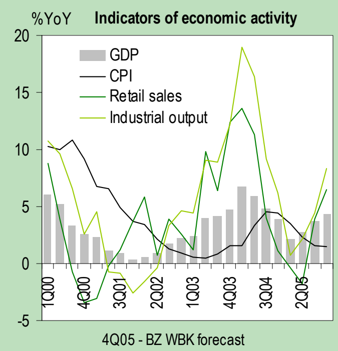
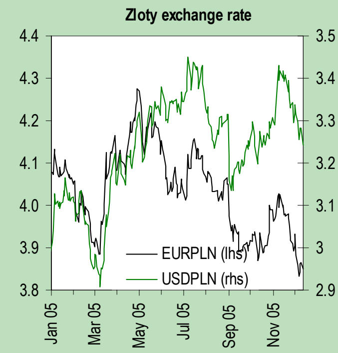
Bank Zachodni WBK

MACROscope

Polish Economy and Financial Markets

December 2005





In this issue:

Maciej Reluga
Chief economist
+48 022 586 8363

Piotr Bielski
+48 022 586 8333

Piotr Bujak
+48 022 586 8341

Cezary Chrapek
+48 022 586 8342

Email: ekonomia@bzwbk.pl

Communication problems

- **The post-election commotion is slowly giving way to stabilization on the political stage.** Even the amendment to the budget does not give rise to any major emotions (another increase in the income is the major point of criticism), at least until it is formally adopted by the parliament. Much as the idea of early elections is talked about in the media with increasing frequency it is too early to judge conclusively if PiS takes such a possibility seriously or it is more a kind of game with smaller political fractions (which get small social support in recent surveys) to win their backing for the budget. No wonder that the financial markets are not overly concerned with such a scenario especially that the Finance Ministry stepped up demand for the Polish currency. The expected ministry's exchange of funds originating from the bonds issue in international markets was one of the key reasons for the latest zloty appreciation. There is no knowing if the strong zloty was the ministry's intention (recording lower debt ratio towards the end of the year), as other government representatives expressed their dissatisfaction with the situation in the currency market. It is certainly worth noting improved market sentiment in all the countries of our region, however, minor changes in the Polish yield curve indicate that the investors' willingness to finance the budget deficit has not increased dramatically. On the other hand, the sentiment in the Polish stock exchange is still positive which certainly translates into the zloty's appreciation.

- **Recently, the attention of media, analysts and business entities has focused less than usually on the current monetary policy.** This is partly due to the fact that – as predicted – over the past three months there have been no changes to the parameters under this policy, but primarily due to the landmark developments in the political scene. Once the emotions around the outcome of elections, unexpected fiasco of coalition talks and appointment of the new government waned, we deemed it appropriate to come back the considerations over the scope of the central bank's activities. Accordingly, the special focus in this month's MACROscope is on transparency of the monetary policy and effectiveness of the central bank's communication with the environment. Using econometric techniques we tried to assess changes that took place on this field in the course of last dozen of months. The conclusions from this survey are not particulatrly optimistic for the central bank, as they show a decrease in predictability of interest rate decisions by the financial market more or less since the middle of 2004. It seems such results should induce the Monetary Policy Council to consider thoroughy the ways of communication with the financial market, especially in the context of further changes in this regard planned since the beginning of new year.

Financial market on 30 November 2005:

NBP deposit rate	3.00	WIBOR 3M	4.60	USDPLN	3.3165
NBP reference rate	4.50	Yield on 52-week T-bills	4.33	EURPLN	3.9053
NBP lombard rate	6.00	Yield on 5-year T-bonds	5.24	EURUSD	1.1775

This report is based on information available until 12.12.2005

Special focus

Good intentions are not enough

Recently, the attention of media, analysts and business entities has focused less than usually on the current monetary policy. This is partly due to the fact that – as predicted – over the past three months there have been no changes to the parameters under this policy, but primarily due to the landmark developments in the political scene. Once the emotions around the outcome of elections, unexpected fiasco of coalition talks and appointment of the new government waned, we deemed it appropriate to come back the considerations over the scope of the central bank's activities.

Accordingly, the object of our interest this month are transparency of the monetary policy and effectiveness of the central bank's communication with the environment. This is not the first time this topic has been brought up in MACROscope – we put it to a thorough analysis in July 2004. Now, we are coming back to this issue again as significant changes have taken place in the Monetary Policy Council's communication policy and new modifications are planned for the following months. It is worth then making a try and assess the innovations in this regard to date and their impact on the reception of the monetary policy by its audience and observers. This assessment should not only be subjective but also supported with a statistical analysis which provides the basis for objective verification of hypotheses related to the changes in the transparency of Poland's monetary policy.

Transparency pays

The issue of monetary policy transparency has been a subject of vivid interest, numerous studies and analyses. It is not without a reason: in a country which establishes its monetary policy – like, e.g., Poland – on the Direct Inflation Target strategy (DIT) in which the central bank cannot boast of a long-term (if any) practice in effective delivery of inflation targets, good understanding by the external environment of the monetary policy targets and ways of their delivering is one of the key elements which can be instrumental in enhancing the monetary authorities' credibility. The credibility of the central bank and the policy it pursues is, on the other hand, a key issue as it enables, among others, influencing more effectively business entities' and households' inflation expectations and appeasing their uncertainty as to the future economic situation. It is also extremely vital for the financial markets' expectations and their reaction to the actions undertaken by the central bank. It is the maintenance of a high credibility of the monetary policy which, according to numerous analyses, allows for effective operation of the so-called expectations channel in the monetary policy transmission mechanism. This, in turn, enables reduction of the costs of disinflation process or keeping the inflation under control, i.e. minimization of the trade-off between inflation rate variability and GDP growth variability (the so-called Taylor's curve).

It is assumed, however, that the basis for better understanding of the monetary policy principles and premises for taking decisions by the central bank is to a large degree, the so-called transparency of the pursued policy, i.e. a situation where there is no clear information asymmetry between the monetary authorities and market/economic life participants. The communication policy of the central bank plays the key role in the improvement of the monetary policy's transparency.

…and the central bank knows that

Certainly well aware of all this are individuals in charge of the monetary policy in Poland. The pressure on the quality of communication with the environment stepped up especially when the new MPC was appointed in early 2004 – both the whole Council and its individual members emphasized many times their strive to improve the transparency of the monetary policy and make sure that the MPC's activities are well understood and interpreted. This purpose was to be served by modifications in the central bank's communication policy including, e.g., change in the form of the MPC's official statements, change in the form of quarterly published *Inflation Reports* as well as the launch of publishing in the said reports medium-term projections on inflation and GDP.

The actions undertaken by the MPC to enhance the transparency of the pursued policy and the intentions behind them were characterized by the Council itself in *Report on monetary policy implementation in 2004* in the following way:

"In the situation of increased uncertainty the Council thought it particularly important to present the premises for its decisions in a comprehensible and transparent manner. One of the measures taken in 2004 with the intention of improving the central bank's communication with its environment was upgrading the format of the *Inflation Report* and bringing forward its release date. Additionally, since August 2004 the inflation projection has been prepared with the assumption of interest rates remaining unchanged throughout the projection horizon. Inflation projections are prepared by the team of economists of the National Bank of Poland under the supervision of the NBP Deputy President Krzysztof Rybiński. The inflation projection is one of the premises on the basis of which the Council takes decisions on NBP interest rates. 2004 also brought the modification to the formula of the MPC's statements released after each meeting. The Council strived to make them more forward-looking than it used to be the case and also to include the assessment of the balance of risks for future inflation. All these changes should lead to better understanding and predictability of changes in monetary policy parameters. It is the Council's hope that in the longer period this increased transparency will be conducive to enhancing monetary policy efficiency."[1]

Does the practice reflect theory?

At first glance, it looks very good while the MPC's intentions accommodate the actual needs of the market. Unfortunately, the description of the Council's actions seems to be needing a supplement.

Following regularly all the decisions taken by the Monetary Policy Council re. parameters of the pursued policy as well as ways of advising the environment of the decisions, objectives and premises of the MPC's activities, we have noted a significant progress over the past few years. On the other hand, the latest experience in this regard gives rise to certain controversies and concerns as the analysis of the signals sent by the central bank over the past months gives an undeniable impression of the growing inconsistency between the decisions taken by the MPC and the rhetoric used to substantiate them. For example, the lecture of the Council's official statements issued after the meetings in the last three months does not facilitate answering a question what arguments stood behind an announcement consistently repeated therein, namely that inflation rate would converge towards the target faster than predicted in the latest *Inflation Report*. Also, an intriguing issue is the MPC's persistence in recalling a risk from oil market in their statements, in a situation where global oil prices have been decreasing and the zloty has been constantly stronger than assumed in last *Inflation Report*. While the contents of the official statements puts high emphasis on building inflation risks, at the same time, the easing bias in monetary policy invariably maintained for many months indicates conclusively that the majority of the MPC members keep viewing the excessive inflation growth risk as limited and believes the chance of interest rates going down in the future is much bigger than the probability of the rates hike. It seems obvious that this situation is not conducive to improving the understanding of decisions in the monetary policy and their premises, both among financial market participants and other policy recipients.

As intended by the MPC, the changes made to the forms of communications were to ensure "better understanding and predictability of changes in the monetary policy parameters". However, our impression from watching the recent changes suggests that the results might fall short of expectations. Therefore, we decided to check if this improvement in predictability of decisions can be confirmed in econometric terms.

Changes in NBP rates vs money market yield curve

To verify the aforementioned thesis, we adopted a methodology proposed by Andrew Haldane and Vicky Read[2], applied quite frequently in empirical studies of transparency of monetary policy[3]. This procedure is based on the analysis of concurrent changes to official interest rates in the central bank and market interest rates. As assumed in this model, in the world where we would have full transparency and 100% credibility of monetary policy, changes to the central bank's official interest rates should not trigger a concurrent significant reaction of the market yield curve. The market, being fully aware of the objectives and reaction functions of the central bank as well as having full knowledge of the economic situation (absence of information asymmetry) should adequately and ahead of time discount future decisions re. monetary policy. Therefore their announcement should come as no surprise and should not trigger adjustment of market rates. If, however, such a reaction takes place, it is indicative of insufficient transparency of monetary policy.

The original econometric model proposed by Haldane and Read was as follows:

$$\Delta\, {}_{t+j}i_{t+m+j} = \alpha_j + \beta_j(\mathrm{L})\,\Delta\, {}_{t+j}i_{t+m+j} + \gamma_j\,\Delta\, {}_{t}i^{c}_{t+m} + \delta_j\, D\,\Delta\, {}_{t}i^{c}_{t+m} + e_{t+m+j}$$

where: ${}_{t+j}i_{t+m+j}$ represents the forward rate on a deposit with a maturity of m months starting at $t+j$; ${}_{t}i^{c}_{t+m}$ represents an official interest rate of the central bank while Δ constitutes the first difference (daily change) of variables. $\beta_j(\mathrm{L})$ is a vector polynomial in the lag operator (L)[4], while the lagged dependent variables have been

[1] *Report on monetary policy implementation in 2004,* NBP (2005), p. 8

[2] A.Haldane, V.Read (2000) *Monetary policy surprises and the yield curve*, Bank of England Working Paper No. 106

[3] See, e.g.: M.Jarmużek, L.Orłowski, A.Radziwiłł (2004) *Monetary policy transparency in inflation targeting countries: the Czech Republic, Hungary and Poland*, CASE Studies and Analises No 281; U.Ziarko-Siwek (2004) *Ocena efektywności informacyjnej wybranych segmentów rynku finansowego w Polsce*, NBP Materiały i Studia Nr 178; R.Matousek (2001) *Market reactions to the Czech National Bank's interest rate decisions*, Bank of England.

[4] $\beta_j(\mathrm{L}) = \beta_{j1}\,\mathrm{L} + \beta_{j2}\,\mathrm{L}^2 + \beta_{j3}\,\mathrm{L}^3 + \ldots$; where $\beta_{j\,n}\,\mathrm{L}^n x_t = \beta_{j\,n}\, x_{t-n}$

introduced into the model to eliminate the residual autocorrelation. D is a dummy variable introduced to intercept the structural change in the model (authors were testing if the transparency of the monetary policy changed after the introduction of the DIT strategy).

In line with the logic of the model, the values of the parameters γ and δ are of key importance. The former coefficient measures the average reaction of the forward rates to the change in the official interest rate (across the entire sample examined). If the market rates anticipated the central bank's decisions with perfect accuracy, the value of the estimated parameter should be close to 0. The γ figure significantly different from 0 would represent in this situation incomplete transparency of the monetary policy. Parameter δ was to identify possible changes (and their direction) in the reaction of interest rates – i.e. in the predictability of the central bank's decisions – in the period designated by the D variable.

In our study, we modified slightly the Haldane and Read model by testing the impact of changes of the official rate not only on the forward rates (FRA), but also on the current money market rates (WIBOR). The implemented dummy variables were to enable formulating an answer to the question of whether the transparency of the monetary policy changed significantly due to the innovations introduced as regards tools of communication with the market (D_1, D_4 variables) or as a result of changes in the Monetary Policy Council's composition (D_2, D_3).[5] The study was carried out based on daily observations covering the period from February 1998 (the outset of the MPC operation) to the end of November 2005. However, due to limitations in the data accessibility, the statistical sample was shorter in the case of some equations. The obtained results are presented below.

