



ECOCHARTS

June 2023

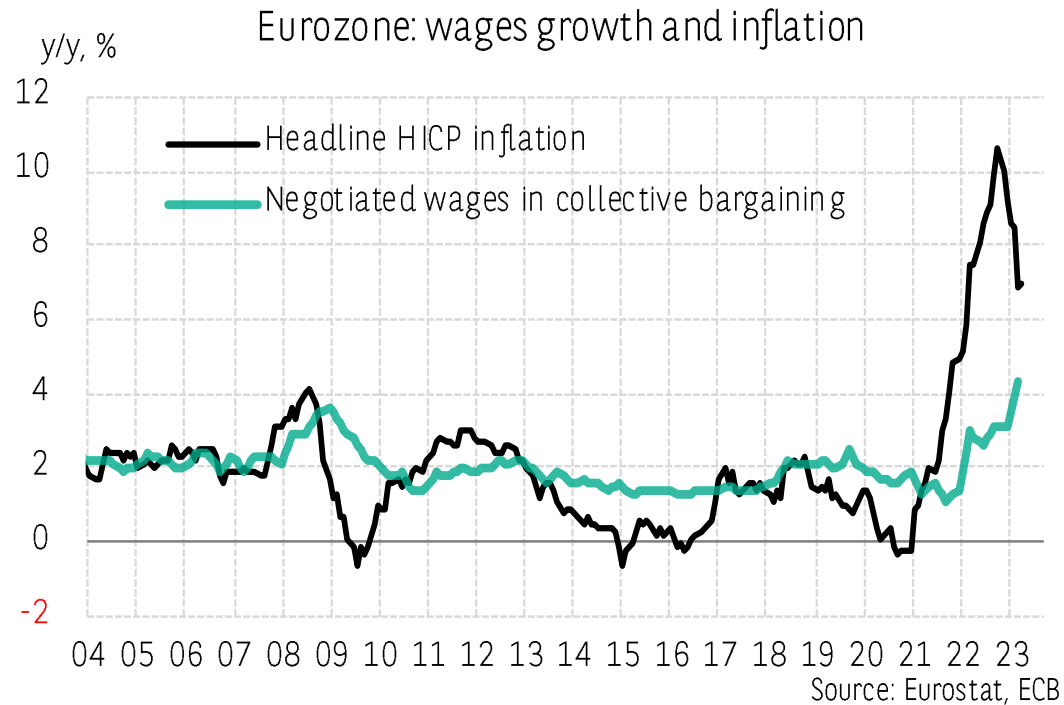
INFLATION TRACKER



BNP PARIBAS

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CHART OF THE MONTH



Wages growth in the eurozone accelerated sharply in the first quarter of 2023: average base salaries, negotiated under collective bargaining agreements, rose by 4.3% year-on-year, the sharpest annual increase since the monetary union was created. This rate of growth – while below inflation – is significant. Wages across the euro-area are likely to continue to grow strongly over the coming months, supported by persistently-high inflation and the record low unemployment rate (6.5% in April).



KEY POINTS: INFLATION NOT DYING DOWN IN THE UK, AND INCREASING IN JAPAN

- The pace of inflation in the United Kingdom remains a cause for concern and is likely to force the Bank of England to raise its policy rate during the summer. While headline inflation fell, from 10.1% y/y in March to 8.7% y/y in April, core inflation continued to accelerate, up from 6.2% to 6.8%. In addition to the very sharp rise in food prices (19.3% y/y), services prices also climbed, reaching the highest level in 31 years at 6.9% y/y in April, driven in particular by rent hikes not seen since the mid-1990s (up 5.5% y/y, the steepest increase since March 1996). The increase in services prices has affected all segments, including communications (up 7.9% y/y, reflecting the jump in telephone subscriptions in April), motor insurance (up 38.5%) and organised travel (up 12.7%). More than 85% of components of the CPI are now rising by more than 4% y/y, the highest ever (page 13).
- Core inflation in the United States remained high in April (CPI and PCE deflator), but some alternative indicators improved somewhat. Indices dedicated to the generalisation of inflation have started to decline (page 7), while PMI survey data (page 18 and 19) once again indicate that fewer companies increased their selling prices in May (although these are still in the minority in the survey). Long-term inflation expectations remain contained, and the inflation breakeven rate (page 25) has continued to fall. The rise in wages has slowed down since the start of the year but the gap with inflation is still narrower than in Europe and Japan, indicating a less significant reduction in real wages in the United States.
- In the eurozone, the annual increase in producer prices slowed to 1% in April (page 9). The energy price component of the CPI has fallen in more than a third of Eurozone countries, with the most significant negative contributions coming from Belgium and the Netherlands. The Baltic states and Slovakia have seen a modest decline in headline inflation, which remains above 10% y/y in May.
- Food inflation in the eurozone has stabilised at a very high level. However, several services sectors are recording a faster rate of inflation, in some cases due to wage increases, for example in accommodation and food services, education, recreation and culture (page 12). Some alternative measures of inflation, closely monitored by the ECB, have nevertheless slowed, such as the PCCI and the weighted median inflation rate (page 9).
- Consumers' long-term inflation expectations increased in May in the United States (University of Michigan survey) and fell in the eurozone in April (ECB's Consumer expectations survey). The central banks will continue to monitor closely expectations developments in the future, even though there has not been any real deterioration up to now (page 21-22).
- In Japan, market expectations are being cautiously adjusted to the new inflationary environment. The inflation breakeven rate reached just over 1.2% at the end of May (page 25). However, core inflation (excluding energy and fresh foods) broke through the 4% y/y mark in April for the first time since 1986, when current statistics began (page 15). More than half of CPI categories have recorded an increase of over 2% over the last 12 months. Two of the three alternative measures of inflation scrutinised by the Bank of Japan have exceeded 3% (trimmed mean) or are close to this level (mode).

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General dynamics of inflation

Inflation and survey data

Inflation expectations (households, forecasters, markets)

Raw materials

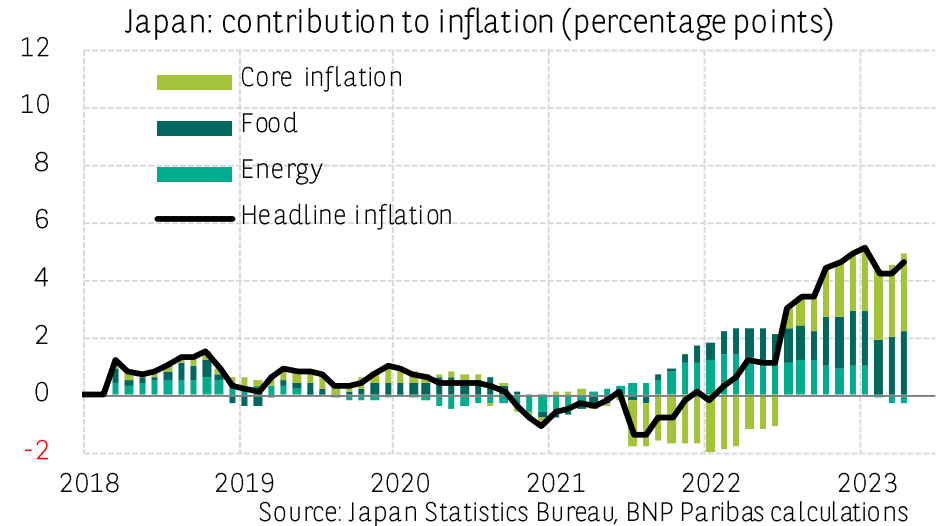
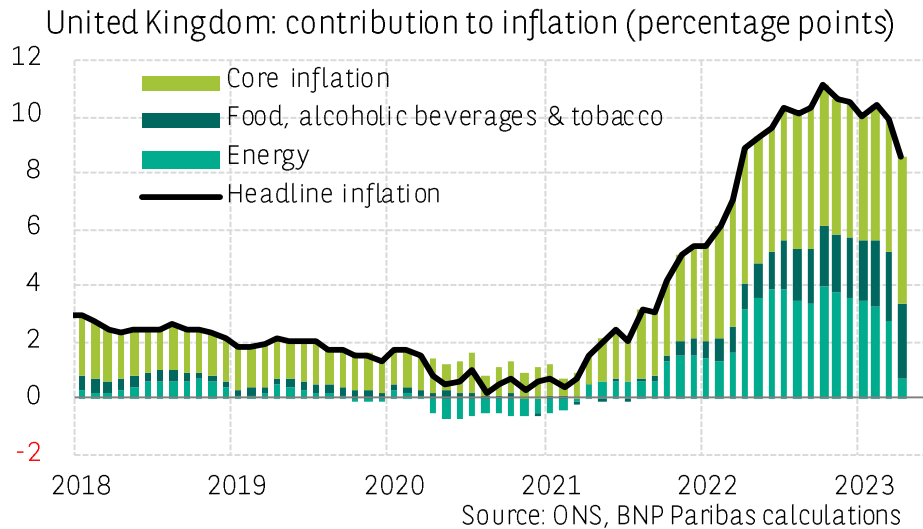
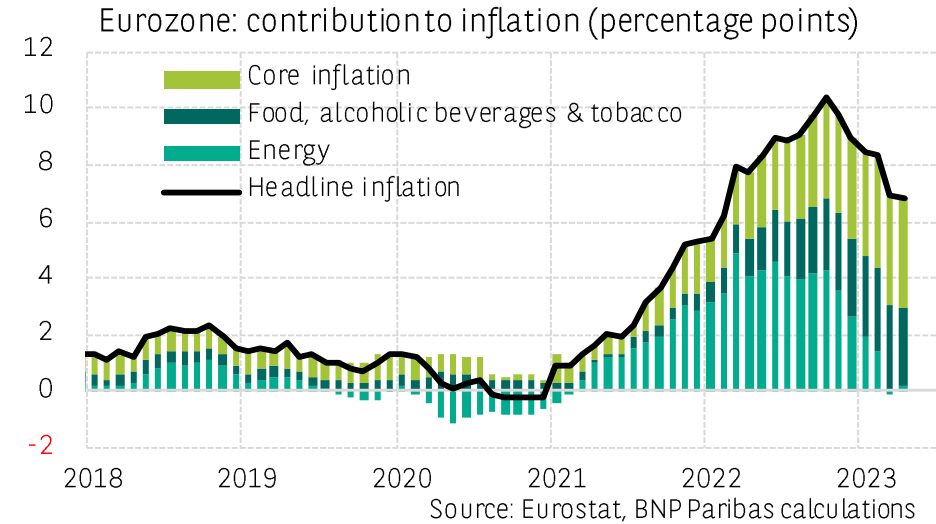
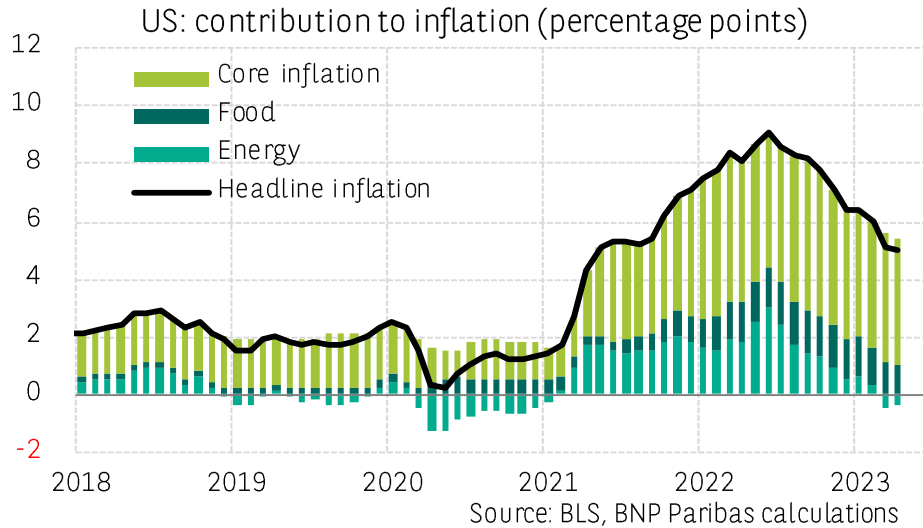
Macroeconomic determinants of inflation (wages, unemployment rate, capacity utilization rate, exchange rate)



