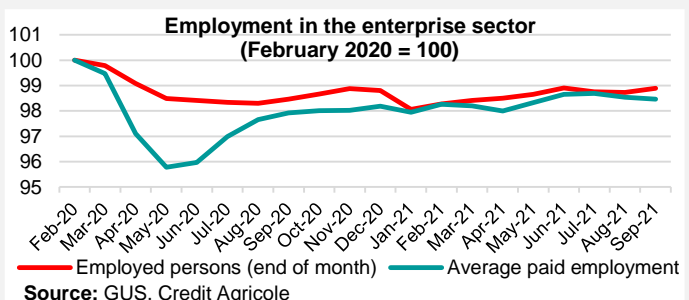


## This week

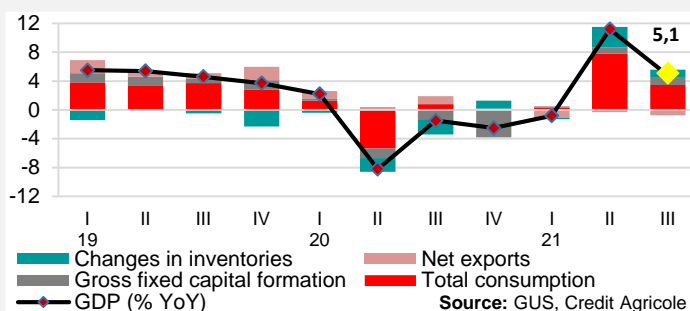
- This week, important data from the US will be published.** We expect nominal retail sales to have increased by 1.3% MoM in October vs. a growth of 0.7% MoM in September. Total sales accelerated chiefly on the back of improved sales in the automotive industry. We forecast industrial production growth to have risen to 0.8% MoM in October, up from -1.3% in September, a trend consistent with business sentiment surveys. We believe data on housing starts (1,586k in October vs. 1,555k in September) and building permits (1,626k vs. 1,586k) will signal a slight recovery of activity on the US real property market. In our opinion, the release of data from the US economy will be neutral for the financial markets.
- Today also saw the publication of data on Chinese industrial production (3.5% YoY in October vs. 3.1% in September), retail sales (4.9% vs. 4.4%) and fixed asset investment in urban agglomerations (6.1% vs. 7.3%).** Thus, industrial output and retail sales figures were above market expectations (3.0% and 3.5%, respectively). In comparison, data on fixed asset investment in urban agglomerations proved slightly lower than the market consensus (6.3%). Industrial production growth was supported by a higher supply of coal and energy. At the same time, it is worth noting that the rise in retail sales followed from higher prices, while, according to our estimates, real retail sales dropped. Despite the generally better-than-expected data from China, in the coming months we anticipate a slowdown in this country's activity due to the energy crisis and turmoil on the real property market, as well as the introduction of new restrictions as the epidemic situation deteriorates. Today's data release does not alter our scenario whereby China's economic growth in 2021 will stand at 8.0% YoY, up from 2.3% in 2020, and will slow down to 5.2% in 2022. Thus, our forecast assumes that in Q4 the annual growth rate of China's GDP will fall to 4.0% YoY vs. 4.9% in Q3. We expect a marked recovery in Q2 2022 as infrastructure investment projects pick up pace and the supply and demand situation on the energy market improves. Today's data from China is consistent with our downward revised GDP path for this country (see below). At the same time, today's data from China is slightly positive for the PLN exchange rate.
- Data on Poland's balance of payments for September will be released today.** We expect the current account balance to have increased to EUR -757m from EUR -1,686m in August, primarily as a result of a higher balance of trade in goods. We forecast that growth in exports fell from 19.4% YoY in August to 14.9% in September, while growth in imports slowed down from 32.9% YoY to 25.2%. Growth in exports and imports in September was held back by negative calendar effects. Considering the continued drop of the current account balance surplus, the release of data on the balance of payments will be slightly negative for the PLN and yields on Polish bonds.
- Final data on inflation in Poland for October will be released today.** We believe that the growth in prices will be in line with the flash estimate (6.8% YoY vs. 5.9% in September). Growth in prices in October was driven by higher contributions of all components (prices of food, fuels, energy, and higher core inflation). Thus, in October, inflation will run above the path from the November inflation projection (6.7% in Q4), which will support our scenario for interest rates (see below). The publication of inflation data will be neutral for the PLN exchange rate and prices of Polish bonds.
- Data on employment and average wages in the enterprise sector Poland in October will be published on Friday.** We forecast that employment growth fell to 0.4% YoY in October, down from 0.6% in September (last year's high base effect). The fourth wave of the COVID-19 pandemic was conducive



to the slowdown in employment on a MoM basis seen in October. In turn, we believe that the growth of average wages was still at an elevated level in October (9.0% YoY vs. 8.7% in September). We believe that the publication of data on employment and average wages in the enterprise sector in Poland, though important for private consumption growth forecasts for Q4, will be neutral for the PLN and the debt market.

