

Global | Inflation and Bottlenecks Chartbook

November 2023

Summary

- In the US, October headline inflation resumed its downward trend (to 3.2% y/y, previous month 3.7% y/y). Core inflation also declined from 4.1% y/y to 4.0 y/y. Main drivers included a favorable base-effect, a meaningful moderation in housing-related prices and a sharp fall in energy prices.
- Eurozone inflation eased also markedly in October (2.9% y/y, previous month 4.3%), reaching the lowest levels since 2021, as energy prices continued to decline due to base effects. Core inflation also cooled down (to 4.2% from 5.3%), led mainly by a decline in core goods' inflation and, to a lesser extent, in services.
- Monthly core inflation rates moderated in the US and the Eurozone to levels (0.2% m/m) that are consistent with the return of inflation to Central Banks' target
- The synchronicity indicators improved as the percentage of items in the CPI basket registering low inflation increased. The persistence of inflation inched down in the Eurozone, as the number of items with recurring increases continued to decrease, while it stabilized in the US.
- Consumer inflation expectations, both medium and long-long term, inched up in the US, while market and analysts' inflation expectation remained steady, slightly below 3%. In the Eurozone, one-year-ahead consumer expectations rose to 4%, while long-term expectations inched up to 2.5%. But analysts' expectations were steady and close to the ECB's 2% medium term target, whereas market-based long-term inflation expectations hovered around 2.5%.
- Our supply bottlenecks indicators suggests that production chains are now working slightly below normalized levels in the US and the Eurozone; suggesting some slack in the manufacturing sector. Bottlenecks seem to be over.

Summary indicators

	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23		
Inflation	7.7	7.1	6.5	6.4	6.0	5.0	4.9	4.0	3.0	3.2	3.7	3.7	3.2	US	IPC Headline (%YoY)
	6.3	6.0	5.7	5.6	5.5	5.6	5.5	5.3	4.8	4.7	4.3	4.1	4.0		IPC Core (%YoY)
	3.1	2.8	2.5	2.3	2.8	2.6	2.4	2.3	2.4	2.5	2.4	2.5	2.4		Inf exp (2Y inf. Swap)
	2.7	2.6	2.6	2.5	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.7	2.8		Inf exp (5Y5Y inf. Swap)
	10.6	10.1	9.2	8.6	8.5	6.9	7.0	6.1	5.5	5.3	5.2	4.3	2.9	EZ	IPC Headline (%YoY)
	5.0	5.0	5.2	5.3	5.6	5.7	5.6	5.3	5.5	5.5	5.3	4.5	4.2		IPC Core (%YoY)
	3.9	3.5	3.4	2.3	2.8	3.0	2.8	2.5	2.5	2.7	2.7	2.6	2.5		Inf exp (2Y inf. Swap)
	2.3	2.4	2.4	2.3	2.5	2.3	2.5	2.5	2.5	2.6	2.5	2.5	2.5		Inf exp (5Y5Y inf. Swap)
Bottlenecks	48.2	46.8	45.1	42.5	47.0	44.3	45.7	42.6	45.6	47.3	46.8	49.2	45.5	US manuf.	ISM New Orders
	45.3	40.0	41.4	43.4	45.1	43.9	43.1	37.5	38.7	42.8	44.1	42.4	42.2		Backlog of Orders
	51.9	50.9	48.6	48.0	47.3	47.8	48.9	51.1	46.7	48.3	50.0	52.5	50.4		Production Index
	46.8	47.2	45.1	45.6	45.2	44.8	44.6	43.5	45.7	46.1	48.6	46.4	47.7		Suppliers' delivery times
	41.6	48.7	48.2	47.4	46.9	48.9	51.3	51.4	46.2	48.7	48.7	47.1	48.6	EZ	Customer Inventories
	-5	-11.1	-12.1	-8.9	-9.4	-9.8	-14.1	-21.9	-26.1	-30	-39.6	-38.9	-37.7		Order books
	0.7	-3.6	0.6	-0.1	4.1	2.3	3.1	-6.6	-3.9	-4.7	-10.2	-7.9	-9.9	manuf.	Production trend
	25.0	23.3	21.8	21.7	19.2	16.4	12.9	11.0	10.1	9.9	9.2	9.9	9.5	EZ const.	Equip shortage
	44.3	42.7	44.1	46.4	44.5	44.8	42.2	43.5	44.1	43.8	44.2	43.8	46.2	Taiwan	Suppliers' delivery times
	558	560	558	557	553	546	549	543	549	559	554	552	552	Input costs	CRB Spot Comdty. Price
1905	1405	1372	1229	1100	1059	1108	1217	1238	1227	1227	1053	953	Container freight		

Note: US and Taiwan (SA, 50+=Increasing); EZ Percent Balance (SA, %).

