

Note: construction of business cycle clock, including concepts and methodology used for its creation was presented in November's MACROscope [http://english.bzwbk.pl/items/english/doc/m\\_eng\\_2009\\_11.pdf](http://english.bzwbk.pl/items/english/doc/m_eng_2009_11.pdf)

## Will it be continued?

- **GDP growth in the first quarter of the year was roughly as expected, however, it is bound to decline below 3% in 2Q.** This will be primarily caused by one-off factors evident already in April economic data releases, however, subsequent data might be also hard to project because of the flood. Nonetheless, we uphold the projection of economic growth in 2010 at slightly above 3% - recovery in the manufacturing sector continues; the construction industry will partly make up for losses in 2H 2010 whilst we consider fall in retail sales fall in April as temporary. We have slightly reduced the projections of investments and construction production throughout the year.

- **Polish financial market was impacted by developments in the European Union in May that led to the depreciation of the zloty and domestic bonds.** Upon a temporary appreciation of the zloty to 3.94 after an aid package was approved, subsequent weeks saw again higher risk aversion globally and a weaker PLN (ca. 4.20). In our view, the EURPLN rate upper band will be at 4.18-4.20 whilst the lower limit will stand at 4.08 providing substantial support (thereafter, 4.04 and 4.00). zloty strengthening might be hindered by returning pressure on EUR depreciation; however, given the assumed small appreciation of the zloty in June, we expect slight recovery on the bond market as well. Domestic data will be of little importance. However, CPI data might have influence on the reduction of market rates at the shorter end of the curve.

- **As announced in the previous report, June's Special focus is dedicated to foreign exchange interventions.** We try to answer the following questions: Are foreign exchange interventions in Poland justified? Can they be effective? Do we face a change of foreign exchange regime? In our opinion, some countries that follow the policy of foreign exchange interventions prove that it might be an effective strategy. We expect the Polish authorities to go ahead with the policy of occasional activity on the FX market. There are no grounds though to claim that the foreign exchange regime has changed in Poland and that range of fluctuations 3.80-4.20, which may be perceived by some market players as acceptable by authorities, will be somehow binding. This is confirmed by a new Governor of the National Bank of Poland. What is interesting, our new estimations of the monetary condition index (MCI) point to a smaller relative importance of the interest rate against the exchange rate in the total impact of both variables on the inflation rate.

- **Professor Marek Belka has announced to continue the existing monetary policy in terms of interest rates and exchange rate.** In our view, Marek Belka will take a pragmatic approach, staying in the mid-range between hawks and doves on the Monetary Policy Council. Based on views presented in the recent International Monetary Fund's reports, one might be tempted to classify him slightly towards "doves".

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**Maciej Reluga**  
Chief economist  
+48 22 586 8363

**Piotr Bielski**  
+48 22 586 8333

**Piotr Bujak**  
+48 22 586 8341

**Cezary Chrapek**  
+48 22 586 8342

Email: ekonomia@bzwbk.pl

### Financial market on 31 May 2010:

NBP deposit rate	2.00	WIBOR 3M	3.86	USDPLN	3.3132
NBP reference rate	3.50	Yield on 2-year T-bonds	4.50	EURPLN	4.0707
NBP lombard rate	5.00	Yield on 5-year T-bonds	5.14	EURUSD	1.2305

This report is based on information available until 11.06.2010

## Special focus

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### What interventions, if any?

In the Special focus article *Zloty during financial turmoil* presented in the October 2009 MACROscope we debated an alternative scenario of fast appreciation of the zloty. This was supposed to be connected with sustainment of the exceptionally loose monetary policy in the world and improvement of the economic outlook. We wrote at that time that such a situation might give rise to the question of optimum FX policy under the direct inflation targeting strategy.

Before long the actual issue of more active FX policy was tabled for discussion at the new Monetary Policy Council. After the strong appreciation of the zloty observed since February 2009 the first quarter of 2010 gave it a further boost that resulted in the first intervention of the central bank in the currency market since 1998.<sup>1</sup>

In turn, the wave of depreciation of the zloty, which was soon generated by the fiscal crisis in the southern countries of the euro zone, raised the question of whether or not, and at which point we would see another intervention – this time to protect the value of the zloty. When the zloty reached 4.20, the market started to speculate about the activity of the Ministry of Finance (through BGK bank) in the FX market, selling euro from the EU funds. The recent weeks also brought unofficial comments from the Ministry of Finance suggesting adoption of a more active approach to the FX policy. Admittedly, these were denied by the statements that the PLN rate is fully floating and the interventions (either way) may be occasional and designed to curb excessive FX fluctuations. However, taking into account that the market expectations may mount that the fiscal and monetary authorities would prefer the EURPLN to fluctuate in band of 3.80-4.20, this *Special focus* will seek to answer the following questions: Are FX interventions in Poland justified? Can they be effective? Do they suggest a change of the currency regime?

#### Technical aspects of the intervention

Central bank interventions may affect the currency market through the *monetary*, *portfolio*, *signalling* and

*microstructural* channels. In the case of the *monetary* channel, FX intervention is not fully sterilised, which influences the demand for money and the interest rates in the market. In turn, the use of the *portfolio* channel causes changes to the portfolios of investors as a result of changes in the relation between domestic and foreign assets. This effect might be even more pronounced in the less developed countries, whose currency reserves are relatively large compared with the value of assets in the local financial market. The literature increasingly often refers to the *signalling* effect where it is assumed that the central banks have better information on the economic situation than other market participants, and that they wish to share such information through direct actions in the FX market. The actions taken by the central bank prompt the market participants to revise their views on the outlook for the macroeconomic situation and the monetary policy, which in turn affects the effectiveness of interventions. Using the *microstructural* channel, the central bank affects the behaviour of the trend-followers by making unexpected interventions on the technically overbought or oversold levels. Such central banking activity encourages the trend-followers to reverse their positions where it is likely that the central bank is about to reverse the trend. The channel may be particularly effective in developing countries where the FX markets are less liquid and the scale of interventions is large relative to the market size.

Long-lasting interventions are an evidence of determination of the central bank, although on the other hand they might mean that other market participants did not follow the central bank, which poses a risk to its credibility and implies weakness of intervention. A large currency intervention increases effectiveness of the central bank actions. However, if a small intervention is effective, this proves that the central bank is highly credible.

The central banks usually intervene in the spot market. In addition to exerting direct influence on the FX rate, the central bank may make transactions in the forward market. In this case, the central bank reserves do not change until the contract is settled. The central bank may also make FX swap transactions affecting the supply of the domestic and foreign currency or decide to buy or sell FX options. FX pressure in the currency market may come from hedging positions on derivatives in the spot market. By means of options, central banks make some market participants to effect transactions in the spot market to stabilise the currency rates, as desired by the central bank, in an attempt to hedge risks arising from the option positions. Use of the forward markets might be less effective where the market is

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<sup>1</sup> NBP intervened in the market between 1995 and 1998, though this was under a different exchange rate regime. Amid crawling peg and gradual devaluation of the zloty, the NBP was purchasing foreign currencies from commercial banks, which high supply resulted from balance of payments situation. Central bank abandoned interventions due to high costs of sterilisation and increased over-liquidity of the banking sector.

characterised by low liquidity or where the economy is in crisis. Central banks might also use more sophisticated option structures.

The use of derivatives for interventions in the FX market – in addition to the standard spot market actions – might increase the effectiveness of the interventions. However, one must be very cautious when using them as the cost of the intervention might be very high. Moreover, actions in the forward market might raise fears that the bank does not have sufficient reserves to intervene in the spot market to protect the FX rates. Surveys conducted among central banks indicate that only few of them are inclined to use derivatives for the interventions.<sup>2</sup>

### **Interventions effectiveness abroad**

Central banks in developed and developing countries have intervened many times over the last dozen of years. Usually, the interventions are aimed at correction of the FX rate deviation from the equilibrium level; reduction of volatility of the FX rates; accumulation of reserves, provision of FX liquidity to the market and reaching inflation target. In many developing countries, even if they have a flexible exchange rate, FX stability remains a key factor for central banks, whose credibility might sometimes be lower than in the developed countries. In addition, the FX rates in such countries influence the inflation to a greater extent. The reluctance to excessively weaken the currency may often result from a strong exposure to foreign debt. The reason for the higher volatility is the smaller and the less liquid market that is susceptible to external pressures.

However, it might be problematic to define the scale of changes to and volatility to the FX rate to call the intervention effective. This is due to the lack of appropriate models that would show how the rates would behave if there was no intervention. Analyses referring to the effectiveness of the interventions give mixed results. Some of them indicate that it is difficult to exert an effective influence of FX rates through a central bank intervention, regardless of the existing monetary policy. Other papers for developed countries conclude that the sterilised interventions may be effective, whether it is officially announced or not. Some researches point that the probability of successful intervention is higher, if it is coordinated among a few central banks and its scale is large. Other suggest that interventions are not effective in limiting the FX rate volatility and sometimes they increase it.

Some analyses in developed countries indicate that the effect of FX interventions is visible in the market mainly on the day of activity of the central bank, and gradually wears off in the subsequent days. Results of analyses in the emerging markets suggest that it is easier to resist appreciation rather than depreciation, though it depends on the selected local macroeconomic situation and global factors. Meanwhile, the significant depreciation is usually accompanied by crisis environment and foreign capital outflow, while increased market volatility limits the effectiveness of intervention. Table on page 8 includes a description of FX interventions in selected countries. The provided examples confirm that in some conditions the FX interventions may be quite effective (Israel, Colombia, Hungary, Czech Republic).

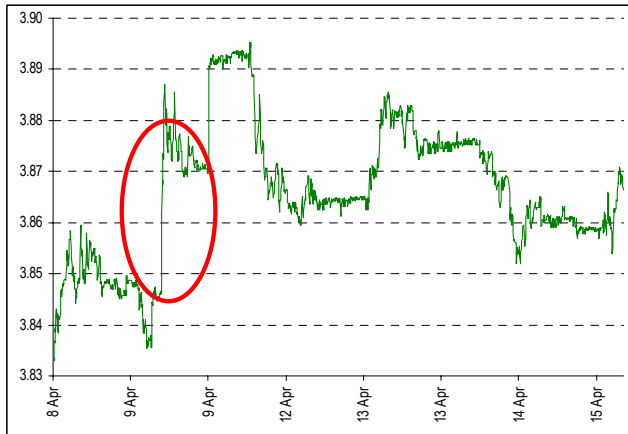
Currency interventions may have a temporary effect on markets, depending on the prevailing market conditions and the conviction of the market participants about FX rate trend. Interventions may help adjust short-term FX movements resulting from temporary shocks, but will not replace monetary or fiscal policy in adjusting fundamental flaws of the economic policy. In the situation where economic fundamentals do not tell much about the direction in which the FX rate is heading, one might look to the central bank for any indication.

### **NBP returns on the market after several years**

Amid inflation targeting framework any decisions on FX intervention should be based on the belief that such a move will not threaten the inflationary target. Moreover till recently the central bank took intervention into consideration only if the inflation target was at threat. Such statement was included in the Monetary Policy Guidelines for 2009 (and for prior years). However, already the previous Council decided to change its approach to more active. Although the NBP did not decide to enter the market, it participated in a coordinated verbal intervention of central banks in the region in February last year, while the MPC changed respective phrase in the Monetary Policy Guidelines for 2010, which says that the central “does not rule out intervention in the market if it was required to ensure macroeconomic and financial stability, which supports realisation inflation target in the medium term”. Such goals, i.e. increasing stability of the zloty, lowering its deviation from the equilibrium exchange rate, and stabilisation of the conditions in which Polish companies operate, were most probably the purposes of the NBP intervention in April (at ca. 3.85 versus euro).

<sup>2</sup> K. Gajewski, 2007.

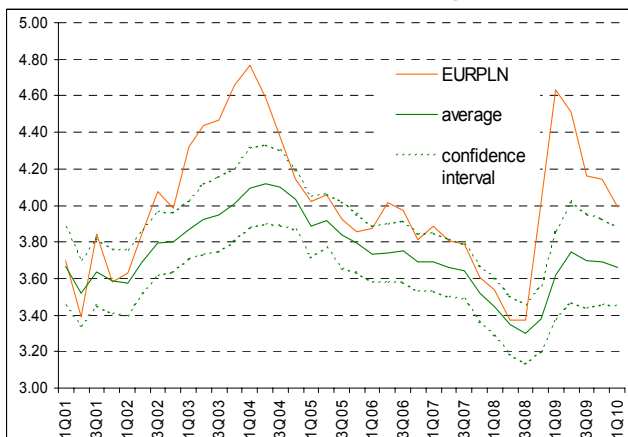
**EURPLN rate during intervention**



Source: Reuters

Indirectly, the intervention was also aimed to increase competitiveness of the Polish economy and support exports, which prospects could have deteriorated if the zloty appreciation continued.

