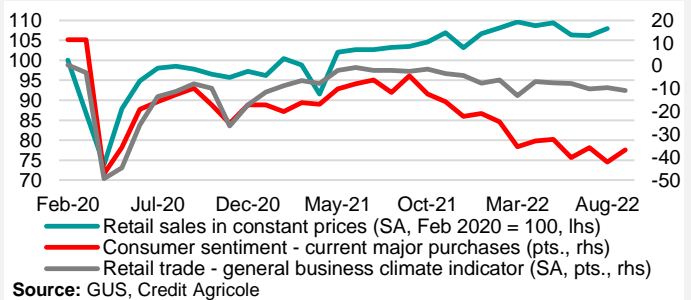


This week

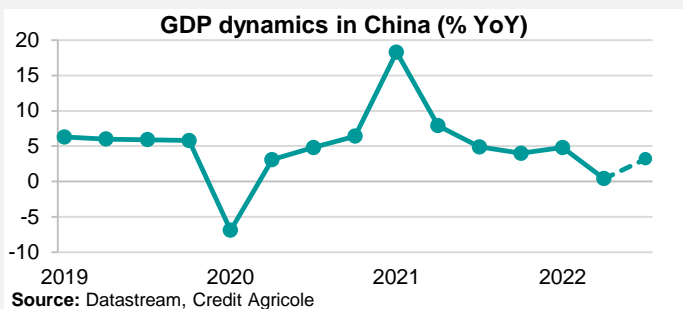
➤ **The key event this week will be the release of Poland's industrial production data for September scheduled for Thursday.** We forecast a drop in industrial production to 9.7% YoY from 10.9% in August. The drop in industrial production is largely accounted for by last year high base effects. Our industrial production growth forecast is above market consensus (8.8%), and thus its materialization would be slightly positive for the PLN and yields on Polish bonds.

➤ **Another important event will be the release of Poland's retail sales figures on Friday.** We expect to see a drop in sales growth to 19.9% YoY in September from 21.5% in August. The drop in retail sales growth was driven by a general downturn in retail trade, weak consumer sentiment (see the chart), and a



further rise in inflation, which whittled down the real purchasing power of consumers. Our retail sales growth forecast is below market consensus (21.5%), thus, its materialization would be slightly negative for the PLN and yields on Polish bonds.

➤ **Tuesday will see the release of important data from China.** We expect to see GDP growth of 3.1% QoQ in Q3 compared to a drop of 2.6% in Q2 (3.2% YoY from 0.4% in Q2). Growth in Q3 was supported by the gradual easing of restrictions imposed in Q2 to curb the spread of the COVID-19 pandemic. Overall,



the September data will show a further acceleration in China's business activity growth. We forecast that industrial production growth picked up to 5.2% YoY in September from 4.2% in August, urban investment growth rose to 6.2% YoY from 5.8% in August, while retail sales growth slowed to 3.0% YoY from 5.4% in August. Our forecasts of China's macroeconomic indicators are close to market expectations, and thus their materialization would be neutral for financial markets.

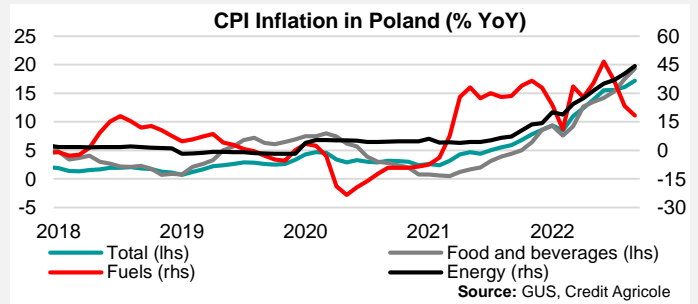
➤ **This week will see the release of some important data on the US economy and business survey results.** We expect to see industrial production growth to have picked up to 0.2% MoM in September from -0.2% MoM in August, which will be consistent with manufacturing business survey results. US housing market data will also be released. We expect that the number of housing starts dropped to 1450k in September from 1575k in August, the number of new building permits fell to 1525k in September from 1542k in August, and existing home sales dropped to 4.61m from 4.80m in August. If our forecasts materialize, the figures will show a deepening slowdown in the US housing market and a high likelihood of the trend continuing in the coming months. We believe that the overall impact of US economy data on financial markets will be limited.

➤ **Data on employment and average wage in Poland's business sector for September will be released on Thursday.** We forecast that growth in employment picked up to 2.5% YoY from 2.4% in August due to last year low base effects. At the same time, average wage growth, driven by strong wage pressure, did not change much from August (12.7% YoY vs. 12.7% in August). September 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 pressure in the coming months. We believe that the release of data on

employment and average wage in the business sector will be neutral for the PLN and the debt market.

