



# ECOCHARTS

May 2023

INFLATION TRACKER

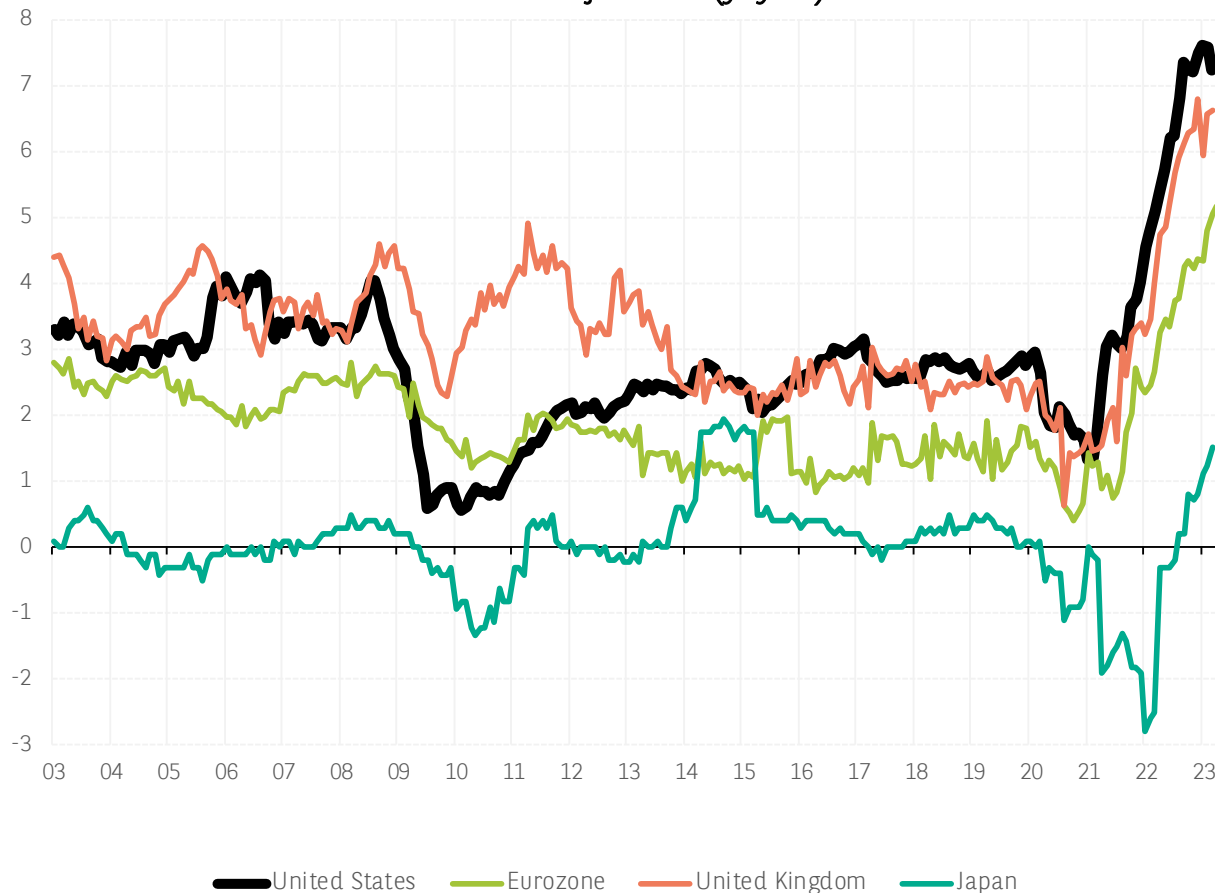


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# CHART OF THE MONTH

## Services inflation (y/y %)



Sources : BLS, Statistics Bureau of Japan, Eurostat, BNP Paribas

Central banks continue to face high inflation, which has spread to almost all items in the consumer price index (CPI). While food inflation is still one of the main drivers of the CPI increase, the momentum in services continues to be strong. Services inflation slowed slightly in the US in March (+7.3% y/y), whereas it accelerated in the UK (+6.6%), the Eurozone (+5.2%) and, to a lesser extent, in Japan (+1.5%).

Higher rent prices largely contribute to services inflation in the UK and the US. However, in all regions, other services items are rising significantly too, including transport services (mainly in the US), leisure and culture (euro area, UK), education (Eurozone, UK), and health (UK).



# KEY POINTS: CORE INFLATION STAYS ELEVATED

- High inflation is affecting almost all consumer price index (CPI) items. In Europe and the US, more than two-thirds of CPI components recorded an annual increase of over 4% in March. The UK is faring worst with 80% of components affected, while in Japan the figure is over 50% – unheard of in the country's recent past.
- Eurozone inflation rose from 6.9% in March to 7.0% in April, according to Eurostat's preliminary estimate. The significant drop in energy prices in April 2022 (-4.0% m/m) led to an adverse base effect in April 2023, which contributed to the rebound in inflation for this component. A decline is likely in May: in particular, the “energy” HICP component fell again on a monthly basis in April (-0.8% m/m), down for the third consecutive month.
- Underlying price pressures continued to build in the first quarter of 2023 in the euro area, although the increase slowed slightly to 5.6% in April (HICP excluding energy, food, alcohol, and tobacco). Core inflation in the US edged higher to 5.6% y/y in March, following a slowdown in previous months.
- Food inflation continues to be one of the main drivers of inflation in all the regions surveyed, along with household goods and leisure and cultural activities (see heatmaps). However, even though food prices are rising strongly in the US (+8.5% y/y in March), their contributions to headline inflation is less than in the Eurozone or Japan because of the significant weight of the “housing” item in the US (also up sharply by +8.2% y/y in March, CPI measure).
- The situation is worse in the UK, where the surge in energy prices persists and contributed almost a quarter to headline inflation in March. Consumer price inflation in the country is still above 10% y/y, which is by far the highest level among G7 economies. This strong pace is being fueled by significant wage increases (+7.0% y/y in February), which in turn are supported by a tight labour market.
- Nevertheless, the PMI surveys give hope for a more pronounced disinflation phase to come: the price pressure indicator (aggregate of PMI indicators) has fallen sharply in recent months in all the countries covered. This corroborates the sharp slowdown in producer prices in recent months.
- Household inflation expectations for the year ahead jumped in the US to 4.6% in April according to the University of Michigan survey, while they stabilised at around 4% in Japan (JCER). The figures for March in the Eurozone will be released by the ECB on 11 May. Forecasters have more measured expectations, with inflation in the US, Japan and the Eurozone not expected to exceed 3% in a year's time. Market expectations remain stable, except in Japan where the break-even inflation rate, which is structurally lower than in Europe or the US, has reached its highest level since 2014.

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**General dynamics of inflation**

**Inflation and survey data**

**Inflation expectations (households, forecasters, markets)**

**Raw materials**

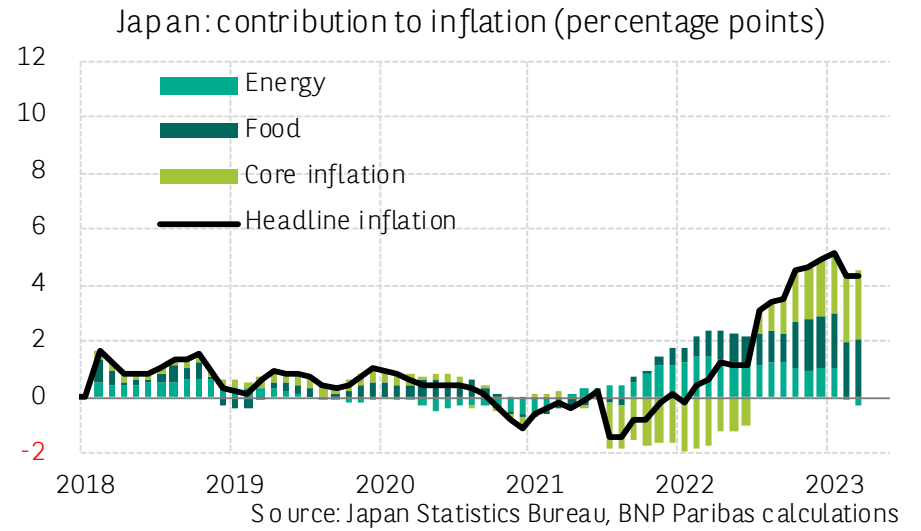
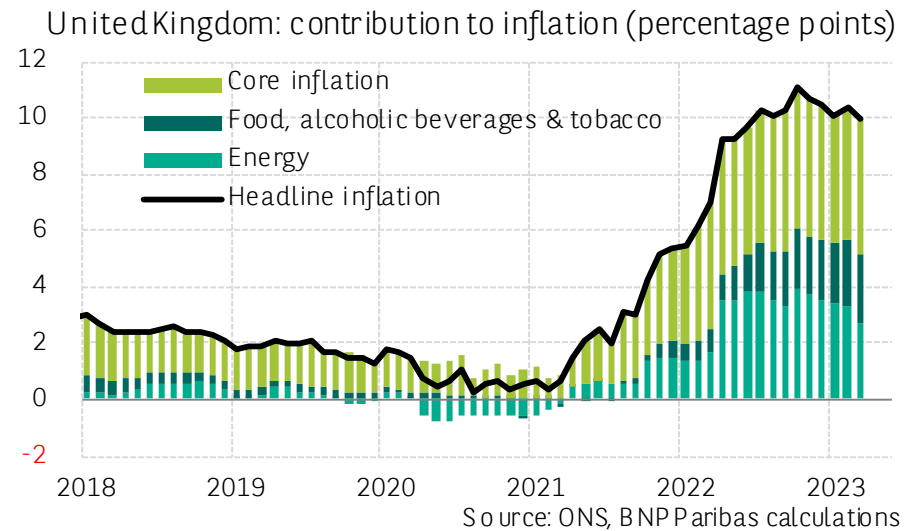
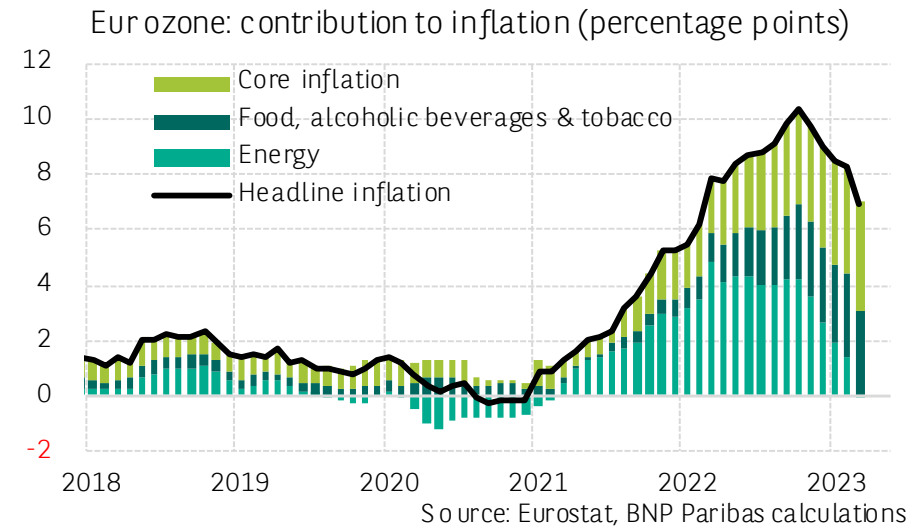
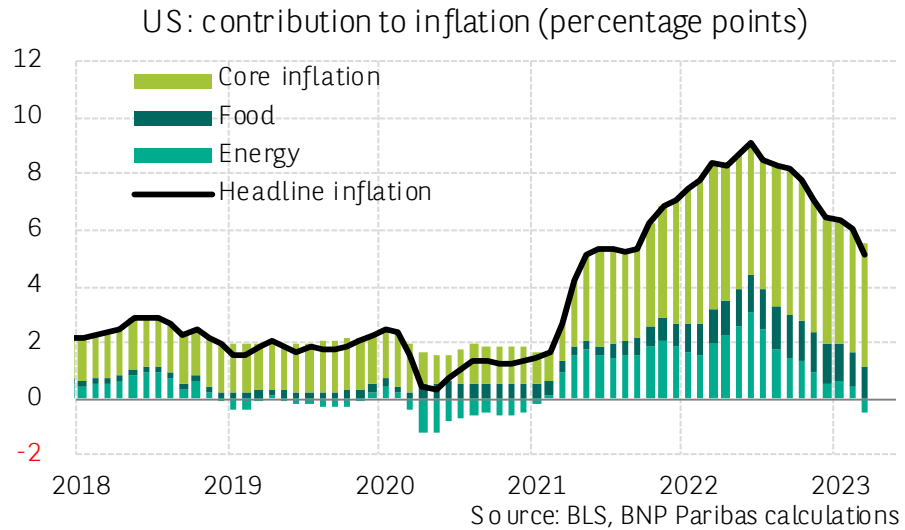
**Macroeconomic determinants of inflation (wages, unemployment rate, capacity utilization rate, exchange rate)**



