

### January 9, 2015 Polish Weekly Review

#### Department of Economic Analysis (research)

Ernest Pytlarczyk, PhD, CFA chief economist tel. +48 22 829 01 66 ernest.pytlarczyk@mbank.pl

Marcin Mazurek, PhD senior analyst tel. +48 22 829 01 83 marcin.mazurek@mbank.pl

Piotr Bartkiewicz analyst tel. +48 22 526 70 34 piotr.bartkiewicz@mbank.pl

Karol Klimas analyst tel. +48 22 829 02 56 karol.klimas@mbank.pl

Department of Financial Markets (business contacts)

Bartlomiej Malocha, CFA head of interest rates trading tel. +48 22 829 01 77 bartlomiej.malocha@mbank.pl

Marcin Turkiewicz head of fx trading tel. +48 22 829 01 67 marcin.turkiewicz@mbank.pl

#### Department of Financial Markets Sales (business contacts)

Inga Gaszkowska-Gebska

institutional sales tel. +48 22 829 01 67 inga.gaszkowska-gebska@mbank.pl

Jacek Jurczyński structured products tel. +48 22 829 15 16 jacek.jurczynski@mbank.pl

#### mBank S.A.

18 Senatorska St. 00-950 Warszawa P. O. BOX 728 tel. +48 22 829 00 00 fax. +48 22 829 00 33 http://www.mbank.pl

#### Table of contents

Our view in a nutshell Economics Slight correction of PMI	page 2 page 3
Fixed income	<b>DOGO</b> 4
	page 4
Turning point	
Money market	page 5
Very cheap end of year and beginning of a new one	
FX market	page 6
PLN relief rally?	
Vols – melting	

### Comment on the upcoming data and forecasts

Because of holidays, January MPC meeting will take place next week. Although we keep stating that rate cuts should not be ruled out at any meeting, January is quite improbable. The reason for this is that the perception of economic growth as strong and recent weakening of Zloty, which is viewed by some MPC members as substitute of rate cuts. Inflation data will be published day after and they should confirm further fall into deflation (driven by lower fuel prices and stable base inflation) and that return to inflation target will be postponed once again. Week will begin with balance of payments publication. The expected narrowing of current account balance, with unchanged trade balance, is driven by seasonal effects in remaining categories.

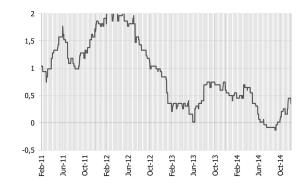
### Polish data to watch: January 12th to January 16th

Publication	Date	Period	mBank	Consensus	Prior
Exports (mio EUR)	13.01	Nov	13550	13455	14728
Imports (mio EUR)	13.01	Nov	13450	13365	14672
Current account (mio EUR)	13.01	Nov	-282	-450	-435
MPC decision (%)	14.01	Jan	2.00	2.00	2.00
M3 y/y (%)	14.01	Dec	8.6	8.2	8.4
CPI y/y (%)	15.01	Dec	-0.9	-0.9	-0.6
Core CPI y/y (%)	16.01	Dec	0.5	0.5	0.4

### Treasury bonds and bills auctions

Paper	Next auction	Last Offer	Yield on the prev auction (%)	Prev auction
52 Week T-bills	-	3000	3.485	3/4/2013
2Y T-bond OK0716	-	2000	1.653	10/23/2014
5Y T-bond PS0719	-	3000	2.007	10/23/2014
10Y T-bond DS1025	-	2000	3.114	9/4/2014
20Y T-bond WS0429	-	150	3.464	5/16/2013

### Reality vs analysts' expectations (surprise index\* for Poland)



#### Comment

No surprises, therefore no changes in the index. Next week brings one opportunity for surprise - the CPI.

\* Surprise index presents in a synthetic way how the market was surprised by macroeconomic releases (it is constructed on daily basis as weighted average of differences between selected releases and Bloomberg forecast consensus).

## mBank.pl



### mBank.pl

### **Fundamentals**

### Our view in a nutshell

- We stick to our view that Poland entered softpatch but recovery will not be derailed. The soft patch, which contrasts with high frequency data, looks shallower than we expected. Growth stalled around 3%. Note that nominal GDP growth is verv low.
- Despite regional (Russia, Ukraine) and European headwinds (soft euro zone growth), stable domestic demand lets economy pass through relatively unscathed. The source of strengh lies in consumption (both private and public) and relatively good moods among firms (production continued but so far accumulated as stocks) that commonly used sentiment indices probably understated.
- 2015 is expected to bring more (positive) exogenous components to the Polish cycle. We may see first effects of credit easing in the euro area. Pension reform, along with the political cycle, opens room for fiscal stimulation. We expect significant fiscal stimulus in 2015 onwards, focused mainly on public infrastructure spending and fueled by the re-launch of EU funding.
- 2-3 years of economic expansion are our baseline scenario but growth rates may prove to be more moderate than we expected few months ago.
- Inflation stays very low (negative) for next 2-3 quarters (longer than NBP projects). Momentum of inflation is already negative and strengthens the impact of high real interest rates.
- MPC got stuck in decision process but the combination of deflation and global factors points to a resumption of further easing. The timing is hard to pin down precisely. Risk of easing is going to accompany each upcoming meeting. In these circumstances betting on anything less than 50bps makes no sense.