**Breakeven EURPLN rate for Polish exporters**

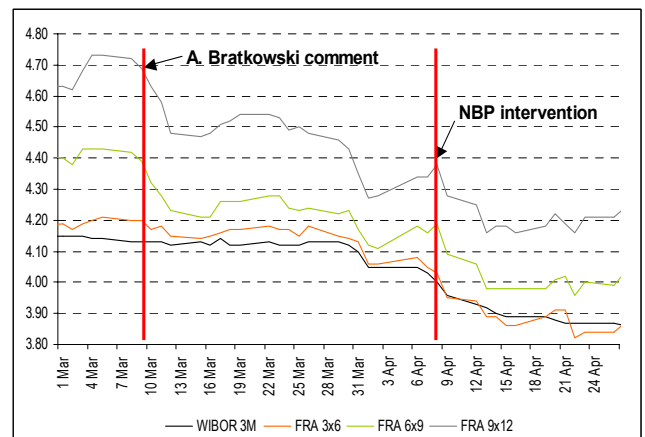


Source: NBP

The NBP actions were justified in that the internal and external environment was likely to make the intervention a success. Admittedly, the interest rate hikes in Poland were quite unlikely given the favourable inflation outlook. Meanwhile, even though for some time there has been an informal neutral bias in the monetary policy of the Monetary Policy Council, the appreciation of the zloty tightened the monetary conditions in the economy. According to many analyses, e.g. the IMF survey on Columbia, there is a strong dependence between effectiveness of the intervention and appropriate adjustment of the monetary policy parameters and synchronisation with phases of the economic cycle. Namely, an intervention aimed to weaken the domestic currency is more likely to be effective if interest rates are cut at the same time. Actually the dovish signals from the MPC in March, when A. Bratkowski said that he assessed the probability of a rate hike at 30%, might have been treated as a substitute of a rate cut, and this resulted in decline of market rates. The NBP decision on

the intervention further reduced the market expectations of interest rate hikes, which resulted in a significant reduction of the FRA rates. The market decided that the central bank sent a signal that it was not afraid of a fast increase in inflation and did not see any threat to the inflationary target. Reduction of the FRA rates illustrated the conviction in the market that the central bank was determined to curb currency appreciation, and that the risk of interest rate reduction was higher.

**Market interest rates and NBP intervention**



Source: Reuters

The NBP intervention was supported by low level of low level of short-term interest rates, resulting from overliquidity of the banking sector and decreasing pressure on currency appreciation from the short-term speculative capital. The uncertainty around the outlook for the world economy, particularly the euro zone, was also seen as a favourable external factor. Another factor that increased the chance for effectiveness of the NBP actions was the favourable technical position of the EUR/PLN rate, which implied that the zloty was being bought off (low RSI, MACD divergence) and that triggered the microstructural channel.

The zloty appreciation trend was halted and the EURPLN rate stabilised below 3.90. The intervention proved effective, even though it was relatively small in size (the central bank bought ca. EUR 9 m from each from several commercial banks), which may show the high credibility of the bank or shallowness of the market.

By lucky chance, the recent interventions of the NBP and the Ministry of Finance coincided with changes in trends, sentiment and risk appetite in global markets. NBP's verbal interventions and currency exchange in the market by the Ministry of Finance completed via BGK state owned bank in February 2009 prevented the zloty from depreciating above 4,90. Then the negative trend in the global markets reversed and the zloty began to recover. Soon after the NBP intervention in April there were increased fears about the fiscal crisis in the euro

zone, which caused further depreciation of the zloty to ca. 4.26. The steps taken by the Ministry of Finance through BGK calmed down the FX market, and soon thereafter UE and IMF announced stabilisation packages for the euro zone countries which needed support. Effectively, this improved the global sentiment. The timing of the NBP and Ministry of Finance decisions, accidental as it may seem, was right and positively affected effectiveness of the intervention.

#### **Will further interventions be equally effective?**

Currently the PLN rate band is acceptable both for the Ministry of Finance and NBP. In our opinion, any actions aimed at stabilising the PLN rate in a rather narrow band might be successful as the market is affected that the factors which do not clearly point to the direction in which the FX rate is heading. On the one hand the inflation is moderate and the uncertainty about the prospect of recovery in the world and Poland is high. On the other hand, Poland will achieve relatively good GDP result as compared with other EU states; labour productivity improved, current account deficit is low, fiscal situation is quite good (relatively small debt to GDP relation, particularly as it includes the cost of pension reform that was not carried out in other countries). The influence of the central bank's presence in the FX market on market players' decisions is reflected in the recommendations of influential analysts of global banks, who before the NBP intervention suggested that higher profits should be sought by playing the zloty appreciation rather than Israeli shekel, given the presence of the Bank of Israel in the market.

When risk appetite improves due to continuation of economic recovery in the world, the positive factors may dominate the zloty prospects and the pressure on PLN appreciation is likely to return. The expected rebound in inflation in autumn and the interest rate hike in Q4 will cause deterioration of the conditions for an effective intervention weakening the zloty. In accordance with the previously mentioned analyses (incl. by IMF), FX interventions aimed at weakening of the currency combined with interest rate increases send contradictory signals to the market.

The Columbian example shows that where interest rates are increased, the pressure on the domestic currency might grow significantly; and if the intervention were to be unsuccessful, the credibility of the central bank would be undermined. In the event of a growing inflationary pressure, any action aimed at weakening of the zloty to

support exports would be incomprehensible and would defy the basic objective of the NBP<sup>3</sup>.

In the long term the zloty appreciation seems to be the most probable scenario. Since improvement of sentiment in the global markets in Q2 2009, capital has again started to flow to Poland to a bigger extent than to the countries in the region, as the Polish economy coped relatively well during the crisis, and the opinion on the lack of structural weaknesses of the Polish economy somewhat emerged. Maintaining the large inflow of long-term capital and speculative capital in the context of Poland's accession to the euro zone may increase the pressure on the zloty appreciation in the following years. Given the EU ban on capital controls (solution used by e.g. Brazil – ineffective in the opinion of the IMF), avoiding excessive appreciation and limiting the inflow of speculative capital may be realised through the presence NBP in the FX market (or smaller scale of interest rate hikes than in a scenario of no appreciation).

The accumulation of FX reserves by the NBP would increase the protection against excessive depreciation at the time of higher risk aversion. It is worth to note that NBP reserves significantly increased due to exchange of EU funds in the NBP by the Ministry of Finance. One may even say that the exchange rate is not fully floating for some time, as part of the EU funds flowing to our country was exchanged outside the market. On the other hand, in case of NBP intervention in the market, purchasing foreign currencies would entail additional sterilisation costs and further increase of banking sector overliquidity. The latter is working towards lower short-term interest rates in the market, which should reduce the speed of appreciation.

Still, one needs to remember that if the inflow of capital is significant, strengthening of the domestic currency is a natural way of curbing the growth of inflation, limiting speculative bubbles and preventing overheating of the economy. Reversal of the fundamental trend would be difficult. This is why, in our view, the central bank should be rather decelerating the excessive appreciation and offsetting large deviations of the exchange rate from the trend.

If the risk aversion returns due to the worse outlook for global economic recovery and given the fiscal tightening in the euro zone countries or the problems of the banking sector in the euro zone, further sell-off of risky assets – including currencies of emerging economies

<sup>3</sup> Apart from this attempts of the zloty weakening at the year-end would be in contrary to the goal of the Ministry of Finance, as it is keen to ensure the PLN is possibly strongest on the last day of the year to reduce the risk of breaching the 55% threshold in relation of debt to GDP.

and the zloty – is still possible. If this happens, we believe that the currency gathered by the Ministry of Finance (ca. EUR4-5bn) could be and even should be used in the event of significant, though temporary, sell-off of the zloty. The actions taken by the Ministry of Finance could be effective, but they should happen relatively soon to discourage other investors from joining the depreciatory trend, and should take place in favourable circumstances (e.g. at the time of strong technical sell-offs). The strong fall of the zloty that would result from the situation in the global markets (most probably due to drastic deterioration prospects of global economy) would most probably be accompanied by the weakening of other risky assets. In such conditions, stopping the depreciatory trend might prove far less effective. Effectiveness of an intervention depends, among others, on the strength of drivers of FX rate trend. Worse performance of the global economy would most probably seriously undermine the demand for the Polish export, and the weakening of the zloty would contribute to stabilisation of results of exporters.

Currently it is hard to say how the NBP would behave if the funds of the Ministry of Finance were insufficient to protect the zloty. In February 2009 the previous Council did not decide for FX intervention, when the current inflation was at much higher level. However, since then the MPC stance to FX policy has changed and also the Council members are different. The last comments of the newly chosen president of the central bank Marek Belka suggest that he would be a proponent of active FX rate policy stemming excessive exchange rate moves, which is in line with the last IMF reports on Poland he accepted. During the financial crisis and high volatility in the financial markets, the actions taken by the central banks might be less effective, which was visible at the turn 2008/2009 in the case of the central bank in Russia. If the intervention was not successful, the credibility of the NBP would be impaired. However, NBP might provide currency through FX swap transactions to reduce the structural shortage of currencies in the Polish banking sector, thus supporting the sector's stability. What is important, forward transactions would not reduce the reserves during the intervention and would have a psychological effect on the market.

To limit the exchange rate fluctuations, the Ministry of Finance and the NBP could use the support of the regulator who would increase stability of the financial sector. For example, the regulator could impose restrictions on FX lending. Lower supply of foreign currencies would decrease the appreciation pressure, while lower foreign debt of the private sector would

defend the zloty from excessive depreciation in case of risk aversion intensification. As suggested by the IMF, the Polish Financial Supervision Authority might also exert pressure on banks or develop regulations that would make banks obtain long-term funding for FX lending and increase the risk weights for such loans. If such a policy caused a significant increase in the pricing of FX loans, this would improve the way the domestic monetary policy affects the credit market. However, for such regulations to be effective, they would need to be developed in association with the regulators of the foreign banks present in Poland.

### Conclusions

Examples of other countries show that interventions might be effective if they are supported by local macroeconomic conditions and global trends. Ample liquidity in the world markets from exceptionally loose monetary policy as well as the fast flow of speculative capital make NBP interventions desirable to reduce the negative impact of excessive FX fluctuations on the economy. In our opinion, the FX interventions of the NBP do not necessarily mean any change to the FX regime – they should be used sparingly and reflect the outlook for inflation, market cycle phase and market conditions (volatility in the market and technical situation). The attempts of changing the long-term trends may not be effective, though the NBP presence in the market may discourage some investors from building excessive speculative positions.

In our view, the central bank will continue its policy of occasional interventions if the zloty appreciation is too high. They should be applied respectively to inflation prospects, the phase of the economic cycle and market conditions. Nevertheless, currently we do not see the more active policy of the central bank as a change of FX regime. First of all it is hard to say the exchange rate system changed after only one intervention of the NBP and occasional exchange of EU funds in the market. Secondly, the NBP actions would most probably be "random", without defending or announcing particular level of FX rate. If they limit the exchange rate fluctuations it is good. If they fail, the NBP will rather not fight with the trend.

Thus, even if based on the last actions of the Polish authorities it might appear that there is 3.80-4.20 band to be defended, in our view the participants of the economic system (creditors, exporters, importers) should not attach to this FX range. This was confirmed by recent comment by the new NBP Governor. This range currently probably could be defended by the NBP and the Ministry of Finance, though there are no reason

to assume that such band could be fixed in the longer term. For example, if we assumed a sudden outflow of capital resulting from global factors, than 4.20 level would be difficult to maintain even with Ministry of Finance's activity (in our view the NBP interventions backing the depreciating zloty would not be the best idea). Similar situation would be if the zloty appreciated. We assume that further increase in labour productivity, quite high GDP growth, increase of inflation and interest rate hikes at the end of the year as well as further inflow of long-term capital to Poland (privatisation, direct investments) will contribute to zloty appreciation in the coming quarters. Central bank will intervene in case of excessive appreciation, though one should remember that NBP interventions weakening the zloty amid interest rate hikes could be interpreted by the market as inconsistent. The Monetary Policy Council will face a choice of optimal path of exchange rate and interest rate. It is worth noticing that according to our new estimation of monetary condition index (details on page 12), the importance of exchange rate has recently increased in terms of affecting the overall restrictiveness of monetary policy and its impact on inflation.

