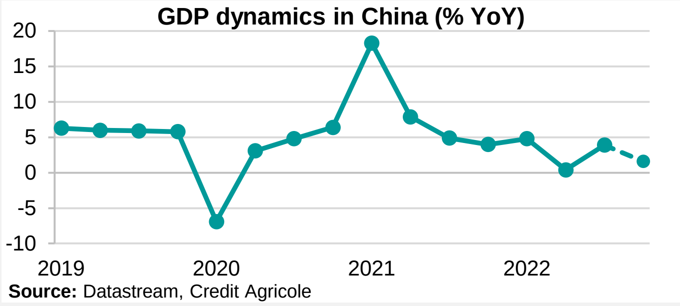
This week

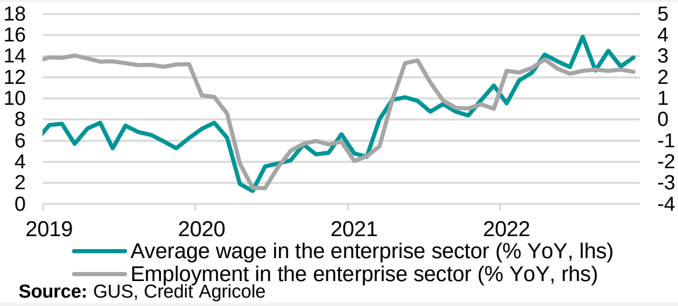
- **The key event this week will be the release of data from China scheduled for Tuesday.** We expect China's GDP to have grown by 1.6% YoY in Q4 compared to 3.9% in Q3 (-1.1% QoQ in Q4 vs. +3.9% in Q3). We expect MoM figures to also show a further slowdown in business activity growth. We forecast that industrial production dropped by 1.0% YoY in December vs. 2.2% growth in November, retail sales shrank further to -8.0% YoY from -5.9% in November, and urban investments growth slowed to 4.8% YoY in December from 5.3% in November. Thus, data will confirm that China's economy continues to be adversely affected by the COVID-19 pandemic; in December China began to ease restrictions which led a sharp rise in infections. We believe that data from China will be neutral for the PLN and yields on Polish bonds.



Source: Datastream, Credit Agricole

- **Some important data from the US will be released this week.** We expect nominal retail sales to have dropped by 0.7% MoM in December compared to a drop of 0.6% in November due to lower sales volumes in the automotive industry and a fall in fuel prices. We expect to see industrial production growth in December continuing at the same rate as in November (-0.2% MoM), which will be consistent with business survey results. We expect data on housing starts (1350k in December vs. 1427k in November), new building permits (1350k vs. 1370k) and existing home sales (3.96m vs. 4.09m) to show a further slowdown in the US housing market. We believe the release of US data will be neutral for financial markets.

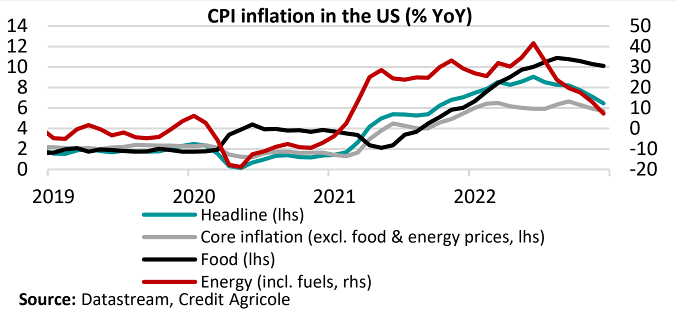
- **Data on employment and average wages in Poland's business sector for December will be released on Friday.** We forecast that growth in employment remained flat from November, at 2.3% YoY. We expect to see a drop in average wage growth to 12.4% YoY in December from 13.9% YoY in November due to last year high base effects and a shift in the timing of bonus payments in mining. December figures will again confirm a good situation in the labour market. We believe that high inflation, low unemployment, and continuing problems with finding qualified workforce will be adding to wage pressures in the coming months, nevertheless, the risk of a wage-price spiral remains low (see MACROmap of 09/01/2023). We believe that the release of data on employment and wages in the business sector will be neutral for the PLN and the debt market.