First of all, the estimated parameters point conclusively to insufficient transparency of the monetary policy in Poland as in each of the tested equations γ values differ significantly from zero. This outcome, however, constitutes no major surprise. On the other hand, the situation is not dramatic as the estimates indicate that only ca. 20%-30% of changes in the official rates came as a "surprise" in the analyzed sample for WIBOR rates which is a result close to estimates for Poland arrived at in other studies[6] and much better than results for the Czech Republic and Hungary (30%-55%). For the FRA market, the surprise coming from the central bank was even smaller (10%-20%).

Another, much more surprising conclusion is evident, statistically significant deterioration in the predictability of NBP interest rates indicated recently by the majority of estimated equations. Irrespective of whether we adopt as the time of the structural change the beginning of the MPC's new tenure (D_3) or the launch of publishing inflation projections in the *Inflation Report* (D_4), the outcome of the majority of tests confirms that prior to these events, the financial markets were able to anticipate future changes to interest rates with more precision – the value of δ_4 coefficient is negative and statistically significant. The scale of predictability deterioration over the recent months is significant as the values of parameter δ_4 are close to -0,2 in the case of WIBOR and between –0.11 and –0.16 for FRA, which means that prior to publishing inflation projections (or before the start of the new MPC tenure) the percentage of "surprises" for the market from the base rate totalled only ca. 10% in the case of WIBOR rates and was practically near zero in the case of forward rates (as compared to γ values quoted above). An exception to this rule are 1-month and 12-month WIBOR money market rates and FRA rates with the longest maturities in the case of which the sign before the estimated parameters is the same as in other equations but values are not significant statistically.

Much less conclusive is the impact exerted on the monetary policy predictability by such incidents as appearance of "policy bias" (D_1) in the MPC statements or change in the NBP Governor's office (D_2). Much as in the majority of estimated equations values of relevant parameters suggest a positive impact of both events on the policy transparency (before the said changes, reactions of interest rates to changes in NBP rates were stronger) only in the case of 3M and 6M WIBOR rates these conclusions can be confirmed statistically.

It should be noticed that a simple empirical method used in our survey, examining reaction of market rates at a time of announcement of changes in NBP official interest rate, does not take into account several issues. For example, simultaneously with a decision on interest rate change, the central bank could deliver other crucial decisions/information regarding monetary policy perspectives, e.g. a change in "bias" or publication of NBP inflation projection. Such situations have actually took place in the analysed period, especially over the last couple of quarters, which obviously could have affected estimated coefficient values. Although those effects were not formally incorporated into our model, one could have an impression that a coincidence of such events with MPC decisions on interest rate changes could have

[5] A more in-depth description of the estimated model, applied variables and the outcome are included in *Technical appendix* on page 5.

[6] M.Jarmużek et al. (2004)

increased variability of financial market rates in the days of decision announcements.

Good intentions are not enough

The outcome of our analysis indicates that against the MPC's intentions, recent changes in the way of communication with the environment have not added to the transparency of the pursued policy. On the opposite, predictability of the Council's decisions by the financial market has deteriorated substantially. This confirms our impression – as avid watchers of the monetary policy – that despite the appearance of quite new and theoretically useful tools in the central bank's communication with the environment, their practical application leaves a lot to wish for. There is still too much arbitrariness in the decisions taken which stems from insufficient elimination of asymmetry of information between the monetary policymakers and the market.

In July 2004, we wrote that the launch of publishing inflation projections by the Polish central bank can add to the monetary policy transparency, but only when the MPC subscribes to these projections. We predicted that otherwise the NBP analysts' projections with which the Council might not fully agree (if at all) can substitute an additional source of uncertainty for the financial market. It looks like our predictions in this regard have crystallized.

In this context, it should be noted that we are in for another significant change in the central bank's communication mode soon. In January 2000, the term "bias" used invariably since February 2006, disappears from the Monetary Policy Council's vernacular. It seems that whether and how the MPC will be able to bridge the gap arising this way in the ways of affecting the expectations of financial markets and other entities of the business life will influence substantially the predictability and transparency of the monetary policy in the foreseeable future. It is worth pondering on this change seriously, as it is not only the outcome of econometric studies but also standard observations which suggest that recently the divergence between the actual decision-taking process and the way of its communication outside has been gradually growing.

Technical annex

Our analysis is based on estimation of simple linear regression:

$$\Delta i_t = \alpha + \beta(L)\Delta i_t + \gamma \Delta i_t^c + \sum_x \delta_x D_x \Delta i_t^c + \varepsilon_t$$

where variables are defined as follows:

Δi_t – daily changes in market interest rate; equation above has been estimated separately with different money market rates: short-term money market rates WIBOR with maturities of 1, 3, 6, and 12 months, forward interest rates FRA 1x2, 3x6, 6x9, 9x12, 3x9, 6x12;

Δi^c_t – daily changes in NBP reference rate;

D_x – regime-shift dummy variables (D_x = 1 before structural change in communication; and D_x = 0 after a change); four dummy variables have been defined, capturing effects of different events that could have potentially had effect on monetary policy transparency:

Dummy	Structural change / event	Date of event
D_1	Introduction of "policy bias" in MPC official statements	23 February 2000
D_2	Change on NBP Governor's post	10 January 2001
D_3	Change of MPC tenure	17 February 2004
D_4	Launch of inflation projections publishing in the *Inflation Report*	25 August 2004

Because of relatively short time span between pairs of events represented by (D_1 , D_2) and (D_3 , D_4), during which only two changes in NBP rates took place (see table below), we have decided not to include all four dummies in one equation. Instead, we have separately estimated equations including D_1 and D_4 – designed to catch significant changes in tools of central bank communication with the environment – and separately with D_2 i D_3, that were corresponding to changes in lineup of rate setting panel.

In sum, in the whole period under examination (February 1998 – November 2005) there were 39 changes to NBP official interest rates. The number of rate changes in periods captured by dummy variables is presented in the table below:

Dummy	D_1	D_2	D_3	D_4
Before	9	11	31	33
After	30	28	8	6

Our equations have been estimated on daily data, using ordinary least squares (OLS) regressions, with a modification of covariance matrix using Newey and West methodology, to take care of the problem with serial correlation and heteroscedascity of residuals.

Because of problems with availability of some series, some of the equations have been estimated using shorter sample.

Variables	Available sample
WIBOR 1M, 3M, 6M FRA 3x6, 6x9, 9x12, 3x9, 6x12	26.02.1998 – 30.11.2005
WIBOR 9M, 12M	2.01.2001 – 30.11.2005
FRA 1x2	31.08.2001 – 30.11.2005

An important issue for correct estimation of the model is an adequate specification of time lags between variables – in order to ensure that model in fact captures reaction of market interest rates to corresponding changes in official interest rates. It is assumed in our model that $\Delta i^c_t \neq 0$ in the day when reference rate change becomes effective (i.e. the next day after the decision is announced by the MPC). Thus, it is important at what time market interest rates have been recorded, WIBOR rates are settled every day at ca. 11:00, i.e. for most of the cases before an announcement of monetary policy decisions. Therefore, we have accepted that for equations using WIBOR it is right to regress Δi_t on concurrent changes Δi^c_t. Unfortunately, in the case of our database of FRA rates, the data records were taken at varying points of the day (and we had no possibility to check precise timing for entire sample. Thus, in some cases reaction of FRA rates on changes Δi^c_t could have taken place at the time *t*, while in other cases it could be already at t-1. Therefore, in equations using FRA as right-hand variables we have introduced modification:

$$\Delta i_t = \alpha + \beta(L)\Delta i_t + \gamma \Delta ii_t^c + \sum_x \delta_x D_x \Delta ii_t^c + \varepsilon_t,$$

where: $\Delta ii_t^c = \Delta i_t^c + \Delta i_{t+1}^c$

Tables below present values of crucial coefficients γ and δ_x for all estimated equations. Numbers in parenthesis represent significance levels (p-values) calculated using Newey-West adjusted standard errors. Statistically significant coefficients have been marked by: *** (1% significance level), ** (5%) and * (10%).

Equations with D_1 and D_4 – changes in communication tools

	γ	δ_1	δ_4	adj. R^2
WIBOR1M	0.298586*** (0.0074)	0.237927 (0.1403)	-0.113978 (0.3779)	0.140180
WIBOR3M	0.317992*** (0.0078)	0.183164* (0.0529)	-0.212678* (0.0950)	0.149093
WIBOR6M	0.246956** (0.0118)	0.175378** (0.0239)	-0.180416* (0.0883)	0.079860
WIBOR9M	0.213608** (0.0147)	-	-0.202315** (0.0310)	0.063575
WIBOR12M	0.211904* (0.0617)	-	-0.183210 (0.1236)	0.058427
FRA1X2	0.130308* (0.0589)	-	-0.127161* (0.0805)	0.017721
FRA3X6	0.202613*** (0.0099)	0.059535 (0.3852)	-0.157846* (0.0578)	0.025324
FRA6X9	0.146108** (0.0121)	0.070581 (0.3297)	-0.114525* (0.0897)	0.019291
FRA9X12	0.119528** (0.0191)	0.096679 (0.3066)	-0.081505 (0.1807)	0.011050
FRA3X9	0.153497*** (0.0093)	0.005684 (0.8794)	-0.155713** (0.0255)	0.004531
FRA6X12	0.141687** (0.0160)	0.079671 (0.4087)	-0.080135 (0.2406)	0.037586

Equations with D_2 and D_3 – changes in MPC lineup

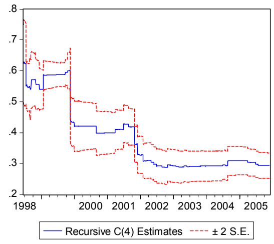
	γ	δ_2	δ_3	adj. R^2
WIBOR1M	0.297323*** (0.0009)	0.226142 (0.1437)	-0.123228 (0.2923)	0.138449
WIBOR3M	0.281771*** (0.0033)	0.178093* (0.0522)	-0.185165* (0.0882)	0.146029
WIBOR6M	0.230594*** (0.0040)	0.177178** (0.0163)	-0.178846** (0.0471)	0.079258
WIBOR9M	0.179576** (0.0133)	-	-0.173510** (0.0306)	0.061430
WIBOR12M	0.175051* (0.0575)	-	-0.148267 (0.1368)	0.055741
FRA1X2	0.116984** (0.0300)	-	-0.123058** (0.0380)	0.018096
FRA3X6	0.163722** (0.0138)	0.070668 (0.2720)	-0.126829* (0.0831)	0.023859
FRA6X9	0.117084** (0.0160)	0.072461 (0.3032)	-0.089624 (0.1457)	0.018666
FRA9X12	0.099689** (0.0163)	0.093439 (0.2948)	-0.065243 (0.2394)	0.010553
FRA3X9	0.124985** (0.0111)	0.028868 (0.6026)	-0.136896** (0.0328)	0.003802
FRA6X12	0.118143** (0.0133)	0.086339 (0.3369)	-0.062954 (0.3120)	0.037546

Equations using market rates WIBOR 9M, WIBOR 12M i FRA 1x2 included only one dummy variable (D_3 or D_4) due to limited size of statistical sample.

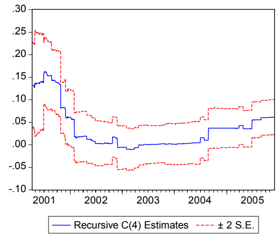
Charts – stability of γ parameter

Charts below present a graphical plot of recursive estimates of γ coefficient, measuring a scale of market rates' reaction to changes in reference rate, in a model without any dummy variables. In other words, they show how γ has changed in time as the number of observations in model was gradually increased.

