

This week

- **The most important event this week will be the publication of data on industrial production and retail sales in Poland scheduled for Friday.** We forecast that output dynamics dropped to 2.9% YoY in December vs. 9.1% in November due to unfavourable calendar effects. In turn, in our view, the nominal retail sales growth rate dropped to 9.0% YoY in December vs. 10.2% in November, i.a. due to lower food and fuel price increases. We believe that, if our forecasts materialize, the aggregate impact of the data may be slightly positive for PLN and yields on Polish bonds.
- **Important data from China will be released on Thursday.** We expect that the economic growth rate dropped to 1.6% QoQ in Q4 vs. 1.7% in Q3 (6.7% YoY vs. 6.8% in Q3). We believe that monthly data will point to a slight deceleration of the economic activity growth rate in December. We forecast that industrial production rose by 6.3% YoY in December vs. 6.1% in November, retail sales rose by 10.1% YoY vs. 10.2%, and urban investments rose by 7.1% YoY vs. 7.2%. We believe that data from China will be neutral for the financial markets.
- **Significant data from the US will be released this week.** We believe that industrial production rose by 0.3% MoM in December vs. a 0.2% increase in November, which will be consistent with the business surveys results. We expect that the ongoing recovery in the US real estate market will be confirmed by data on housing starts (1285k in December vs. 1297k in November) and building permits (1300k vs. 1303k). Business survey results will also be released this week. We forecast that the NY Empire State Index rose to 19.5 pts in January from 18.0 pts in December, in turn the Philadelphia Fed Index rose to 27.9 pts in January vs. 26.2 pts in December. The preliminary University of Michigan Index will be released on Friday. We forecast that its value rose to 98.0 in January vs. 95.9 pts in December. We believe that the US readings will not be market moving.
- **The December data on average wages and employment in the corporate sector in Poland will be released on Wednesday.** We forecast that employment dynamics have not changed compared to November and amounted to 4.5%. In turn, the average wage dynamics rose to 7.2% YoY in December vs. 6.5% in November, due to bonuses paid in mining that were higher than in 2016. Though important for the forecast of private consumption dynamics in Q4, the release of data on corporate wages and employment will be neutral for PLN and the debt market, we believe.
- **Data on the Polish balance of payments in November will be released today.** We expect the current account surplus to have dropped to EUR 556M in November vs. EUR 575M in October, mainly due to lower trade balance. We forecast that export dynamics dropped to 12.6% YoY in November vs. 15.4% in October, while import growth rate dropped to 11.5% YoY vs. 12.9%. Conducive to slower import and export growth rate was the effect of unfavourable difference in the number of working days. Our forecast is close to the market consensus; therefore, its materialization will be neutral for PLN.
- **Final data on the December inflation in Poland will be released today.** We see a slight risk that the rate of inflation will be revised upwards compared to the flash estimate (2.0% YoY) and will amount to 2.1% vs. 2.5% in November. We believe that the indicator decreased due to lower dynamics of food and fuel prices. The publication of the inflation data will be neutral for PLN and prices of Polish bonds.

Last week

- **As we expected, the Monetary Policy Council left interest rates unchanged at the last week's meeting (the reference rate amounts to 1.50%).** In the statement after the meeting, the Council repeated the view that inflation would remain close to the inflation target over the

projection horizon and the current level of interest rates was conducive to keeping the Polish economy on the sustainable growth path and maintaining macroeconomic stability. An assessment of short-term prospects for economic growth was also included in the statement, namely that favourable economic conditions in the Polish economy would continue in the next quarters, yet GDP growth would probably be lower than in the second half of 2017. It shows that the Council expects a slight deceleration of GDP growth in the coming quarters. At the conference after the meeting, the NBP Governor, A. Głapiński repeated the view presented in recent months that NBP interest rates should stay at the current level until the end of 2018. He also signaled that the period of stable interest rates might be extended into 2019 (see MACROPulse of 10/1/2018). Present at the conference MPC member, E. Gatnar, so far showing a relatively high inflation aversion, commented on the flash estimate of the December inflation (2.0% YoY vs. 2.5% in November), saying that perhaps a process has started to develop which will result in the lowering of the inflation path in the March inflation projection. Interestingly, he also stated that a situation where the expected inflation exceeds the target (2.5%) but stays below the upper tolerance band (3.5%) does not require a monetary policy response. The above-quoted remarks of the NBP Governor and E. Gatnar indicate that the MPC has slightly relaxed its bias in monetary policy compared to December. They support our revised forecast of NBP rates, in which, given a moderate wage pressure and the expected in the coming quarters gradual decrease in inflation to a level significantly below the inflation target (see MACROmap of 11/12/2017), the MPC will leave interest rates unchanged until the middle of 2019.