Last week

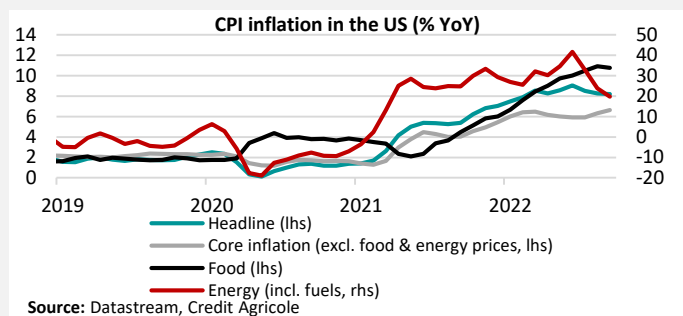
➤ **CPI inflation in Poland rose to 17.2% YoY in September from 16.1% in August, running in line with GUS's flash estimate.** Thus, inflation hit its highest level since February 1997. The rise in inflation was driven by higher rises in the prices of food and non-alcoholic beverages (19.3% YoY in September vs. 17.5% in August),



energy (44.3% vs. 40.3%), and a rise in core inflation, which in accordance with our estimates stood at 10.7% YoY in September vs. 9.9% in August. These rises were partially offset by a slower growth in the prices of fuels, which dropped to 18.3% YoY from 23.3%. In our opinion, the marked acceleration in core inflation and the fact that is accounted for by a wide range of categories suggest that inflation pressure in the Polish economy remains strong. We maintain our forecast that headline inflation will reach its local maximum of 18.4% YoY in December, and then it will begin to fall gradually. Consequently, we forecast that inflation will rise to 14.5% YoY in 2022 from 5.1%, and then will fall to 10.4% in 2023.

➤ **Poland's current account balance fell to EUR -3,967m in August from EUR -1,887m in July, running well below market expectations (EUR -1,500m) and our forecast (EUR -1,156m).** Thus, it was the 10th month in a row with Poland's current account deficit. The decline in the current account balance is accounted for by lower balances on trade in goods and services, and lower primary and secondary income balances (down by EUR 1,062m, EUR 171m, EUR 762m, and EUR 85m, respectively, from July). At the same time, faster growth was seen both in exports (24.8% YoY in August vs. 19.0% in July) and in imports (28.2% vs. 20.6%), which to a large extent is accounted for by favourable calendar effects. In accordance with a press release from the NBP, a rise in transaction prices was also an important driver of growth in export and imports. It is also worth noting that the data shows growth in exports and imports in the automotive industry, which is a result of a recovery in this sector. The August figures are in line with our forecast showing that the cumulative current account balance for the last four quarters as a percentage of GDP will dropped to -3.9% in Q3 from -3.5% in Q2.

➤ **US CPI inflation eased to 8.2% YoY in September vs. 8.3% in August, running above market expectations (8.1%).** Inflation was driven down by lower growth rate of energy prices. The opposite effect came from higher food price growth and an increase in core inflation, which rose in September to 6.6% YoY against 6.3% in August and was above market expectations (6.5%). At the same time, it is worth noting that an important source of the increase in core inflation are services, whose prices are now growing faster than those of goods on an annual basis (6.8% vs. 6.7%). The data thus points to continued strong inflationary pressures in the US economy. Consequently, we have revised our scenario for US monetary policy (see below). Last week the preliminary University of Michigan index was published. It increased in



October to 59.8 pts vs. 58.6 pts in September, running above market expectations (58.9 pts). The increase in the index was due to a higher component for assessment of the current situation, while the expectations component remained unchanged. On the other hand, after two months of decline, the median for expected inflation at a 1-year horizon (5.1% YoY in October vs. 4.7% in September), reported together with the University of Michigan index, increased, confirming continued strong inflationary pressures in the US economy. We forecast that US GDP will expand by 1.7% in 2022 vs. 5.9% growth in 2021.

