

February 10, 2017

## **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)

Wojciech Dunaj head of interest rates trading tel. +48 22 829 07 51 wojciech.dunaj@mbank.pl

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

## Department of Financial Markets

(business contacts)

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

Jacek Jurczyński head of treasury sales 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	page 2
Economics	page 3
■ The MPC remains skeptical of inflation	
Fixed income	page 4
■ Steepener	
Money market	page 5
■ Dovish MPC	
FX market	page 6
■ Spot – PLN is consolidating gains	

### Comment on the upcoming data and forecasts

Options - EUR/PLN vols - The U-turn?

Week begins with the release of CPI data (there was no flash reading) for January. We expect CPI to acceerate to 1.7% y/y due to several factors: higher food prices, low statistical base in the prices of fuels, hikes in administered prices. The balance of payments data, due on the same day, will show a somewhat wider current account deficit, driven primarly by a modest trade deficit (we forecast strong imports growth). On Tuesday the CSO will publish flash Q4 GDP data (hence no details). On the basis of annual data, we expect a reading of 2.6% y/y (which will translate into +1-1.5% q/q). On Thursday the CSO will release labor market data. As it is always the case in January, the annual change in 9+ population of corporates will be the main driver of employment data. Apart from the usual lagged effect of previous year's employment growth, it might be influenced by the on-going shift from civil contracts into regular contracts. Wage growth likely accelerated materially in January - apart from a very strong calendar effect, the minimum wage hike (adding at least 0.2 pp. more than usual to annual wage growth), catching up after weak December is responsible. Finally, on Friday, the CSO will publish industry and trade data. In both instances we expect massive acceleration on y/y basis. Calendar effect is one factor, but retail sales should be boosted by low statistical base and strong nominal effect (big drops in retail prices in January '16).

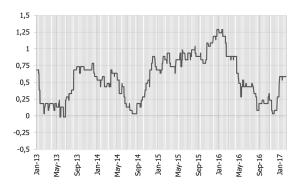
### Polish data to watch: February 13th to February 17th

Publication	Date	Period	mBank	Consensus	Prior
CPI y/y (%)	13.02	Jan	1.7	1.6	8.0
Current account balance (mio EUR)	13.02	Dec	-829	-700	-427
Exports (mio EUR)	13.02	Dec	14500	14205	15943
Imports (mio EUR)	13.02	Dec	15000	14425	15841
GDP flash y/y (%)	14.02	Q4	2.6	2.5	2.5
M3 y/y (%)	14.02	Jan	9.0	9.3	9.6
Average gross wage y/y (%)	16.02	Jan	4.8	4.0	2.7
Employment y/y (%)	16.02	Jan	3.4	2.9	3.1
Sold industrial output y/y (%)	17.02	Jan	8.2	7.7	2.3
PPI y/y (%)	17.02	Jan	4.0	3.6	3.0
Retail sales y/y (%)	17.02	Jan	12.5	7.8	6.4

### Treasury bonds and bills auctions

Paper	Next auction	Last Offer	Yield on the prev auction (%)	Prev auction
(29/32/33/37/52W) T-bills	2/20/2017	2000	1.520	2/6/2017
2Y T-bond OK1019	2/16/2017	500	2.168	2/2/2017
5Y T-bond PS0422	2/16/2017	1500	3.122	2/2/2017
10Y T-bond DS0727	2/16/2017	2100	3.809	2/2/2017
15Y T-bond WS0428	2/16/2017	200	3.027	7/7/2016

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



#### Comment

Unchanged from previous week – no data. Data releases are plentiful next week, thus we expect the Polish surprise index to move in either direction.

<sup>\*</sup> 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).



