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## Polish Weekly Review

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### Comment on the upcoming data and forecasts

A quiet week ahead of us. Flash CPI (due next Thursday) will likely bring stabilization to annual CPI growth. A monthly decline in fuel prices (exacerbated by high statistical base) will be offset by another raise in core inflation.

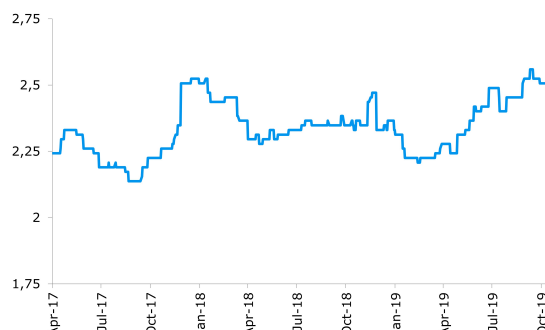
### Polish data to watch: October 25th to November 1st

| Publication       | Date  | Period | mBank | Consensus | Prior |
|-------------------|-------|--------|-------|-----------|-------|
| Flash CPI y/y (%) | 31.10 | Oct    | 2.6   |           | 2.6   |

### Treasury bonds and bills auctions

| Paper              | Next auction | Last Offer | Yield on the prev auction (%) | Prev auction |
|--------------------|--------------|------------|-------------------------------|--------------|
| T-bill             | -            | 700        | 1.500                         | 2/22/2017    |
| 2Y T-bond OK0521   | 11/7/2019    | 300        | 1.445                         | 7/26/2019    |
| 5Y T-bond PS1024   | 11/7/2019    | 2000       | 1.823                         | 7/26/2019    |
| 10Y T-bond DS1029  | 11/7/2019    | 1500       | 2.100                         | 7/26/2019    |
| 30Y T-bond WS0447  | 11/7/2019    | 60         | 3.180                         | 4/25/2019    |
| 5Y floater WZ0525  | 11/7/2019    | 2500       | -                             | 7/26/2019    |
| 10Y floater WZ0529 | 11/7/2019    | 2100       | -                             | 7/26/2019    |

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



### Comment

PPI surprised to the upside, but retail sales came out significantly below market consensus. As a result, Polish surprise index declined considerably last week. There is only one opportunity for the index to move next week - Flash CPI reading on Thursday.

\* 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

- Polish economy is set to slow down considerably next year. Waning effects of fiscal stimulus, unfavorable EU spending calendar, retrenchment of local government investment and weaker investment outlook are to blame. That being said, consumption will remain very resilient and this makes all the difference compared to 2011-2013 cycle. Our revised 2020 forecasts call for 3.2% y/y growth.
- Core inflation is at multi-year high, but there is limited space for further acceleration. The pass-through from wages is working in services, but wage growth has stabilized there. In addition, deflation is likely to return to core consumer goods given the global environment and the lagged relationship with local manufacturing wages.
- The MPC is now talking about holding rates steady through 2021 (the end of most members' term) and – given the overall environment (both global and local factors) – we concur. We don't expect any rate changes in Poland in the foreseeable future. The risks are to the downside.
- This year's fiscal deficit is set to widen due to brisk expenditure growth. Next year's balanced budget proposal is not realistic given the already announced spending (pension bonus made permanent) and ambitious revenue targets. The revised budget will show a small deficit. General government deficit will remain low as local governments are set to cut investment considerably.

### Financial markets

- Global growth worries, strong dollar and thin liquidity are a toxic combination for the PLN. The result was marked weakening in recent weeks. The worst is over in our view.
- We see more or less stable PLN along the way. New wave of global monetary easing makes Polish rates relatively higher and the economy is holding very well given the global slowdown of economic activity. However, slowdown is slowdown and as the risks for monetary policy are tilted to the downside, the same applies to PLN valuation. Breakeven exchange rates for exporters are, however, moving steadily higher with rising labor costs and that puts an ever-higher floor on EURPLN. No durable appreciation in current circumstances.