➤ **Significant data from the US economy were released last week.** Retail sales rose by 0.4% MoM in December vs. a 0.9% increase in November. Slower retail sales growth resulted from their lower monthly dynamics in most of the categories. Excluding car sales, retail sales rose by 0.4% MoM in December vs. a 1.3% increase in November. Data on CPI inflation were also released last week and dropped to 0.1% MoM in December vs. 0.4% MoM in November (2.1% YoY in December vs. 2.2% in November). Conducive to decrease in inflation were lower dynamics of fuel prices (-2.7% MoM vs. 7.3%). Increase in core inflation to 1.8% YoY in December vs. 1.7% in November (0.3% MoM in December vs. 0.1% in November) had an opposite impact. We maintain our scenario, in which the inflation data coming in the subsequent months will not be a sufficient justification for the scale of monetary tightening expected in the December projection (by 75bp – see MACROmap of 18/12/2017). Thus, we forecast that the scale of interest rate hikes in 2018 will be lower from FOMC members' expectations and will amount to 50bp. However, the last week's data on inflation in the US have changed our expectations concerning the timing of subsequent interest rate hikes. We now believe that they will take place in March and in September (before we believed that it would be June and December, respectively).

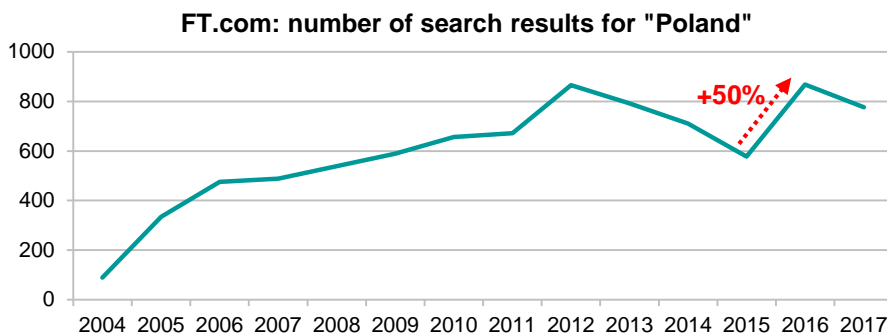
➤ **Significant data from the German economy were released last week.** According to the flash estimate, the German GDP rose by 2.2% YoY in 2017 vs. a 1.9% increase in 2016. Higher dynamics of the German GDP resulted from higher contributions of net exports (0.2 pp in 2017 vs. -0.3 pp in 2016) and inventories (0.1 pp vs. -0.2 pp), while lower contribution of government expenditure (0.3 pp vs. 0.7 pp) had an opposite impact. The contributions of private consumption and investments have not changed and amounted to 1.1 pp and 0.6 pp, respectively. Thus, like in 2016, private consumption was the main source of growth of the German economy in 2017. Data on the German trade balance was also released last week and its surplus rose to EUR 22.3bn in November vs. EUR 19.9bn in October. It was accompanied by an increase in the dynamics of exports (4.1% MoM in November vs. -0.3% in October) and imports (2.3% MoM vs. 1.8%). Data on industrial production was also released week and rose 3.4% MoM in November vs. a 1.2% decrease in October. The increase in its dynamics resulted from higher output growth rate in manufacturing and construction. Lower monthly output dynamics in energy had an opposite impact. Data on orders in manufacturing were also released last week and decreased by 0.4% MoM vs. a 0.7% increase in October. Based on the

flash estimate of the German GDP in the whole 2017, we estimate that its quarterly growth rate amounted to 0.9% in Q4 vs. 0.8% in Q3.