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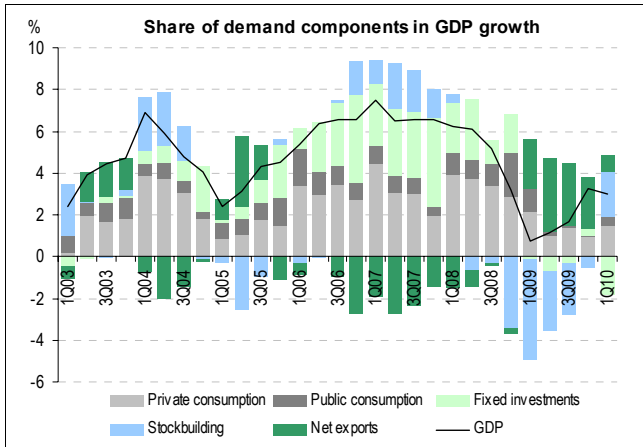
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## Overview of selected FX interventions

Country	Period	Description
The Czech Republic	2001-2002	<p>In the years 2001-2002, central bank's interventions were meant to stop appreciation of the Czech koruna. According to Bank for International Settlements, such interventions had a minor yet statistically significant impact on spot rate and risk reversal price (according to investors, depreciation was more likely than appreciation). The interventions did not impact the implied volatility; i.e. they neither increased volatility nor did they translate into more uncertainty around the future FX rate. Analyses show also that interventions are effective in an asymmetric way, i.e. interventions designed to stop currency appreciation are more effective than those intended to stop depreciation. One of the reasons why the intervention was effective was that its scale was large relative to CZK/EUR market size. Analyses of the Czech koruna tend to confirm that the portfolio and microstructural channels play a more important role in developing countries compared with the developed ones and that interventions aimed to stop appreciation are more effective.</p> <p>Over the recent months, the central bank has frequently expressed its dissatisfaction with the appreciating koruna. However, the FX market was influenced mainly by way of adjusting monetary policy parameters (interest rate cuts) to stop tightening of the monetary conditions.</p>
Israel	2008-	<p>IMF analyses show that during the past few years Israeli FX interventions effectively slowed down appreciation of the shekel while pursuing a reliable policy of direct inflation target. In March 2008, in the wake of substantial influx of capital and the shekel appreciation, the central bank embarked on accumulating reserves (which were low at that time). Currencies were purchased on a daily basis and the amounts to be purchased were earlier announced. After the plan was successfully delivered in August 2009, the central bank changed its intervention pattern and opted for discretionary interventions to address any untypical FX rate trends that would vary from fundamental signals or any distortion of the FX market.</p>
Columbia	2004-2007	<p>The Colombian FX intervention strategy (2004-2007) proved that the central bank must synchronise its actions in the FX market with phases of the economic cycle. Starting from 2008, the central bank used FX swap options and discretionary interventions on the spot market in a direct inflationary target framework and the floating rate system. The bank wanted to keep reserves on a pre-defined level, reduce excessive volatility that would put its inflationary target at risk, and to ensure stability of the financial sector and external relations. The interventions were effective during the first stage of the programme, i.e. when FX purchases through auctions were supported with a loose monetary policy. However, during the economic revival, conflicting messages were sent with FX interventions and interest rate increases. Appreciation pressure increased and so did speculative positions as investors expected the central bank to defend its inflationary target.</p>
Mexico	1996-2003	<p>From 1996 to 2001, after the peso crisis, the central bank organised auctions to sell dollar put options with a view to accumulating reserves. These measures did not impact the peso rate and proved effective. On top of that, from 1996 to 2003, the central bank made discretionary interventions to stabilise the peso rate. No specific FX rate was defended, though. The central bank would also sell US dollars to slow down the pace of accumulating reserves and reduce the cost of the same. According to IMF analysis (2004), the impact of FX interventions by way of FX sale was minor yet important from the statistical perspective. Statistical impact was no longer that significant in the case of currency purchase. IMF analyses confirm the assumptions adopted by the central bank, i.e. to minimise the impact of interventions on FX rates. According to IMF analyses, interventions do not help reduce or smooth out volatility. Contrary to the bank's intentions, sale of currency would usually add to volatility.</p>
Pakistan	2001-2006	<p>In July 2000, the rupee was freed and PKR/USD rate became highly volatile. FX market was shallow and the central bank launched interventions to reduce volatility. From September 2001 to March 2004, SBP bought US dollars to stop excessive appreciation of the local currency and protect exports. Then, starting from April 2004, the central bank sold USD as the rupee weakened in the wake of the growing current turnover deficit. The central bank successfully smoothed out FX movements and shaped the FX rate.</p>
Switzerland	1986-1995 2008-	<p>Analyses carried out by the central bank (1986-1995) show that interventions aimed to strengthen the Swiss franc were more effective than those designed to depreciate the local currency.</p> <p>Appreciation pressure emerged during the recent crisis as capital took flight away from more risk markets into secure assets. SNB interventions were driven by fears of deflation and were designed to weaken the Swiss franc or to reduce the appreciation pressure. However, the threat of deflation has disappeared, economic outlook has improved (compared with the Eurozone) and SNB is expected to increase interest rates earlier than ECB. That said, SNB interventions are not enough to reverse the trend, which is even stronger during risk aversion. One may argue that measures applied by SNB do slow down appreciation. On the other hand, FX reserves increased threefold.</p>
Turkey	2001-2003	<p>An analysis carried out by the central bank (CBRT) in 2004 shows that large-scale interventions are more effective in stopping domestic currency appreciation. CBRT intervened when monetary policy was relaxed during the appreciation trend of the Turkish lira. The appreciation began with the end of the crisis and abandonment of the crawling peg in 2001. Small-scale sale of foreign currency was designed to mark the presence of the central bank. The trend reversed with the first intervention and, after the second one, volatility decreased. Purchase of currency on the market (2002) did not trigger a higher volatility and broke TRY appreciation trend. In H2 2008, there were large scale and distant currency purchases through auctions. Such interventions did not impact volatility; they did weaken domestic currency but from the statistical perspective any changes in the trend were negligible.</p> <p>IMF analyses (2004) showed that from the statistical perspective the impact of FX interventions (purchase and sale alike) on FX rate was negligible; this was in line with the assumptions adopted by the central bank, i.e. to minimise the impact of interventions on FX rates. On top of that, FX sale reduced short-term volatility but increased the long-term one. According to IMF analyses, interventions are not useful in reducing or smoothing out volatility.</p>
Hungary	2003 2008-2010	<p>In January 2003, an intensive speculative attack was launched on the forint. Market players wanted to force the government to lower the forint band. Investors expected a higher inflation, quick accession to ERM2 and adoption of the euro. There were many recommendations in place supporting a stronger forint. Investors expected that the central bank would not cut interest rates in order to defend its inflationary target. With the then interest rates, central intervention would have been very costly. The central bank purchased € 5.3 bn in just two days, lowered interest rates, set the maximum threshold for deposit with the central bank at a low level and repulsed the attack. According to some analysts, despite pressure from the labour market and demand there were no fundamental reasons for the speculation. Players were not fully aware of the regulations, either (actually, consent from the government was required to lower the band). A higher supply of domestic currency triggered only a short-term reduction of interest rates. After the attack failed, majority of speculative positions were closed in just a couple of days and investors sustained severe losses. However, the central bank made a handsome profit and improved reliability of the Hungarian FX system. To keep the rate away from the strong end of the band, the central bank decided to relax its monetary policy. After the intervention stopped appreciation, MNB withdrew capital and began selling euro through auctions, official and unofficial sale. These measures proved effective and allowed the bank to avoid excessive volatility and to start playing in favour of appreciation again.</p> <p>Depreciation was not stopped despite an interest rate increase in late 2008, i.e. during stronger risk aversion. Forint was negatively affected by losses on bonds and investors' closing positions on the debt market. Please note, however, that PLN depreciation was even stronger. Over the recent months the central bank has responded to too quick appreciation with dovish comments on rates, interest rate cuts and verbal FX interventions.</p>



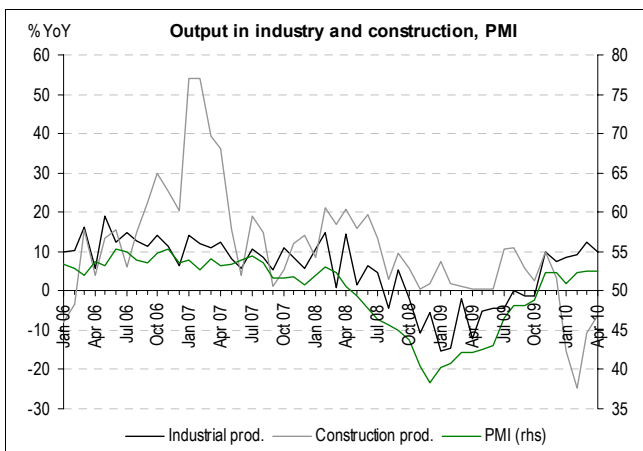
## Economic update



### Weaker GDP growth in H1, then rebound

▪ GDP growth in Q1 2010 slightly decelerated to 3.0%YoY and was roughly in line with expectations, although its structure has proved to be a bit surprising. Much deeper than expected decline in investment by 12.4%YoY (probably driven by heavy winter at the start of the year) has been offset in large part by solid performance of foreign trade and rebuilding inventories. Two latter factors may be better than earlier assumed also in the subsequent quarters. Private consumption growth slightly accelerated in Q1 to 2.2%YoY.

▪ In Q2 the GDP growth may decelerate further to below 3% due to temporary negative effects of the national mourning, and the flood, however, we expect economic recovery to continue in the subsequent quarters, so that GDP growth in 2010 may reach slightly above 3%.



### Weaker than expected data at the start of Q2

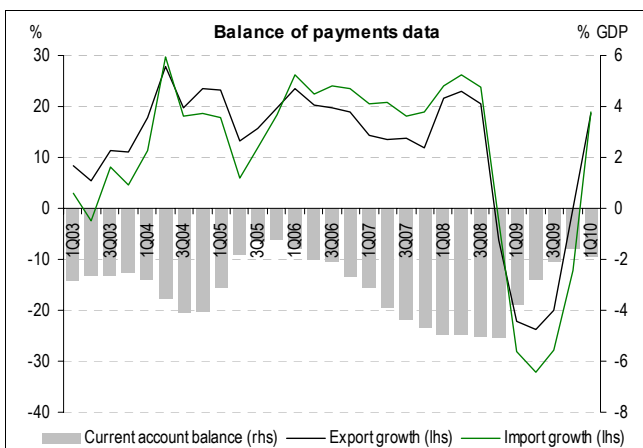
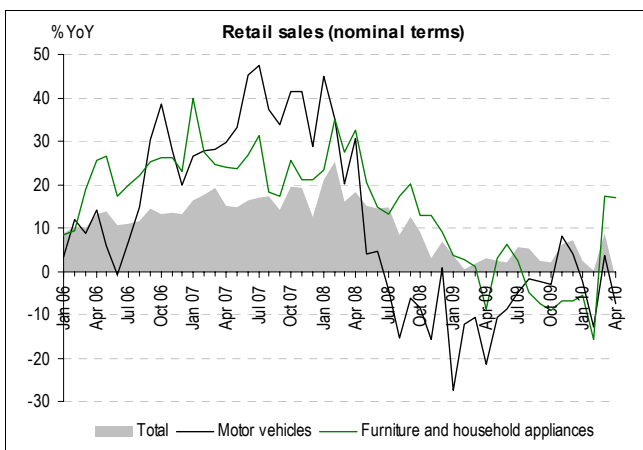
▪ Economic data for April confirmed that GDP growth in Q2 may be lower than in Q1. Industrial production rose in April by 9.9%YoY (seasonally adjusted growth reached 8.8%YoY, and was the lowest this year), while construction output fell by 6.1%YoY. Both results were below forecasts.

▪ Production for exports is still a key driver of economic recovery, which was confirmed by PMI survey for May (the highest growth in export orders for three years). The construction sector is recovering from first quarter's slump slower than we expected. In May, a new risk factor appeared – the flood – which probably had negatively affected economic activity, causing breaks in transport, supplies, and work in some areas.

▪ Polish manufacturing PMI dropped in May to 52.2 from 52.5 in April. Despite the deterioration in the main index, the data showed the maintenance of growth in industrial production at the pace seen in April. The growth rate of new orders weakened, but only in case of domestic orders.

▪ Retail sales data for April were much weaker than expected (annual decline of 1.6% in nominal terms instead of the expected growth of nearly 4%). However, it has to be remembered that the early Easter and the national mourning had significant impact on consumer behaviour in April.

▪ Also, the data about retail sales in May could not be a good measure of underlying consumption demand, due to impact of flood on households' behaviour. Nevertheless, one should notice that consumer sentiment is still improving, which was confirmed by surveys published recently by the CSO and Ipsos. This, together with improving situation in the labour market, allows to expect a revival in consumption growth in subsequent quarters.