### mBank forecasts

|                                     | 2015 | 2016 | 2017 | 2018 | 2019 F | 2020 F |
|-------------------------------------|------|------|------|------|--------|--------|
| GDP y/y (%)                         | 3.8  | 3.0  | 4.8  | 5.1  | 4.5    | 3.2    |
| CPI Inflation y/y (average %)       | -0.9 | -0.6 | 2.0  | 1.6  | 2.4    | 3.1    |
| General government balance (%GDP)   | -2.7 | -2.2 | -1.4 | -0.2 | -0.7   | -1.1   |
| Current account (%GDP)              | -0.6 | -0.5 | 0.2  | -0.6 | -1.2   | -1.4   |
| Unemployment rate (end of period %) | 9.8  | 8.2  | 6.6  | 5.9  | 5.4    | 5.1    |
| Repo rate (end of period %)         | 1.5  | 1.5  | 1.5  | 1.5  | 1.5    | 1.5    |

|                                | 2019<br>Q1 | 2019<br>Q2 | 2019<br>Q3 F | 2019<br>Q4 F | 2020<br>Q1 F | 2020<br>Q2 F | 2020<br>Q3 F | 2020<br>Q4 F |
|--------------------------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|
| GDP y/y (%)                    | 4.7        | 4.5        | 4.3          | 4.3          | 3.9          | 3.5          | 3.0          | 2.5          |
| Individual consumption y/y (%) | 3.9        | 4.4        | 4.6          | 5.0          | 4.6          | 4.2          | 3.4          | 2.8          |
| Public Consumption y/y (%)     | 6.4        | 3.4        | 5.0          | 5.0          | 3.0          | 3.0          | 3.0          | 3.0          |
| Investment y/y (%)             | 12.6       | 9.0        | 6.0          | 5.0          | 2.0          | 2.0          | 0.0          | 0.0          |
| Inflation rate (% average)     | 1.2        | 2.4        | 2.8          | 3.3          | 3.7          | 3.2          | 2.7          | 2.7          |
| Unemployment rate (% eop)      | 5.9        | 5.2        | 5.2          | 5.4          | 5.5          | 4.9          | 4.9          | 5.1          |
| NBP repo rate (% eop)          | 1.50       | 1.50       | 1.50         | 1.50         | 1.50         | 1.50         | 1.50         | 1.50         |
| Wibor 3M (% eop)               | 1.72       | 1.72       | 1.72         | 1.72         | 1.72         | 1.72         | 1.72         | 1.72         |
| 2Y Polish bond yields (% eop)  | 1.69       | 1.61       | 1.52         | 1.51         | 1.55         | 1.55         | 1.55         | 1.55         |
| 10Y Polish bond yields (% eop) | 2.84       | 2.39       | 2.00         | 1.95         | 2.10         | 2.24         | 2.27         | 2.30         |
| EUR/PLN (eop)                  | 4.30       | 4.24       | 4.37         | 4.35         | 4.35         | 4.40         | 4.40         | 4.40         |
| USD/PLN (eop)                  | 3.84       | 3.73       | 4.01         | 4.03         | 3.95         | 3.93         | 3.86         | 3.83         |
| F - forecast                   |            |            |              |              |              |              |              |              |

## Economics

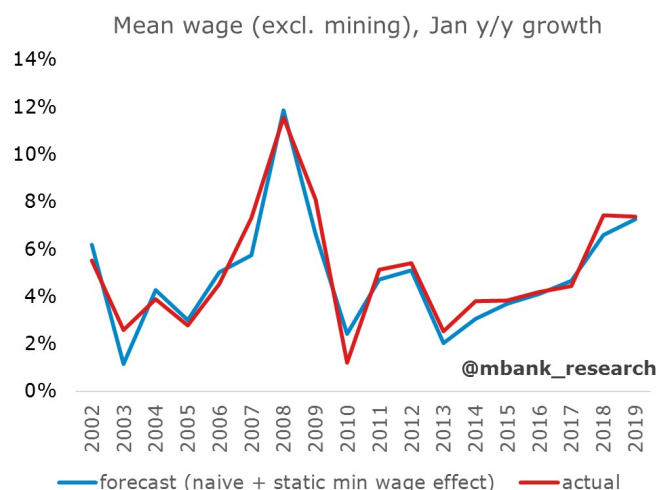
### What if the minimum wage hike didn't matter in macroeconomic perspective?

