

# MACROscope

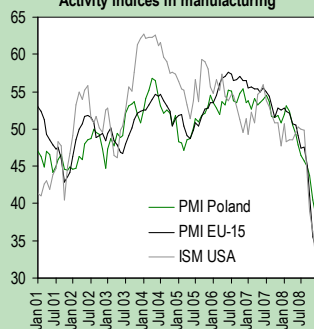
## Polish Economy and Financial Markets

January 2009

### GDP forecasts for 2009

(%YoY)	market	BZ WBK
January '09	2.0	2.0
December '08	2.8	2.6
November '08	3.5	3.3
October '08	3.9	3.9
September '08	4.4	4.5

Activity indices in manufacturing



### In this issue:

Economic update	2
Housing market update	4
Central bank watch	5
Government and politics	7
Market monitor	8
International review	10
Economic calendar	11
Statistics & forecasts	12

**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

## 2010 to be better

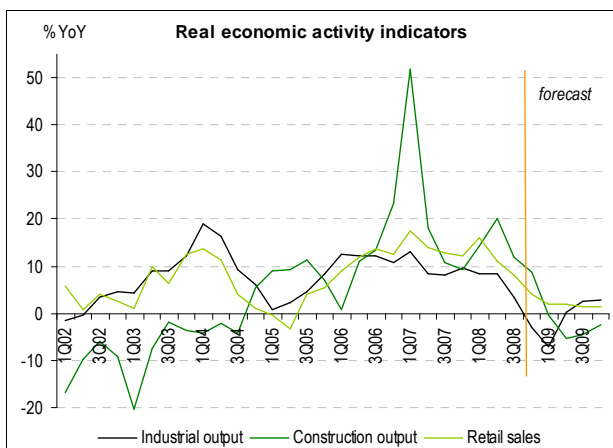
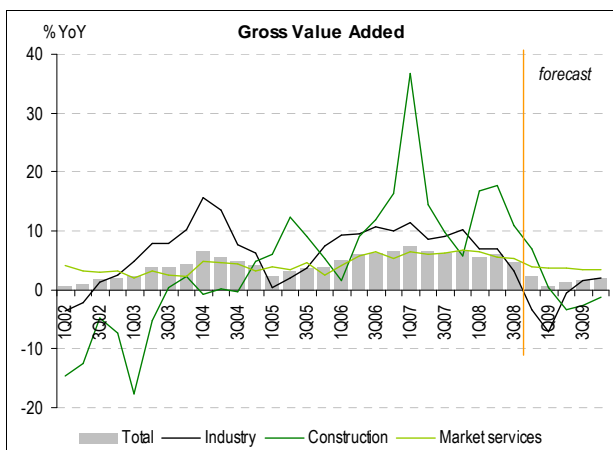
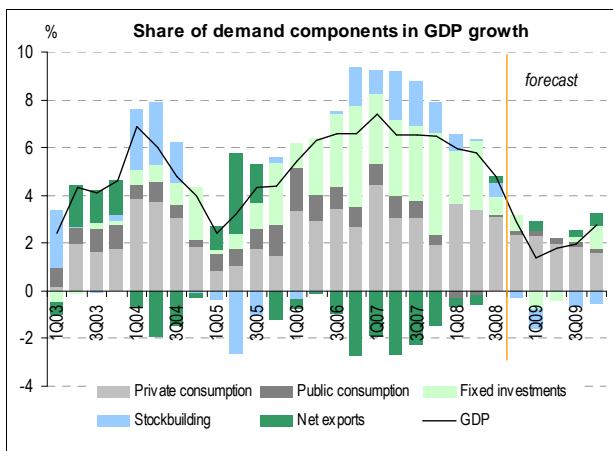
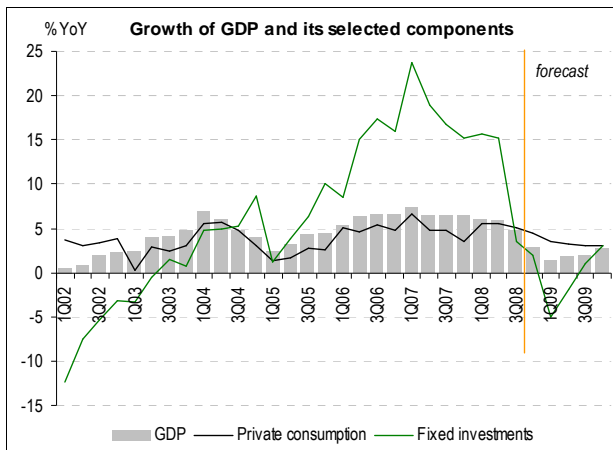
- One of the New Year's wishes we recently received was "All the best in 2010". It suggested that 2009 was the year we wanted to sink into oblivion. Though we do not share the pessimistic projections for the Polish economy about recession in 2009, we have no doubt that the upcoming quarters will be tough for Poland's economy. We will probably see a decline in investments, exports and employment. A gloomy joke goes that all ratios keep falling, except for... unemployment rate. However, trying to look on the bright side, we can hope that the second half of 2009 will be a bit better. Unlike last year when our projections for 2008 were outlined in *Special Focus* section, now we present key assumptions underlying the 2009 projections in each section. The assumptions relate to economic growth, inflation, property market, financial markets as well as monetary and fiscal policy (a table with relevant figures is provided at the end of the report, as usual).
- We now forecast a 2% economic growth. As the margin table shows, last month the market consensus changed more than our projections. Changes in the projections were further driven by poor macroeconomic data in Poland and abroad. We expect an annualised positive GDP growth both in the eurozone and the US as late as in Q2 2010 although these economies will start bouncing back at 2009-end. Although 2010 will be better from the global perspective and in consequence also in Poland, this will be the year witnessing an economic growth below potential.
- Lower economic growth will be conducive to the decline of inflation rate which will fall soon to the target level (2.5%). This means further interest rate cuts, though probably not on the scale seen in December (75bp). Anyway total cuts will exceed another 100bp in the months to come. Compared to our projections for a reference interest rate decline down to 3.5% in H1 2009, financial markets forecast a larger-scale monetary policy expansion. Further reductions should not be hindered even by conditions on the foreign exchange (a relatively weak PLN). All the odds are that the EURPLN rate will be on average higher than we earlier projected.
- Notwithstanding very tough market conditions, a significant GDP slowdown which will affect income and the budget gap, and despite considerable volatility on the FX market, the Polish government is still willing to enter ERM2 in H1 2009. Moreover, this is to happen without earlier amendments in the Constitution (the Law and Justice does not consent to it, the Civic Platform is not willing to hold a referendum), which in our view jeopardises our accession path to the eurozone. Uncertainty regarding the Polish political stage nearly two years ahead of elections is so noticeable that nobody can guarantee that we will enter potentially costly ERM2 only for two years, all the more so because the macroeconomic situation can force the government anyway to change its eurozone membership plans (risk of missing the Maastricht criteria).