- ▬ **The Chinese foreign trade balance increased to USD 54.7bn in December vs. USD 40.2bn in November.** At the same time, export dynamics to 10.9% YoY in December vs. 12.3% in November, while import dynamics dropped to 4.5% in December vs. 17.7% in November. The last week's data from the Chinese economy are consistent with our scenario of recovery in global trade.
- ▬ **We believe that the final data released this week will indicate that HICP inflation for the Eurozone decreased from 1.5% YoY in November to 1.3% in December.** We expect that the rate of inflation will decrease further to 1.2% YoY in January. In our view, core inflation will continue to stay at a low level (0.9%-1.1% YoY) until Q3 2018. Thus, we forecast that HICP inflation in the Eurozone will range from 1.2% to 1.6% YoY in 2018 and, on a average, will amount to 1.4% YoY. The path of inflation in the Eurozone supports our forecast of inflation in Poland – down to 1.7% YoY in 2018 vs. 2.0% in 2017. The materialization of our inflation scenario will be conducive to lower yields on Polish bonds.

Domestic factors important for PLN

Recent months saw a marked strengthening of PLN. EURPLN dropped from 4.32 (local maximum) in September 2017 to 4.18 as at the end of 2017. This means that PLN appreciated against EUR by 3.5% over that period. In the analysis below we are trying to answer the question to what extent global factors were responsible for EURPLN depreciation and in what part this depreciation resulted from factors originating locally.



Source: Financial Times, Credit Agricole

The starting point of our analysis has been the phenomenon we have observed in the last two years of an increasing number of news about Poland being published by foreign news agencies. The number of articles about Poland released each year on the Financial Times' website was decreasing between 2012 and 2015 (see the graph). In our view, such tendency might

indicate a declining frequency of major domestic events that could potentially impact EURPLN. Such assumption would be consistent with the results of empirical studies, as literature shows that after the outbreak of the global financial crisis the exchange rates of Central and Eastern European countries have become less sensitive to domestic business cycles while the impact of global factors has relatively increased. The number of articles concerning Poland published on the Financial Times' website visibly increased (by 50% YoY) in 2016 and continued to stay at a higher level also in 2017. This may signal that the importance of local events for EURPLN has increased again in the last two years.

In order to test this hypothesis, we have used econometric modeling to decompose EURPLN volatility into two types of factors – local and global ones. Local factors are responsible for the part of EURPLN volatility which depends i.a. on the publication of domestic macroeconomic indicators, change in financial markets expectations concerning local monetary policy outlook, change in political risk, etc. On the other hand, global factors represent the impact of global events – common to all the currencies (i.a. changes in global risk aversion). To this end we have selected the exchange rates of four currencies of

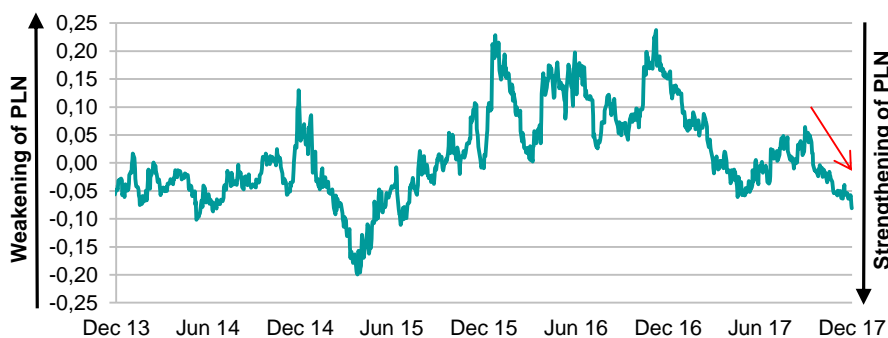
the region versus EUR (EURPLN, EURHUF, EURRON, and EURCZK) which are moderately strongly correlated. Based on the chosen sample of exchange rates, using the principal component method, we can obtain the first principal component. It is an artificially created variable supposed to explain possibly the largest part of common variability of the selected exchange rates. We therefore assume that this principal component represents the impact of global events on the region's foreign exchange rates. We have then created a linear regression model for EURPLN, in which the only explanatory variable is the principal component obtained above. The theoretical value of the explanatory variable obtained with the use of the model is interpreted global factors, and the residuals in the model are interpreted as the portion of EURPLN which depends on local factors.