### Clear rebound in foreign trade

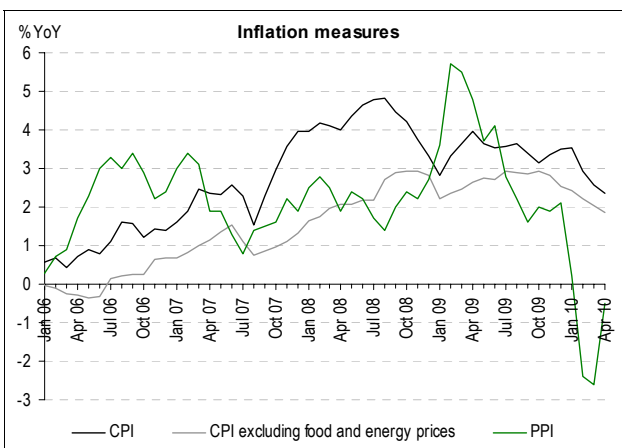
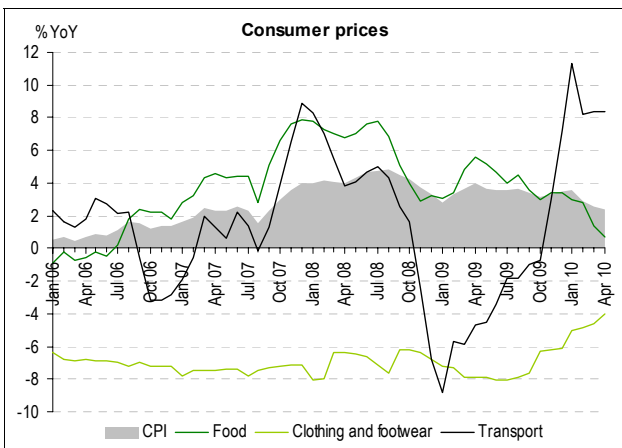
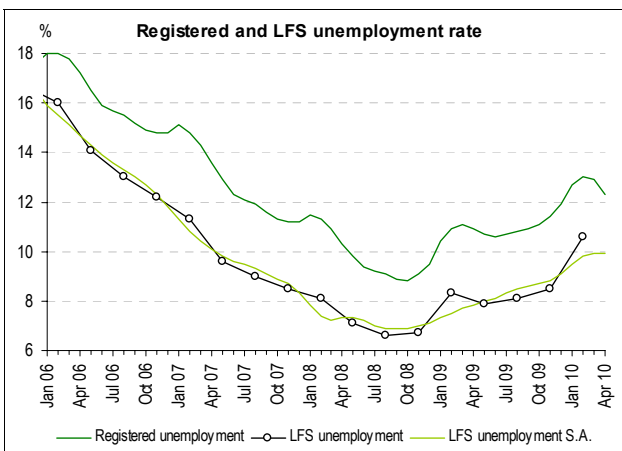
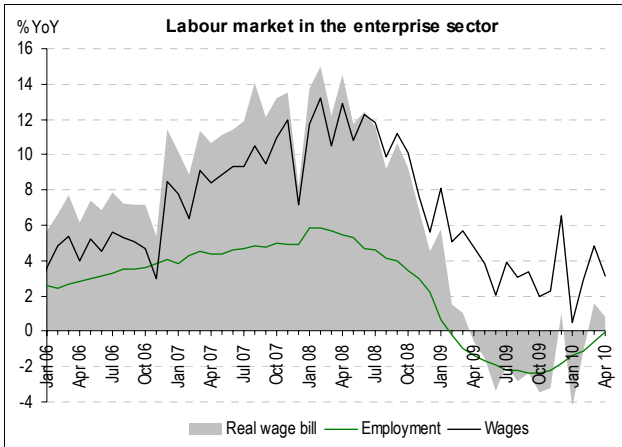
▪ Current account deficit in March reached €559m, in line with expectations. There was a significant acceleration in growth of foreign trade volume. Exports in euro terms increased by 24.1%YoY and imports by 27%. Exports measured in Polish zloty was at the highest level in history, which suggests that financial results of Polish exporters in Q1 may be record high as well.

▪ Surplus in services (€350m) has been achieved mainly through the transport sector, which confirms the recovery in foreign trade. Similar conclusions result from the business climate surveys among companies.

▪ Inflow of foreign direct investments remained at very high level – in March it was at nearly €1.3bn, and in the last twelve months exceeded €8bn.

Source: CSO, NBP, Reuters, own calculations

## Economic update



Source: CSO, NBP, own calculations

### Moderately positive signals from the labour market

Domestic data from the labour market in April were in general quite positive. Lower than expected growth in wages (3.2%YoY) was accompanied by a positive surprise in employment (0%YoY after 14 straight months of falling). In relation to March, average employment increased by 0.3%, which resulted from higher demand for labour across majority of branches in corporate sector. Thus, the change probably reflects a general trend in the labour market rather than a one-off change in one particular branch. Positive changes in the labour market are also confirmed by persistently high number of new job offers (at the highest level for two years).

A fall in registered unemployment rate to 12.3% (from 12.9% in March) was stronger than suggested by seasonal pattern – the number of unemployed fell by over 100,000 during the month, the most in three years.

According to LFS methodology, unemployment rate in Q1 reached 10.6%. Quarterly increase (by 2.3 pp) was stronger than in case of registered unemployment, which may be explained by the fact that a large part of employment in construction sector is unregistered, and thus a negative impact of extreme weather conditions in Q1 was more accurately reflected in FLS data than in official unemployment registers.

In the subsequent months improvement in the labour market may not be as fast as in April, as there will be no more effect of rebound after heavy winter. On the other hand, there will be a new effect of reconstruction of flood damage.

According to estimates of Labour Ministry, the registered unemployment rate fell in May to 12% (few weeks earlier they suggested it may be below 12%) and should keep coming down in subsequent months.

### Inflation below target, will keep falling

Inflation in April was slightly above expectations but fell to 2.4%YoY, being below the NBP's inflation target for the first time for 2.5 years. The most surprising element (again) was a substantial increase in prices of clothes and footwear, but it seems that it was rather temporary phenomenon. A significant rise in prices of food and fuel took place, but in other categories there was stabilisation of prices with no demand-side pressure.

Core inflation excluding food and fuel prices fell to 1.9%YoY in April. Other measures of core inflation decreased as well, confirming that the fundamental inflationary pressure is muted.

PPI growth in April was above forecast and reached -0.5%YoY. Prices increased mainly in production and processing of commodities and in subsequent months it may be continued due to zloty weakening.

In subsequent months we expect a further fall in inflation rate, although a pace of decline may be slightly slower than earlier assumed due to impact of zloty depreciation and potential impact of flood on food prices (although the latter should not be particularly strong). Inflation should return to the 2.5% target in the second half of the year.

The Ministry of Finance expects inflation to decline in May to 2.1%YoY, and to below 2% in June. According to the ministry, the forecast for May, however, is fraught with more uncertainty than usually, and the main risks are food prices, for which the ministry assumed a growth of only 0.1%MoM. In our opinion, the food prices increased more significantly (0.9%MoM), mainly due to a spike in the second half of the month under impact of flood. As a result, we predict that the CPI growth will be at 2.3%YoY in May.

## Central bank watch

### Selected fragments of the MPC statement in May

(...) as a result of the fiscal crisis in Greece and high uncertainty regarding the pace of curbing public finance imbalances in some other euro area countries, the short-term outlook for economic growth in this region has deteriorated. At the same time, fast economic growth is recorded in the largest emerging economies. The ensuing risk of strong increase in economic imbalances resulting from a boom leads to a gradual macroeconomic policy tightening in those countries.

Uncertainty connected with the fiscal crisis in Greece contributed to increasing volatility of asset prices in the international financial markets, including the prices of energy commodities. Growing risk aversion in the financial markets was also conducive to a marked depreciation of the exchange rate of the euro against the US dollar and to the depreciation of currencies of emerging economies, including the zloty.

In line with available forecasts, in the months to come the annual CPI will still be lowered by negative base effects connected with the surge in the prices of excise goods and food prices in 2009. Also economic factors will be conducive to lower inflation: currently low demand pressure and moderate growth of labour costs. In turn, inflation decline in 2010 may be reduced by rises in commodity prices in the world markets – though recently curbed – as well as by persistently elevated growth of some administered prices, including the prices of energy carriers and services related to house maintenance.

In the Council's assessment the probabilities of inflation running below or above the inflation target in the medium term are balanced.

An important factor affecting monetary policy is the situation of the public finance sector. Introducing measures aimed at permanently reducing the deficit of the general government sector and at curbing the increase of the public debt will support macroeconomic stability and will allow to meet the criteria for euro adoption.

The Council maintains the opinion that Poland should join the Exchange Rate Mechanism II and the euro area at the earliest possible date, after meeting the necessary legal, economic and organisational conditions.

### Profile of Marek Belka, new NBP Governor

Marek Belka, aged 58, is an economist, professor and academic teacher. He has published more than 100 scientific papers devoted primarily to the theory of money and anti-inflation policy in developing countries. He specialises in applied economics and contemporary economic thought. He has served twice as Deputy Prime Minister and Minister of Finance in two Polish governments. From 2 May 2004 to 31 October 2005 he also served as Prime Minister. Before that, he was Director of Economic Policy in the Coalition Provisional Authority in Iraq, where he was responsible for the currency reform, the development of a new banking system and supervision of the economy. Having stepped down as prime minister, he was appointed Executive Secretary of UN Economic Commission for Europe (UNECE). In January 2009, he was appointed Director of European Department at the International Monetary Fund.

### Result of voting on new NBP Governor

	Yes	No	Abstain	Absent
PO	202	1	-	3
PiS	-	149	-	7
Lewica	39	-	-	4
PSL	-	26	-	5
Polska Plus	-	6	-	1
SDPL	4	-	-	-
DKP SD	3	-	-	-
independent	5	2	-	3
<b>SUM</b>	<b>253</b>	<b>184</b>	<b>-</b>	<b>23</b>

Source: NBP, PAP, Reuters

### In June it will be more interesting

- As expected, the Monetary Policy Council did not change interest rates (reference rate still at 3.5%) or the informal bias in the monetary policy. In the official communiqué released after the meeting the Council noticed further signals of economic recovery abroad and its uneven spread as well as deterioration of short-term economic growth prospects in some euro zone countries due to fiscal crisis. The Council noted that the crisis also resulted in the zloty weakening, though it is hard to find a more detailed comment on this issue.

- As regards the Polish economy, the Council emphasised a continuing economic recovery, gradual improvement in the labour market situation, though with still moderate growth in wages and low level of capacity utilisation. Summing up anti- and pro-inflationary arguments the Council noticed still low demand pressure, and on the other hand pointed to the risk in the form of commodity prices and administered prices.

- Overall, it appears that the Council's assessment regarding the situation in the Polish economy has not changed substantially. Possible deterioration of the prospects for GDP growth in the euro area and the consequent postponement of rates hikes by the ECB, may act in the direction of later monetary tightening in Poland. However, on the other hand, the recently observed weakening of the zloty and possible inflationary effects of the flood on food prices, together with the ongoing economic recovery in Poland, may act in the opposite direction. Therefore, we do not change our forecasts that interest rate hikes cycle will begin in Q4 and the total scale of hikes will amount to 100bps until the end of 2011. Undoubtedly, a very important factor for assessment of the medium-term inflation prospects by the MPC will be the new NBP projection for CPI and GDP, which will be revealed this month.