### Financial market on 31 December 2008:

NBP deposit rate	3.50	WIBOR 3M	5.66	USDPLN	2.9618
NBP reference rate	5.00	Yield on 2-year T-bonds	5.13	EURPLN	4.1724
NBP lombard rate	6.50	Yield on 5-year T-bonds	5.07	EURUSD	1.4087

This report is based on information available until 12.01.2009

## Economic update



Source: CSO, own calculations

### Forecasts 2009 – demand side of the economy

- In the course of 2009 consumption demand will gradually weaken as a result of negative tendencies in the labour market. Fall in nominal growth rate of wage will be significant (in the enterprise sector from an average of 15.7% in 2008 to 3% in 2009, while in the whole economy from 13.6% to 3.3%), although real growth rate will decelerate to a lesser extent thanks to drop in inflation. Besides, there will be high scale of social benefits indexation (around 6%). What is more, additional support for disposable income of households will be changes in PIT and VAT (PLN8bn from PIT and PLN2bn from VAT), but a better part of money from PIT cut will go to households with higher income and thus lower propensity to consume.

- Support for investment activity will be increase inflow of EU funds (by ca. PLN10bn, adding ca. 0.5pp to GDP growth), which will offset to some extent lower inflow of FDIs (we assume fall of 50%, taking away over 1.5pp of GDP growth). Large uncertainty is connected with effects of the government's Plan for Stability and Development", but the rise in limit of state's guarantees and additional loans from the state's bank BGK is similar to value of rise in total loans for firms in 2008 (over PLN40bn).

- Exports performance will be negatively affected by gloomy prospects for GDP growth in the EU, although in case of Polish goods and services one may count on some positive substitution effect. At the same time, weaker domestic demand (highly import-consuming, especially in case of investment) will lead to rapid fall in imports growth and thus positive contribution of net export to GDP growth.

- We predict that C/A gap in 2009 will fall to 4.6% from 5.4% in 2008, but structure of its financing will deteriorate (coverage by EU funds up from 29% to 43%, but coverage of FDIs down from 49% to 27%).

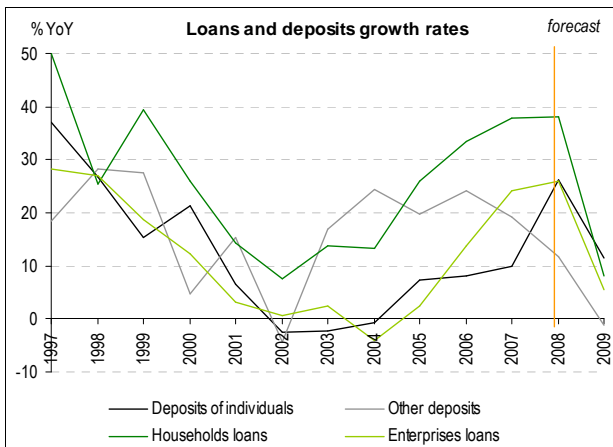
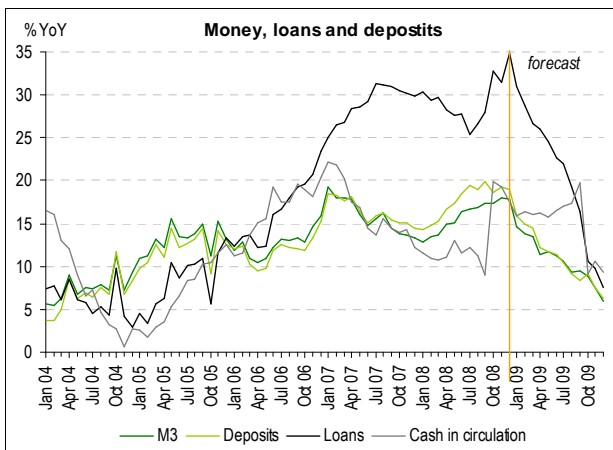
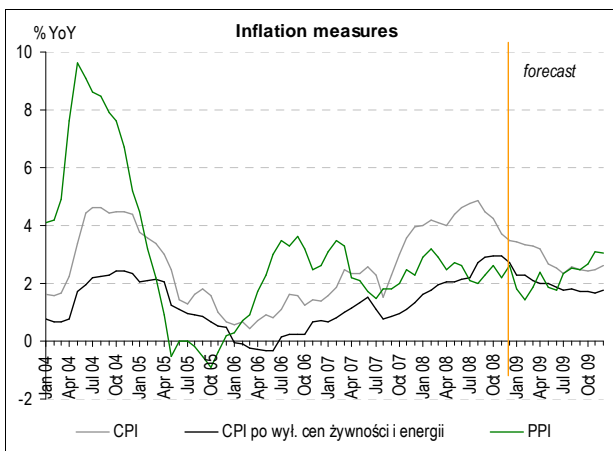
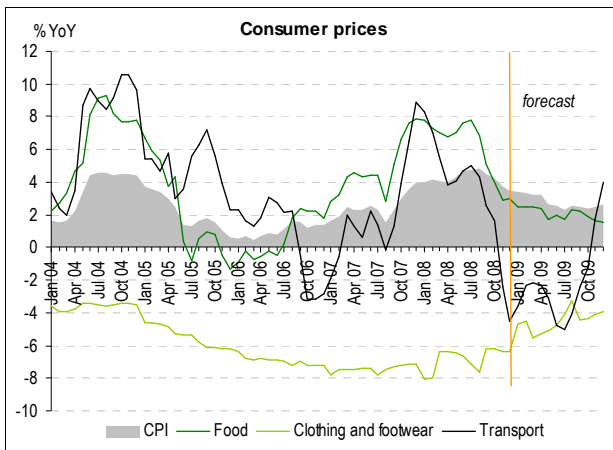
### Forecasts 2009 – supply side of the economy

- Looking at the economic activity from the supply side of the economy, the prospects seem the worst in construction. We forecast that value added in this sector will fall by 1.9% and construction output will fall by 3.2% against the corresponding growth rates of 11.7% and 13.7% in 2008. This will be connected with slump in investment activity (among other due to weaker FDIs inflow) and lower number of new projects in real estate market. On the other hand, a positive factor for activity in construction will be increased realisation of infrastructure projects connected with use of EU funds.