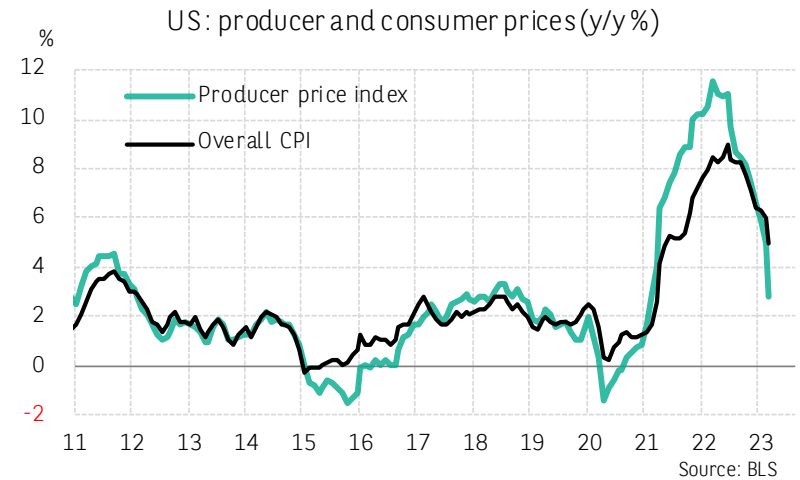
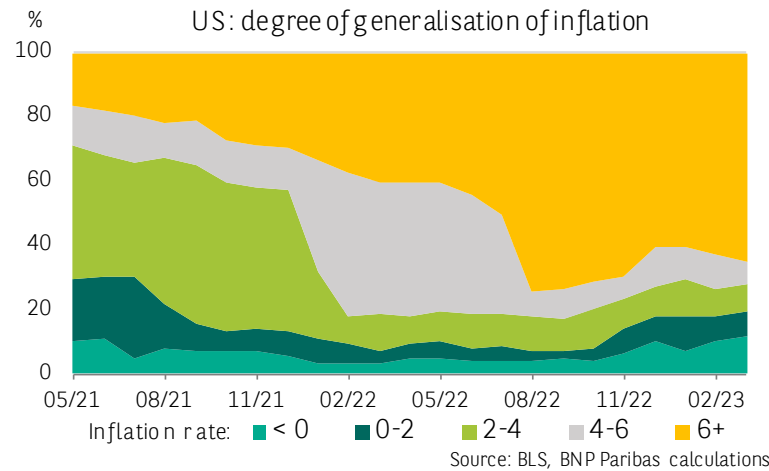
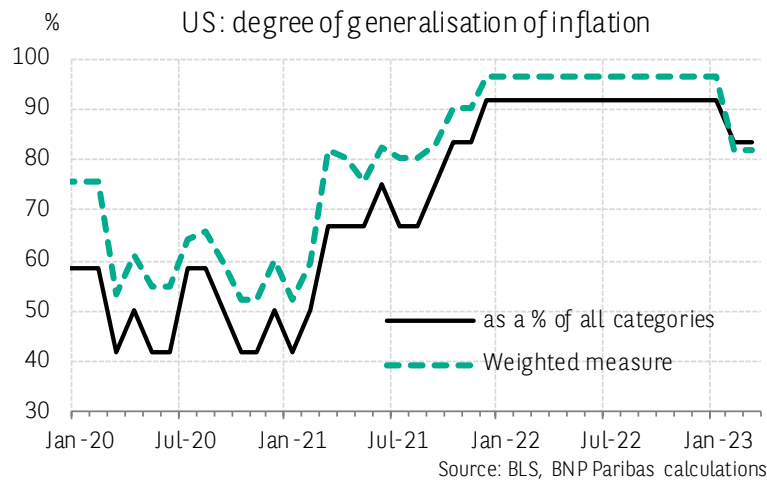
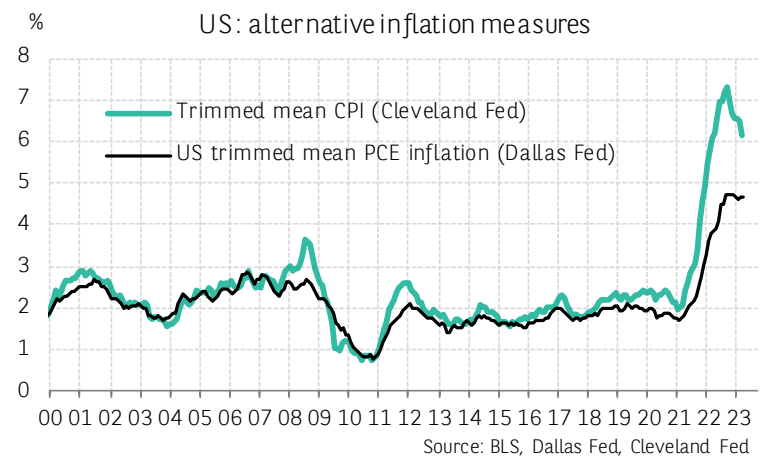
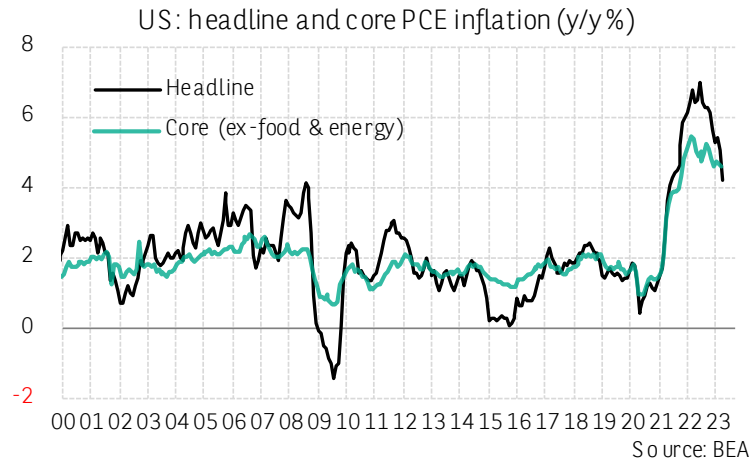
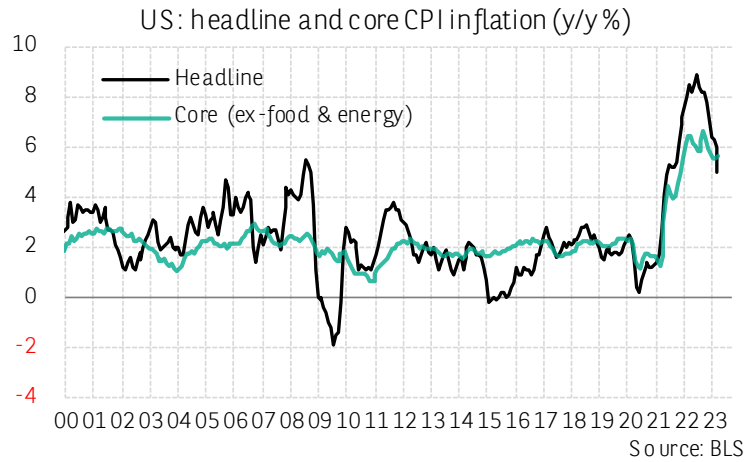
# General dynamics of inflation



# 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.



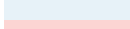



# United States inflation heatmap

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

	Weight (%)	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
<b>Total</b>	<b>100</b>	6,74	6,46	6,73	7,16	6,64	6,46	6,44	5,99	5,36	4,67	4,58	4,21	3,22
Food and non-alcoholic beverages	7,6	8,82	9,65	10,82	11,04	11,96	12,34	11,73	11,25	10,76	10,69	10,16	8,96	7,13
Alcoholic beverages, tobacco and narcotics	1,2	2,52	2,75	3,02	3,07	3,07	3,67	3,22	2,82	3,04	2,98	3,37	3,06	2,95
Clothing and footwear	2,7	6,75	5,56	5,15	5,35	5,23	5,11	5,18	3,91	3,13	2,46	2,41	2,56	2,53
Housing, water, electricity, gas and other fuels	36,1	2,93	3,23	3,83	4,49	4,71	5,18	5,52	5,37	5,46	5,87	6,02	5,98	5,54
Furnishings, household equipment and routine household maintenance	4,0	10,45	10,26	9,28	10,07	10,68	10,28	9,60	8,94	8,04	7,04	6,01	5,83	5,22
Health	7,4	-0,26	-0,21	-0,02	0,46	0,39	0,59	0,90	0,61	0,41	0,83	0,19	-0,01	-0,30
Transports	14,5	24,64	21,72	21,30	21,72	17,64	13,78	12,37	10,49	6,55	1,82	1,54	0,18	-3,82
Communications	3,3	1,33	1,05	0,79	0,56	0,40	0,00	-0,62	-0,91	0,48	0,62	1,11	1,13	1,67
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	-0,47	-0,27	-0,04	0,45	0,28	0,31	1,27	1,16	1,39	1,62	0,05	-0,18	0,14
Restaurants and hotels	7,8	6,87	6,67	6,94	5,99	4,64	5,40	5,52	6,06	5,58	5,35	5,41	4,76	4,04
Miscellaneous goods and services	6,1	1,32	1,83	2,53	3,84	4,70	5,74	7,05	6,90	6,57	5,85	5,27	4,41	3,80

Source: BLS

Difference with the 2010-2019 average

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

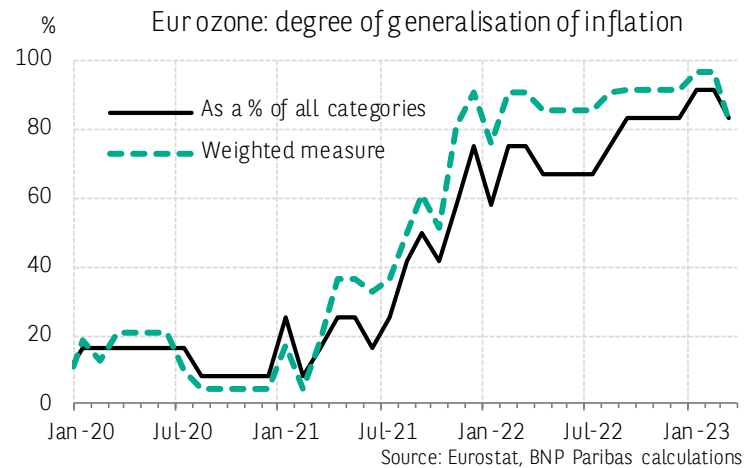
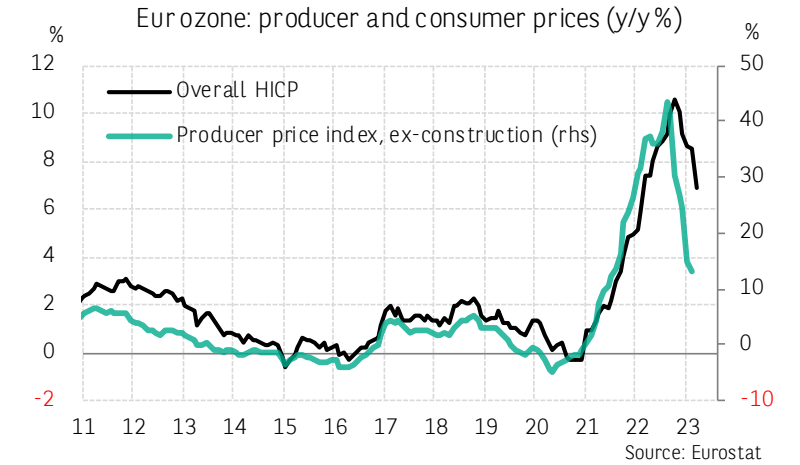
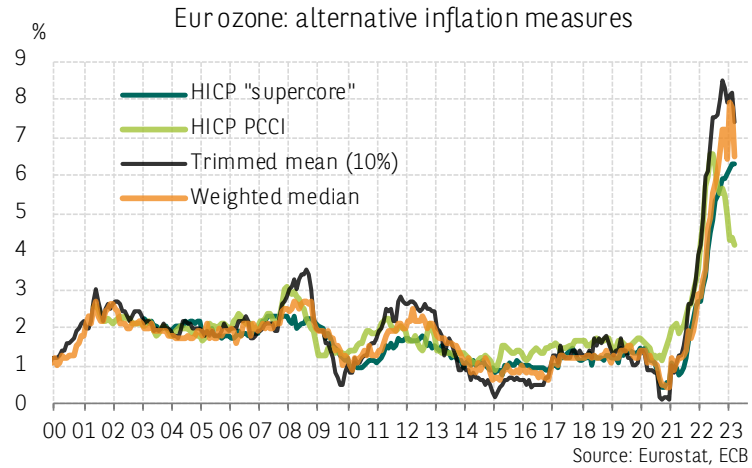
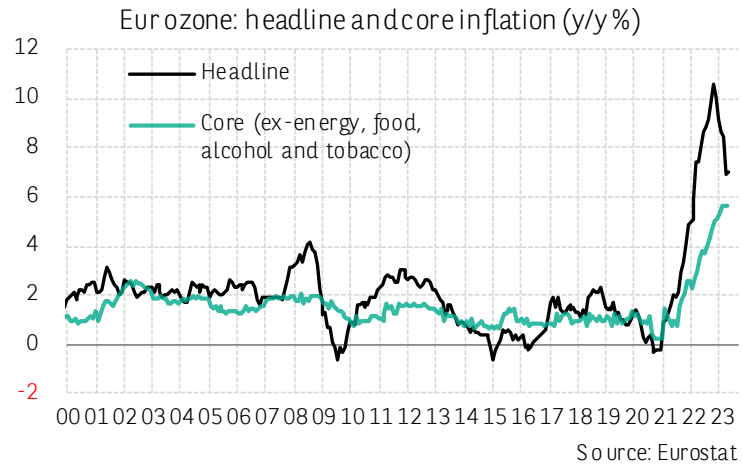


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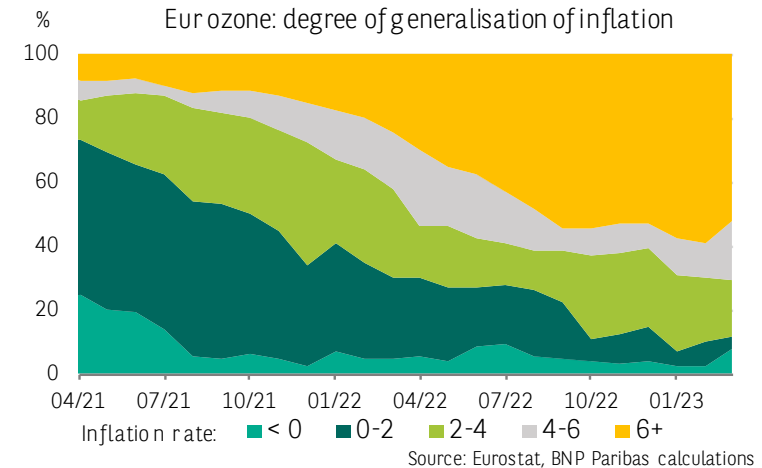
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# Inflation dynamics in the Eurozone: different metrics and degree of generalisation

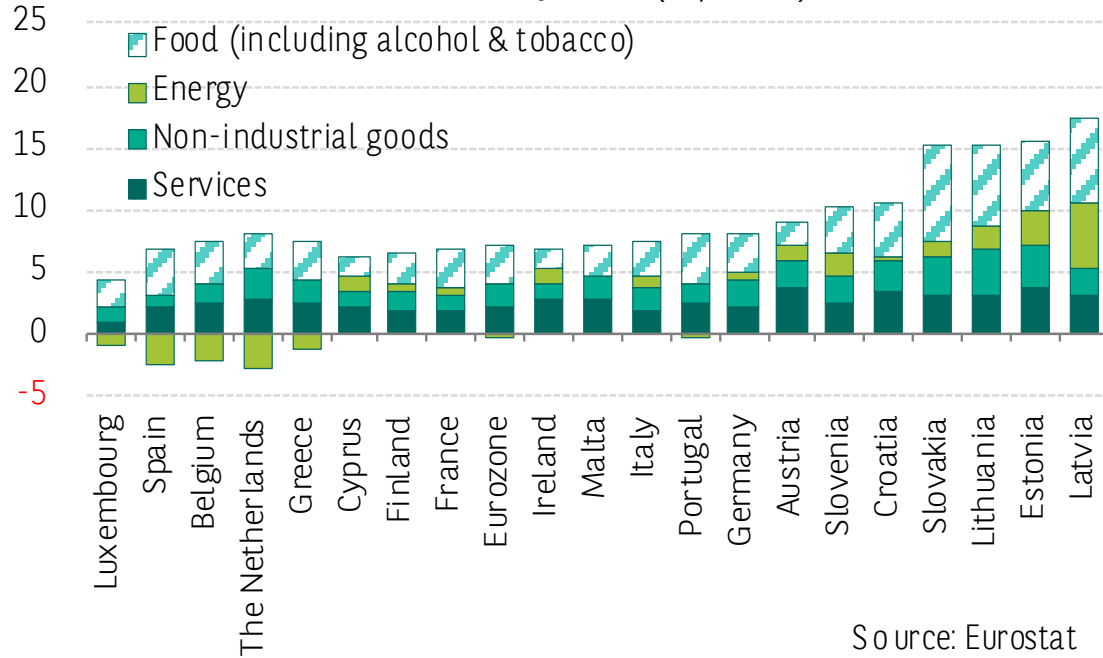


Note: the black line represents the % of CPI components whose increase is greater than, or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.

