Tightening of the tax system brought PLN 12.5bn of VAT revenues in 2017

This week

- **Important hard data on US economy and business survey results will be released this week.** We expect industrial production to have dropped to 0.2% MoM in January vs. 0.9% in December, due to lower output in mining. We forecast that nominal retail sales increased by 0.1% MoM in January vs. a 0.4% increase in December, due to lower sales in the automotive branch. The sustainability of the recovery in the US real estate market will be confirmed by high numbers of building permits (1310k in January vs. 1300k in December) and housing starts (1230k vs. 1192k). Business survey results will also be released in the US. In our view, the Philadelphia FED Index rose to 23.5 pts in February from 22.2 pts in January, and the NY Empire State Index probably rose to 18.0 pts from 17.7 pts in January. We forecast that the preliminary University of Michigan Index (93.7 pts vs. 95.7 pts in January) will signal a slight deterioration of households' sentiment in February. We believe that the aggregate impact of data on the US economy on the financial market will be limited.
- **Subsequent GDP estimates for major European economies will be released on Wednesday.** We expect that, like in the first estimate, the quarterly GDP dynamics in the Eurozone stood at 0.6% in Q4 2017 vs. 0.7% in Q3. The economic growth rate in Germany is likely to have increased to 0.9% QoQ in Q4 2017 (the highest level since Q1 2017) vs. 0.8% in Q3. The release of GDP data for the Eurozone and Germany will not have any significant impact on PLN or the Polish debt market, we believe.
- **Data on the Polish balance of payments in December 2017 will be released on Tuesday**. We expect the current account balance to have increased to EUR 303M vs. EUR 233M in November 2017, mainly due to higher balance of transfers with the European Union. We forecast that export dynamics decreased from 14.8% YoY in November to 5.7% in December, while import growth rate dropped from 15.9% YoY down to 5.6%. In our view, data pointing to a higher-from-the-market-expectations (PLN -230M) current account balance in December will be conducive to PLN strengthening.
- **The flash estimate of GDP in Poland in Q4 2017 will be released on Wednesday.** Based on GDP data for 2017 published by GUS two weeks ago (see MACROpulse of 30/1/2018), we forecast that the GDP growth rate rose to 5.1% YoY from 4.9% in Q3 2017. Conducive to faster GDP growth were higher contributions of investments and public consumption (see MACROpulse of 30/1/2018). The publication of GDP data should not be market moving. We see an upside risk to our forecast. However, its materialization should not result in any significant changes in PLN rate or prices of Polish bonds.
- **Data on the January inflation in Poland will be released on Thursday and in our view dropped to 1.9% YoY vs. 2.1% in December.** In our view the decrease in inflation rate was due to lower dynamics of food prices. The materialization of the forecast will be in line with our short-term inflation scenario (see the quarterly table). Data on inflation in Poland will be neutral for the financial markets.
- **The January data on average wages and employment in the corporate sector in Poland will be released on Friday**. GUS will make the annual review of the number of people employed in microenterprises (companies employing less than 10 persons), which will result in a significant monthly increase in the number of people working in companies employing at least 10 persons. However, the scale of the revision is likely to be smaller from 2017. Consequently, we forecast that employment dynamics dropped to 3.5% YoY from 4.6% in December 2017, i.a. due to lower from 2016 increase in minimum wage and the abatement of the effect of a shift of bonus payments in mining. Though important for the forecast of private consumption dynamics in Q1, the release of data on corporate wages and employment will be neutral for PLN and the debt market, we believe.