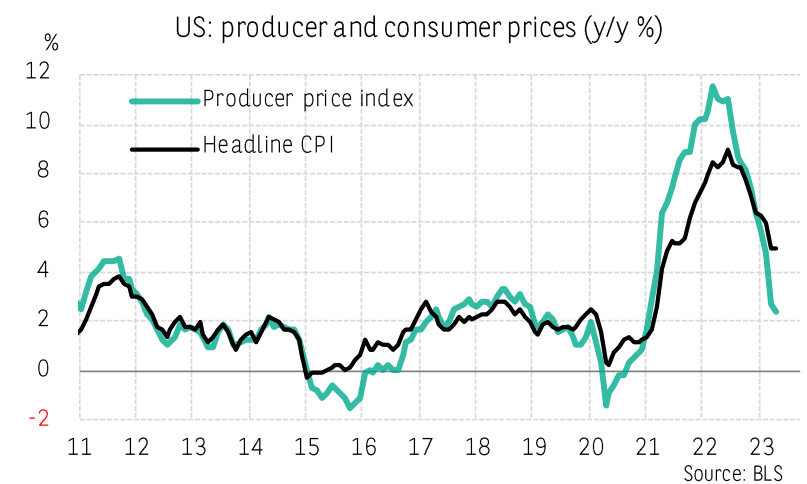
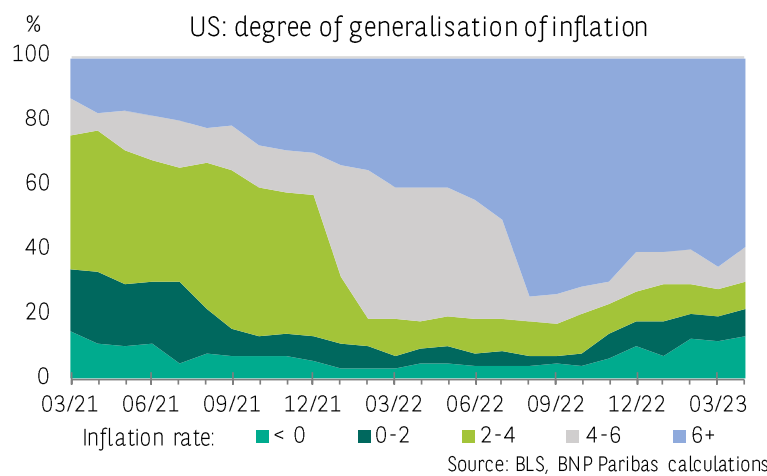
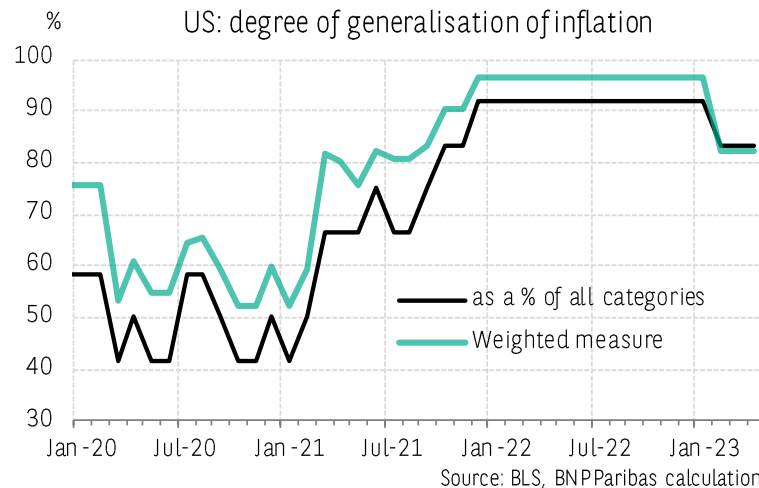
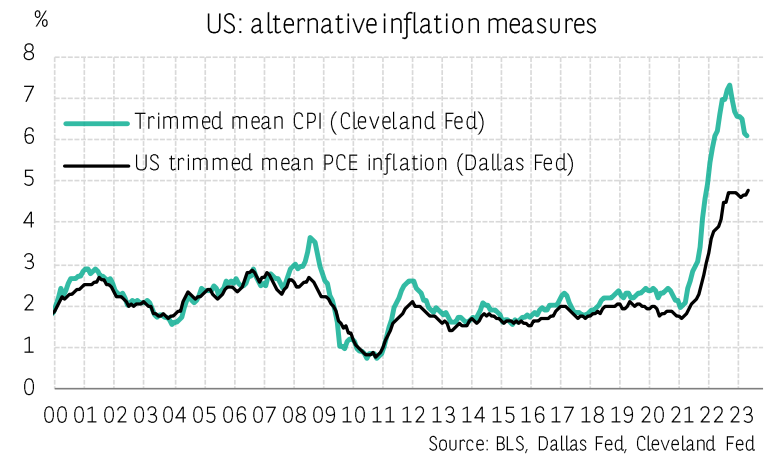
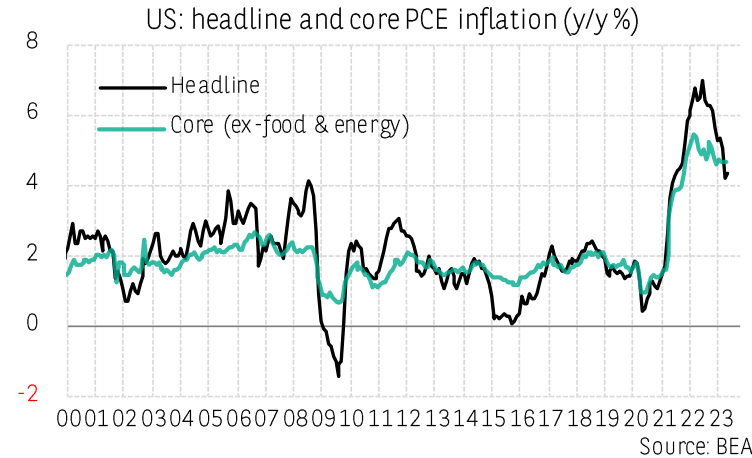
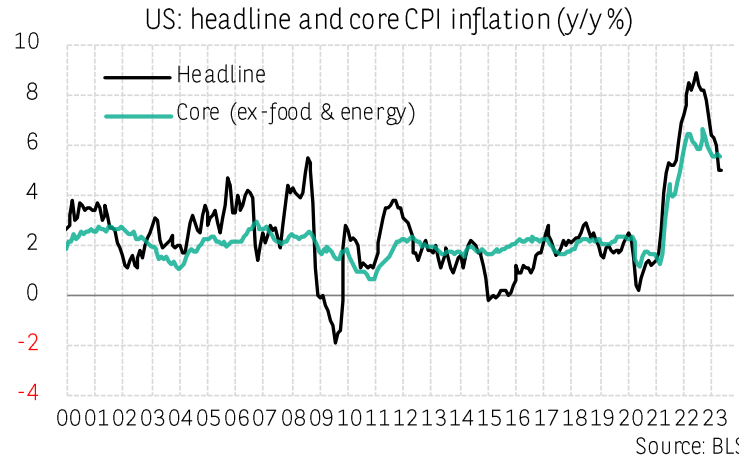
General dynamics of inflation



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 (%)	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Total	100	6.45	6.72	7.15	6.63	6.44	6.43	5.98	5.35	4.66	4.56	4.20	3.20	3.17
Food and non-alcoholic beverages	7.6	9.55	10.73	10.94	11.86	12.24	11.64	11.15	10.66	10.59	10.07	8.86	7.03	5.72
Alcoholic beverages, tobacco and narcotics	1.2	2.75	3.02	3.07	3.07	3.67	3.22	2.82	3.04	2.98	3.37	3.06	2.95	2.68
Clothing and footwear	2.7	5.56	5.15	5.35	5.23	5.11	5.18	3.91	3.13	2.46	2.41	2.56	2.53	2.88
Housing, water, electricity, gas and other fuels	36.1	3.23	3.83	4.49	4.71	5.18	5.52	5.37	5.46	5.87	6.02	5.98	5.54	5.28
Furnishings, household equipment and routine household maintenance	4.0	10.26	9.28	10.07	10.68	10.28	9.60	8.94	8.04	7.04	6.01	5.83	5.22	4.90
Health	7.4	-0.21	-0.02	0.46	0.39	0.59	0.90	0.61	0.41	0.83	0.19	-0.01	-0.30	-0.18
Transports	14.5	21.72	21.30	21.72	17.64	13.78	12.37	10.49	6.55	1.82	1.54	0.18	-3.82	-2.51
Communications	3.3	1.05	0.79	0.56	0.40	0.00	-0.62	-0.91	0.48	0.62	1.11	1.13	1.67	1.87
Recreation and culture	6.7	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26	-0.26
Education	2.7	-0.27	-0.04	0.45	0.28	0.31	1.27	1.16	1.39	1.62	0.05	-0.18	0.14	0.03
Restaurants and hotels	7.8	6.67	6.94	5.99	4.64	5.40	5.52	6.06	5.58	5.35	5.41	4.76	4.04	3.43
Miscellaneous goods and services	6.1	1.83	2.53	3.84	4.70	5.74	7.05	6.90	6.57	5.85	5.27	4.41	3.80	3.60

Source: BLS

Difference with the 2010-2019 average

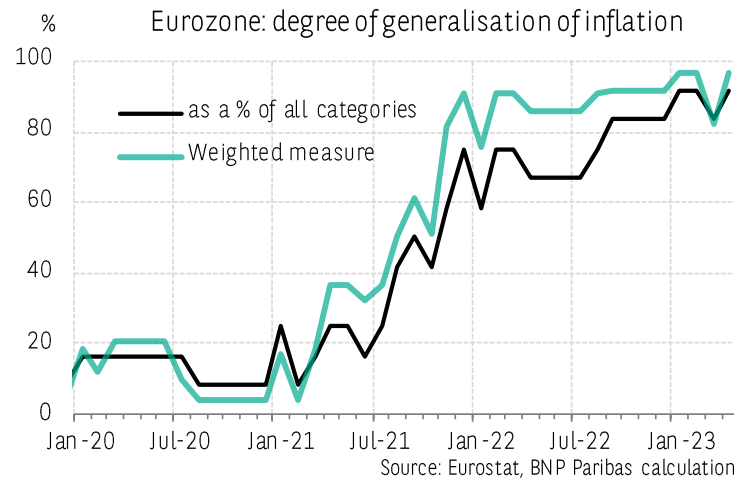
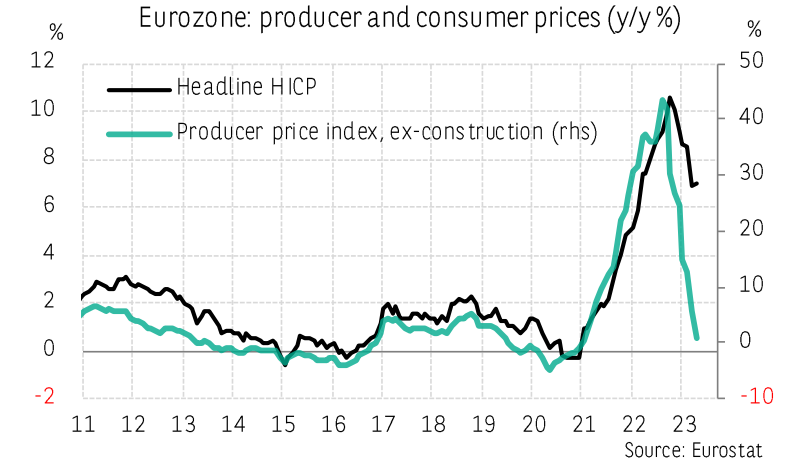
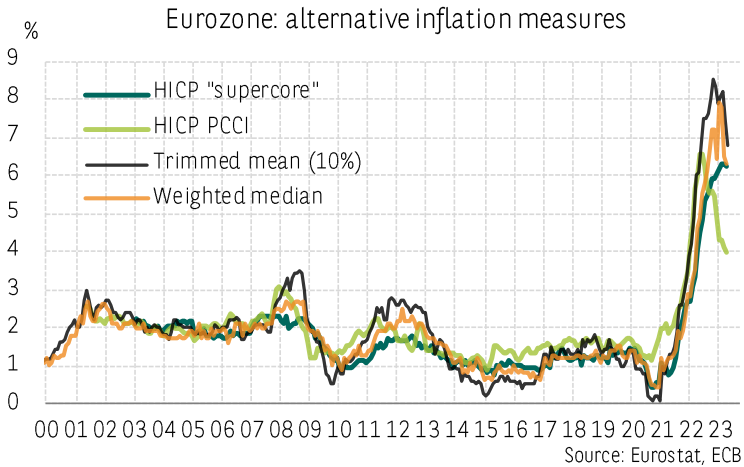
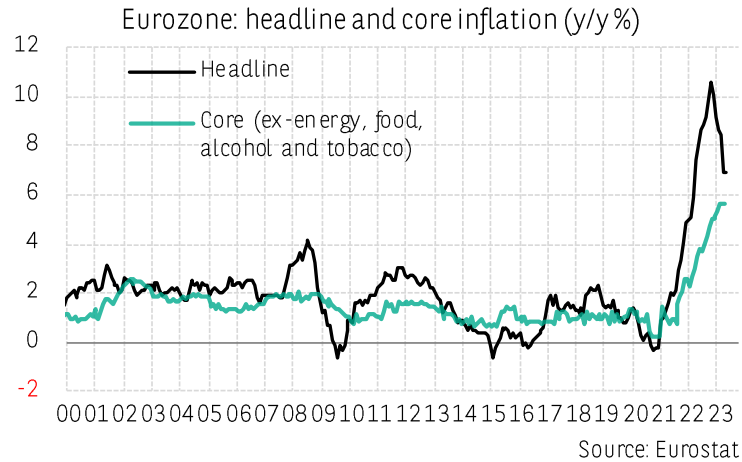
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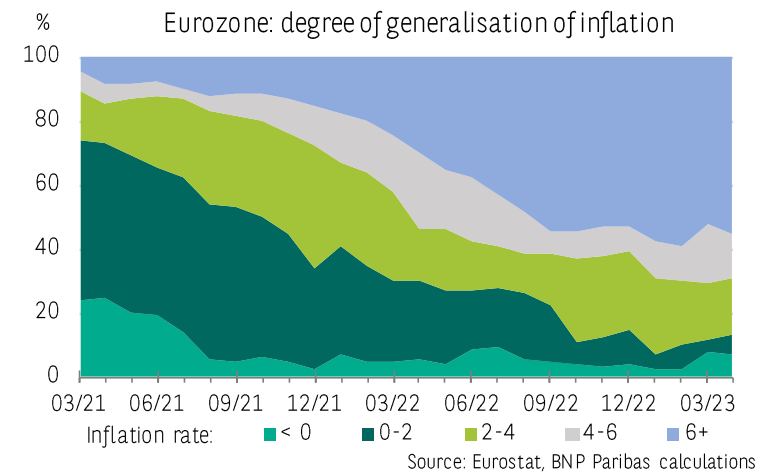
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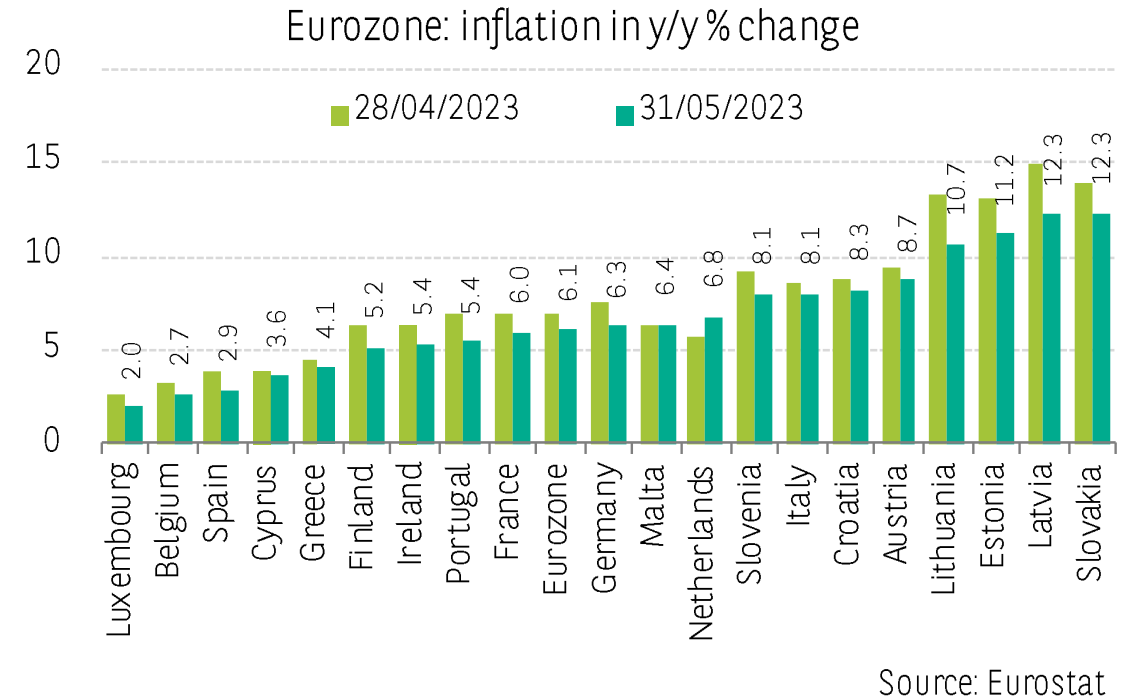
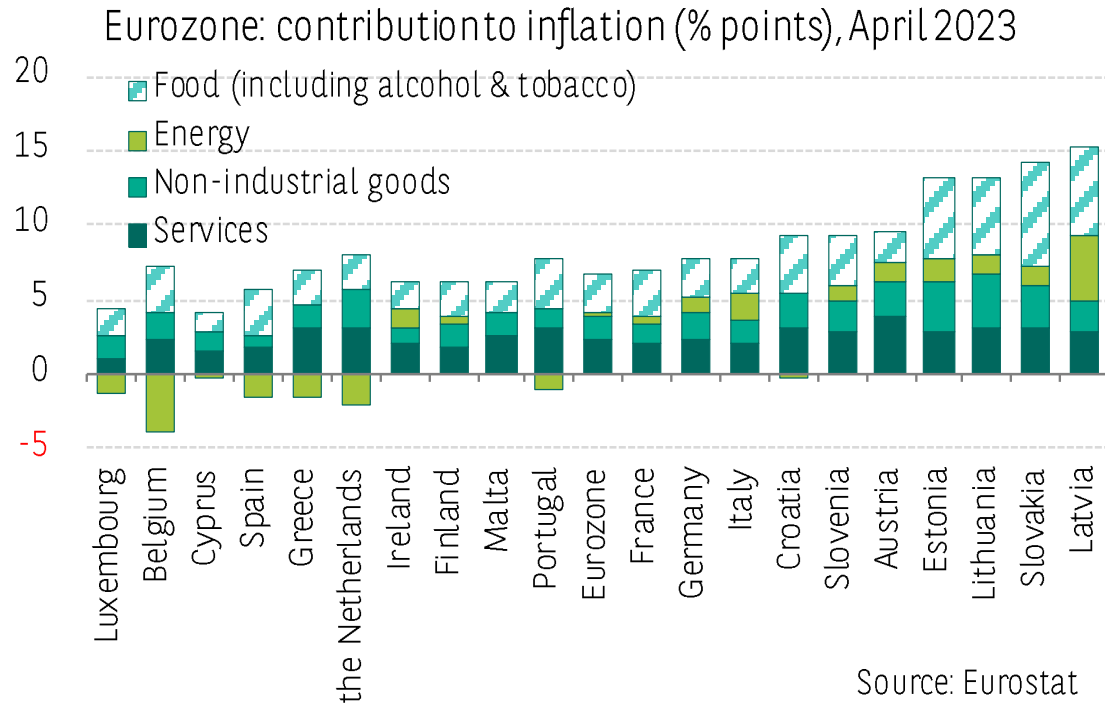
Inflation dynamics in the Eurozone: different metrics and degree of generalisation