- We predict that fall in value added and output will be also seen in industry (-1% and -0.6%, respectively, against positive growth rates of 3% and 4.1% in 2008). This applies particularly to branches with large share of exports, which will be under negative influence of economic slump experienced by Poland's main trading partners, especially Germany, which still have ca. 25% share in Poland's exports (we assumed that recession in the Europe's largest economy will be deeper than on average in the euro zone).

- Growth rates in value added in market services (GDP component on the supply side connected with consumption demand) and in retail sales will also go down, according to our forecasts, but will remain in the positive territory. We predict slowdown to 3.5% from 5.3% for value added growth and to 3.9% from 13.2% for retail sales growth. Annual increase in retail sales in the first half of the year will be related to rapid drop in auto sales in annual terms (lower current demand amid crisis and high base effect). Later in the year, there will be stronger influence on all components of retail sales due to lower growth in households' disposable income.

## Economic update



Source: CSO, NBP, own calculations

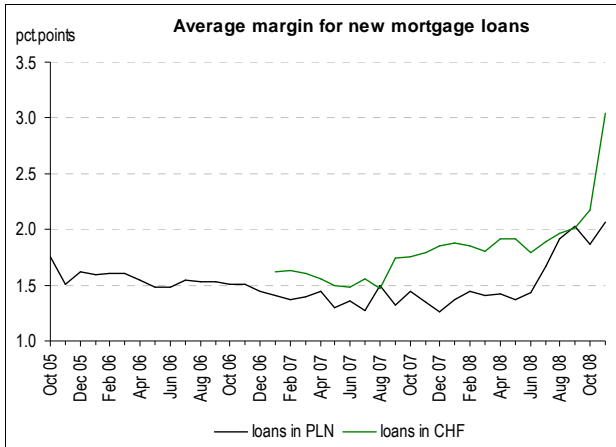
### Forecasts 2009 – inflation

- Substantial weakening of domestic demand and softer labour market conditions (and thus weaker cost pressure) will act towards weakening of the underlying inflationary pressure (not connected with exogenous factors). Already in the final quarter of 2008 a lowering of annual price growth was seen in some categories of services (e.g. in hotels and restaurants).
- However, the strongest impact on fall in the CPI inflation will be related to exogenous factors, mostly food and fuel prices. Sharp drop in agricultural commodities prices in the global markets and in majority of foodstuff prices locally seen for a few months will lead to significant lowering of annual growth rate of food and non-alcoholic beverages prices (to ca. 2% from ok. 6% this year). We also assume that transport price growth rate in 2009 will be negative (as a result of assumption that average crude oil prices will be below 50\$ in 2009 against nearly 100\$ in 2008).
- An element constraining domestic effect of disinflation impact of fall in agricultural and industrial commodities in the global markets is the zloty weakening, but according to our estimates this will offset only a part of the fall in global prices.
- The most pro-inflationary factor in 2009 will be housing and energy costs (we predict annual price growth in this category will go down only slightly to 8.5% from 9.1% in 2008). We assume that electricity prices' hike of 10% approved by Energy Regulatory Office (URE) in January will be the last one this year and natural gas prices will remain unchanged, although the URE suggested a possibility of fall in natural gas prices.
- All in all, we expect that the CPI inflation will return to the target of 2.5% in June and CPI less food and energy prices will fall below target already in January, although the old net inflation would not return to the target until year-end.

### Forecasts 2009 – loans and deposits

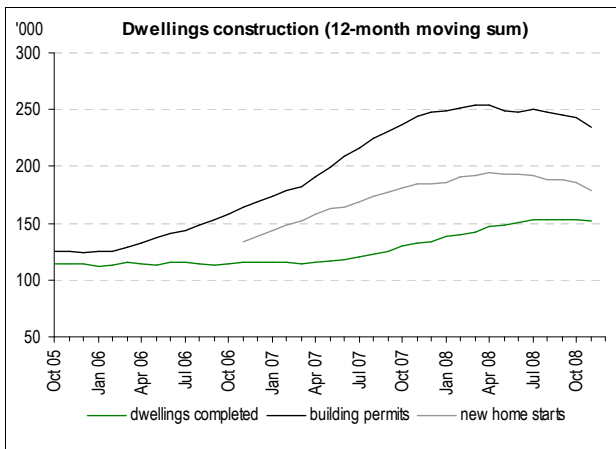
- We forecast that in the course of this year annual growth in total loans will significantly decelerate, to 7.5% at the end of 2009 from ca. 35% in December 2008, in case of households loans to 8% from nearly 40% and in case of corporate loans to 5.5% from over 25%. The fall in loans growth will be accompanied by substantial fall in growth rate of total deposits, to 5.5% from nearly 20% at the end of 2008. Annual growth in individuals' deposits will decelerate to 11.5% from ca. 26% and growth rate of other deposits will drop to -1.6% from around 12%.
- Total loans growth in 2009 will be negatively affected by FX effect (we predict the zloty will be stronger at end-2009 than at end-2008). However, the major negative impact will be related to tighter credit conditions (own actions of banks and expected introduction of the T recommendation by the Financial Supervision Authority) and weaker financial stance of firms and households. We predict the strongest deceleration in case of mortgage loans – effect of the above mentioned factors and additionally of the fact that potential buyers may wait for the whole 2009 for deeper fall in prices. On the other hand, there will be some positive effect of changes in the state's program of subsidies to interest payments.
- Corporate loans growth will be weaker due to tighter credit policy and weaker investment activity with simultaneous increase in share of own resources in fixed investment financing (effect of more difficult access to credit).
- Corporate deposits will fall due to weaker financial stance of firms with simultaneous increase in share of own resources in fixed investment financing. Increase in households' deposits will be lower due to weaker situation in labour market, fall in interest rates and in 2H2009 some outflow of funds to more risky assets may be visible.