Source: BBVA Research and Haver Analytics

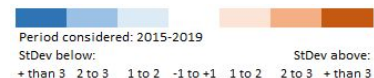
Both headline and core inflation declined in most countries compared to previous year; FX pass-through boosted inflation in Argentina and Türkiye

Headline Inflation Y/Y%, NSA

	2022												2023											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O		
US	7.5	7.9	8.5	8.3	8.6	9.1	8.5	8.3	8.2	7.7	7.1	6.5	6.4	6.0	5.0	4.9	4.0	3.0	3.2	3.7	3.7	3.2	US	
China	0.8	0.8	1.3	2.0	2.0	2.4	2.6	2.4	2.7	2.1	1.5	1.8	2.2	1.1	0.8	0.3	0.3	0.1	-0.2	0.2	0.1	-0.1	China	
Eurozone	5.1	5.9	7.4	7.4	8.1	8.6	8.9	9.1	9.9	10.6	10.1	9.2	8.6	8.5	6.9	7.0	6.1	5.5	5.3	5.2	4.3	2.9	Eurozone	
Germany	4.2	4.3	5.9	6.3	7.0	6.7	6.7	7.0	8.6	8.8	8.8	8.1	8.7	8.7	7.4	7.2	6.1	6.4	6.2	6.1	4.5	3.8	Germany	
France	2.9	3.6	4.5	4.8	5.2	5.8	6.1	5.9	5.6	6.2	6.2	5.9	6.0	6.3	5.7	5.9	5.1	4.5	4.3	4.9	4.9	4.0	France	
Spain	6.1	7.6	9.8	8.3	8.7	10.2	10.8	10.5	8.9	7.3	6.8	5.7	5.9	6.0	3.3	4.1	3.2	1.9	2.3	2.6	3.5	3.5	Spain	
UK	5.5	6.2	7.0	9.0	9.1	9.4	10.1	9.9	10.1	11.1	10.7	10.5	10.1	10.4	10.1	8.7	8.7	7.9	6.8	6.7	6.7	4.6	UK	
Turkey	48.7	54.4	61.1	70.0	73.5	78.6	79.6	80.2	83.5	85.5	84.4	64.3	57.7	55.2	50.5	43.7	39.6	38.2	47.8	58.9	61.5	61.4	Turkey	
Argentina	50.7	52.3	55.1	58.0	60.7	64.0	71.0	78.5	83.0	88.0	92.4	94.8	98.8	102.5	104.3	108.8	114.2	115.6	113.4	124.4	138.3	142.7	Argentina	
Colombia	6.9	8.0	8.5	9.2	9.1	9.7	10.2	10.8	11.4	12.2	12.5	13.1	13.3	13.3	13.3	12.8	12.4	12.1	11.8	11.4	11.0	10.5	Colombia	
Mexico	7.1	7.3	7.5	7.7	7.7	8.0	8.2	8.7	8.7	8.4	7.8	7.8	7.9	7.6	6.8	6.3	5.8	5.1	4.8	4.6	4.5	4.3	Mexico	
Peru	5.7	6.1	6.8	8.0	8.1	8.8	8.7	8.4	8.5	8.3	8.4	8.5	8.7	8.6	8.4	8.0	7.9	6.5	5.9	5.6	5.0	4.3	Peru	
Brazil	10.4	10.5	11.3	12.1	11.7	11.9	11.9	10.1	8.7	7.2	6.5	5.9	5.8	5.8	5.6	4.7	4.2	3.9	3.2	4.0	4.6	5.2	4.8	Brazil
Chile	7.7	7.8	9.4	10.5	11.5	12.5	13.1	14.1	13.7	12.8	13.3	12.8	12.3	11.9	11.1	9.9	8.7	7.6	6.5	5.3	5.1	5.0	Chile	