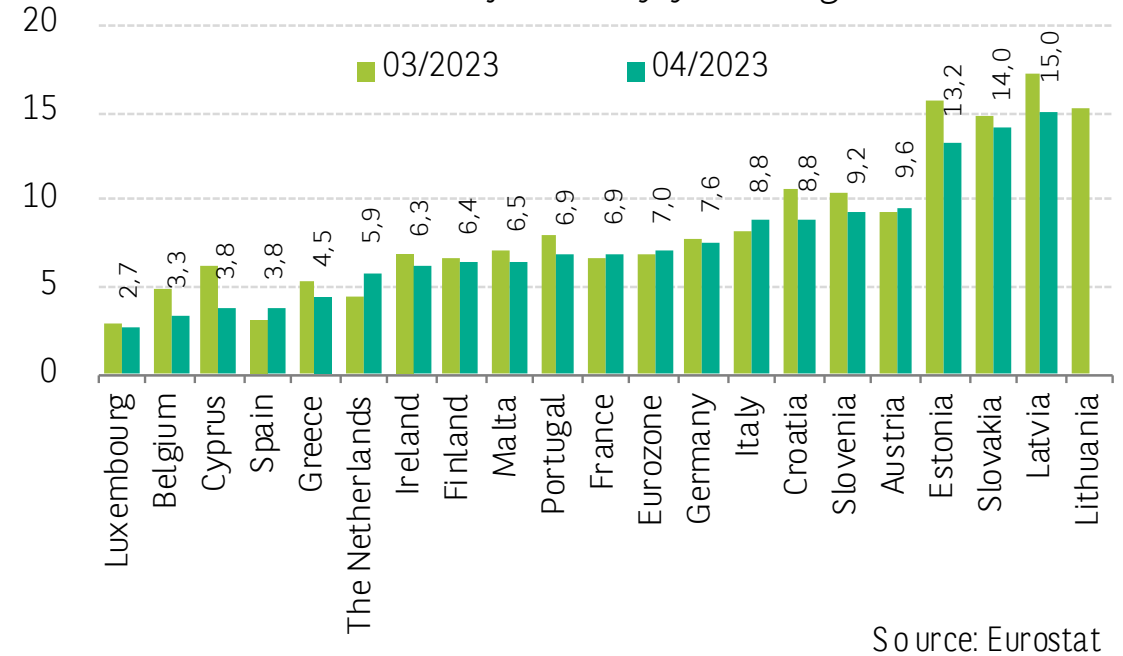


# Inflation dynamics in the Eurozone by country (1)

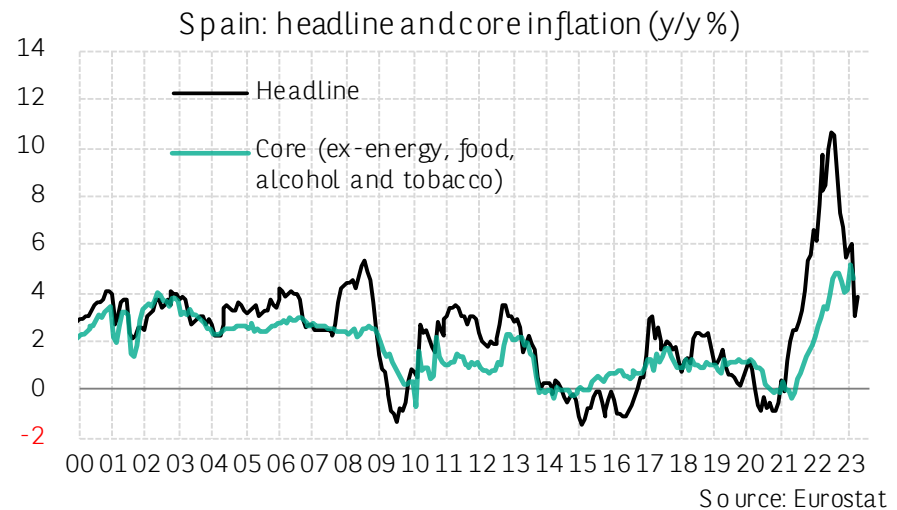
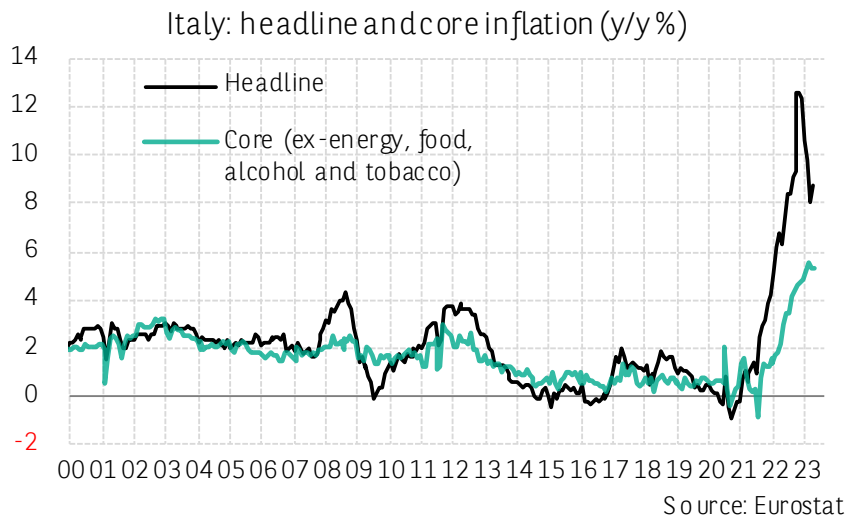
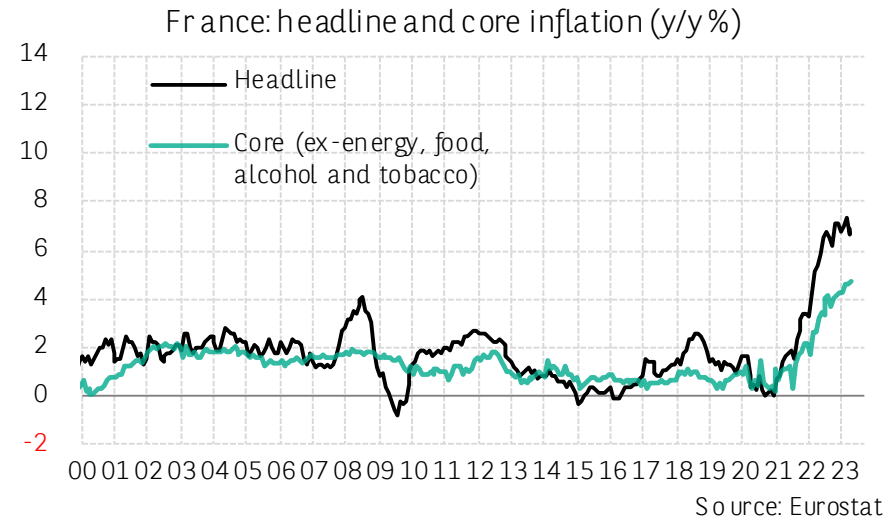
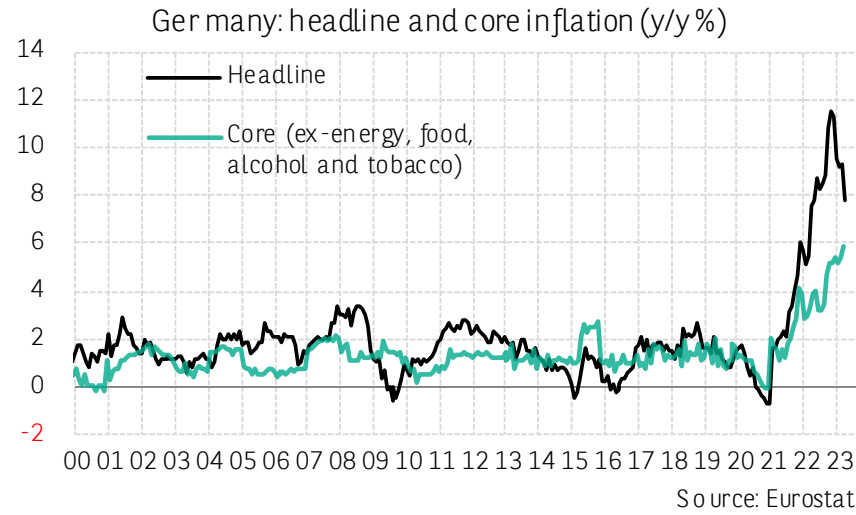
Eurozone: contribution to inflation (% points), March 2023



Eurozone: inflation in y/y % change



# Inflation dynamics in the Eurozone by country (2)





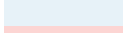



# Eurozone inflation heatmap

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

	Weight (%)	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
<b>Total</b>	<b>100</b>	6,09	6,09	6,70	7,29	7,51	7,79	8,57	9,27	8,70	7,84	7,29	7,15	5,53
Food and non-alcoholic beverages	17	4,26	5,99	7,28	8,94	10,04	10,97	12,33	14,02	14,54	14,55	14,83	15,87	16,08
Alcoholic beverages, tobacco and narcotics	4	-0,82	-0,93	-0,41	0,13	0,37	0,68	0,96	1,10	1,46	2,11	2,47	2,96	4,23
Clothing and footwear	5	1,56	1,43	1,19	0,04	-0,53	1,55	2,70	3,29	2,83	3,14	4,42	4,81	4,19
Housing, water, electricity, gas and other fuels	18	15,42	14,02	14,42	15,05	15,90	17,86	19,31	21,38	18,80	14,43	10,13	8,23	2,79
Furnishings, household equipment and routine household maintenance	7	3,69	4,48	5,35	5,93	6,39	6,81	7,23	7,94	8,08	8,53	8,54	8,32	7,98
Health	5	0,05	0,12	0,28	0,16	0,28	0,24	0,45	0,80	0,72	0,76	1,51	1,64	1,62
Transports	15	12,74	11,19	12,16	12,58	10,90	8,08	9,10	8,13	6,84	5,08	5,31	3,96	-1,24
Communications	3	1,72	1,83	1,39	1,44	0,96	1,03	0,97	0,82	0,73	0,89	1,54	2,09	2,02
Recreation and culture	8	2,40	2,93	2,86	3,64	3,65	4,06	3,89	4,16	4,00	4,76	3,53	4,37	5,58
Education	1	-1,76	-1,74	-1,78	-1,84	-1,75	-1,64	2,93	3,22	3,26	3,24	3,37	3,53	3,59
Restaurants and hotels	8	3,27	4,04	5,24	6,12	6,45	6,29	6,68	6,60	6,27	6,44	6,33	6,80	6,68
Miscellaneous goods and services	10	0,76	0,97	1,20	1,23	1,58	1,80	1,95	2,39	2,68	2,81	3,65	3,85	3,86

Source: Eurostat

Difference with the 2010-2019 average

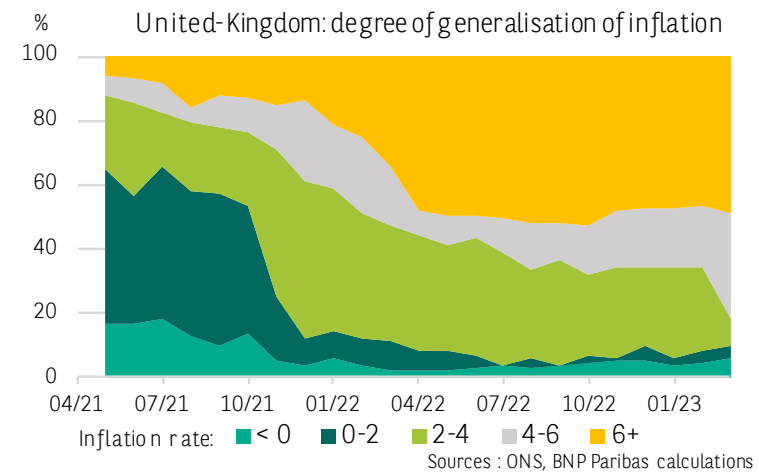
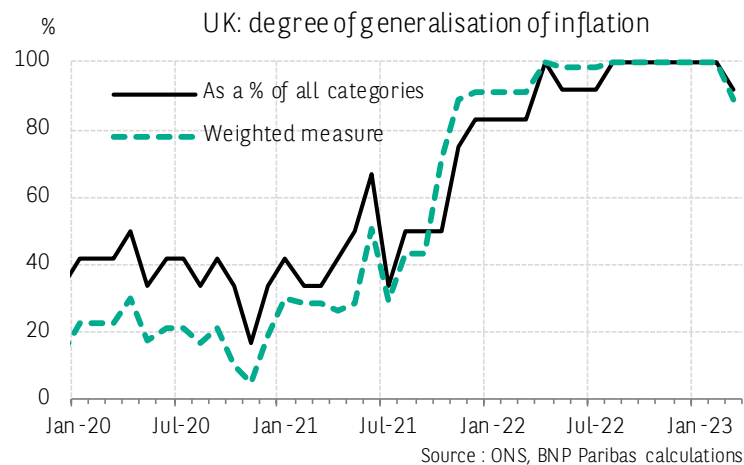
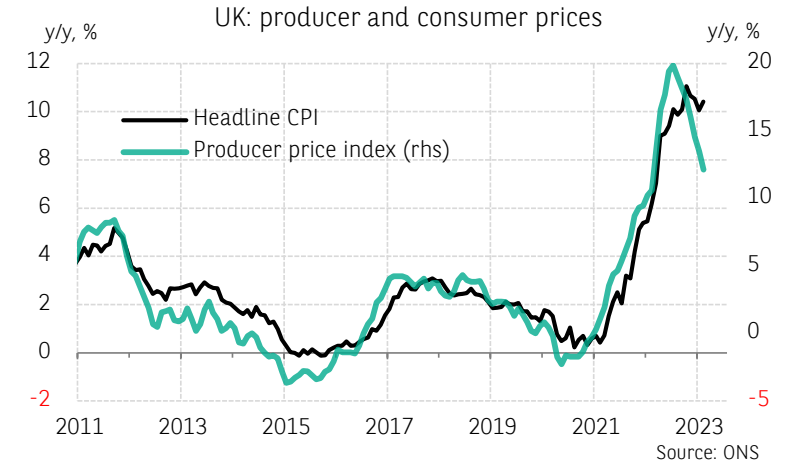
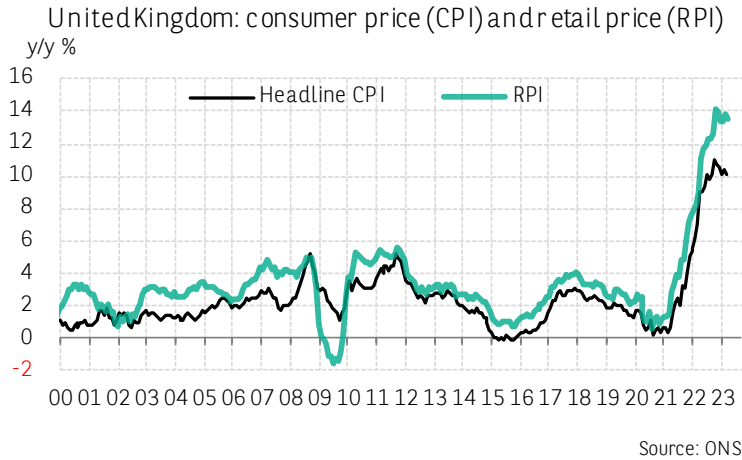
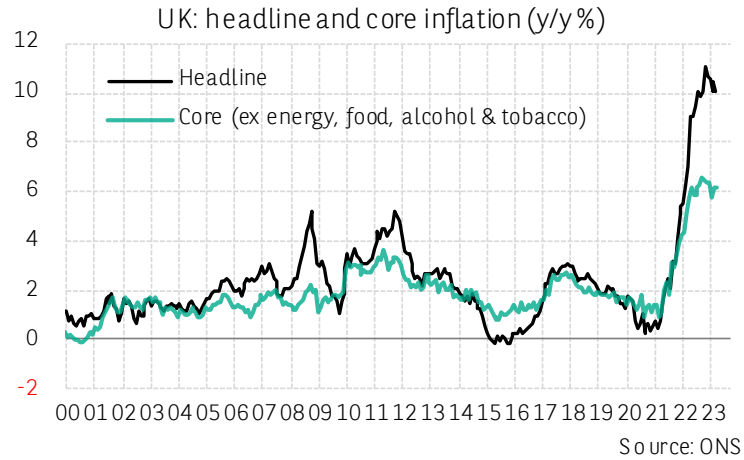
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# Inflation dynamics in the United Kingdom: different metrics and degree of generalisation



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.