Post-election dust is settling and it's time to consider which changes in economic policy will go into effect next year. The most certain one is the minimum wage hike, from 2250 to 2600 (PLN/month; +15,6%). We've elaborated on the government's ambitious plans in the area in [one of the previous reports](#).

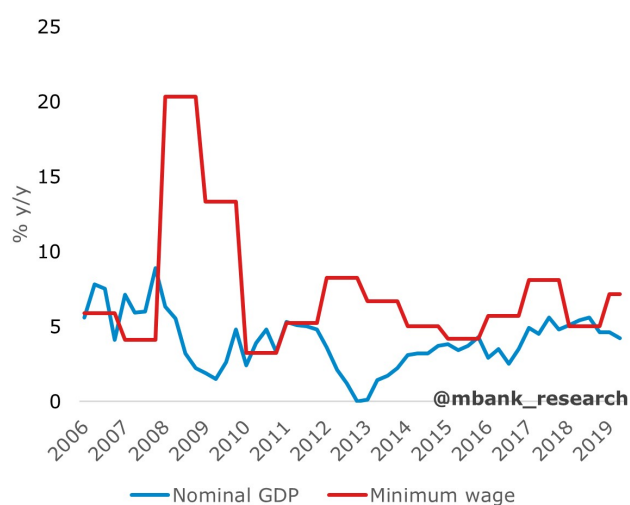
A word of caution at the start – the ambiguity of macroeconomic data makes it impossible to provide anything beyond educated guesses. However, there is an emerging consensus that the hike will lift wage growth up by 1.5-2 percentage points in January 2020 and have some negative impact on employment (although compared to some really non-defined counterfactual), consistent with the literature on the previous episode ([\[1\]](#),[\[2\]](#)). Static calculations in this vein are easy, so let's ask a different question. What if the hike didn't matter in the macroeconomic perspective? But how can this be if it directly affects between 15 and 20% of the workforce (depends on one's assumptions on the number of workers earning the minimum wage at present and earning between the old and the new minimum wage)?

First, labor supply. From a single enterprise's perspective, minimum wage hike does not impact labor supply. However, it raises the reservation wage nationally (i. e. the minimum wage that enables a non-participant to start working) and is bound to attract some entrants to the labor force (as noted before, the government is, in a way, competing with itself, since minimum wage is offsetting the labor supply disincentives of social transfers). Firms with large proportion of workers close to minimum wage are often the ones most prone to automation. You would think that a hairdresser as an ultimate proof that it is NOT the case, but feel free to find other occupations that really matter – average household expenditures total 0.53% with respect to the hairdresser and this applies to men, women and children and also their beards and nails. Automation kills some workplaces and creates others. This may also boost labor supply and lower labor demand.

Second, empirically minimum wage hikes have some predictive powers with regard to wage growth – in some sectors the extent of the hike is correlated with average wage increase in January, in some isn't. It also improves upon naive forecasts of mean wage growth. However, it is not a silver bullet. You may follow an example like this we did on our own (see the graph). Mind that the errors in calculation are purely random, neither cyclical nor connected with the scale of minimum wage hike. If minimum wage hikes are so important for the economy, then they should be visible in wage growth well past the implementation date. They are not.



Maybe (and this is the third argument) the timing of wage hikes is always peculiar. Since they are usually a function of lagged mean wage growth, they tend to lag GDP growth as well and the largest ones often occur at the bottom of economic cycles. In Poland, this is what exactly happened in 2001, 2009, 2012 and is destined to happen again in 2020, if our forecasts are to be believed. This also means that large-scale minimum wage hikes have had only a transitory effect – in each of these episodes the gravity of falling labor demand took over and subsequently dampened nominal wage growth.



Perhaps it's time then to change perspective and stay more open to different thought experiments as the scarcity and quality of macro data does not favor econometric thinking at all (ok, it looks scientific but nothing more).