### Our view in a nutshell

#### **Fundamentals**

- GDP growth likely bottomed at ca. 2.5% y/y in Q4 2016, when base effects reached their peaks. Momentum is very positive right now, growth likely picked up on a q/q basis in Q4 already. This year, growth will accelerate to the average of 3.4%, as investment returns to growth. Given the upside surprises in construction, one can expect investment growth to turn positive in Q1 already. With consumption growth already solid, we expect growth to accelerate over the course of the year, touching 4% y/y in Q4.
- Polish deflation has ended. During the next two quarters inflation will be boosted by statistical base effects, weak PLN and commodity price spike (headline inflation to reach 2.5% at the turn of Q1 and Q2). We are still skeptical of genuine inflationary pressures in the Polish economy, though. The fate of inflation in the second half of next year, absent a sustained increase in commodity prices, is by no means certain. Because of the well-known base effects in oil prices, interest should turn to core inflation.
- Rising inflation will prove to be a fertile ground for rate hike bets. It is very unlikely that these will materialize this year, though. We see the MPC's reaction function as symmetrical see the Glapinski's comments on allowing real rates to run negative. It is more realistic to place bets on monetary tightening in 2018.

### **Financial markets**

- However, local factors should be positive for the Zloty: faster growth, good fiscal figures and potential for more aggresive rate hike bets should lift Zloty later his year.
- The prevailing event risk for PL assets, the CHF conversion, moved to the background. All known details are relatively benign (no forced conversion).

### mBank forecasts

		2013	3	2014	2015	2016	2017 F	2018 F
GDP y/y (%)		1.4		3.3	3.9	2.8	3.4	3.5
CPI Inflation y/y (average %)		0.9		-0.1	-0.9	-0.6	2.2	2.3
Current account (%GDP)		-1.2		-2.1	-0.6	-0.6	-0.9	-1.1
Unemployment rate (end of period %)		13.4		11.4	9.8	8.3	7.8	7.3
Repo rate (end of period %)		2.50		2.00	1.50	1.50	1.50	2.00
	2017	2017	2017	2017	2018	2018	2018	2018
	Q1 F	Q2 F	Q3 F	Q4 F	Q1 F	Q2 F	Q3 F	Q4 F
GDP y/y (%)	3.1	3.4	3.4	3.8	3.8	3.6	3.6	3.6
Individual consumption y/y (%)	4.4	4.2	3.8	3.8	3.6	3.5	3.4	3.4
Public Consumption y/y (%)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Investment y/y (%)	-2.0	3.5	6.3	7.0	7.3	7.0	6.5	5.5
Inflation rate (% average)	2.1	2.4	2.4	1.9	2.1	2.2	2.3	2.4
Unemployment rate (% eop)	8.5	7.9	7.5	7.8	8.0	7.4	7.1	7.3
NBP repo rate (% eop)	1.50	1.50	1.50	1.50	1.50	1.50	1.75	2.00
Wibor 3M (% eop)	1.73	1.73	1.73	1.73	1.73	1.73	1.98	2.23
2Y Polish bond yields (% eop)	2.05	2.10	2.15	2.20	2.20	2.20	2.30	2.40
10Y Polish bond yields (% eop)	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90
EUR/PLN (eop)	4.38	4.30	4.25	4.20	4.20	4.20	4.20	4.20
USD/PLN (eop)	3.91	3.91	3.94	4.04	4.12	4.12	4.12	4.12
F - forecast								



### **Economics**

### The MPC remains skeptical of inflation

The MPC kept interest rates unchanged during its February meeting. The post-meeting statement, apart from the usual set of adjustments to recent data, has a new sentence in the ending paragraph: "the Council judges that the risk of inflation persistently running above the target in the medium term is low". This kind of wording used to be typical for the MPC at the turn of 2009/10 and preceded the last monetary tightening cycle in 2011-2012.

The aforementioned sentence was probably the only hawkish element of the press conference - other comments from governor Glapinski were decisively dovish. A lot of space was devoted to the recent (and upcoming as well) increases in inflation - here the MPC is very skeptical of the extent and duration of the inflation spike, contrary to most private sector analysts or even the Ministry of Finance. Current increases in inflation are deemed exogeneous and transitory (the well-known y/y trajectory of oil prices was emphasized) and will only temporarily push inflation above 1.5% as the NBP's forecast do not envisage any danger to the inflaton target itself. In fact, the MPC does not believe that inflation will exceed 2% in any month this year. Comments regarding economic growth were traditionally optimistic – Glapinski indicated on 3.5-3.6% growth this year.