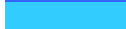
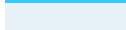
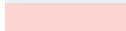


# United Kingdom inflation heatmap

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

	Weight (%)	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
<b>Total</b>	<b>100</b>	4,80	6,78	6,86	7,18	7,87	7,64	7,87	8,82	8,44	8,30	7,82	8,19	7,83
Food and non-alcoholic beverages	9,3	4,24	5,04	6,98	8,12	10,96	11,43	12,91	14,60	14,77	15,17	15,04	16,40	17,51
Alcoholic beverages, tobacco and narcotics	3,9	0,09	-0,34	0,28	-0,08	0,70	0,75	0,81	1,39	-0,63	-1,02	0,39	0,96	0,59
Clothing and footwear	4,9	9,17	7,64	6,32	5,53	6,02	6,97	7,85	7,88	6,88	5,84	5,58	7,43	6,53
Housing, water, electricity, gas and other fuels	31,4	5,25	16,79	16,95	17,13	17,56	17,55	17,79	24,19	24,12	24,11	24,28	24,14	23,61
Furnishings, household equipment and routine household maintenance	6,3	8,56	8,79	9,11	8,60	8,32	8,32	8,96	8,81	8,92	8,08	7,43	6,94	6,31
Health	1,8	-0,13	-0,36	-0,78	-0,92	-1,21	0,03	0,89	1,62	2,20	2,50	3,70	4,23	4,53
Transports	11,1	10,47	10,55	10,82	11,98	11,84	9,09	7,66	6,01	4,31	3,57	0,21	-0,01	-2,11
Communications	1,9	-2,08	0,01	-0,02	0,14	0,41	-0,04	-0,37	0,44	-0,23	-0,80	-0,41	0,89	0,88
Recreation and culture	10,5	3,87	4,83	3,93	3,75	4,51	4,21	4,16	4,74	4,24	3,79	3,91	2,96	3,53
Education	2,6	-2,47	-2,47	-2,47	-2,47	-2,47	-2,47	-2,72	-3,82	-3,82	-3,82	-3,82	-3,82	-3,82
Restaurants and hotels	9,0	4,06	5,12	4,76	5,70	6,09	5,82	6,85	6,72	7,41	8,51	7,93	9,27	8,47
Miscellaneous goods and services	7,3	0,65	1,65	1,70	1,97	2,78	3,34	3,81	3,87	4,15	4,15	4,62	5,35	5,51

Source : ONS

Difference with the 2010-2019 average

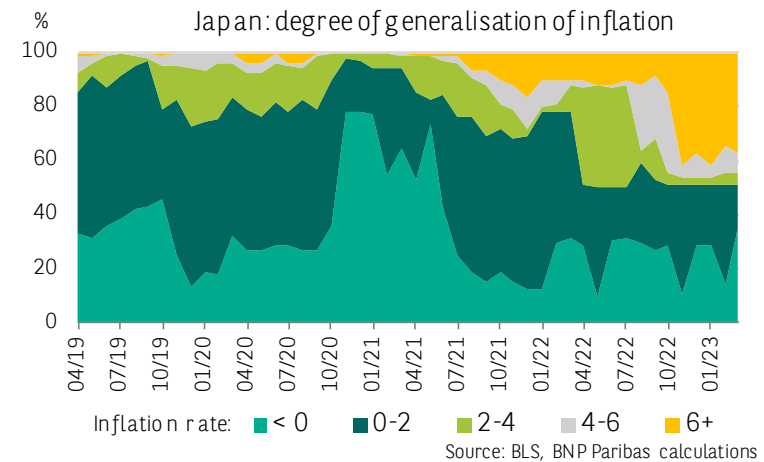
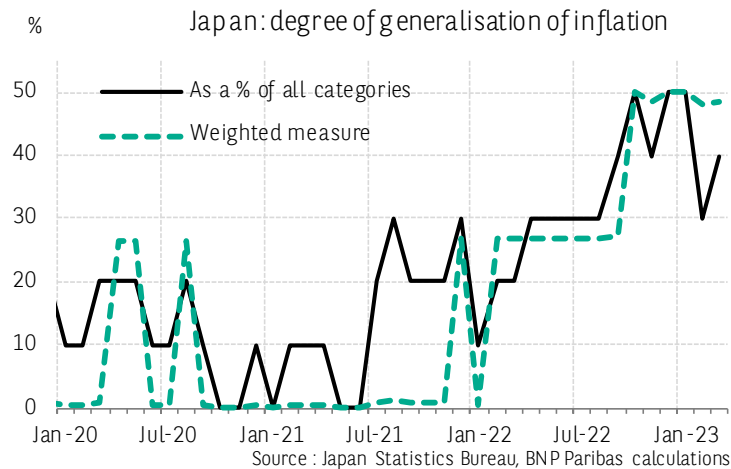
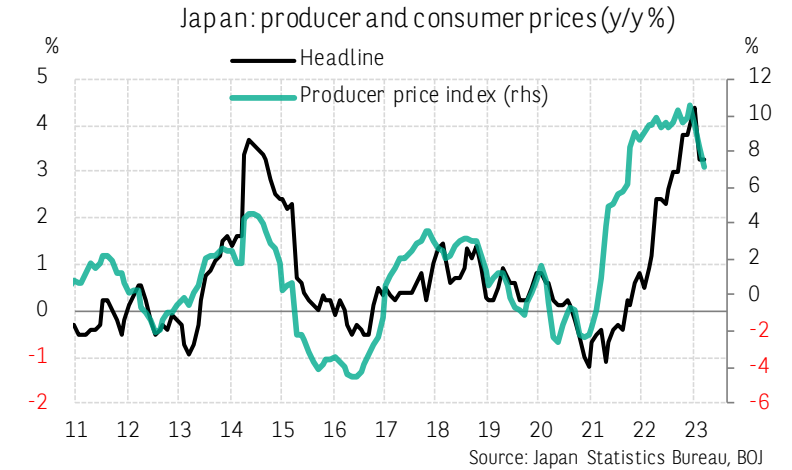
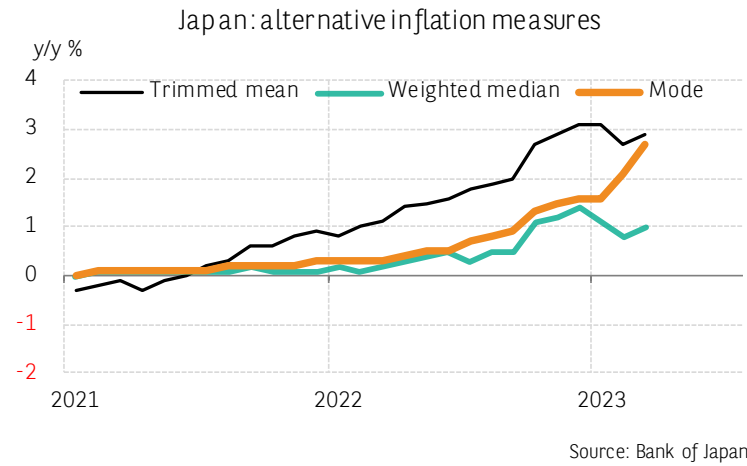
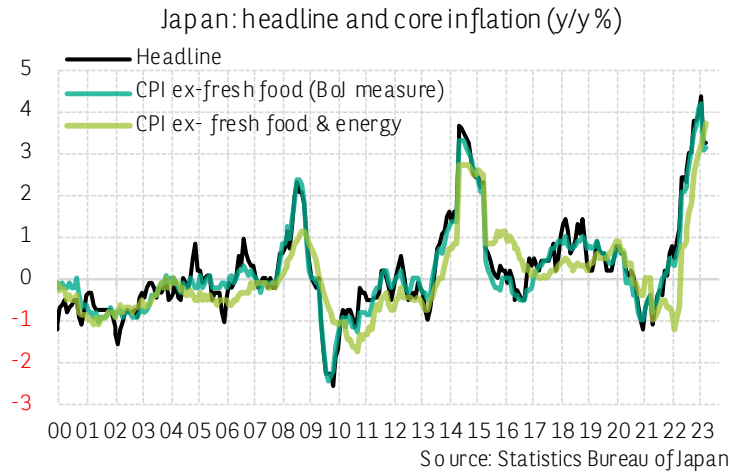
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# Inflation dynamics in Japan: different metrics and degree of generalisation



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-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23
<b>Total</b>	<b>100</b>	0,73	1,95	1,94	1,84	2,14	2,54	2,53	3,33	3,33	3,53	3,92	2,81	2,79
Food	9,3	2,38	2,89	3,08	2,65	3,37	3,55	3,09	5,20	5,89	5,89	6,30	6,48	6,66
Clothing and footwear	3,9	0,11	0,20	0,30	0,50	0,82	0,94	1,28	1,96	2,15	2,27	2,63	2,92	3,08
Housing	4,9	0,44	0,54	0,64	0,74	0,74	0,74	0,74	1,23	1,33	1,43	1,43	1,43	1,43
Fuel, light and water charges	31,4	14,71	13,96	12,67	12,27	12,98	13,86	13,21	12,93	12,42	13,40	13,23	-2,00	-4,47
Furniture and household utensils	6,3	1,35	3,23	4,51	4,89	4,87	5,36	7,65	7,84	8,31	8,48	8,60	9,62	10,39
Medical care	1,8	-0,73	-1,03	-1,03	-0,93	-0,93	-1,03	-0,83	-0,13	-0,03	-0,03	0,17	0,58	0,98
Transportation and communication	11,1	-7,35	-0,57	-1,11	-1,00	-0,68	0,17	0,28	1,70	1,26	1,69	1,80	1,37	1,14
Culture and recreation	1,9	1,18	1,47	1,56	1,08	0,67	1,54	2,06	0,77	-0,21	-0,11	1,47	1,46	2,14
Education	10,5	2,01	1,50	1,40	1,30	1,30	1,30	1,20	1,20	1,20	1,20	1,20	1,60	1,50
Miscellaneous goods and services	2,6	-0,23	-0,03	-0,13	0,07	-0,13	0,07	-0,03	-0,43	-0,34	-0,04	-0,04	0,16	0,15

Source : Statistics Bureau of Japan

## Difference with the 2010-2019 average

Less than 0	Dark Blue
Between 0 and 1	Light Blue
Between 1 and 2	Very Light Blue
Between 2 and 4	Light Red
Between 4 and 7	Dark Red
Greater than 7	Very Dark Red



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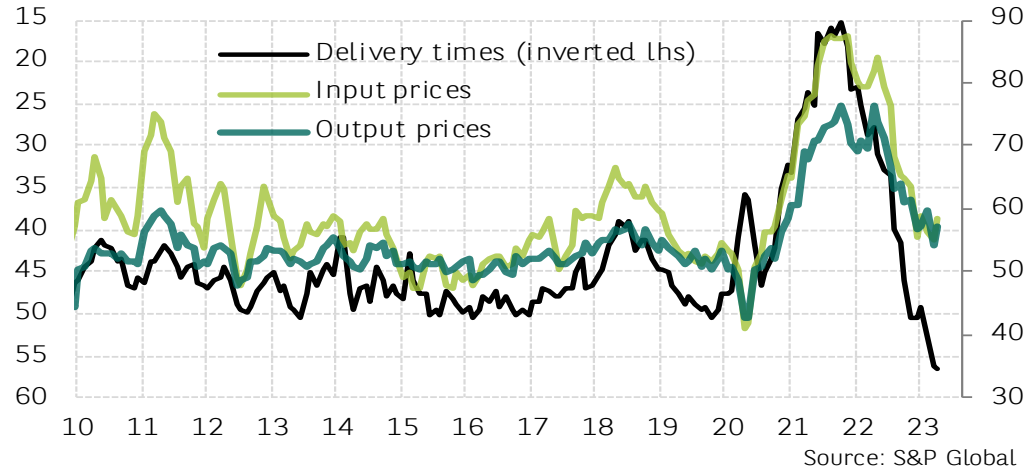


# Inflation and survey data

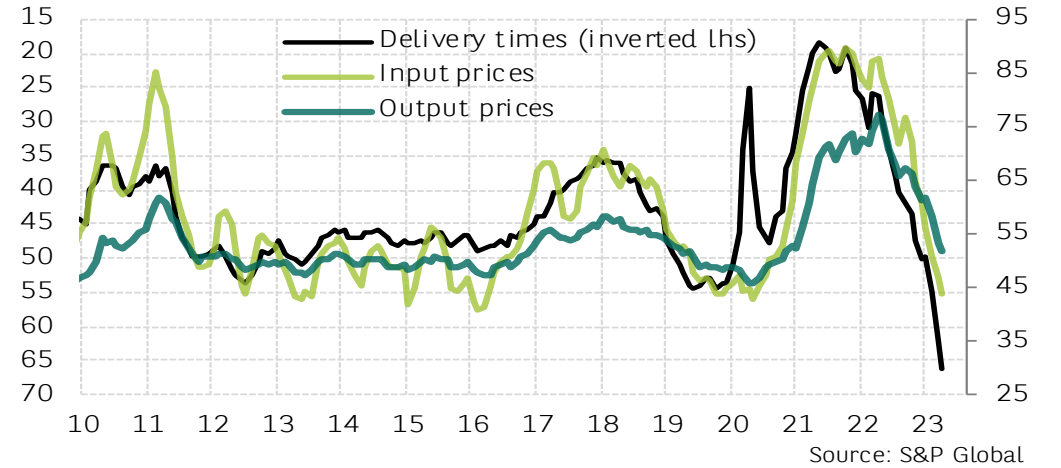


# PMI surveys: an indication of inflationary pressures (1)

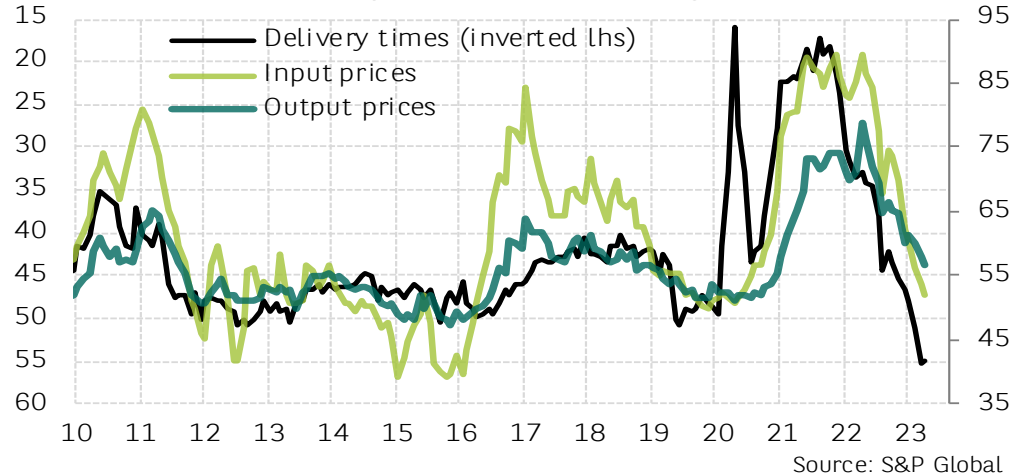
United States: manufacturing PMI indices