# Housing market update

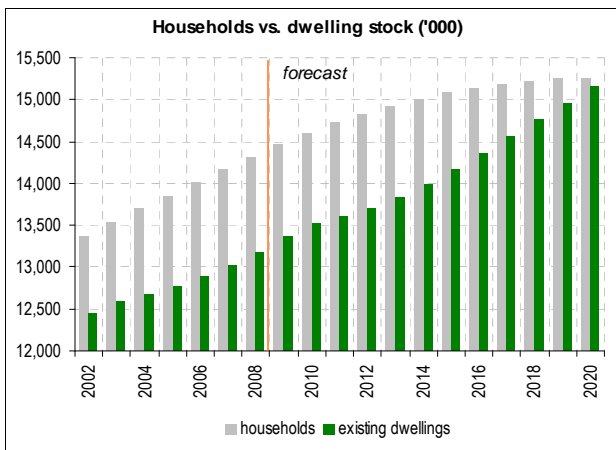


## Problems with financing and drop in demand in 2008

- Financial market crisis and clear slowdown in economy will make the next year in the housing market very difficult.
- Further stagnation in demand for houses should be expected in the nearest months. As long as world's major economies are in recession and risk aversion reigns in financial markets, one should not expect that foreign investors will be interested in buying real estate in Poland (even though zloty depreciation makes such investment relatively cheaper).
- Demand of domestic units will be constrained by deteriorating situation in labour market, high uncertainty, and expectation for price falls, and especially by worsening financing conditions (recommendation T of financial supervisor, banks' own decisions tightening credit policies and lowering LTV, rise in margins, and constraints in supply of foreign currency loans, particularly in CHF).

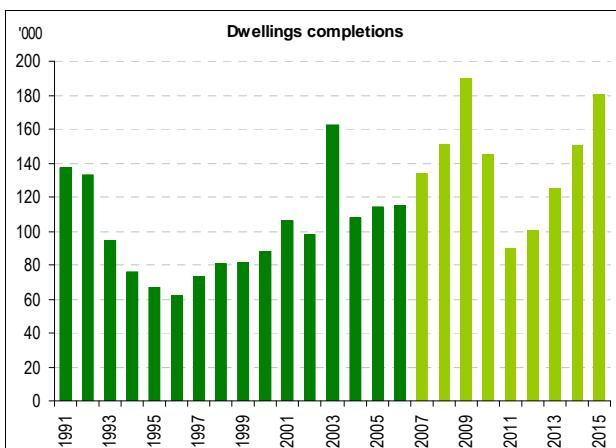


- Meanwhile, house supply in 2009 will remain high (ca. 190,000 versus 151,000 in 2008). Although number of new building permits have already started falling and developers inform they are sharply trimming new investments, there will be still many house completions from investments that have been started in the last several quarters. House supply in secondary market may be also high (profit taking, fear of price fall).
- In effect, drop in house prices in 2009 may be deeper than last year and in our view will reach at least 10%.
- A factor that may deepen correction of house prices in cities is, apart from falling demand, a new bill that enables automatic change of all rural ground within city limits into construction land.
- In turn, a positive impulse for housing demand and prices already in second half of the year may be deep fall in interest rates and improvement of relation between house prices and households' revenue.



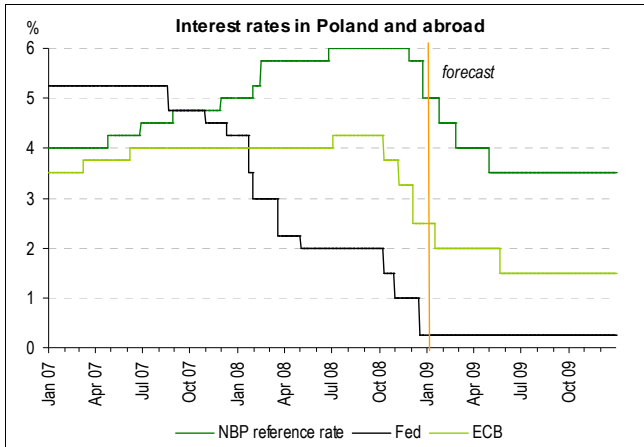
## ... although structural house shortage still high

- Looking at housing market in long-term perspective, one should remember that a structural mismatch between the number of existing dwelling stock and the number of households has not changed significantly in the recent years. Current data about number of households are not available, but basing on statistical office's forecast of households number (2003-2030) one can estimate that despite a strong revival in house construction in 2007-2008, there was in fact no change in the level of shortage of flats (due to rapid household formation rate) and the gap still exceeds 1m units.
- Moreover, significant cuts in real estate investments by developer companies due to financial crisis suggests that new house supply will shrink dramatically after 2009 (according to our forecast it will return below 100,000 units in 2011). In effect, despite gradually decreasing households formation rate in the next years, saturation of housing market will probably not take place before 2020.
- Predicted significant decline in supply of new housing units after 2009 together with forecasts of gradual revival in economic climate and housing demand allow assuming that after price decline in the next several quarters, there will be a significant rebound in prices of dwellings in 2011-2012. After 2015 those trends may be alleviated due to predicted demographic scenario (ageing society, slowing down growth in households number), however a positive impulse may be generated by potential Poland's accession to the euro zone.



Source: CSO, NBP, own calculations

# Central bank watch



## Interest rates sharply down, more cuts looming

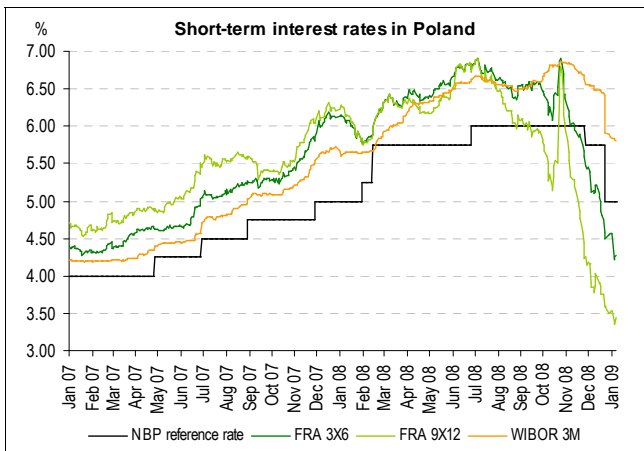
▪ Sudden deterioration in world economic situation and improvement in inflation outlook triggered fast and decisive reactions of major central banks, which brought interest rates in some countries (US, Japan, Switzerland) down to nearly zero. We predict that in those economies where a room for rate cuts still exists (among others, in the euro zone and the UK) monetary easing will continue. Central banks will also pursue other non-standard steps to revive economic growth around the globe.

