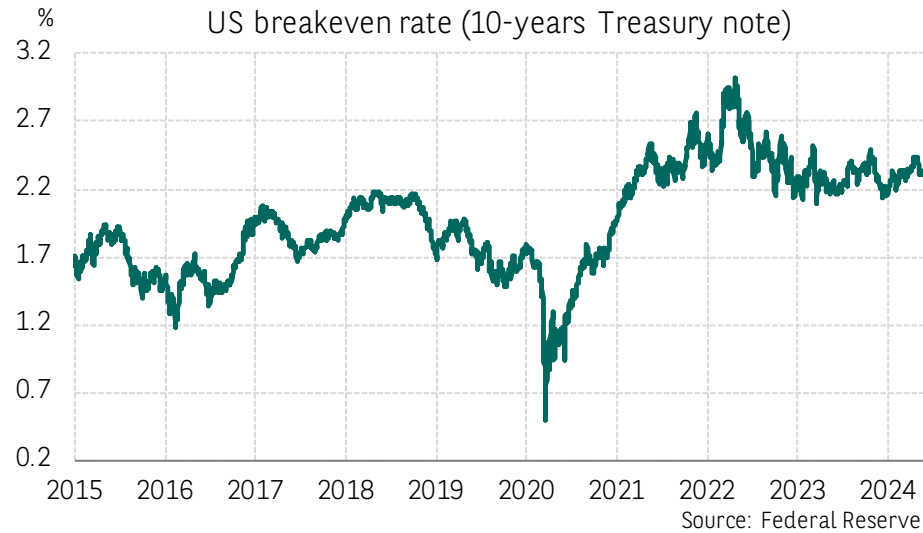
Inflation expectations in Japan



* Weighted average of respondents' answers from the consumer confidence survey (Cabinet Office)



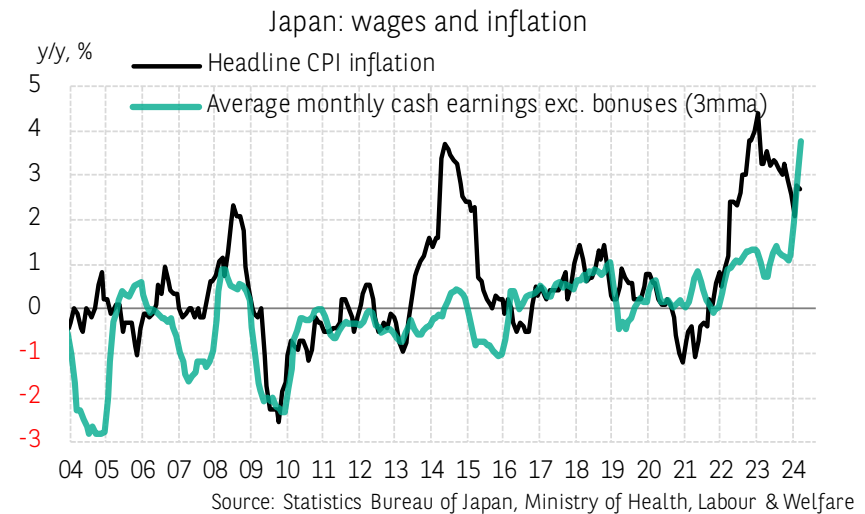
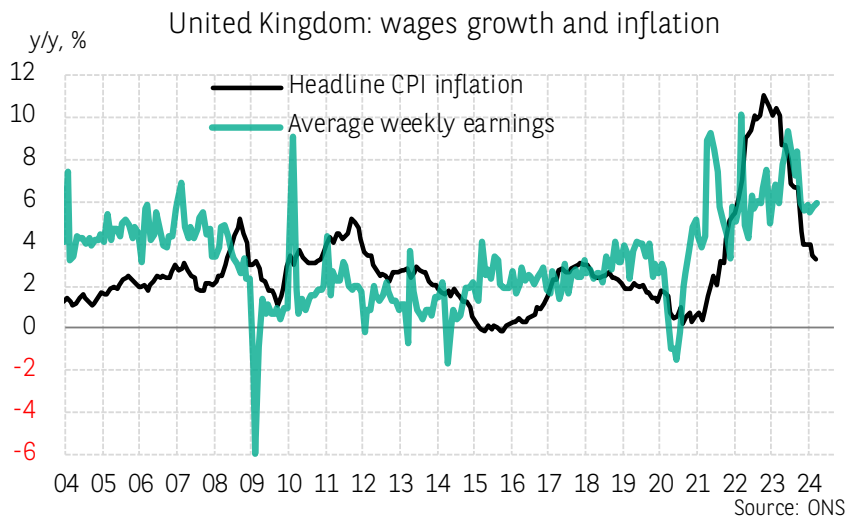
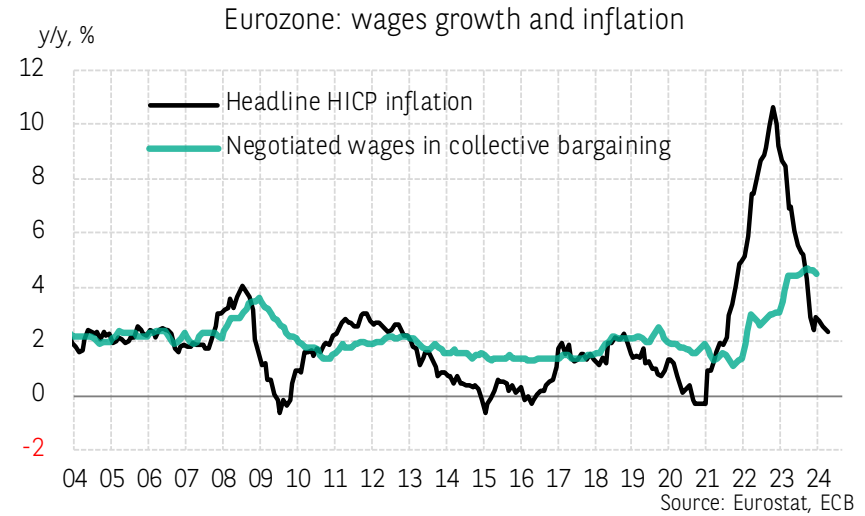
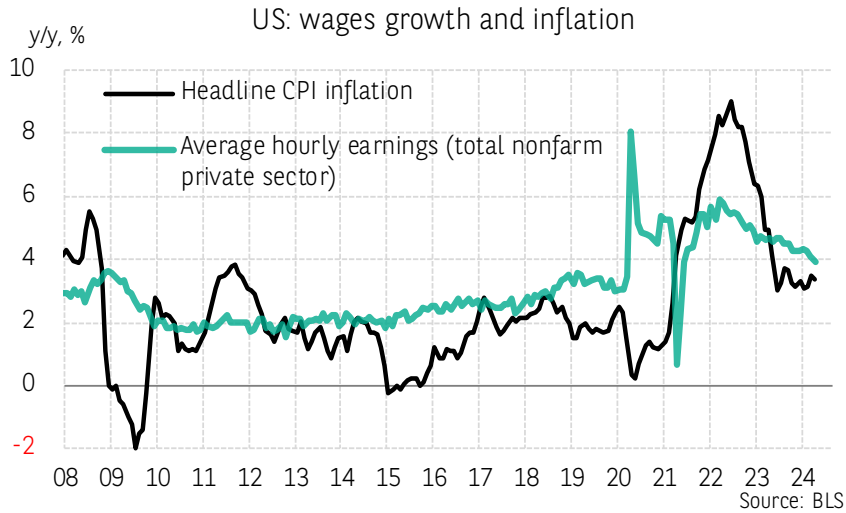
Market expectations: breakeven inflation rate