### **Financial markets**

- With the new year we returned to outright long exposure on Polish bonds (10y).
- Prolonged disinflation, MPC's easing bias and euro QE are set to support Polish bonds in the mid term.
- Weaker zloty near term on negative portfolio effects (PLN is the cheapest hedge against Russia risks).
- Zloty to strenghten in the mid-term on euro QE and high real interest rates (carrry trades).

### mBank forecasts

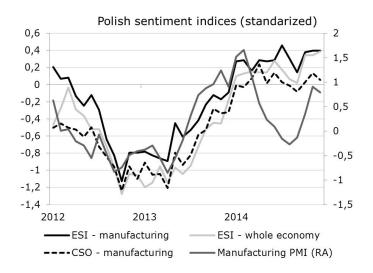
		2010	) 2	2011	2012	2013	2014F	2015F
GDP y/y (%)		3.7	4	.8	1.8	1.7	3.4	3.5
CPI Inflation y/y (average %)		2.8	4	.3	3.7	0.9	0.0	-0.1
Current account (%GDP)		-4.5	-4	4.9	-3.5	-1.3	-1.2	-1.8
Unemployment rate (end of period %)		12.4	1	2.5	13.4	13.4	11.7	11.1
Repo rate (end of period %)		3.50	4	4.50 4.25		2.50	2.00	1.50
	2014	2014	2014	2014	2015	2015	2015	2015
	Q1	Q2	Q3	Q4 F	Q1F	Q2F	Q3 F	Q4 F
GDP y/y (%)	3.4	3.5	3.3	3.0	2.8	3.1	3.5	4.4
Individual consumption y/y (%)	2.9	3.0	3.2	3.0	2.8	2.8	3.2	3.4
Public Consumption y/y (%)	0.1	3.7	3.5	2.4	2.0	3.0	3.0	3.0
Investment y/y (%)	11.2	8.7	9.9	7.0	6.0	6.0	7.0	9.0
Inflation rate (% average)	0.6	0.2	-0.3	-0.6	-0.9	-0.4	0.1	0.8
Unemployment rate (% eop)	13.9	12.0	11.5	11.9	12.6	11.8	10.6	11.4
NBP repo rate (% eop)	2.50	2.50	2.50	2.00	1.50	1.50	1.50	1.50
Wibor 3M (% eop)	2.71	2.68	2.28	2.06	1.64	1.66	1.66	1.66
2Y Polish bond yields (% eop)	3.01	2.51	2.00	1.79	1.55	1.58	1.64	1.74
10Y Polish bond yields (% eop)	4.23	3.45	3.05	2.52	2.50	2.40	2.70	2.74
EUR/PLN (eop)	4.17	4.16	4.18	4.29	4.25	4.25	4.20	4.10
USD/PLN (eop)	3.03	3.04	3.31	3.54	3.66	3.73	3.75	3.73
F - forecast								



### mBank.pl

### Slight correction of PMI

No surprises this time the Purchasing Managers Index fell to 52.8 in December from 53.2 in November. This way, PMI shows similar pattern to industrial indices published earlier by the CSO (see chart below), which also showed minor worsening of industrial sentiment.



Too far-reaching conclusions should not be drawn from this slight change. Firstly, even not taking into consideration irregular and not uniform character of PMI growth, December is a very specific month due to very volatile workday influence. This volatility is not always well captured by seasonal adjustments. Secondly, the analysis of PMI structure in December reveals that this small decline had two main drivers: new orders marginally slowed down (after skyrocketing in previous month) and there were declines in both times of delivery and purchases subindices. Two remaining components were rather optimistic: production kept its solid last month value and employment category has risen to highest levels since April 2014.

Still no signs of cost or price pressure could be found in Polish industry: due to low commodity prices (like oil) costs for companies remained almost unchanged, while final goods prices are falling for 25th month in a row. This does not necessarily need to cause a slide in profitability. PMI is a diffusion index, thus it does not take under consideration the size of both revenues and losses of particular enterprises. Nevertheless, this situation puts pressure on some companies to lower their margins.