Source: GUS, Credit Agricole

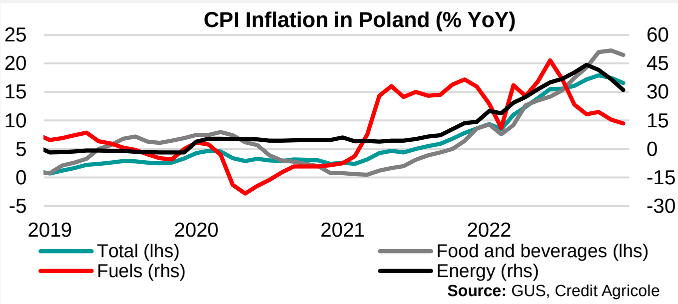
Last week

- **Important data from the US was released last week.** US CPI inflation fell to 6.5% YoY in December from 7.1% in November, in line with market expectations. The fall in inflation was driven by slower rises in energy and food prices, and lower core inflation, which dropped to 5.7% YoY in December from 6.0% in November, also in line with market expectations. The preliminary University of Michigan index rose to 64.6 pts in January from 60.4 pts in December, above market expectations (60.4 pts). The rise in the index is driven by rises in its components for both the assessment of the current situation and expectations. At the same time, median expected inflation over one-year horizon, released together with the reading of the University of Michigan index, fell to 4.0% YoY in January from 4.4% in December, which shows that households' inflation expectations in the US are falling. In view of falling inflationary pressures, we see a downside risk to our scenario, which expects the Fed to hike rates two more times, by 50bp in February and by 25bp in March, and thus to end the interest rate hike cycle with the federal funds target range of [5.00%; 5.25%]. At the same time, we still expect the Fed to begin a rate reduction cycle in 2024 and rates to be cut by a total 100bp over the whole of 2024.



Source: Datastream, Credit Agricole

- **In accordance with the final GUS estimate, CPI inflation in Poland dropped to 16.6% YoY in December from 17.5% in November, running in line with GUS's flash estimate and well below market consensus and our forecast (17.3%).** Thus, inflation dropped for the second month in a row. The drop in inflation was driven by lower price rises in the 'energy' (31.1% YoY in December vs. 36.8% in November), 'food and non-alcoholic beverages' (21.5% vs. 22.3%), and 'fuels' (13.5% vs. 15.5%) categories, partially offset by higher core inflation, which, according to our estimates, rose to 11.5%-11.6% YoY in December from 11.4% in November. Although faster growth in core inflation shows that inflationary pressures in Poland's economy remain strong, the fact that inflationary pressures affect fewer categories may indicate the first signs of their weakening (see MACROpulse of 13/01.2023). Inflation for the whole of 2022 rose to 14.3% YoY from 5.1% for 2021. We expect headline inflation to reach its local maximum of 18.8% YoY in February 2023, and then it will start falling to around 7.1% in December 2023. We expect annual average CPI inflation of 12.1% in 2023. We acknowledge a significant risk to our forecast due to difficulties with estimating the combined effects of the phasing-out of the Anti-Inflation Shield and the introduction of a new energy price surge curbing mechanism at the beginning of 2023 (see MACROmaps of 5/12/2022 and 12/12/2022).