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 (see MACROpulse of 7/2/2018). Like in the previous month, a view was included in the statement that favourable economic conditions in the Polish economy would continue in the next quarters but GDP growth would probably be slightly lower than in the second half of 2017. It shows that the Council expects a slight deceleration of GDP growth in the coming quarters. In addition, it results from the statement that the Council attributes the sharp acceleration in investments growth in Q4 2017 mainly to the recovery in public investments which is in line with our view. At the conference after the meeting, the NBP Governor, A. Glapiński repeated the view presented in recent months that NBP interest rates should stay at the current level until the end of 2018. The NBP Governor clarified his statement from the month before when he signaled that the period of stable interest rates "may be extended into 2019", emphasizing that in his view the rates would remain stable for a longer period of time "facts and circumstances allowing". Especially noteworthy is the change in bias of the present at the conference MPC member, Ł. Hardt, to a more dovish one. He said that the impact of higher unit labour costs on inflation was limited and the probability of stable NBP interest rates until the end of 2018 was currently higher than few months ago. The tone of the conference after the meeting supports our forecast of NBP rates, in which, given a moderate wage pressure and the expected in Q4 decrease in inflation to a level significantly below the inflation target, the MPC will leave interest rates unchanged until the middle of 2019. The main risk to our inflation scenario and – indirectly – to the forecast of NBP interest rates is the significant increase in oil prices that was recorded in recent weeks, signaling higher risk of secondary inflationary impulses related to increase in energy prices.
- **Numerous data from the German economy were released last week**. The foreign trade surplus dropped to EUR 21.5M in December vs. EUR 22.3M in November. It was accompanied by a decrease in the monthly dynamics of exports (down to 0.4% MoM in December vs. 4.1% in November) and imports (1.4% vs. 2.2%). Data on industrial production were also released week and its monthly dynamics dropped to -0.6% in December vs. 3.1% in November. Their decline resulted from lower output growth rate in manufacturing and construction, while their acceleration in energy had an opposite impact. On the other hand, the monthly dynamics of new orders recorded an increase, rising to 3.8% in December vs. -0.1% in November. The data support our estimate, in which the German GDP rose by 0.9% QoQ in Q4 vs. a 0.8% increase in Q3.
- **The surplus of the Chinese balance on trade decreased to USD 20.3bn in January vs. USD 54.7bn in December, running clearly below the market expectations (EUR 54.1bn)**. At the same time, export dynamics rose to 11.1% YoY in January vs. 10.9% in December, while import dynamics rose to 36.9% in January vs. 4.5% in December. Conducive to the sharp increase in imports was the low base effect from the year before related to a different distribution of the Chinese New Year (in 2017 it fell in January and this year in February). The increase in the dynamics of Chinese imports was also supported by higher growth rate of the imports of source materials, partly resulting from their higher prices. The data on the Chinese foreign trade for the first months of the year should be treated with great caution due to numerous temporary effects which increase their volatility.
- **Last week a strong correction in the US stock market and consequently in global markets took place**. S&P 500 dropped by 5.2% last week, hitting the lowest level since October 2017. Oil

market also saw a correction with the price of Brent oil dropping by USD 6 per barrel down to USD 62.56. The correction in the stock market and the fall of oil prices led to a slight decrease in expectations concerning the pace of the monetary normalization in the US. Several FOMC members spoke about the situation in the stock market last week. J. Bullard expressed the view that the latest sell-off was not surprising. In turn, R. Kaplan stated that the correction was needed and in his view it had no implications for the economy. The above statements indicate that the recent sell-off in the stock market is not likely to be a factor significantly altering FED members' expectations concerning the profile of interest rates in the US (the total scale of the monetary tightening in 2018 amounting to 75bp according to the December FOMC projection). Consequently, we maintain our scenario in which FED will hike interest rates three times in 2018 each time by 25 bp (in March, June, and September).

Tightening of the tax system brought PLN 12.5bn of VAT revenues in 2017

The Finance Ministry data on the estimated execution of the state budget in 2017 pointed to a marked increase in VAT revenues – they are estimated at PLN 156.8bn. They were by 23.9% (namely by PLN 30.2bn) higher from the revenues for 2016. Compared to the Budget Act for 2017, the VAT revenues were higher by PLN 13.3bn, i.e. by 9.3%. Having more data at our disposal now, we have updated our June analysis (see MACROmap of 26/6/2017) in which we were trying to answer the question to what extent reducing the VAT gap (the tightening of the tax system) was responsible for the increase in VAT revenues.