Decomposition of EURPLN volatility		
Sample	Global factors	Local factors
	R ²	1-R ²
January 1999 - August 2008	17%	83%
September 2008 - April 2015	68%	32%
May 2015 - November 2017	7%	93%

Source: Credit Agricole

of local factors. Before the financial crisis the impact of local factors dominated over global factors – they were responsible for 83% of EURPLN volatility. However, from the outbreak of the crisis until 2015, global factors played a dominant role, explaining 68% of EURPLN volatility. To test if the importance of local factors has increased again in recent years, we have applied econometric modelling also on a sample from May 2015 till the end of 2017. The beginning of the sample is marked symbolically by the victory of A. Duda in the presidential election which signaled a high likelihood of changes in the political scene after the autumn parliamentary election and has contributed to increase in political risk in Poland. In this time sample domestic developments were of key importance for EURPLN and were responsible for 93% of its volatility.

Thus, the R² coefficient of determination for the said econometric model shows the extent to which PLN volatility depends on global factors. The remaining (not explained by the model) part of the volatility (1-R²) is interpreted as the impact



Source: Reuters, Credit Agricole

— Local factors of EURPLN

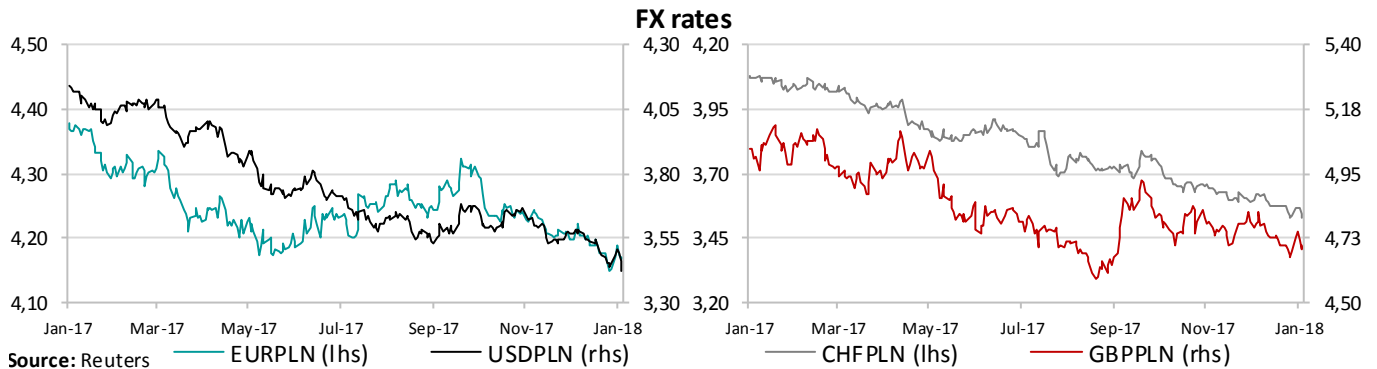
Observing the evolution of the local factors of EURPLN rate over a period from September 2017 till the end of 2017, we can see that it has decreased (which corresponds to PLN appreciation vs. EUR) in that time by 14 grosz, while the global factor has not changed significantly. This means that the PLN appreciation recorded in that period was

largely due to positive factors of a local nature. It should be noted that our analysis does not provide a precise answer regarding the scale at which specific local factors have impacted changes in EURPLN (e.g. publications of macroeconomic data, remarks of MPC members, changes in political risk) because their impact is treated in aggregation. Declines in EURPLN local factor were observed in that period i.a. after the publication of better-than-expected domestic macroeconomic data, successful bond auctions, and publication of the November inflation projection with upward revised GDP and inflation profiles. This means that PLN appreciation was probably impacted to the largest extent by the growing market expectations of interest rates hikes by the MPC. Our view is supported by the increasing scale of NBP interest rates hikes priced in by FRA contracts in that period.