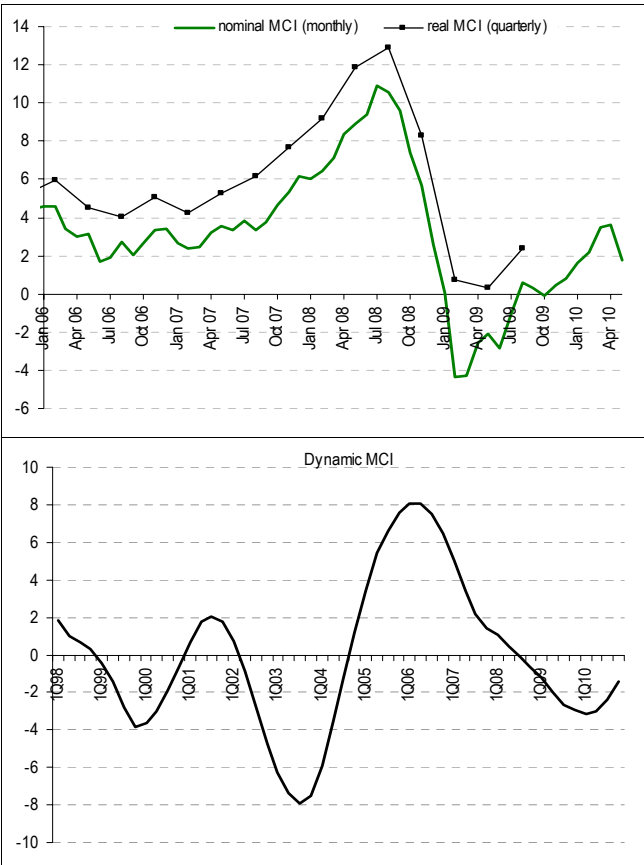
### Marek Belka – new President of the NBP

- The Sejm speaker and acting President Bronisław Komorowski decided to indicate his candidate for the post of the NBP Governor before the presidential election. It is not certain whether he surprised colleagues from the PO, but surely the minor coalition partner was not consulted. Together with the opposition PiS, PSL did not support this candidature. This was mostly due to procedural reasons, though deputy PM Waldemar Pawlak mentioned a number of Belka's characteristics he did not like. Anyway, Belka was supported by the coalition PO-SLD

- In our opinion, Marek Belka meets most of the attributes of a top central banker. Marek Belka has vast academic experience (papers mainly on monetary policy), broad understanding of financial markets and economic knowledge as well as a lot of experience in government, advisory and scientific institutions. Belka has also managerial abilities necessary to head large institution and he is a known figure in the international stage.

- We assume Marek Belka will present a pragmatic approach and would be positioned somewhere in the middle of the MPC members' "restrictiveness" ranking, though perhaps with a slight shift toward "dovish" side. The last IMF report on Poland released in April, which was approved by Belka, suggested that one should not be in hurry with monetary policy tightening and in case of zloty appreciation, interest rate cuts could be considered. Marek Belka's appointment gives some hope that conflicts within the MCP will be moderated. First Belka's comments suggest current monetary policy will be continued.

# Restrictiveness of the Monetary Policy (Council)



- We decided to update our Monetary Condition Index in order to include changes observed in the Polish economy since 2007. Therefore, we re-estimated weights of interest rates and exchange rates taken into account when calculating MCI. The rising openness of the Polish economy (and with lower effectiveness of domestic interest rates due to higher share of FX denominated loans) led to changes in relative importance of both elements. The weight of interest rates lowered, while that of exchange rate increased when their impact on inflation is taken into account. In other words, the so-called MCI ratio i.e. relation of interest rate and exchange rate weights fell to 1.5 from 1.8. Nevertheless, this change did not lead to substantial changes in MCI developments. Nominal MCI fell in May as a result of lower three-month WIBOR and higher EURPLN rate.

- Also, we calculate the so-called dynamic MCI i.e. the MCI which takes into account the lagged influence of both interest rate and exchange rate on inflation (different for both of variables). Due to its construction, contrary to a standard MCI, the dynamic MCI does not indicate the level or changes in restrictiveness of monetary policy, but this may be rather an indicator of inflation pressure intensity connected with previous changes in monetary policy instruments (FX rate and interest rates, excluding possible impact of other indicators).

- The dynamic MCI for Poland shows that starting 2006 until the end of 2009 intensification of inflation pressure connected to monetary conditions was in the downward trend, as a result of higher real interest rates in 2004-06 as well as appreciation of REER in 2Q04-3Q08 period. In the following quarters this pressure may be higher due to fall in real rates since the end of 2008 and depreciation of real exchange rate in 2009.

Filar 1.63 (1.61)

Wasilewska-Trenkner 1.59 (1.48)

Noga 1.53 (1.52)

Wojtyna 1.50 (0.91)

Stawiński 1.25 (0.91)

Czekaj 1.00 (0.86)

Owsiak 0.88 (0.91)

Nieckarz 0.88 (0.83)

**Skrzypek** 0.81 (b.d.)

Pietrewicz 0.80 (0.74)

Winięcki

Rzońca

Zielińska-Głębocka

Bratkowski

Belka

Hausner

Chojna-Duch

Gilowska

Glapiński

Każmierczak

## First comments of new NBP governor did not surprise

After nomination for the position of NBP Governor (as well as during examination by the parliamentary Public Finance Committee) professor Marek Belka presented his view on macroeconomic policy. He said that under inflation targeting strategy the central bank should not indicate any levels of preferred exchange rate, but FX interventions are possible in order to limit excessive movements of the currency. When assessing current and previous monetary policy, he said it was appropriate. In his opinion, Poland should join the euro zone in a favourable moment, when the economy is ready. He refused to indicate a date. What is interesting, his answers to some questions were rather indirect (i.e. when the first rate hike? what GDP growth forecast for 2010?). He even emphasised that central banker should be restrained with comments. We hope that the new MPC chairman will be to convince to such point of view also some other members of the Council.

Most MPC members reacted positively to the nomination, however Adam Glapiński (similarly to politicians from PiS and PSL) said that a way of NBP Governor election is "outrageous" and the decision should be made only after the presidential election.

## FCL problem solved? Time to analyse interest rates

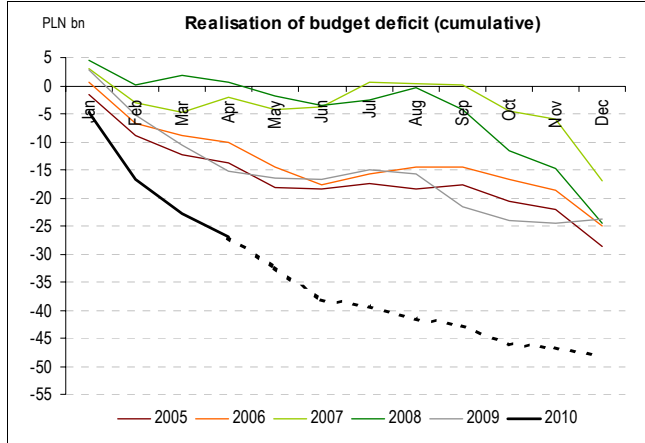
Acting NBP president Piotr Wiesiołek said that the NBP received a modified stance of the Ministry of Finance regarding the flexible credit line from the IMF, and the NBP gave its positive opinion and is ready to back the motion for FCL. It means that after the conflict within the NBP was solved as regards NBP profit for 2009, the flexible credit line will recede into background as well. Therefore, the MPC will spend more time on analysing the optimal path of interest rate and exchange rate, especially in the context of new GDP and CPI projection,.

Wiesiołek said also there was a threat to inflation from food prices, though the CPI growth should be near inflation target and interest rates should stay unchanged till the year-end. Obviously, this opinion should not have any impact on expectations regarding official rates. Wiesiołek added that reaction of the zloty to events in Hungary was emotional.

Description regarding the index of MPC members' restrictiveness is available in previous MACROscope editions.

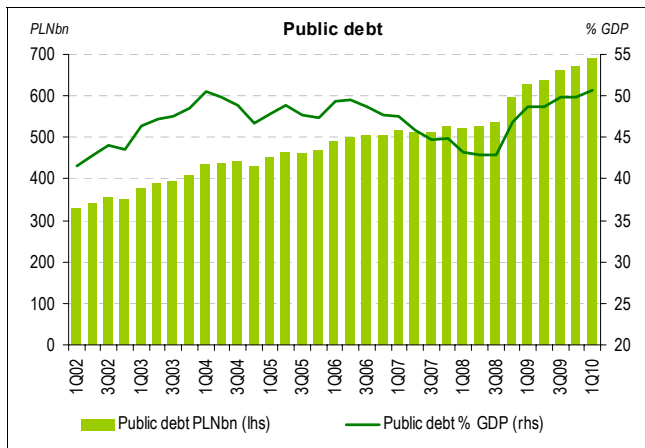
Source: CSO, Eurostat, NBP, own calculations

## Government and politics



### Is the flood going to hurt budget execution?

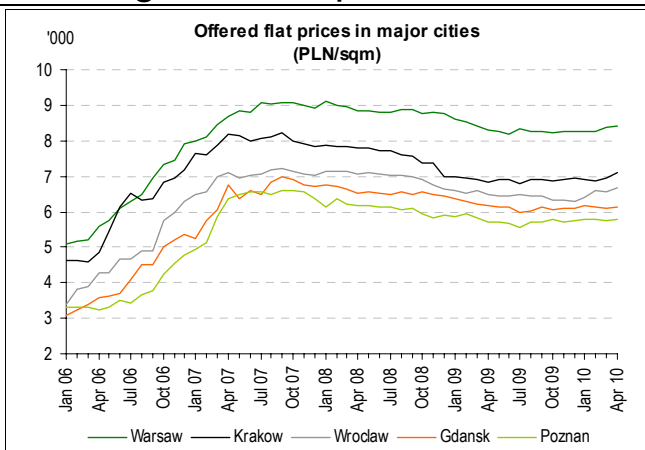
- Budget deficit in April amounted to PLN27.04bn, or 51.8% of the annual plan. The result was PLN5.6bn below the level planned in the schedule of budget implementation. According to MinFin, after May the deficit was still clearly below the schedule, but the difference could be less than a month earlier.
- In April, quite a good result was reported primarily in indirect taxes (up 26.4%YoY). PIT revenues were significantly lower than last year, however this probably resulted mainly from the effects of lowering tax rates in 2009 (settlement of annual tax).
- Estimates of the costs of flood and their impact on the budget are not yet known, but they should not lead to budget amendment. Funds for flood damage and compensation will come from reserves and transfers from other purposes.



### Spending rule better than nothing but not enough

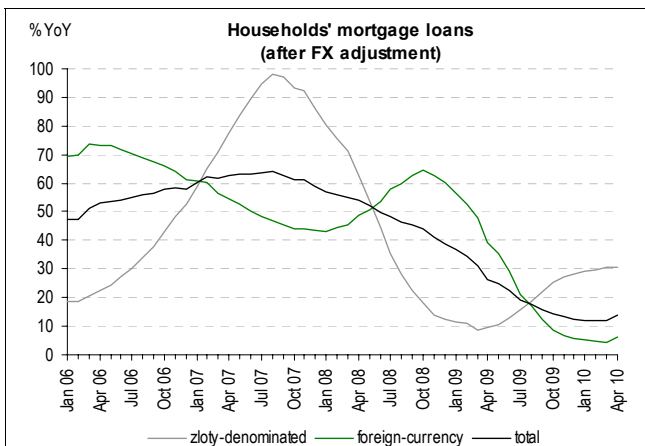
- According to the MinFin, the “disciplinary rule” assuming limit of 1% spending growth above inflation, will be implemented in construction of 2011 budget, which will bring savings of PLN3bn next year and PLN8.5bn in 2011-12.
- In our opinion, it is hard to say there will be any savings, as limiting spending growth as compared to previous years is a necessity anyway (and was taken into account in Convergence Programme).
- We positively perceive formal commitment to limit spending, but please note that the rule concerns only one fourth of central budget expenditures, which in turn are only a half of total spending of the public finance sector. In July we will learn some more details concerning the next year’s budget.

## Housing market update



### House prices slightly up

- House prices in the secondary market inched up in April and May, although the upward trend is not too strong and well established and not confirmed by some data sources (especially in the case of smaller cities).
- The supply of apartments on the secondary market still outnumbers the demand. However, the brokers reported a rising number of deals that may suggest demand’s recovery.
- The number of new projects launched by the developers is rising.
- In larger cities there is still considerably bigger supply than the demand of apartments for rent. Such ratio has a negative impact on the rent prices, mainly for larger apartments.

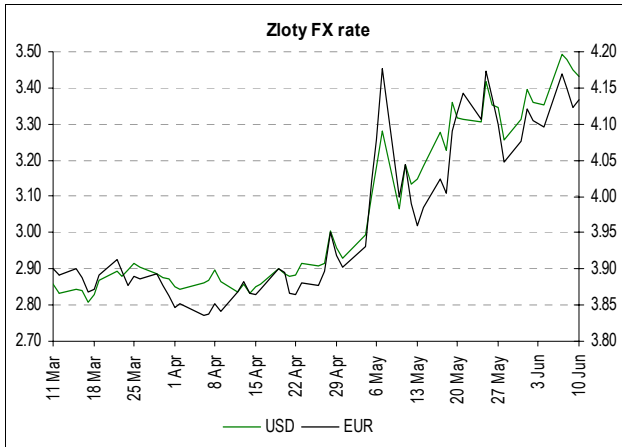


### The demand for the mortgage loans rising

- Households are getting more and more interested in buying apartments. Milder bank credit requirements, stabilization of the interest rates, government support schemes and the recovery of the job market seem to be decisive factors that fuel the demand.
- Mortgage loan growth started accelerating. Loans denominated in the polish zloty are the most popular (their increase in the first four months of the year was over threefold than of foreign currency loans, adjusted by FX fluctuations), though banks are gradually enhancing their offer of foreign currency mortgage loans.
- The Financial Supervision Authority announced possible further restrictions if the number of foreign currencies denominated mortgage loans rises too fast in coming months.