Below we are using a similar approach as in our previous analysis. In order to estimate the impact of the improved VAT collection on the amount of the state budget revenues from VAT, it is necessary to identify the tax base, namely the goods and services subject to taxation. We assumed that the amount of the tax base was approximately equal to the sum of private consumption, public consumption, public investments, and households' outlays on fixed assets. We then estimated the effective VAT rate, namely the percentage of the tax base received by the state budget. Our analysis shows that except for seasonal variations (+ 0.5 pp depending on quarter), the effective VAT rate is a pro-cyclical variable, meaning that it increases with GDP dynamics and incomes earned by the society, which we believe may be due to growing percentage of expenditures on luxury goods in the households' basket and decreasing scope of grey economy in the recovery phase of the business cycle.

Considering the interdependencies outlined above, we have built an econometric model in which effective VAT rate is explained by nominal dynamics of domestic demand, seasonal binary variables, and two binary variables representing the impact of the government measures between 2016 and 2017 on VAT revenues. The first one takes the value '1' in the years 2016-2017 and the second one takes the value "1" in the period from Q1 to Q3 2017. The government measures include operations aimed at improving VAT collection (i.a. the introduction of the so-called Single Control File, introduction of the "carriage package" and "alcohol package", and the launch of the National Tax Authority) as well as the changed timing of VAT returns (see below). On the basis of this model we are able to decompose the difference between the amount of VAT revenues between Q1-Q3 2017 period and Q1-Q3 2016 (PLN 22.4bn). In our analysis we are forced to disregard the information on revenues from the tax on goods and services for Q4 2017 because the national accounts data enabling to identify the tax base for this period are not yet available.

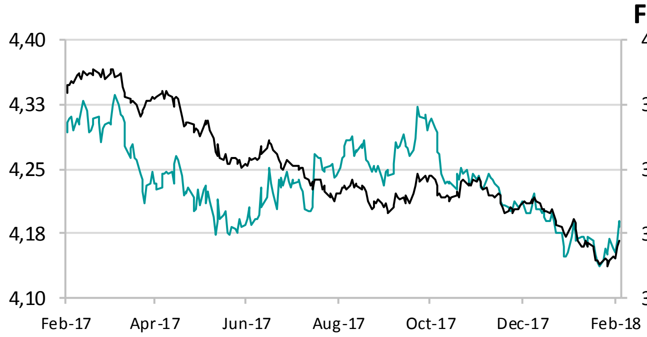
In Q1-Q3 2017 period, the tax base increased by 6.0% compared to the same period of the previous year, which, with unchanged effective tax rate, would result in identical relative increase in VAT revenues (PLN 5.8bn). At the same time, this period saw a sharp acceleration in domestic demand growth (change of position in the economic cycle), which, according to the results of econometric modeling, contributed to a PLN 4.2bn increase in VAT revenues. This means that VAT revenues between Q1 and Q3 2017 rose by PLN 10.0bn only as a result of recovery of economic growth.

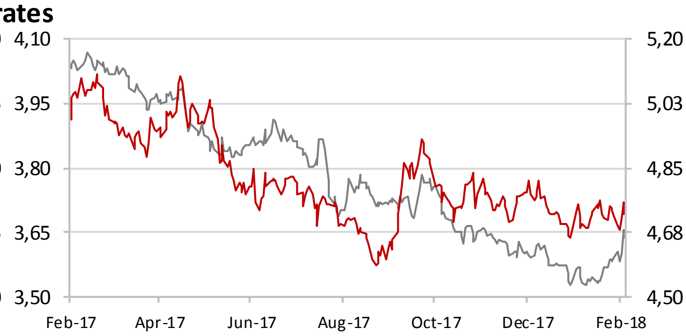
The effects of government measures (operations tightening the tax system and changed timing of returns) on VAT revenues in 2017 can be estimated on the basis of the parameter situated next to the binary variable taking the value "1" between Q1 and Q3 2017. It shows that the effective tax rate increased on the average by 1.2 pp in 2017 compared to 2016, which means that the government measures were conducive to PLN 14.4bn increase in VAT revenues between Q1 and Q3 2017. In order to single out the impact of only the effects of the tax system tightening, this estimate should be adjusted by the impact of the shift of VAT returns in 2016. According to the reply by Ministry of Finance to a Parliamentary question, the actual VAT returns amounted to PLN 13.8bn in December 2016 and were higher by ca. PLN 5.0bn than in the same month of 2014 and 2015. This was the effect of the government action consisting in shifting VAT returns in order to smooth the public finance deficit profile. This means that VAT revenues were lower by ca. PLN 5bn in December 2016 and were higher by a similar amount in 2017, compared to a situation where such shift would not have taken place. The above reasoning leads to a conclusion that the tax system tightening between Q1 and Q3 2017 amounted to ca. PLN 9.4bn. Using the seasonal interdependencies, we estimate that these effects for the whole year would amount to ca. PLN 12.5bn.