## Last week

**In accordance with the flash estimate published by the GUS, Polish GDP growth deaccelerated from 11.2% YoY in Q2 to 5.1% YoY in Q3.** Economic growth was strongly driven down mainly by the abatement of the last year's low base effect related to the COVID-19 pandemic and associated



restrictions curbing economic activity in Q2 2020. Seasonally-adjusted quarterly GDP growth expanded from 1.8% in Q2 to 2.1% in Q3, which shows that economic growth has accelerated. This means that in Q3 GDP exceeded the pre-pandemic level (Q4 2019) by 2.9%. The data published by the GUS represent a flash estimate. Full GDP data, including information on its structure, will be published in late November. We believe that consumption, supported by the effect of pent-up demand in households and continuing improvement in the labour market, was the main driver of economic growth in Q3 (see MACROPulse of 12/11/2021). Data on GDP growth in Q3 signal a slight upward risk to our forecast of economic growth in 2021 (4,9%).

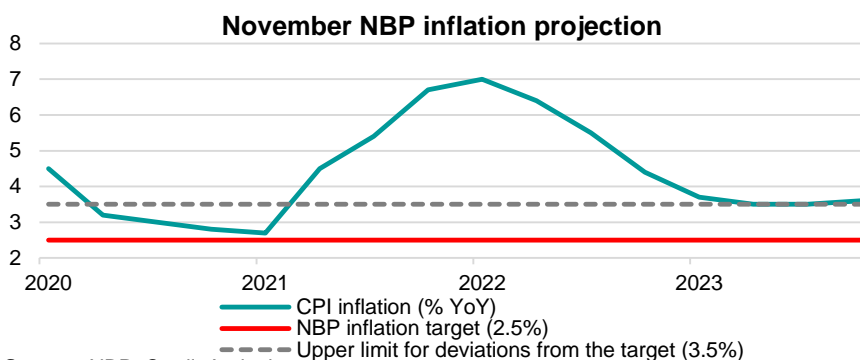
**Last week, numerous data regarding the US economy was published.** Last week saw the release of the number of new jobless claims, which dropped to 267k vs. 271k two weeks prior, running slightly above market expectations (265k). In turn, the number of continued applications rose from 2.1 million to 2.2 million. Directly prior to the outbreak of the pandemic, the number of continued jobless claims stood at 1.7 million. Thus, the data does not alter our assessment that the situation on the US labour market is gradually improving and is coming closer to equilibrium. Last week, data on CPI inflation was also released, showing an expansion to 5.4% YoY in September, up from 5.3% in August, in line with market expectations. US inflation has now reached its highest level since November 1990. The rise in inflation was wide-ranging and was recorded for energy, food and core inflation, with the latter rising from 4.0% to 4.6% YoY to reach its highest level since September 1991. The flash University of Michigan index signaled a substantial deterioration in consumer sentiment as it declined to 66.8 pts in November, down from 71.6 pts in October, running well below market expectations (72.2 points). The drop of the index was attributable to a fall of its components for both the perception of the present situation and expectations. US household sentiment deteriorated on the back of the highest inflation in 30 years and the waning effect of payouts under Joe Biden's stimulus package. The data represents a downside risk to our scenario according to which throughout 2021 US GDP will expand by 6.1% vs. a decline of 3.5% in 2020, to grow by 4.0% in 2022.