Core Inflation Y/Y%, NSA

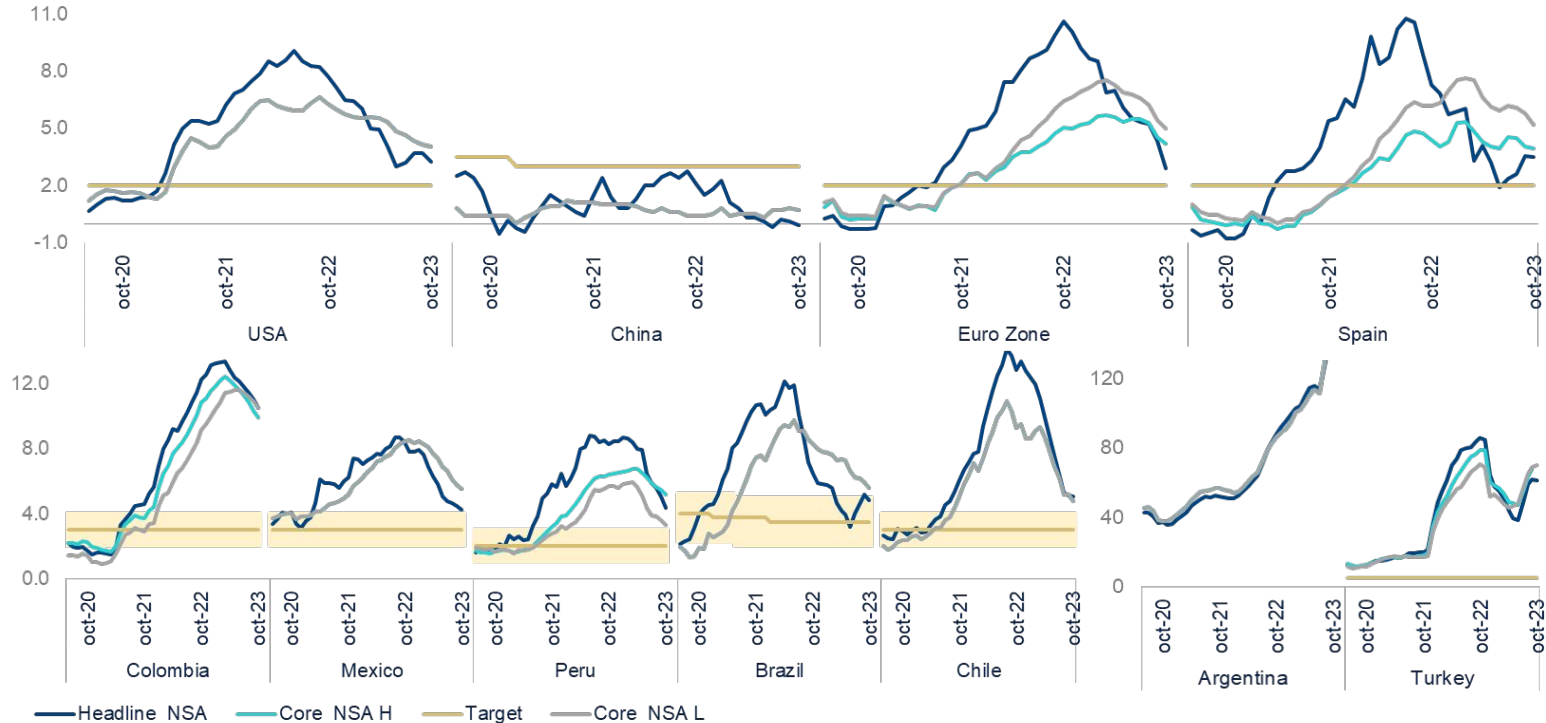
US	6.0	6.4	6.5	6.2	6.0	5.9	5.9	6.3	6.6	6.3	6.0	5.7	5.6	5.5	5.6	5.5	5.3	4.8	4.7	4.3	4.1	4.0	US
China	1.0	1.0	0.9	0.7	0.6	0.8	0.6	0.6	0.4	0.4	0.4	0.5	0.8	0.4	0.5	0.5	0.5	0.3	0.7	0.7	0.8	0.7	China
Eurozone	2.3	2.7	3.0	3.5	3.8	3.7	4.0	4.3	4.8	5.0	5.0	5.2	5.3	5.6	5.7	5.6	5.3	5.5	5.5	5.3	4.5	4.2	Eurozone
Germany	3.0	3.1	3.3	3.8	4.1	3.2	3.4	3.6	4.7	5.2	5.1	5.5	5.1	5.5	6.1	5.9	5.3	6.3	6.3	6.4	5.1	4.5	Germany
France	1.6	2.4	2.5	3.0	3.2	3.1	3.8	4.0	3.6	4.0	4.0	4.1	4.2	4.5	4.7	4.9	4.6	4.7	4.5	4.3	3.9	3.8	France
Spain	2.2	2.6	3.0	3.4	3.4	3.9	4.6	4.8	4.8	4.4	4.0	4.3	5.3	5.3	4.8	4.3	4.0	3.9	4.5	4.5	4.1	3.9	Spain
UK	4.3	5.1	5.7	6.1	6.1	6.1	6.6	6.7	7.1	7.2	7.0	7.1	6.7	7.2	7.2	7.9	8.1	7.9	7.7	7.1	6.9	6.4	UK
Turkey	43.3	47.4	51.8	58.3	63.1	66.4	71.0	74.9	76.5	78.6	78.4	60.1	58.4	56.6	53.4	48.7	47.8	47.0	54.5	63.4	67.6	67.8	Turkey
Argentina	54.0	54.5	57.3	60.5	63.2	65.5	72.2	78.4	82.3	86.4	89.1	90.6	94.4	100.4	102.0	105.2	110.3	113.1	111.5	125.3	142.2	149.7	Argentina
Colombia	5.6	6.4	6.9	7.7	8.0	8.4	8.8	9.4	10.0	10.8	11.1	11.6	11.8	12.2	12.4	12.2	11.9	11.6	11.3	10.8	10.3	9.9	Colombia
Mexico	6.2	6.6	6.8	7.2	7.3	7.5	7.7	8.1	8.3	8.4	8.5	8.3	8.5	8.3	8.1	7.7	7.4	6.9	6.6	6.1	5.8	5.5	Mexico
Peru	3.9	4.2	4.6	5.0	5.5	5.8	6.2	6.3	6.3	6.4	6.5	6.5	6.6	6.6	6.8	6.7	6.5	6.2	5.9	5.6	5.4	5.2	Peru
Brazil	8.0	8.6	9.2	9.4	9.3	9.7	9.1	9.1	8.6	8.3	8.0	7.8	7.7	7.6	7.2	7.3	7.2	6.6	6.2	6.1	6.0	5.6	Brazil
Chile	7.1	6.6	7.4	8.3	9.0	9.9	10.3	10.9	10.3	9.3	9.5	8.6	8.6	9.1	9.4	8.7	7.9	6.9	6.2	5.2	5.2	4.8	Chile



Source: BBVA Research, Haver Analytics. We report here harmonised core inflation excluding food and energy. These measures may differ from local measures of core inflation where EA and Spain: excludes unprocessed food and energy, France excludes government tariffs and volatile prices, Germany excludes energy prices.