With current market pricing, such a rhetoric is of course supportive for short bonds. The skepticism towards inflation (note that we see a risk of inflation exceeding 2% in February already) and dismissal of early signs of rising momentum in underlying inflation are a recipe for surprises in the coming months. Nevertheless, the MPC seems determined to wait it all out, just as it did not waver when deflation was still substantial. The upward surprises in inflation should, however, be enough to restart rate hike plays. Furthemore, even though the issue of negative real rates moved into the background, there is a question of how such a rapid drop in real rates will be assessed by foreign investors (probably will be seen as a negative). In such a scenario yield curve might even steepen.

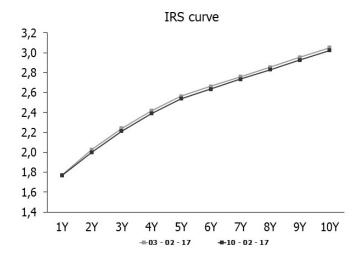


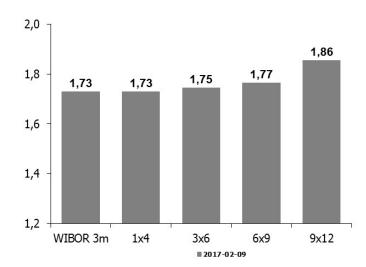
## **Fixed income**

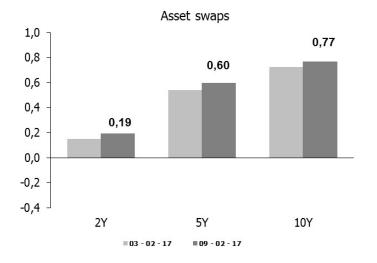
### Steepener

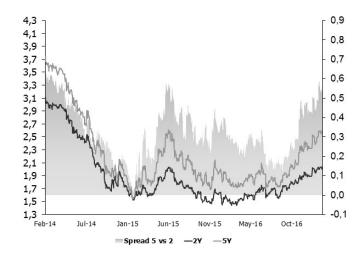
Market looks heavy since last week. We saw mostly foreign investors on the offer side. Market trades OK0419 at 2.19%, PS0422 at 3.19%, DS0727 at 3.85%. Spreads are currently traded: PS0721 / DS0726 at 77 bps, DS0726/DS0727 at 10 bps. ASW are 58/56 bps in PS0422 / 5y and DS0727 / 10y at 75/73 bps. Next Thursday, the Ministry of Finance will offer 4-7 bn of bonds: OK0419, PS0422, DS0727, WZ1122 and WZ0126. We mostly expect demand for floaters.

# mBank.pl











## Money market

### **Dovish MPC**

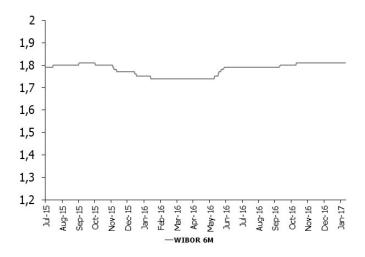
MPC left rates unchanged last week. This decision was in line with market consensus, therefore the conference was the major event. Governor Glapinski sounded very dowish and relaxed with rates at 1.5%. Although he stated that negative real rates may happen in the medium term and will last only temporary, this creates space to surprise as CPI should cross 1.5% on Monday already, and the spike will last even until Q3, according to analysts' estimates. We stay cautious and wait until the repricing of the curve, when we actually enter negative real rates.

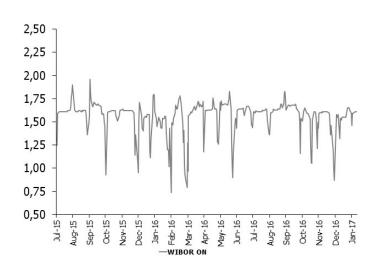
Banks bought all NBP bills offered at today's OMO. Cash rates should stay around 1.50% next week.