General situation in Polish economy did not change. Moderate economic growth rate is incapable of creating endogenous inflation pressure. Industrial sector has only begun to recover from the period of weakness at the turn of Q2 and Q3. Meanwhile, enterprises still operate in a deflationary environment and recent weakening of Zloty could only partly offset those problems. It is worth noticing that because strong depreciation of CIS currencies, effective exchange rate (trade – weighted) remained almost unchanged. This leads us to expect further monetary easing, although it is hard to guess exact time of its renewal. March seems to be a quite reasonable month because new inflation projection will be presented then.



### Fixed income

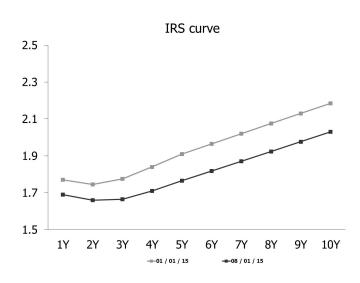
### **Turning point**

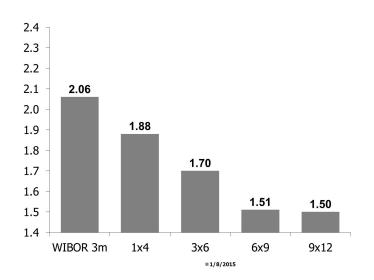
Beginning of this year was positive for Polish fixed income market. Low Oil prices on global market and possible ECB action (QE on the next meeting) fueled expectations for more rate cuts in Poland. Bonds reached new lows so let's highlight it: 10Y bonds record low of 2.30%, 5Y 1.90%, 2Y 1.70%. Is there any barrier for bonds they cannot break? Are those levels even relevant, or investors are just buying Poland because there are inflows no matter what?

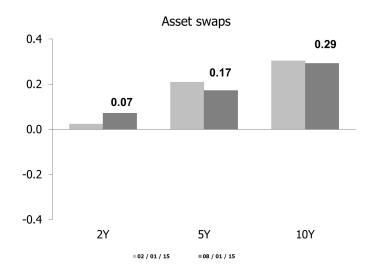
Recent events in Russia and Greece definitely showed how important global capital inflows are for local economy. Weakness of PLN at the end of 2014 shows that Poland is no exception. Investors recently prefer to put money on safest bets and Poland - outside of Eurozone and with bonds not protected by ECB – is a little fragile. It seems that MPC is comfortable with current repo rate as they are convinced that CPI is going to be higher at the end of the year (above 0%). From this point of view recent rally looks like a good opportunity to sell bonds as ECB's Quantitative Easing is widely priced in already.

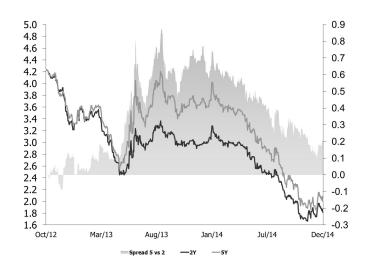
Recommendation: Sell DS0725.

### mBank.pl











### mBank.pl

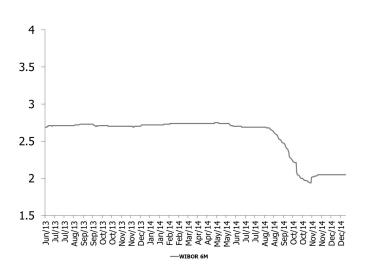
### Money market

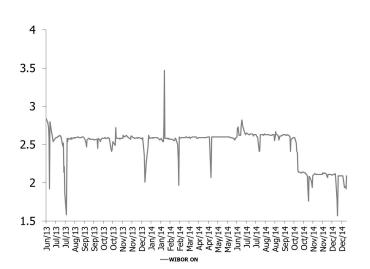
### Very cheap end of year and beginning of a new one.

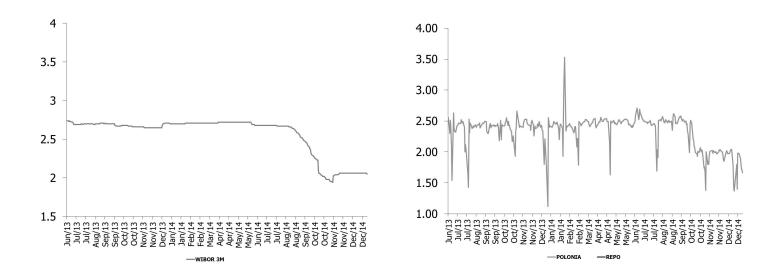
Polonia fluctuated around 1.70 for 3 weeks. Next week cash should stay around 1.90 as there is a MPC meeting on Wednesday. It will fall if the MPC moves rates and rise to 2.00 if they leave rates without changes.

Probability of rate cut in January is just 20% (1W and 2W OIS are quoting around 1.90). Whole curve is discounting 50 bps as 1Y OIS is at 1.51/1.56.