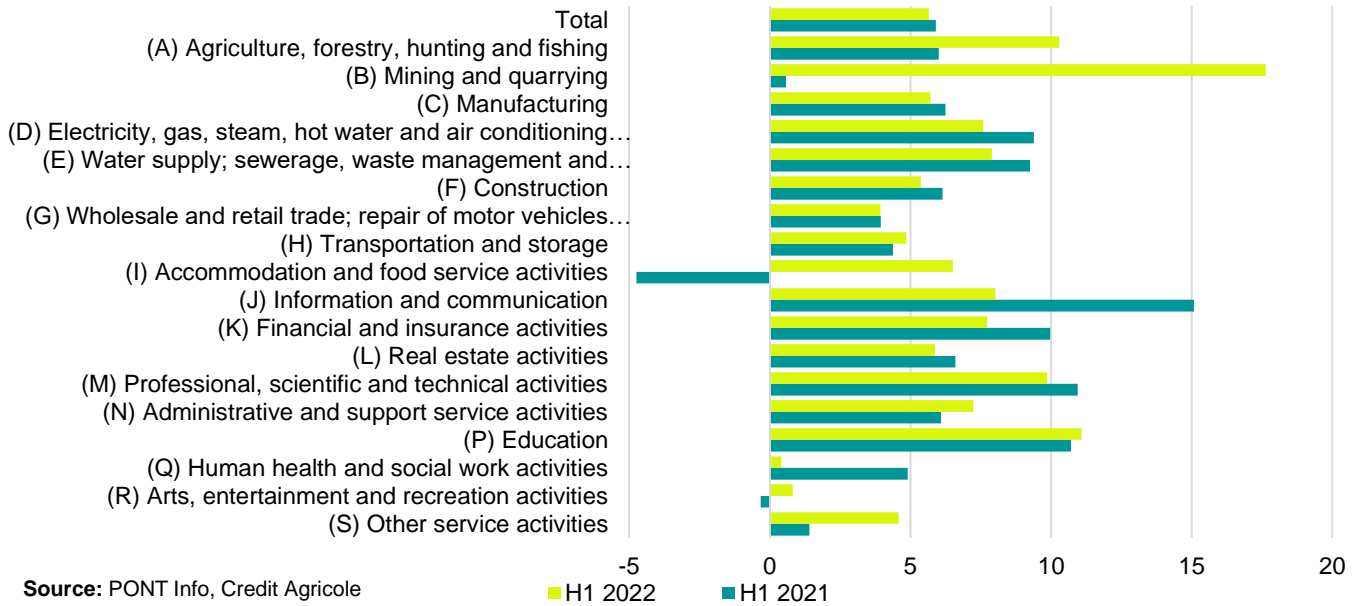
➤ **Minutes of the September FOMC meeting were published last week.** According to the transcript of the discussion at the meeting, FOMC members expressed concern that inflation was declining more slowly than previously expected. For this reason, FOMC members reiterated their willingness to continue to raise interest rates and pursue a restrictive monetary policy for some time. At the same time, FOMC members agree that a return to price stability will be associated with lower economic growth and a deterioration in the labour market. In the contents of the Minutes, one can see differences in the views of FOMC members regarding the target level of US interest rates in the current hike cycle. On the one hand, some members expressed concerns about the negative impact of too much monetary tightening on the macroeconomic situation. On the other hand, many members expressed the view that the potential costs of too weak monetary tightening would be higher than the costs associated with too large scale of interest rate hikes. Given last week's US inflation data, we have revised our Fed interest rate scenario. We now forecast that the Federal Reserve will raise interest rates by 75bp (50bp before revision) in November, 50bp (25bp) in December and 25bp (25bp) in Q1 before ending the hiking cycle. Thus, at the end of Q1, the range for fluctuations in the Federal Reserve funds rate will be [4.50%, 4.75%]

➤ Energy prices for companies: is it a calm before the storm?

The number of companies complaining about the increase in costs of business activity due to a strong growth in energy prices has grown over the last couple of months. The prices of energy and gas for enterprises, as opposed to the prices for households, are not subject to regulation by the Energy Regulatory Office, and therefore they are significantly higher than prices for individual consumers, and they vary depending on the contract concluded with the service provider. Below you will find our analysis of how the energy costs increase has impacted the companies' financial results, and what trends we expect to see in this area.

For this purpose, we used data from the PONT Info database. The information contained in the database is based on full, official GUS data included in reports filled in by enterprises employing at least 10 staff members, representing individual sectors of the economy. When analysing the data, one can see that the ratio between energy costs and total revenues did not change much between H1 2021 and H1 2022 (see the diagram below). The percentage increased by 0.27 pp. across all economy sectors (from 1.51% to 1.78% in H1 2022), and was lower than 0.3 pp. for three-fourths of categories shown in the diagram. It should be noted here that the data provided by Towarowa Giełda Energii (Energy Commodity Exchange) shows that the average prices of energy and gas rose by 132% and 340% respectively in that period. This means that the enterprises have considerably succeeded in transferring the growing costs of energy on other links in the supply chain, including consumers. Furthermore, some enterprises still have long-term contracts for energy concluded several quarters ago, which stipulate fixed energy prices. This means that those companies have not suffered from the strong price growth in the stock exchange yet, which also explains why the ratio between the energy costs and revenues is relatively stable.