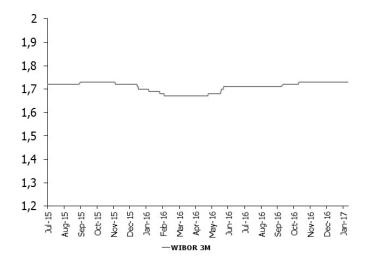
Ref rate vs Polonia averages:

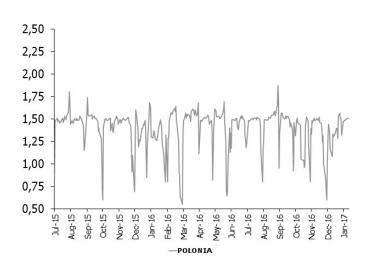
30 day 7 bp

90 day 18 bp











### **Forex**

**Spot – PLN is consolidating gains** Early in the week, EUR/PLN was testing the 4.25-4.27 support and it failed at first attempt (4.2755 was the low of the week). The correction upward took us to 4.3240 (the consecutive high). PLN does not has a life of its own, we are simply mimicking the global risk appetite. We expect the 4.25-4.35 to constitute the range in the nearest future. By choice, we are more eager to fade extreme PLN strength, as we are skeptical about its further prospects. Quickly approaching elections in Europe will not allow the risk on mood to last forever.

**EUR/PLN vols – The U-turn?** The buyers came back to the market, the frontend was paid as we has approached the historically attractive levels. 2 month EUR/PLN ATM were paid at 5.6%, 1 year EUR/PLN ATM traded at 7.4%. The 3 month is now covering FOMC meetings, we see healthy demand for that. 1 month EUR/PLN ATM mid is 5.5% (0.7% higher), 3 month EUR/PLN is at 6.8% (1% higher!) and, finally, 1 year is fixing at 7.4% (0.2% higher). The currency spread (difference between USD/PLN and EUR/PLN) was higher as well. Skew is better bid.

#### **Short-term forecasts**

Main supports / resistances: EUR/PLN: 4.25 / 4.35 USD/PLN: 3.90 / 4.20

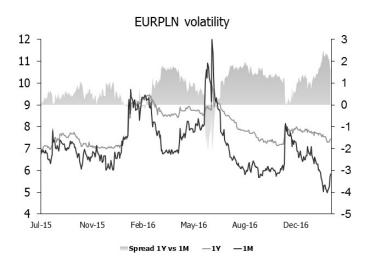
Spot Position: None.

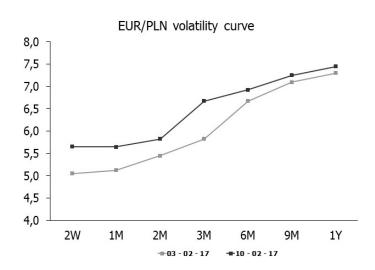
We are willing to buy EUR/PLN at 4.2700, we are ready to add at 4.2400, with a stop at 4.2150, and hopes to see 4.38+ again.

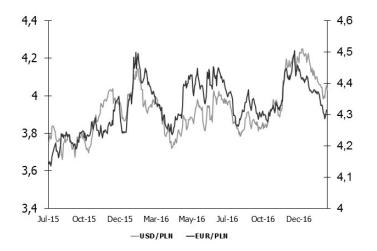
EUR/PLN is a rangy beast, we think it should sooner or later revert to the mean, which currently we can pin around 4.38-4.40, unless something really unexpected happens.

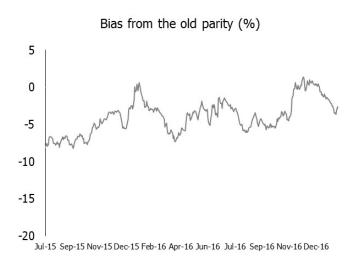
#### Options Vol - Long 9 month EUR/PLN vol.

We were lucky with closing shorts in frontend vols, as the vols have bounced significantly. We are keeping the backend long as an outright long position. We see French and Dutch elections as a good enough reason to be long vol at current levels.