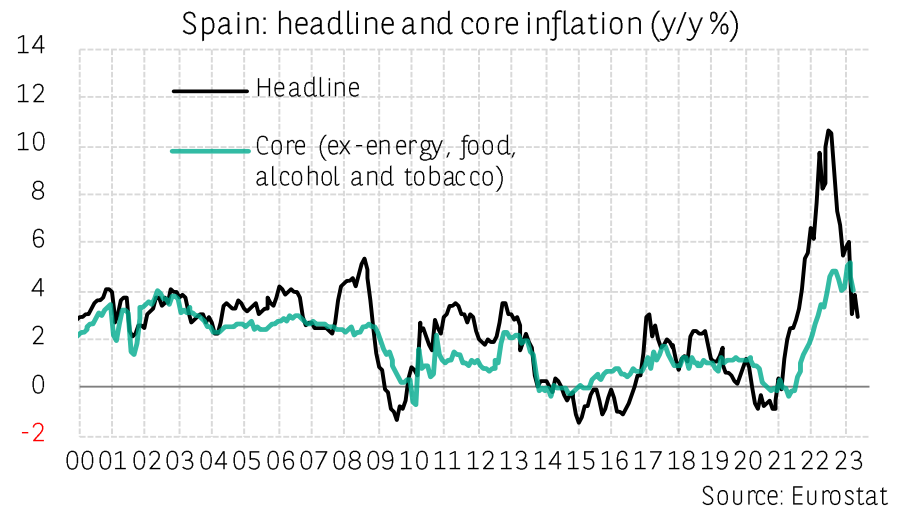
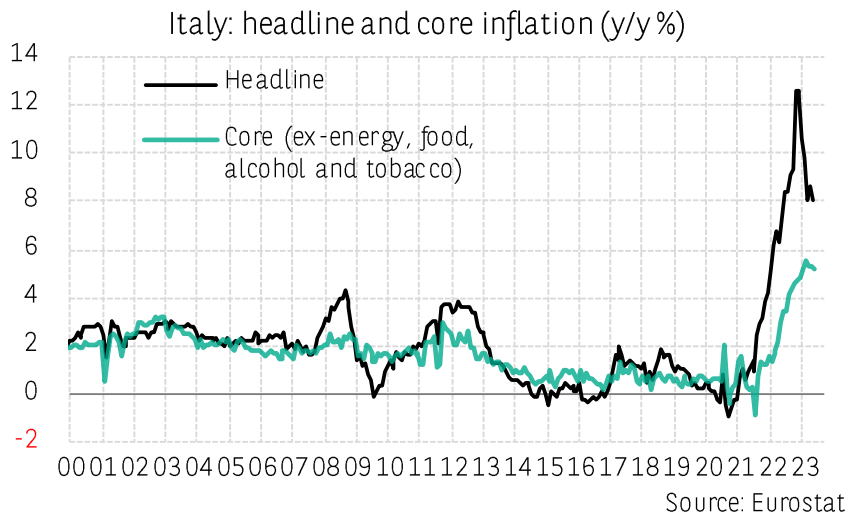
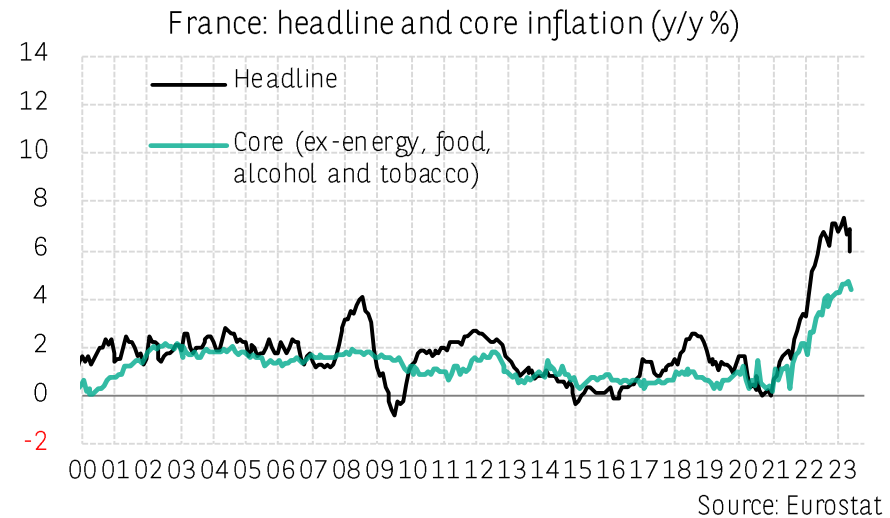
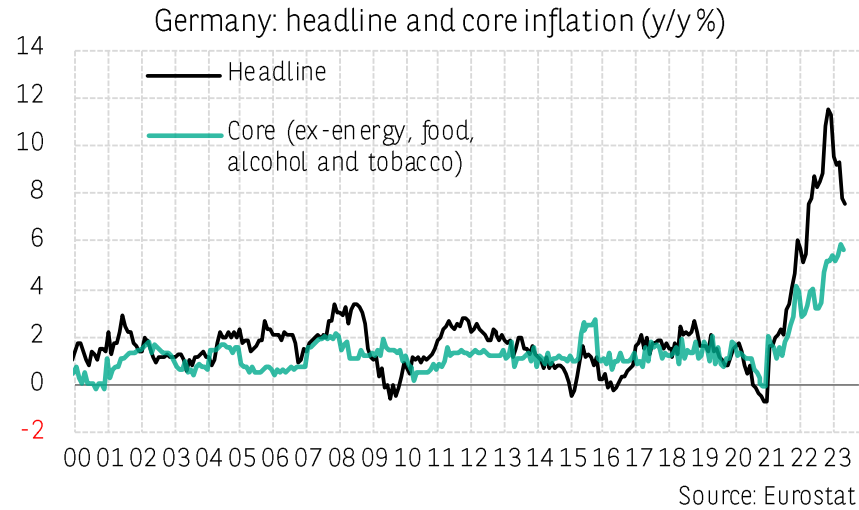
Note: the black line represents the % of CPI components whose increase is greater than, or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.



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

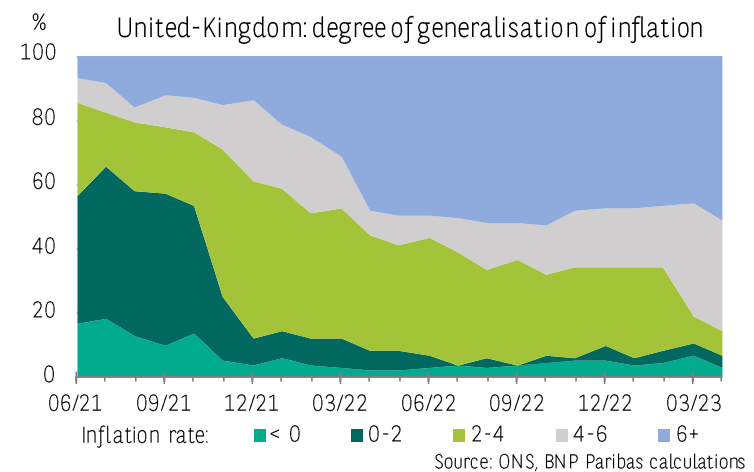
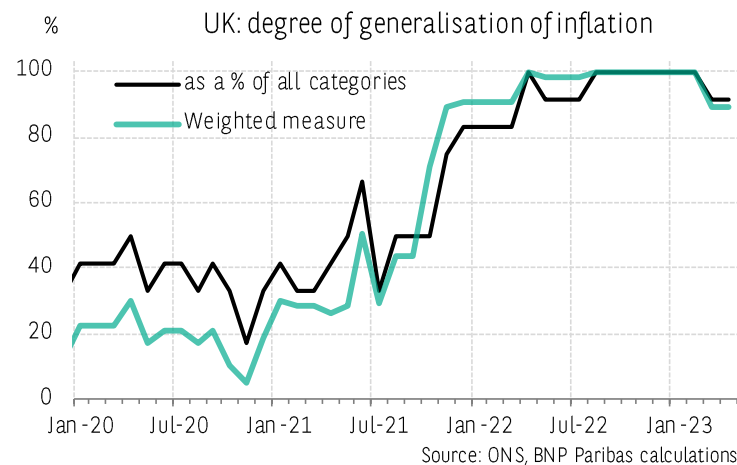
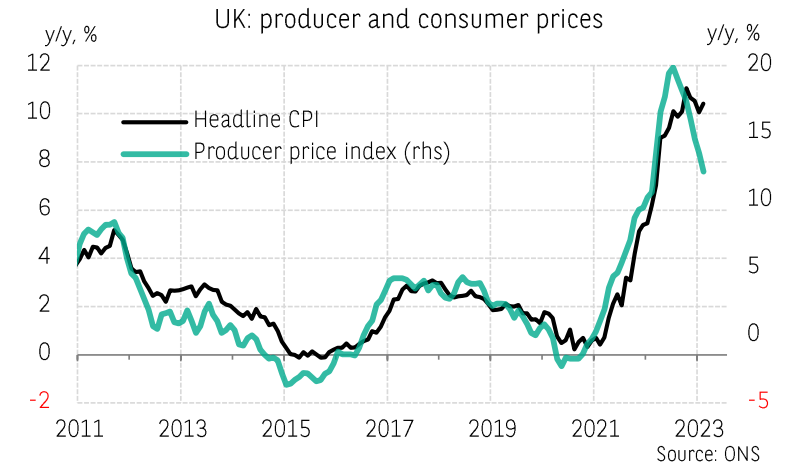
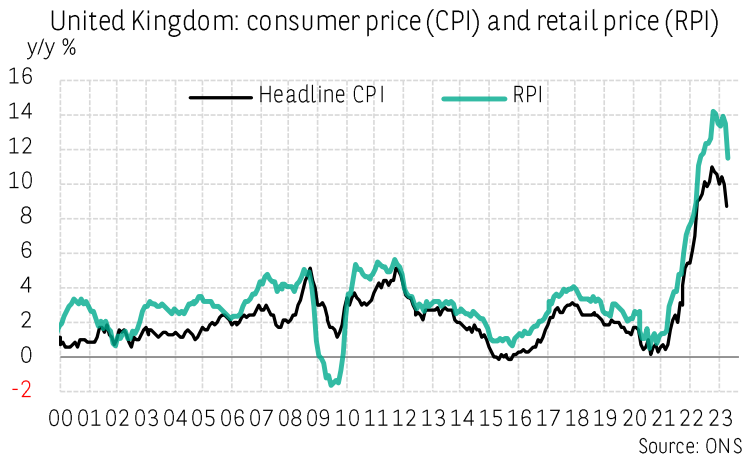
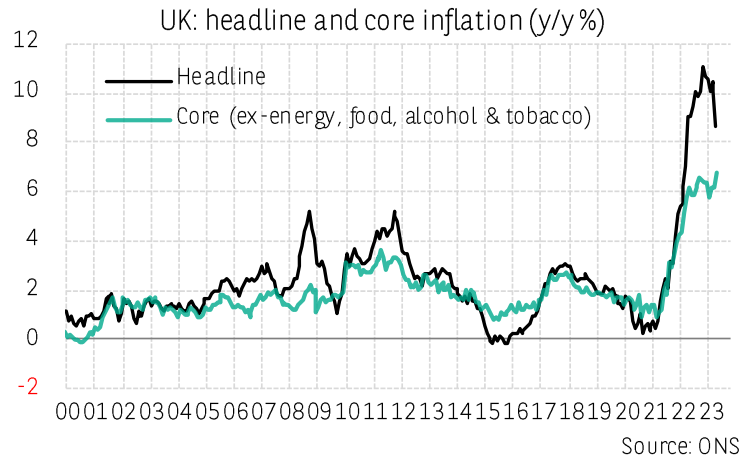
	Weight (%)	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Total	100	6.09	6.70	7.29	7.51	7.79	8.57	9.27	8.70	7.84	7.29	7.15	5.53	5.61
Food and non-alcoholic beverages	17	5.99	7.28	8.94	10.04	10.97	12.33	14.02	14.54	14.55	14.83	15.87	16.08	13.54
Alcoholic beverages, tobacco and narcotics	4	-0.93	-0.41	0.13	0.37	0.68	0.96	1.10	1.46	2.11	2.47	2.96	4.23	4.51
Clothing and footwear	5	1.43	1.19	0.04	-0.53	1.55	2.70	3.29	2.83	3.14	4.42	4.81	4.19	3.59
Housing, water, electricity, gas and other fuels	18	14.02	14.42	15.05	15.90	17.86	19.31	21.38	18.80	14.43	10.13	8.23	2.79	3.02
Furnishings, household equipment and routine household maintenance	7	4.48	5.35	5.93	6.39	6.81	7.23	7.94	8.08	8.53	8.54	8.32	7.98	7.52
Health	5	0.12	0.28	0.16	0.28	0.24	0.45	0.80	0.72	0.76	1.51	1.64	1.62	1.80
Transports	15	11.19	12.16	12.58	10.90	8.08	9.10	8.13	6.84	5.08	5.31	3.96	-1.24	1.27
Communications	3	1.83	1.39	1.44	0.96	1.03	0.97	0.82	0.73	0.89	1.54	2.09	2.02	2.04
Recreation and culture	8	2.93	2.86	3.64	3.65	4.06	3.89	4.16	4.00	4.76	3.53	4.37	5.58	4.89
Education	1	-1.74	-1.78	-1.84	-1.75	-1.64	2.93	3.22	3.26	3.24	3.37	3.53	3.59	3.68
Restaurants and hotels	8	4.04	5.24	6.12	6.45	6.29	6.68	6.60	6.27	6.44	6.33	6.80	6.68	7.02
Miscellaneous goods and services	10	0.97	1.20	1.23	1.58	1.80	1.95	2.39	2.68	2.81	3.65	3.85	3.86	3.86

Source: Eurostat

Difference with the 2010-2019 average



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.