Net profitability in particular sections of economy (% , companies employing more than 9 employees)

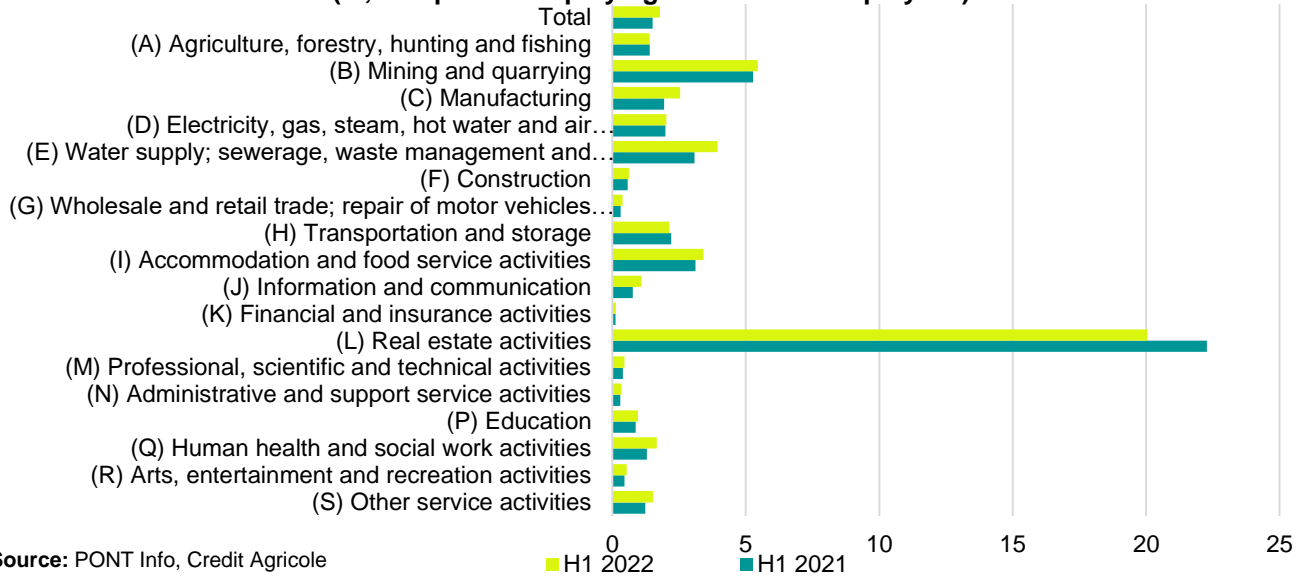


Source: PONT Info, Credit Agricole

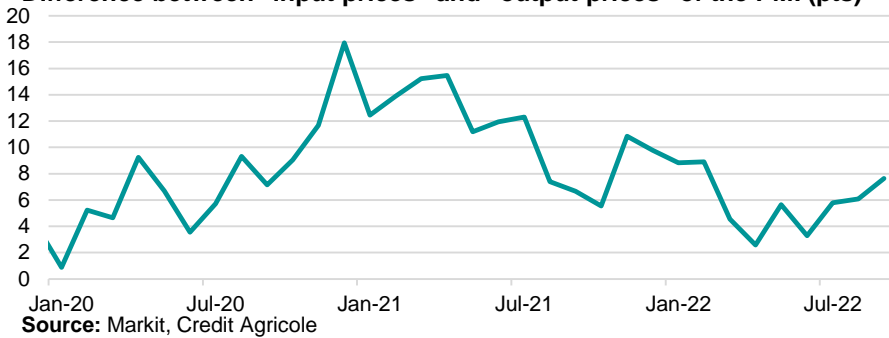
Our conclusion concerning the transfer of costs of company operations (and not just the energy costs) on customers is also confirmed by the results of the enterprise profitability analysis (income-to-net sales revenues ratio). Profitability in all economy sectors has slightly fallen, from 5.9% in H1 2021 to 5.65% in H1 2022 (see the diagram below). Furthermore, the profitability of enterprises in that period increased in 8 out of 18 categories shown in the diagram. This means that in general the companies handled the increasing costs of operation well until H1 2022. However, we need to remember that only the companies that employ at least 10 staff members were included in the analysis. In the case of micro-enterprises (the companies employing up to 9 staff members), the scale of growth of those costs is so big that it may cause some of them to lose their profitability. Such companies usually have limited options of transferring costs on customers due to a small scale of their operations and strong competition. The analysis of the impact of the energetic shock on micro-enterprises' operations was presented in MACROmap of 31/01/2022.