Headline inflation resumed its downward trend in the US, while moderating further in the EZ, Mexico, Colombia and Peru. Core rates eased more gradually

INFLATION, Y/Y%



Source: BBVA Research, "L" refers to local definition. Haver Analytics.

Sequentially, November inflation was negative in Europe and tempered in the US and EM; core inflation was steady or saw a slight moderation, mainly in

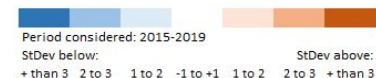
Headline Inflation M/M%, SA

	2022												2023										
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M		J	J	A	S	O
US	0.6	0.7	1.0	0.4	0.9	1.2	0.0	0.2	0.4	0.5	0.2	0.1	0.5	0.4	0.1	0.4	0.1	0.2	0.2	0.6	0.4	0.0	US
China	0.0	0.2	0.4	0.6	0.1	0.4	0.2	-0.2	0.0	0.1	0.0	0.0	-0.1	0.1	-0.5	0.1	0.1	0.1	-0.1	0.2	-0.1	0.0	China
Eurozone	1.0	0.7	1.4	0.3	0.8	0.7	0.7	0.7	1.0	1.1	0.3	0.1	0.4	0.7	-0.1	0.5	0.0	0.2	0.5	0.6	0.1	-0.3	Eurozone
Germany	0.7	0.7	1.7	0.5	0.9	0.0	0.5	0.5	1.7	0.8	0.4	-0.5	1.2	0.5	0.6	0.2	-0.1	0.3	0.2	0.5	0.3	0.0	Germany
France	0.5	0.7	0.9	0.5	0.5	0.7	0.4	0.3	-0.1	0.9	0.3	0.1	0.8	1.0	0.3	0.6	-0.2	0.0	0.0	0.8	0.3	-0.1	France
Spain	0.6	0.9	2.3	-0.7	0.5	1.4	0.7	0.4	-0.5	-0.3	0.1	0.1	0.7	1.1	-0.3	0.1	-0.3	0.1	1.1	0.7	0.4	-0.3	Spain
UK	0.6	0.7	1.0	2.0	0.5	0.8	0.9	0.5	0.5	1.6	0.4	0.5	0.1	1.1	0.7	0.7	0.5	0.1	-0.2	0.4	0.5	-0.4	UK
Turkey	10.2	4.5	5.5	5.9	4.1	4.7	3.4	2.9	4.2	3.1	2.4	0.1	5.7	2.8	2.4	1.1	0.8	3.9	10.7	10.8	5.9	3.0	Turkey
Argentina	4.2	5.1	5.7	6.0	5.6	5.5	7.4	7.2	5.6	6.0	5.4	5.0	6.4	7.1	6.6	8.3	8.4	6.1	6.3	12.6	12.2	7.9	Argentina
Colombia	1.4	1.2	0.8	1.0	1.0	0.8	1.0	1.1	1.0	1.1	1.0	1.0	1.5	1.2	0.8	0.5	0.5	0.6	0.7	0.8	0.6	0.6	Colombia
Mexico	0.3	0.9	0.8	0.8	0.6	0.7	0.6	0.8	0.6	0.5	0.4	0.5	0.4	0.6	0.1	0.3	0.2	0.0	0.4	0.7	0.5	0.3	Mexico
Peru	0.2	0.4	1.0	1.1	0.5	1.2	0.7	0.6	0.6	0.5	0.6	0.7	0.4	0.4	0.8	0.7	0.4	-0.1	0.1	0.3	0.1	-0.2	Peru
Brazil	0.5	1.0	1.5	1.0	0.5	0.7	-0.6	-0.3	-0.2	0.6	0.4	0.5	0.4	0.8	0.6	0.6	0.3	0.0	0.2	0.3	0.3	0.2	Brazil
Chile	1.0	0.5	1.7	1.4	1.3	1.2	1.3	1.2	0.7	0.2	1.3	0.4	0.6	0.2	0.9	0.3	0.2	0.1	0.2	0.1	0.5	0.1	Chile