**Last week, vital data regarding the German economy was published.** The ZEW index, reflecting sentiment among analysts and institutional investors regarding the economic situation in Germany, climbed to 31.7 pts in November, up from 22.3 pts in October, running well above market expectations (20.2 pts). This marks the first rise in the index since May 2021. According to the relevant press release, respondents' sentiment remains affected by persisting supply bottlenecks and elevated inflation. On the other hand, expectations regarding future economic outlook are improving, which was the factor driving the index up. Last week also saw the

publication of data on the trade surplus in Germany, which grew to EUR 13.2bn in September from EUR 13.0bn in August, running slightly below market expectations (EUR 13.5bn). This was driven by a rise in exports (-0.7% MoM in September vs. -1.2% in August July) with a simultaneous drop in imports (0.1% vs. 3.5%). We stand by our forecast that in 2021 German GDP will rise by 3.2% compared with a 4.6% decline in 2020.

## Weak PLN necessitates further interest rate hikes

Two weeks ago, the Monetary Policy Council decided to raise interest rates again (from 0.50% to 1.25%). In its press release, the MPC reiterated its last month's assessment that the expected further recovery in domestic economic activity and the favorable labour market environment would be conducive to increased inflation over the monetary policy transmission horizon (see MACROmap of 3/11/2021). As a consequence, the Council opted for a further monetary tightening with a view to bringing inflation down to the inflation target in the mid-term. Thus, the post-meeting press release highlighted the increased significance of the expected inflation as a function of the MPC's reaction.

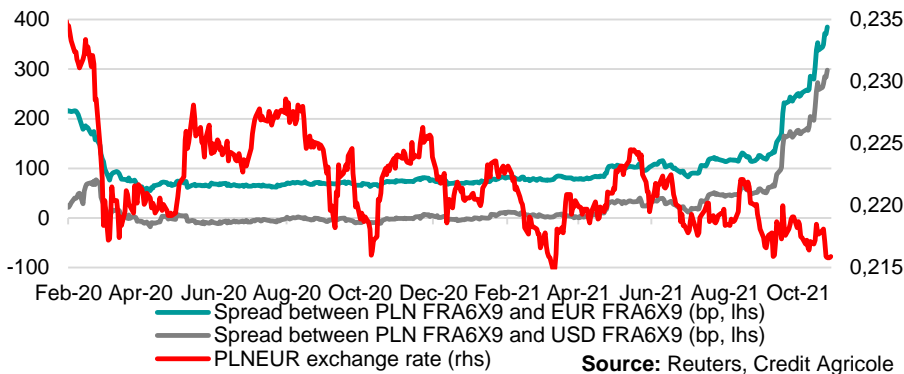


Source: NBP, Credit Agricole

In line with the NBP's November projection, prepared with the assumption of NBP interest rates remaining unchanged, inflation will stand at 3.5-3.6% YoY in the second half of 2023, i.e. within the monetary policy transmission horizon (see chart). The results of research on the transmission mechanism in monetary policy suggest that, after factoring in the

November interest rate hike (75 bps), inflation in the second half of 2023 would fall just under the upper limit for deviations from the MPC's inflation target (3.5%)

The monetary policy transmission mechanism has three main channels: the interest rate channel (transmission of reference rate hikes onto deposit and lending rates at commercial banks, as well as bond yields and share prices), the credit channel (the propensity and capacity of commercial banks to grant loans, i.e. the supply of loans) and the exchange rate channel (appreciation of the PLN). According to the results of research on the transmission of monetary policy, the maximum response of core inflation to a 1 pp. rise in the short-term interest rate for four quarters occurs in the sixth quarter after the rate change and amounts to approx. -0.5 pp. The scale of the response of total CPI inflation to an interest rate impulse is similar. Under normal circumstances, the maximum response of core inflation is, in around one-third, driven by the effects of the interest rate and credit channels, and, in two-thirds, by the effects of the exchange rate channel. However, it should be noted that the exchange rate channel of transmission of interest rates to inflation is currently obstructed, as the PLN exchange rate is not appreciating despite the monetary tightening. Excluding this transmission channel, it can be basically said that an interest rate hike of 100 bps for four quarters will result in a decline of inflation by approx. 0.2 pp. six quarters after the tightening decision.