Source: GUS, Credit Agricole

- **Poland's current account balance rose to EUR -422m in November from EUR -597m in October, running well above market expectations (EUR -970m) and our forecast (EUR -1084m).** Thus, it was the 13th month in a row with Poland's current account deficit. The increase in the current account balance is accounted for by higher trade and secondary income balances (up by EUR

788m and EUR 7m, respectively, from October), partially offset by lower services and primary income balances (down by EUR 102m and EUR 518m, respectively, from October). At the same time, November saw drops both in export growth (20.3% YoY in November from 24.4% in October) and in import growth (17.7% from 25.3%). In accordance with the NBP's press release, continuing strong real export growth was driven mainly by higher exports in the motor industry resulting from improved availability of key manufacturing components as well as rises in exports of food and fuels. At the same time, a gradual slowdown in fast growth in imports was driven by a fall in imports of intermediary goods. We see an upside risk to our forecast, which expects the cumulative current account balance for the last four quarters as a percentage of GDP to fall to -4.0% in Q4 from -3.7% in Q3.

- **China's trade balance widened in December to USD 78.0bn vs. USD 69.8bn in November, against market expectations of USD 76.2bn.** Exports growth rate slowed in December to -9.9% YoY vs. -8.7% in November while imports growth rate increased to -7.5% vs. -10.6%, running above market expectations (10.0% and -9.8% respectively). The export data signal a reduction in global trade activity, as well as the negative impact of the J. Biden administration's restrictions on Chinese sales of certain goods to the US (including electronics). The import data shows the negative impact of the increase in infections with the move away from the zero COVID policy on Chinese domestic demand. We believe that a significant improvement in the epidemic situation in China can only be expected in late March / early April 2023, which will support a recovery in domestic demand. This is consistent with our forecast that China's GDP growth will increase to 5.0% YoY in 2023, up from 3.0% in 2022, and will settle at 4.8% in 2024.
- **As expected, Fitch has maintained Poland's long-term credit rating at A- with a stable outlook.** According to the agency, the current rating balances, on the one hand, Poland's diversified economy, the relatively low level of public debt and strong economic fundamentals, and, on the other hand, the indicators developed by the World Bank on the rule of law and GDP per capita, which are at a relatively low level in comparison with other A-rated countries. Fitch has slightly modified its assessment of factors that, if they materialize, could contribute to a negative decision on Poland's rating in the future. The first of these is a sustained increase in the public debt to GDP ratio. The second is the persistence of inflation at high levels, which would contribute to a deterioration in the competitiveness of the Polish economy, a slowdown in economic growth and an increase in foreign debt. The third is a significant deterioration in the rule of law, an escalation of tensions between Poland and the EU or a significant decline in Poland's credibility in terms of its fiscal or economic situation. In its previous assessment, however, Fitch highlighted the negative consequences of the energy shock as one of the potential negative factors for Poland's rating. The factors that could contribute to an improvement in Poland's credit rating did not change significantly compared to the previous report. According to Fitch, a rating upgrade could take place in the event of stronger-than-expected economic growth and a corresponding faster narrowing of the income gap between Poland and developed countries or a sustained decline in public debt to GDP. In our opinion, Fitch's confirmation of Poland's rating and its outlook is neutral for the PLN and yields on Polish bonds.

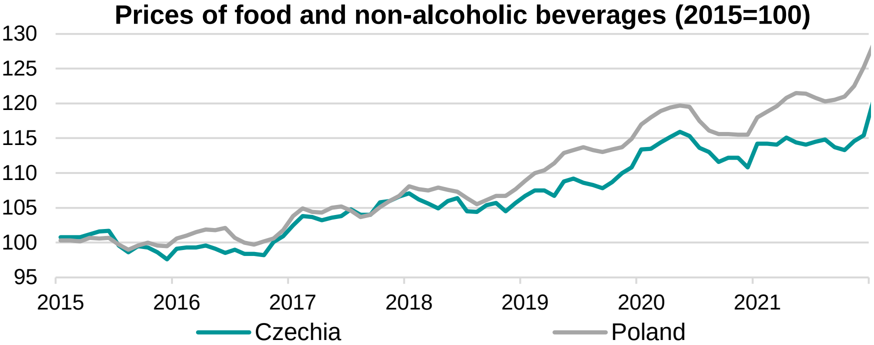
By how much did the VAT cut reduce food prices?