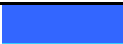
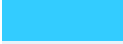
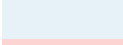


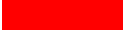
United Kingdom inflation heatmap

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

	Weight (%)	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Total	100	6.78	6.86	7.18	7.87	7.64	7.87	8.82	8.44	8.30	7.82	8.19	7.83	6.43
Food and non-alcoholic beverages	9.3	5.04	6.98	8.12	10.96	11.43	12.91	14.60	14.77	15.17	15.04	16.40	17.51	17.40
Alcoholic beverages, tobacco and narcotics	3.9	-0.34	0.28	-0.08	0.70	0.75	0.81	1.39	-0.63	-1.02	0.39	0.96	0.59	4.42
Clothing and footwear	4.9	7.64	6.32	5.53	6.02	6.97	7.85	7.88	6.88	5.84	5.58	7.43	6.53	6.15
Housing, water, electricity, gas and other fuels	31.4	16.79	16.95	17.13	17.56	17.55	17.79	24.19	24.12	24.11	24.28	24.14	23.61	9.86
Furnishings, household equipment and routine household maintenance	6.3	8.79	9.11	8.60	8.32	8.32	8.96	8.81	8.92	8.08	7.43	6.94	6.31	5.73
Health	1.8	-0.36	-0.78	-0.92	-1.21	0.03	0.89	1.62	2.20	2.50	3.70	4.23	4.53	4.42
Transports	11.1	10.55	10.82	11.98	11.84	9.09	7.66	6.01	4.31	3.57	0.21	-0.01	-2.11	-1.45
Communications	1.9	0.01	-0.02	0.14	0.41	-0.04	-0.37	0.44	-0.23	-0.80	-0.41	0.89	0.88	5.06
Recreation and culture	10.5	4.83	3.93	3.75	4.51	4.21	4.16	4.74	4.24	3.79	3.91	2.96	3.53	5.18
Education	2.6	-2.47	-2.47	-2.47	-2.47	-2.47	-2.72	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82
Restaurants and hotels	9.0	5.12	4.76	5.70	6.09	5.82	6.85	6.72	7.41	8.51	7.93	9.27	8.47	7.36
Miscellaneous goods and services	7.3	1.65	1.70	1.97	2.78	3.34	3.81	3.87	4.15	4.15	4.62	5.35	5.51	5.58

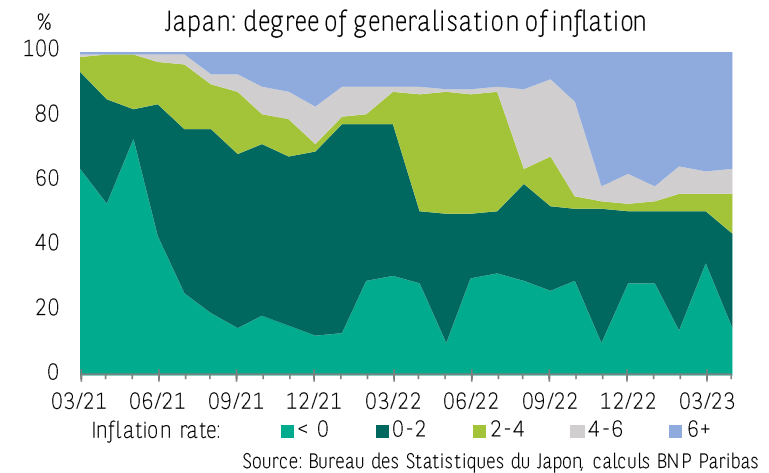
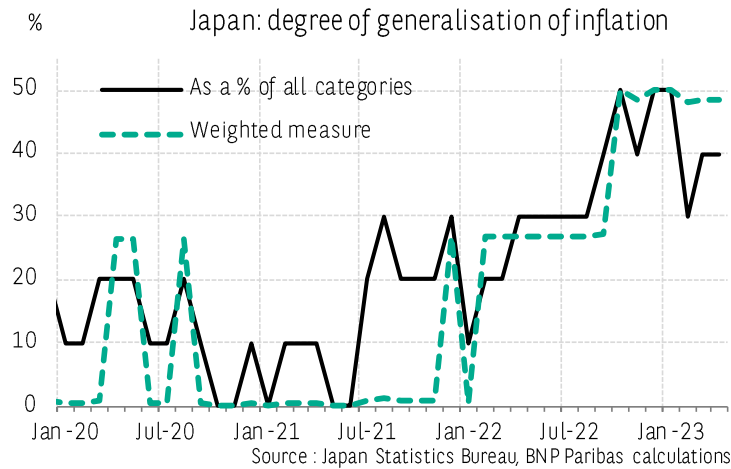
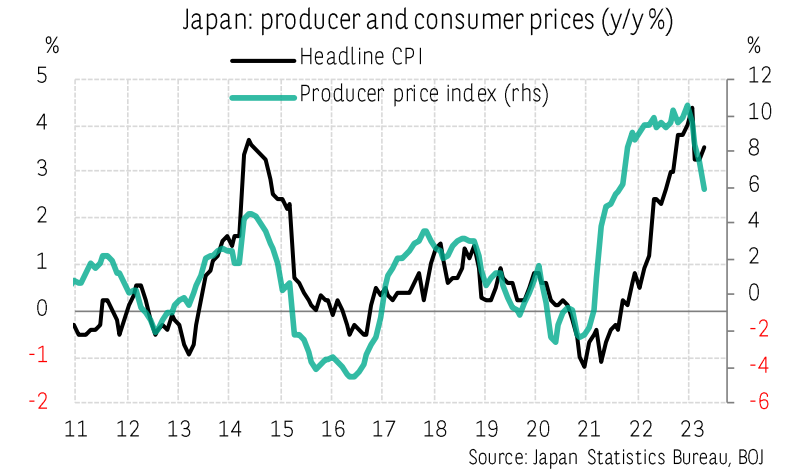
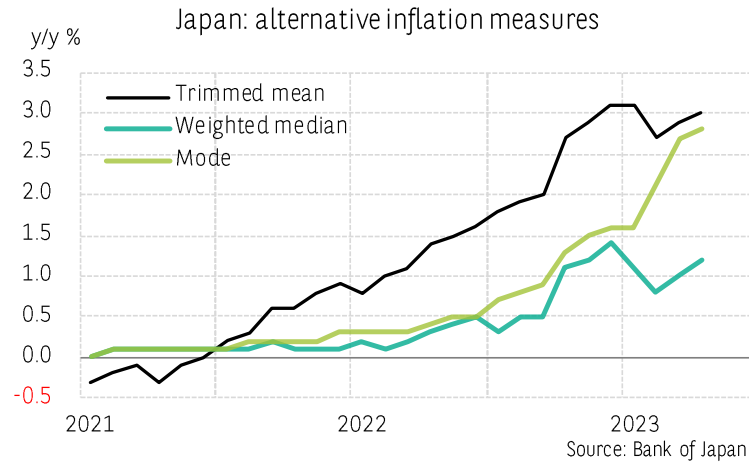
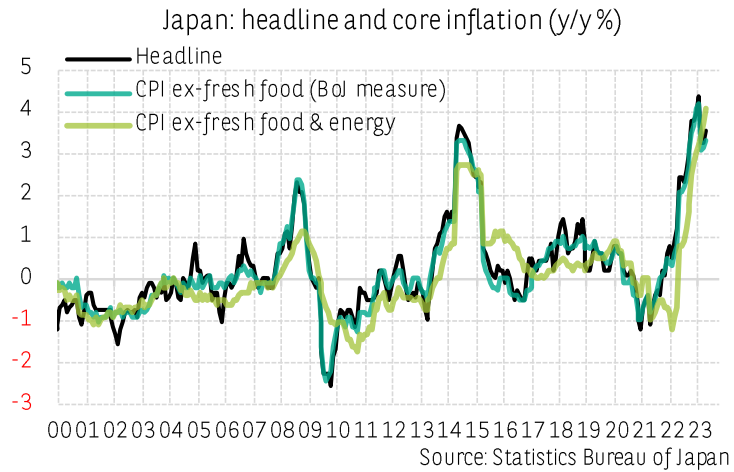
Source : ONS

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	



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.




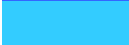
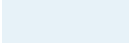


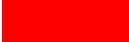
Japan inflation heatmap

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

	Weight (%)	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23
Total	100	1.95	1.94	1.84	2.14	2.54	2.53	3.33	3.33	3.53	3.92	2.81	2.79	3.08
Food	9.3	2.89	3.08	2.65	3.37	3.55	3.09	5.20	5.89	5.89	6.30	6.48	6.66	7.40
Clothing and footwear	3.9	0.20	0.30	0.50	0.82	0.94	1.28	1.96	2.15	2.27	2.63	2.92	3.08	3.22
Housing	4.9	0.54	0.64	0.74	0.74	0.74	0.74	1.23	1.33	1.43	1.43	1.43	1.43	1.33
Fuel, light and water charges	31.4	13.96	12.67	12.27	12.98	13.86	13.21	12.93	12.42	13.40	13.23	-2.00	-4.47	-5.58
Furniture and household utensils	6.3	3.23	4.51	4.89	4.87	5.36	7.65	7.84	8.31	8.48	8.60	9.62	10.39	10.99
Medical care	1.8	-1.03	-1.03	-0.93	-0.93	-1.03	-0.83	-0.13	-0.03	-0.03	0.17	0.58	0.98	1.39
Transportation and communication	11.1	-0.57	-1.11	-1.00	-0.68	0.17	0.28	1.70	1.26	1.69	1.80	1.37	1.14	1.36
Culture and recreation	1.9	1.47	1.56	1.08	0.67	1.54	2.06	0.77	-0.21	-0.11	1.47	1.46	2.14	2.99
Education	10.5	1.50	1.40	1.30	1.30	1.30	1.20	1.20	1.20	1.20	1.20	1.60	1.50	1.89
Miscellaneous goods and services	2.6	-0.03	-0.13	0.07	-0.13	0.07	-0.03	-0.43	-0.34	-0.04	-0.04	0.16	0.15	-0.04

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	

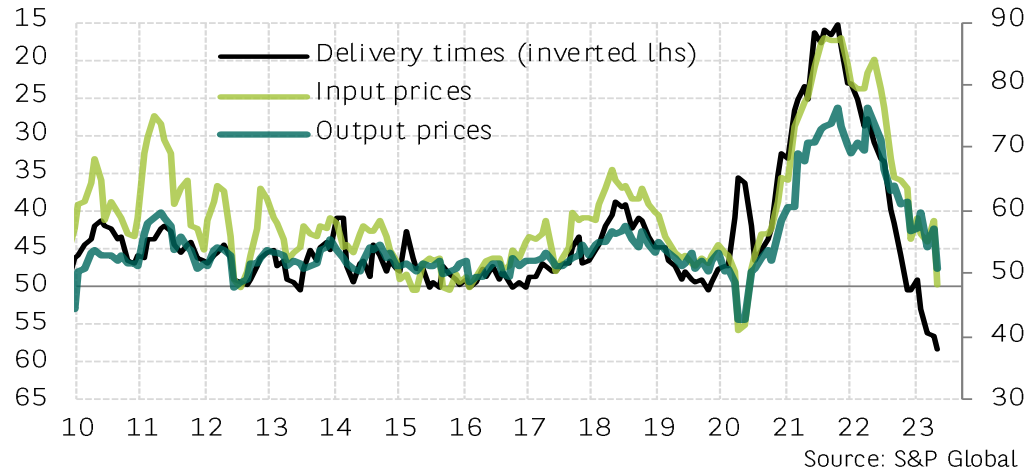


Inflation and survey data

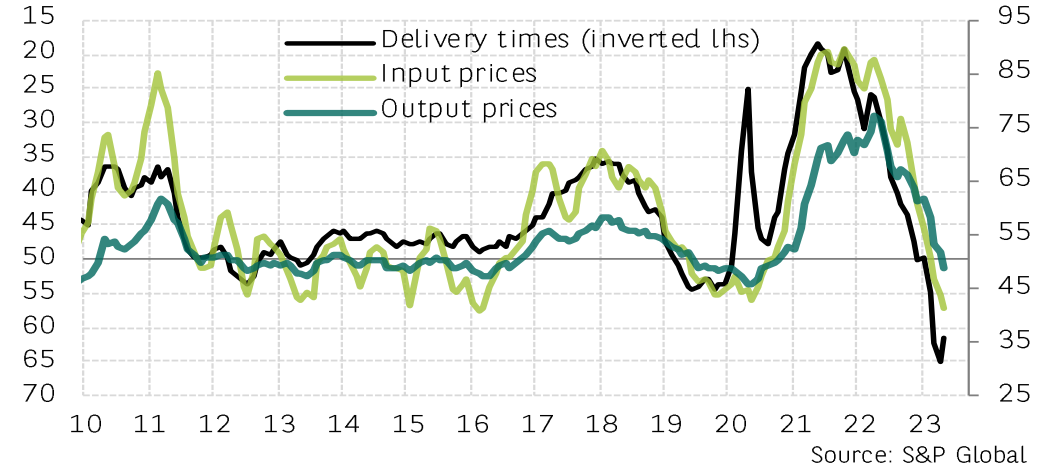


PMI surveys: an indication of inflationary pressures (1)