The above result is similar to the one we obtained in the June analysis. It should be pointed out that our estimate may vary by ca. PLN ±4.5bn, due to the fact that the model does not fully fit the empirical data. This means that in an optimistic scenario the tax system tightening brought in 2017 additional VAT revenues at a level of PLN 17bn (56.3% increase in VAT revenues). In turn, the minimum effects of such tightening can be estimated at PLN 8bn (26.5%). Our estimates may change after the publication of the national accounts data enabling to identify the tax base in Q4 2017. The obtained results are consistent with the analysis published in MACROmap of 22/1/2019, in which the structural balance of the public finance sector in relation to GDP will not substantially change between 2015 and 2018.

Data on the Polish balance of payments positive for PLN

FX rates





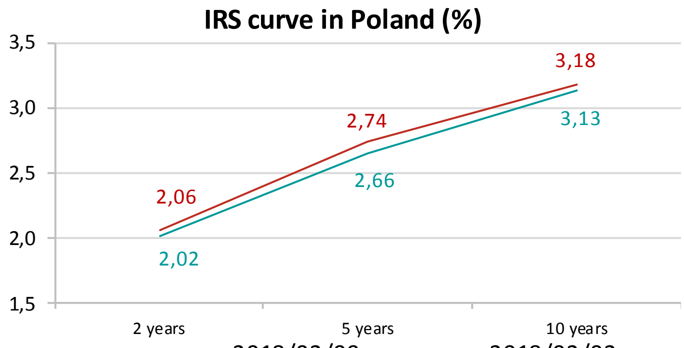
Source: Reuters

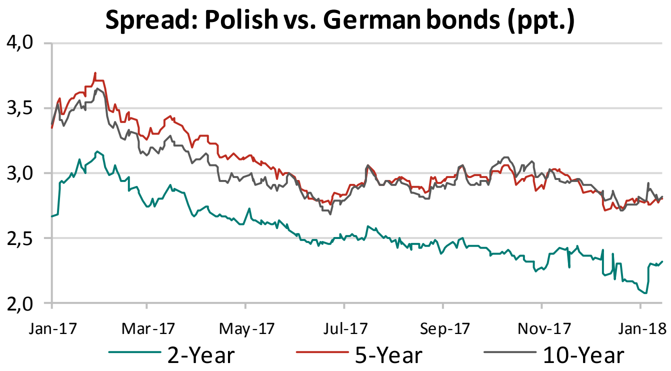
Last week EURPLN rate rose to 4.1823 (PLN weakening by 0.3%). In the first part of the week, PLN was relatively stable, despite a strong correction in the world markets, which resulted in a sharp increase in global risk aversion. The VIX index being a measure of risk aversion rose last week to the highest level since 2015. Nonetheless, PLN started visibly depreciating from Thursday in the wake of the deterioration of the global sentiment. On Friday its depreciation continued. The MPC meeting had a limited impact on the market.

Last week, due to the sharp increase in global risk aversion, PLN was depreciating the strongest against USD and CHF, namely the currencies believed to be the so-called safe havens. At the same time, for the same reason, USD strengthening vs. EUR was observed throughout last week. In effect, EURUSD rate dropped to a level slightly above 1.22 on Friday.