Our recommendation is to buy OK0116 at 1.72 and hedge it by buying 6x9 FRA at 1.52.









### Forex

**PLN relief rally?** There bigger picture is quite blurred, ECB QE is looming on the horizon just a few days before Greece elections. Polish MPC decision is also a potential risk. EUR/PLN range, 4.3215 high and 4.2580 low for the week. 4.2450-4.2650 support zone witch could be pivotal for EUR/PLN in the near time. Was really 4.40 just a bad Christmas dream? Is volatility back for good? We need to wait to find out.

**Vols** – **melting** The reversed correlation with PLN is still alive and kicking. The stronger PLN and generally calmer markets were the reason why the sellers got back in control. The 1 month EUR/PLN ATM is now 6.6% mid (0.5% lower than on the 2nd of January), 3 months ATM EUR/PLN are 6.7% (0.4% lower), 1 year ATM was given this Friday at 7.2% (0.3% lower). The currency spread (difference between USD/PLN and EUR/PLN vol) and skew are roughly unchanged.

### Short-term forecasts

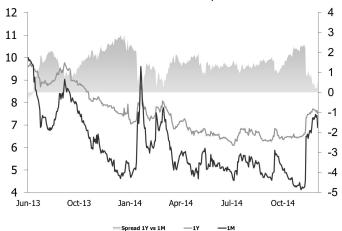
Main supports / resistances: EUR/PLN: 4.2350 / 4.34 USD/PLN: 3.50 / 3.80

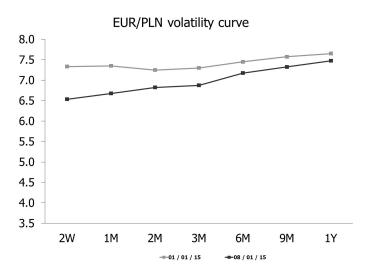
**Spot – Long EUR/PLN at 4.2700** We are long EUR/PLN at 4.2700 ready to add 4.2550 with stop loss below 4.2450 and profit taking at 4.33. The trade is purely tactical. We are sidelined in USD/PLN.

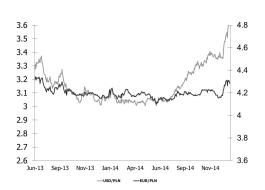
**Options – Core Long 1y long Vega** We stick to our core Long in Vega in the backend. The position has performed well into the year end, 1 year EUR/PLN has reached 7.5% (from 6.25% low) before correcting lower to 7.2%. The move was quite big, but this does not change the bigger picture that we are relatively low in vols. The vols are still nominally cheap, we are sticking to the position.



EURPLN volatility







Bias from the old parity (%) 0 -5 -10 -15 -20 -25 -30 Jun-13 Aug-13 Oct-13 Nov-13 Jan-14 Mar-14 May-14 Jun-14 Aug-14 Oct-14 Nov-14