Energy prices: is it a calm before the storm?

Energy costs as a share of total revenues in particular sections of economy (% , companies employing more than 9 employees)



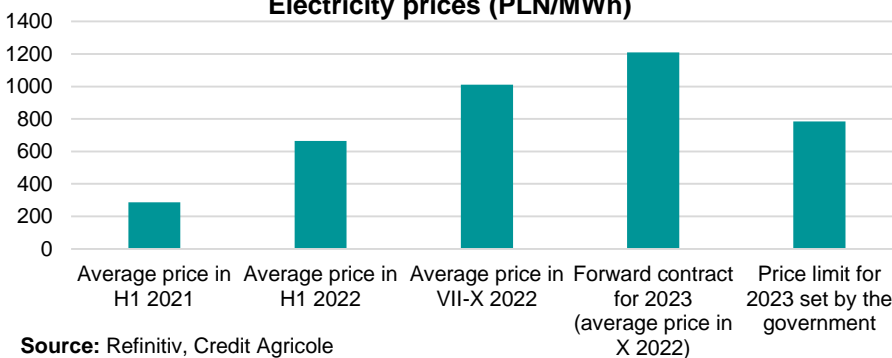
Difference between "input prices" and "output prices" of the PMI (pts)



Although the financial results of enterprises were still relatively good, we believe that their situation will deteriorate in H2 2022. So far, the prices of finished goods have been growing amidst high demand. At present, the demand is falling, both in Poland and abroad. Furthermore, in accordance with the PMI survey results, buyers are becoming more careful in their purchasing activity or limiting their

orders due to high prices. This means that there will be less room for further transfer of costs on customers. The difference between PMI components for the input prices and output prices is useful for telling to what extent a company in the industrial manufacturing sector is capable of transferring higher costs of its operations on customers. In simple terms, this indicator can be interpreted as a difference in price growth rates between production means and finished products. The higher the indicator, the lower the degree to which the enterprises transfer their costs on the prices of finished goods. After a strong growth in a difficult period of pandemic in 2020, the said indicator followed a downward trend throughout 2021 and in H1 2022. However, it began to grow again in H2 2021, indicating that the options of further transfer of costs of operation on customers are limited.

Electricity prices (PLN/MWh)



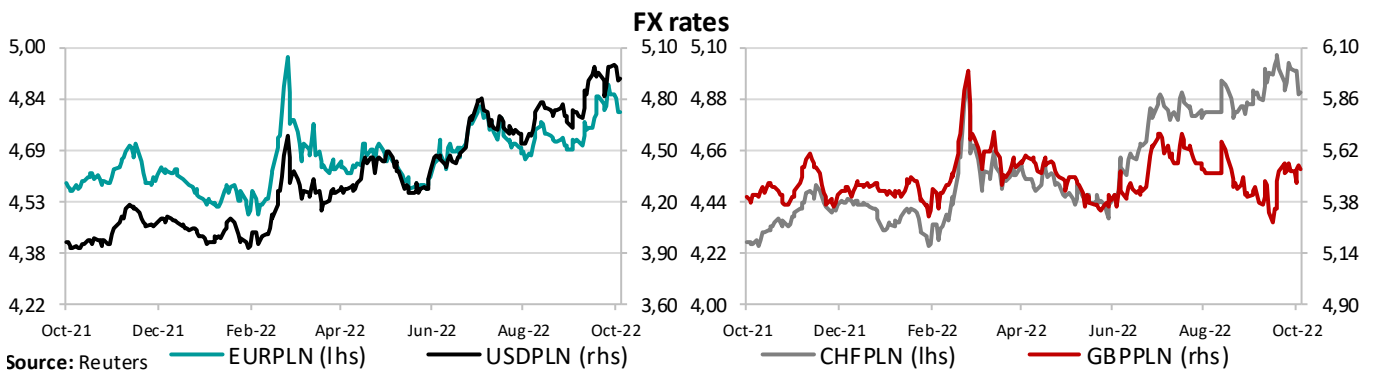
It also should be noted that energy prices in H2 2022 continue to grow strongly. The average prices of electricity and gas in July-October 2022 grew by 52% and 89% respectively comparing to H1 2022, and it will drive the profitability of enterprises down amidst the limited room for transferring

Energy prices: is it a calm before the storm?