▪ In environment of rapidly falling interest rates abroad and severe economic slowdown that will affect also Poland, we expect a continuation of monetary policy easing by the MPC – rate cuts in January and February by 50 bp each and further reductions of reference rate to 3.5% in Q2.

▪ Main argument in favour of interest rate cuts is clear improvement of inflation outlook in Poland following general fall in inflationary pressures around the world (CPI may fall to inflation target already in second half of this year) and strong deceleration in economic growth – we expect slowdown in domestic demand growth to 1.6% and GDP growth to 2% in 2009.

▪ Fear of excessively rapid zloty depreciation will be a factor preventing the MPC from deeper single rate cut, even though FX market reaction (or in fact lack of it) after cut in December may slightly lessen those concerns. We assume that nearest cuts will be of 50 bp (possibly smaller in Q2).

▪ Money market FRA rates are pricing in a reduction in NBP reference rate to at least 3.0-3.25% in the second half of this year.

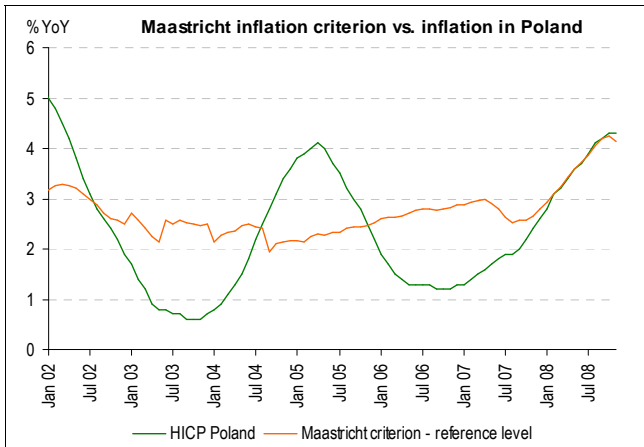


## Road to euro zone still under question mark

▪ An important factor for MPC decisions will be a pace of progress on the road to euro zone accession. The government has been maintaining his pledge to enter the euro zone in possibly short term, however realisation of this strategy is under big question mark due to lack of political support for change in the constitution.

▪ In our view, even a scenario of fast euro zone entry does not exclude rate cuts due to currently high disparity between Poland and the euro zone.

▪ Fulfilment of Maastricht inflation criterion may be difficult in near term – inflation in EU countries struck by recession will be faster than in Poland (we have breached the reference level already in October). Still, the criterion must be fulfilled ca. 1-1.5 years before EMU entry, which leaves some time.



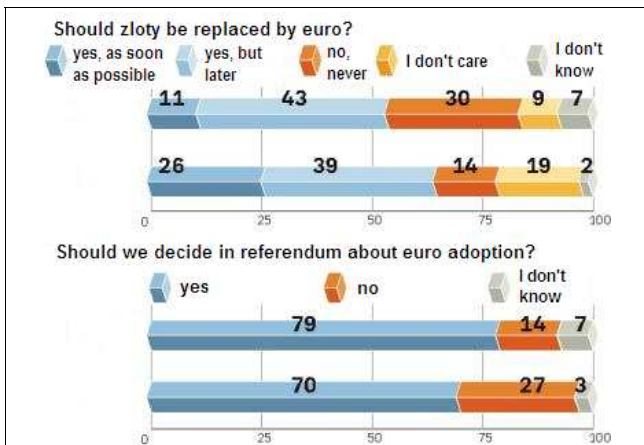
## NBP's report on euro adoption delayed

▪ NBP report on costs and benefits of euro zone entry, planned to be released by the end of the year, has not been finished yet. The NBP keeps working on corrections, taking into consideration implications of market crisis and remarks of the MPC.

▪ NBP deputy president Witold Koziński said recently that the tone of the report is positive, i.e. benefits of euro adoption are greater than costs related to loss of monetary autonomy.

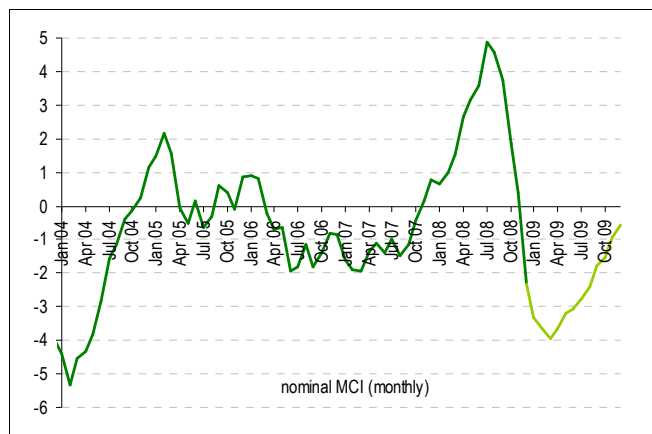
▪ A separate report on the euro adoption has been ordered and is being prepared for the President Kaczyński's office.

▪ Poles' support for euro adoption has been rising, yet still the majority would prefer to wait with the decision. According to TNS OBOP survey, 60% of Poles think that euro zone entry should take place after level of economic development in Poland converges to average EU level.