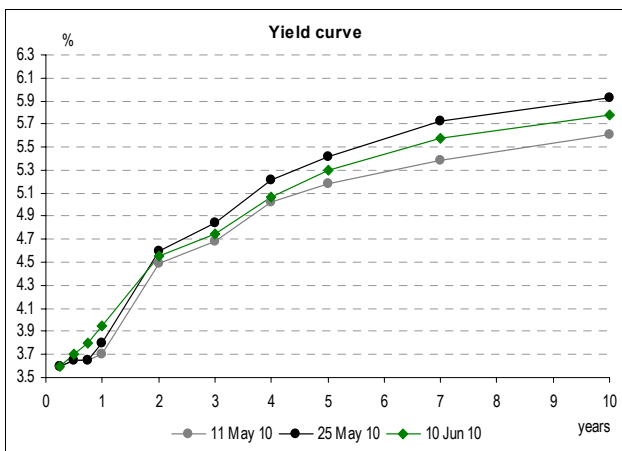
Source: Ministry of Finance, CSO, NBP, szybko.pl, own calculations

# Market monitor



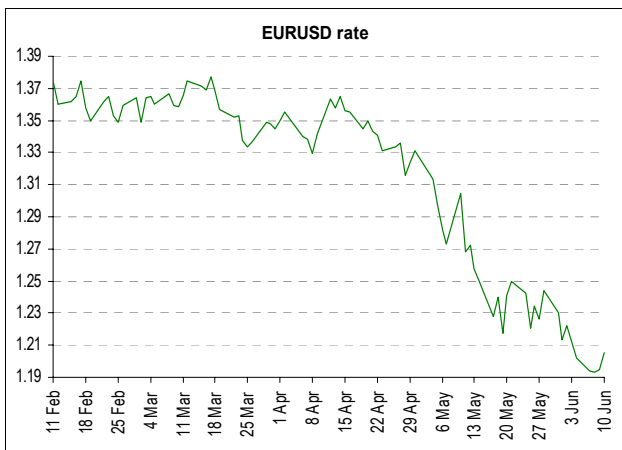
### Zloty under pressure of negative moods and weak euro

- Last month the zloty was under negative pressure of events in the EU. After recovery of the zloty to 3.94 in reaction to acceptance of the EU and IMF stabilisation package for the euro zone and amid BGK activity in the market, next weeks brought another increase of risk aversion and weaker zloty (ca. 4.20) after introduction of ban on short sale of bonds, CDS and stocks in Germany, and comments from Hungary on supposed similarity to Greek situation.
- Technical analysis does not explicitly indicate direction for the zloty. The EURPLN rate will be limited from the upside by range of 4.18-4.20 with possible presence of MinFin (through BGK) above this band, and from the downside the support is at 4.08 (next levels are: 4.04 and 4.00). The zloty may head in this direction after breaking the rising trend line. The strengthening of the zloty may be still disturbed by return of pressure on the euro.



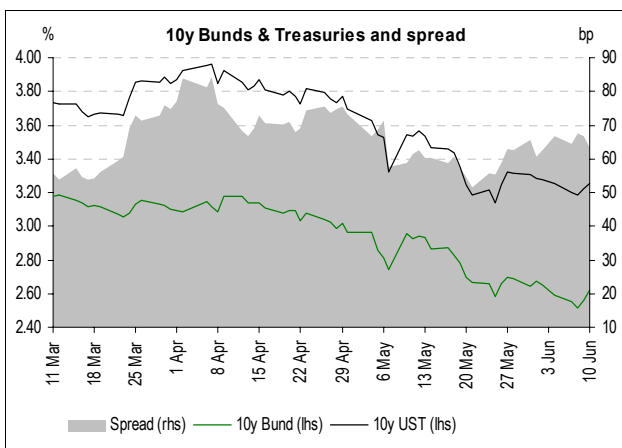
### Significant weakening of Polish bonds

- Last month there was a significant weakening in the debt market. Bond market behaved similar to the FX market. Since the half of May in the next weeks yields were rising. The longer end of the curve might have been negatively affected by events in the region and comments of the Prime Minister and finance minister that the euro was not a top priority. During a month there was a yield curve flattening due to higher increase of yields at the shorter end of the curve. There was also a significant increase of asset swap spread.
- We expect some recovery in bond market amid assumed slight zloty strengthening. Domestic data should have small influence on the market, though the CPI data (our forecast and MinFin forecast below market consensus), as well as retail sales data, may act toward lower market rates at shorter end. Comments of the new NBP Governor on monetary policy may be more important.



### Heavy euro sell-off

- Euro rebound after accepting the EU&IMF stabilisation package was temporary and EURUSD rate fell to 1.22. Another increase to 1.26 resulted from speculation on central banks intervention. Later there was a series of negative events such as: ban on short sales of bonds, CDS and some stocks in Germany, increased tension in the Korean Peninsula, speculation that China may limit the purchase of euro zone countries debt, ECB warning on possible further losses of European banks and speculation on problems in Hungary. This resulted in a sharp drop of EURUSD, temporarily below 1.20.
- The euro should stay under pressure. Factors, which contributed to weaker euro will not disappear soon, though the pace of the euro depreciation may decelerate, if data show that weaker single currency supports the European economy. Divergence of the EURUSD rate and MACD would supports euro rebound.

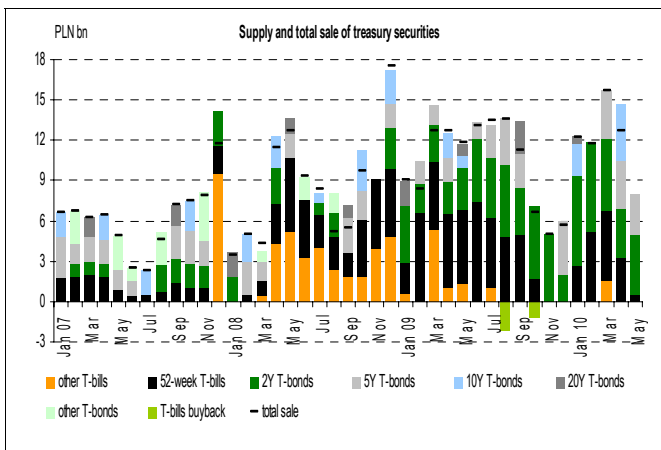
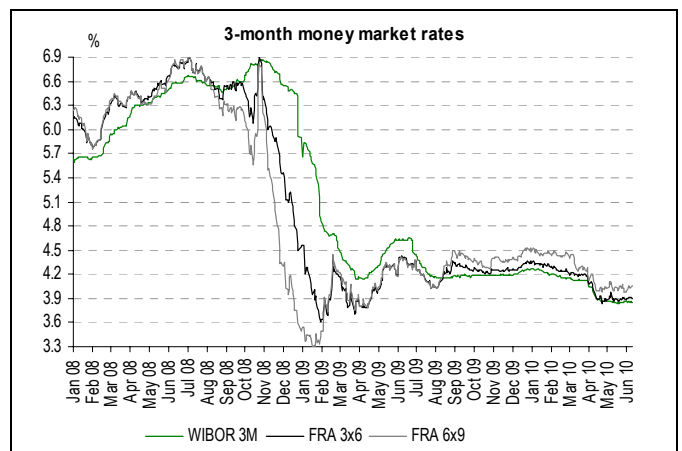
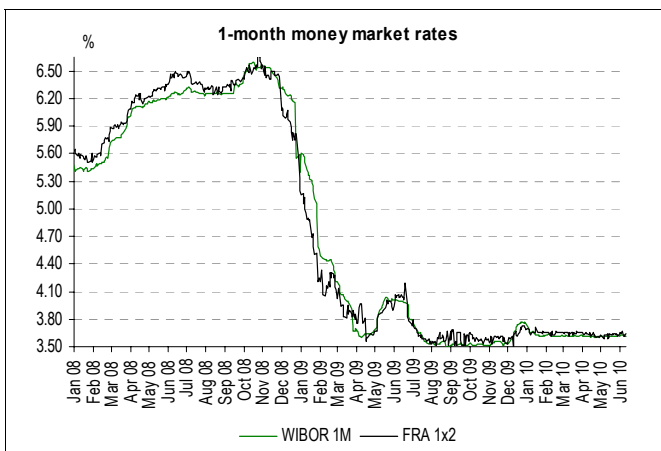
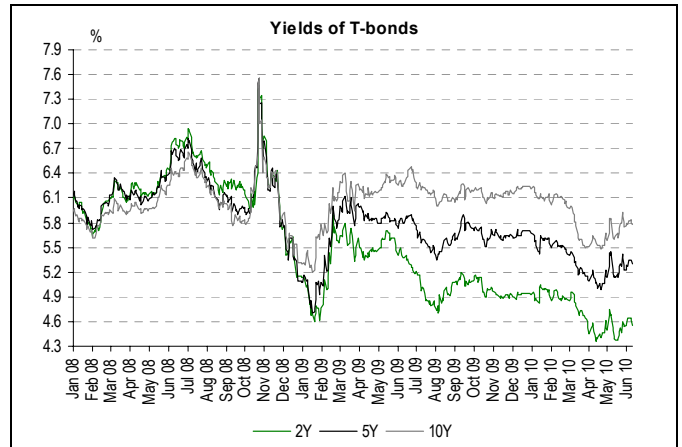
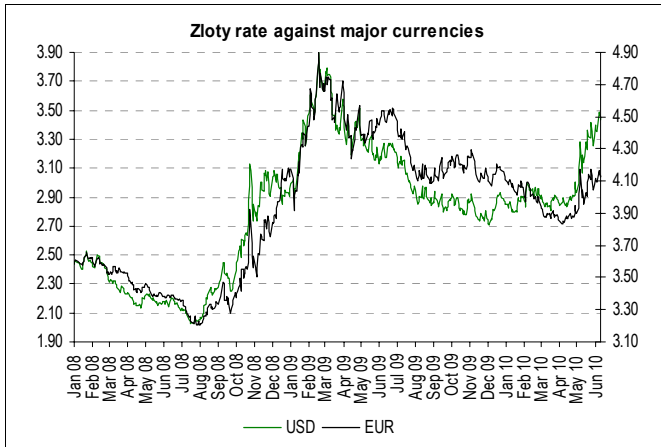


### Yields of German bonds at record low levels

- Series of events, which negatively affected the euro, risk appetite and stock prices last month contributed to significant strengthening in the core debt markets (yields decline of 25-30 bp). After accepting the stabilisation package of the EU and IMF there was narrowing of spreads between PIIGS bonds and Bunds, though the Bunds and Treasuries strengthening was continued. Yields of German bonds declined across the curve to record low levels.
- As there are concerns the pace of economic recovery in the US decelerates in H2 the prospects of interest rate hikes in the US is remote (we expect first rate move in 2011), which will slow down the recovery of bond yields. Along with the expected fiscal tightening in the euro zone the monetary policy is going to stay loose for a long time (well into 2011), which will also decelerate rebound in market rates.