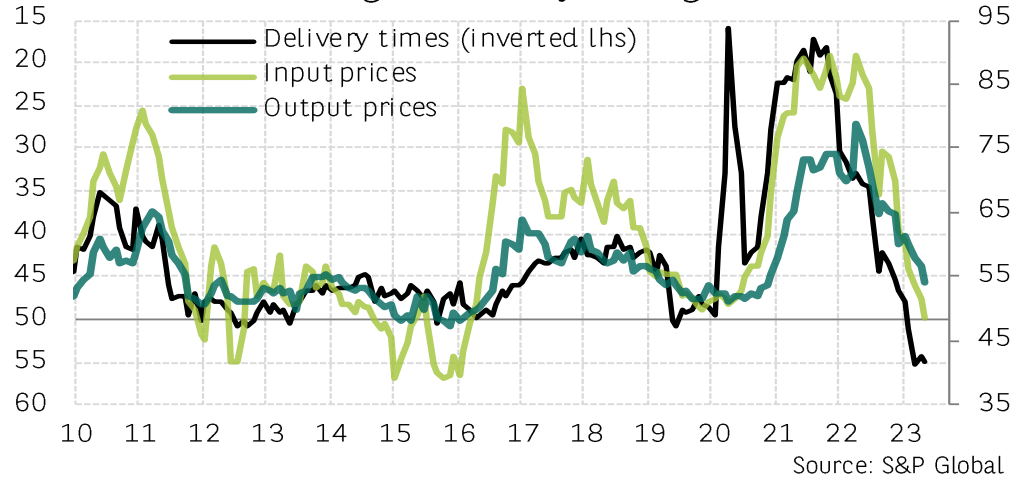
United States: manufacturing PMI indices



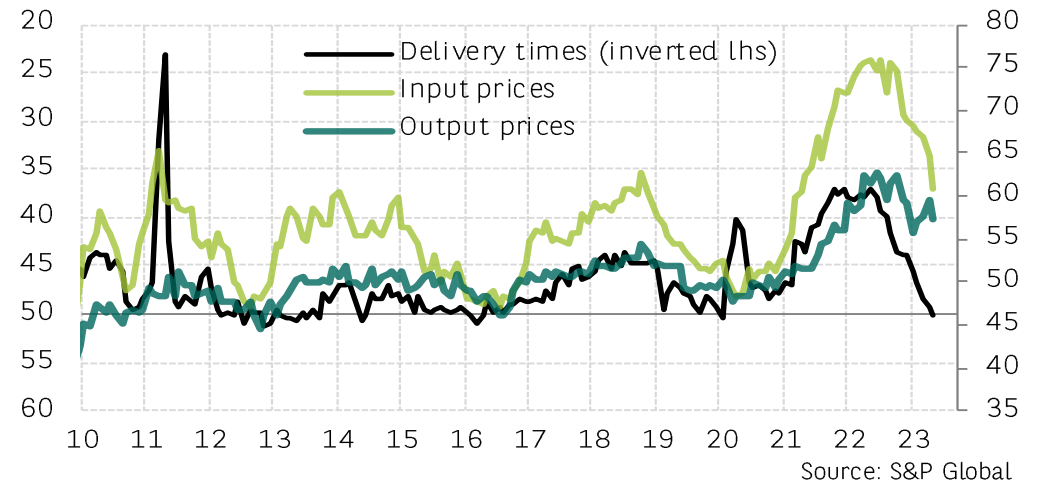
Eurozone: manufacturing PMI indices



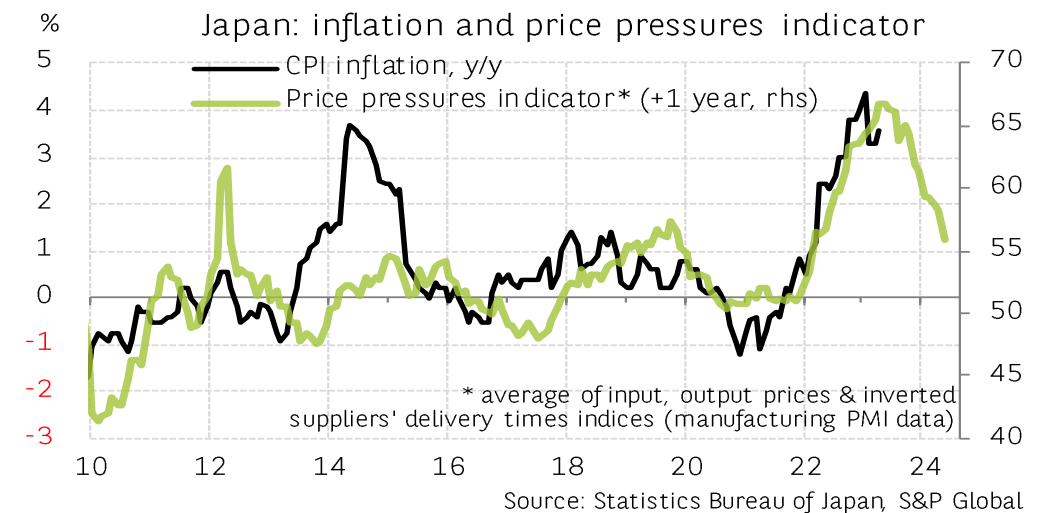
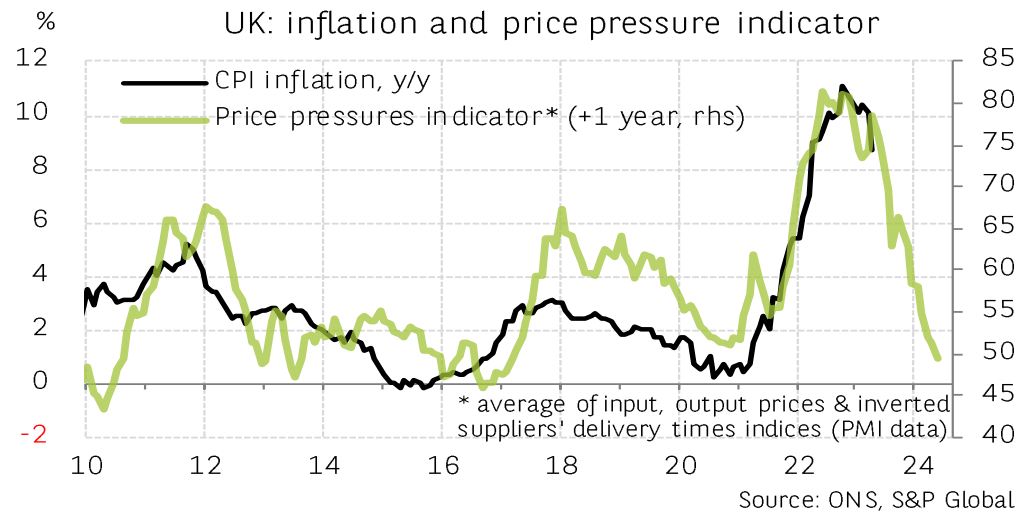
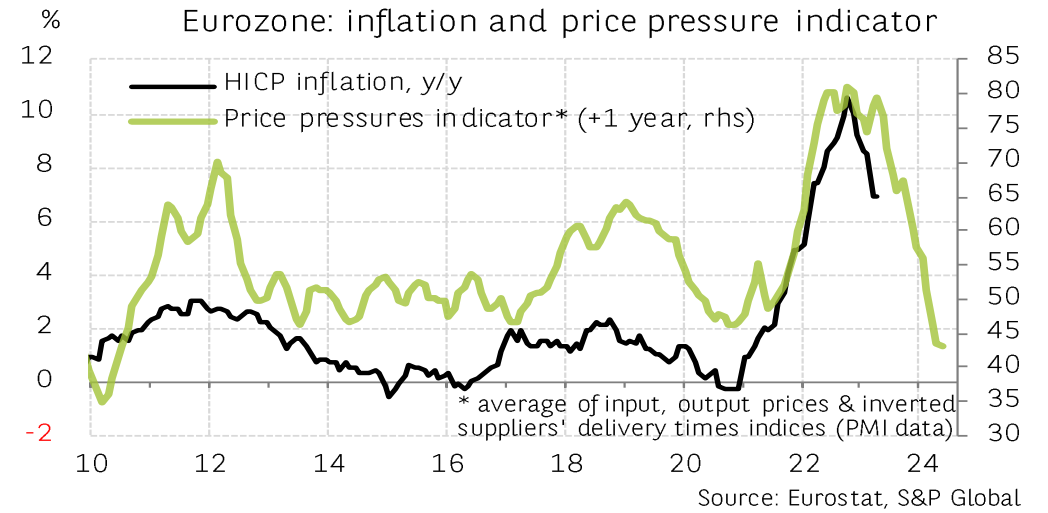
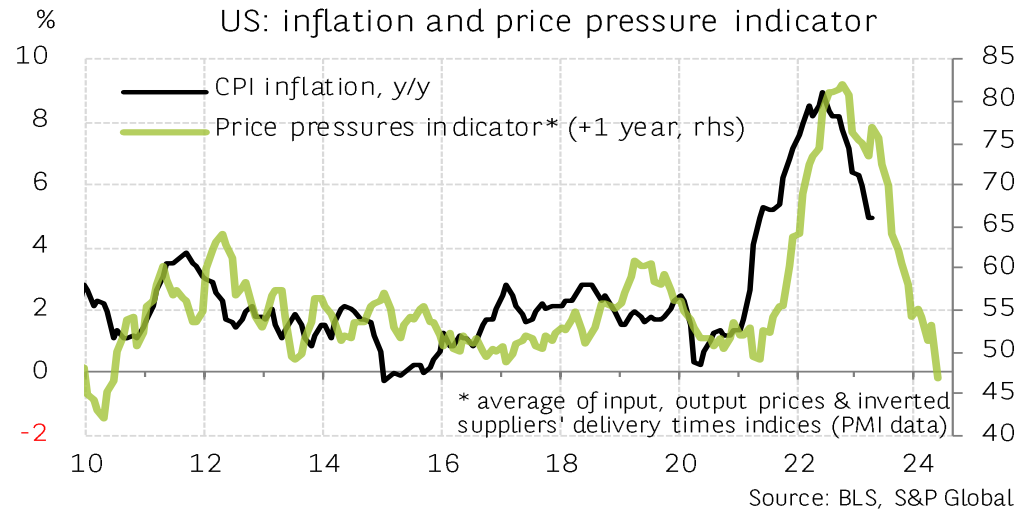
United Kingdom: manufacturing PMI indices



Japan: manufacturing PMI indices



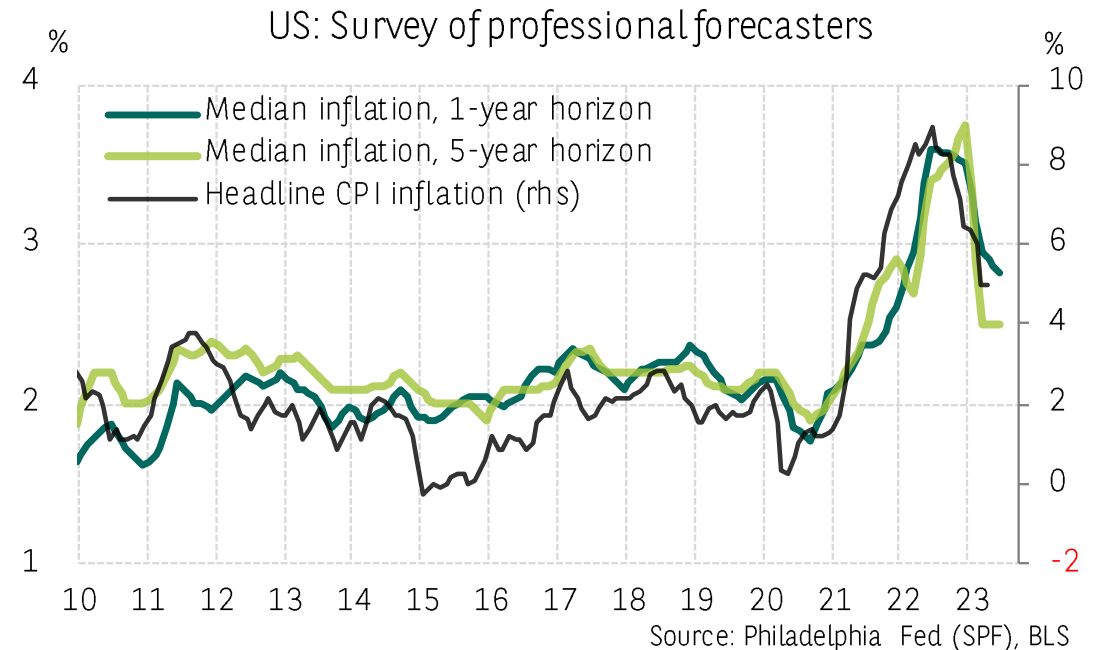
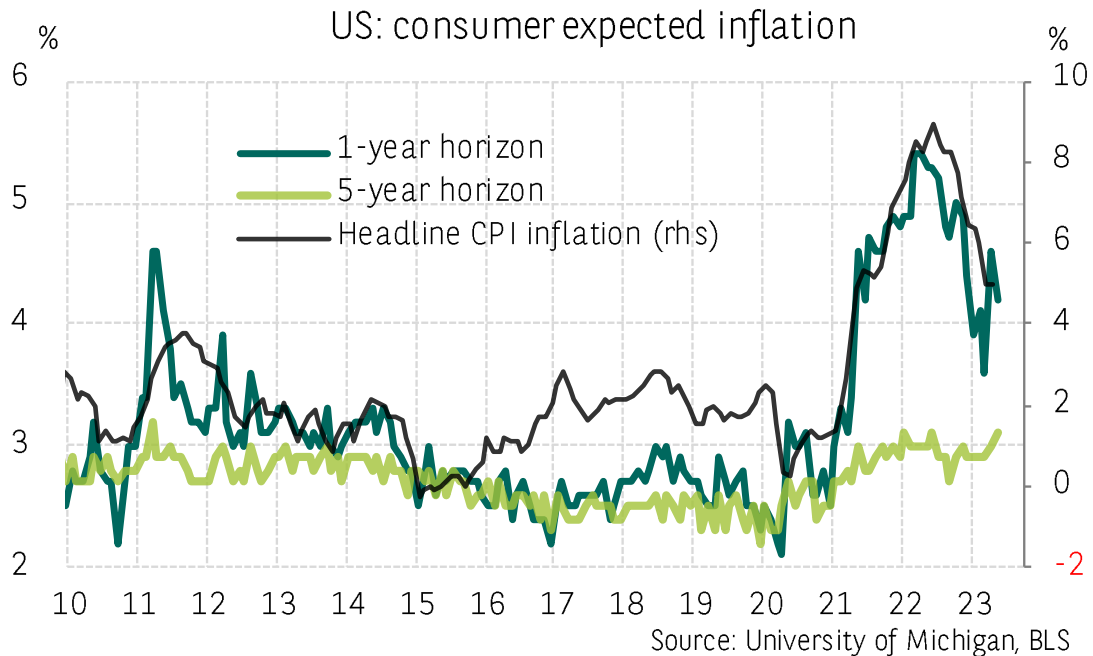
PMI surveys: an indication of inflationary pressures (2)