## Fixed income

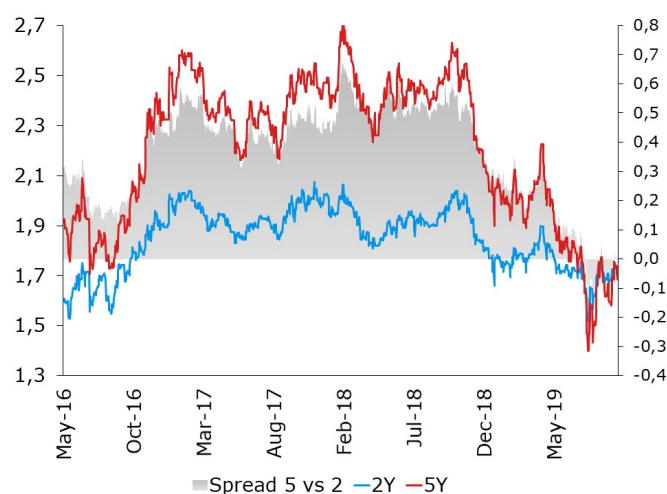
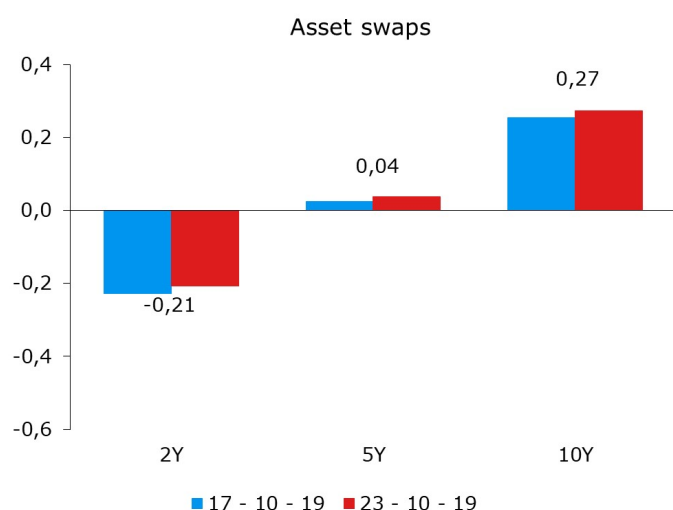
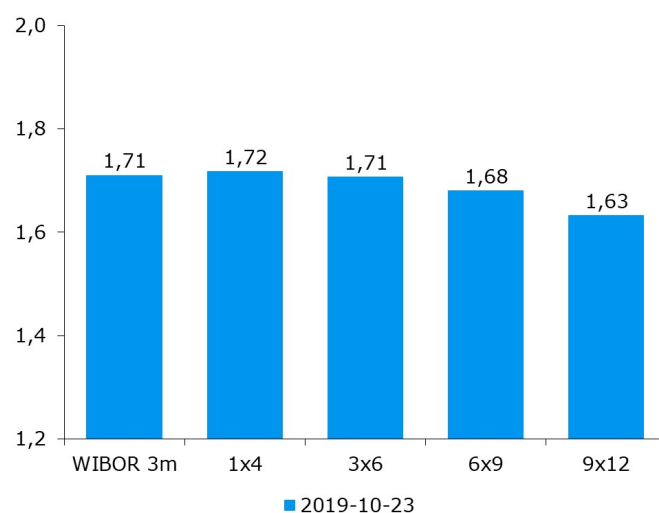
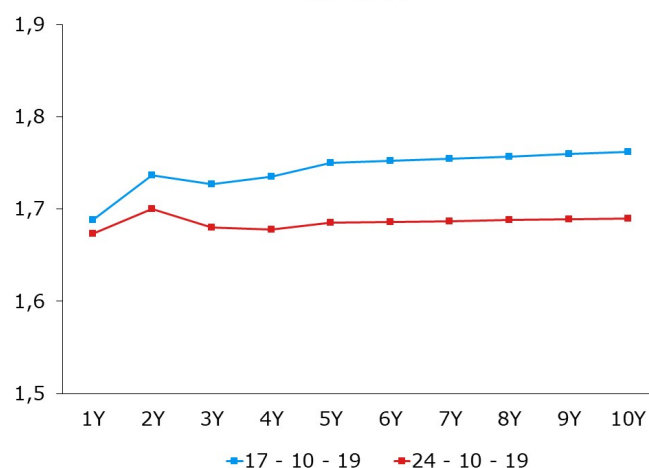
### First auction this month

Tomorrow, the Ministry is selling bonds at a switching auction. Market is expecting strong demand, as it is the first auction this month. We are slowly entering Christmas mode, volatility and turnover are very low. ASWs are stable. Market is focused on BREXIT and US-China trade talks, other events don't exist. POLGBs are mainly following core markets.