Core Inflation M/M%, SA

US	0.6	0.5	0.3	0.5	0.6	0.6	0.3	0.6	0.6	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.2	0.2	0.3	0.3	0.2	US
China	-0.1	0.2	0.1	0.0	0.0	0.2	-0.1	0.0	-0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.3	0.0	0.0	0.0	China
Eurozone*	0.5	0.2	0.3	0.4	0.5	0.2	0.5	0.5	0.7	0.5	0.4	0.3	0.5	0.5	0.3	0.4	0.2	0.4	0.5	0.3	0.0	0.2	Eurozone*
Germany	0.5	0.2	0.3	0.3	0.6	-0.2	0.5	0.3	1.1	0.6	0.5	0.5	0.1	0.7	0.9	0.2	-0.1	1.0	0.5	0.5	-0.3	0.0	Germany
France	0.4	0.5	0.1	0.5	0.4	0.2	0.5	0.4	0.0	0.5	0.3	0.2	0.3	0.8	0.4	0.7	0.1	0.2	0.4	0.1	-0.3	0.4	France
Spain	0.4	0.3	0.4	0.3	0.3	0.5	0.5	0.4	0.3	0.2	0.2	0.4	1.3	0.5	-0.1	-0.2	0.1	0.3	1.0	0.3	-0.1	0.1	Spain
UK	0.5	0.6	0.7	0.6	0.4	0.5	0.5	0.5	0.6	0.5	0.4	0.5	0.0	1.0	0.6	1.1	0.8	0.3	0.5	-0.1	0.4	0.1	UK
Turkey	6.7	3.9	4.3	3.9	3.7	3.1	4.2	4.1	3.3	2.7	1.7	1.0	7.4	2.2	2.2	2.6	4.1	4.2	10.4	10.0	5.8	3.2	Turkey
Argentina	4.1	4.8	5.7	6.1	5.7	5.6	6.7	6.6	5.3	5.8	5.1	4.8	6.2	8.1	6.5	7.7	8.3	7.1	5.8	13.6	13.3	9.1	Argentina
Colombia	1.1	1.0	0.8	0.9	0.9	0.8	0.9	1.0	0.9	1.0	0.8	0.8	1.3	1.3	1.0	0.8	0.6	0.6	0.6	0.6	0.5	0.6	Colombia
Mexico	0.6	0.7	0.7	0.7	0.7	0.6	0.8	0.7	0.7	0.6	0.5	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.4	0.2	0.4	0.4	Mexico
Peru	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.7	0.4	0.5	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.2	Peru
Brazil	0.7	0.9	0.9	0.7	0.6	0.9	0.3	0.6	0.5	0.5	0.4	0.5	0.6	0.8	0.5	0.8	0.5	0.3	0.0	0.5	0.3	0.1	Brazil
Chile	1.0	-0.1	1.0	1.1	0.9	1.0	0.9	0.9	0.3	0.1	0.9	0.1	1.0	0.4	1.2	0.5	0.2	0.2	0.2	-0.1	0.3	-0.2	Chile

* The Eurozone core inflation data shown in the table are seasonally adjusted using Haver Analytics.



Source: BBVA Research, Haver Analytics. We report here harmonised core inflation excluding food and energy. These measures may differ from local measures of core inflation for the EA and Spain: excludes unprocessed food and energy, France excludes government tariffs and volatile prices, Germany excludes energy prices.

Monthly inflation rates are more normalized, except in Colombia, Mexico, Argentina and Türkiye

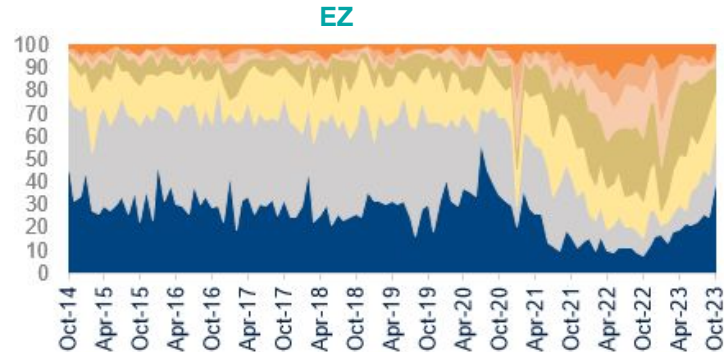
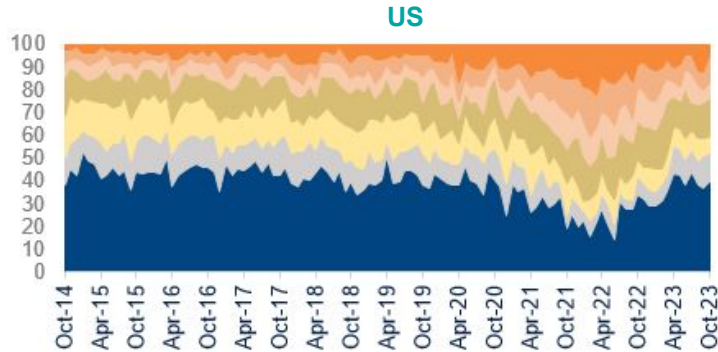
INFLATION, M/M% (SA)



Source: BBVA Research, Haver Analytics.

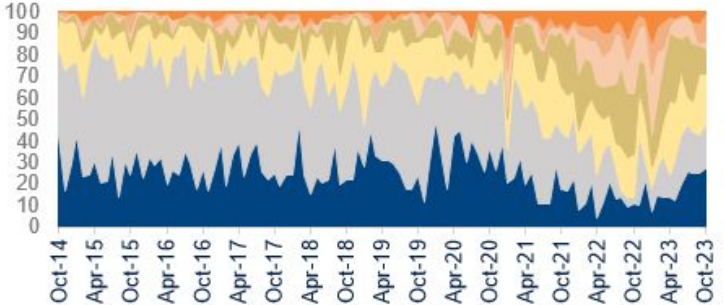
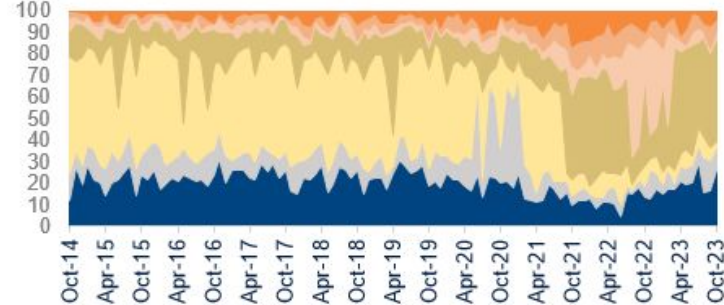
Synchronicity: the percentage of items with low inflation increased but the share of items with inflation between 4-8% is still above normal levels