We believe that the importance of local factors will continue to be high in the coming quarters. However, the direction of their impact will be opposite to that observed in recent months. We believe

that, contrary to market expectations, the MPC will not hike interest rates this year. Our scenario is supported by the remarks of the NBP Governor and other MPC members at the conference after the Council meeting last week (see above) indicating that the MPC has slightly relaxed its bias in monetary policy compared to December. A gradual decrease in market expectations of monetary tightening taking place soon will limit the scale of PLN appreciation in the coming quarters. This supports our forecast assuming only a moderate strengthening of PLN in 2018 (EURPLN down to 4.10 at year end).

Domestic data on production and retail sales positive for PLN

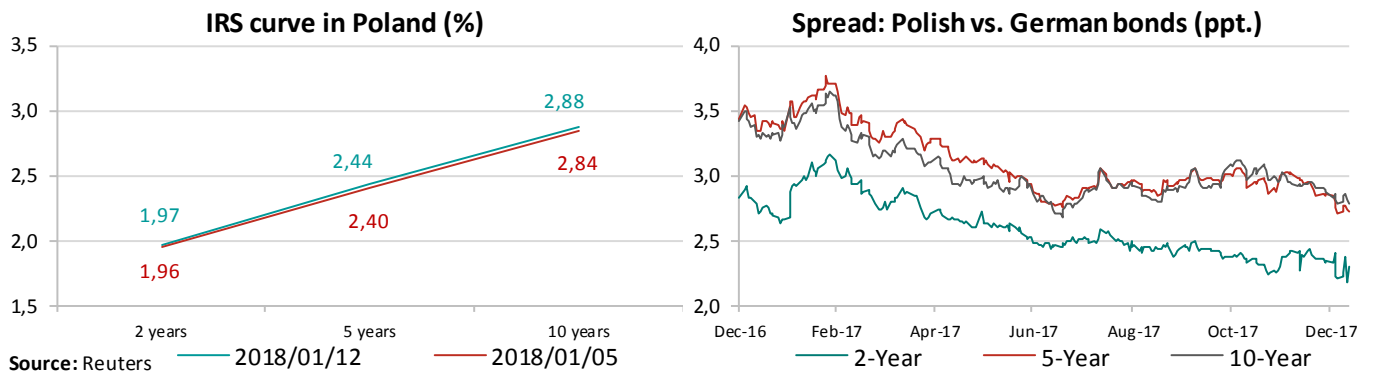


Last week EURPLN rate rose to 4.1691 (PLN weakening by 0.4%). Monday through Wednesday, PLN was depreciating due to a correction after its marked strengthening two weeks ago. Despite the dovish tone of the press conference after the MPC meeting on Wednesday, PLN was appreciating, supported by decrease in global risk aversion reflected by lower VIX index. On Thursday, PLN continued to appreciate partly making up for the losses from the beginning of the week. Friday saw a slight weakening of PLN, supported by better-than-expected data on US inflation.

EUR strengthening vs. major currencies was observed last week. Its scale was bigger from PLN weakening vs. EUR. Consequently, PLN has slightly appreciated vs. USD and CHF.

The publication of data on industrial production and retail sales in Poland, scheduled for Friday, will be crucial for PLN this week. We believe that they will be slightly positive for PLN. Other domestic data (balance of payments, corporate wages and employment, and final estimate of inflation) will not be market moving, we believe. In our view, data from China (GDP estimate in Q4, industrial production, retail sales, and urban investments) and from the US (industrial production, number of housing starts, building permits, NY Empire State, Philadelphia FED Indies and preliminary University of Michigan Index) will also be neutral for PLN.