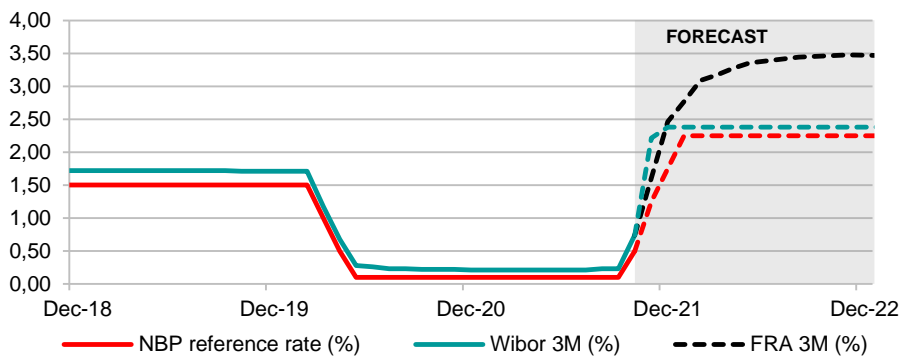


Source: Reuters, Credit Agricole

We believe that the obstruction of the exchange rate channel of interest rate transmission will continue over the coming months. The factor limiting the appreciation of the PLN is the continued legal dispute between the EU and Poland delaying the launch of the National Recovery Plan and market expectations of a monetary tightening in the USA. Another

factor holding back the strengthening of the PLN is investors' concerns of an NBP intervention on the FX market in late 2021 in a repeat of a move from 2020. NBP's rationale for these operations was unclear, and thus they could have been motivated by the central bank's plan to raise its year-end profit in 2020. Although, in our opinion, the risk of NBP re-using this instrument is not significant, some investors may be concerned about another PLN depreciation in the closing days of the year. Even if the depreciation of the Polish currency will not be NBP's goal in late December 2021, the central bank will try to curb an excessive appreciation of the PLN.

According to statements made by some MPC representatives, a further monetary tightening was a necessity. This scenario was outlined last week by Łukasz Hardt. Jerzy Żyżyński pointed out that a rise in inflation beyond the projection would mean that interested rates would have to be hiked by another 75 bps above their current level. At the same time, it should be pointed out that such an alternative inflation scenario is already underway (in October, inflation amounted to 6.8% YoY as compared with 6.7% forecast for 2020 Q4 in the projection). In turn, Adam Glapiński announced at the conference following the November meeting that the MPC "will do everything in its scope to bring inflation down to the target".



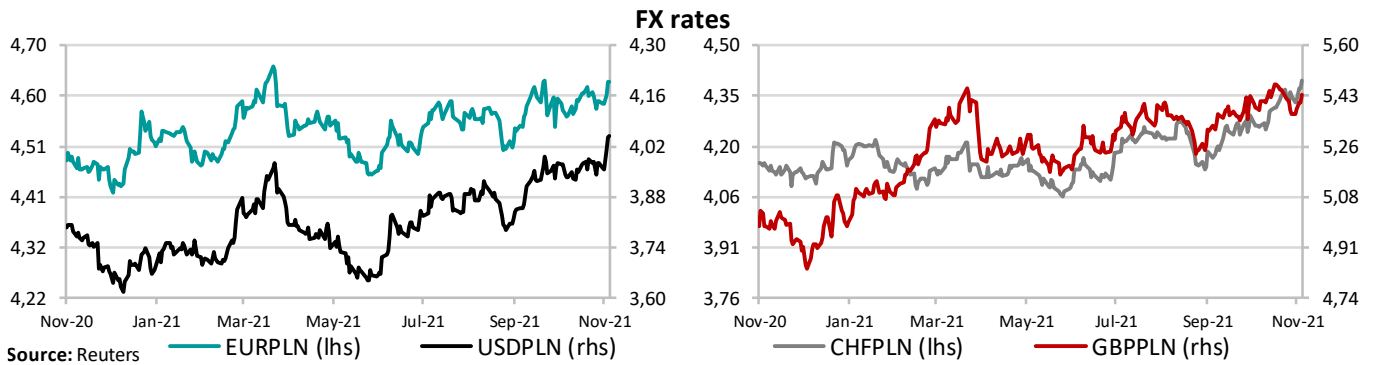
Source: Reuters, Credit Agricole

We expect interest rates to be raised by 50bps in December and by another 50bps in January 2022, up to 2.25%. Assuming the continued obstruction of the exchange rate channel, a total interest rate hike of 175 bps (75 bps in November plus the expected 100bp) and their subsequent stabilization at least until the end of 2022 would lower inflation by approx. 0.3-0.4 pp. in

the second half of 2023, bringing it to around 3.0%. We believe that the materialization of such a scenario would be acceptable for both the current and the next MPC if the interpretation of the inflation target as a band (2.5% +/- 1 pp.) presented earlier is maintained. Therefore, we consider that the scale of interest rate hikes currently priced in by the markets (to over 3% in the horizon of a couple of months) is excessive.