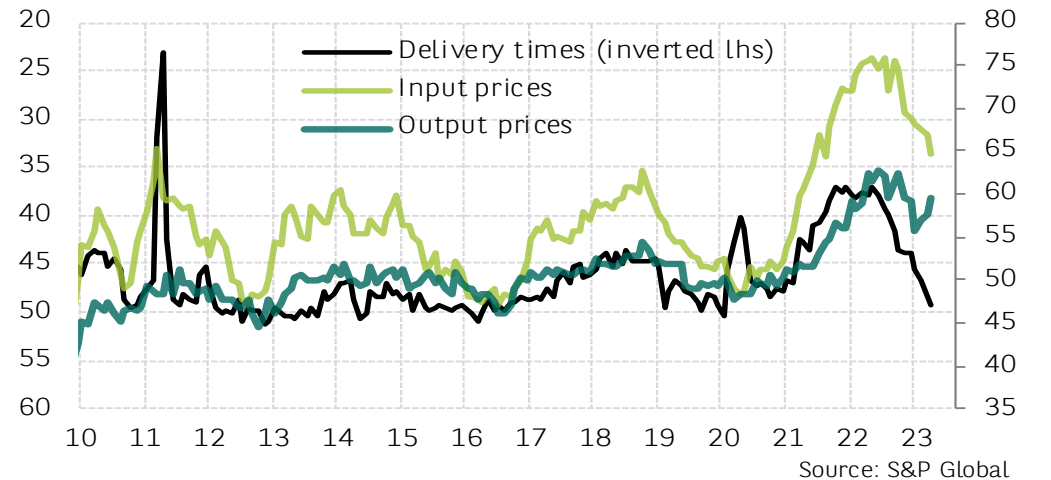
Eurozone: manufacturing PMI indices



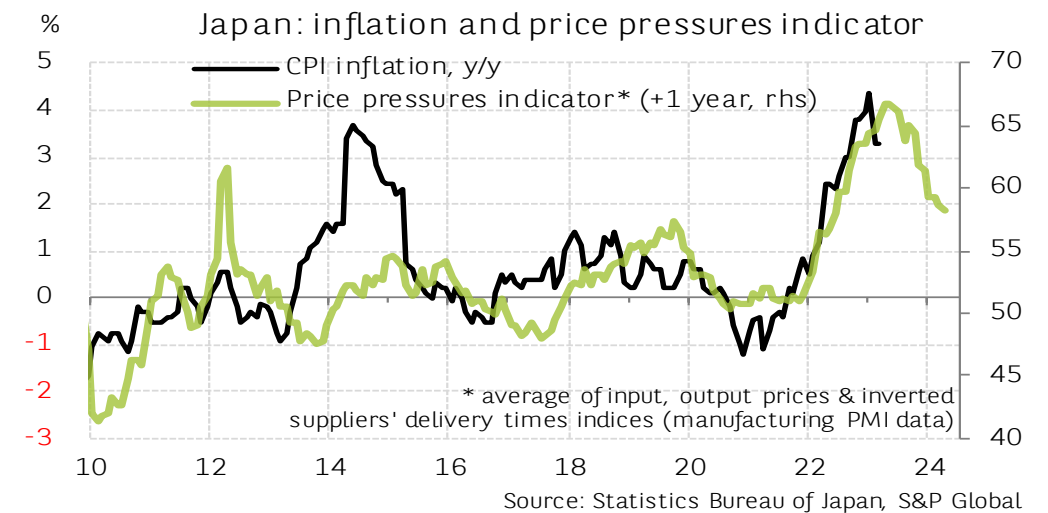
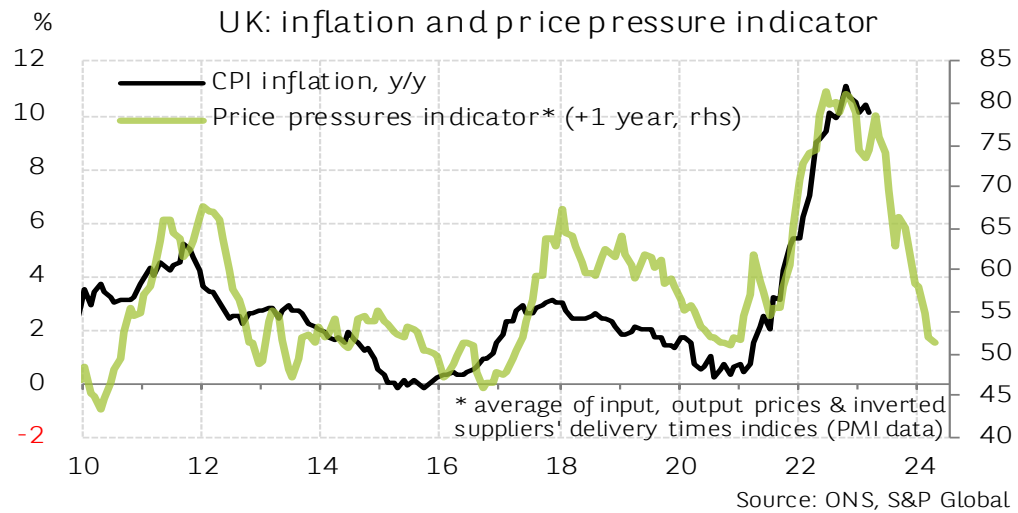
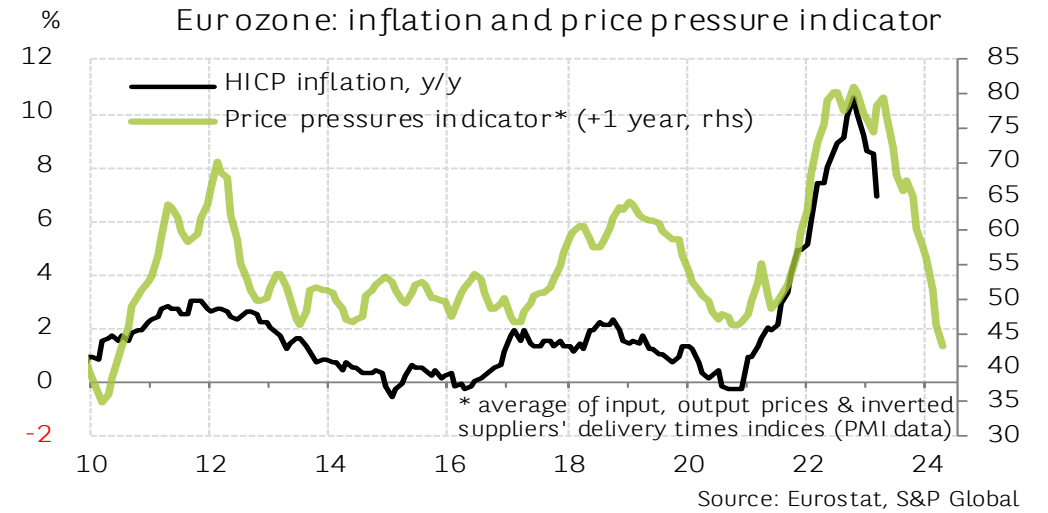
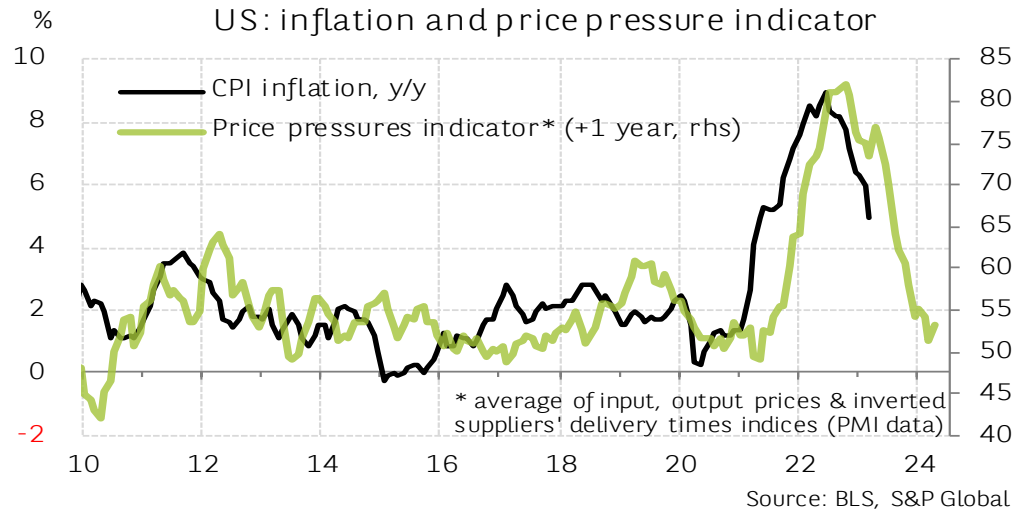
United Kingdom: manufacturing PMI indices



Japan: manufacturing PMI indices



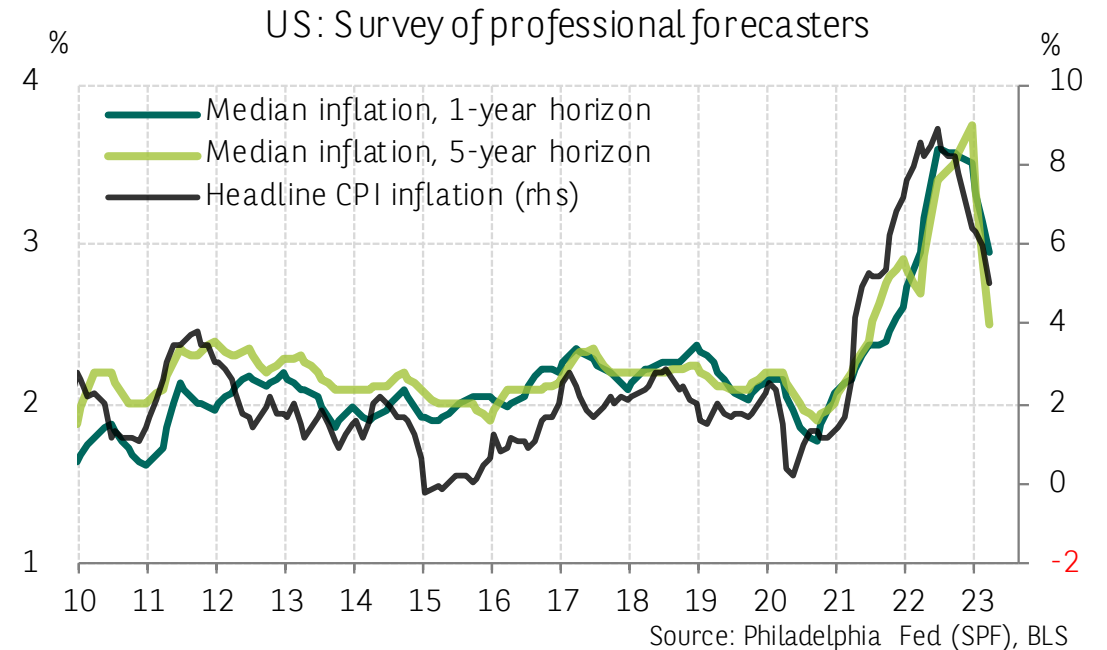
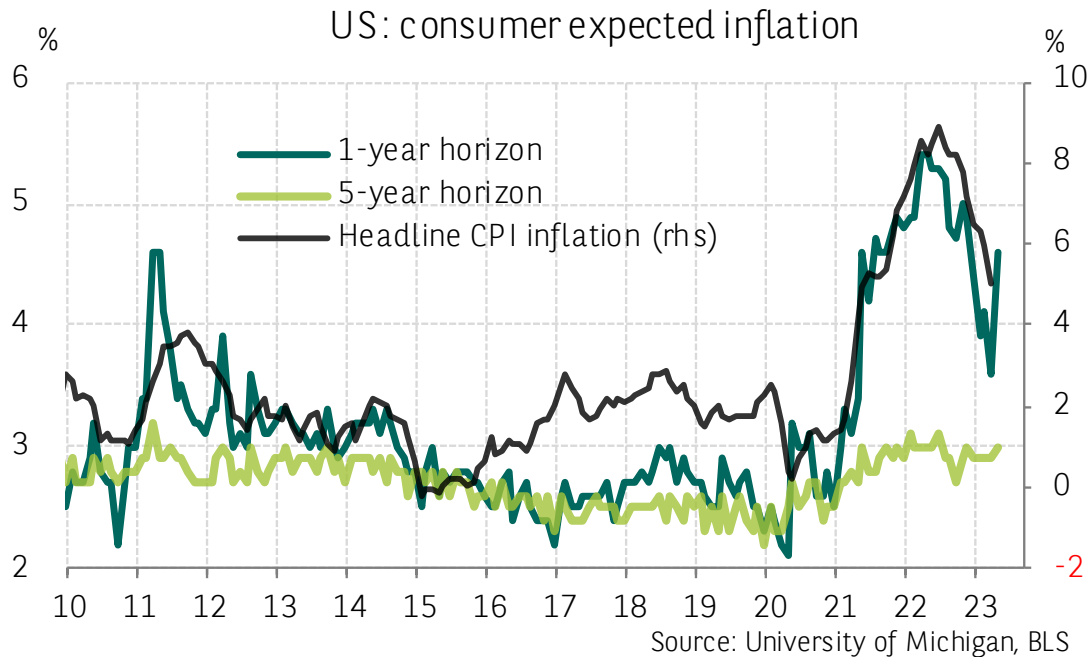
# PMI surveys: an indication of inflationary pressures (2)