At the beginning of 2023, the government restored VAT rates for fuel and selected energy carriers from before the outbreak of the war in Ukraine. These rates had been at a reduced level for the past year due to the so-called Anti-Inflation Shield. In the case of food and non-alcoholic beverages, the zero VAT rate has been extended until June 2023. Below we estimate the impact of the VAT reduction on food prices.

The reduction in the VAT rate to zero in February 2022 affected food goods previously taxed at 5%. These goods account for around 80% of purchases within the inflationary category 'food and non-alcoholic beverages'. Thus, sugar, coffee, tea, chocolate, fizzy drinks, among others, which were taxed at a VAT rate higher than 5% before February 2022, were not covered by the Anti-Inflation Shield. If the VAT rate reduction were fully reflected in retail prices, the prices of food goods covered by the Anti-inflation Shield should have decreased by 4.8%. For example, a commodity with a net price of PLN 100 would cost PLN 105 gross before the VAT rate reduction, and with a zero VAT rate its gross price should drop to PLN 100, i.e. fall by 4.8%. However, due to various factors (including the development of margins, competition in a given market, access to information, cost pressures), sellers could, with the introduction of the Anti-Inflation Shield, increase the net price at the same time, which would result in a smaller reaction (than a 4.8% decrease) of the gross price to the VAT rate reduction. We discussed the determinants that may limit the transmission of the VAT rate reduction on food prices in detail in the MACROmap of 10/01/2022.

In order to estimate the actual scale of the transmission of the VAT rate reduction on food prices in Poland, we used an econometric analysis - the so-called difference-in-differences method. In a nutshell, this method involves measuring the difference between the price of a given product before and after the reduction of the VAT rate in Poland. Then the difference between the price levels of an analogous product at the same points in time in another country is calculated. The difference-in-differences in the two countries answers the question of what was the effect of government intervention (in this case a reduction in the VAT rate) on food prices. This method uses the assumption of parallel trends (changes over time) in both countries. In other words, we assume that if the VAT rate had not been reduced in Poland, food prices in Poland and in the chosen reference country would have behaved in the same way.

Prices of food and non-alcoholic beverages (2015=100)



Source: Eurostat, Credit Agricole

We chose the Czech Republic as the reference country (i.e. a counterfactual scenario to the Polish situation). This is due to two factors. Firstly, due to the similar latitude, agriculture in Poland and the Czech Republic has similar climatic conditions. For this reason, the structure of agricultural production in Poland and the Czech Republic is similar. Secondly, due to the geographical proximity and the possibility of free movement of goods within the EU, there are ample opportunities for arbitrage in the conditions of price deviation of agri-food products between the two countries. These similarities are also confirmed by statistical analysis. The correlation between Poland and the Czech Republic for individual inflation subcategories within the ‘food and non-alcoholic beverages’ category has been very high in recent years, averaging 0.80. At the same time, the Czech government did not intervene in the food price formation mechanism during the Anti-Inflation Shield period in Poland. Thus, the assumption that if the VAT rate had not been reduced in Poland, food prices in Poland and the Czech Republic would have behaved similarly is justified.