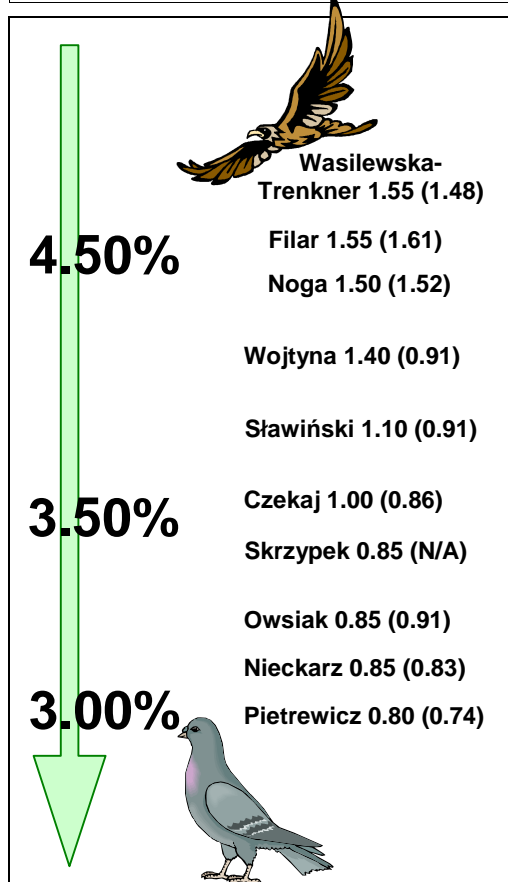
Źródło: NBP, Eurostat, Reuters, GfK Polonia, own calculations

## Restrictiveness of the Monetary Policy (Council)



### Restrictiveness index sharply down again

- Estimates, taking into account our predicted changes in interest rates and zloty exchange rate, suggest that monetary restrictiveness will continue falling in nearest months, in reaction to further interest rates reductions and persisting zloty weakness.
- Starting from Q2, index of restrictiveness will start erasing some of earlier losses under influence of zloty appreciation assumed by our forecasts (amid simultaneous gradual weakening of long-term equilibrium exchange rate), which impact will outweigh predicted further reduction in interest rates.
- Nevertheless, restrictiveness of monetary policy will be clearly lower in 2009 than in the previous year.



Index is between 0 and 2. A vote for the majority view is given a score of 1. A vote for a more hawkish (less dovish) decision than the majority view has a score of 2 and a vote for a less hawkish (more dovish) decision than the majority view has a score of 0. Average of points for all votes is the value of the index for a given MPC member.

Numbers directly by the name are values of the index for period since the beginning of Sławomir Skrzypek's term as NBP governor and numbers in parentheses are values of the index for 2004-2006.

Direction of the restrictiveness axis reflects our expectations regarding direction of interest rate changes within the nearest 12 months. Values in percent indicate **our subjective** assumption as regards a preferred level of the reference rate in 12 months by a particular MPC member.

### People to look at in 2009

The most recent trends in the economy and financial markets have clearly clipped the wings of hawks, and in effect gravity centre of views within the Monetary Policy Council have moved clearly towards advocates of interest rate reductions. While it seems that a consensus has already formed in the Council that further monetary easing is justified, opinions of various MPC members about a scale and speed of preferred rate cuts are diversifies, as usually.

This year, probably the lowest number of surprises should be expected from those MPC members that ranked the lowest in our restrictiveness chart. We expect that Mirosław Pietrewicz, Stanisław Nieckarz and Stanisław Owsiak will keep voting for possibly fast and possibly deep interest rate cuts. Nevertheless, their votes will not determine the actual scale of monetary easing.

Similarly as last year, we think one should pay much more attention to comments of Jan Czekaj. Also, a view of NBP president Sławomir Skrzypek will be equally important. As long as those two will signal support for further monetary easing, there will be no way to stop interest rate reductions (NBP president has a casting vote in case of 5:5 result). Their comments suggested that they attach significant importance to rate and scale of economic slowdown. Andrzej Sławiński and Andrzej Wojtyna still seem to be more cautious in expressing opinions about monetary policy prospects. In their comments, one may notice a particular importance of situation in the FX market and concern about impact of zloty fluctuations on inflation prospects.

In situation when main question for this year is not whether but when and in what scale monetary policy should be relaxed, hawkish faction of the MPC is slowly losing strength and arguments. One should notice that after December decisive rate cut almost all MPC members admitted that further monetary easing cannot be ruled out, possibly even in the first months of the new year. It included also Marian Noga and Dariusz Filar (the latter said directly that if inflation falls below 3.5%, the MPC will have a room for rate cuts). Only Halina Wasilewska-Trenkner stands alone, defending current level of interest rates. In her opinion, next interest rate decisions should be postponed in January and February, in order to have better assessment of economic situation. Representatives of the hawkish faction in the MPC will probably remain less willing than other Council members to apply next rate cuts, however it will have no crucial importance for the shape of MPC decisions.

### What shape of the new Council?

Tenure of the current Monetary Policy Council matures in January 2010. Therefore, as the end of the year approaches, the market will turn more and more attention to analysing most likely line-up of the next Council. In the poll among bank analysts published in *Parkiet* daily at the start of September, the biggest number of votes as candidates for the new MPC collected Stanisław Gomułka, Krzysztof Rybiński and Andrzej Bratkowski. In this poll, we have suggested, apart from the first one of those three, also Ryszard Kokoszczyński from the NBP and prof. Marek Góra, labour market expert. Nevertheless, it is likely that similarly as in previous years, there will be a number of surprises among nominations.

## Government and politics

### General government result according to the Convergence Program update December 2008

	2007	2008	2009	2010	2011
Central sector	-3.2 (-3.2)	-3.6 (-3.2)	-2.7 (-2.5)	-2.5 (-2.0)	-2.1 (b.d.)
Local governments	0.1 (0.2)	0.4 (0.6)	0.2 (0.3)	-0.1 (0.3)	-0.2 (b.d.)
Social security funds sector	1.1 (1.0)	0.5 (0.1)	-0.1 (0.2)	0.2 (0.2)	0.3 (b.d.)
<b>General government result</b>	<b>-2.0 (-2.0)</b>	<b>-2.7 (-2.5)</b>	<b>-2.5 (-2.0)</b>	<b>-2.3 (-1.5)</b>	<b>-1.9 (1.0)</b>

Note: In brackets values from the Convergence Program update March 2008

### Main macroeconomic forecasts for 2009 according to the Convergence Program and BZ WBK

Annual average	Convergence Program update December 2008	BZ WBK
GDP growth	3.7	2.0
Individual consumption	4.5	3.2
Fixed investment	4.4	0.1
Exports	3.2	-9.8
Imports	1.8	-10.7
EURPLN	3.68	3.95
Inflation*	2.9	2.7
The NBP reference rate	4.3	3.75