Inflation-wage dynamics



Inflation-wage dynamics



Raw materials



Raw materials

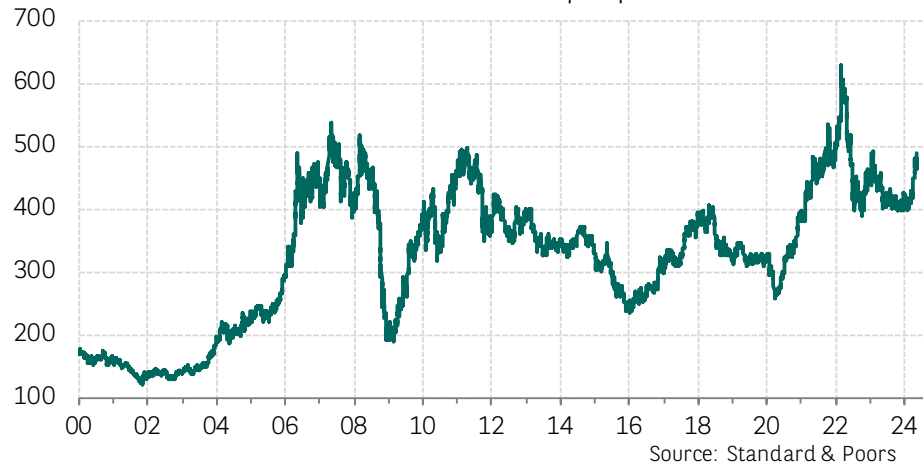
WTI crude oil price, USD/barrel



Natural gas price, USD/million BTU



S&P GSCI industrial metal spot price index



S&P GSCI agriculture spot price index



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 1 87 74 01 51 anis.bensaidani@bnpparibas.com

Lucie Barette
Southern Europe +33 1 87 74 02 08 lucie.barette@bnpparibas.com

Veany Bou, Tarik Rharrab
Statistics

ECONOMIC PROJECTIONS, RELATIONSHIP WITH THE FRENCH 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

Mickaëlle Fils Marie-Luce +33 1 42 98 48 59 mickaelle.filsmarie-luce@bnpparibas.com

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 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 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 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 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 document you agree to 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 marchés 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.