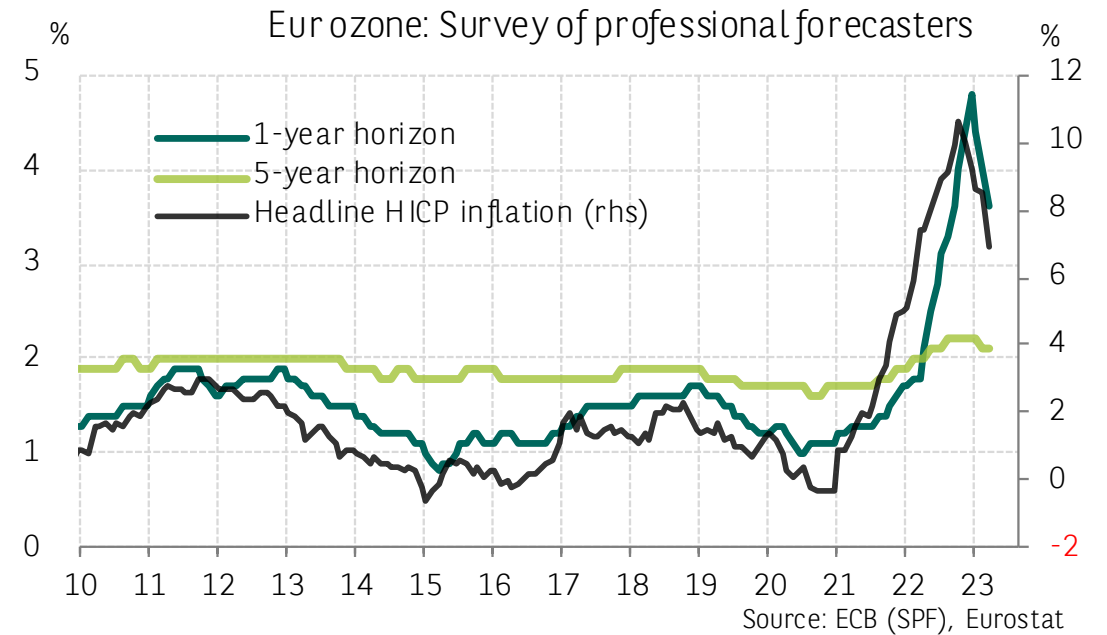
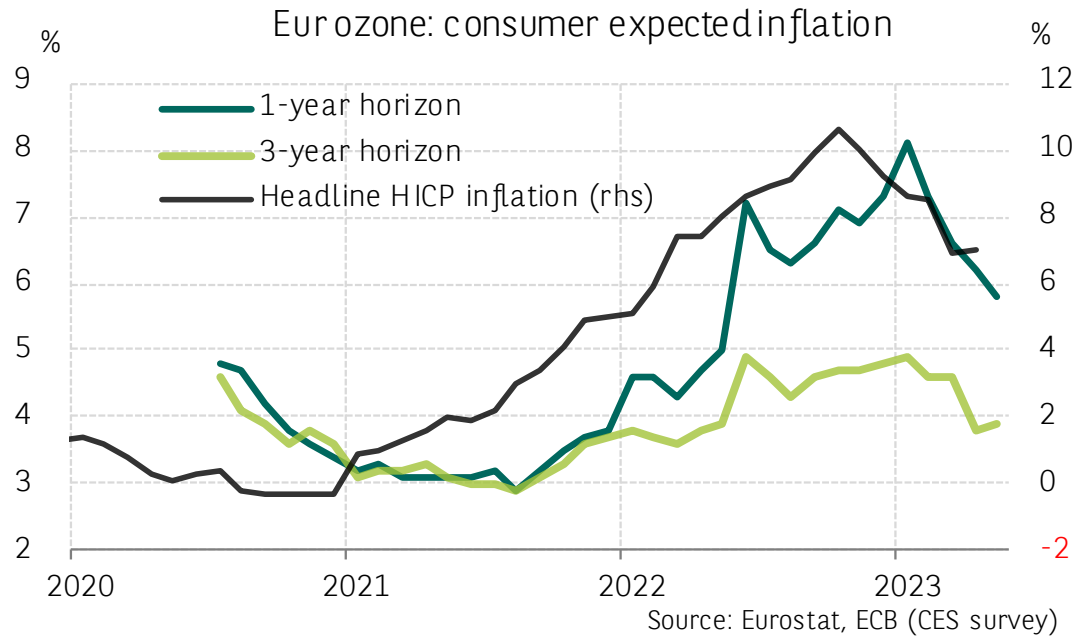
# Inflation expectations (households, forecasters, markets)



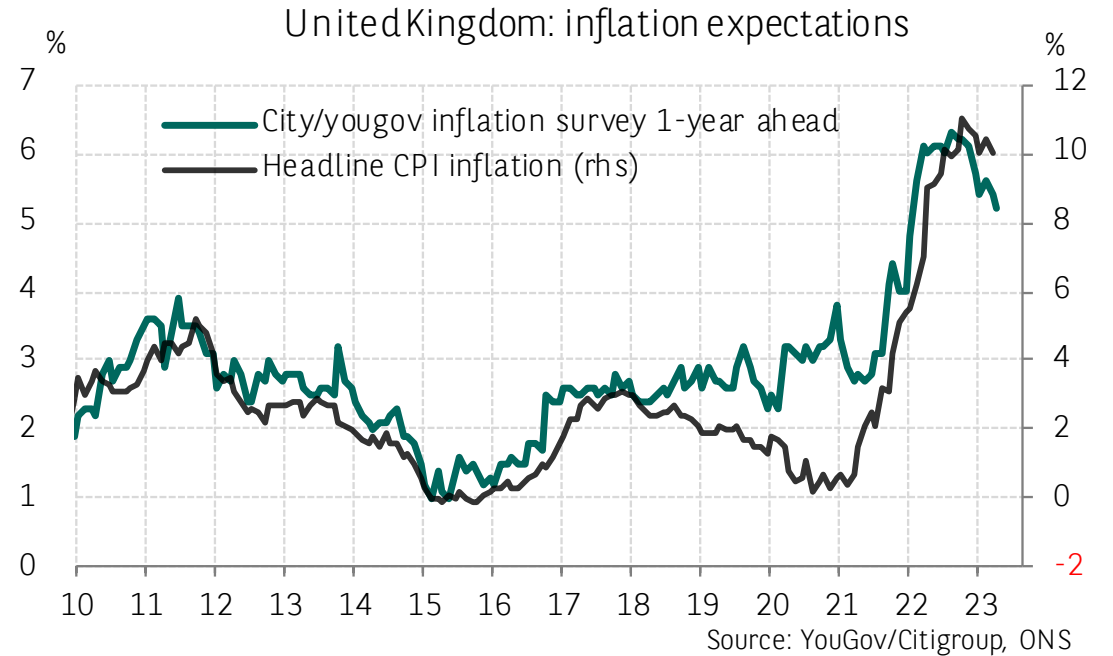
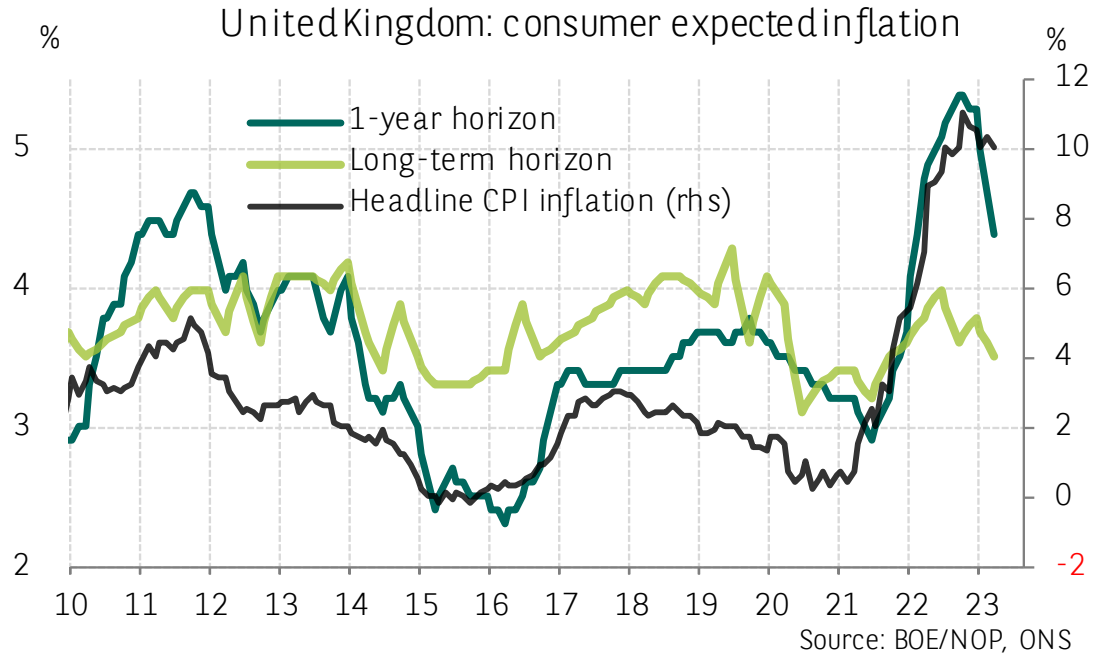
# Inflation expectations in the United States



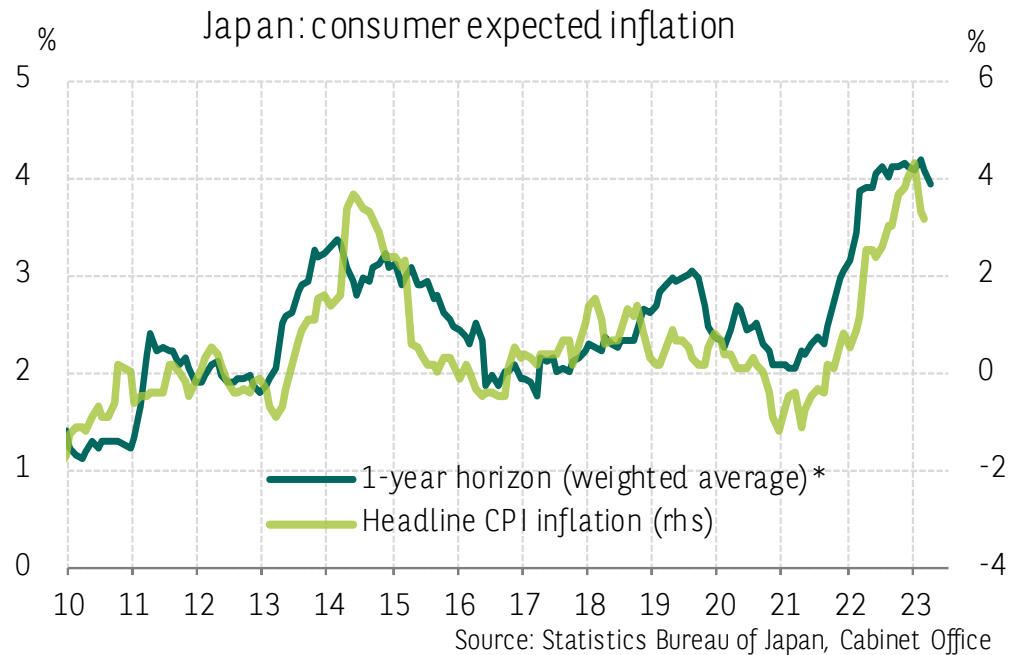
# Inflation expectations in the Eurozone



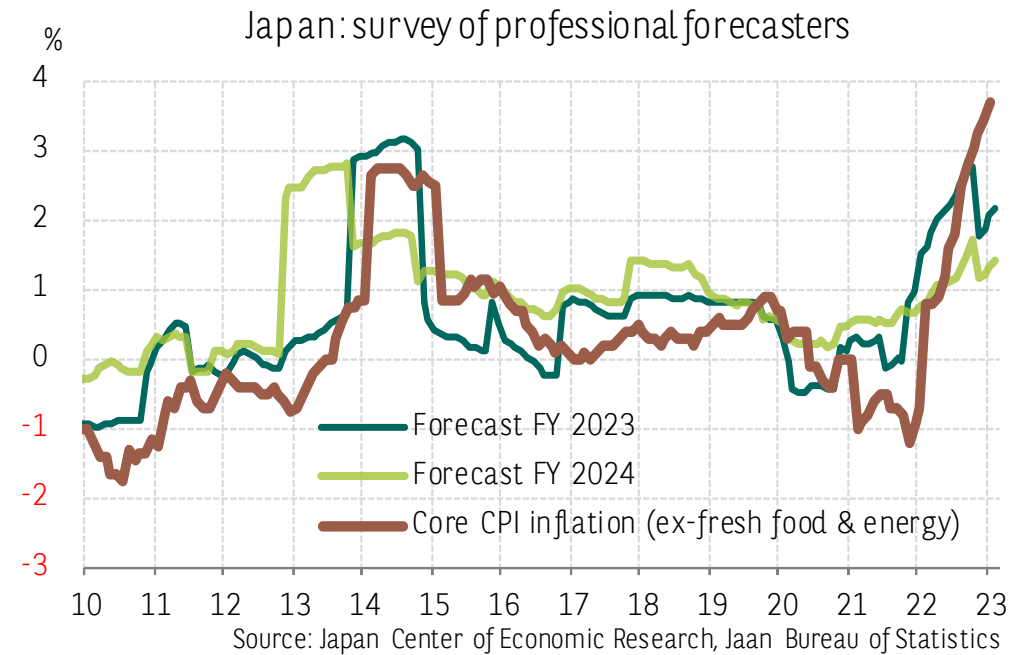
# Inflation expectations in the United Kingdom