PERCENTAGE OF ITEMS WITHIN DIFFERENT INFLATIONARY BRACKETS



% of two-digit items with an annualized monthly inflation:

WEIGHTED* PERCENTAGE OF ITEMS WITHIN DIFFERENT INFLATIONARY BRACKETS

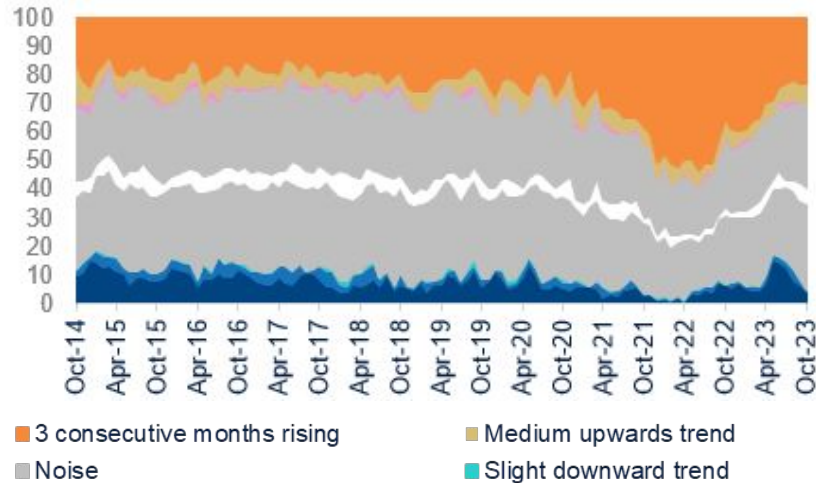


- (20 and more)
- (12 to 20)
- (8 to 12)
- (4 to 8)
- (2 to 4)
- (0 to 2)
- (Less than 0)

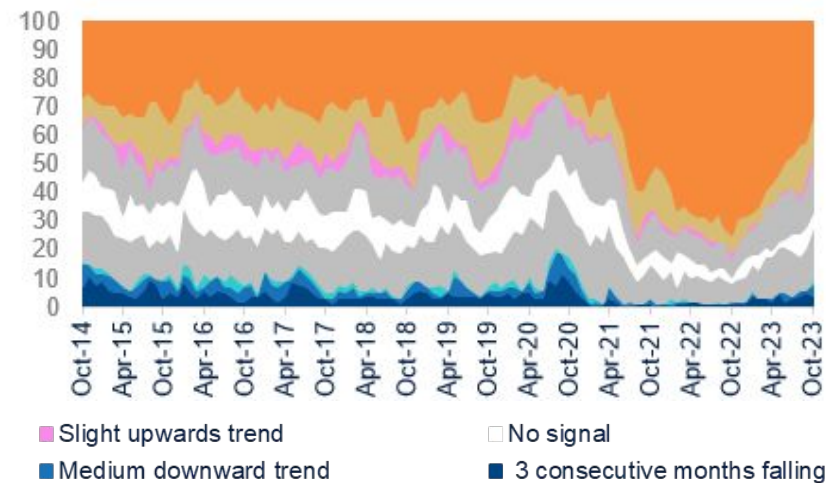
*weighted by each item's level of expenditure within the CPI basket.
Source: BBVA Research based on Haver Analytics

The number of items with frequent price revisions has moderated in the US and the EZ but is still remain above pre-pandemic levels

PERCENTAGE OF ITEMS WITH FREQUENT ADJUSTMENTS US



EZ



Medium downward trend refers to 3 price reductions and no increases in the last three months.

Slight downward trend refers to 2 price reduction and no increases in the last three months:

Noise: refers to both price increases AND reductions in the last three months.

No signal: refers to no significant change in prices in the last three months

Slight upward trend refers to 2 price increase and no reduction in the last three months:

Medium upwards trend refers to 3 price increases and no reductions in the last three months.

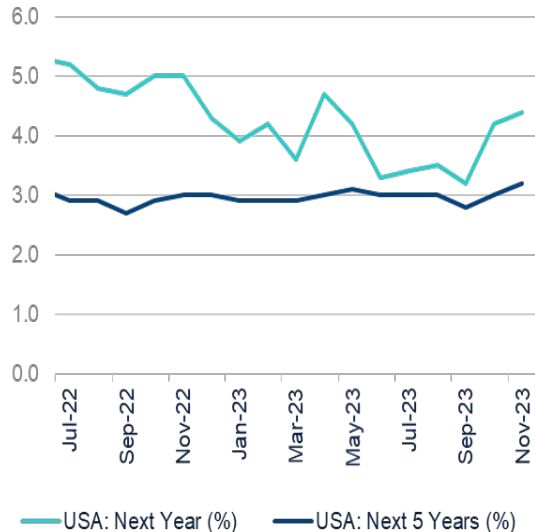
% of items* with prices signaling; * items within the CPI basket (2 digits) and where.