## Market prices update

Date	Money market rates (mid close) FRA rates (mid close)												
26/2017   1.99	Date	FXSW 3M	WIBOR 3M	FXSW 6M	WIBOR 6M	FXSW 1Y	WIBOR 1Y	1x4	3x6	6x9	9x12	12x15	6x12
2/7/2017   1.97													
28/2017									-				
2/9/2017   1.72   1.73   1.77   1.71   1.84   1.75   1.73   1.75   1.77   1.86   1.94   1.87													
Paper													
Paper				1.77	1.71	1.04	1.75	1./3	1.75	1.77	1.00	1.94	1.07
32W TB 3/14/2016 11/30/2016 99.04 1.35 1500 1757 1692 OK0419 1/5/2017 4/25/2019 94.88 2.32 1000 2825 990 PS0422 1/5/2017 7/25/2027 89.20 3.16 1500 2787 1544  Fixed income market rates (closing mid-market levels)  Date 1Y WIBOR 1Y T-bill 2Y IRS OK0715 5Y IRS PS0718 10Y IRS DS1023 2/3/2017 1.750 1.474 1.635 1.578 1.960 2.232 2.405 2.949 2/6/2017 1.750 1.474 1.635 1.578 1.960 2.232 2.405 2.949 2/8/2017 1.750 1.474 1.635 1.578 1.960 2.232 2.405 2.949 2/8/2017 1.750 1.474 1.635 1.578 1.960 2.232 2.405 2.949 2/8/2017 1.750 1.474 1.635 1.578 1.990 2.290 2.447 2.985 2/9/2017 1.750 1.474 1.635 1.525 2.000 2.269 2.460 2.964  EUR/PLN 0-delta stradle  EUR/PLN 0-delta stradle  Date 1M 3M 6M 1Y 1M 1Y 1Y 2/3/2017 5.13 5.83 6.68 7.30 7.30 1.96 0.49 2/6/2017 5.28 5.90 6.68 7.33 7.33 1.96 0.49 2/6/2017 5.69 6.18 6.85 7.40 7.40 1.91 0.49 2/8/2017 5.65 6.68 6.90 7.45 7.45 1.93 0.49 2/8/2017 5.65 6.68 6.90 7.45 7.45 1.93 0.49 2/8/2017 5.65 6.68 6.90 7.45 7.45 1.93 0.49 2/8/2017 5.65 6.68 6.93 7.45 7.45 1.93 0.49 2/8/2017 4.2864 3.9892 4.0084 3.5438 1.3867 0.1589	•			Ava price	Ava vield	Supply	Demand	Sold					
OK0419			•	• .									
PS0422													
DS0727   1/5/2017   7/25/2027   89.20   3.76   1500   2787   1544													
Date													
Date         1Y WIBOR         1Y T-bill         2Y IRS         OK0715         5Y IRS         PS0718         10Y IRS         DS1023           2/3/2017         1.750         1.474         1.635         1.578         1.960         2.232         2.405         2.949           2/6/2017         1.750         1.474         1.635         1.578         1.960         2.232         2.405         2.949           2/7/2017         1.750         1.474         1.635         1.578         1.960         2.232         2.405         2.949           2/8/2017         1.750         1.474         1.635         1.578         1.960         2.232         2.405         2.949           2/8/2017         1.750         1.474         1.635         1.525         2.000         2.269         2.440         2.985           2/9/2017         1.750         1.474         1.635         1.525         2.000         2.269         2.460         2.985           EUR/PLN 0-delta stradle         25-delta RR         25-delta FLY           Date         1M         3M         6M         1Y         1M         1Y         1Y           2/3/2017         5.13         5.83         6.68						1300	2101	1344					
2/3/2017       1.750       1.474       1.635       1.578       1.960       2.232       2.405       2.949         2/6/2017       1.750       1.474       1.635       1.578       1.960       2.232       2.405       2.949         2/7/2017       1.750       1.474       1.635       1.578       1.960       2.232       2.405       2.949         2/8/2017       1.750       1.474       1.635       1.638       1.990       2.290       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.447       2.985         2/9/2017       5.13       5.83       6.68       7.30       7.30       1.96       0.49         2/6/2017       5.83       6.68       6.90       7.45       7.45       1.93						EV IDS	DS0719	10V IDS	DS1022				
2/6/2017       1.750       1.474       1.635       1.578       1.960       2.232       2.405       2.949         2/7/2017       1.750       1.474       1.635       1.578       1.960       2.232       2.405       2.949         2/8/2017       1.750       1.474       1.635       1.638       1.990       2.290       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.460       2.964         EUR/PLN 0-delta stradle         25-delta RR       25-delta FLY         Date       1 M       3M       6M       1Y       1M       1Y       1Y         2/3/2017       5.13       5.83       6.68       7.30       7.30       1.96       0.49         2/6/2017       5.28       5.90       6.68       7.33       7.33       1.96       0.49         2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         2/8/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN													