Markets focus on domestic data on production and retail sales



Source: Reuters

Last week the 2-year IRS rates rose to a level of 1.97 (up by 1 bp), of 5-year rates to a level of 2.440 (up by 4 bp), and of 10-year rates to a level of 2.88 (up by 4 bp). Throughout last week, IRS rates were showing a relatively low volatility, supported by limited liquidity. Despite its dovish tone, the press conference after the MPC meeting had no substantial impact on IRS rates, which were slightly increasing, following the German debt market.

This week, the Polish debt market will focus on the data on industrial production and retail sales in Poland. In our view, they will support an increase in IRS rates. Other domestic data (balance of payments, corporate wages and employment, and final estimate of inflation) are likely to be neutral for the debt market. In our view, the numerous data from the US (industrial production, number of housing starts, building permits, NY Empire State, Philadelphia FED Indies and preliminary University of Michigan Index) will also have a limited impact on IRS rates.

Forecasts of the monthly macroeconomic indicators

Main monthly macroeconomic indicators in Poland														
Indicator	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18
NBP reference rate (%)	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50
EURPLN*	4,40	4,32	4,31	4,23	4,23	4,18	4,23	4,25	4,25	4,31	4,24	4,20	4,18	4,17
USDPLN*	4,18	4,00	4,07	3,97	3,88	3,72	3,70	3,59	3,57	3,65	3,64	3,53	3,48	3,50
CHFPLN*	4,11	4,04	4,05	3,96	3,90	3,84	3,86	3,72	3,72	3,77	3,65	3,59	3,57	3,57
CPI inflation (% YoY)	0,8	1,7	2,2	2,0	2,0	1,9	1,5	1,7	1,8	2,2	2,1	2,5	2,1	2,1
Core inflation (% YoY)	0,0	0,2	0,3	0,6	0,9	0,8	0,8	0,8	0,7	1,0	0,8	0,9	0,9	0,9
Industrial production (% YoY)	2,2	9,1	1,1	11,0	-0,6	9,1	4,5	6,2	8,7	4,3	12,3	9,0	2,9	2,9
PPI inflation (% YoY)	3,2	4,0	4,5	4,8	4,2	2,4	1,8	2,2	3,0	3,2	3,0	1,8	0,7	0,7
Retail sales (% YoY)	6,4	11,4	7,3	9,7	8,1	8,4	6,0	7,1	7,6	8,6	8,0	10,2	9,0	9,0
Corporate sector wages (% YoY)	2,7	4,3	4,0	5,2	4,1	5,4	6,0	4,9	6,6	6,0	7,4	6,5	7,2	7,2
Employment (% YoY)	3,1	4,5	4,6	4,5	4,6	4,5	4,3	4,5	4,6	4,5	4,4	4,5	4,5	4,5
Unemployment rate* (%)	8,2	8,5	8,4	8,0	7,6	7,3	7,0	7,0	7,0	6,8	6,6	6,5	6,6	6,6
Current account (M EUR)	-106	2548	-514	-405	350	-264	-892	-203	189	120	575	556	556	556
Exports (% YoY EUR)	9,0	15,1	6,4	19,7	3,2	19,2	7,2	13,3	11,5	10,0	15,4	12,6	12,6	12,6
Imports (% YoY EUR)	9,8	16,0	10,5	19,8	4,6	21,7	14,5	13,2	7,8	7,5	12,9	11,5	11,5	11,5