\* In the Convergence Program forecast for HICP inflation while BZ WBK forecast for CPI inflation

### General government balance according to BZ WBK

Item	% of GDP
<b>General government balance according to the Convergence Program</b>	<b>-2.5</b>
Lower GDP growth	-0.85
Lower interest rates	0.15
Higher EURPLN	-0.22
<b>Total macroeconomic risk</b>	<b>-0.9</b>
<b>General government balance according to BZ WBK estimates</b>	<b>-3.4</b>
Selected additional risk factors (e.g. costs of reprivatisation, restructuring of state's railway company, etc.)	-0.5

### Comments from PM Donald Tusk on euro adoption issue

PM Donald Tusk, interview with *Dziennik* daily, 31 December 2008: Q: So the referendum is not an option. A: No. There will be no referendum [on euro]. Q: So, how will you reach an agreement with opposition? A: At the first meeting leaders of the PiS talked about euro adoption in 2020. At the last meeting Jarosław Kaczyński [PiS leader] talked that the zloty is a symbol of sovereignty and he is not euro enthusiast at all. He has a right to think so. However, in such case the PiS is not a partner for a compromise on the issue. Q: Then, how are you going to change the constitution? This is not possible without PiS. And without change in constitution you will not introduce euro. A: The constitution should be changed shortly after approval of the Accession Treaty, as it envisage euro adoption in Poland. Thus, the constitution has to be changed regardless of what date will be chosen [for euro adoption]. We will change the constitution when it is possible in the parliament. The road map will be realised anyway. And the role of referendum will be played by parliamentary elections in 2011. Or maybe PiS will not be uniform on the issue? Well, I will not test it, submitting a project of changes to the constitution, not being sure it will be approved. Amid the global crisis, a rejection of the project would be negative for our credibility.

### New (optimistic) Convergence Program for New Year

▪ The new path of general government deficit presented in the Convergence Program update December 2008 is less favourable than in the previous version of the Program published in March 2008, which of course is related to weaker prospects for economic situation. The updated Program is based on macro assumptions consistent with assumptions in the 2009 budget (GDP growth in 2009 at 3.7%), which we have already assessed as too optimistic.

▪ Thus, the government's estimate that the general government deficit will reach 2.5% of GDP in 2009 seems to be risky. Taking into account the Program's sensitivity analysis of the general government balance to effect on GDP growth, interest rates and zloty exchange rate and our forecasts of these variables, we estimate that the general government deficit in 2009 will rise to almost 3.5% of GDP. On the top of that one could also take into account possible additional risk factors.

▪ If the government wanted to offset our estimate of the macroeconomic risks, it would have to find nearly PLN12bn. This means that all spending other than fixed ones (including fixed investments, which are to a large extent related to EU funds) would have to fall by 2.5% as compared to 2008 instead of the planned growth of 6.6%. If one would also like to take into account possible costs of additional risk factors for public finance (in the amount of 0.5% of GDP in line with our estimate), then spending other than fixed ones (including fixed investment) would have to be cut by as much as 5%. Such action (that is reduction in priority spending other than those related to EU funds) seems unlikely to us given that the Program confirms the government's will to realisation of *the Plan for Stability and Development*.

### Savings from 2008 budget will not help much

▪ There is still no full information on the realisation of the 2008 budget, but we expect that revenues were much lower than planned and it will be difficult to move a large amount of them to 2009. However, spending was lower than planned to even greater extent and this will enable to create some margin for 2009 budget. We estimate its value at some PLN5bn.

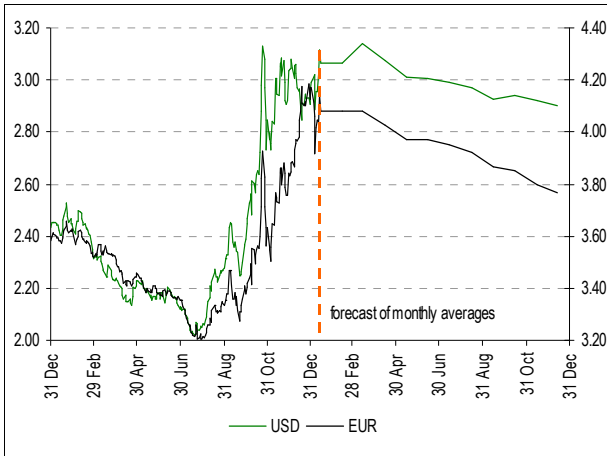
▪ Such amount would enable to cover only a part of the PLN12bn needed to meet the general government target, although this may be enough to keep the central budget in check. Increase in the general government deficit above the level targeted in the Convergence Program will probably take place outside the central sector (e.g. through increase in indebtedness of the Social Security fund or local governments).

### Stable on the political scene and risky road to the euro

▪ Agreeable cooperation within the ruling coalition and a possibility to reject the President's vetoes with support from the left wing parties decrease likelihood of early elections (e.g. together with elections to the European Parliament in June).

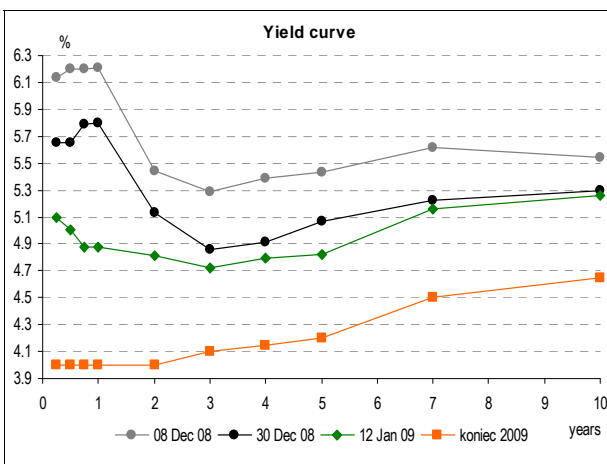
▪ Recent comments from PM Tusk suggest there will no referendum on euro, but road map to euro (ERM2 entry in 1H09) will be realised. This is connected with risk that without political consensus (no changes in constitution), the EC and the ECB will be against zloty presence in ERM2 (example of Bulgaria). Moreover, the government admits that uncertain situation in the markets may delay ERM2 entry (we think the zloty would be more volatile without changes in the constitution) and the whole process of euro adoption. In our view it would be better to not enter ERM2 without legal changes.