We see an upside risk to our interest rate scenario in Poland due to the market's expectation of a quicker monetary tightening by the FED (see above) and, consequently, a lower PLN exchange rate. However, our baseline scenario also carries a downside risk on account of the crisis on the eastern border. If it escalates, the MPC will be less inclined to raise interest rates despite high inflation. The balance of these two risk factors is currently tilted towards higher interest rates.

**Domestic inflation data crucial for the PLN**



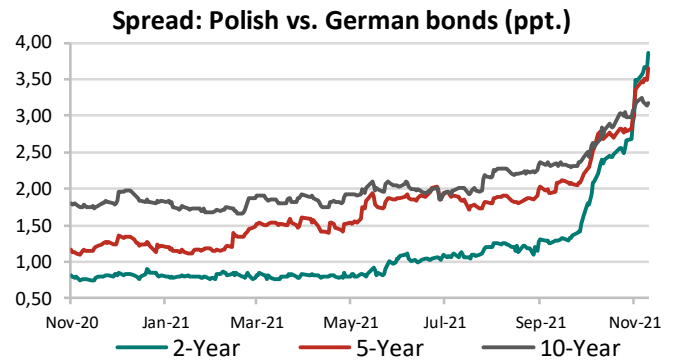
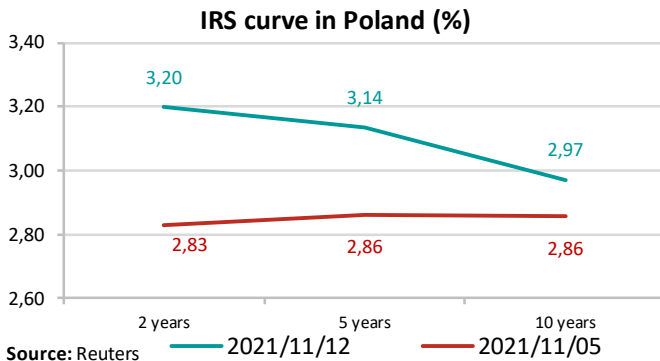
Source: Reuters

**Last week, the EURPLN rate increased to 4.6311 (the PLN weakened by 0.8%).** At the beginning of the week the PLN was stable. From Wednesday on EURPLN increased. A similar trend was also observed for the EURHUF exchange rate, indicating a common cause for the weakening of the PLN and the HUF against the EUR. In our view, it was largely related to the publication of higher-than-market-consensus inflation data in the US, which intensified expectations for interest rate hikes by the Fed leading to capital outflows from emerging markets, including Poland and Hungary. Moreover, the depreciation of the PLN was supported by lower liquidity in the market due to the long weekend. The publication of domestic GDP data had no significant impact on the market.

Last week also saw a further weakening of the EUR against the USD. This is supported by differences in the monetary policy stance of the Fed and the ECB, where, in the case of the US, investors expect interest rates to be raised faster than in the Eurozone; the aforementioned publication of higher-than-expected inflation data in the US is another supporting factor. Due to the drop of the EURUSD and the rise of the EURPLN exchange rate, the USDPLN exchange rate exceeded the level of 4.06 last week, which is its highest value since May 2020.

Data from China published this morning is slightly positive for the PLN. Today’s release of domestic inflation data is going to be crucial for the PLN this week. However, this is final data, so we do not expect it to have a strong impact on the EURPLN exchange rate. On the other hand, domestic balance of payments data may be slightly negative for the PLN. In our opinion, other data from Poland (employment and average wages in the corporate sector) will have no significant impact on the PLN. We believe that US data (industrial production, retail sales, housing starts, building permits) will also be neutral for the PLN.

**Yield curve increasingly inverted**



**Last week, 2-year IRS rates increased to 3.20 (up by 37 bps), 5-year rates to 3.14 (up by 28 bps) and 10-year ones to 2.97 (up by 11 bps).** Throughout last week we saw IRS rates rise following core markets (US, Germany). The rise in IRS rates in the core markets is supported by expectations of interest rate hikes by major central banks in the face of continued strong global inflation growth. At the same time, it is worth noting the inversion of the yield curve, whereas previously the curve was only flattening out. The increase in expectations of rate hikes is concentrated at the short end of the curve. This means that in the longer term the market is pricing a downward adjustment of interest rates. The publication of domestic GDP data had no significant impact on the market.