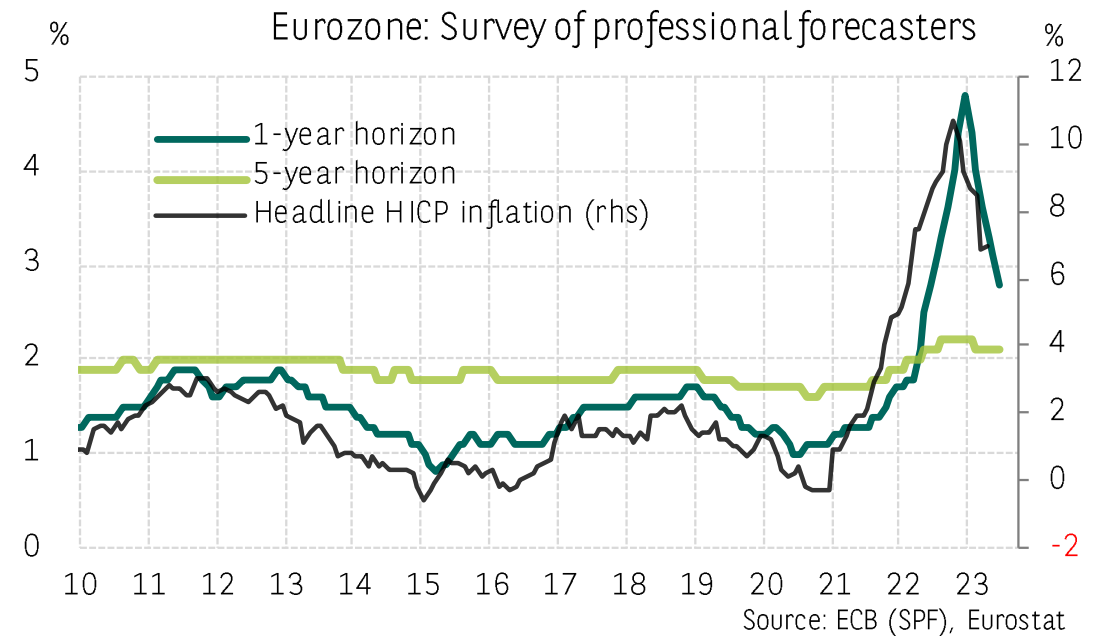
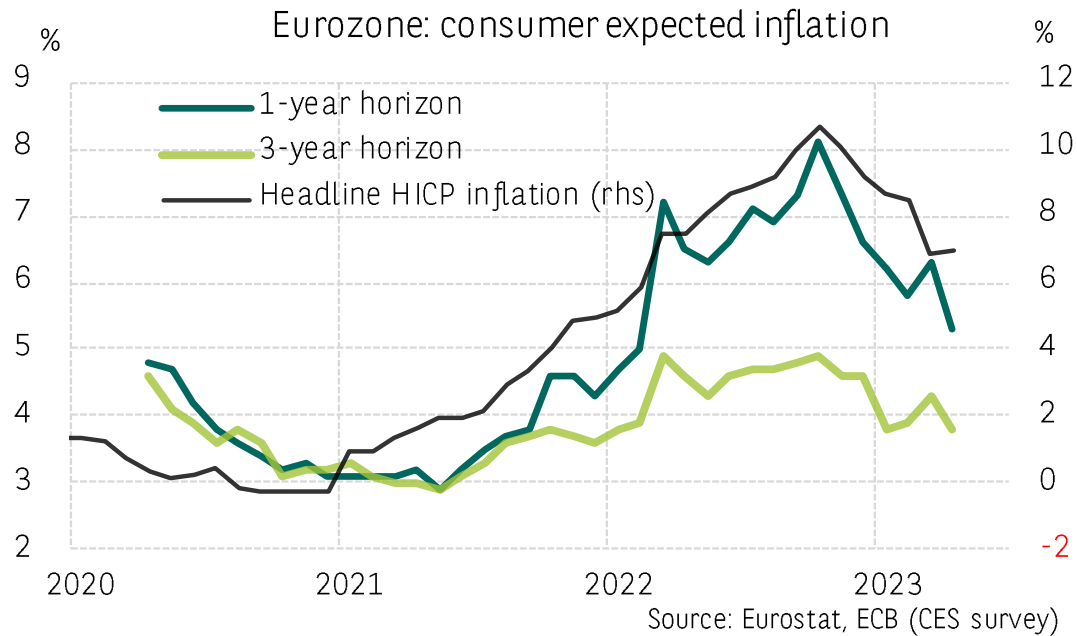
Inflation expectations (households, forecasters, markets)



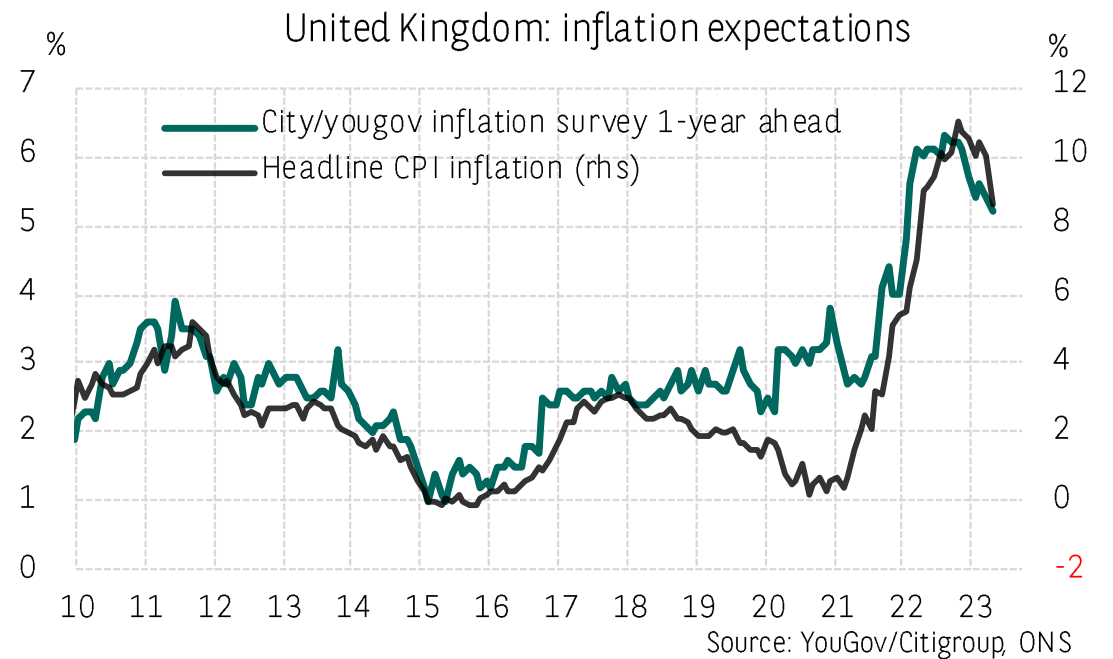
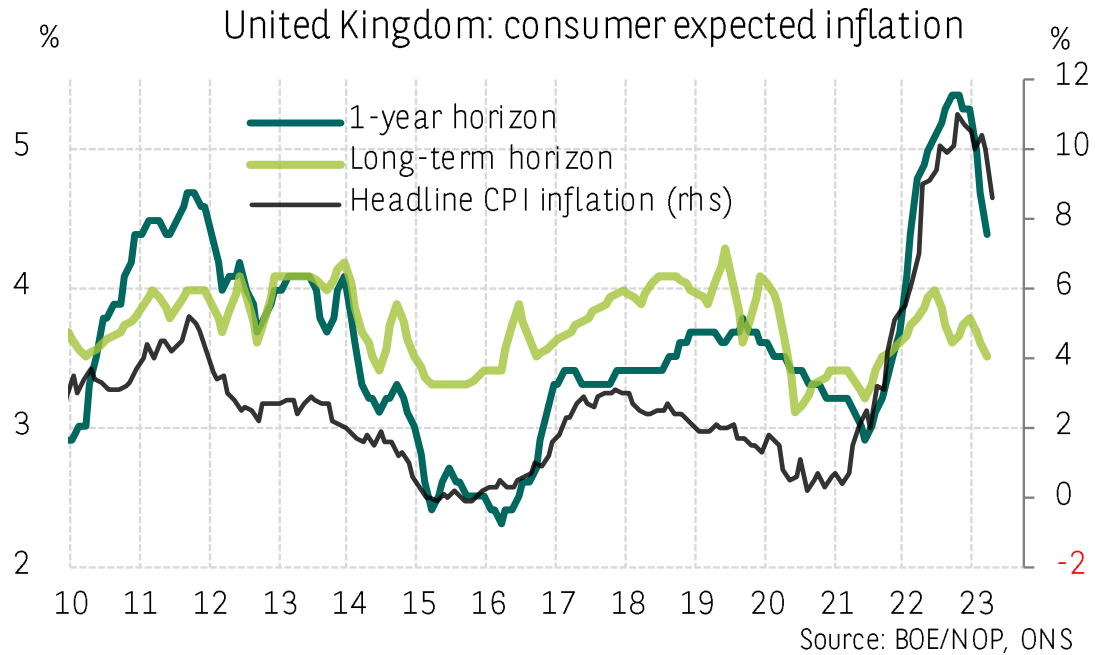
Inflation expectations in the United States



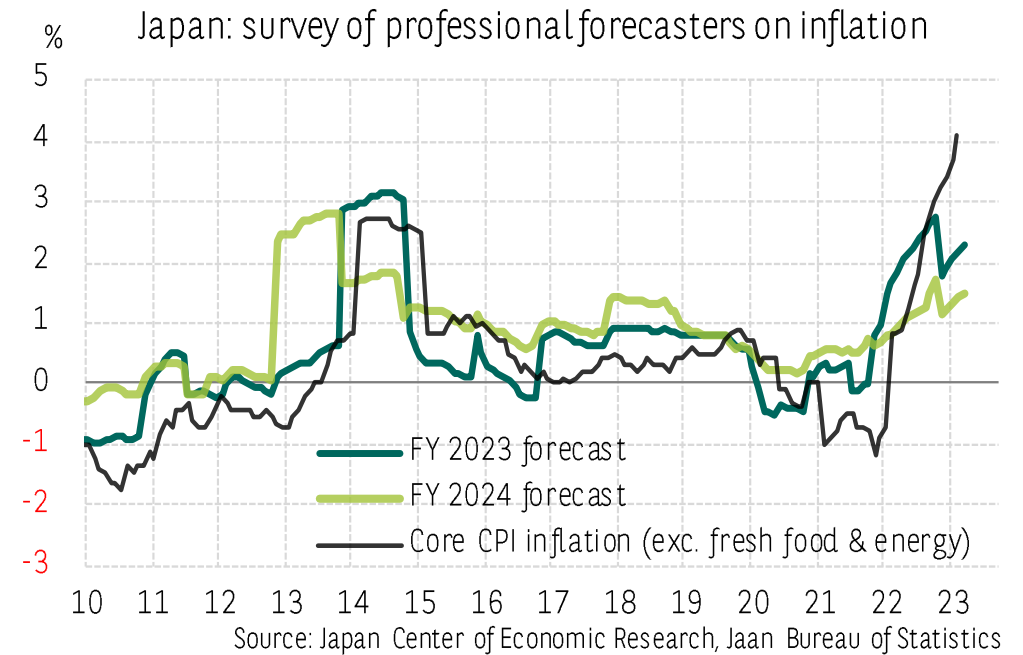
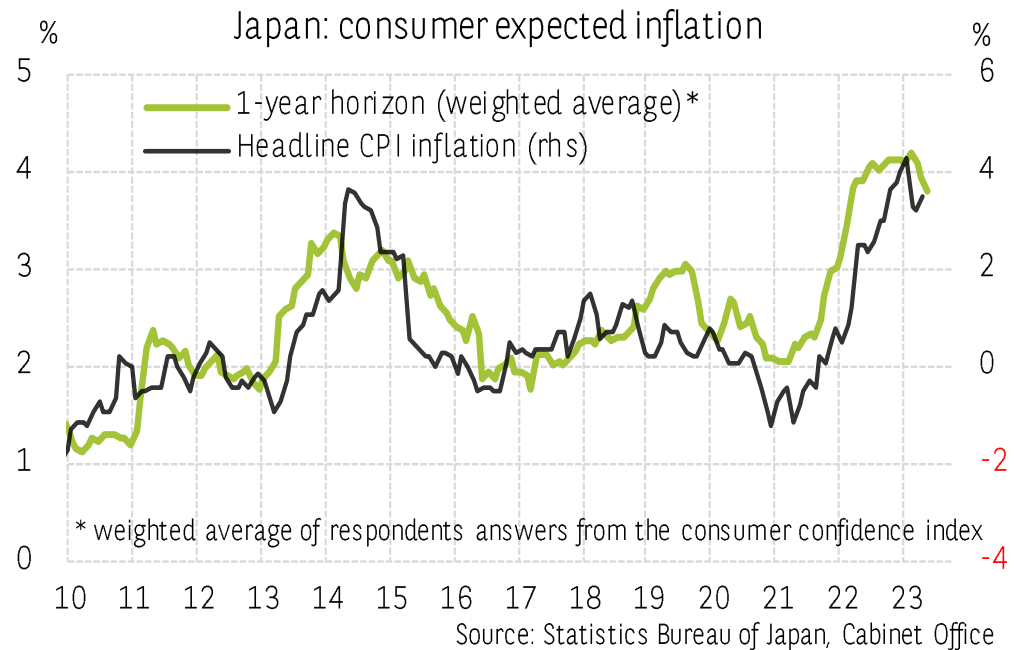
Inflation expectations in the Eurozone