PS1024/5y is flat, DS1029/10y is 25 bps. PS1024/DS1029 is 25 bps DS1029/Bund is 246 bps.

DS1021 is trading at 1.45% (5 bps down), PS1024 is trading at 1.71% (6 bps down) and DS1029 is trading at 1.96% (7 bps down).

IRS curve



## Money market

### Slightly down

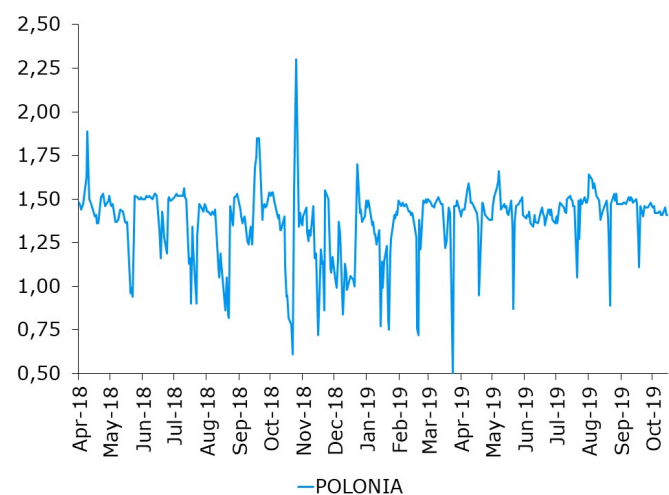
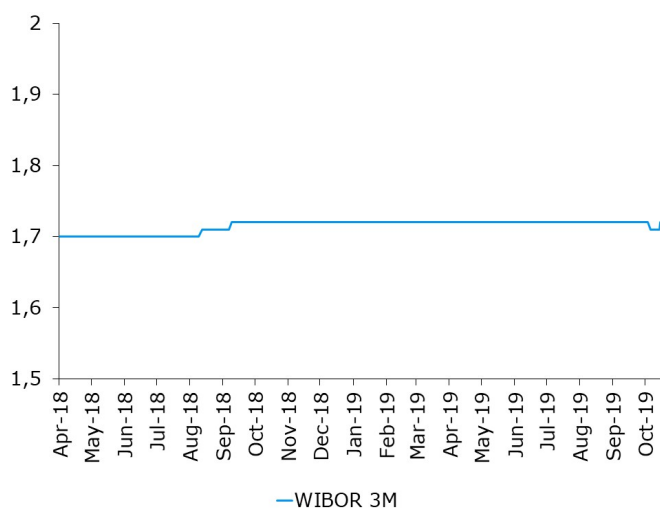
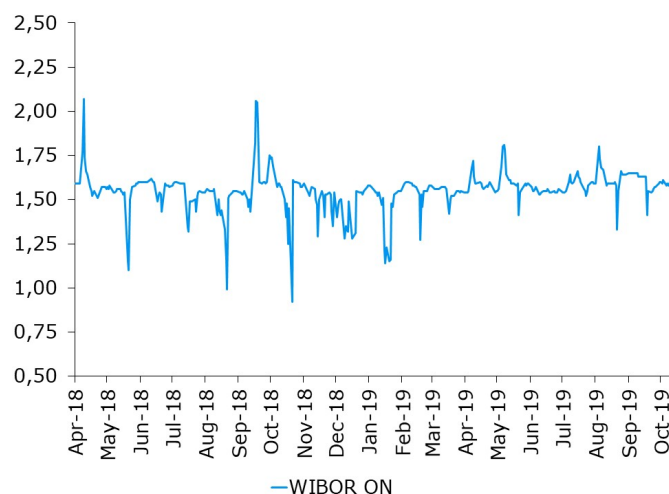
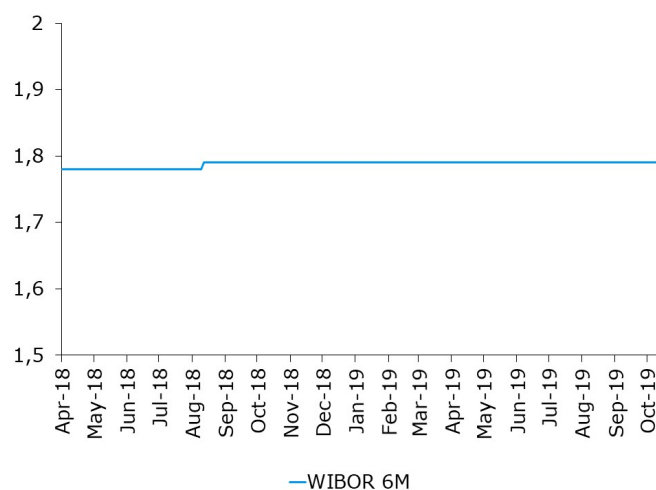
Last week swaps came off recent heights. Top of the range at 1.80% was defended and now we are trading 10 bps lower. This might be seen somewhere close to current mid of the range. Tomorrow we have a switching auction, so ASWs are a thing to watch.