Source: BBVA Research, Haver Analytics.

In all of the above, price changes of less than 0.05% annualized inflation are considered insignificant.

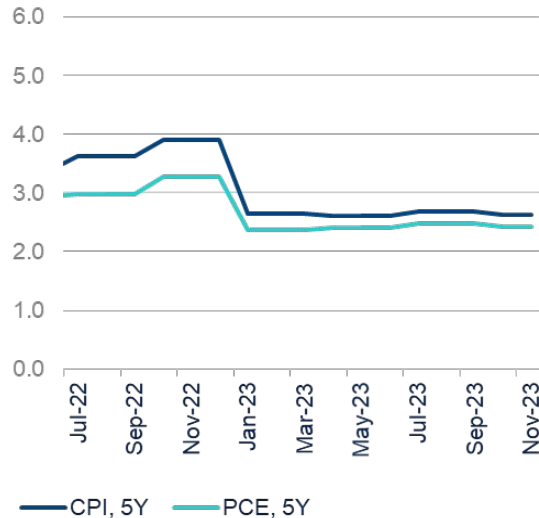
In the US, consumers inflation expectations inched up, while markets and analysts' expectations remain anchored below 3%

EXPECTATIONS: CONSUMERS SURVEY (NEXT YEAR, NEXT 5 YEARS)



Source: BBVA Research, Haver Analytics.

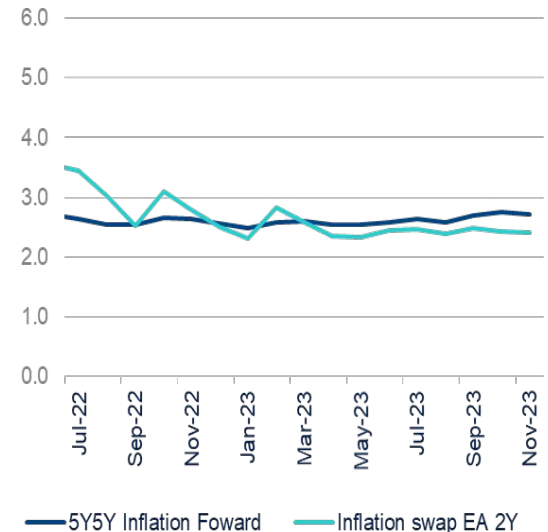
EXPECTATIONS: PROFESSIONAL FORECASTERS (LONG-TERM*, %)



*/ This refers to an average of 5 and 10-year ahead expected rate of inflation

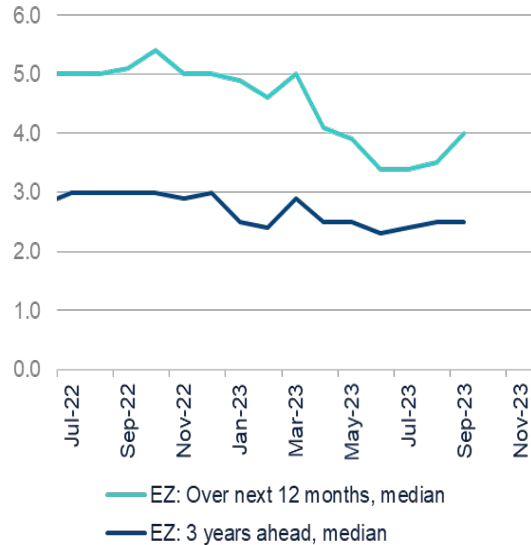
Source: Federal Reserve Bank of Philadelphia.

EXPECTATIONS: MARKET (5Y5Y FORWARD, 5Y SWAP)

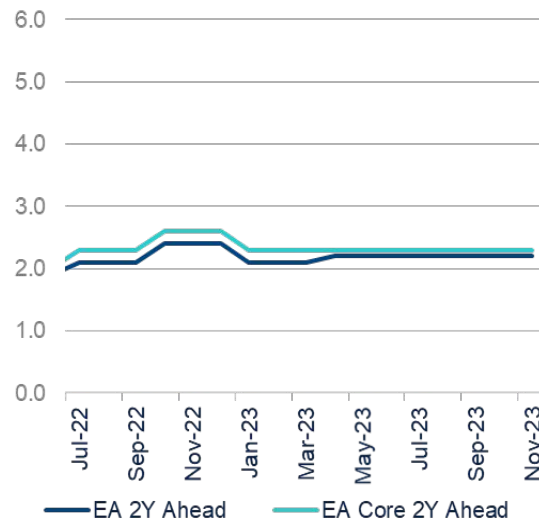


EZ consumer inflation expectations increased slightly, while analysts' are close to ECB's 2% level and markets' remain above the target