costs on recipients. The outlook for 2023 is not bright, either. In accordance with the government’s bill, the cap on electricity prices for micro-, small and medium enterprises is to be set at PLN 785/MWh (an 18.2% growth comparing to H1 2022). However, the electricity price for large enterprises in the free market in 2023 may even exceed PLN 1,200/MWh (+82%). This was the average price set out in contracts for electricity supplies in the following year as of October 2022. Additionally, no government plans have been announced concerning caps on gas prices. In October 2022, gas prices for 2023 as estimated in futures were 84% higher comparing to H1 2022. Energy costs can be expected to keep on growing also in the case of heating supplies. However, the situation with heating is more complex than with electricity and gas (no stock exchange), which means that it is hard to predict precisely how much the prices will grow. Furthermore, some companies use gas and electricity for heating rather than the heat provided via the heating network. It should also be remembered that some companies will soon face the expiry of their long-term contracts for energy supplies, the contracts having been concluded when prices were much lower, and this means that they are yet to experience the cost-related shock.

The costs of companies’ operations will be driven up not just by higher energy costs, but also by growing labour costs. Wage growth will be caused by the continuing, strong wage pressure in the Polish economy, driven by high inflation persisting amidst the tense situation in the labour market. Furthermore, the minimum wage increase planned for the next year (from PLN 3,010 in 2022 to PLN 3,490 in January 2023, and then, from 1 July 2023 onwards, to PLN 3,600) will enhance that effect. The increase of the share of total costs in the companies’ revenues will mean that the companies will have to start reducing their margins faced with limited options of transferring their growing costs on other links in the supply chain. Looking for savings in other areas will be another solution. We believe that the number of entities deciding to increase the degree of automation of their production processes will be growing. Nonetheless, we expect the growth in gross capital expenditure to slow down strongly despite this investment stimulus. The increased uncertainty regarding the economic outlook (including the developments of the war in Ukraine and the prices of energy), investment climate deterioration, growing costs and declining margins and gains of enterprises will drive the enterprises’ investments down. Therefore, we expect the rate of growth of total gross capital expenditure to drop from 3.5% YoY in 2022 to 1.1% YoY in 2023 (see the quarterly table).

Domestic data on production and retail sales in the spotlight



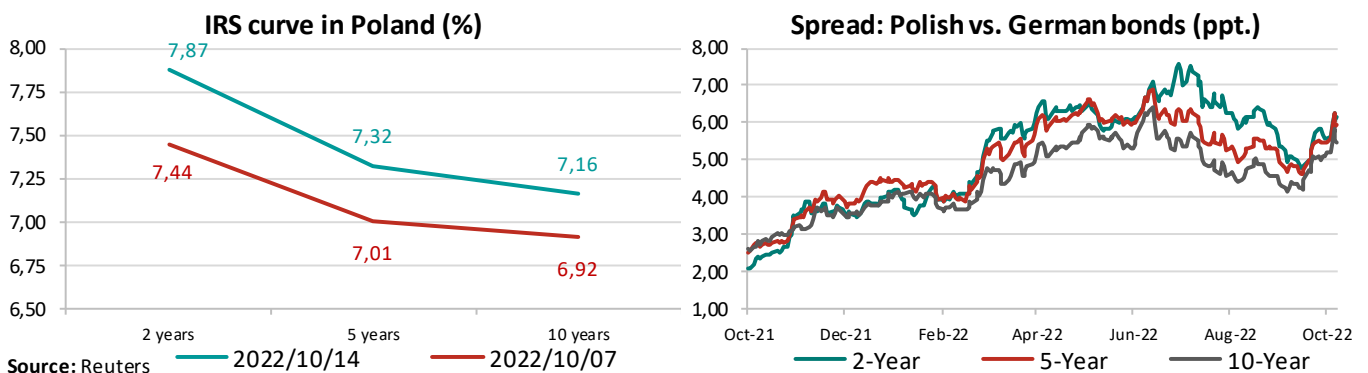
Last week, the EURPLN rate dropped to 4.8032 (the PLN strengthened by 1.1%). The first part of the week brought a stabilisation of the EURPLN exchange rate, which was supported by a poor calendar of macroeconomic events. On Thursday, the PLN was characterised by increased volatility, which was linked to the publication of higher-than-expected inflation data in the US. On Friday, the increased volatility of

the EURPLN exchange rate was fostered by the National Bank of Hungary's surprising decision to raise the lombard rate by as much as 950bp and to suspend 1-week collateralised loans by the central bank to commercial banks, which led to a strong decline in the EURHUF exchange rate.