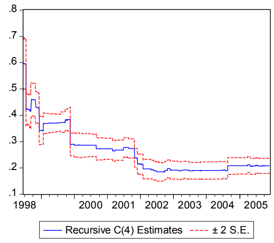
WIBOR 1M



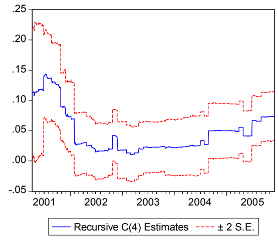
WIBOR 9M



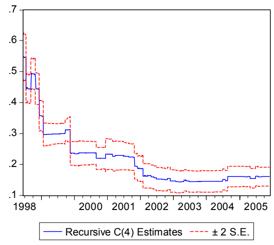
WIBOR 3M



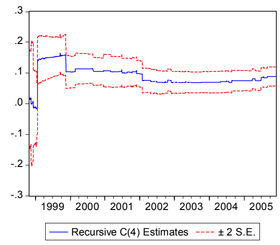
WIBOR 12M



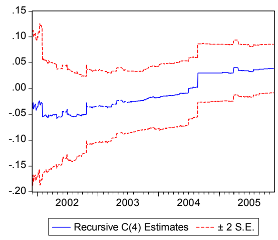
WIBOR 6M



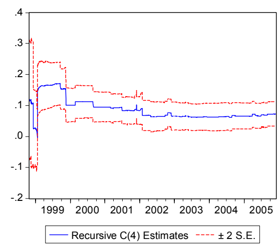
FRA 3X6



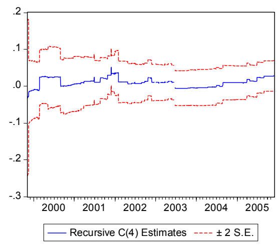
FRA 1x2



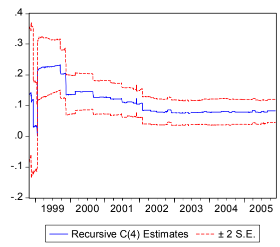
FRA 6X9



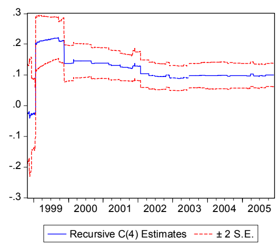
FRA 3X9



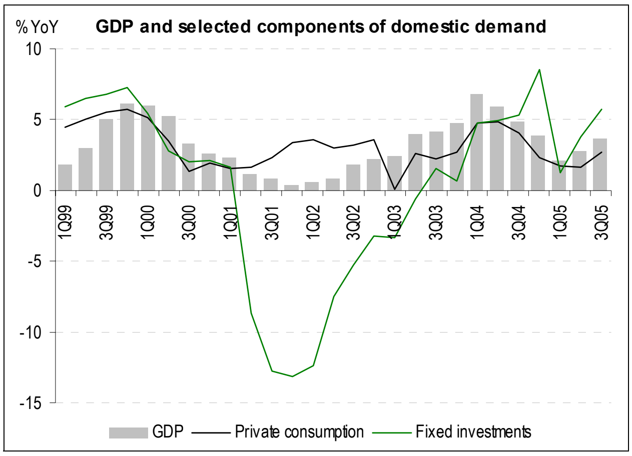
FRA 9X12

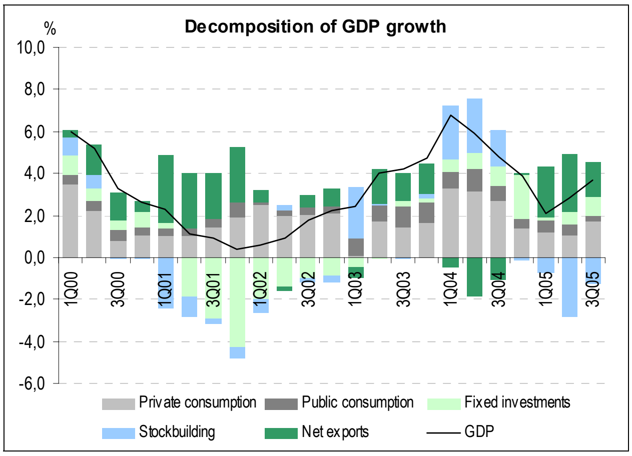


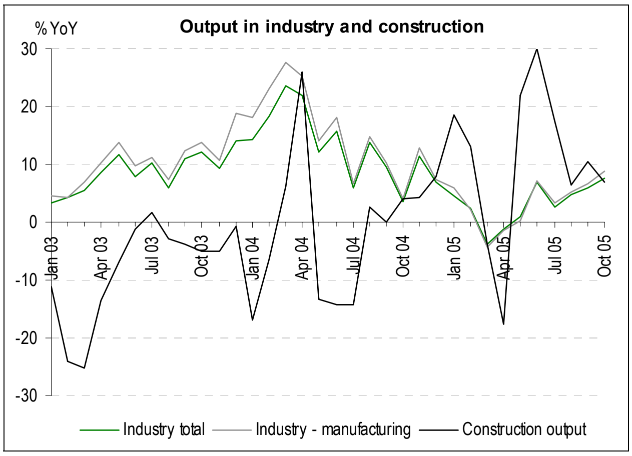
FRA 6X12

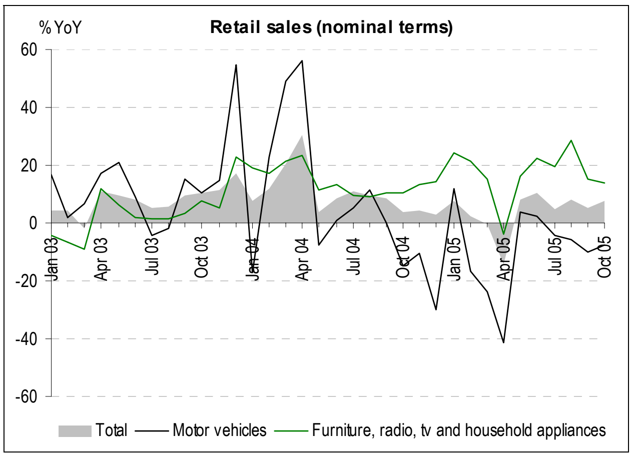


Economic update









Source: CSO, own calculations

GDP data were better than expected this time

- GDP growth in 3Q05 was 3.7%YoY versus our forecast at 3.6% and market consensus of 3.4%. This is a good news given that data for the first and second quarter of the year were disappointing.
- At the same time domestic demand growth was slightly lower than we predicted and stood at 1.6%YoY (we forecasted 1.7%YoY rise). Individual consumption growth accelerated to 2.7%, and investment growth to 5.7%, which also was somewhat weaker than we predicted (2.8 and 6.0%, respectively), but stronger than market expectations (2.5% and 5.3%, respectively).
- Despite improvement in domestic demand, the fact is that economic growth is still driven to a large extent by net exports (its contribution to GDP growth in 3Q05 was around 2 percentage points and additionally net exports was upwardly revised in 2Q05).
- All in all, a conclusion from GDP data is that up-to-date expectations of gradual acceleration of economic growth are materialising. This concerns also domestic demand, but in this field the recovery has been limited so far.
- Such character of economic recovery does not seem to be particularly dangerous for inflation outlook. The question arises whether further changes in the pace and structure of economic growth will begin to become less favourable for future inflation.
- We forecast that GDP growth in 4Q05 will amount to 4.3-4.4%, which would translate into GDP growth of 3.3% in the whole 2005. We also maintain our forecast of economic growth at 4.3% in 2006. Better than expected economic activity indicators for October supports predictions of further GDP growth acceleration in the final quarter of this year.

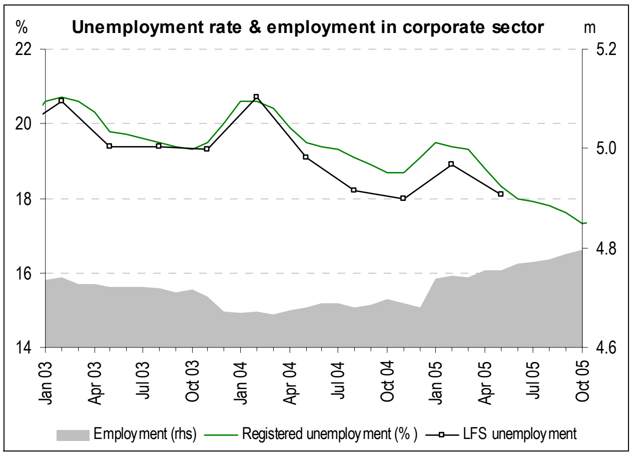
Good result in industry, limited optimism in construction

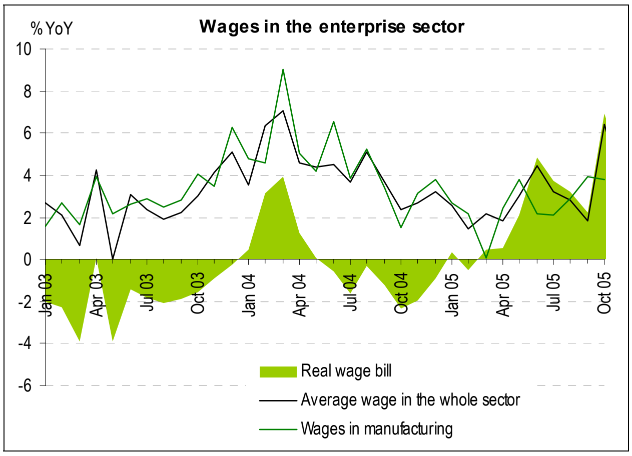
- Industrial output in October rose by 7.6%YoY while market consensus was only 6% and the most upbeat forecast was 7.2%. In manufacturing alone, output growth was even higher and reached 8.8%YoY, which is the best result for almost a year. After adjustment for seasonal factors, industrial output grew by 6.8%YoY.
- October results of industry confirm that the Polish economy entered the final quarter of this year in a good shape with continuously improving economic activity. This was still possible to a large extent thanks to excellent performance of export sector (high output in branched with high share of exports).
- Construction output increased by 6.8%YoY. Although the result is not dramatically bad, it does not allow to hope for rapid rebound in investment demand towards the end of 2005.

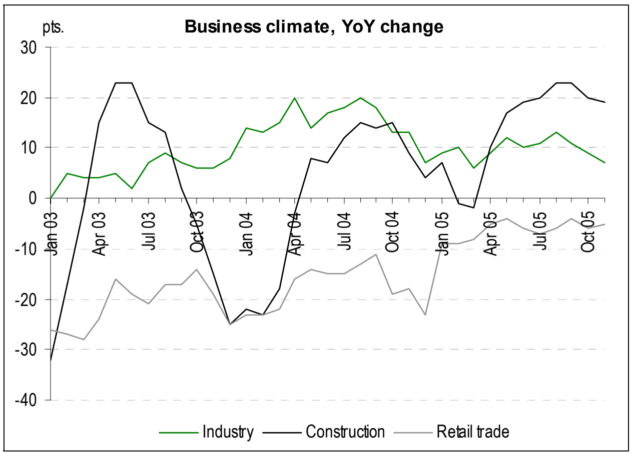
Higher than predicted rise in retail sales

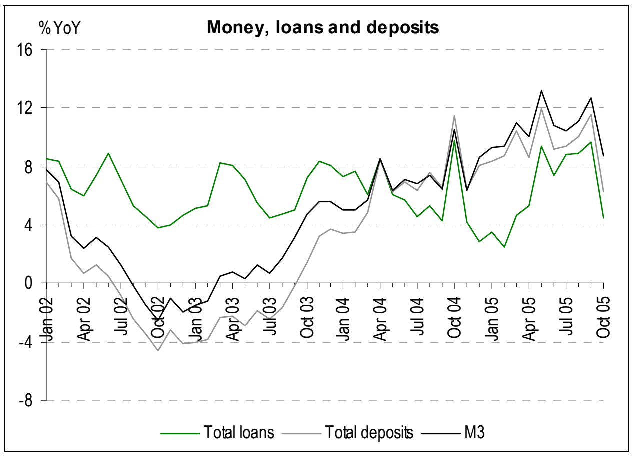
- October saw 7.5%YoY nominal rise in retail sales (market expected 6.2% growth, we forecasted 5.7% increase). Real growth was 5.7%YoY. Along with better than expected output figures, retail sales data confirmed continuation of economic recovery at the beginning of 4Q05.
- Breakdown of retail sales growth in October was similar as in previous months. Sales of motor vehicles fell again (continued crisis on new car market after EU entry), while other components performed much better, with en exception of foodstuff, beverages and tobacco where a fall of 1.4%YoY was seen. In general, the data indicated acceleration in individual consumption growth, although this is rather gradual improvement. We predict that this component of total demand in the Polish economy will rise by around 3.5% in 2006.

Economic update









Source: CSO, NBP, own calculations

Steady increase in labour demand

▪ Average employment in the enterprise sector grew by 2.1%YoY in October. It seems that labour demand growth has stabilised around 2%, which is a very good result against the background of the whole history of market economy in Poland. In our opinion, similar pace of employment growth will be maintained in the nearest future thanks to strengthening economic activity.

▪ As a result of increase in labour demand, the unemployment remains in downward trend. At the end of October the registered unemployment rate fell to 17.3% from 17.6% a month earlier and 18.7% a year earlier. The nearest months will see seasonal increase in unemployment, but the favourable trend (strong unemployment reduction in annual terms) will be maintained and firming labour market conditions will improve households' financial stance and thus support consumption demand.

Solid rise in wage bill in the enterprise sector

▪ After weak growth in average wage in enterprises in September (a mere 1.8%YoY), October saw strong rebound to 6.4%YoY. This was the highest average wage growth since March 2004 and it exceeded market forecasts ranging between 2.0 and 3.7%.

▪ Clear change in the pace of average wage growth resulted from a shift of bonus payment in telecommunication (28.5%YoY drop in average wage in September and 45.9%YoY rise in October) and in mining. Meanwhile, pace of average wage growth in the largest sector of industry (manufacturing) remained almost unchanged 3.8%YoY versus 3.9%YoY in September.

▪ Wage bill in firms rose as much as 8.6%YoY in nominal terms and 7.0%Yoy in real terms which was the best result since late 1990s. This supports forecasts of gradual revival in consumption demand, especially that 2006 will see hikes in pensions.

Enterprises' moods without major changes, still good

▪ Business climate indicators for November has not changed an assessment of economic situation. Manufacturing and construction experienced seasonal, slight deterioration, but indices for these sectors remained in the black, which indicates that majority of firms is still upbeat on business climate.

▪ While evaluation of situation in manufacturing was again lower than a year ago (by 6pts), index for construction posted stronger annual rise (10pts) than earlier, which is a good signal as regards investment activity.