Inflation expectations in the United Kingdom



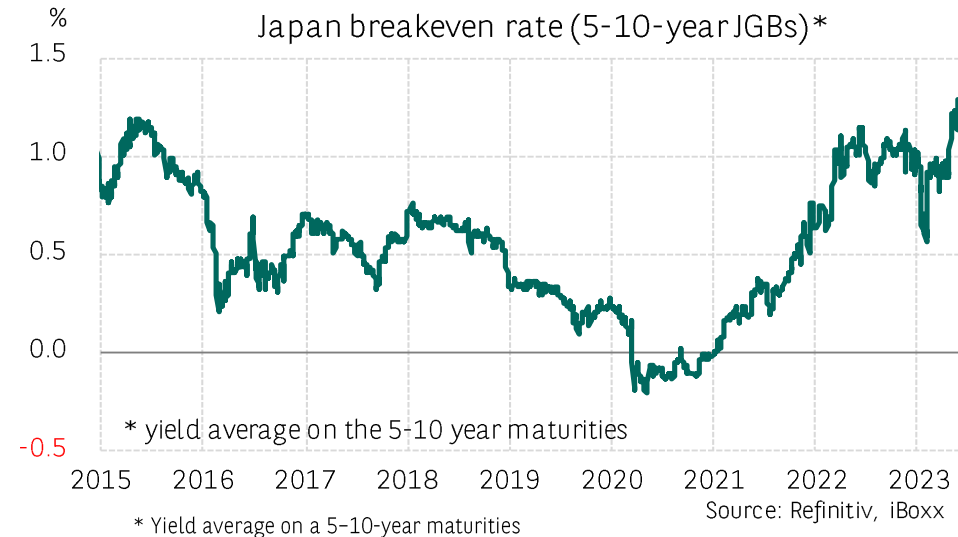
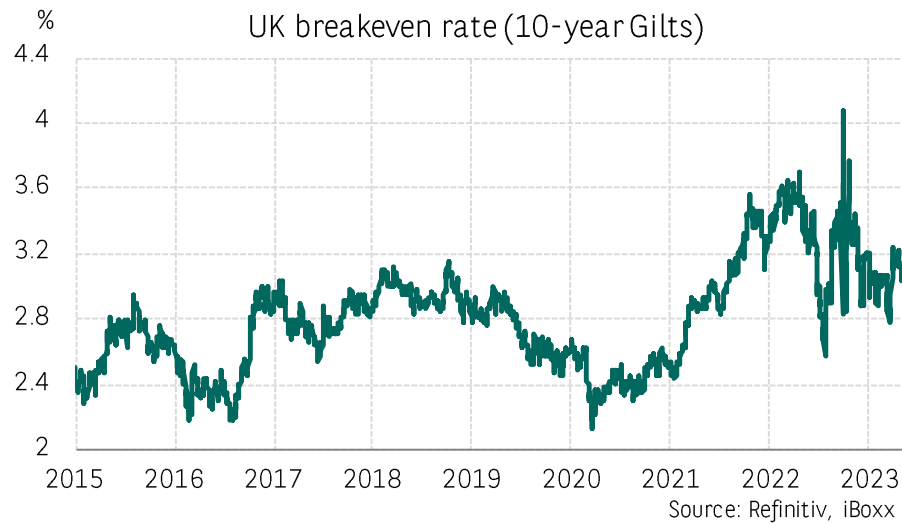
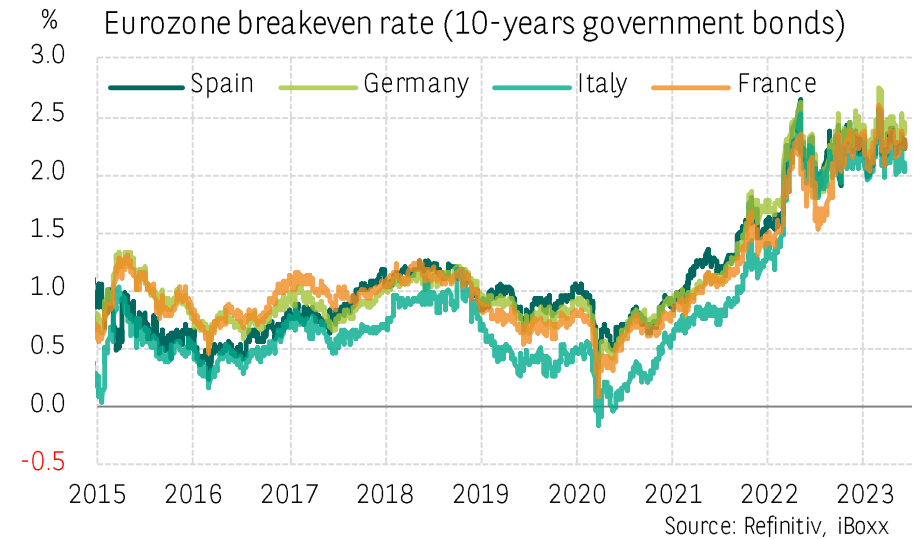
Inflation expectations in Japan



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



Market Expectations: Breakeven inflation rate



Raw materials

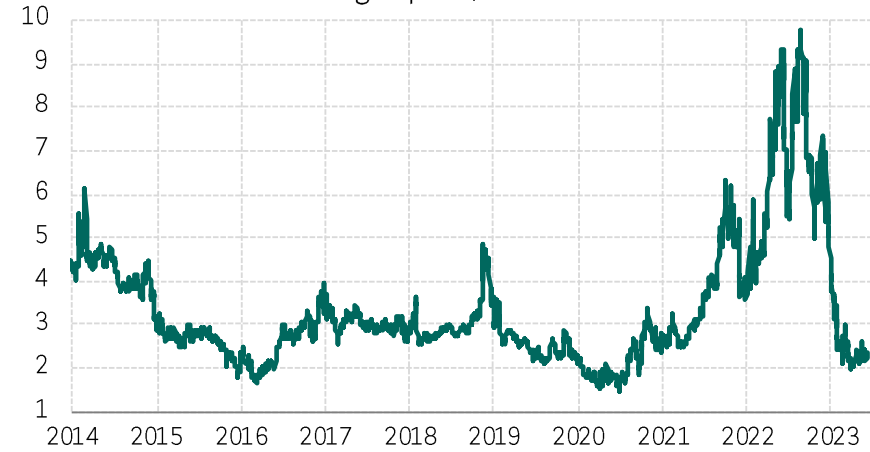


Raw materials

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

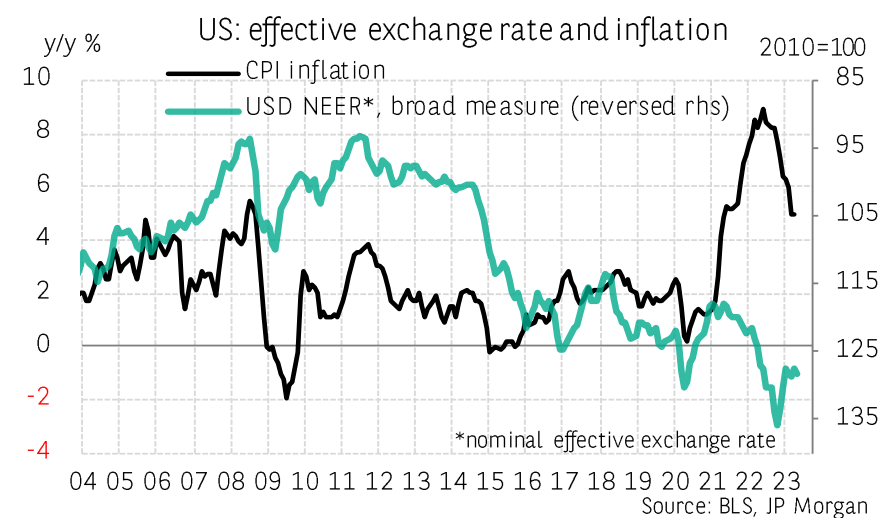
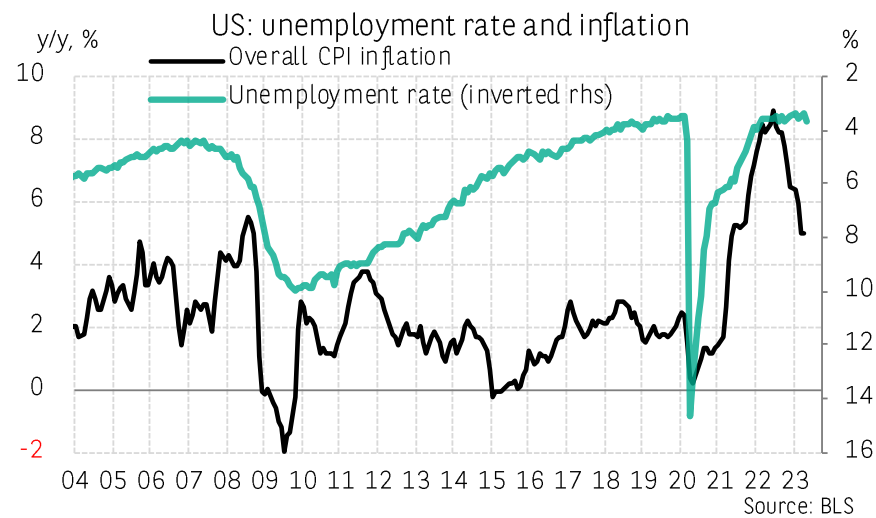
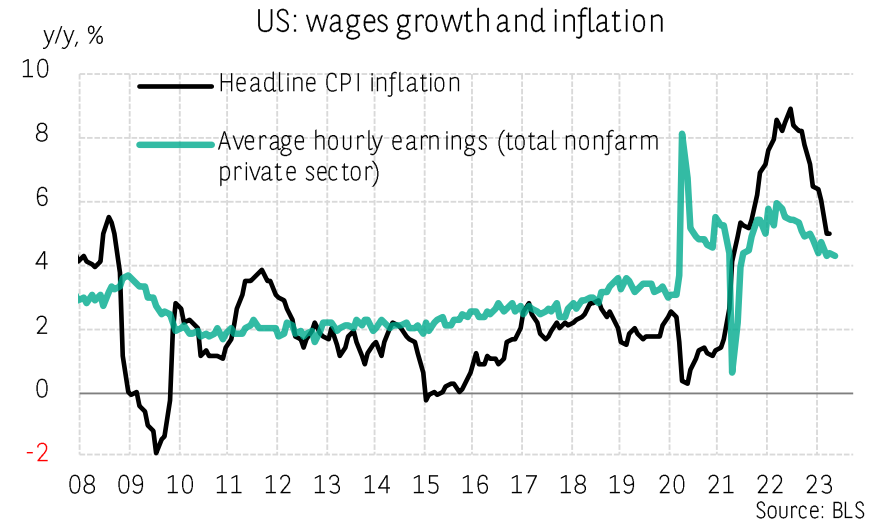
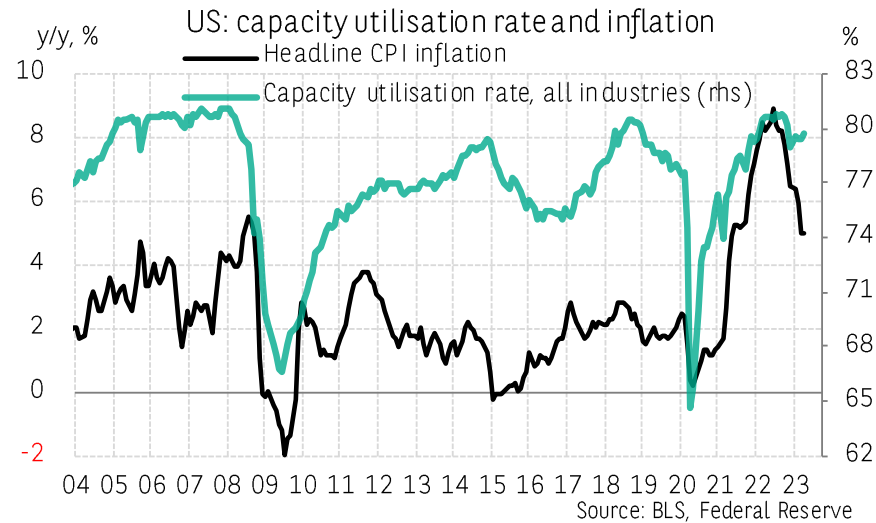


Macroeconomic determinants of inflation

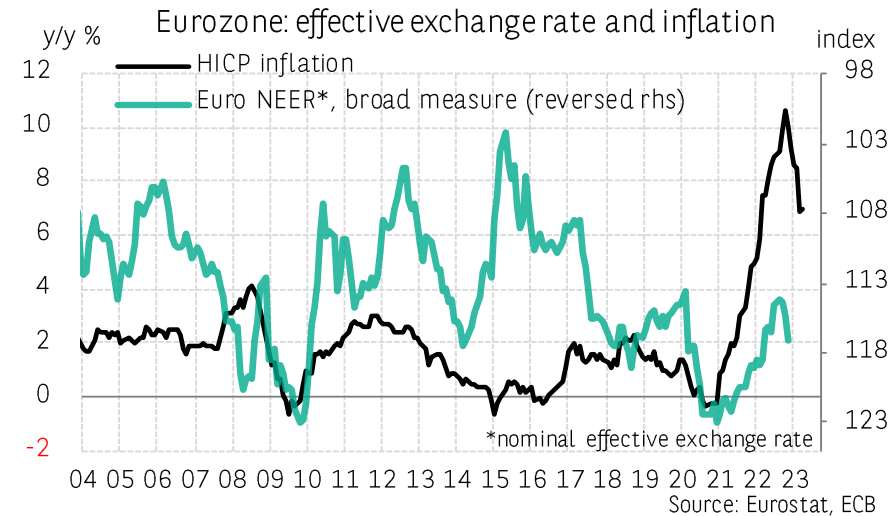
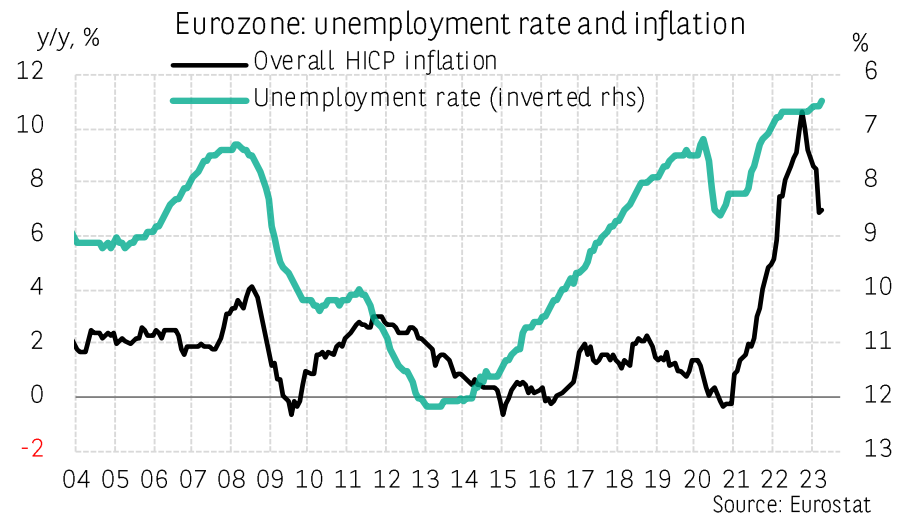
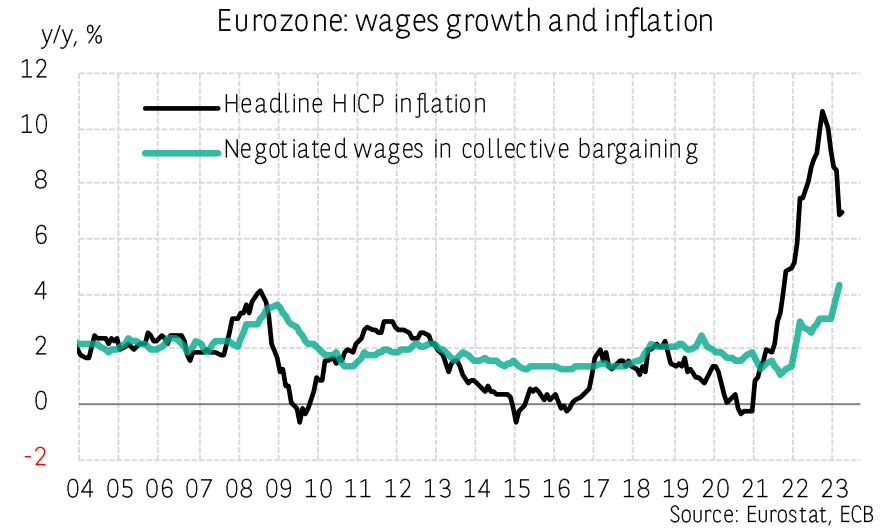
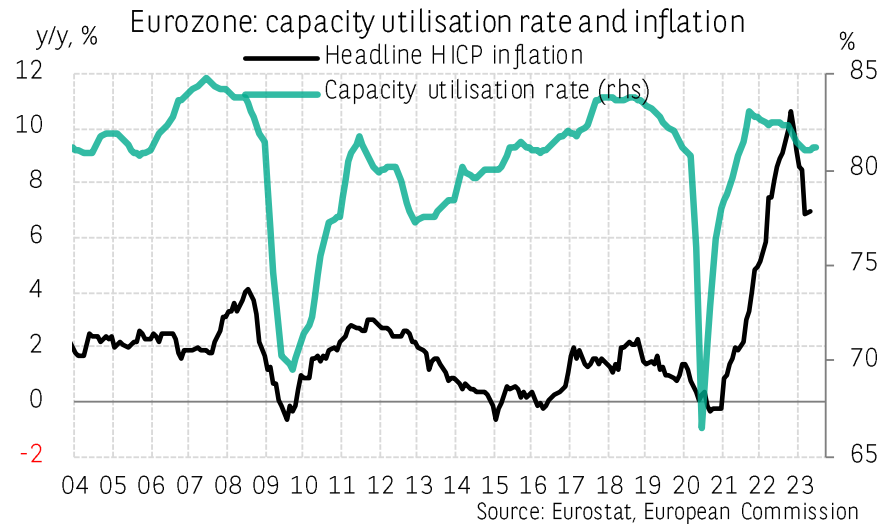
(wages, unemployment rate, capacity utilisation rate, exchange rate)