This week, today’s release of data on domestic inflation will be in the spotlight. However, we do not expect it to have a material impact on IRS rates. Other domestic data (balance of payments, employment and average wages in the corporate sector) is also likely to be neutral for the curve. We believe that US data (industrial production, retail sales, housing starts, building permits) will not have a significant impact on IRS, either.

## Forecasts of the monthly macroeconomic indicators

Main monthly macroeconomic indicators in Poland														
Indicator	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21
NBP reference rate (%)	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,10	0,50	1,25
EURPLN*	4,60	4,47	4,55	4,52	4,52	4,63	4,56	4,48	4,52	4,56	4,52	4,60	4,60	<b>4,60</b>
USDPLN*	3,95	3,75	3,73	3,72	3,74	3,95	3,79	3,66	3,81	3,84	3,83	3,98	3,98	<b>3,93</b>
CHFPLN*	4,32	4,13	4,21	4,18	4,11	4,18	4,15	4,07	4,12	4,24	4,18	4,27	4,35	<b>4,36</b>
CPI inflation (% YoY)	3,1	3,0	2,4	2,6	2,4	3,2	4,3	4,7	4,4	5,0	5,5	5,9	<b>6,8</b>	
Core inflation (% YoY)	4,2	4,3	3,7	3,9	3,7	3,9	3,9	4,0	3,5	3,7	3,9	4,2	<b>4,5</b>	
Industrial production (% YoY)	1,0	5,4	11,1	0,7	2,5	18,6	44,2	29,6	18,1	9,6	13,1	8,9	<b>5,8</b>	
PPI inflation (% YoY)	-0,4	-0,2	0,1	1,0	2,2	4,2	5,5	6,6	7,2	8,4	9,6	10,2	<b>10,5</b>	
Retail sales (% YoY)	-2,1	-5,3	-0,8	-6,0	-2,7	17,1	25,7	19,1	13,0	8,9	10,7	11,1	<b>12,6</b>	
Corporate sector wages (% YoY)	4,7	4,9	6,6	4,8	4,5	8,0	9,9	10,1	9,8	8,7	9,5	8,7	<b>9,0</b>	
Employment (% YoY)	-1,0	-1,2	-1,0	-2,0	-1,7	-1,3	0,9	2,7	2,8	1,8	0,9	0,6	<b>0,4</b>	
Unemployment rate* (%)	6,1	6,1	6,3	6,5	6,6	6,4	6,3	6,1	6,0	5,9	5,8	5,6	<b>5,5</b>	
Current account (M EUR)	1550	1298	751	2034	652	71	1269	-531	-378	-1551	-1686	<b>-757</b>		
Exports (% YoY EUR)	5,8	12,4	17,0	1,0	5,6	27,7	68,6	40,5	22,7	13,1	19,4	<b>14,9</b>		
Imports (% YoY EUR)	-2,4	6,2	14,6	-3,7	6,0	23,6	58,3	52,4	34,7	21,5	32,9	<b>25,2</b>		