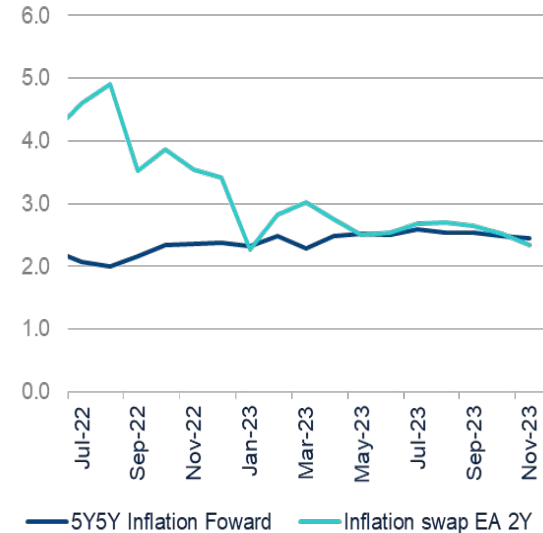
EXPECTATIONS: CONSUMERS SURVEY (NEXT YEAR, 3Y AHEAD)



EXPECTATIONS: PROFESSIONAL FORECASTERS (LONG-TERM*, %)



EXPECTATIONS MARKET (5Y5Y FORWARD, 5Y SWAP)



Source: BBVA Research, ECB, consumer survey

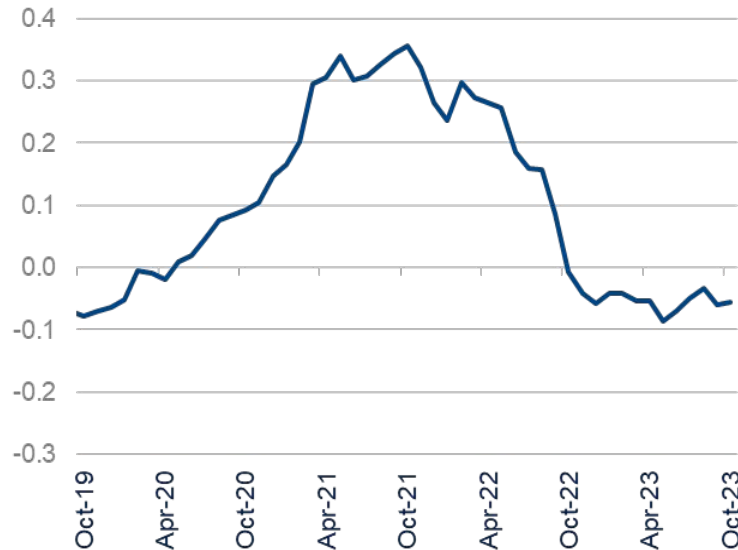
*/ Long-Term CPI Inflation refers to 2027 expected headline inflation

Source: ECB

Our supply bottlenecks indicator stands slightly lower than normalized levels, suggesting some slack in manufacturing activity. Bottlenecks seem to be over

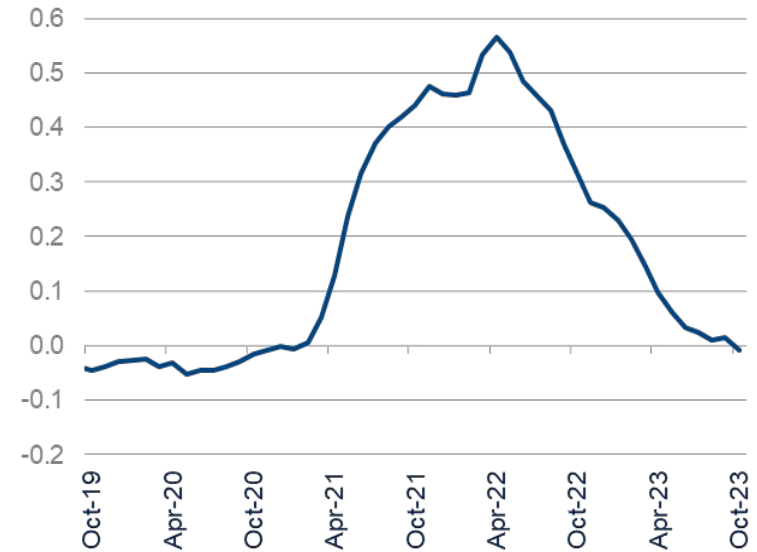
US SUPPLY BOTTLENECKS INDICATOR

(INDEX; LAST AVAILABLE DATA: SEPTEMBER 2023)



EZ: SUPPLY BOTTLENECKS INDICATOR

(INDEX; LAST AVAILABLE DATA: SEPTEMBER 2023)



Principal Component Analysis (PCA) has been the methodology followed in the construction of the supply bottlenecks indicator for United States and the Euro Area, whereby the first principal component has been considered as the corresponding supply bottlenecks indicator.

Variables included in the indicator: EA19: factors limiting production - Equipment (Percent Balance SA); EA19: Material shortage construction (Percent Balance SA);IFO: Germany: Material shortage in construction (Percent Balance SA);Ea 19: Retail Inventories (Percent Balance SA);Harplex Shipping Index;Vessel Size in TEU - Rates in US\$.

Source: BBVA Research, Haver Analytics.

Disclaimer

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