# Inflation expectations in Japan

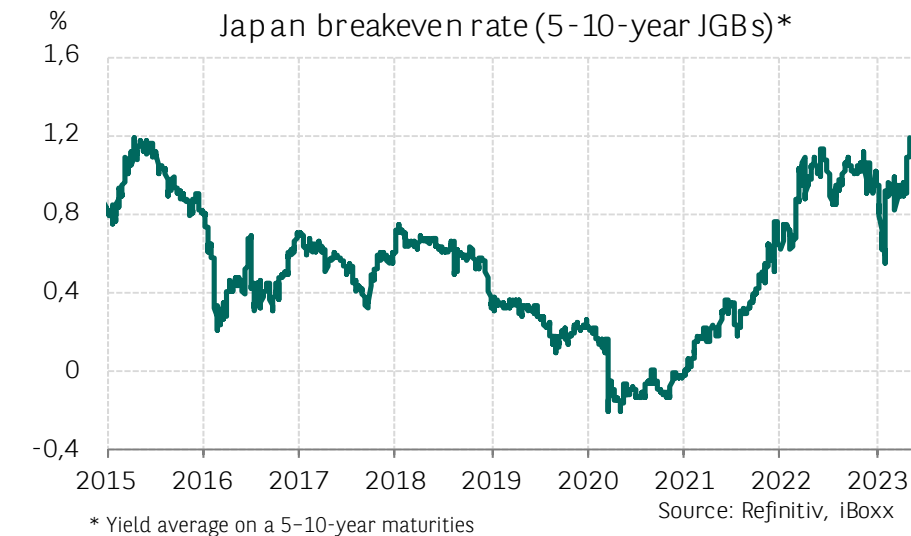
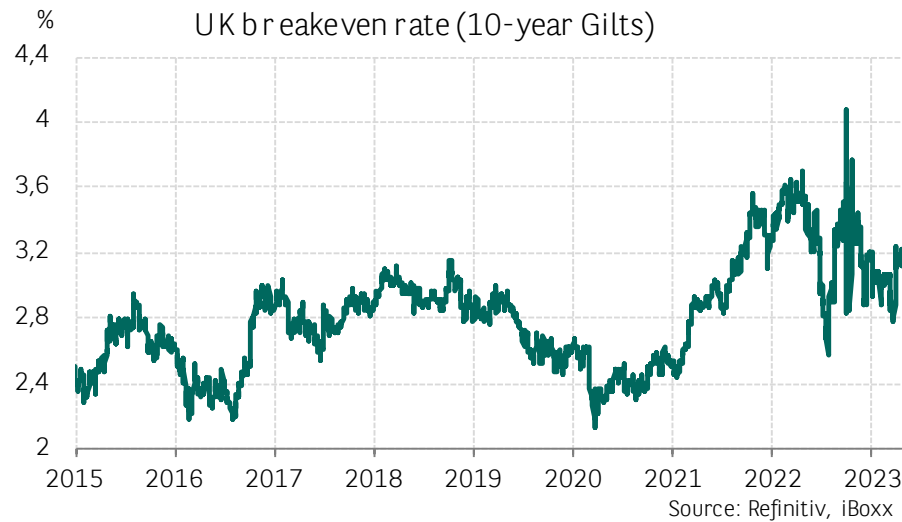
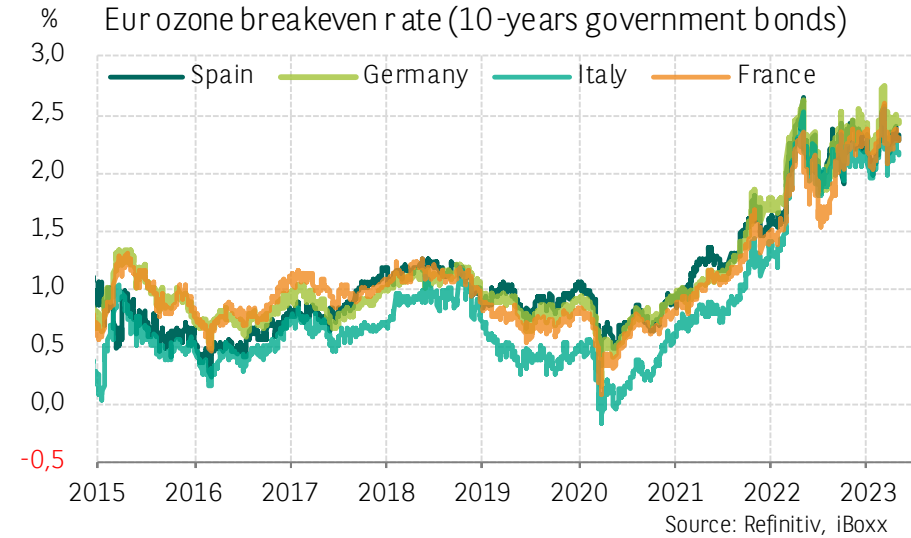
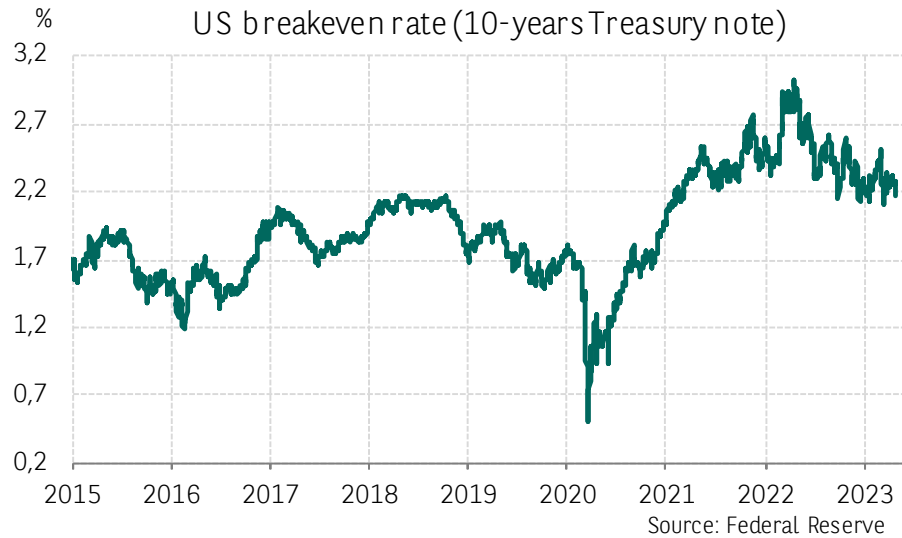


\* Weighted average of respondents' answers from the consumer confidence survey (Cabinet Office)





# Market Expectations: Breakeven inflation rate



# Raw materials

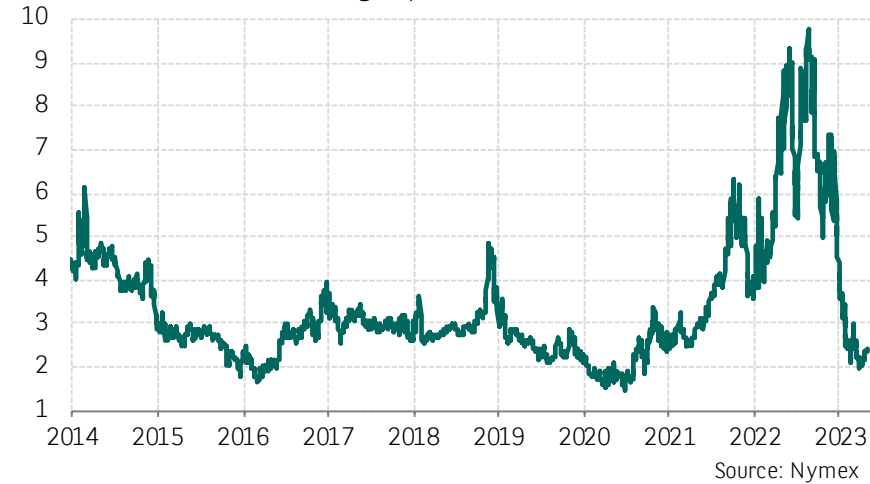


# Raw materials

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

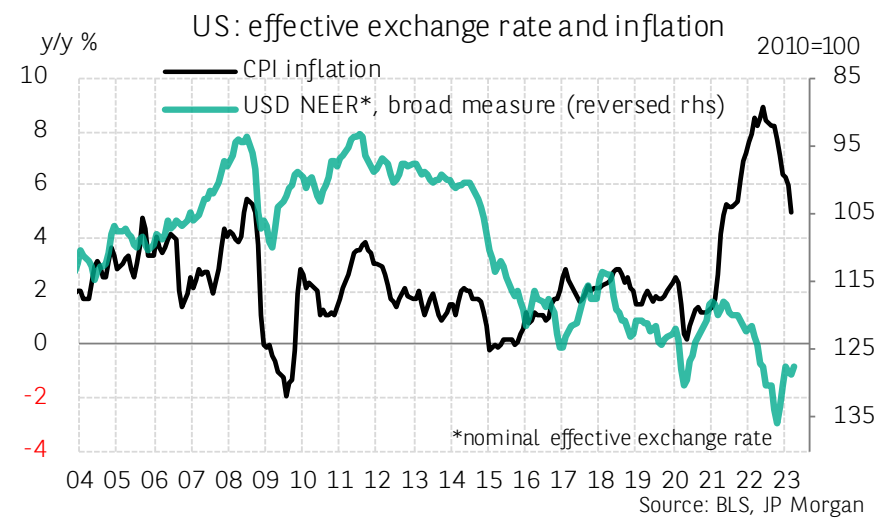
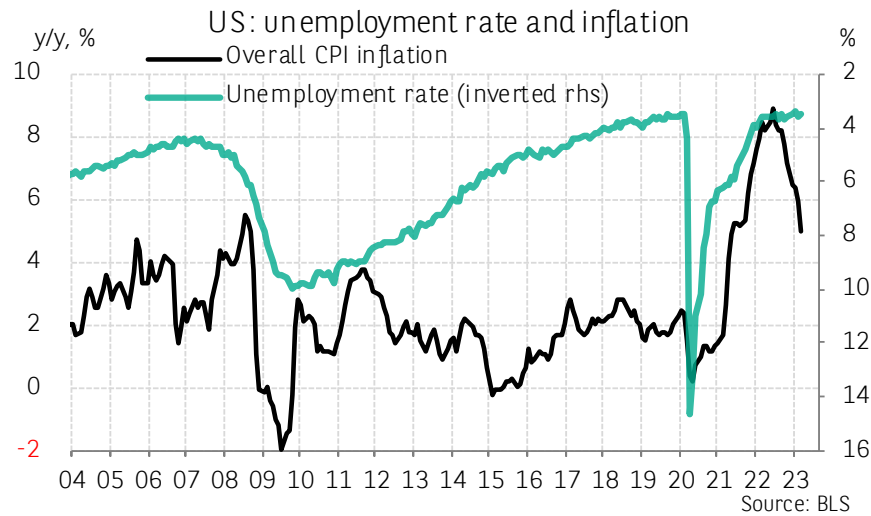
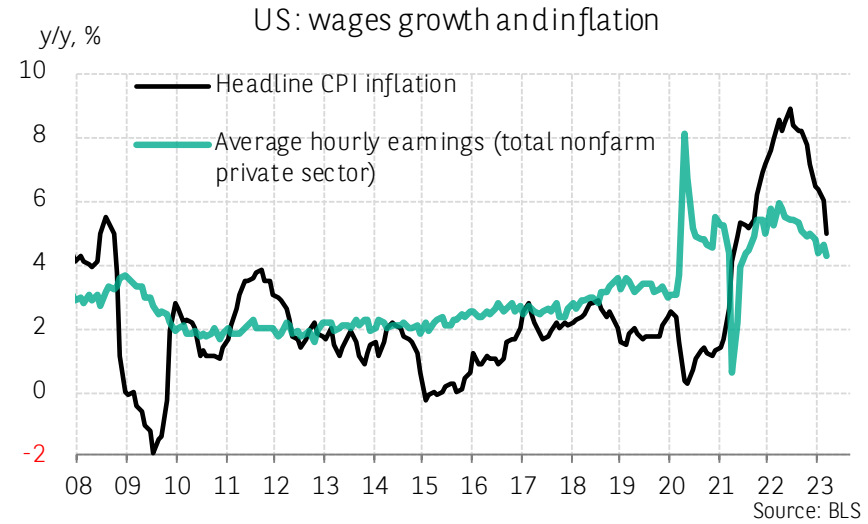
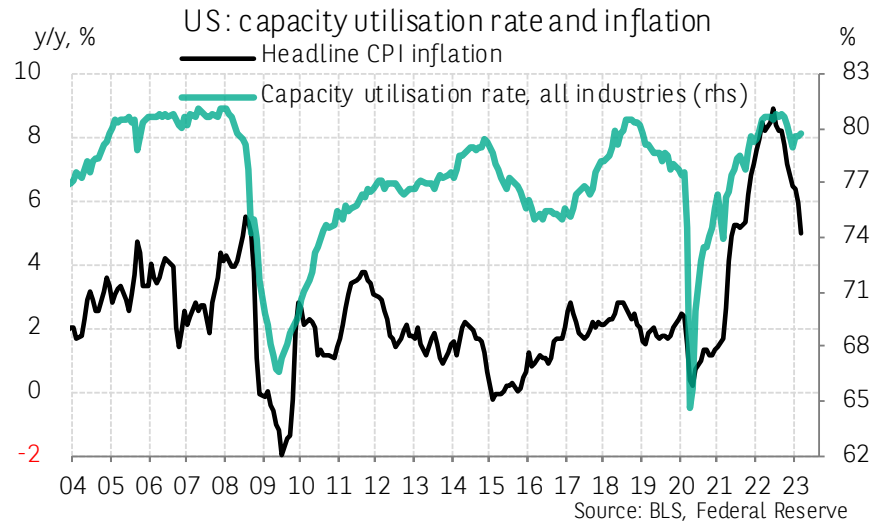