For the greater part of last week, the EURUSD exchange rate was characterised by relatively low volatility due to the poor calendar of macroeconomic events. On Thursday, the USD strengthened temporarily against the EUR in response to the publication of higher-than-expected US inflation data.

This week, Thursday's publication of domestic industrial production data will be in the spotlight, and it may contribute to the strengthening of the PLN, while retail sales data in Poland (Friday) may have the opposite effect. We believe that other publications from the Polish and global economies planned for this week will not have a significant impact on the PLN. Information concerning the assessment of the risk of production disruptions as a result of the gas shock in Europe and the course of hostilities in Ukraine will remain an important factor determining the PLN exchange rate as it could significantly affect the assessment of the economic growth prospects in the Eurozone and Poland.

IRS rates go up following core markets



Last week, 2-year IRS rates increased to 7.87 (up by 43bp), 5-year rates to 7.32 (up by 31bp) and 10-year ones to 7.16 (up by 24bp). Last week saw a rise in IRS rates across the curve following the core markets. The rise in yields in the core markets was driven by investor expectations of further interest rate hikes by major central banks, further strengthened by the release of higher-than-expected US inflation data.

This week, the publication of domestic industrial production data (Thursday) will be crucial for the IRS rates as it may support an increase in IRS rates at the short end of the curve. On the other hand, the publication of retail sales data in Poland scheduled for Friday may contribute to a drop in IRS rates at the short end of the curve. Other data releases from the global economy planned for this week will not have a significant impact on the IRS, in our opinion. Information concerning the assessment of the risk of production disruptions as a result of the gas shock in Europe and the course of hostilities in Ukraine will remain an important factor shaping the curve as it could significantly affect the assessment of the economic growth prospects in the Eurozone and Poland.

Forecasts of the monthly macroeconomic indicators

Main monthly macroeconomic indicators in Poland

Indicator	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
NBP reference rate (%)	0,10	0,50	1,25	1,75	2,25	2,75	3,50	4,50	5,25	6,00	6,50	6,50	6,75	6,75
EURPLN*	4,60	4,60	4,65	4,58	4,58	4,69	4,64	4,67	4,58	4,70	4,73	4,72	4,85	4,83
USDPLN*	3,98	3,98	4,10	4,03	4,08	4,18	4,19	4,43	4,27	4,48	4,63	4,70	4,95	4,98
CHFPLN*	4,27	4,35	4,47	4,42	4,40	4,56	4,54	4,55	4,45	4,69	4,86	4,80	5,01	4,98
CPI inflation (% YoY)	5,9	6,8	7,8	8,6	9,4	8,5	11,0	12,4	13,9	15,5	15,6	16,1	17,2	
Core inflation (% YoY)	4,2	4,5	4,7	5,3	6,1	6,7	6,9	7,7	8,5	9,1	9,3	9,9	10,7	
Industrial production (% YoY)	8,7	7,6	14,9	16,3	18,0	17,3	15,4	12,3	14,9	10,4	7,1	10,9	9,7	
PPI inflation (% YoY)	10,3	12,0	13,6	14,4	16,1	16,1	21,9	24,1	24,7	25,6	25,5	25,5	25,4	
Retail sales (% YoY)	11,1	14,4	21,2	16,9	20,0	16,5	22,0	33,4	23,6	19,9	18,4	21,5	19,9	
Corporate sector wages (% YoY)	8,7	8,4	9,8	11,2	9,5	11,7	12,4	14,1	13,5	13,0	15,8	12,7	12,5	
Employment (% YoY)	0,6	0,5	0,7	0,5	2,3	2,2	2,4	2,8	2,4	2,2	2,3	2,4	2,5	
Unemployment rate* (%)	5,6	5,5	5,4	5,4	5,5	5,5	5,4	5,2	5,1	4,9	4,9	4,8	4,7	
Current account (M EUR)	-1653	941	-1482	-3883	-1091	-2032	-4206	-2844	-1340	-541	-1887	-3967		
Exports (% YoY EUR)	11,0	6,2	13,7	25,0	27,4	20,3	11,9	18,2	26,9	21,3	19,0	24,8		
Imports (% YoY EUR)	22,3	22,0	31,2	39,6	38,7	29,7	31,4	36,4	32,5	26,6	20,6	28,2		