# mBank

### mBank.pl

### Market prices update

Date     FX8W 3M     WIBOR 3M     FX8W 6M     WIBOR 6M     FX8W 1Y     WIBOR 1Y     1x4     3x6     6x9     9x12     12x15     6x12       1/2/2015     1.95     1.95     1.93     1.94     1.80     1.77     1.60     1.60     1.62     1.61       1/5/2015     2.04     2.06     1.91     1.95     1.92     1.94     1.88     1.73     1.54     1.53     1.55     1.54       1/7/2015     1.85     2.06     1.94     1.95     1.93     1.94     1.88     1.73     1.52     1.52     1.52     1.52     1.52     1.52     1.52     1.51     1.50     1.52     1.51     1.50     1.52 <td< th=""><th colspan="8">Money market rates (mid close) FRA rates (mid close)</th><th></th></td<>	Money market rates (mid close) FRA rates (mid close)												
11/5/2015   2.04   2.06   1.97   1.95   1.98   1.94   1.88   1.73   1.54   1.53   1.54     1/6/2015   2.00   2.06   1.94   1.95   1.92   1.94   1.88   1.72   1.54   1.53   1.55   1.54     1/6/2015   1.85   2.06   1.84   1.95   1.93   1.94   1.88   1.73   1.52   1.53   1.52   1.51     1/8/2015   1.95   2.06   1.84   1.95   1.93   1.94   1.88   1.73   1.54   1.53   1.52   1.51     1/8/2015   1.95   2.06   1.84   1.95   1.93   1.94   1.88   1.73   1.54   1.53   1.52   1.51     Last primary market rates   Loside   Maturity   Avg. price   Avg. yield   Supply   Demand   Sold     Silve114   7/25/2015   9.825   3.41   4000   5807   4075   5   1.55   1.54   1.55   1.54     Pixed incomer market rates (closing mid-market levis)   E   E   1.52   1.53 <th></th>													
116/2015   2.00   2.06   1.91   1.95   1.92   1.94   1.88   1.72   1.54   1.53   1.55   1.54     17/2015   1.95   2.06   1.84   1.95   1.83   1.94   1.89   1.73   1.52   1.53   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.52   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.51   1.50   1.52   1.51   1.51   1.50   1.51													
17/2015   1.85   2.06   1.84   1.95   1.83   1.94   1.89   1.73   1.52   1.53   1.52   1.51     Last primary market rates													
1/8/2015   1.95   2.06   1.94   1.95   1.93   1.94   1.88   1.70   1.51   1.50   1.52   1.51     Paper   Au. date   Maturity   Avg. price   Avg. yield   Supply   Demand   Sold     52W TB   3/4/2013   8/28/2013   98.33   3.49   3000   7324   3084     0K0716   4/23/2014   7/25/2016   93.51   3.02   800   2136   836     Fixed income market rates (closing mid-market levels)   92.5   3.41   4000   5807   4075     Ds1025   6/5/2014   7/25/2025   94.90   3.82   2000   2743   1693     Fixed income market rates (closing mid-market levels)   market rates (closing mid-market levels)   1.70   1.50   2.469     1/2/2015   1.940   1.800   1.670   1.732   1.810   1.989   2.080   2.385     1/6/2015   1.940   1.800   1.670   1.731   1.765   1.937   2.030   2.322     1/8/2015   1.940   1.765   1.660   1.711   1.780   1.962													
Last primary market rates       Paper     Au. date     Maturity     Avg. price     Avg. yield     Supply     Demand     Sold       52W TB     3/4/2013     8/28/2013     98.33     3.49     3000     7324     3084       0K0716     4/23/2014     7/25/2016     93.51     3.02     800     2136     836       PS0719     5/8/2014     7/25/2025     94.90     3.82     2000     2743     1683       Fixed income market rates     (closing mid-market levels)      1683     1.730     1.753     1.885     2.094     2.165     2.469       1/2/2015     1.940     1.835     1.730     1.752     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     1.940     1.749     1.660     1.731     1.765													
Paper     Au. date     Maturity     Avg. price     Avg. yield     Supply     Demand     Sold       52W TB     3/4/2013     8/28/2013     98.33     3.49     3000     7324     3084       OK0716     4/23/2014     7/25/2016     93.51     3.02     800     2136     836       PS0719     5/8/2014     7/25/2025     94.90     3.82     2000     2743     1693       Fixed income market rates (closing mid-market levels)     Date     1V WIBOR 1Y T-bill     2Y IRS     OK0715     5 Y IRS     PS0718     10Y IRS     DS1023       1/2/2015     1.940     1.835     1.730     1.753     1.885     2.094     2.165     2.469       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/7/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     7.48     7.40     7.50     7.65     7.65     2.65     0.62       1/7				1.94	1.95	1.95	1.94	1.00	1.70	1.51	1.50	1.52	1.51
52W TB     3/4/2013     8/28/2013     98.33     3.49     3000     7324     3084       OK0716     4/23/2014     7/25/2016     93.51     3.02     800     2136     836       PS0719     5/8/2014     7/25/2019     99.25     3.41     4000     5807     4075       DS1025     6/5/2014     7/25/2025     94.90     3.82     2000     2743     1693       Fixed income market rates (closing mid-market levels)       12/2015     1.940     1.835     1.730     1.753     1.885     2.094     2.165     2.469       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.800     1.670     1.731     1.765     1.937     2.030     2.325       1/8/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     7.48     7.40     7.55     7.55     2.65     0.62       1/		·		Ava, price	Ava, vield	Supply	Demand	Sold					
OK0716     4/23/2014     7/25/2016     93.51     3.02     800     2136     836       PS0719     5/8/2014     7/25/2019     99.25     3.41     4000     5807     4075       Ds1025     6/5/2014     7/25/2025     94.90     3.82     2000     2743     1693       Fixed incow     market rates (cosing mid-market levels)     V     V     DR     DY INS     DS1023       1/2/2015     1.940     1.835     1.730     1.753     1.885     2.094     2.165     2.469       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/7/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/7/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     7.48     7.40     7.50     7.65     7.65     2.65     0.62       1/7/2015     7.43     7.29     7.43 </td <td>•</td> <td></td> <td>•</td> <td>• •</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	•		•	• •									