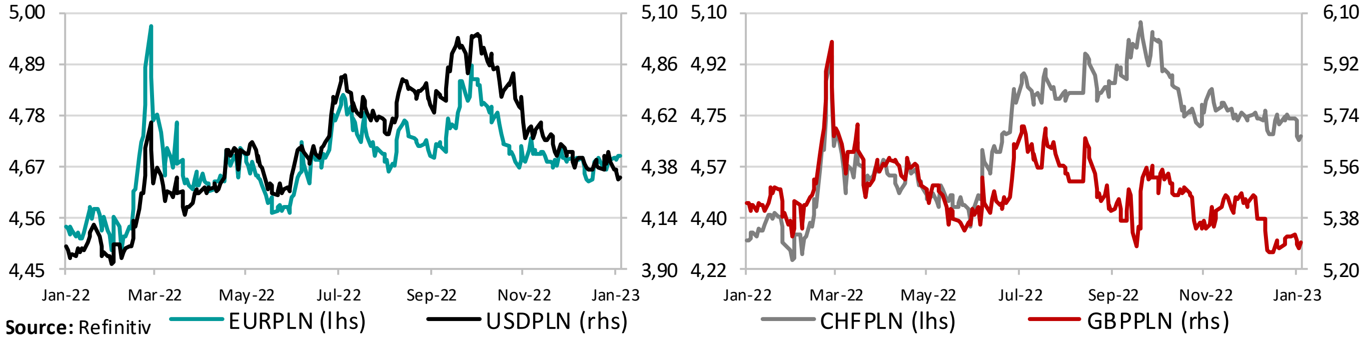
We conducted our analysis on the basis of dozens of so-called elementary food groups, i.e. basic categories that are the lowest level in the system of weights used to calculate price indices at higher levels of aggregation. According to the results of the econometric modelling, the reduction in the VAT rate contributed to a reduction in the prices of food products that were previously subject to a 5 per cent rate, by about 3 per cent on average. This means that the transmission of the VAT rate reduction on product prices was around 60%. Given that these goods account for 80 per cent of the value of purchases within the 'food and non-alcoholic beverages' category, it can be estimated that the VAT reduction had an impact of approximately 2.4 per cent on the decrease in total food products. We believe that the incomplete transmission of the VAT reduction on prices was due to strong cost pressures in the agri-food and retail sectors (rising prices of agricultural raw materials, energy, transport, packaging and labour), which led some food distributors to try to use the tax changes to increase their profitability. Taking into account the weight of food in the overall inflation basket, we estimate that the reduction of the VAT rate on food had an effect of lowering total inflation in Poland by 0.6 pp.

Incidentally, by modifying our model accordingly, we also verified two hypotheses regarding retailers' price-setting mechanism. The first concerned artificial price increases in January 2022 in the period between the announcement of plans to reduce the VAT rate on food and its entry into force. According to media reports, there was a risk that some retailers would increase the net prices of their products before the Anti-Inflation Shield was triggered, so that after the VAT reduction their gross price would decrease less compared to the original levels. However, we did not find any evidence of such action in January 2022, which was probably the result of the UOKiK monitoring the prices of selected food items and stigmatising the negative practices of sellers. The second hypothesis we verified was that the effect of the VAT reduction was spread over several months, as market participants could have been adjusting their pricing strategy to their competitors' actions. This hypothesis was not reflected in the empirical data either. Our model indicates that the effect of the VAT reduction on prices fully materialised in February 2022.

The anti-inflationary effects of the VAT rate reduction on food prices we have estimated are important, but the behaviour of food prices after the Shield is cancelled will be much more important. The results of international studies in the area of the transmission of VAT changes on prices indicate that an important determinant of the strength of the impact of restoring VAT rates to their original level may be the timing of withdrawing the Shield. When consumer demand is weaker, firms may be more willing to absorb a tax increase in order to maintain their already deteriorating sales performance. Conversely, when consumer demand is strong, businesses can pass on the tax to a greater extent to consumers, without a significant deterioration in sales performance. In our baseline scenario, we assume that the process of restoring the original VAT rates on food will be implemented gradually (in three tranches) and will not begin until 2024. The Anti-Inflation Shield on food is going to be withdrawn gradually, as the government in power in 2024 will attempt to avoid a spike in food prices, we believe. However, the gradual restoration of the original VAT rates on food will allow them to be more easily passed on to consumers (small changes in prices will be less noticeable and consequently more acceptable than a spike). Combining this with a recovery in consumption we expect from H2 2023 on, which will also last into 2024, we forecast that the withdrawal of the Anti-Inflation Shield on food will lead to a full transmission of the tax to gross prices covered by the Shield (representing 80% of food expenditure) and, consequently, total food prices will increase by around 4%. Thus, we maintain our assessment that the food Anti-Inflation Shield, although it enabled a temporary reduction in food price growth, in the long term it will make the prices of food and non-alcoholic beverages in Poland approximately 1.6% higher than in the scenario if the Food Anti-Inflation Shield was not introduced (the effect of a net price increase after the introduction of the Shield and then full VAT transmission after its termination).