# Macroeconomic determinants of inflation

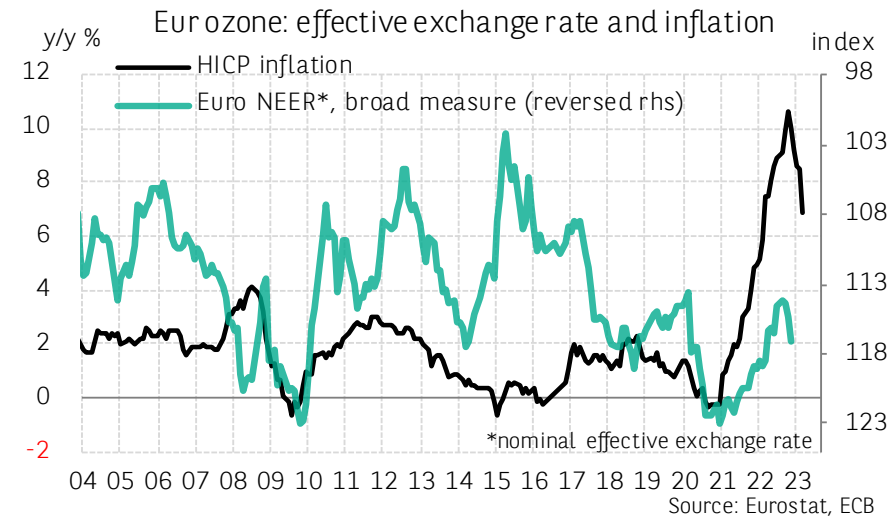
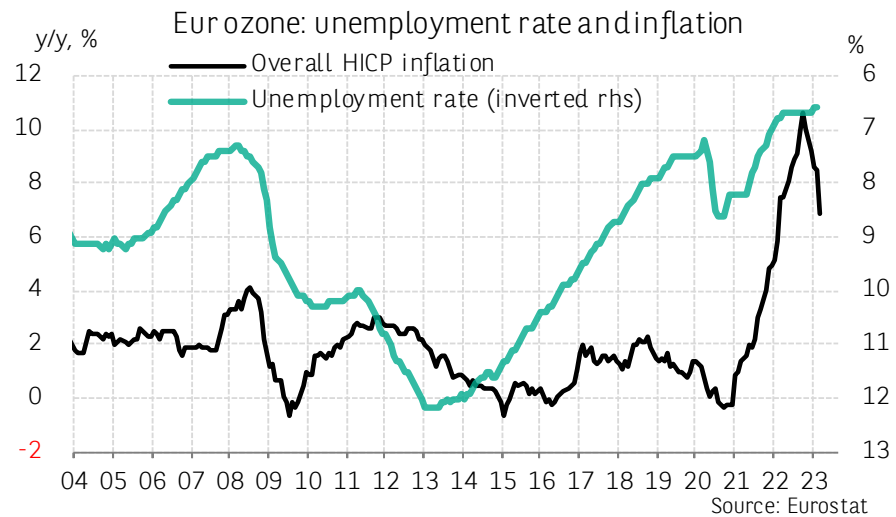
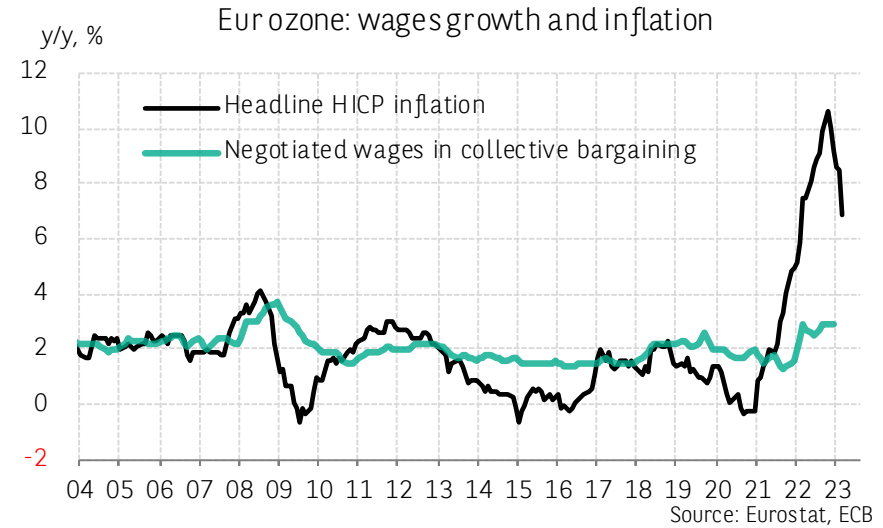
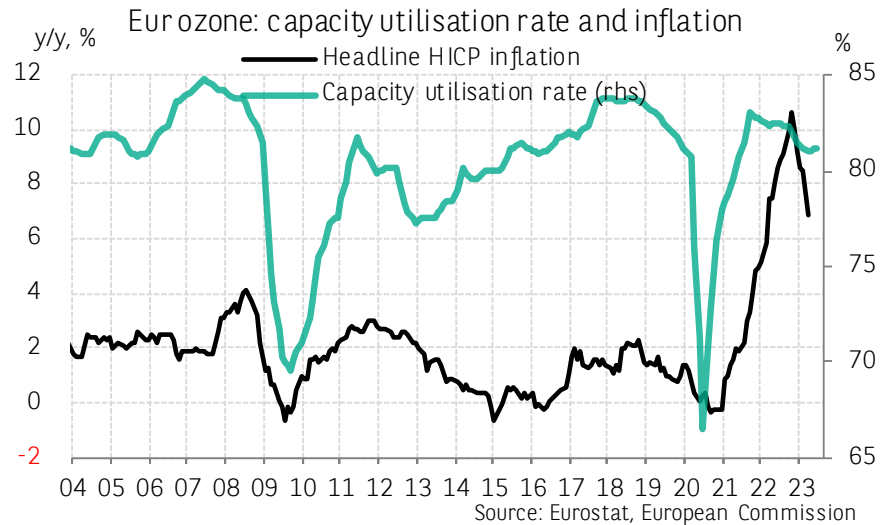
(wages, unemployment rate, capacity utilisation rate, exchange rate)



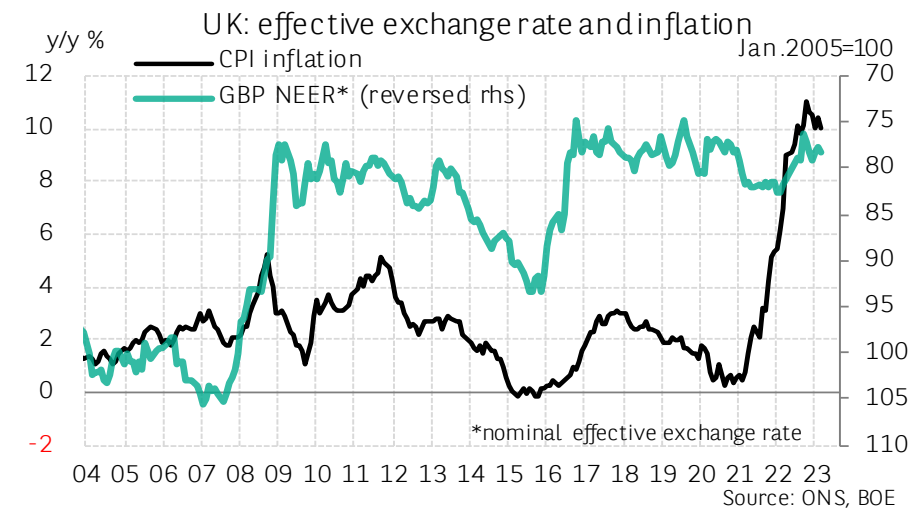
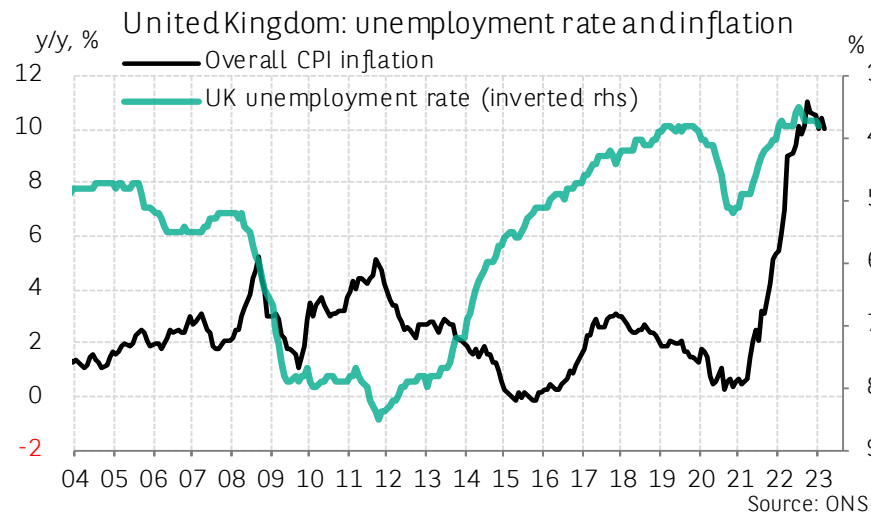
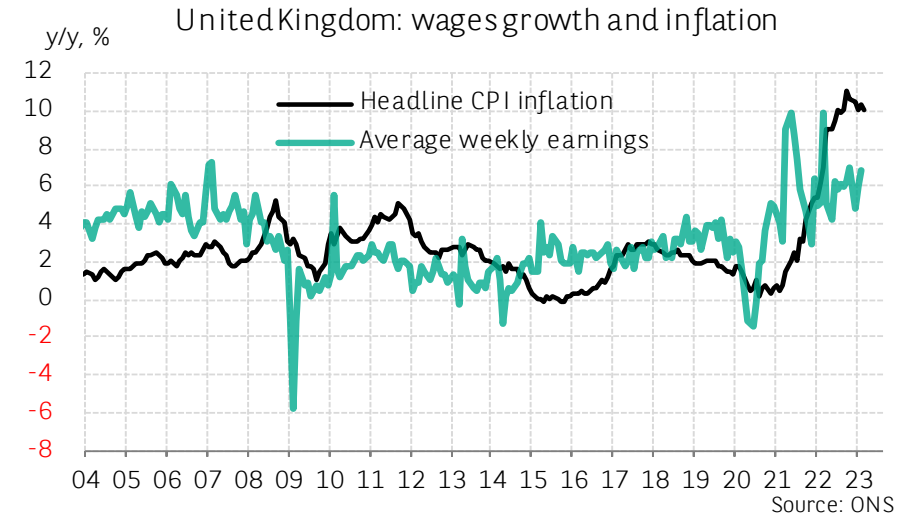
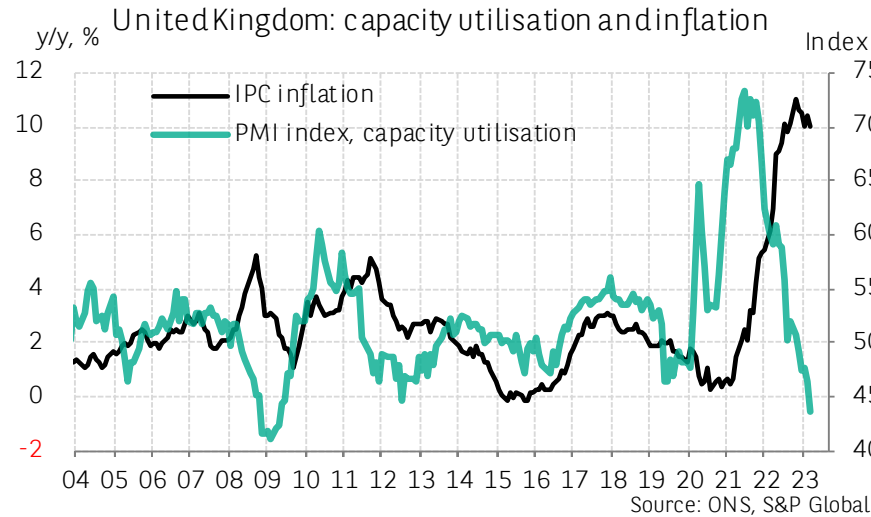
# Determinants of inflation in the United States



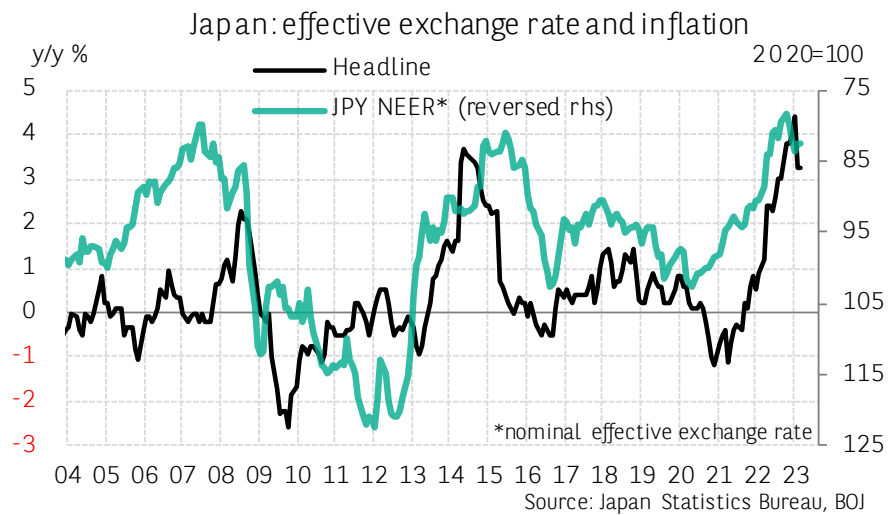
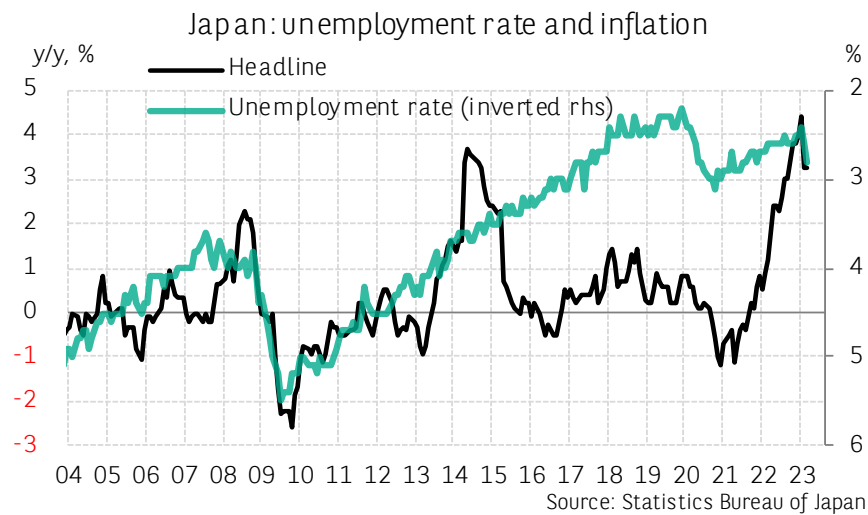
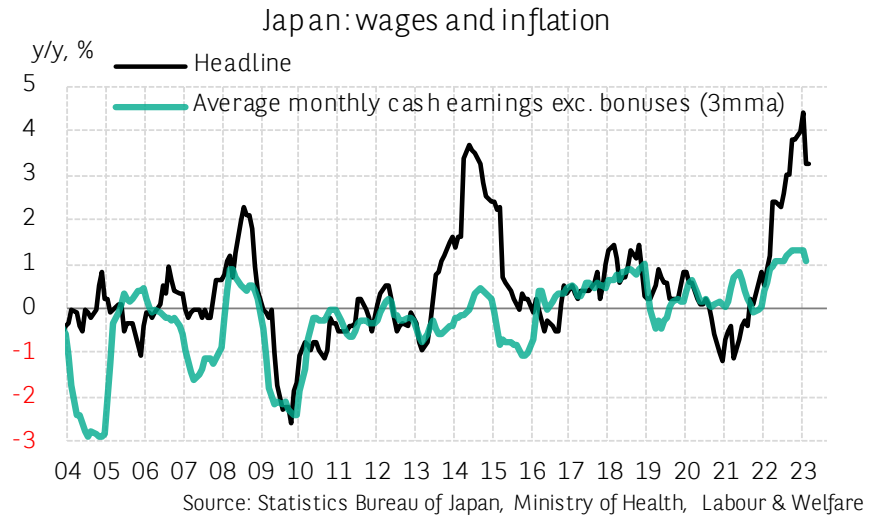
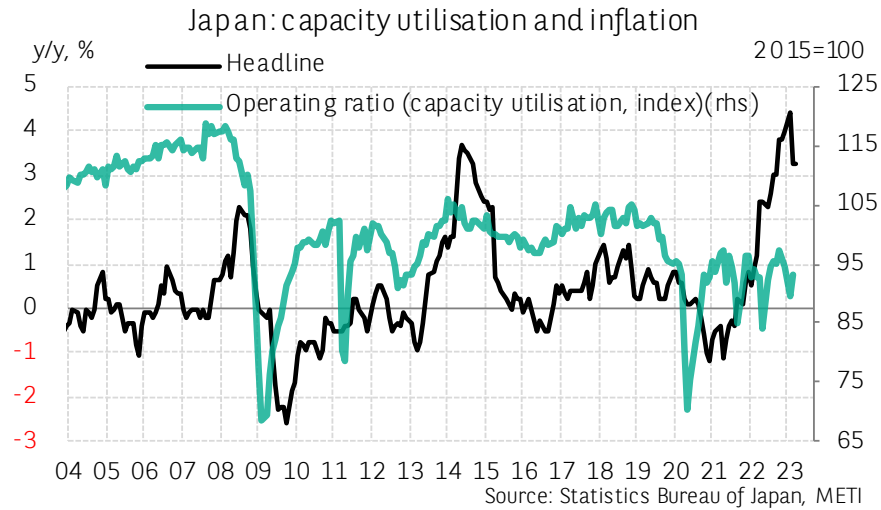
# Determinants of inflation in the Eurozone



# Determinants of inflation in the United Kingdom



# Determinants of inflation in Japan





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