2/7/2017       1.750       1.474       1.635       1.578       1.960       2.232       2.405       2.949         2/8/2017       1.750       1.474       1.635       1.638       1.990       2.290       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.460       2.964         EUR/PLN 0-delta stradle         Date       1M       3M       6M       1Y       1M       1Y       1Y         2/3/2017       5.13       5.83       6.68       7.30       7.30       1.96       0.49         2/6/2017       5.28       5.90       6.68       7.33       7.33       1.96       0.49         2/7/2017       5.69       6.18       6.85       7.40       7.40       1.91       0.49         2/8/2017       5.65       6.68       6.90       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1586													
2/8/2017       1.750       1.474       1.635       1.638       1.990       2.290       2.447       2.985         2/9/2017       1.750       1.474       1.635       1.525       2.000       2.269       2.460       2.964         EUR/PLN 0-delta stradle       25-delta RR       25-delta FLY         Date       1M       3M       6M       1Y       1M       1Y       1Y         2/3/2017       5.13       5.83       6.68       7.30       7.30       1.96       0.49         2/6/2017       5.28       5.90       6.68       7.33       7.33       1.96       0.49         2/7/2017       5.69       6.18       6.85       7.40       7.40       1.91       0.49         2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         2/9/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2864       3.9892       4.0084       3.5438       1.													
2/9/2017 1.750       1.474       1.635       1.525       2.000       2.269       2.460       2.964         EUR/PLN 0-delta stradle       25-delta RR       25-delta FLY         Date       1M       3M       6M       1Y       1M       1Y       1Y         2/3/2017       5.13       5.83       6.68       7.30       7.30       1.96       0.49         2/6/2017       5.28       5.90       6.68       7.33       7.33       1.96       0.49         2/7/2017       5.69       6.18       6.85       7.40       7.40       1.91       0.49         2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         2/9/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1591         2/6/2017       4.2864       3.9892       4.0084       3.5438       1.3867       0.1589 <td></td>													
EUR/PLN 0-delta stradle         25-delta RR         25-delta FLY           Date         1M         3M         6M         1Y         1M         1Y         1Y           2/3/2017         5.13         5.83         6.68         7.30         7.30         1.96         0.49           2/6/2017         5.28         5.90         6.68         7.33         7.33         1.96         0.49           2/7/2017         5.69         6.18         6.85         7.40         7.40         1.91         0.49           2/8/2017         5.83         6.68         6.90         7.45         7.45         1.93         0.49           2/9/2017         5.65         6.68         6.93         7.45         7.45         1.88         0.49           PLN Spot performance           Date         EURPLN         USDPLN         CHFPLN         JPYPLN         HUFPLN         CZKPLN           2/3/2017         4.2985         4.0014         4.0192         3.5374         1.3906         0.1591           2/6/2017         4.2864         3.9892         4.0084         3.5438         1.3867         0.1586           2/7/2017         4.2943         4.0280 <td></td>													
Date         1M         3M         6M         1Y         1M         1Y         1Y           2/3/2017         5.13         5.83         6.68         7.30         7.30         1.96         0.49           2/6/2017         5.28         5.90         6.68         7.33         7.33         1.96         0.49           2/7/2017         5.69         6.18         6.85         7.40         7.40         1.91         0.49           2/8/2017         5.83         6.68         6.90         7.45         7.45         1.93         0.49           2/9/2017         5.65         6.68         6.93         7.45         7.45         1.88         0.49           PLN Spot performance           Date         EURPLN         USDPLN         CHFPLN         JPYPLN         HUFPLN         CZKPLN           2/3/2017         4.2985         4.0014         4.0192         3.5374         1.3906         0.1591           2/6/2017         4.2864         3.9892         4.0084         3.5438         1.3867         0.1589			1.474	1.635	1.525	2.000		2.460	2.964	05 1	u. ELV		