Source: Reuters, BZ WBK

# Market monitor



Treasury bills auctions (PLN m)		
Auction date	OFFER	DEMAND/SALE
22.03.2010	52-week:700-1200; 39-week:1000-1500	2653/1150; 2862/1498
29.03.2010	52-week.: 700-1000	2637/1000
1.04.2010	52-week: 700-1000	4409/760
12.04.2010	52-week: 700-1000	4429/855
19.04.2010	52-week: 700-800	3941/750
26.04.2010	52-week: 400-500	2183/500
30.04.2010	cancelled	cancelled
10.05.2010	52-week: 400-500	2632/500
17.05.2010	52-week: 600-1000	1886/676
24.05.2010	52-week: 600-1000	1518/794
7.06.2010	52-week: 1100-1600	4096/1458
14.06.2010	52-week: 800-1200	-
21.06.2010	52-week: 600-1000	-

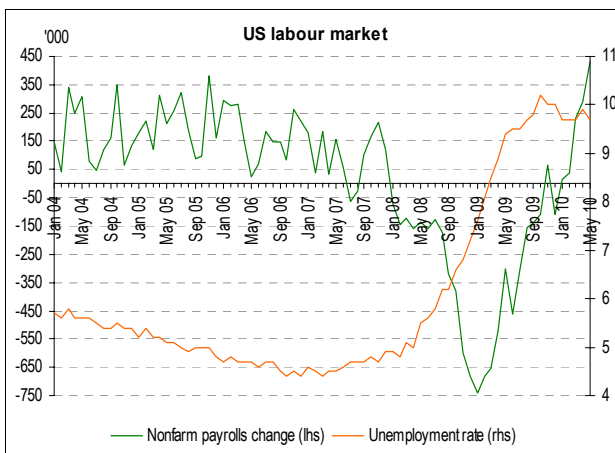
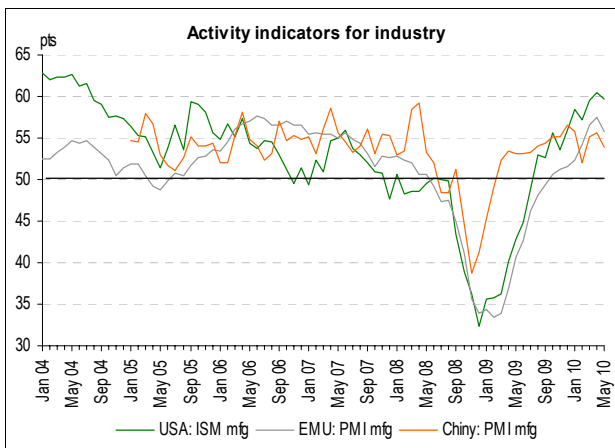
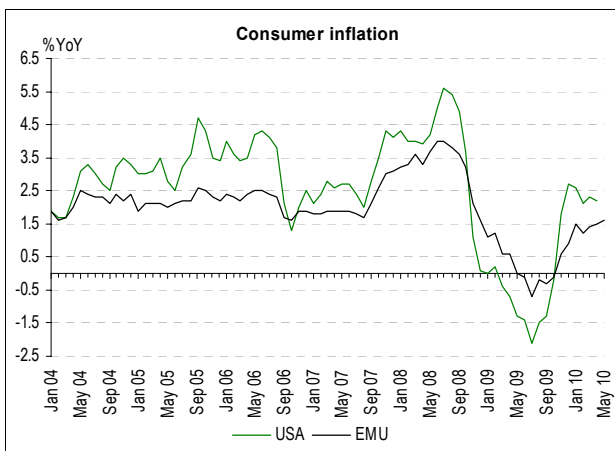
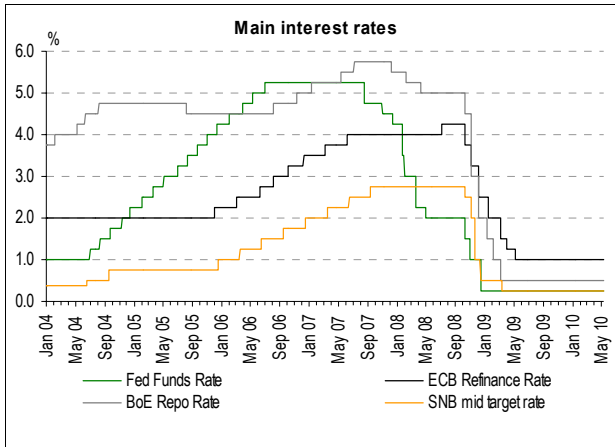
\* based on data of the Ministry of Finance

## Treasury bond auctions in 2009/2010 (PLNm)

month	First auction			Second auction			Switch auction				
	date	T-bonds	offer	sale	date	T-bonds	Offer	sale	date	T-bonds	sale
July	1.07	OK0112	3000-4500	4006	15.07*	PS0414	1000-2000	-	8.07	PS0414/ DS1019	0/1982
August	5.08*	OK0112	3900-5400	5402	12.08	PS0414	2000-3500	3500	-	-	-
September	2.09	OK0112	2500-3500	3500	9.09	PS0414	1000-2500	1109	23.09*	WS0922	1000-2400/2400
October	7.10*	OK0112	3000-5400	5400	-	-	-	-	29.10	PS0413/PS0414/DS1019	1573/1753/1290
November	10.11	OK0712	3500-5000	5000	-	-	-	-	26.11	OK0712/P0414	1121/2243
December	2.12	OK0712/PS0415	3000-6000	5651	-	-	-	-	16.12	-	-
January	13.01*	OK0712	6600	6600	20.01*	DS1019/WS0429	2400/600	2409/591	6.01	PS0415/WZ0118	2494/2383
February	10.02*	OK/PS	6600	6600	17.02	DS/WS/WZ/IZ	-	-	3.02	-	-
March	10.03	OK0712	3500-5400	5448	17.03	WZ0121	2000-3600	3600	3.03	PS0415/DS1019/WS0429	1784/2662/315
April	7.04	OK0712	2500-3600	3219	14.04	DS1020	2000-4200	3600	21.04**	PS0415	3600/3000***
May	5.05	OK0712	2500-4500	3700	12.05	PS0415	1500-3000	2989	27.05	WZ0121	422
June	2.06	OK0712	3000-5400	5400	16.06	DS/WS/WZ/IZ	-	-	23.06	-	-

\* with supplementary auction, \*\* primary auction, \*\*\* demand/sale

## International review



Source: Reuters, ECB, Federal Reserve

### ECB buys euro zone sovereign bonds

▪ According to the Fed minutes from the last FOMC meeting in April, released in the evening, the bank raised its GDP forecast, though it still considers that the slowdown will be visible by some time, and the inflation pressure will be limited. The opinion of the most of the FOMC members was that one should not hurry with the sale of banking assets connected with mortgage loans. The views of Fed members were quite consistent on need for interest rates to stay low for extended period. In June Fed chairman Ben Bernanke said that moderate economic recovery in the US should be continued despite weak situation in the housing market and high unemployment. In his opinion, it will take time until 8.5 million jobs lost in the past two years will be restored, and the Fed will take steps to promote recovery.

▪ As expected the ECB left main rate unchanged at 1%. The conclusions from the ECB meeting indicate the bank will not hurry with interest rate hikes. New economic forecasts of the ECB showed slight improvement of 2010 GDP growth estimate to 1%YoY and deterioration of 2011 GDP estimate to 1.2%. The ECB expects inflation at levels of 1.5%YoY and 1.6%YoY respectively, which points that interest rates may stay at low level well into 2011. J.C. Trichet said that bond purchases of the euro zone countries are temporary and are not quantitative easing as they are sterilised.

▪ Data on the US inflation showed decline of the CPI in April by 0.1%MoM (+2.2%YoY) against expected increase by 0.1%. Core inflation after excluding the energy and food prices remained unchanged in monthly terms (0.9%YoY) against expected increase of 0.1%.

▪ According to preliminary estimates of the Eurostat inflation in the euro zone in May was at 1.6%YoY, which was in line with expectations rising from 1.5%YoY in April.

### Slowdown of activity recovery in manufacturing

▪ The PMI index for Chinese manufacturing fell in May to 53.9 pts from 55.7 against expected smaller drop to 54.5 pts.

▪ PMI for euro zone manufacturing fell in May to 55.8 pts below preliminary reading of 55.9 from 57.6 in April. German PMI crucial form the point of the view of Polish exports declined less than expected from 61.5 to 58.4. PMI for euro zone services rose in May to 56.2 pts against 55.6 pts in April (56 was expected).

▪ Retail sales in the euro zone declined in April by 1.2%MoM after increase of 0.5% in March (analysts expected increase of 0.1%MoM). Economic sentiment index in the euro zone unexpectedly fell in May to 98.4 pts from 100.6 pts in April after correction against expected stabilisation.

▪ ISM activity index for the US manufacturing fell in May to 59.7 pts from 60.4 pts and was above expectations at 59.0. This was supported by exports orders. Meanwhile the ISM index for the services sector remained unchanged in May at 55.4 pts (vs. expected increase to 55.6). US retail sales disappointed in May (falling first time in 8 months by 1.2%MoM vs. expected increase of 0.2%) due to end of government rebate. Meanwhile consumer sentiment reports are still positive.

▪ GDP euro zone in Q1 rose by 0.6%YoY s.a. (0.2%QoQ) above expected 0.5%YoY (0.2%QoQ). US data on Q1 GDP were downwardly revised to 3.0% from 3.2%, while market expected revision to 3.4%.

▪ In May, the US non-farm payrolls increased by 431,000 jobs versus 290,000 in the previous month and expected increase of 513,000. Out of this, 411,000 was related to temporary census hiring, while the private sector employed only 41,000 people, less than expected. At the same time, the unemployment rate in May stood at 9.7%, down from 9.9% in April, and was below expectations at 9.8%, due to depletion of the workforce.



## Economic calendar

Monday	Tuesday	Wednesday	Thursday	Friday
<b>14 June</b> <i>PL: Auction of Treasury Bills</i> <i>PL: Money supply (May)</i> EZ: Industrial production (Apr)	<b>15</b> <i>PL: CPI (May)</i> DE: ZEW index (Jun) US: Import prices (May) US: NY Fed index (May) US: Capital flows (Apr) JP: BoJ decision	<b>16</b> <i>PL: 10Y bond auction</i> <i>PL: Balance of payments (Apr)</i> EZ: Final HICP (May) US: Building permits (May) US: Industrial production (May) US: PPI (May) US: Capacity use (May)	<b>17</b> <i>PL: Wages and employment (May)</i> CH: SNB decision US: CPI (May) US: Leading indicators (Apr) US: Philly Fed index (Jun)	<b>18</b> <i>PL: Industrial output (May)</i> <i>PL: PPI (May)</i>
<b>21</b> <i>PL: Auction of Treasury Bills</i>	<b>22</b> <i>PL: Core inflation (May)</i> <i>PL: Business climate indicators (Jun)</i> DE: Index Ifo (Jun) US: Home sales (May) US: House prices (Apr)	<b>23</b> <i>PL: Switch auction</i> <i>PL: Wages and employment (Apr)</i> EZ: Flash manufacturing PMI (May) EZ: Flash services PMI (May) US: New home sales (Apr) US: Fed meeting	<b>24</b> <i>PL: Retail sales (May)</i> <i>PL: Unemployment rate (May)</i> <i>PL: MPC minutes (May)</i> US: Durable goods orders (May)	<b>25</b> US: final GDP (1Q) US: Final Michigan (Jun)
<b>28</b> <i>PL: Auction of Treasury Bills</i> EZ: M3 money supply (May) US: Core PCE (May)	<b>29</b> <i>PL: MPC meeting</i> <i>PL: Balance of payments (1Q)</i> EZ: Economic sentiment (Jun) US: Case/Shiller index (Apr)	<b>30</b> <i>PL: MPC meeting-decision</i> EZ: Flash HICP (Jun) US: ADP report (May) US: Chicago PMI (Jun)	<b>1</b> <i>PL: PMI (Jun)</i> EZ: Manufacturing PMI (Jun) US: Manufacturing ISM (Jun) US: Pending home sales (May)	<b>2</b> EZ: PPI (May) US: Non-farm payrolls (Jun) US: Unemployment rate (Jun) US: Industrial orders (Jun)
<b>5</b> <i>PL: Auction of Treasury Bills</i> EZ: Services PMI (Jun) EZ: Retail sales (May)	<b>6</b> <i>PL: MPC meeting</i> US: ISM services sector (jJun)	<b>7</b> <i>PL: 2Y bond auction</i> EZ: Revised GDP growth (1Q)	<b>8</b> EZ: ECB decision	<b>9</b> US: Wholesale inventories (May)
<b>12</b> <i>PL: Auction of Treasury Bills</i>	<b>13</b> <i>PL: Balance of payments (May)</i> <i>PL: CPI (Jun)</i> DE: Index ZEW (Jul) US Trade balance (May)	<b>14</b> <i>PL: 5Y bond auction</i> <i>PL: Money supply (Jun)</i> EZ: Industrial production (May) EZ: Final HICP (Jun) US: Import prices	<b>15</b> US: NY Fed index (Jun) US: PPI (Jun) US: Capacity use (Jun) US: Industrial production (Jun) US: Philly Fed index (Jul)	<b>16</b> US: CPI (Jun) US: Capital flows (May) US: Preliminary Michigan (Jul)

Source: CSO, NBP, Ministry of Finance, Reuters.