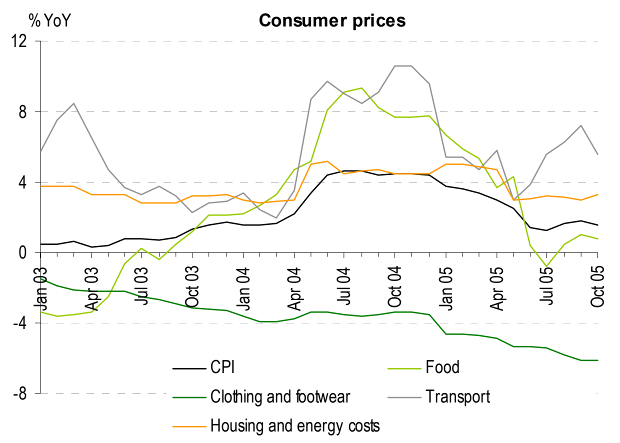
▪ Business climate in retail trade was still evaluated negatively (-5pts versus –6pts in October), but index for this sector continued trend of fast improvement in annual terms (by 13pts). This bodes well for consumption demand in the final quarter of this year.

Transitory slump in money growth

▪ Money supply in October grew by 8.7%YoY against 12.7%YoY rise in September and average rise of 11%Yoy in January-September period.

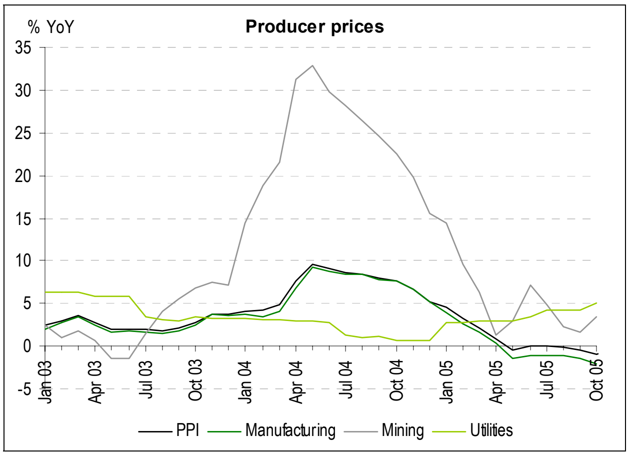
▪ Deterioration of monetary statistics was widely expected as a result of high base effect (one-off rise in total deposits and credits in October 2004 related to IPO of the largest Polish bank PKO BP) For that reason, total deposits growth in October this year decelerated to 6.3%YoY from 11.6%YoY in September and total loans grew a mere 4.5%YoY versus 9.6%YoY rise a month earlier. However, looking at monthly growth in households' borrowing of nearly PLN4bn (or 3%MoM) and of PLN1bn (or 0.8%MoM) in corporate borrowing, one can conclude that demand for loans keeps gradually strengthening.

Economic update



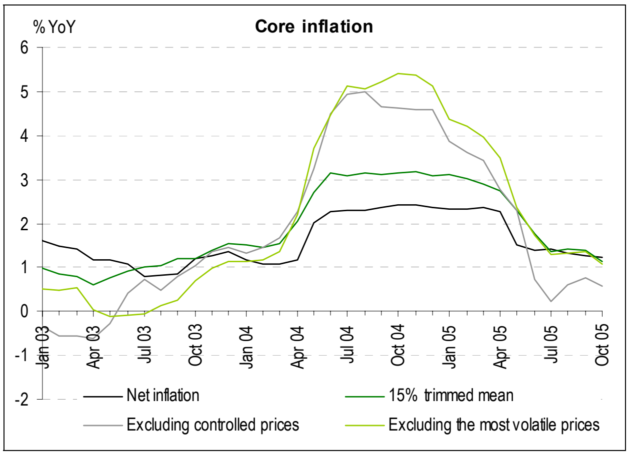
Improvement in short-term inflation outlook

- In October, inflation dropped to 1.6%YoY from 1.8%YoY in September. It was slightly higher than market consensus and our prediction, both at 1.5%YoY. Inflation fall resulted from lower fuel prices (-0.5%MoM) after reduction in excise tax on fuels in mid-September, and from weak increase in food prices (0.9%MoM and 0.8%YoY). There are still no signs of demand-side pressure.
- Housing and energy costs increased by 0.7%MoM, slightly stronger than we estimated, due to hike in natural gas prices.
- Inflation outlook for the nearest months seems favourable. The government withdrew from the earlier planned hike in excise on fuels, food becomes cheaper after ban on Polish export to Russia, and the strong zloty offset moderate oil price growth. We forecast inflation fell to 1.3%YoY in November and should stay below 2%YoY until the end of 1Q06.



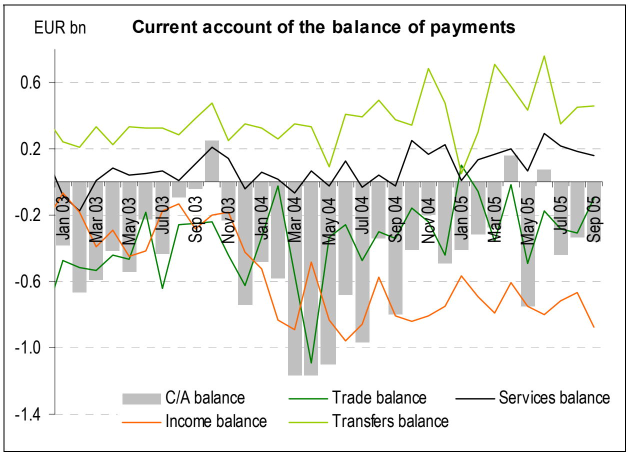
Fall of producer prices indicates lack of second-round effect

- PPI in October was much lower than expected, falling 0.9%YoY after a revised 0.5%YoY drop in September.
- The data showed complete lack of inflationary pressure, especially in that part of industry (manufacturing) which operates in the most competitive markets where prices fell by 2.1%YoY. One should remember that low PPI growth is partly resulting from zloty appreciation and high base effect, but acceleration in PPI inflation in the nearest months, when high base effect disappears, will not be significant.
- All in all, it seems that data on producer prices for the recent months showed that producers reluctantly increase their prices even in the face of rising oil prices. This suggests that demand pressure on prices remains benign. This constrains concerns about possible occurrence of second-round effects.



Low core inflation confirms lack of inflationary pressure

- All the five core inflation measures declined in October. Net inflation (CPI less food and fuel prices) decreased to 1.2%YoY from 1.3%YoY (specifically to 1.23% from 1.27%) 15% trimmed mean reached 1.13%YoY versus 1.38%YoY a month earlier. The other measures of core inflation were even lower (CPI less controlled prices at 0.56%YoY, CPI less the most volatile prices at 1.06%YoY and CPI less the most volatile and fuel prices at 0.46%YoY).
- Very low level of all core inflation measures shows that inflationary pressure in the Polish economy remains idle and rather diminishes than strengthens despite firms and consumers are still functioning in an environment of high oil and energy prices, and despite economic activity gradually revives. This bodes well for the medium-term inflation outlook.

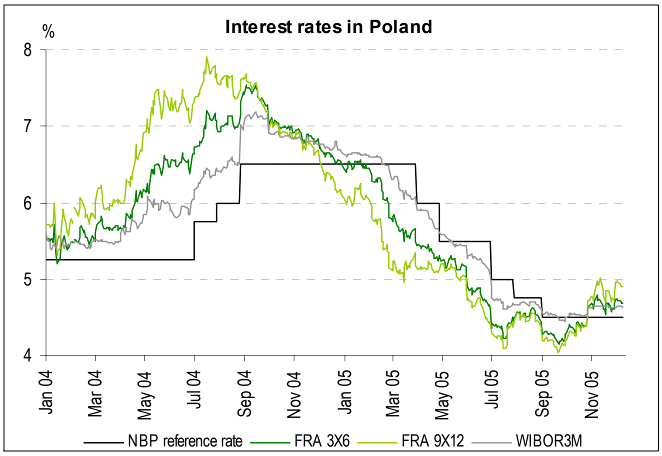


Source: CSO, NBP, own calculations

Export sector still performs very well

- C/A deficit in September was lower than expected and reached €357m. Gap in trade of goods reached only €102m due to continuously excellent exports performance which jumped by 14.8%YoY to a record high of €7.2bn. Imports grew 10.3%YoY, which also were a decent result.
- There was also strong rise in exports of services (almost 24%YoY) with moderate increase in imports (5.1%YoY). Income account was in the red (€872m) as a result of high dividend payments. This was only partly offset by surplus in transfer account (€460m).
- All in all, balance of payments data confirmed very good external position of the Polish economy. 12-month cumulated C/A deficit in relation to GDP reached a mere 1.6% after September.

Central bank watch



Fragments of the MPC statement from 30 November 2005

Crude oil prices have continued falling throughout November. Since the October meeting of the Council the price of Brent oil has decreased by USD 6.81 per barrel, i.e. by 11.4%. However, the price forecasts of this commodity for 2006 have not changed significantly and remain above the currently quoted prices. The uncertainty about the impact of the considerable accumulated growth of oil prices on economic growth and inflation remains significant and still has to be taken into consideration.

At present, it is difficult to assess whether this acceleration in wage growth [exceeding the average from the first three quarters of 2005] will be maintained in the subsequent months.

Since the last meeting of the Council, zloty exchange rate has not changed significantly, yet, in the first two months of 2005 Q4 the zloty remained stronger than accounted for in the August *Inflation Report*.

The Council maintains its opinion that inflation may return to the target sooner than it was forecasted in the August inflation projection. It is expected that having achieved the target, inflation will remain at a level close to it. The moderate wage growth is an indication than no second round effects have materialised so far. Should there appear signals of increased probability that these effects should occur, the balance of risks might change, which would then affect the future decisions of the Council.

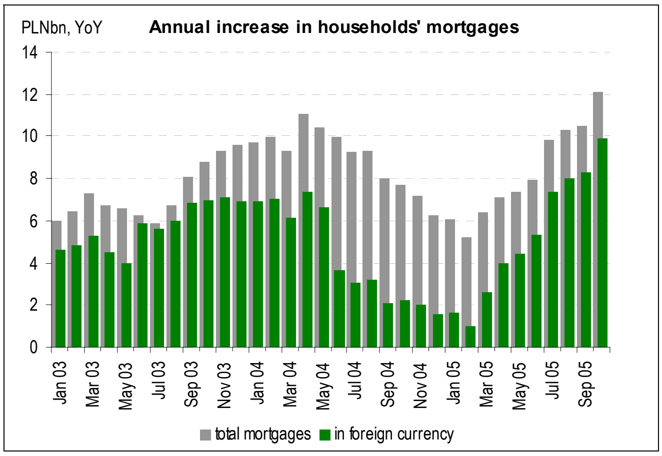
Justification of Samoobrona project of changes in central bank law; 2 December 2005

Maintaining stable level of prices cannot be limited only to combating price inflation. The project envisages that NBP should care about the value of the Polish currency also through supporting the economic policy of the government as regards economic growth and combating unemployment.

In extreme cases, which would be justified if the parliament does not accept the annual report of monetary policy implementation presented by the Monetary Policy Council, the crisis situation may be resolved by early reconstruction of the MPC.

Major change refers to exchange rate policy (article 24). As a result of too early floating of the zloty the Polish government was devoid of influence on fluctuations of the national currency, although formally it has such entitlement. Other EU countries maintained such influence of the government until joining the monetary union (ERM2 mechanism).

Change in article 65 allow a possibility of using the so-called revaluation reserve (reserve created for covering the risk of FX rate change) for other purposes, if the government judge it necessary from the point of view of overall interest of the economy.



Source: NBP, Reuters

Interest rates still unchanged

- Third time in a row the Monetary Policy Council maintained interest rates unchanged and kept easing bias in monetary policy.
- The official statement after November's meeting and the justification of the decision were similar to what we saw in the previous two months, which might suggest that according to the Council nothing has changed in the Polish economy as compared to the previously expected scenario.
- The MPC said that GDP figure for Q3, as well as private consumption and investments, were exactly in line with the central bank's expectations, but at the same time net exports' contribution to GDP growth proved significantly larger than anticipated. This means that stock building and/or public consumption were significantly overestimated i.e. NBP's prediction of total domestic demand was overestimated as well.
- Despite this fact and in spite of fall in oil prices in recent months and stronger zloty as compared to assumptions of August inflation projection, the MPC maintained the opinion that inflation may return to the target of 2.5% sooner than it was forecasted in the August inflation projection.
- However, at the same time the Council maintained easing bias in monetary policy, which means that according to the majority of MPC members probability of rate cut is still higher than probability of rate hike.
- We maintain our opinion that NBP reference rate may be stable at 4.5% until the end of the next year. Although, in case of positive inflation surprise at the turn of the year and increase of strong zloty appreciation the MPC may be under pressure to cut rates again.

Central bank under fire (again)

- Politicians' initiatives aimed at limiting the independence of the central bank are back in the parliament. Samoobrona proposed a bill of change in the central bank charter, which assumed, among others, making the central bank responsible not only for stable prices, but also for supporting economic growth and combating unemployment, allowing a possibility of dismissal of NBP president or MPC members, decreasing number of MPC members.
- The government distanced itself from this proposal, but PiS deputies agreed that while the whole project is going too far, some changes aimed at extending a list of bank's objectives may be supported by the party. Such change could trigger negative reaction not only of financial markets, but also of European commission and/or ECB.

FX loans under observation

- High activity of commercial banks in giving credits denominated in foreign currencies (especially as regards households' mortgages) persuaded the Polish Bank Association to propose a ban on such credits.
- NBP does not take such extreme option into account, although there is open question of how a possible limitation should be constructed i.e. whether there will be introduction of some limitations as regards banks' own funds, share of FX loans in total loans or in total assets. Limitation on minimum requirement reserve on FX liabilities was introduced in Romania earlier this year.
- According to NBP statement, the General Inspectorate of Banking Supervision will propose some actions adequate to the situation and market risk, after consultations with banking sector.