PS0719     5/8/2014     7/25/2019     99.25     3.41     4000     5807     4075       DS1025     6/5/2014     7/25/2025     94.90     3.82     2000     2743     1693       Fixed incover market rates (closing mid-market levels)       Date     1Y WIBOR     1Y FINI     2Y IRS     OK0715     5Y IRS     PS0718     10Y IRS     DS1023       1/2/2015     1.940     1.835     1.730     1.752     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     1.940     1.749     1.660     1.731     1.765     1.937     2.030     2.322       Date     IM     3M     6M     177 <td></td>													
DS 1025     6/5/2014     7/25/2025     94.90     3.82     2000     2743     1693       Fixed income market rates (closing mid-market levels)       Date     1Y WIBOR     1Y T-bill     2Y IRS     OK0715     5Y IRS     PS0718     10Y IRS     DS1023       1/2/2015     1.940     1.835     1.730     1.753     1.860     2.094     2.165     2.469       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.600     1.670     1.732     1.810     1.989     2.080     2.385       1/7/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     1.940     1.749     1.660     1.731     1.962     2.050     2.322       1/8/2015     7.48     7.40     7.50     7.65     7.65     2.65     0.62       1/5/2015     7.35     7.23     7.35     7.58     2.65     0.62 <td></td>													
Fixed income market rates (closing mid-market levels)       Date     1Y WIBOR     1Y T-bill     2Y IRS     OK0715     5Y IRS     PS0718     10Y IRS     DS1023       1/2/2015     1.940     1.835     1.730     1.753     1.885     2.094     2.165     2.469       1/5/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     1.940     1.749     1.660     1.731     1.765     1.937     2.030     2.322       EUR/PLN 0-deita stradle     25-deita RR     25-deita FLY       Date     1M     3M     6M     1Y     1M     1Y     1Y       1/2/2015     7.48     7.40     7.50     7.65     7.65     2.65     0.62       1/6/2015     7.43     7.29     7.43     7.65     7.65     2.65     0.62       1/6/2015     6.68													
Date     1Y WIBOR     1Y T-bill     2Y IRS     OK0715     5Y IRS     PS0718     10Y IRS     DS1023       1/2/2015     1.940     1.835     1.730     1.753     1.885     2.094     2.165     2.469       1/5/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/6/2015     1.940     1.800     1.670     1.732     1.810     1.989     2.080     2.385       1/7/2015     1.940     1.765     1.663     1.717     1.780     1.962     2.050     2.329       1/8/2015     1.940     1.749     1.660     1.731     1.765     1.937     2.030     2.322       EUR/PLN 0-delta stradle     Z5-delta RR     Z5-delta RR     Z5-delta FLY       Date     1M     3M     6M     1Y     1M     1Y     1Y       1/2/2015     7.48     7.40     7.50     7.65     7.65     2.65     0.62       1/6/2015     7.43     7.29     7.43     7.65     <						2000	2740	1000					
1/2/2015   1.940   1.835   1.730   1.753   1.885   2.094   2.165   2.469     1/5/2015   1.940   1.800   1.670   1.732   1.810   1.989   2.080   2.385     1/6/2015   1.940   1.800   1.670   1.732   1.810   1.989   2.080   2.385     1/7/2015   1.940   1.765   1.663   1.717   1.780   1.962   2.050   2.329     1/8/2015   1.940   1.749   1.660   1.731   1.765   1.937   2.030   2.322     EUR/PLN 0-detta stradle   25-detta R   25-detta FLY     Date   1M   3M   6M   1Y   1M   1Y   1Y     1/2/2015   7.48   7.40   7.50   7.65   2.65   0.62   1/5/2015     1/6/2015   7.43   7.29   7.43   7.65   7.65   2.65   0.62     1/7/2015   6.69   6.93   7.36   7.50   7.65   2.65   0.62     1/7/2015   6.68   6.88   7.18   7.48   7.			<u> </u>		· · · · · · · · · · · · · · · · · · ·	5Y IRS	PS0718	10Y IRS	DS1023				
1/5/2015   1.940   1.800   1.670   1.732   1.810   1.989   2.080   2.385     1/6/2015   1.940   1.800   1.670   1.732   1.810   1.989   2.080   2.385     1/7/2015   1.940   1.765   1.663   1.717   1.780   1.962   2.050   2.329     1/8/2015   1.940   1.749   1.660   1.731   1.765   1.937   2.030   2.322     EUR/PLN 0-deita stradle   25-deita RR   25-deita FLY     Date   1M   3M   6M   1Y   1M   1Y   1Y     1/2/2015   7.48   7.40   7.50   7.65   7.65   2.65   0.62     1/5/2015   7.35   7.23   7.35   7.58   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   7.65   2.63   0.61     1/8/2015   6.68   6.88   7.18   7.48   7.48   2.59   0.62     1/8/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1				1.730									
1/6/2015   1.940   1.800   1.670   1.732   1.810   1.989   2.080   2.385     1/7/2015   1.940   1.765   1.663   1.717   1.780   1.962   2.050   2.329     1/8/2015   1.940   1.749   1.660   1.731   1.765   1.937   2.030   2.322     EUR/PLN 0-delta stradle   Z5-delta RR   Z5-delta FLY     Date   1M   3M   6M   1Y   1M   1Y   1Y     1/6/2015   7.48   7.40   7.50   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   2.65   0.62     1/8/2015   6.68   6.88   7.18   7.48   2.59   0.62     1/8/2015   4.608   3.5725   3.5833   2.9671   1.3512   0.1554     1/2/2015   4.3008   3.5975   3.5792													
1/7/2015   1.940   1.765   1.663   1.717   1.780   1.962   2.050   2.329     1/8/2015   1.940   1.749   1.660   1.731   1.765   1.937   2.030   2.322     EUR/PLN 0-delta stradle   25-delta RR   25-delta RL     Date   1M   3M   6M   1Y   1M   1Y   1Y     1/2/2015   7.48   7.40   7.50   7.65   2.65   0.62     1/6/2015   7.35   7.23   7.35   7.58   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   2.65   0.62     1/8/2015   6.68   6.88   7.18   7.48   2.59   0.62     1/8/2015   6.68   6.88   7.18   7.48   2.59   0.62     1/8/2015   6.68   6.88   7.18   7.48   2.59   0.62     1/8/2015   4.3078   3.5725   3.5833   2.9671   1.3512   0.1554     1/5/2015   4.3008   3.5975   3.5792   2.9926													