## MPC meetings and data release calendar for 2010

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
MPC meeting	25-26	23-24	30-31	27-28	24-25	29-30	6	23-24	28-29	26-27	23-24	21-22
MPC minutes	21	19	18	22	20	22	20	20	21	20	22	21
GDP*	-	-	2	-	31	-	-	30	-	-	30	-
CPI	14	15 <sup>a</sup>	15 <sup>b</sup>	15	14	15	13	13	14	13	15	14
Core inflation	21	-	22	22	21	22	20	20	21	20	22	21
PPI	21	18	17	20	20	18	19	18	17	19	19	17
Industrial output	21	18	17	20	20	18	19	18	17	19	19	17
Retail sales	28	23	24	23	26	24	-	-	-	-	-	-
Gross wages, employment	19	16	16	19	19	17	16	17	16	18	18	16
Unemployment	28	23	24	23	26	24	-	-	-	-	-	-
Foreign trade	about 50 working days after reported period											
Balance of payments*	-	-	31	-	-	29	-	-	-	-	-	-
Balance of payments	15	12	12	13	17	16	13	11	-	-	-	-
Money supply	14	12	12	14	14	14	14	13	-	-	-	-
NBP balance sheet	7	5	5	7	7	7	7	6	-	-	-	-
Business climate indices	22	22	22	22	21	22	22	20	22	22	22	22

\* quarterly data, <sup>a</sup> preliminary data for January, <sup>b</sup> January and February

Source: CSO, NBP

## Economic data and forecasts

### Monthly economic indicators

		May 09	Jun 09	Jul 09	Aug 09	Sep 09	Oct 09	Nov 09	Dec 09	Jan 10	Feb 10	Mar 10	Apr 10	May 10	Jun 10
PMI	pts	42.5	43.0	46.5	48.2	48.2	48.8	52.4	52.4	51.0	52.4	52.5	52.5	52.2	52.8
Industrial production	%YoY	-5.2	-4.5	-4.4	0.1	-1.3	-1.3	9.9	7.4	8.5	9.2	12.5	9.9	8.9	9.4
Construction production	%YoY	0.3	0.5	10.7	11.0	5.7	2.7	9.9	3.2	-15.3	-24.7	-10.9	-6.1	-4.6	-1.4
Retail sales <sup>a</sup>	%YoY	2.4	2.1	5.7	5.2	2.5	2.1	6.3	7.2	2.5	0.1	8.7	-1.6	2.2	4.1
Unemployment rate	%	10.7	10.6	10.7	10.8	10.9	11.1	11.4	11.9	12.7	13.0	12.9	12.3	11.9	11.5
Gross wages in enterprises sector <sup>a</sup>	%YoY	3.8	2.0	3.9	3.0	3.3	2.0	2.3	6.5	0.5	2.9	4.8	3.2	4.4	3.8
Employment in enterprises sector	%YoY	-1.7	-1.9	-2.2	-2.2	-2.4	-2.4	-2.2	-1.8	-1.4	-1.1	-0.6	0.0	0.5	1.0
Export (€)	%YoY	-20.6	-21.3	-22.8	-20.6	-17.0	-10.8	1.0	12.4	11.9	20.1	24.1	22.3	22.2	21.9
Import (€)	%YoY	-30.7	-30.6	-29.3	-27.0	-26.8	-20.9	-11.0	-3.3	7.6	22.1	27.0	24.1	24.3	22.6
Trade balance	EURm	-26	-279	-445	-420	59	-185	-288	-645	-205	-233	-514	-400	-200	-400
Current account balance	EURm	-405	-232	-776	-116	-250	-342	-1 433	-959	-754	155	-559	-670	-550	-600
Current account balance	% GDP	-3.5	-3.0	-3.0	-2.8	-2.3	-1.9	-1.9	-1.6	-1.6	-1.8	-2.0	-2.0	-2.1	-2.2
Budget deficit (cumulative)	PLNbn	-16.4	-16.7	-15.0	-15.6	-21.5	-24.0	-24.4	-23.8	-4.8	-16.7	-22.7	-27.0	-32.4	-36.9
Budget deficit (cumulative)	% of FY plan	68.9	70.0	63.2	65.8	90.3	101.1	102.6	100.0	9.3	32.1	43.5	51.8	62.0	70.6
CPI	%YoY	3.6	3.5	3.6	3.7	3.4	3.1	3.3	3.5	3.5	2.9	2.6	2.4	2.3	2.2
CPI excluding prices of food and energy	%YoY	2.8	2.7	2.9	2.9	2.9	2.9	2.8	2.6	2.4	2.2	2.0	1.9	1.7	1.6
PPI	%YoY	3.7	4.1	2.8	2.2	1.6	2.0	1.9	2.1	0.2	-2.4	-2.6	-0.5	1.5	0.3
Broad money (M3)	%YoY	14.2	14.4	11.9	9.0	9.6	11.9	8.0	8.1	6.3	5.1	5.5	6.0	6.1	5.7
Deposits	%YoY	15.7	15.9	13.0	10.7	10.9	13.5	10.3	9.8	7.5	6.8	6.2	6.9	7.2	6.7
Loans	%YoY	29.3	26.8	23.3	19.8	18.6	14.9	13.4	8.6	5.4	3.0	2.2	3.8	5.0	5.1
USD/PLN	PLN	3.23	3.22	3.05	2.90	2.86	2.85	2.79	2.83	2.85	2.93	2.87	2.89	3.24	3.36
EUR/PLN	PLN	4.41	4.51	4.30	4.13	4.16	4.21	4.17	4.14	4.07	4.01	3.89	3.87	4.06	4.07
Reference rate <sup>b</sup>	%	3.75	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50
Lombard rate <sup>b</sup>	%	5.25	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
WIBOR 3M	%	4.52	4.60	4.26	4.16	4.18	4.18	4.19	4.23	4.24	4.17	4.13	3.92	3.85	3.85
Yield on 52-week T-bills	%	4.91	4.73	4.43	4.23	4.33	4.35	4.26	4.25	4.01	3.90	3.92	3.84	3.71	3.80
Yield on 2-year T-bonds	%	5.60	5.34	4.93	4.92	5.10	5.03	4.92	4.92	4.95	4.90	4.76	4.47	4.52	4.55
Yield on 5-year T-bonds	%	5.85	5.83	5.55	5.53	5.74	5.65	5.64	5.67	5.58	5.51	5.27	5.10	5.26	5.25
Yield on 10-year T-bonds	%	6.30	6.34	6.19	6.08	6.18	6.15	6.14	6.21	6.12	6.09	5.71	5.56	5.74	5.75

Source: CSO, NBP, Finance Ministry, BZ WBK own estimates; <sup>a</sup> in nominal terms, <sup>b</sup> at the end of period

## Quarterly and annual economic indicators

		2007	2008	2009	2010	1Q09	2Q09	3Q09	4Q09	1Q10	2Q10	3Q10	4Q10
GDP	PLNbn	1 176.7	1 272.8	1 342.6	1 414.5	313.7	327.0	331.9	371.4	327.4	342.5	349.8	394.8
GDP	%YoY	6.8	5.1	1.8	3.2	0.7	1.1	1.8	3.3	3.0	2.8	3.4	3.7
Domestic demand	%YoY	8.7	5.6	-1.0	3.5	-1.6	-2.3	-1.3	0.9	2.2	3.1	3.8	4.7
Private consumption	%YoY	4.9	5.7	2.3	2.3	3.3	1.6	2.3	1.7	2.2	2.0	2.5	2.5
Fixed investments	%YoY	17.6	9.6	-0.8	1.8	-0.8	-3.3	-1.4	1.1	-12.4	0.0	6.0	6.5
Industrial production	%YoY	10.7	3.6	-3.2	8.4	-10.0	-6.7	-1.3	5.5	9.4	9.4	8.5	5.8
Construction production	%YoY	16.4	10.0	4.6	2.2	3.1	0.5	9.0	4.8	-16.7	-3.9	6.2	12.8
Retail sales (real terms)	%YoY	7.6	5.0	2.7	2.7	1.0	1.0	3.6	4.7	0.3	-0.8	3.3	6.9
Unemployment rate <sup>a</sup>	%	11.2	9.5	11.9	11.5	11.1	10.6	10.9	11.9	12.9	11.5	11.1	11.5
Gross wages in enterprise sector (real terms)	%YoY	6.8	6.1	1.1	1.3	3.2	0.2	0.5	0.5	-0.2	0.9	1.6	2.7
Employment in enterprise sector	%YoY	4.6	4.8	-1.2	0.6	0.1	-1.0	-1.8	-2.0	-1.3	0.5	1.4	1.9
Export (€)	%YoY	13.4	14.2	-17.1	16.2	-22.2	-23.8	-20.1	0.1	18.6	22.1	15.0	10.0
Import (€)	%YoY	19.5	17.2	-25.4	18.5	-28.2	-32.2	-27.8	-12.1	18.9	23.6	17.0	15.0
Trade balance	EURm	-12 369	-17 724	-3 183	-6 039	-744	-513	-812	-1 114	-952	-1 000	-1 460	-2 627
Current account balance	EURm	-14 696	-18 302	-5 005	-6 915	-30	-1 088	-1 159	-2 728	-1 158	-1 820	-1 560	-2 377
Current account balance	% GDP	-4.7	-5.1	-1.6	-1.9	-4.0	-3.0	-2.2	-1.6	-1.9	-2.0	-2.1	-1.9
General government balance	% GDP	-1.9	-3.7	-7.1	-6.7	-	-	-	-	-	-	-	-
CPI	%YoY	2.5	4.2	3.5	2.5	3.3	3.7	3.5	3.3	3.0	2.3	2.2	2.6
CPI <sup>a</sup>	%YoY	4.0	3.3	3.5	2.7	3.6	3.5	3.4	3.5	2.6	2.2	2.4	2.7
CPI excluding food and energy prices	%YoY	1.0	2.3	2.7	1.8	2.3	2.7	2.9	2.8	2.2	1.7	1.6	1.8
PPI	%YoY	2.0	2.2	3.3	0.6	4.9	4.2	2.2	2.0	-1.6	0.5	2.0	1.7
Broad money (M3) <sup>a</sup>	%YoY	13.4	18.6	8.1	6.2	17.5	14.4	9.6	8.1	5.5	5.7	6.6	6.2
Deposits <sup>a</sup>	%YoY	14.5	20.6	9.8	6.1	19.4	15.9	10.9	9.8	6.2	6.7	6.8	6.1
Loans <sup>a</sup>	%YoY	29.9	36.0	8.6	8.2	34.5	26.8	18.6	8.6	2.2	5.1	6.9	8.2
USD/PLN	PLN	2.77	2.41	3.12	3.09	3.45	3.27	2.94	2.83	2.88	3.16	3.24	3.12
EUR/PLN	PLN	3.78	3.52	4.33	3.94	4.50	4.45	4.20	4.17	3.99	4.00	3.96	3.81
Reference rate <sup>a</sup>	%	5.00	5.00	3.50	3.75	3.75	3.50	3.50	3.50	3.50	3.50	3.50	3.75
Lombard rate <sup>a</sup>	%	6.50	6.50	5.00	5.25	5.25	5.00	5.00	5.00	5.00	5.00	5.00	5.25
WIBOR 3M	%	4.73	6.36	4.42	3.98	4.83	4.44	4.20	4.20	4.18	3.88	3.85	4.03
Yield on 52-week T-bills	%	4.69	6.26	4.54	3.98	4.75	4.81	4.33	4.29	3.94	3.78	4.00	4.20
Yield on 2-year T-bonds	%	5.23	6.22	5.17	4.67	5.26	5.46	4.98	4.96	4.87	4.51	4.50	4.80
Yield on 5-year T-bonds	%	5.52	6.15	5.65	5.30	5.50	5.85	5.61	5.66	5.46	5.20	5.20	5.35
Yield on 10-year T-bonds	%	5.56	6.06	6.11	5.75	5.86	6.27	6.15	6.17	5.97	5.68	5.65	5.70

Source: CSO, NBP, Finance Ministry, BZ WBK own estimates

<sup>a</sup> at the end of period

This analysis is based on information available until 11.06.2010 has been prepared by:

## **ECONOMIC ANALYSIS UNIT**

### **TREASURY DIVISION**

ul. Marszałkowska 142, 00-061 Warszawa, fax +48 022 586 83 40

Email: ekonomia@bzwbk.pl Web site (including Economic Service page): <http://www.bzwbk.pl>

**Maciej Reluga** – Chief Economist

tel. +48 022 586 83 63, Email: [maciej.reluga@bzwbk.pl](mailto:maciej.reluga@bzwbk.pl)

**Piotr Bielski** +48 022 586 83 33

**Piotr Bujak** +48 022 586 83 41

**Cezary Chrapek** +48 022 586 83 42

## **TREASURY SERVICES DEPARTMENT**

### **Poznań**

pl. Gen. W. Andersa 5

61-894 Poznań

tel. +48 061 856 58 14

fax +48 061 856 55 65

### **Warszawa**

ul. Marszałkowska 142

00-061 Warszawa

tel. +48 022 586 83 20

fax +48 022 586 83 40

### **Wrocław**

ul. Rynek 9/11

50-950 Wrocław

tel. +48 071 370 25 87

fax +48 071 370 26 22

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