Data from China in the spotlight for investors

FX rates



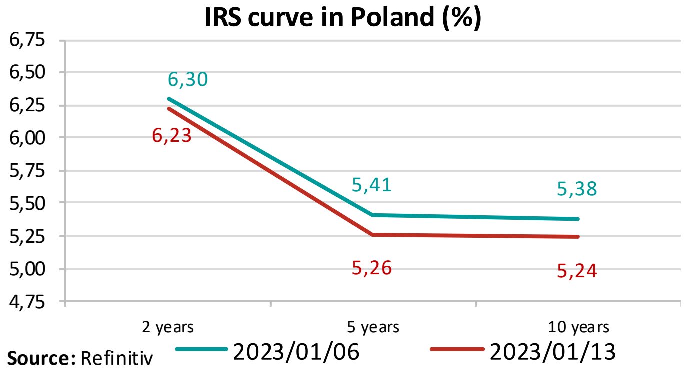
Source: Refinitiv

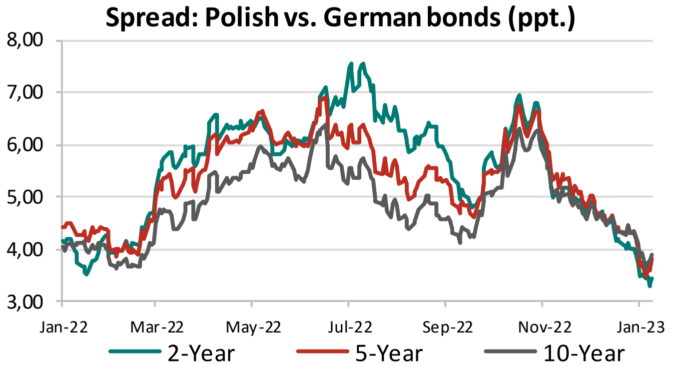
Last week, the EURPLN rate increased to 4.6925 (the PLN weakened by 0.1%). Last week the EURPLN exchange rate was quite stable and stayed close to the 4.69 level. The reduced volatility of the EURPLN exchange rate was supported by a relatively poor calendar of macroeconomic events. The publication of domestic inflation data, in line with flash estimate, had no significant impact on the PLN.

On the other hand, the EURUSD exchange rate experienced greater volatility. On Thursday, there was a slight weakening of the USD against the EUR after the publication of data indicating a marked decline in US inflation, which dampened expectations among some investors for further strong interest rate rises by the Fed.

Last Friday's decision by Fitch to maintain Poland's rating and its outlook is neutral for the PLN. This week, the publication of data from China (GDP, industrial production, retail sales, urban investments) scheduled for Tuesday will be crucial for the PLN. However, we believe that it will not have a material impact on the PLN. We expect that other publications from the Polish and global economies planned for this week will not have a significant impact on the PLN. Information suggesting a possible change in the monetary policy stance of the Federal Reserve and the ECB, as well as information relating to the course of hostilities in Ukraine will remain an important factor determining the PLN exchange rate.

Yields keep falling following core markets





Source: Refinitiv

Last week, 2-year IRS rates dropped to 6.23 (down by 7bp), 5-year rates to 5.26 (down by 15bp) and 10-year ones to 5.24 (down by 14bp). Last week saw further drop in IRS rates across the curve following the core markets. The decline in yields in the core markets is supported by diminishing expectations of further strong hikes by the Fed and ECB amid emerging signs of weakening inflationary pressures in the US and the Eurozone.