Cash rates still slightly below 1.50%. End of the reserve period next week will result in higher volatility.

Ref rate vs Polonia averages:

30 day 6 bp

90 day 5 bp



## Forex

**Spot: the unstoppable zloty** Financial markets shrugged off talks of early elections in the UK and further limbo in the Brexit story. Signs that the U.S. and China were making progress in their efforts to resolve the trade dispute supported EM currencies, Zloty was not an exception. EUR/PLN has continued its sluggish 4-week march down from the top of 4.3960, reaching as low as 4.2690 yesterday, before registering a minor rebound today (to 4.28-ish). Zloty strength is most visible against USD, as USD/PLN dropped from 4.0240 to 3.8260, following the EUR/USD rise. Healthy Polish fundamentals and generally solid economy favor strong Zloty. On the other hand there are fears of a slowdown in global growth, Brexit uncertainty and trade war worries. Zloty's performance will still be determined by the global sentiment.

**Options: implied volatility sliding** It was another very calm week on the options market. As a consequence, gamma and vega were heavily offered on the market. Both volatility curves, EUR/PLN as well USD/PLN, have become more steep. 1 month ATM mid is 3.7% today (almost 0.35% lower), 3 month is at 3.8% (0.25% lower) and, finally, 1 year is at 4.25% (0.2% lower). The skew and the currency spread (difference between USD/PLN and EUR/PLN) are lower than a week ago too.

## Short-term forecasts

Main supports / resistances:

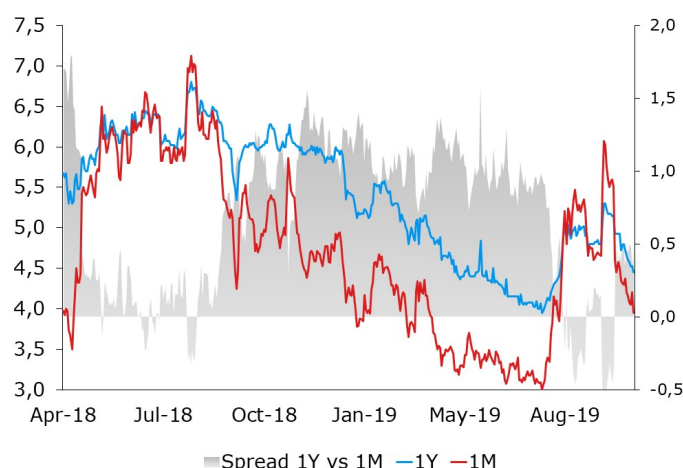
EUR/PLN: 4.2500 / 4.3400

USD/PLN: 3.7500 / 3.9500

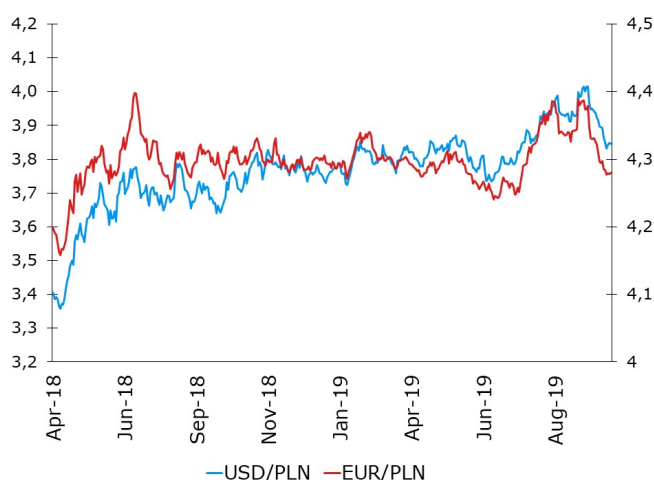
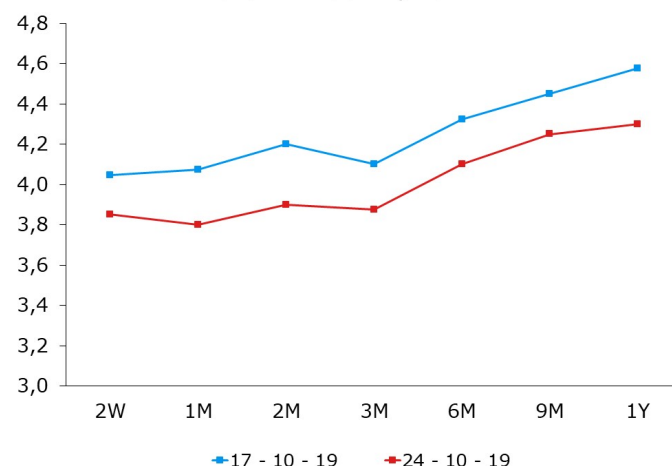
### Current position: long EUR/PLN at 4.28

We are long EURPLN at 4.28 and ready to add to this long at 4.26 with 4.24 stop and hopes to revisit 4.29+. It is a technical / opportunistic trade, as we are looking for 4.26-4.30 range to hold.

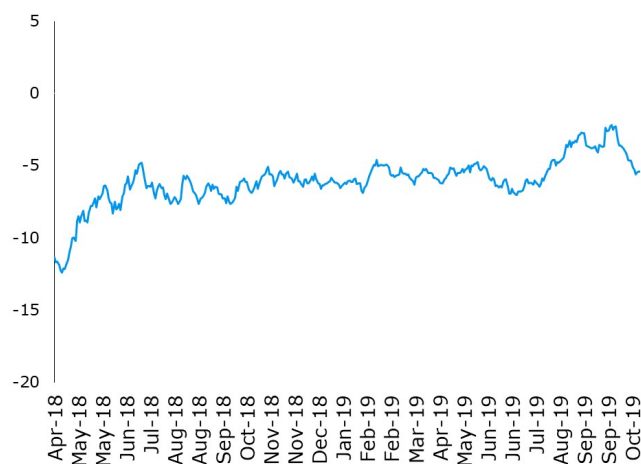
EURPLN volatility



EUR/PLN volatility curve



Bias from the old parity (%)





## Market prices update

| Money market rates (mid close) |         |          |         |          |         |          | FRA rates (mid close) |      |      |      |       |      |
|--------------------------------|---------|----------|---------|----------|---------|----------|-----------------------|------|------|------|-------|------|
| Date                           | FXSW 3M | WIBOR 3M | FXSW 6M | WIBOR 6M | FXSW 1Y | WIBOR 1Y | 1x4                   | 3x6  | 6x9  | 9x12 | 12x15 | 6x12 |
| 10/17/2019                     | 1.80    | 1.71     | 1.84    | 1.69     | 1.90    | 1.74     | 1.71                  | 1.71 | 1.69 | 1.67 | 1.63  | 1.77 |
| 10/20/2019                     | 1.80    | 1.71     | 1.85    | 1.69     | 1.90    | 1.74     | 1.73                  | 1.71 | 1.71 | 1.69 | 1.67  | 1.77 |
| 10/21/2019                     | 1.82    | 1.71     | 1.85    | 1.69     | 1.90    | 1.74     | 1.71                  | 1.70 | 1.68 | 1.65 | 1.63  | 1.75 |
| 10/22/2019                     | 1.73    | 1.71     | 1.75    | 1.69     | 1.78    | 1.74     | 1.70                  | 1.69 | 1.65 | 1.63 | 1.59  | 1.72 |
| 10/23/2019                     | 1.85    | 1.72     | 1.86    | 1.69     | 1.91    | 1.74     | 1.72                  | 1.71 | 1.68 | 1.63 | 1.58  | 1.75 |