Crucial for PLN this week will be the domestic data on the balance of payments. If our higher-from-the-market-consensus forecast materializes, they will be slightly positive for PLN. Other data from the Polish economy (flash estimate of GDP in Q4, CPI inflation, corporate wages and average employment) will be neutral for PLN, we believe. In our view, the preliminary data about GDP for the Eurozone economies and numerous data from the US (inflation, retails sales, industrial production, preliminary University of Michigan Index, housing starts, new building permits, NY Empire State and Philadelphia FED Indices) will also have a limited impact on the market.

Polish debt market focuses on domestic inflation reading





Source: Reuters

Last week 2-year IRS rates dropped to a level of 2.015 (down by 4 bp), 5-year rates to a level of 2.66 (down by 8 bp), and 10-year rates to a level of 3.125 (down by 6 bp). Monday saw a decrease in IRS rates across the curve. It was a correction after their sharp increase two weeks ago (see MACROmap of 5/2/2018). From Tuesday to Thursday an increase in IRS rates was observed following the German debt market. Friday saw a correction supported by improved global market sentiment.

This week the Polish debt market will focus on domestic data on inflation. However, if our higher-from-the-market-consensus forecast materializes, the data will be neutral for IRS rates. Other data from the Polish economy (flash estimate of GDP in Q4, balance of payments, corporate wages and average employment) will also have a limited impact on the market. We believe that the numerous data from the US (inflation, retails sales, industrial production, preliminary University of Michigan Index, housing starts, new building permits, NY Empire State and Philadelphia FED Indices) as well as preliminary data on GDP for the Eurozone economies will not have any significant impact on IRS rates.

Forecasts of the monthly macroeconomic indicators

Main monthly macroeconomic indicators in Poland

Indicator	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	Feb-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*	4,32	4,31	4,23	4,23	4,18	4,23	4,25	4,25	4,31	4,24	4,20	4,18	4,15	**4,16**
USDPLN*	4,00	4,07	3,97	3,88	3,72	3,70	3,59	3,57	3,65	3,64	3,53	3,48	3,34	**3,38**
CHFPLN*	4,04	4,05	3,96	3,90	3,84	3,86	3,72	3,72	3,77	3,65	3,59	3,57	3,59	**3,58**
CPI inflation (% YoY)	1,7	2,2	2,0	2,0	1,9	1,5	1,7	1,8	2,2	2,1	2,5	2,1	**1,9**	
Core inflation (% YoY)	0,2	0,3	0,6	0,9	0,8	0,8	0,8	0,7	1,0	0,8	0,9	0,9	**1,0**	
Industrial production (% YoY)	9,1	1,1	11,0	-0,6	9,1	4,5	6,2	8,7	4,3	12,3	9,1	2,7	**7,8**	
PPI inflation (% YoY)	4,0	4,5	4,8	4,2	2,4	1,8	2,2	3,0	3,2	3,0	1,8	0,3	**0,1**	
Retail sales (% YoY)	11,4	7,3	9,7	8,1	8,4	6,0	7,1	7,6	8,6	8,0	10,2	6,0	**6,9**	
Corporate sector wages (% YoY)	4,3	4,0	5,2	4,1	5,4	6,0	4,9	6,6	6,0	7,4	6,5	7,3	**6,2**	
Employment (% YoY)	4,5	4,6	4,5	4,6	4,5	4,3	4,5	4,6	4,5	4,4	4,5	4,6	**3,5**	
Unemployment rate* (%)	8,5	8,4	8,0	7,6	7,3	7,0	7,0	7,0	6,8	6,6	6,5	6,6	**6,9**	
Current account (M EUR)	2548	-514	-405	350	-264	-892	-203	189	120	297	233	**303**		
Exports (% YoY EUR)	15,1	6,4	19,7	3,2	19,2	7,2	13,3	11,5	10,0	15,5	14,8	**5,7**		
Imports (% YoY EUR)	16,0	10,5	19,8	4,6	21,7	14,5	13,2	7,8	7,5	14,8	15,9	**5,6**		