1/8/2015   1.940   1.749   1.660   1.731   1.765   1.937   2.030   2.322     EUR/PLN 0-delta stradle   25-delta RR   25-delta FLY     Date   1M   3M   6M   1Y   1M   1Y   1Y     1/2/2015   7.48   7.40   7.50   7.65   7.65   2.65   0.62     1/5/2015   7.35   7.23   7.35   7.58   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   7.65   2.65   0.62     1/7/2015   6.90   6.93   7.36   7.50   7.50   2.63   0.61     1/8/2015   6.68   6.88   7.18   7.48   7.48   2.59   0.62     PLN Spot performance   performance   performance   performance   performance   performance     1/2/2015   4.3078   3.5725   3.5833   2.9671   1.3512   0.1553     1/5/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/6/2015   4.3008													
EUR/PLN 0-delta stradle     25-delta RR     25-delta FLY       Date     1M     3M     6M     1Y     1M     1Y     1Y       1/2/2015     7.48     7.40     7.50     7.65     7.65     2.65     0.62       1/5/2015     7.35     7.23     7.35     7.58     2.65     0.62       1/6/2015     7.43     7.29     7.43     7.65     7.65     2.65     0.62       1/7/2015     6.90     6.93     7.36     7.50     7.50     2.63     0.61       1/8/2015     6.68     6.88     7.18     7.48     7.48     2.59     0.62       PLN Spot performance													
1/2/2015   7.48   7.40   7.50   7.65   7.65   2.65   0.62     1/5/2015   7.35   7.23   7.35   7.58   7.58   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   7.65   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   7.50   2.63   0.61     1/8/2015   6.68   6.88   7.18   7.48   7.48   2.59   0.62     PLN Spot performance     Date   EURPLN   USDPLN   CHFPLN   JPYPLN   HUFPLN   CZKPLN     1/2/2015   4.3078   3.5725   3.5833   2.9671   1.3512   0.1554     1/5/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/6/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/7/2015   4.3115   3.6375   3.5898   3.0604   1.3490   0.1559										25-de	Ita FLY		
1/5/2015   7.35   7.23   7.35   7.58   7.58   2.65   0.62     1/6/2015   7.43   7.29   7.43   7.65   2.65   0.62     1/7/2015   6.90   6.93   7.36   7.50   2.63   0.61     1/8/2015   6.68   6.88   7.18   7.48   7.48   2.59   0.62     PLN Spot performance     Date   EURPLN   USDPLN   CHFPLN   JPYPLN   HUFPLN   CZKPLN     1/2/2015   4.3078   3.5725   3.5833   2.9671   1.3512   0.1554     1/5/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/6/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/6/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/7/2015   4.3115   3.6375   3.5898   3.0604   1.3490   0.1559			ЗM	6M	1Y			1Y					
1/6/2015   7.43   7.29   7.43   7.65   2.65   0.62     1/7/2015   6.90   6.93   7.36   7.50   2.63   0.61     1/8/2015   6.68   6.88   7.18   7.48   7.48   2.59   0.62     PLN Spot performance     Date   EURPLN   USDPLN   CHFPLN   JPYPLN   HUFPLN   CZKPLN     1/2/2015   4.3078   3.5725   3.5833   2.9671   1.3512   0.1554     1/5/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/6/2015   4.3008   3.5975   3.5792   2.9926   1.3476   0.1553     1/6/2015   4.3015   3.6375   3.5898   3.0604   1.3490   0.1559	1/2/2015	7.48	7.40	7.50	7.65		7.65	2.65		0.62			
1/7/2015     6.90     6.93     7.36     7.50     7.50     2.63     0.61       1/8/2015     6.68     6.88     7.18     7.48     7.48     2.59     0.62       PLN Spot performance       Date     EURPLN     USDPLN     CHFPLN     JPYPLN     HUFPLN     CZKPLN       1/2/2015     4.3078     3.5725     3.5833     2.9671     1.3512     0.1554       1/5/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/7/2015     4.3115     3.6375     3.5898     3.0604     1.3490     0.1559	1/5/2015	7.35	7.23	7.35	7.58		7.58	2.65		0.62			
1/8/2015     6.68     6.88     7.18     7.48     7.48     2.59     0.62       PLN Spot performance       Date     EURPLN     USDPLN     CHFPLN     JPYPLN     HUFPLN     CZKPLN       1/2/2015     4.3078     3.5725     3.5833     2.9671     1.3512     0.1554       1/5/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3015     3.6375     3.5898     3.0604     1.3490     0.1559	1/6/2015	7.43	7.29	7.43	7.65		7.65	2.65		0.62			
PLN Spot performance       Date     EURPLN     USDPLN     CHFPLN     JPYPLN     HUFPLN     CZKPLN       1/2/2015     4.3078     3.5725     3.5833     2.9671     1.3512     0.1554       1/5/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/7/2015     4.3115     3.6375     3.5898     3.0604     1.3490     0.1559	1/7/2015	6.90	6.93	7.36	7.50		7.50	2.63		0.61			
Date     EURPLN     USDPLN     CHFPLN     JPYPLN     HUFPLN     CZKPLN       1/2/2015     4.3078     3.5725     3.5833     2.9671     1.3512     0.1554       1/5/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/6/2015     4.3008     3.5975     3.5792     2.9926     1.3476     0.1553       1/7/2015     4.3115     3.6375     3.5898     3.0604     1.3490     0.1559	1/8/2015	6.68	6.88	7.18	7.48		7.48	2.59		0.62			
1/2/20154.30783.57253.58332.96711.35120.15541/5/20154.30083.59753.57922.99261.34760.15531/6/20154.30083.59753.57922.99261.34760.15531/7/20154.31153.63753.58983.06041.34900.1559	PLN Spot p	erformance											
1/5/20154.30083.59753.57922.99261.34760.15531/6/20154.30083.59753.57922.99261.34760.15531/7/20154.31153.63753.58983.06041.34900.1559	Date	EURPLN	USDPLN	CHFPLN	JPYPLN	HUFPLN	CZKPLN						
1/6/20154.30083.59753.57922.99261.34760.15531/7/20154.31153.63753.58983.06041.34900.1559	1/2/2015	4.3078	3.5725	3.5833	2.9671	1.3512	0.1554						
1/7/2015     4.3115     3.6375     3.5898     3.0604     1.3490     0.1559	1/5/2015	4.3008	3.5975	3.5792	2.9926	1.3476	0.1553						
	1/6/2015	4.3008	3.5975		2.9926	1.3476	0.1553						
	1/7/2015	4.3115	3.6375	3.5898	3.0604	1.3490	0.1559						