Central bank watch

Comments of the central bank representatives	Our remarks
Leszek Balcerowicz, NBP governor, MPC chairman **MPC press conference, 30 November** We are in the stage of interest rates hikes by important central banks and all economic data suggest stronger than a month ago that the economy is accelerating. […] there is substantial uncertainty, but everybody should pay attention that inflation may return to the target faster in the horizon of monetary policy. Faster than it seems.	Available economic data indeed indicate that the Polish economy is continuing to accelerate. However, it is worth to notice that finally the pace of growth met expectations, while the previous data were quite disappointing. Additionally, the zloty rate is still stronger than the NBP assumed in the August inflation projection, while oil prices fell quite substantially and a few other factors positive for inflation outlook appeared. Therefore, there is still a question what factors will lead, according to NBP, to faster return of inflation to the target, as compared with August projection.
Dariusz Filar, MPC member **PAP, 1 December** In my opinion, the situation in Poland is atypical. We had price shock after joining the European Union, which was visible in 2004 and it still influences current inflation and core inflation as a base effect. In the first months of 2006 we will observe full influence of high commodity prices, especially fuel prices, when the base effect disappears.	It is not entirely clear why the price shock after the EU entry will affect the inflation rate at the beginning of 2006 as a statistical base effect. This would be possible only in case that after sharp price increase after EU entry the adverse effect was visible. Possibly, to some extent this was noticeable in case of food prices (no influence on core net inflation). However, even if we take into account that CPI inflation will accelerate tin Q1 2006, this would not be a substantial rise as CPI should not exceed 2%.
Stanisław Nieckarz, MPC member **PAP, 6 December** We do not need such high interest rates for the realisation of the inflation target. If we additionally take into account that there is no considerable inflation pressure on the demand-side, which is supported by high unemployment, room for some monetary easing is still open and keeping easing bias confirms this. […] Still there are no threats for inflation on the demand-side and risk is only as regards supply factors, such as fuel and food prices.	It is not surprising that for Stanisław Nieckarz current level of interest rates is still too high. Many times in the past we saw his comments suggesting there was no reason to keep Polish official rates above the EU level. While this theory has undoubtedly some flaws, it is indeed the case that currently it is hard to find demand-side pressure on prices. Recent decisions of the MPC on keeping easing bias suggest (even if it was not directly stated in the statements) that the majority view within the Council does not exclude a possibility of rate cuts if the inflation remains under control.
Stanisław Owsiak, MPC member **Reuters, 7 December** If the zloty continues to be strong, it may have a positive effect on inflation. (…) Strong zloty is a problem from the point of view of export profitability. In my opinion, the middle of next year may be the moment when inflation nears the inflation target, but whether it crosses will largely depend on the zloty exchange rate. There is concern about exports because it is a sizeable component of GDP growth and even though it continues to expand its profitability is falling. According to my information some exporters are even willing to suffer losses to defend their market, but the question is how long they can manage to do that.	There is no doubt that strong zloty appreciation, if it is continued in coming weeks/months, may quite significantly change inflation forecasts, as well predictions concerning economic growth, and as a consequence expectations as regards monetary policy. The stronger zloty and the longer this effect lasts, the more likely is that the Monetary Policy council decides to cut rates at the beginning of the next year. Of course this will also depend on upcoming macroeconomic data (and the new inflation projection of the central bank, to be release in late January) , but currently there are no hints suggesting that tensions on the domestic demand side will appear.
Halina Wasilewska-Trenkner, MPC member **PAP, 5 December** Inflation should amount to 1.6-1.8% in Q1 2006. Still there are some chances that 2% level would not be reached. When inflation returns to the target will depend on food and fuel prices in 2006. Some risks for inflation exist but it is difficult to assess how important they are as fuel prices fluctuate quite atypically. **Radio PiN, 9 December** I have mixed feelings. On the one hand we can say that theoretically there is a room for interest rate cuts, but on the other hand the assessment of Prime Minister was based on current situation, while interest rates influences the economy within a couple of quarters when the situation may be different. It is hard to agree with PM assessments. If interest rates abroad started to rise, then lagging behind is not a good option. There is still inflation risk, which may appear also in Poland. We have two serious threats for inflation and there is a question whether we should aim at interest rate cut. There are some dangers for the budget on the revenues side. On the expenditure side the budget is tight as this assumes use of some incomes and this will a tough budget. There might be some difficulties with realisation of revenues and a smooth realisation in time.	While according to Stanisław Owsiak the pace in which inflation will return to the target will depend mostly on exchange rate development, in view of Halina Wasilewska-Trenkner this will depend on next year's food and fuel prices. It is quite interesting that both members did not mention factors related to domestic demand (wage growth, consumption etc.) as influencing inflation processes. Does it mean that MPC members are certain of projections with this regard or maybe do not see these factors as important risk for inflation. Also, it is interesting that for some MPC members the uncertainty connected with the prices of commodities or food products equals the risk of excessive rise of these prices. However, it seems that uncertainty should to the same extent mean a probability that prices will be lower than it is currently predicted, creating a positive inflation surprise. One should notice that supply-side shocks are by nature unpredictable and if uncertainty connected with these factors was to tie central bankers' hands it would be difficult to make any decisions in monetary policy. In our opinion, the central bank should rather concentrate on the most likely scenario, which does not assume strong inflation pressure, as for today. The MPC published the opinion on the budget draft, which was quite critical. As the amendment increased revenues even more, one can expect the MPC's criticism to be stronger in the opinion of this new document.

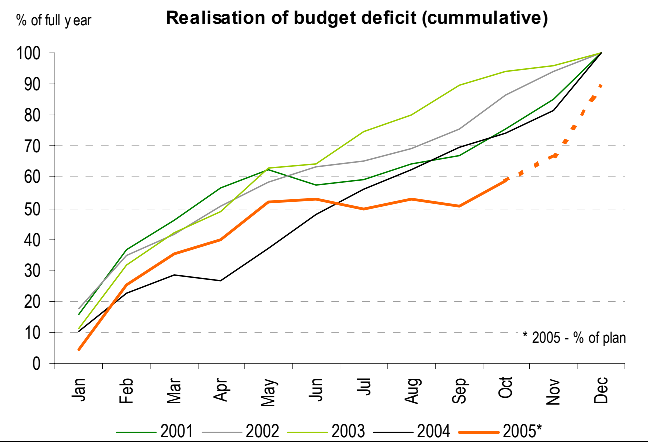
Government and politics

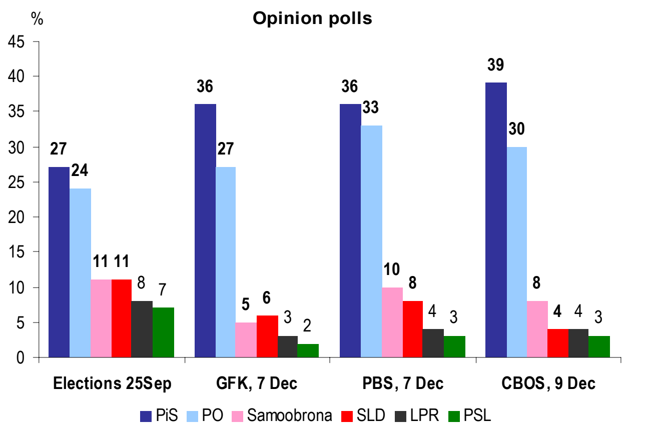
Main budgetary assumptions for 2006

	Budget amendment	Belka's budget draft
GDP growth (% YoY)	4.3	4.3
CPI inflation (average, % YoY)	1.5	1.5
Budget revenue (PLN bn)	194.2	191.30
Budget spending (PLN bn)	224.7	223.87
Budget deficit (PLN bn)	30.55	32.58

Calendar of event related to fiscal policy in Poland

Date	Event
9-14 Jan	Budget in various Sejm's committees
16-29 Jan	Budget in Public Finance Committee
10 Jan	The second reading of budget in the Sejm
10 Jan	Updated version of Convergence Program
13 Jan	The third reading of budget in the Sejm
17 Jan – 16 Feb	Budget in the Senate
15 Feb	The Sejm votes on Senate's amendments
17 Feb	The President signs the budget





Source: Ministry of Finance, PAP, Reuters, opinion polls

Nothing special in the budget amendment

- Budget amendment accepted by the new cabinet assumed deficit of PLN30.55bn (PLN2bn below the draft of Belka's government) with revenues higher by PLN3bn and spending higher by PLN0.8bn.
- Although high growth in revenues is the main subject of criticism, the assumed level of revenues may be reached amid, among others, transferring a part of this year's receipts for the next year (new cabinet increased the planned realisation of 2005 deficit by PLN3bn, as compared to suggestions of previous finance minister).
- In general, the 2006 budget should be realised without major problems, and thus it Is not surprising that financial markets perceived it quite neutrally.
- In line with expectations, although all parties in the parliament criticised the 2006 budget draft presented by the new government (even PM had some reservations), the document was unanimously sent for further work to Sejm's committees.
- January will be marked by many events related to fiscal policy. Apart from consecutive steps of work over budget draft, we will then also see the new Convergence Program.
- FinMin Teresa Lubińska said during discussion on fiscal policy in Public Finance Committee that the new Convergence Program will be presented to the European Commission on January 10. Besides, she gave no details on government's fiscal plans, only saying that the previous program was unrealistic. This suggests that the new one will no assume anymore meeting convergence criteria in 2007, yet later. Well, we will see how the European Commission will react to that.

Budget 2005 in excellent shape

- In the meantime, the realisation of this year budget is much better than expected. After 10 months of the year deficit amounted to 58.8% of the plan (the best result within last 10 years), mainly as a result of strong growth in tax revenues.
- According to the Ministry of Finance budget gap should not exceed 66-67% of the full-year plan after November and should be around PLN30bn in the whole year (against the plan of PLN35bn). A few weeks ago previous finance minister said that the 2005 deficit may be as low as PLN28bn.
- Some part of the deficit of public finance sector will be pushed outside the central budget, because some subsidies were underestimated. This refers in particular to subsidy for social security fund, as this institution will probably have to borrow on the market towards the end of this year.

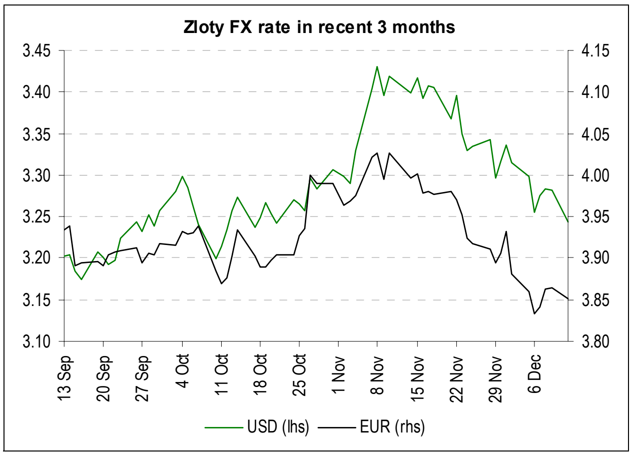
Polarisation on the political scene after election?

- Opinion polls after election confirmed the usual observation that public support is favourable for the winner. All polls showed strong support for the parties, which reached the best result in September's parliamentary elections, while support for smaller parties decreased.
- Some of the polls suggested that if election took place in December only three parties would have been represented in the parliament while PiS would have reached majority.
- This located PiS in a comfortable position and the party may put a pressure on smaller parties (a threat of early election) to reach their support during important voting.
- At the same time PiS faces temptation to reach even more power in the parliament in case of early election, although of course this connected with a substantial risk.