\*end of period

## Forecasts of the quarterly macroeconomic indicators

Main macroeconomic indicators in Poland												
Indicator	2021				2022				2020	2021	2022	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Gross Domestic Product (% YoY)	-0,8	11,2	5,1	4,8	4,5	4,8	4,5	4,8	-2,5	4,9	4,7	
Private consumption (% YoY)	0,1	13,1	5,0	3,0	3,1	3,0	3,1	3,2	-3,0	5,1	3,1	
Gross fixed capital formation (% YoY)	1,7	5,6	7,0	13,5	6,2	5,7	7,8	7,0	-9,0	7,9	6,8	
Export - constant prices (% YoY)	7,3	29,2	16,3	7,9	7,0	7,5	7,3	7,5	0,1	14,1	7,3	
Import - constant prices (% YoY)	10,3	34,5	20,0	9,8	8,1	7,9	8,0	8,0	-1,2	17,9	8,0	
GDP growth contributions	Private consumption (pp)	0,0	7,2	3,0	1,5	1,9	1,7	1,8	1,5	-1,8	2,9	1,7
	Investments (pp)	0,2	0,9	1,1	2,9	0,8	0,8	1,3	1,6	-1,7	1,3	1,1
	Net exports (pp)	-1,1	-0,3	-0,8	-0,4	-0,2	0,2	0,1	0,2	0,7	-0,9	0,1
Current account (% of GDP)***	2,7	1,7	1,7	1,7	1,7	1,6	1,5	1,5	2,9	1,7	1,5	
Unemployment rate (%)**	6,4	6,0	5,6	5,8	6,0	5,5	5,3	5,4	6,2	5,8	5,4	
Non-agricultural employment (% YoY)	0,1	3,1	1,0	0,8	0,5	0,5	0,4	0,4	-0,5	1,2	0,5	
Wages in national economy (% YoY)	6,6	9,6	9,4	9,2	9,6	9,3	9,2	9,2	5,3	8,7	9,3	
CPI Inflation (% YoY)*	2,7	4,5	5,5	6,8	6,9	5,9	5,1	4,1	3,4	4,9	5,5	
Wibor 3M (%)**	0,21	0,21	0,23	2,38	2,38	2,38	2,38	2,38	0,21	2,38	2,38	
NBP reference rate (%)**	0,10	0,10	0,10	1,75	2,25	2,25	2,25	2,25	0,10	1,75	2,25	
EURPLN**	4,63	4,52	4,60	4,60	4,57	4,50	4,45	4,40	4,55	4,60	4,40	
USDPLN**	3,95	3,81	3,98	3,90	3,87	3,75	3,71	3,64	3,73	3,90	3,64	

\* quarterly average

\*\* end of period

\*\*\*cumulative for the last 4 quarters

**Calendar**

TIME	COUNTRY	INDICATOR	PERIOD	PREV. VALUE	FORECAST*	
					CA	CONSENSUS**
<b>Monday 11/15/2021</b>						
3:00	China	Industrial production (% YoY)	Oct	3,1	2,8	3,0
3:00	China	Retail sales (% YoY)	Oct	4,4	3,5	3,5
3:00	China	Urban investments (% YoY)	Oct	7,3	6,2	6,2
<b>10:00</b>	<b>Poland</b>	<b>CPI (% YoY)</b>	<b>Oct</b>	<b>5,9</b>	<b>6,8</b>	<b>6,8</b>
<b>14:00</b>	<b>Poland</b>	<b>Current account (M EUR)</b>	<b>Sep</b>	<b>-1686</b>	<b>-757</b>	<b>-1263</b>
14:30	USA	NY Fed Manufacturing Index (pts)	Nov	19,8		20,5
<b>Tuesday 11/16/2021</b>						
11:00	Eurozone	Preliminary GDP (% QoQ)	Q3	2,2	2,3	2,2
11:00	Eurozone	GDP flash estimate (% YoY)	Q3	3,7		3,7
<b>14:00</b>	<b>Poland</b>	<b>Core inflation (% YoY)</b>	<b>Oct</b>	<b>4,2</b>	<b>4,5</b>	<b>4,5</b>
14:30	USA	Retail sales (% MoM)	Oct	0,7	1,3	1,4
15:15	USA	Industrial production (% MoM)	Oct	-1,3	0,8	0,7
15:15	USA	Capacity utilization (%)	Oct	75,2		75,7
16:00	USA	Business inventories (% MoM)	Sep	0,6		0,6
<b>Wednesday 11/17/2021</b>						
11:00	Eurozone	HICP (% YoY)	Oct	4,1	4,1	4,1
14:30	USA	Initial jobless claims (k)	w/e	281		
14:30	USA	Housing starts (k MoM)	Oct	1555	1586	1578
14:30	USA	Building permits (k)	Oct	1586	1626	1640
<b>Thursday 11/18/2021</b>						
14:30	USA	Philadelphia Fed Index (pts)	Nov	23,8		22,0
<b>Friday 11/19/2021</b>						
<b>10:00</b>	<b>Poland</b>	<b>Employment (% YoY)</b>	<b>Oct</b>	<b>0,6</b>	<b>0,4</b>	<b>0,4</b>
<b>10:00</b>	<b>Poland</b>	<b>Corporate sector wages (% YoY)</b>	<b>Oct</b>	<b>8,7</b>	<b>9,0</b>	<b>8,5</b>
10:00	Eurozone	Current account (bn EUR)	Sep	13,4		

\*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