*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	5,1	4,7	4,3	4,2	3,9	4,6	4,3	3,0
Private consumption (% YoY)	4,7	4,9	4,8	4,8	5,2	4,2	4,1	4,3	4,8	4,4	3,6
Gross fixed capital formation (% YoY)	-0,5	0,9	3,3	11,8	9,2	9,5	7,6	4,7	5,4	7,1	3,1
Export - constant prices (% YoY)	9,6	3,1	7,6	8,0	7,5	6,5	6,6	6,0	7,0	6,6	5,0
Import - constant prices (% YoY)	9,7	6,0	5,7	8,3	8,1	7,8	7,5	7,0	7,4	7,6	6,0
GDP growth contributions: Private consumption (pp)	2,9	2,9	2,9	2,4	3,4	2,5	2,4	2,1	2,8	2,6	2,1
Investments (pp)	0,0	0,1	0,6	2,9	1,1	1,5	1,3	1,2	1,0	1,3	0,6
Net exports (pp)	0,4	-1,3	1,1	0,1	0,0	-0,4	-0,2	-0,3	0,1	-0,2	-0,3
Current account***	0,1	-0,4	0,2	0,3	-0,1	-0,1	-0,4	-0,4	0,3	-0,4	-0,6
Unemployment rate (%)**	8,0	7,0	6,8	6,6	6,6	6,0	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	7,1	6,8	5,8	6,1	6,8	5,3	6,4	6,5
CPI Inflation (% YoY)*	2,0	1,8	1,9	2,3	1,8	1,9	2,0	1,3	2,0	1,7	1,8
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	3,42	3,37	3,30	3,25	3,48	3,25	3,19

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

Calendar

TIME	COUNTRY	INDICATOR	PERIOD	PREV. VALUE	FORECAST*	
					CA	CONSENSUS**
		Tuesday 02/13/2018				
14:00	**Poland**	**Current account (M EUR)**	**Dec**	**233**	**303**	**-230**
		Wednesday 02/14/2018				
8:00	Germany	Preliminary GDP (% QoQ)	Q4	0,8	0,9	0,6
10:00	**Poland**	**Flash GDP (% YoY)**	**Q4**	**4,9**	**5,1**	**5,2**
11:00	Eurozone	Preliminary GDP (% QoQ)	Q4	0,6	0,7	0,6
11:00	Eurozone	GDP flash estimate (% YoY)	Q4	2,7	2,6	2,7
11:00	Eurozone	Industrial production (% MoM)	Dec	1,0		0,0
14:30	USA	CPI (% MoM)	Jan	0,1	0,4	0,3
14:30	USA	Core CPI (% MoM)	Jan	0,3	0,3	0,2
14:30	USA	Retail sales (% MoM)	Jan	0,4	0,1	0,2
16:00	USA	Business inventories (% MoM)	Dec	0,4	0,3	0,3
		Thursday 02/15/2018				
14:00	**Poland**	**CPI (% YoY)**	**Jan**	**0,0**	**1,9**	**1,9**
14:30	USA	NY Fed Manufacturing Index (pts)	Feb	17,7	18,0	18,0
14:30	USA	Philadelphia Fed Index (pts)	Feb	22,2	23,5	21,6
15:15	USA	Industrial production (% MoM)	Jan	0,9	0,2	0,2
15:15	USA	Capacity utilization (%)	Jan	77,9	78,0	78,0
		Friday 02/16/2018				
14:00	**Poland**	**Employment (% YoY)**	**Jan**	**4,6**	**3,5**	**3,4**
14:00	**Poland**	**Corporate sector wages (% YoY)**	**Jan**	**7,3**	**6,2**	**6,9**
14:30	USA	Housing starts (k MoM)	Jan	1192	1230	1230
14:30	USA	Building permits (k)	Jan	1300	1310	1300
16:00	USA	Initial U. of Michigan Sentiment Index (pts)	Feb	95,7	94,7	95,5

*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

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