Government and politics

Comments of government representatives and politicians	Our remarks
Kazimierz Marcinkiewicz, Prime Minister **PAP, 7 December** I reiterated many times, that it seems there is still room for rate cuts in Poland.(...) We have a stable budget, low budget deficit. All this in normal circumstances would result in interest rate cut, yet not in Poland. We will try to encourage those that make the decisions in that matter to active help to accelerate economic growth (...) Without persuading the majority of the economists we will not make it, tough I still see some positive prerequisites, because situation (...) on accepting the auto-amendment is convenient for the market.	One should not assume that in current law regulations, the decisions of the MPC are determined by views or appeals of politicians. It is worth to notice though the increased interest of members of the parliament towards issues on NBP activity and its rights and first disturbing legislative initiatives. Taking into consideration the experience of previous years it is rather typical behaviour of politicians at the start of the new Sejm's term. The crusade against the NBP 4 years ago came to nothing. We hope, it will happen this time as well, taking into consideration that PM Marcinkiewicz defends the independence of the central bank and speaks against proposed amendment to NBP bill.
Jarosław Kaczyński, PiS president **PAP, 9 December** [Q.: Do you aim at earlier elections?] A.: I am trying to make Poland to be well governed. Take a look at the constitution and do not ascribe me magical skills. I do not posses them though I would like to. **Marek Jurek, Lower House speaker, PiS deputy** **PAP, 7 December** If it turns out that there is no majority in Sejm able to cooperate with the government to pursue a national policy, then an early election will be necessary. **Przemysław Gosiewski, chief of PiS parliamentary caucus** **PAP, 7 December** Sejm, which was elected in August this year, has mandate for 4 years. If it was not able to fulfil its tasks – among others to pass bills then the only reasonable solution would be calling for peoples will, which are highest sovereign.	It is still difficult to make a clear-cut assessment, whether taking seriously the early elections scenario by the PiS members is only a game to pass a budget or a real option considered by politicians. Results of opinion polls set a ruling party in a very good position. They allow to keep the informal junior coalition partners in check before voting on the budget 2006 by threatening that the lack of support for the budget may end with calling an early election next year and parties such as LPR, PSL or even Samoobrona could even not enter the parliament. On the other hand, the guarantee of president Lech Kaczynski's favour makes this strategy quite safe. If it appeared, that by February the preference of the voters would have changed, early election could be avoided even if Sejm rejects the budget. According to Polish constitution, if the budget is not accepted, the president may shorten the term of the parliament though he is not obliged to do so.
Teresa Lubińska, finance minister **PAP, 8 December** Keeping budget gap at PLN30bn with current level of GDP [growth] does not give a chance for quick reduction of the deficit [relation to GDP]. It will be possible, if GDP growth is faster. **Reuters, PAP, 7 December** The previous convergence programme was unrealistic. We will prepare a new convergence programme, but not one that leads to Poland adopting the euro with slow economic growth. We will bring a strong, fast-growing Poland into the euro zone. Public debt will systematically rise, because we are at stage of building highways. (…) There is no danger of breaking 55% [of public debt ratio to GDP], and 2007 should see further stabilisation and lowering of this ratio.	An update Convergence Programme will be the first official document of the new government from which we will get to know fiscal plans beyond 2006. One can predict in which direction changes in the document will go as compared to the previous program on the basis of up to date comments from FinMin. The new plan of fiscal consolidation will surely be less ambitious than the ("unrealistic) previous one, which pledged to lower budget deficit to 2.2% of GDP in 2007. In the new program nominal budget deficit will most likely be set at PLN30bn, but this would not be enough, as finance minister admits herself, to lower budget deficit ratio to GDP with current pace of economic growth. This strategy is not likely to give Poland a chance to tackle the problem of high fiscal deficit and mounting public debt, unless miraculous economic boom takes place. According to finance minister, the program should be prepared until January 10. It is not hard to guess that reaction of the European Commission to that document will not be warm, but it will appear probably only after a few months.
Piotr Woźniak, economy minister **PAP, 2 December** We have quite stable situation as regards the zloty rate. All complain about the strong zloty, but this is not confirmed by export results. This does not mean that the zloty rate will be maintained at current level or will strengthen further. This will be an instrument quite frequently-used by the current government. If exports began to fall rapidly, I would recommend such actions [to influence the zloty rate]. For the time being, from my point of view there is no need to fiddle with zloty rate. I will not help the NBP out.	Minister Woźniak has not explained how the government could affect the zloty rate without changing the Polish law (including the Constitution) which holds that FX policy is shaped jointly by the government and the central bank. One cam imagine that the government would buy foreign currency on the market (conducting inverse transactions to what it is doing now), for instance in order to pack back foreign debt. The problem is, however, that such actions requires large flexibility in fiscal policy, i.e. lower spending on other goals and/or a possibility of additional financing on the domestic market without an increase debt servicing costs. Unfortunately, even if this was possible, it should also lead to capital inflow and thus the whole action could prove fruitless.
Jacek Krzyślak, head of financial policy, analysis and statistics department of the FinMin; Reuters, 1 December We expect inflation in December to fall to 1.2 or 1.3%. Prices in November did not change as compared to October and maybe they even declined. On the basis of data we collected, food prices increased by a mere 0.1%MoM in November and fuel prices dropped by 3.1%MoM. (…) Changes seen so far indicate that there is not reason to predict inflation rebound in January or February.	Until recently, our inflation forecast was assuming that inflation fell to 1.5%YoY in November and this assumption was based of solid food price growth. However, an important role has been played by the fact that Russian ban on a part of Polish food exports increased domestic supply of foodstuff and resulted in significant price reductions. This situation improves short-term inflation outlook, which should be positive for the debt market.

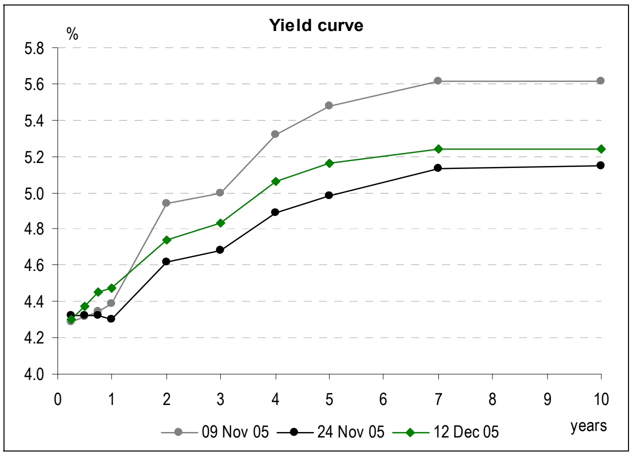
Market monitor



Zloty on strongest levels for 3.5 years

▪ On stabilisation of political situation and gradual retreat from costly election promises by new government, adopting conservative assumption to the budget draft, which was quite positively approved by the markets, zloty gained against the euro to the strongest level for 3.5 years. It was supported by Ministry of Finance, which exchanged proceeds from foreign currency denominated issues, by Slovakia's entry to ERM-2, as well as by perspective of the end of rate hikes cycle in U.S., which improved sentiment to the region. Downgrading of credit rating of Hungary by Fitch agency resulted in temporary correction.

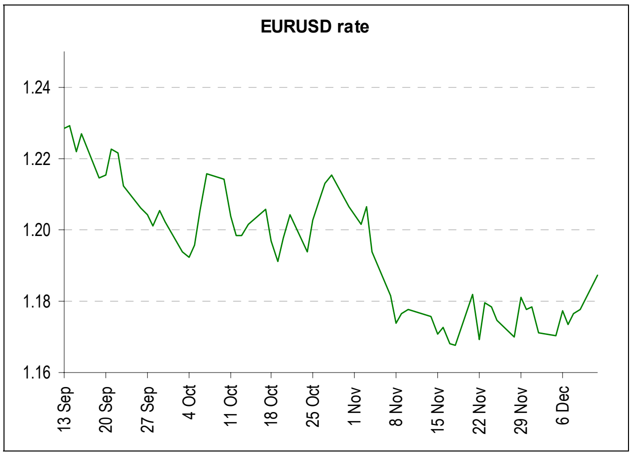
▪ Amid likely end of tightening rate hikes series, minimal chances for rate cuts in Poland as well as good moods in the region zloty should remain quite strong. It will be supported by expectations of further sale of foreign currencies by MF with low activity in December.



Strengthening and yields stabilization

▪ In the past month the bond market strengthened in reaction to stabilization on the political stage and drop of yields on the core bond markets. 5Y bonds yield fell temporarily below 5%. Dovish overtone of FOMC minutes resulted in investors return to the region. Yields rose on higher wages, industrial production, Q3 GDP as well as amid the rate decision of MPC, which left the parameters of monetary policy unchanged. Debt weakened on deterioration of Hungarian credit rating, which negatively affected markets in the region.

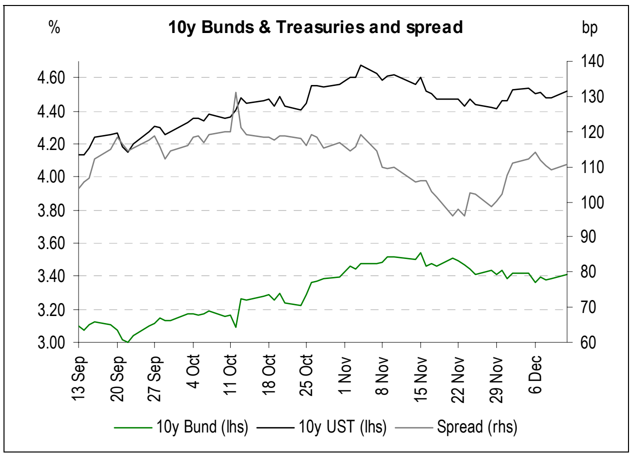
▪ If CPI is in line with the Ministry of Finance's forecasts at 1.2%YoY the expectations on additional rate cut may rise, whereas the debt market may strengthen. Bonds will be sensitive to situation on the core markets amid lower activity at the end of the year and holiday season.



Dollar is still strong, in narrow range though Fed will weigh

▪ On strong expectations of rate hikes and better economic data (Q3 GDP) in U.S. than in EMU dollar appreciated against the euro in the mid November to the highest level for 2 years (1.1648) and stayed in narrow range 1.164-1.19. High net capital inflows levelled record high trade deficit. Euro recovered amid rate increase in the EMU, though more dovish comments of ECB still supported the greenback. EURUSD soared to 1.196 on expectations of possible change in Fed's rate statement wording, which may signal the end of monetary policy tightening.

▪ EURUSD did not break 1.17 – an important technical level and amid an expected and possible end of rate hikes in U.S., where yield advantage was the main reason for recent dollar appreciation, we do not expect further dollar significant strengthening and return to 1,20 level is well possible.



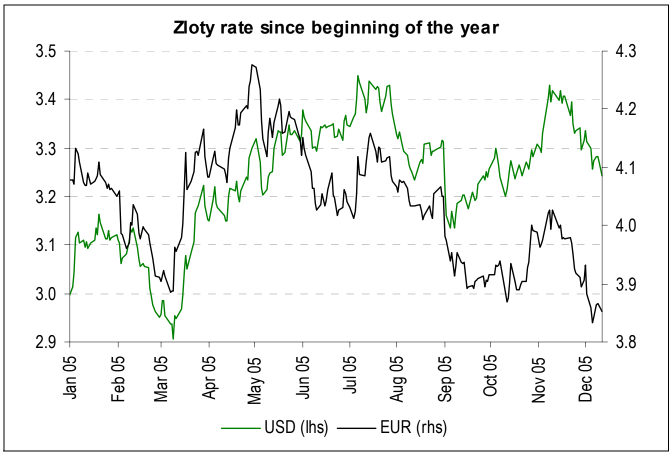
Source: Reuters, BZ WBK

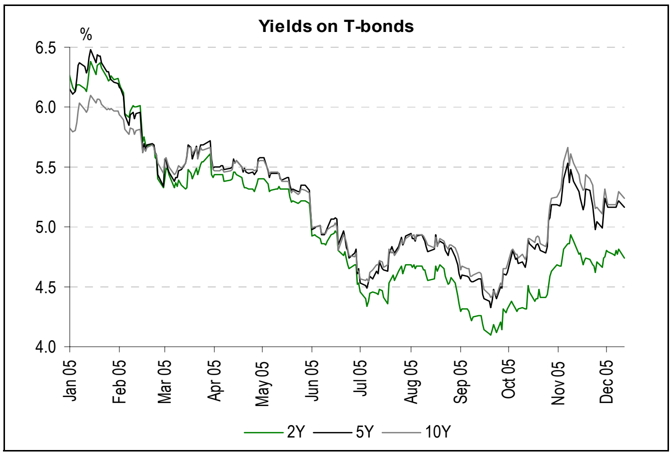
Yields lower on core bonds markets

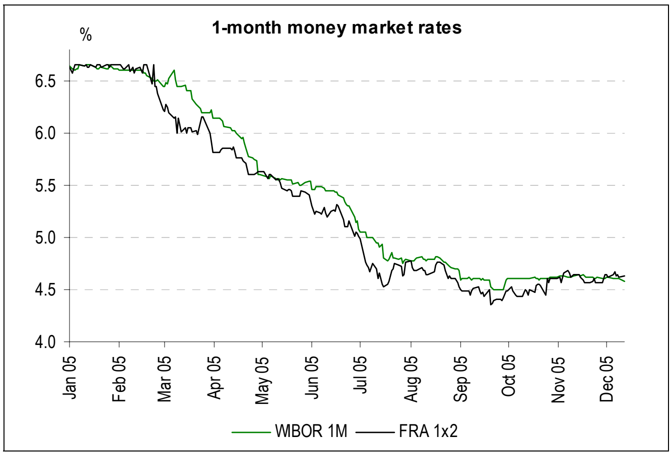
▪ Yields of 10Y Treasuries fell from 4.62% (9 Nov) to 4.52% (12 Dec) and 10Y Bunds from 3.51% to 3.40%. Yields spread fell under 100 bps, when some data suggested weakening of growth and curbing inflation in U.S. and FOMC minutes were a bit dovish. Statements of ECB members, that rate raise in the euro zone is not a start of a cycle supported Bunds. U.S. yields rose on good data from the labor market, GDP and ISM and fell on higher non-farm productivity and lower unit labor costs figures.

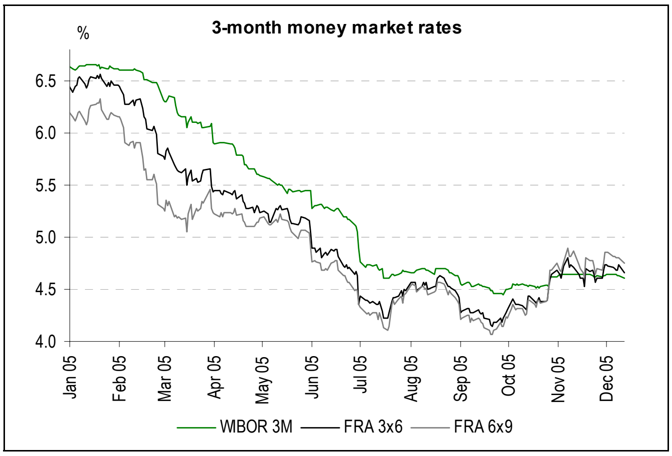
▪ The market awaits Fed's communiqué after December decision, which may suggest the end of rate hikes and if fulfils will result in bonds strengthening. In EMU the expectations of the market will be highly determined by the incoming figures, that will affect monetary policy course, which according to ECB comments is not fully set and explicit.