Last Friday's decision by Fitch to maintain Poland's rating and its outlook is neutral for IRS rates. We believe that data releases from the Polish and global economies planned for this week will not have a significant impact on the IRS. Information suggesting a possible change in the monetary policy stance of the Federal Reserve and the ECB, as well as information relating to the course of hostilities in Ukraine will remain an important factor affecting the yield curve.

Forecasts of the monthly macroeconomic indicators

Main monthly macroeconomic indicators in Poland

Indicator	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23
NBP reference rate (%)	1,75	2,25	2,75	3,50	4,50	5,25	6,00	6,50	6,50	6,75	6,75	6,75	6,75	6,75
EURPLN*	4,58	4,58	4,69	4,64	4,67	4,58	4,70	4,73	4,72	4,85	4,71	4,67	4,69	**4,70**
USDPLN*	4,03	4,08	4,18	4,19	4,43	4,27	4,48	4,63	4,70	4,95	4,77	4,48	4,38	**4,39**
CHFPLN*	4,42	4,40	4,56	4,54	4,55	4,45	4,69	4,86	4,80	5,01	4,76	4,74	4,72	**4,80**
CPI inflation (% YoY)	8,6	9,4	8,5	11,0	12,4	13,9	15,5	15,6	16,1	17,2	17,9	17,5	16,6	
Core inflation (% YoY)	5,3	6,1	6,7	6,9	7,7	8,5	9,1	9,3	9,9	10,7	11,0	11,4	**11,6**	
Industrial production (% YoY)	16,3	18,0	17,3	15,4	12,3	14,9	10,4	7,1	10,9	9,8	6,6	4,5	**3,0**	
PPI inflation (% YoY)	14,4	16,1	16,1	21,9	24,1	24,7	25,6	25,5	25,5	24,6	23,1	20,8	**19,3**	
Retail sales (% YoY)	16,9	20,0	16,5	22,0	33,4	23,6	19,9	18,4	21,5	21,9	18,3	18,4	**18,0**	
Corporate sector wages (% YoY)	11,2	9,5	11,7	12,4	14,1	13,5	13,0	15,8	12,7	14,5	13,0	13,9	**12,4**	
Employment (% YoY)	0,5	2,3	2,2	2,4	2,8	2,4	2,2	2,3	2,4	2,3	2,4	2,3	**2,3**	
Unemployment rate* (%)	5,8	5,9	5,9	5,8	5,6	5,4	5,2	5,2	5,2	5,1	5,1	5,1	**5,2**	
Current account (M EUR)	-3883	-1091	-2032	-4206	-2834	-1078	-499	-1206	-2743	-1839	-597	-422		
Exports (% YoY EUR)	25,0	27,4	20,3	11,9	17,6	26,8	21,5	20,3	27,6	26,5	24,4	20,3		
Imports (% YoY EUR)	39,6	38,7	29,7	31,4	36,0	32,7	27,1	21,8	29,4	30,1	25,3	17,7		