*end of period

Forecasts of the quarterly macroeconomic indicators

Main macroeconomic indicators in Poland

Indicator	2022				2023				2021	2022	2023	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Gross Domestic Product (% YoY)	8,5	5,5	3,9	0,5	-1,0	0,1	2,6	3,2	6,8	4,3	1,2	
Private consumption (% YoY)	6,6	6,4	1,1	0,5	0,2	0,4	0,5	0,5	6,3	3,5	0,4	
Gross fixed capital formation (% YoY)	4,3	7,1	4,2	0,6	-1,4	0,2	1,9	2,4	2,1	3,5	1,1	
Export - constant prices (% YoY)	2,0	5,2	4,5	3,3	1,6	0,5	2,9	4,5	12,5	3,8	2,3	
Import - constant prices (% YoY)	8,8	7,8	2,2	0,9	0,7	-1,5	4,7	6,5	16,1	4,6	2,4	
GDP growth contributions	Private consumption (pp)	3,9	3,6	0,6	0,2	0,1	0,2	0,3	0,2	3,5	2,0	0,2
	Investments (pp)	0,6	1,1	0,7	0,1	-0,2	0,0	0,3	0,5	0,4	0,6	0,2
	Net exports (pp)	-3,8	-1,2	1,4	1,4	0,6	1,3	-0,9	-1,0	-1,0	-0,3	0,0
Current account (% of GDP)***	-2,7	-3,5	-3,9	-4,0	-3,8	-3,4	-3,7	-4,3	-1,4	-4,0	-4,3	
Unemployment rate (%)**	5,4	4,9	4,7	5,0	5,3	5,0	4,7	5,0	5,4	5,0	5,0	
Non-agricultural employment (% YoY)	2,3	0,6	2,0	2,2	2,2	1,2	0,7	0,3	1,8	1,8	1,1	
Wages in national economy (% YoY)	9,7	11,8	10,8	10,6	11,1	9,4	9,2	8,5	8,9	10,7	9,6	
CPI Inflation (% YoY)*	9,6	13,9	16,3	18,3	16,6	11,8	8,7	4,6	5,1	14,5	10,4	
Wibor 3M (%)**	4,77	7,05	7,21	7,38	7,38	7,38	7,26	6,26	2,54	7,38	6,26	
NBP reference rate (%)**	3,50	6,00	6,75	7,25	7,25	7,25	7,25	6,50	1,75	7,25	6,50	
EURPLN**	4,64	4,70	4,85	4,90	4,90	4,85	4,70	4,65	4,58	4,90	4,65	
USDPLN**	0,00	0,00	0,00	5,05	4,95	4,80	4,48	4,35	0,00	5,05	4,35	

* quarterly average

** end of period

***cumulative for the last 4 quarters

Calendar

TIME	COUNTRY	INDICATOR	PERIOD	PREV. VALUE	FORECAST*	
					CA	CONSENSUS**
Monday 10/17/2022						
14:00	Poland	Core inflation (% YoY)	Sep	9,9	10,7	10,7
14:30	USA	NY Fed Manufacturing Index (pts)	Oct	-1,5		-5,0
Tuesday 10/18/2022						
4:00	China	GDP (% YoY)	Q3	0,4	3,2	3,4
4:00	China	Industrial production (% YoY)	Sep	4,2	5,2	4,5
4:00	China	Retail sales (% YoY)	Sep	5,4	3,0	3,3
4:00	China	Urban investments (% YoY)	Sep	5,8	6,2	6,0
11:00	Germany	ZEW Economic Sentiment (pts)	Oct	-61,9		-66,0
15:15	USA	Industrial production (% MoM)	Sep	-0,2	0,2	0,1
15:15	USA	Capacity utilization (%)	Sep	80,0		80,0
Wednesday 10/19/2022						
11:00	Eurozone	HICP (% YoY)	Sep	10,0		10,0
14:30	USA	Housing starts (k MoM)	Sep	1575	1450	1480
14:30	USA	Building permits (k)	Sep	1542	1525	1530
Thursday 10/20/2022						
10:00	Poland	Employment (% YoY)	Sep	2,4	2,5	2,4
10:00	Poland	Corporate sector wages (% YoY)	Sep	12,7	12,5	13,0
10:00	Poland	PPI (% YoY)	Sep	25,5	25,4	25,5
10:00	Poland	Industrial production (% YoY)	Sep	10,9	9,7	8,8
11:00	Eurozone	Current account (bn EUR)	Aug	-19,9		
14:30	USA	Philadelphia Fed Index (pts)	Oct	-9,9		-5,0
16:00	USA	Existing home sales (MMoM)	Sep	4,80	4,61	4,69
Friday 10/21/2022						
10:00	Poland	Retail sales (% YoY)	Sep	21,5	19,9	21,5
16:00	Eurozone	Consumer Confidence Index (pts)	Oct	-28,8		-30,3

*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

** Reuters