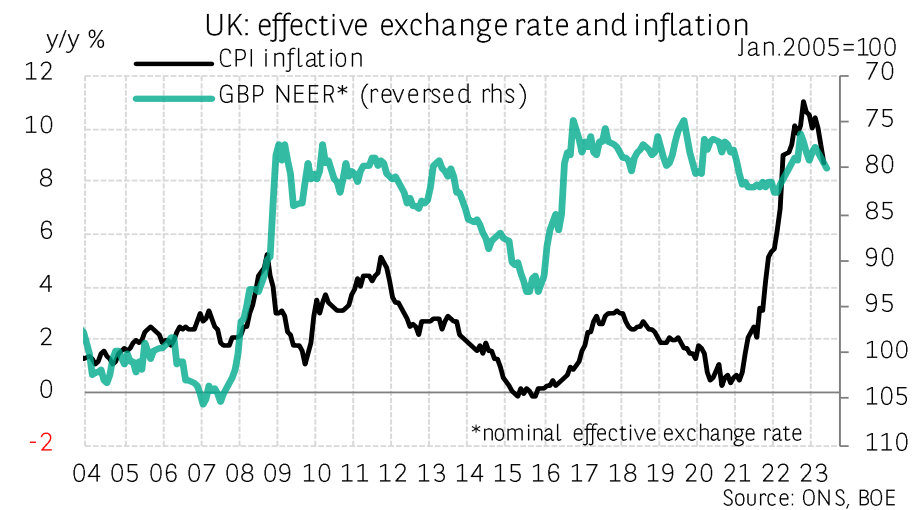
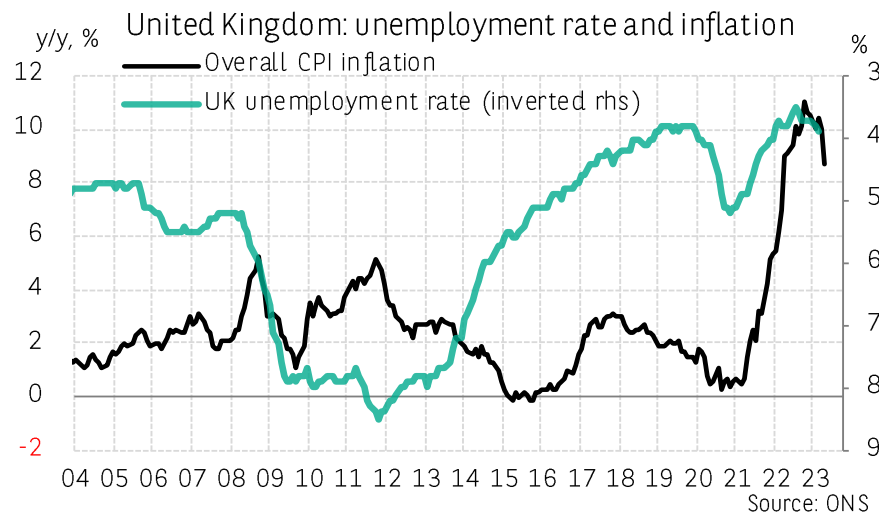
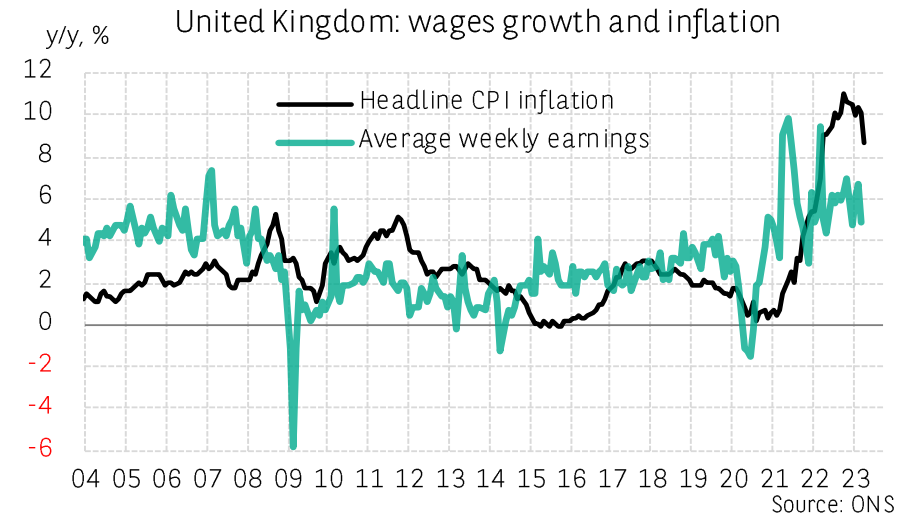
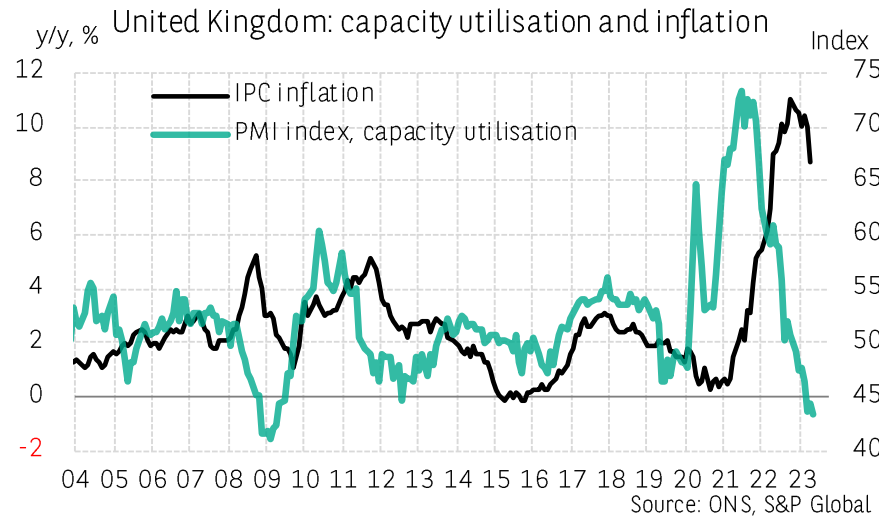
Determinants of inflation in the United States



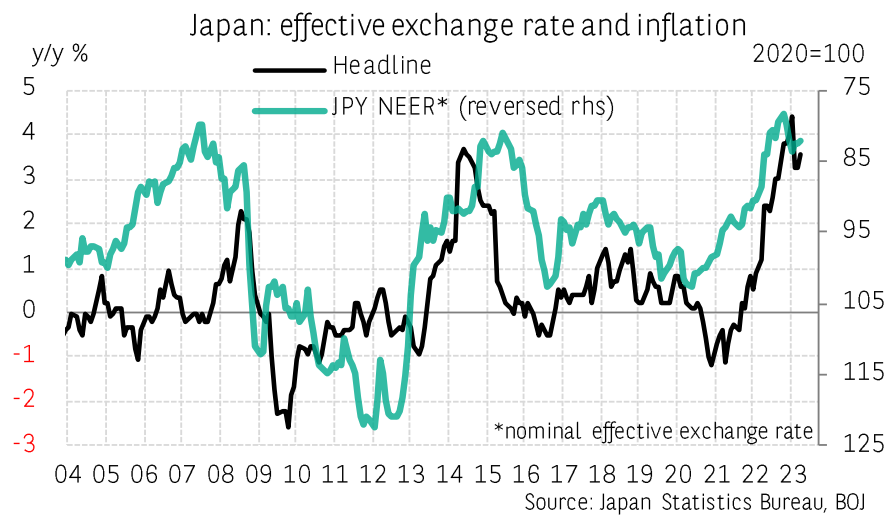
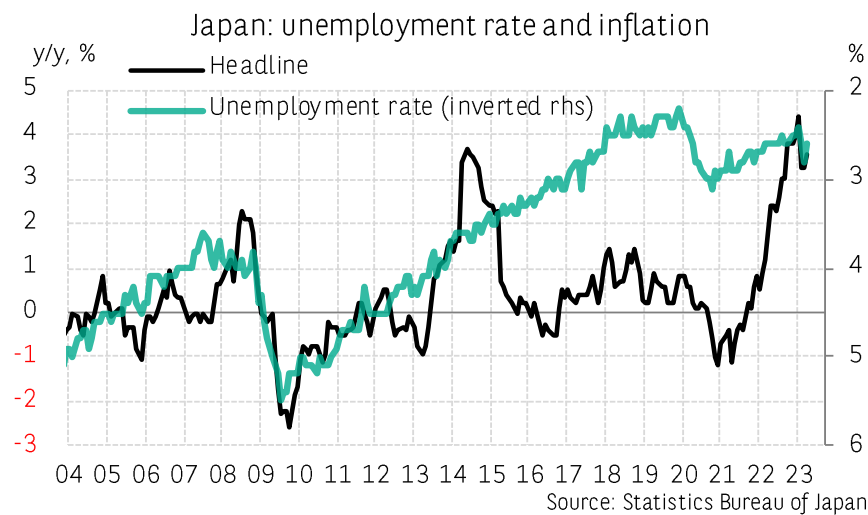
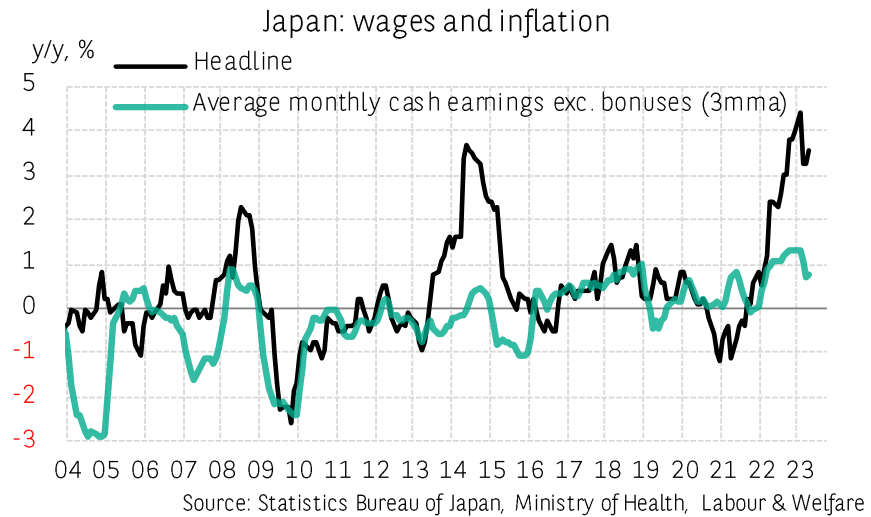
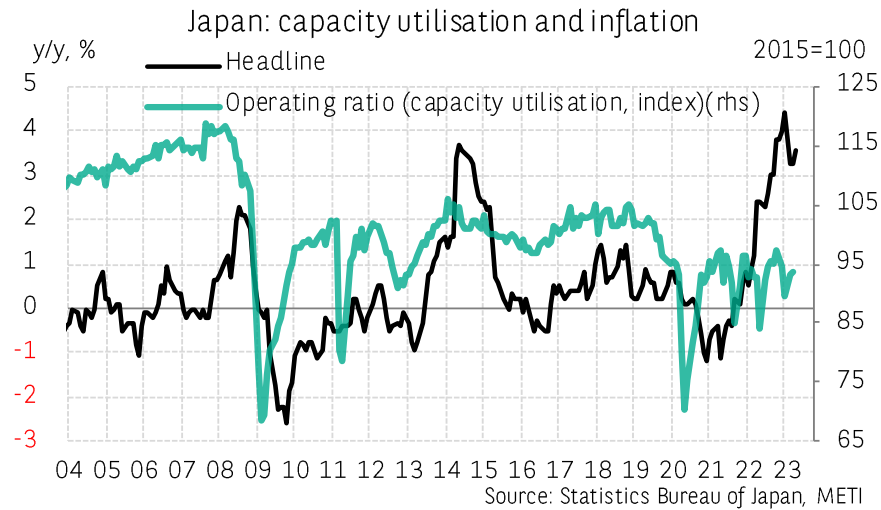
Determinants of inflation in the Eurozone



Determinants of inflation in the United Kingdom



Determinants of inflation in Japan



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