*end of period

Forecasts of the quarterly macroeconomic indicators

Main macroeconomic indicators in Poland

Indicator		2022				2023				2022	2023	2024
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Gross Domestic Product (% YoY)		8,6	5,8	3,6	1,1	-1,0	0,0	2,5	3,2	4,5	1,2	3,1
Private consumption (% YoY)		6,7	6,4	0,9	-2,0	-0,7	-0,9	0,7	2,5	2,9	0,3	3,0
Gross fixed capital formation (% YoY)		4,7	6,6	2,0	-1,8	-2,4	-0,3	1,4	2,8	2,1	0,8	4,0
Export - constant prices (% YoY)		4,2	5,2	6,9	4,5	2,3	1,0	3,3	4,6	5,2	2,8	3,8
Import - constant prices (% YoY)		9,4	6,9	6,0	2,3	0,3	-1,0	3,1	4,0	5,9	1,6	4,3
GDP growth contributions	Private consumption (pp)	4,0	3,6	0,5	-1,0	-0,4	-0,5	0,4	1,2	1,6	0,2	1,7
	Investments (pp)	0,6	1,0	0,3	-0,4	-0,3	-0,1	0,2	0,6	0,3	0,1	0,7
	Net exports (pp)	-2,7	-0,7	0,6	1,3	1,2	1,3	0,2	0,4	-0,2	0,8	-0,2
Current account (% of GDP)***		-2,7	-3,5	-3,7	-4,0	-3,9	-3,8	-3,7	-3,6	-4,0	-3,6	-3,0
Unemployment rate (%)**		5,8	5,2	5,1	5,2	5,6	5,4	5,3	5,5	5,2	5,5	5,4
Non-agricultural employment (% YoY)		2,3	0,6	-0,9	-0,5	-0,5	-0,5	-0,5	-0,5	0,4	-0,5	0,1
Wages in national economy (% YoY)		9,7	11,8	14,6	14,0	14,5	13,2	11,4	9,9	12,5	12,3	7,5
CPI Inflation (% YoY)*		9,6	13,9	16,3	17,3	18,3	13,5	10,1	6,4	14,3	12,1	4,8
Wibor 3M (%)**		4,77	7,05	7,21	7,02	6,88	6,88	6,88	6,88	7,02	6,88	5,76
NBP reference rate (%)**		3,50	6,00	6,75	6,75	6,75	6,75	6,75	6,75	6,75	6,75	5,75
EURPLN**		4,64	4,70	4,85	4,69	4,78	4,73	4,70	4,65	4,69	4,65	4,50
USDPLN**		4,19	4,48	4,95	4,38	4,78	4,59	4,43	4,27	4,38	4,27	4,29

* quarterly average
** end of period
***cumulative for the last 4 quarters

Calendar

TIME	COUNTRY	INDICATOR	PERIOD	PREV. VALUE	FORECAST*	
					CA	CONSENSUS**
		Monday 01/16/2023				
14:00	**Poland**	**Core inflation (% YoY)**	**Dec**	**11,4**	**11,6**	**11,6**
		Tuesday 01/17/2023				
3:00	China	GDP (% YoY)	Q4	3,9	1,6	1,8
3:00	China	Industrial production (% YoY)	Dec	2,2	-1,0	0,5
3:00	China	Retail sales (% YoY)	Dec	-5,9	-8,0	-7,8
3:00	China	Urban investments (% YoY)	Dec	5,3	4,8	5,0
14:30	USA	NY Fed Manufacturing Index (pts)	Jan	-11,2		-8,7
		Wednesday 01/18/2023				
11:00	Eurozone	HICP (% YoY)	Dec	9,2	9,2	9,2
14:30	USA	Retail sales (% MoM)	Dec	-0,6	-0,7	-0,8
15:15	USA	Industrial production (% MoM)	Dec	-0,2	-0,2	-0,1
15:15	USA	Capacity utilization (%)	Dec	79,7		79,6
16:00	USA	Business inventories (% MoM)	Nov	0,3		0,4
		Thursday 01/19/2023				
10:00	Eurozone	Current account (bn EUR)	Nov	-0,4		
14:30	USA	Philadelphia Fed Index (pts)	Jan	-13,8		-11,0
14:30	USA	Housing starts (k MoM)	Dec	1427	1350	1358
14:30	USA	Building permits (k)	Dec	1351	1350	1370
		Friday 01/20/2023				
10:00	**Poland**	**Corporate sector wages (% YoY)**	**Dec**	**13,9**	**12,4**	**12,4**
10:00	**Poland**	**Employment (% YoY)**	**Dec**	**2,3**	**2,3**	**2,3**
16:00	USA	Existing home sales (M MoM)	Dec	4,09	3,96	3,95

*The forecasts of macroeconomic indicators for Poland were prepared by Credit Agricole Bank Polska S.A. The forecasts of foreign indicators were prepared by Crédit Agricole Corporate and Investment Bank

** Refinitiv

MACRO MAP

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