*end of period

Forecasts of the quarterly macroeconomic indicators

Main macroeconomic indicators in Poland												
Indicator	2017				2018				2017	2018	2019	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Gross Domestic Product (% YoY)	4,1	4,0	4,9	4,8	4,2	3,9	3,6	3,6	4,5	3,8	3,3	
Private consumption (% YoY)	4,7	4,9	4,8	4,3	4,2	3,9	3,5	3,8	4,7	3,9	3,0	
Gross fixed capital formation (% YoY)	-0,5	0,9	3,3	6,9	8,6	7,2	7,2	6,6	3,6	7,2	5,0	
Export - constant prices (% YoY)	9,6	3,1	7,6	7,5	5,6	6,5	6,6	6,2	7,0	6,2	5,0	
Import - constant prices (% YoY)	9,7	6,0	5,7	6,9	6,4	7,1	7,2	8,2	7,1	7,2	6,0	
GDP growth contributions	Private consumption (pp)	2,9	2,9	2,9	2,1	2,7	2,3	2,1	1,9	2,7	1,8	
	Investments (pp)	0,0	0,1	0,6	1,7	1,0	1,2	1,2	1,6	0,6	0,9	
	Net exports (pp)	0,4	-1,3	1,1	0,6	-0,2	0,0	0,0	-0,7	0,2	-0,3	
Current account***	0,1	-0,4	0,0	-0,5	-0,8	-0,4	-0,1	-0,5	-0,5	-0,5	-0,7	
Unemployment rate (%)**	8,0	7,0	6,8	6,6	6,7	6,1	6,2	6,5	6,6	6,5	6,5	
Non-agricultural employment (% YoY)	2,1	2,4	1,8	1,6	1,2	0,7	0,4	0,3	2,0	0,6	0,0	
Wages in national economy (% YoY)	4,1	5,0	4,9	5,9	6,8	5,8	6,1	6,8	5,0	6,4	6,5	
CPI Inflation (% YoY)*	2,0	1,8	1,9	2,2	1,8	1,9	2,0	1,2	2,0	1,7	2,0	
Wibor 3M (%)**	1,73	1,73	1,73	1,72	1,72	1,72	1,72	1,72	1,72	1,72	1,97	
NBP reference rate (%)**	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,50	1,75	
EURPLN**	4,23	4,23	4,31	4,18	4,17	4,14	4,12	4,10	4,18	4,10	4,15	
USDPLN**	3,97	3,70	3,65	3,48	3,53	3,45	3,38	3,33	3,48	3,33	3,27	

* quarterly average

** end of period

***cumulative for the last 4 quarters

Calendar

TIME	COUNTRY	INDICATOR	PERIOD	PREV. VALUE	FORECAST*	
					CA	CONSENSUS**
Monday 01/15/2018						
14:00	Poland	CPI (% YoY)	Dec	2,0	2,1	2,0
14:00	Poland	Current account (M EUR)	Nov	575	556	693
Tuesday 01/16/2018						
14:00	Poland	Core inflation (% YoY)	Dec	0,9	0,9	0,8
14:30	USA	NY Fed Manufacturing Index (pts)	Jan	18,0	19,5	18,0
Wednesday 01/17/2018						
11:00	Eurozone	HICP (% YoY)	Dec	1,4	1,4	1,4
14:00	Poland	Employment (% YoY)	Dec	4,5	4,5	4,5
14:00	Poland	Corporate sector wages (% YoY)	Dec	6,5	7,2	6,9
15:15	USA	Industrial production (% MoM)	Dec	0,2	0,3	0,5
15:15	USA	Capacity utilization (%)	Dec	77,1	77,3	77,3
Thursday 01/18/2018						
3:00	China	GDP (% YoY)	Q4	6,8	6,7	6,7
3:00	China	Retail sales (% YoY)	Dec	10,2	10,1	10,1
3:00	China	Industrial production (% YoY)	Dec	6,1	6,3	6,0
3:00	China	Urban investments (% YoY)	Dec	7,2	7,1	7,1
14:30	USA	Housing starts (k MoM)	Dec	1297	1285	1280
14:30	USA	Building permits (k)	Dec	1303	1300	1300
14:30	USA	Philadelphia Fed Index (pts)	Jan	26,2	27,9	25,0
Friday 01/19/2018						
10:00	Eurozone	Current account (bn EUR)	Nov	30,8		
14:00	Poland	PPI (% YoY)	Dec	1,8	0,7	0,6
14:00	Poland	Retail sales (% YoY)	Dec	10,2	9,0	6,9
14:00	Poland	Industrial production (% YoY)	Dec	9,1	2,9	2,8
16:00	USA	Initial U. of Michigan Sentiment Index (pts)	Jan	95,9	98,0	97,0

*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