| Last primary market rates |           |            |            |            |        |        |      |
|---------------------------|-----------|------------|------------|------------|--------|--------|------|
| Paper                     | Au. date  | Maturity   | Avg. price | Avg. yield | Supply | Demand | Sold |
| 32W TB                    | 2/22/2017 | 8/30/2017  | 99.21      | 1.50       | 700    | 1832   | 726  |
| OK0521                    | 7/26/2019 | 5/25/2021  | 97.42      | 1.45       | 300    | 625    | 300  |
| PS1024                    | 7/26/2019 | 10/25/2024 | 102.10     | 1.82       | 2000   | 2330   | 1500 |
| DS1029                    | 7/26/2019 | 10/25/2029 | 105.91     | 2.10       | 1500   | 2248   | 1511 |

| Fixed income market rates (closing mid-market levels) |          |           |        |        |        |        |         |        |
|---|----------|-----------|--------|--------|--------|--------|---------|--------|
| Date  | 1Y WIBOR | 1Y T-bill | 2Y IRS | OK0720 | 5Y IRS | PS0423 | 10Y IRS | WS0428 |
| 10/17/2019  | 1.740    | 1.253     | 1.737  | 1.510  | 1.750  | 1.774  | 1.762   | 2.016  |
| 10/20/2019  | 1.740    | 1.271     | 1.728  | 1.536  | 1.733  | 1.774  | 1.740   | 2.018  |
| 10/21/2019  | 1.740    | 1.254     | 1.727  | 1.512  | 1.740  | 1.787  | 1.748   | 2.037  |
| 10/22/2019  | 1.740    | 1.238     | 1.710  | 1.501  | 1.710  | 1.745  | 1.717   | 1.982  |
| 10/23/2019  | 1.740    | 1.168     | 1.700  | 1.493  | 1.685  | 1.722  | 1.690   | 1.963  |

| EUR/PLN 0-delta stradle |      |      |      |      | 25-delta RR |      | 25-delta FLY |  |
|-------------------------|------|------|------|------|-------------|------|--------------|--|
| Date                    | 1M   | 3M   | 6M   | 1Y   | 1M          | 1Y   | 1Y           |  |
| 10/17/2019              | 4.08 | 4.10 | 4.33 | 4.58 | 4.58        | 1.21 | 0.39         |  |
| 10/20/2019              | 4.05 | 4.08 | 4.30 | 4.53 | 4.53        | 1.21 | 0.39         |  |
| 10/21/2019              | 4.20 | 4.13 | 4.30 | 4.53 | 4.53        | 1.17 | 0.39         |  |
| 10/22/2019              | 3.95 | 3.98 | 4.20 | 4.45 | 4.45        | 1.16 | 0.33         |  |
| 10/23/2019              | 3.80 | 3.88 | 4.10 | 4.30 | 4.30        | 1.11 | 0.33         |  |

| PLN Spot performance |        |        |        |        |        |        |
|----------------------|--------|--------|--------|--------|--------|--------|
| Date                 | EURPLN | USDPLN | CHFPLN | JPYPLN | HUFPLN | CZKPLN |
| 10/17/2019           | 4.2849 | 3.8638 | 3.8902 | 3.5506 | 1.2878 | 0.1665 |
| 10/20/2019           | 4.2844 | 3.8503 | 3.8969 | 3.5420 | 1.2946 | 0.1669 |
| 10/21/2019           | 4.2775 | 3.8307 | 3.8899 | 3.5265 | 1.2946 | 0.1670 |
| 10/22/2019           | 4.2792 | 3.8408 | 3.8851 | 3.5380 | 1.2961 | 0.1673 |
| 10/23/2019           | 4.2778 | 3.8473 | 3.8887 | 3.5500 | 1.3004 | 0.1672 |

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