### Disclaimer

Distribution and use of this publication The review note is based on the information available to the public. This review creates exclusively a marketing information as defined in Paragraph 9 Section 1 of the Decree of Minister of Finance dated November 20, 2009 on procedures and conditions to be followed by investment firms and banks mentioned in Article 70 Section 2 of Law on Trading in Financial Instruments dated July 29, 2005 as well as by custody banks. This review note is provided to you for information purposes only and is not intended as advice on any particular matter or as recommendation, offer or solicitation for purchase of sale of any financial instrument and should not be taken as such. mBank SA, its directors, officers, executives, managers, servants or agents expressly disclaim all liability to any person in respect of any-thing, and in respect of the consequences of anything, done or omitted to be done, wholly or partly, in reliance upon the whole or any part of the contents of this review note. The opinions and estimates contained herein reflect the current judgment of the author(s) on the date of this document and are subject to change without notice. The opinions pointed in review do not necessarily correspond to the opinions of mBank SA. The past performance of financial instruments is not indicative of future results. No assurance can be given that any financial instrument or issuer described herein would yield favourable investment results. mBank and/or its principals or employees may have a long or short position or may transact in the financial instrument(s) and/or securities referred to herein or may trade in such financial instruments with other customers on a principal basis. No client or other reader should act or refrain from acting on the basis on any matter contained in it without taking specific independent professional advice on the particular facts and circumstances in issue. Copyright protection exists in this publication and it may not be, even partially, reproduced of distr