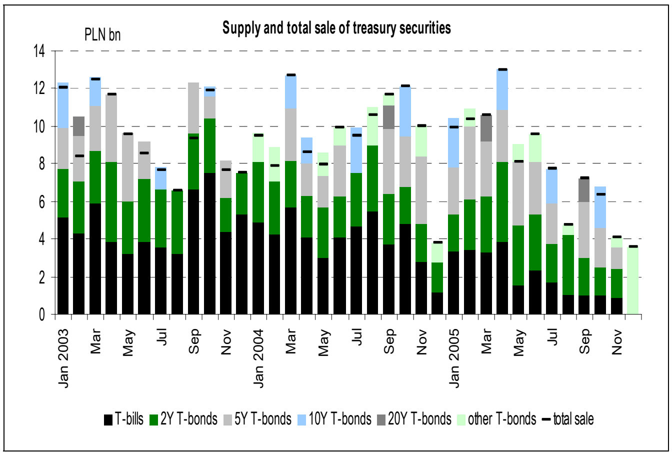
Market monitor











Treasury bill auctions (PLN m)

Date of auction	OFFER / SALE 13-week	52-week	Total
03.10.2005	100/100	400/400	500/500
17.10.2005	100/100	400/400	500/500
Total October	**200 / 200**	**800 / 800**	**1 000 / 1 000**
07.11.2005	-	400/400	400/400
21.11.2005	-	500/500	500/500
Total November	**-**	**900 / 1 200**	**900 / 900**
05.12.2005	100/100	1 200/ 1 200	1 300/1 300
19.12.2005	100	600-1 200	600-1300
Total December*	**100 - 200**	**1 800 - 2 400**	**1 900 - 2 500**

* estimations based on Ministry of Finance preliminary information

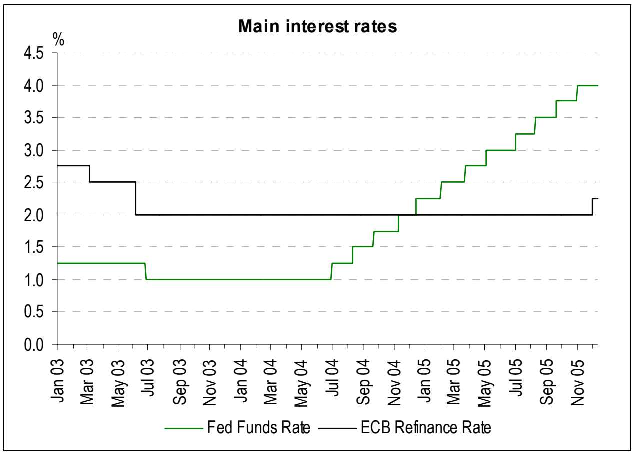
Treasury bond auctions in 2005 (PLN m)

month	First auction date	T-bonds	offer	sale	Second auction date	T-bonds	offer	sale	Third auction date	T-bonds	offer	sale
January	05.01	OK0407	2 000	2 000	12.01	DS1015	2 600	2 130	19.01	PS0310	2 500	2 500
February	02.02*	OK0407	2 760	2 760	09.02*	IZ0816	960	960	16.02*	PS0310	3 840	3 200
March	02.03*	OK0407	3 000	3 000	09.03	WS0922	1 400	1 400	16.03	PS0310	2 900	2 900
April	06.04	OK0407	3 500	3 500	13.04	DS1015	2 200	2 130	20.04*	PS0310	2 750	2 750
May	04.05*	OK0807	3 120	3 120	11.05	IZ0816	1 000	0	18.05*	PS0310	3 360	3 360
June	01.06*	OK0807	3 000	3 000	08.06*	WZ0911	1 440	1 440	15.06	PS0310	2 800	2 800
July	06.07	OK0807	2 000	2 000	13.07	DS1015	1 800	1 800	20.07	PS0310	2 200	2 200
August	03.08*	OK0807	3 240	3 240	10.08	IZ0816	500	500	-	-	-	-
September	07.09	OK1207	2 000	2 000	14.09*	WS0922	1 200	1 200	21.09*	PS0310	3 000	3 000
October	05.10	OK1207	1 500	1 500	12.10*	DS1015	2 025	2 025	19.10	PS0310	2 100	2 100
November	02.11	OK1207	1 500	1 500	09.11	IZ0816	500	491,5	16.11*	DS1110	1 200	1 200
December	07.12*	WZ0911	3 600	3 600	-	-	-	-	-	-	-	-

* with supplementary auction

Source: Ministry of Finance, Reuters, BZ WBK

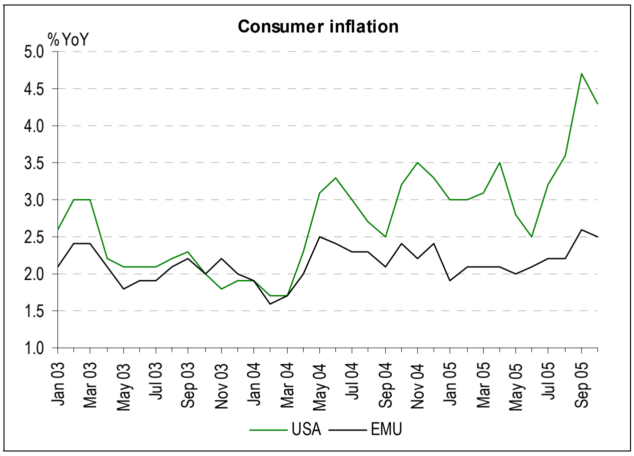
International review



Rising expectations on sooner end of rate hikes in U.S.

▪ Mixed data from U.S. economy suggested possible slower growth and weaker inflation pressure (core PPI, CPI), and FOMC minutes had a slightly dovish overtone. Although next data (GDP, durable goods orders, ISM) was positive, high productivity and lower unit labor costs increased expectations on sooner end of rate rise series. The market expects, that on December meeting Fed will raise Fed Funds rate from 4% to 4.25%.

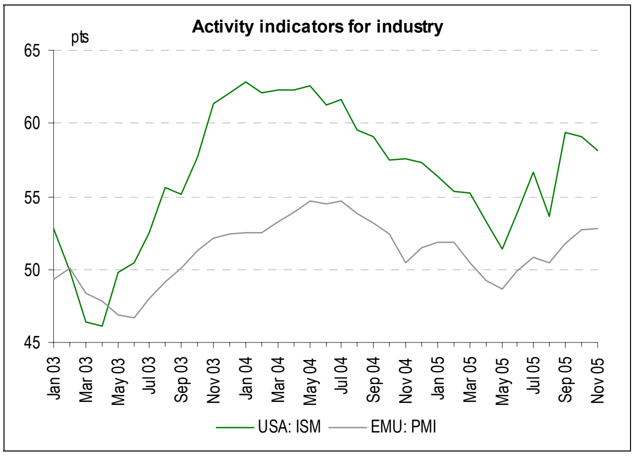
▪ European Central Bank increased main interest rate in the euro zone for the first time in 5 years time from 2.0% to 2.25%. The chairman of ECB Jean Claude Trichet stated that this decision was not a clear-cut start of aggressive tightening campaign and following decisions will be made based on incoming data. However some ECB members do not exclude rate hike and remind that rates are still on historically low levels.



Mixed inflation data

▪ U.S. CPI rose in October by 0.2%MoM and 4.3%YoY as compared to record high 1.2%MoM in September and expectations of no change MoM. Rise of core inflation, excluding food and gasoline amounted 0.2%MoM and 2.1%YoY and was in line with expectations. PPI increased in October by 0,7%MoM (5.9%YoY) after 1.9%MoM in September, whereas the market did not expect any change. Core PPI surprisingly fell by 0.3%MoM with expected rise of 0.2%MoM. Despite the main inflation measures were higher than market consensus, core indices showed lower inflation pressure.

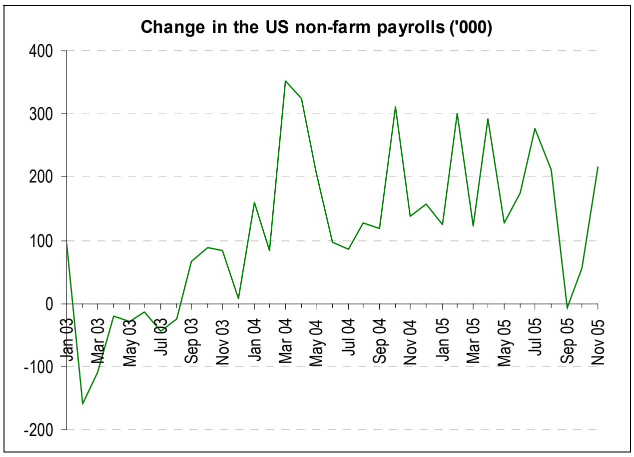
▪ HICP inflation in the euro zone dropped in October to 2.5%YoY from 2.6%YoY, whereas preliminary estimates for November indicate further drop down to 2.4%YoY. PPI in EMU rose o 0.6%MoM and 4.1%YoY after 0.5%MoM and 4.4%YoY.



Activity indices drop in U.S. and rise in EMU

▪ ISM index showing the shape of manufacturing sector in U.S. fell from 59.1 pts to 58.1 pts in November and was much higher than expected 57.5 pts. Non-manufacturing ISM dropped from 60.0 pts to 58.5 pts and was slightly above market consensus at 59.0 pts. Employment component indicated positive situation on the labor market, whereas prices paid sub-indices fell and were much better than those in Chicago PMI.

▪ Activity index in manufacturing sector in the euro zone (PMI) rose in November from 52.7 pts to expected 52.8 pts, which is the highest level for 14 months. PMI in services sector soared from 54.9 pts to the highest level for 16 months (55.2 pts) and strongly above market forecast at 54.8. Prices paid component featured the highest rise in the non-manufacturing PMI.



Source: Reuters, ECB, Federal Reserve

Better situation on the labor market - lower inflation pressure

▪ In November non-farm payrolls in United States rose to 215,000 from 56,000 in October, with slightly lower expectations 210,000, which showed that uncertainty resulting from hurricane effects was limited.

▪ Unemployment rate in U.S. did not change in comparison to October reading and remained at 5.0%, whereas average hourly earnings increased in line with expectations by 0.2%MoM and 3.2%YoY, which is the highest rise YoY since March 2003. Non-farm productivity in United States soared in Q3 2005 by 4.7%, whereas unit labor costs dropped by 1.0% as compared to market consensus at 4.5% and –0.8 respectively, which showed weaker inflation pressure and better shape of labor market.

Economic calendar

Monday	Tuesday	Wednesday	Thursday	Friday
12 December USA: Budget deficit (Nov)	**13** GER: ZEW index (Dec) USA: Retail sales (Nov) USA: Fed meeting – decision	**14** ***POL: Switch bond auction*** ***POL: CPI (Nov)*** ***POL: Money supply (Nov)*** ***POL: Balance of payments (Oct)*** USA: Foreign trade (Oct) USA: Foreign trade prices (Nov)	**15** ***POL: Wages (Nov)*** ***POL: Employment (Nov)*** USA: CPI (Nov) USA: Net capital flows (Oct) USA: Capacity utilisation (Nov) USA: Industrial output (Nov)	**16** EMU: Final HICP (Nov) USA: Current account (Q3)
19 ***POL: Treasury bills auction*** ***POL: PPI (Nov)*** ***POL: Output in industry and construction (Nov)*** EMU: Industrial output (Oct)	**20** ***POL: MPC meeting*** GER: IFO index (Dec) EMU: Trade balance (Oct) USA: House starts (Nov) USA: PPI (Nov)	**21** ***POL: MPC meeting – decision*** ***POL: Retail sales (Oct)*** ***POL: Unemployment rate (Oct)*** USA: PCE (Q3) USA: Final GDP (Q3)	**22** ***POL: Core inflation (Oct)*** ***POL: Business climate (Nov)*** USA: Consumption (Nov) USA: PCE (Nov) USA: Personal income (Nov)	**23** EMU: Current account (Oct) USA: Durable goods (Nov) USA: Michigan index (Dec)
26 ***INT: Holiday – Christmas Day***	**27** USA: Consumers' confidence (XII)	**28**	**29** EMU: Money supply (Nov) USA: Home sales (Nov)	**30** ***POL: Balance of payments (Q3)*** USA: Chicago PMI (Dec)
2 January *INT: Holiday (USA, GB, CA, CH, JP)*	**3** USA: ISM manufacturing (Nov) USA: FOMC minutes	**4** EMU: HICP flash (Dec) USA: Factory orders (Nov)	**5** EMU: PPI (Nov) EMU: Retail sales (Nov) USA: ISM non-manufacturing (Dec)	**6** EMU: Unemployment (Nov) USA: Average hourly earnings(Dec) USA: Non-farm payrolls (Dec) USA: Unemployment (Dec)
9	**10** USA: Wholesale inventories (Nov) GER: ZEW index (Jan)	**11**	**12** EMU: GDP revised (Q3) EMU: ECB meeting – decision USA: Foreign trade (Oct) USA: Foreign trade prices (Nov) USA: Fed budget (Dec)	**13** ***POL: Money supply (Dec)*** ***POL: Balance of payments (Nov)*** USA: PPI (Dec) USA: Retail sales (Dec)