2/3/2017       5.13       5.83       6.68       7.30       7.30       1.96       0.49         2/6/2017       5.28       5.90       6.68       7.33       7.33       1.96       0.49         2/7/2017       5.69       6.18       6.85       7.40       7.40       1.91       0.49         2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         2/9/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1591         2/6/2017       4.2864       3.9892       4.0084       3.5438       1.3867       0.1586         2/7/2017       4.2943       4.0280       4.0271       3.5844       1.3864       0.1589			014	014	434			437			ta FLY		
2/6/2017       5.28       5.90       6.68       7.33       7.33       1.96       0.49         2/7/2017       5.69       6.18       6.85       7.40       7.40       1.91       0.49         2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1591         2/6/2017       4.2864       3.9892       4.0084       3.5438       1.3867       0.1586         2/7/2017       4.2943       4.0280       4.0271       3.5844       1.3864       0.1589			-										
2/7/2017       5.69       6.18       6.85       7.40       7.40       1.91       0.49         2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         2/9/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1591         2/6/2017       4.2864       3.9892       4.0084       3.5438       1.3867       0.1586         2/7/2017       4.2943       4.0280       4.0271       3.5844       1.3864       0.1589													
2/8/2017       5.83       6.68       6.90       7.45       7.45       1.93       0.49         2/9/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1591         2/6/2017       4.2864       3.9892       4.0084       3.5438       1.3867       0.1586         2/7/2017       4.2943       4.0280       4.0271       3.5844       1.3864       0.1589													
2/9/2017       5.65       6.68       6.93       7.45       7.45       1.88       0.49         PLN Spot performance         Date       EURPLN       USDPLN       CHFPLN       JPYPLN       HUFPLN       CZKPLN         2/3/2017       4.2985       4.0014       4.0192       3.5374       1.3906       0.1591         2/6/2017       4.2864       3.9892       4.0084       3.5438       1.3867       0.1586         2/7/2017       4.2943       4.0280       4.0271       3.5844       1.3864       0.1589													
PLN Spot performance           Date         EURPLN         USDPLN         CHFPLN         JPYPLN         HUFPLN         CZKPLN           2/3/2017         4.2985         4.0014         4.0192         3.5374         1.3906         0.1591           2/6/2017         4.2864         3.9892         4.0084         3.5438         1.3867         0.1586           2/7/2017         4.2943         4.0280         4.0271         3.5844         1.3864         0.1589													
Date         EURPLN         USDPLN         CHFPLN         JPYPLN         HUFPLN         CZKPLN           2/3/2017         4.2985         4.0014         4.0192         3.5374         1.3906         0.1591           2/6/2017         4.2864         3.9892         4.0084         3.5438         1.3867         0.1586           2/7/2017         4.2943         4.0280         4.0271         3.5844         1.3864         0.1589			6.68	6.93	7.45		7.45	1.88		0.49			
2/3/2017     4.2985     4.0014     4.0192     3.5374     1.3906     0.1591       2/6/2017     4.2864     3.9892     4.0084     3.5438     1.3867     0.1586       2/7/2017     4.2943     4.0280     4.0271     3.5844     1.3864     0.1589													
2/6/2017     4.2864     3.9892     4.0084     3.5438     1.3867     0.1586       2/7/2017     4.2943     4.0280     4.0271     3.5844     1.3864     0.1589	Date	EURPLN	USDPLN	CHFPLN	JPYPLN	HUFPLN	CZKPLN						
2/7/2017 4.2943 4.0280 4.0271 3.5844 1.3864 0.1589	2/3/2017	4.2985	4.0014	4.0192	3.5374	1.3906	0.1591						
	2/6/2017	4.2864	3.9892	4.0084	3.5438	1.3867	0.1586						
0/0/04/7 4 0/00 4 0/04/4 0 0/04/4 0 0/04/4 0 0/04/4	2/7/2017	4.2943	4.0280	4.0271	3.5844	1.3864	0.1589						
2/8/201/ 4.3128 4.0521 4.0521 3.6068 1.3944 0.1596	2/8/2017	4.3128	4.0521	4.0521	3.6068	1.3944	0.1596						
2/9/2017 4.3162 4.0332 4.0533 3.5932 1.3981 0.1597	2/9/2017	4.3162	4.0332	4.0533	3.5932	1.3981	0.1597						

## **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