Source: CSO, NBP, Finance Ministry, Reuters

MPC meetings and data release calendar for 2006

	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
MPC meeting	24-25	21-22	28-29	25-26	30-31	27-28	25-26	29-30	26-27	24-25	28-29	19-20
GDP*	31	-	1	-	30	-	-	29	-	-	29	-
CPI	16	15[a]	15[b]	14	15	14	14	14	14	16	15	14
Core inflation	-	-	-	-	-	-	-	-	-	-	-	-
PPI	19	17	17	20	19	20	19	18	19	18	20	19
Industrial output	19	17	17	20	19	20	19	18	19	18	20	19
Retail sales	-	-	-	-	-	-	-	-	-	-	-	-
Gross wages, employment	16	15	15	18	17	16	17	16	15	16	16	15
Unemployment	-	-	-	-	-	-	-	-	-	-	-	-
Foreign trade	about 50 working days after reported period											
Balance of payments*	-	-	31	-	-	-	-	-	-	-	-	-
Balance of payments	13[c]	13	14	-	-	-	-	-	-	-	-	-
Money supply	13	14	14	-	-	-	-	-	-	-	-	-
NBP balance sheet	6	7	7	-	-	-	-	-	-	-	-	-
Business climate indices	23	23	23	24	23	23	24	23	25	23	23	22

* quarterly data, [a] preliminary data, January, [b] January and February, [c] November 2004, [d] January, [e] February

Source: CSO, NBP

Economic data and forecasts

Monthly economic indicators

		Nov 04	Dec 04	Jan 05	Feb 05	Mar 05	Apr 05	May 05	Jun 05	Jul 05	Aug 05	Sep 05	Oct 05	Nov 05	Dec 05
Industrial production	%YoY	11.4	6.8	4.6	2.3	-3.7	-1.1	0.9	6.9	2.6	4.8	5.9	7.6	8.5	8.8
Retail sales [c]	%YoY	4.4	2.8	7.5	2.4	-0.3	-14.4	8.0	10.5	5.0	7.9	5.4	7.5	8.4	8.3
Unemployment rate	%	18.7	19.1	19.5	19.4	19.3	18.8	18.3	18.0	17.9	17.8	17.6	17.3	17.4	17.7
Gross wages [b c]	%YoY	2.7	3.2	2.6	1.4	2.2	1.8	3.0	4.5	3.2	2.8	1.8	6.4	3.8	3.6
Employment [b]	%YoY	-0.3	0.2	1.5	1.6	1.6	1.7	1.6	1.7	1.8	2.0	2.2	2.1	2.1	2.1
Export [d]	%YoY	31.0	22.5	35.0	27.3	11.0	12.6	11.3	12.9	12.9	13.7	14.8	14.7	6.1	10.8
Import [d]	%YoY	24.5	16.3	22.7	27.9	6.8	-5.2	13.5	10.8	8.7	13.1	10.3	14.0	11.5	14.3
Trade balance [d]	EURm	-238	-442	100	-60	-359	-19	-495	-172	-286	-308	-102	-140	-600	-700
Current account balance [d]	EURm	-199	-489	-408	-317	-275	157	-754	77	-438	-335	-357	-370	-550	-700
Current account balance [d]	% GDP	-4.3	-4.1	-4.0	-3.8	-3.4	-2.7	-2.5	-2.1	-1.8	-1.8	-1.6	-1.6	-1.7	-1.8
Budget deficit (cumulative)	PLNbn	-33.8	-41.5	-1.6	-8.8	-12.3	-13.9	-18.3	-18.5	-17.5	-18.5	-17.8	-20.6	-23.1	-29.0
Budget deficit (cumulative)	% realisation	81.4	100.0	4.5	25.2	35.2	39.6	52.3	52.9	49.9	52.8	50.8	58.8	66.0	82.9
CPI	%YoY	4.5	4.4	3.7	3.6	3.4	3.0	2.5	1.4	1.3	1.6	1.8	1.6	1.3	1.5
PPI	%YoY	6.7	5.2	4.5	3.2	2.2	0.9	-0.5	0.0	0.0	-0.2	-0.5	-0.9	-0.5	0.9
Broad money (M3)*	%YoY	6.4	8.7	9.3	9.4	11.0	10.0	13.2	10.8	10.4	11.1	12.7	8.7	12.2	10.3
Deposits*	%YoY	6.5	8.1	8.4	8.7	10.4	8.7	11.9	9.2	9.4	10.1	11.6	6.3	10.4	8.7
Credits*	%YoY	4.2	2.9	3.5	2.4	4.6	5.3	9.4	7.4	8.8	9.0	9.6	4.5	9.3	10.5
USD/PLN	PLN	3.28	3.09	3.11	3.06	3.04	3.21	3.29	3.34	3.40	3.29	3.20	3.26	3.37	3.26
EUR/PLN	PLN	4.26	4.14	4.08	3.99	4.02	4.16	4.18	4.06	4.10	4.05	3.92	3.92	3.97	3.88
Reference rate [a]	%	6.50	6.50	6.50	6.50	6.00	5.50	5.50	5.00	4.75	4.75	4.50	4.50	4.50	4.50
WIBOR 3M	%	6.81	6.72	6.63	6.54	6.15	5.78	5.48	5.22	4.66	4.67	4.57	4.50	4.64	4.70
Lombard rate [a]	%	8.00	8.00	8.00	8.00	7.50	7.00	7.00	6.50	6.25	6.25	6.00	6.00	6.00	6.00
Yield on 52-week T-bills	%	6.81	6.44	6.28	5.95	5.51	5.36	5.19	5.09	4.30	4.33	4.15	4.19	4.35	4.40
Yield on 2-year T-bonds	%	6.81	6.39	6.24	5.82	5.43	5.39	5.27	5.14	4.50	4.60	4.22	4.42	4.75	4.80
Yield on 5-year T-bonds	%	6.78	6.29	6.31	5.80	5.56	5.50	5.38	5.25	4.70	4.84	4.51	4.85	5.23	5.25
Yield on 10-year T-bonds	%	6.43	6.02	5.98	5.72	5.57	5.49	5.36	5.24	4.72	4.87	4.57	4.90	5.36	5.30

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

[a] at the end of period [b] in corporate sector [c] in nominal terms [d] balance of payments data on transaction basis

* Since January 2005 the NBP changed methodology of monetary statistics (definition of Monetary Financial Institutions has been extended with cooperative savings and credit unions (SKOK)). Before January 2005 the table presents growth rates in old methodology, not fully comparable with recent data.

Quarterly and annual economic indicators

		2003	2004	2005	2006	1Q04	2Q04	3Q04	4Q04	1Q05	2Q05	3Q05	4Q05
GDP	PLNbn	842.1	922.2	970.1	1 027.1	212.6	225.2	228.7	255.6	226.2	235.7	237.2	270.9
GDP	%YoY	3.8	5.3	3.3	4.3	6.8	5.9	4.8	3.9	2.1	2.8	3.7	4.3
Domestic demand	%YoY	2.7	5.9	1.7	4.0	6.9	7.4	5.8	3.8	1.1	-0.5	1.6	4.4
Private consumption	%YoY	1.9	4.0	2.3	3.6	4.7	4.8	4.1	2.3	1.7	1.6	2.7	3.3
Fixed investments	%YoY	-0.1	6.3	5.5	8.2	4.7	4.9	5.3	8.5	1.2	3.8	5.7	8.0
Industrial production	%YoY	8.4	12.3	3.9	6.1	19.0	16.4	9.2	6.2	0.7	2.3	4.4	8.3
Retail sales (real terms)	%YoY	3.6	7.1	1.7	6.3	13.6	11.3	4.0	1.1	-0.4	-3.2	3.9	6.3
Unemployment rate [a]	%	20.0	19.1	17.7	16.6	20.4	19.4	18.9	19.1	19.3	18.0	17.6	17.7
Gross wages (real terms)	%YoY	2.0	0.8	0.9	2.5	3.8	1.6	-0.5	-1.5	-1.3	0.8	1.0	3.1
Export [b]	%YoY	9.1	22.3	14.5	8.4	17.9	27.7	19.7	23.6	23.1	12.2	13.9	10.4
Import [b]	%YoY	3.3	19.5	11.6	12.3	11.4	29.9	18.0	18.7	17.8	5.7	10.7	13.2
Trade balance [b]	EURm	-5 077	-4 552	-3 142	-6 404	-910	-1 693	-1 115	-834	-316	-690	-696	-1 440
Current account balance [b]	EURm	-4 108	-8 401	-4 279	-6 404	-2 245	-2 962	-2 102	-1 092	-1 001	-528	-1 130	-1 620
Current account balance [b]	% GDP	-2.1	-4.1	-1.8	-2.5	-2.5	-3.4	-4.1	-4.1	-3.3	-2.1	-1.6	-1.8
Budget deficit (cumulative) [a]	PLNbn	-37.0	-41.5	-29.0	-30.0	-11.8	-19.9	-29.0	-41.5	-12.3	-18.5	-17.8	-29.0
Budget deficit (cumulative) [a]	% GDP	-4.4	-4.5	-3.0	-2.9	-5.6	-3.6	-4.0	-4.9	-5.4	-2.6	0.3	-4.1
CPI	%YoY	0.8	3.5	2.2	1.9	1.6	3.3	4.5	4.4	3.6	2.3	1.6	1.5
CPI [a]	%YoY	1.7	4.4	1.5	2.1	1.7	4.4	4.4	4.4	3.4	1.4	1.8	1.5
PPI	%YoY	2.6	7.0	0.8	1.3	4.4	8.8	8.3	6.5	3.3	0.1	-0.2	-0.2
Broad money (M3)* [a]	%YoY	5.6	8.7	10.3	8.4	5.7	7.2	6.5	8.7	11.0	10.8	12.7	10.3
Deposits* [a]	%YoY	3.7	8.1	8.7	8.7	4.8	6.9	6.6	8.1	10.4	9.2	11.6	8.7
Credits* [a]	%YoY	8.1	2.9	10.5	15.0	6.0	5.7	4.3	2.9	4.6	7.4	9.6	10.5
USD/PLN	PLN	3.89	3.65	3.24	3.26	3.82	3.89	3.62	3.27	3.07	3.28	3.30	3.30
EUR/PLN	PLN	4.40	4.53	4.03	4.01	4.78	4.69	4.43	4.24	4.03	4.13	4.02	3.92
Reference rate [a]	%	5.25	6.50	4.50	4.50	5.25	5.25	6.50	6.50	6.00	5.00	4.50	4.50
WIBOR 3M	%	5.69	6.21	5.30	4.70	5.47	5.87	6.68	6.81	6.44	5.49	4.63	4.61
Lombard rate [a]	%	6.75	8.00	6.00	6.00	6.75	6.75	8.00	8.00	7.50	6.50	6.00	6.00
Yield on 52-week T-bills	%	5.33	6.50	4.92	4.50	5.75	6.24	7.26	6.75	5.91	5.21	4.26	4.31
Yield on 2-year T-bonds	%	5.38	6.89	5.05	4.90	6.28	6.86	7.66	6.75	5.83	5.27	4.44	4.66
Yield on 5-year T-bonds	%	5.61	7.02	5.27	5.45	6.67	7.10	7.59	6.70	5.89	5.38	4.68	5.11
Yield on 10-year T-bonds	%	5.77	6.84	5.26	5.50	6.70	7.00	7.25	6.40	5.76	5.37	4.72	5.19

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

[a] at the end of period; [b] balance of payments data on transaction basis
* Since January 2005 the NBP changed methodology of monetary statistics. Before January 2005 the table presents growth rates in old methodology, not fully comparable with recent data.

TREASURY DIVISION

Pl. Władysława Andersa 5, 61-894 Poznań
secretary tel. +48 061 856 58 35, fax +48 061 856 55 65

This analysis is based on information available until 12.12.2005 has been prepared by:

ECONOMIC ANALYSIS UNIT

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

Piotr Bielski	+48 022 586 83 33
Piotr Bujak	+48 022 586 83 41
Cezary Chrapek	+48 022 586 83 42

TREASURY SERVICES DEPARTMENT

Gdańsk
Długie Ogrody 10
80-765 Gdańsk
tel. +48 058 326 26 40
fax +48 058 326 26 42

Kraków
Rynek Główny 30/8
31-010 Kraków
tel. +48 012 424 95 01
fax +48 012 424 21 41

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

This publication has been prepared by Bank Zachodni WBK S.A. (a member of AIB Group) for information purposes only. It is not an offer or solicitation for the purchase or sale of any financial instrument. All reasonable care has been taken to ensure that the information contained herein is not untrue or misleading. But no representation is made as to its accuracy or completeness. No reliance should be placed on it and no liability is accepted for any loss arising from reliance on it. Bank Zachodni WBK S.A.. its affiliates and any of its or their officers may be interested in any transactions. securities or commodities referred to herein. Bank Zachodni WBK S.A. or its affiliates may perform services for or solicit business from any company referred to herein. This publication is not intended for the use of private investors. Clients should contact analysts at and execute transactions through a Bank Zachodni WBK S.A. entity or an AIB Group entity in their home jurisdiction unless governing law permits otherwise. Copyright and database rights protection exists in this publication.

Bank Zachodni WBK S.A. jest członkiem Allied Irish Banks Group