# Market monitor



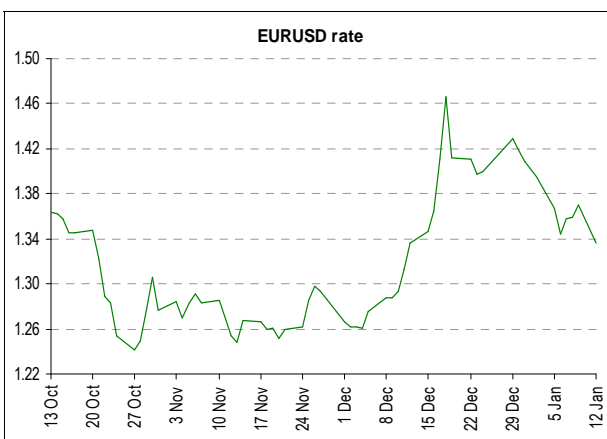
### Zloty will strengthen when risk aversion dissipates

- We expect quite high volatility of the zloty rate will hold for some time this year. However, in moments of increased risk aversion we think the EURPLN should rather not significantly exceed 4.30. In our view the annual average EURPLN rate will rise from 3.52 in 2008 to 3.95 this year. In our opinion the zloty will record the weakest levels at the start of the year and is going to gradually strengthen to ca. 3.80 against the euro at the year-end.
- This year the risk aversion will still be a major force influencing the zloty exchange rate. Together with expected gradual easing of conditions in the credit markets and improvement of liquidity situation of the foreign investors the zloty will moderately recover amid still relatively better fundamentals of domestic economy as compared to region peers and majors. The ERM2 issue will stay in the background.



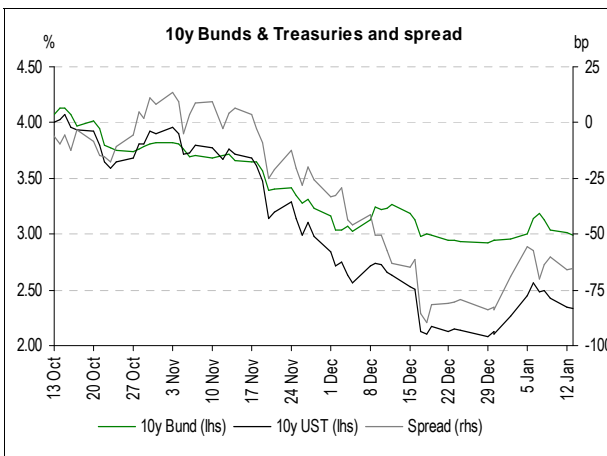
### Yield curve steepening

- Poor data from the Polish economy amid quite fast drop of inflation and further monetary policy easing by the ECB will contribute to more interest rate cuts by the MPC. This will be an incentive for foreign investors to bond purchases, mainly of short maturity, which is going to make it easier for the finance ministry to sell quite large amount of securities scheduled for this year. The strengthening at the longer end of the curve will be smaller due to risk aversion staying for some time in the world markets.
- Uncertainty regarding the joining the euro zone and ERM2 entry date may result in 5x5 spread staying in range of 50-90 bp. The 10Y yields spread vs. Bunds should rather decline below 200 bp. The fall in risk aversion should contribute to decrease of asset-swap spread toward the longer-term averages (toward 30-50 bp), though this will rather not happen already at the start of the year.



### Dollar stronger in 2009

- After significant recovery of the euro, which was connected with limiting long dollar positions and increased demand for single European currency at the year-end, we expect a gradual recovery of the US currency toward 1,30. In our view the EURUSD rate may fluctuate in range of 1.25-1.37 on the course of the year.
- More interest rate cuts in the euro zone will negatively affect the euro, as they will decrease the interest rate disparity against the US. The dollar will be supported by the stimulating nature of the US monetary and fiscal policies. Despite the fact the fiscal packages in the US are substantial and may be a burden for the US budget they will help the US economic growth to recover sooner as compared to other major industrialised countries.



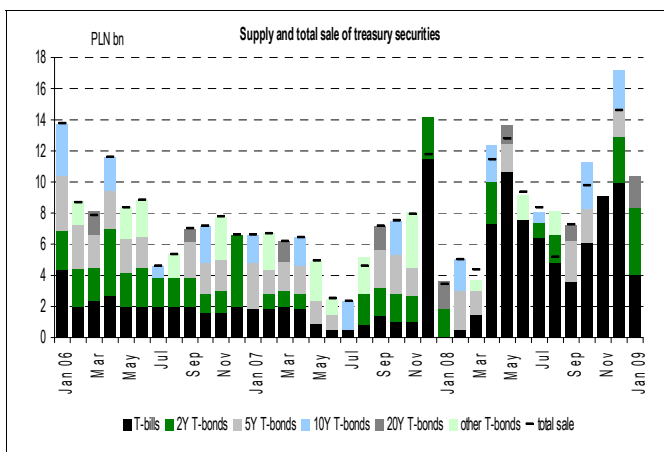
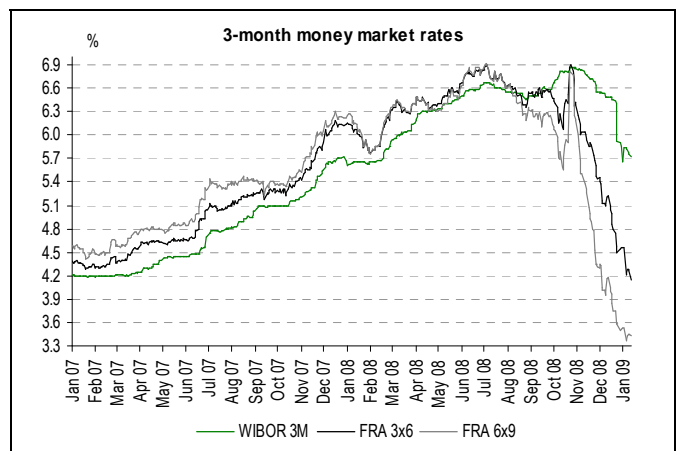
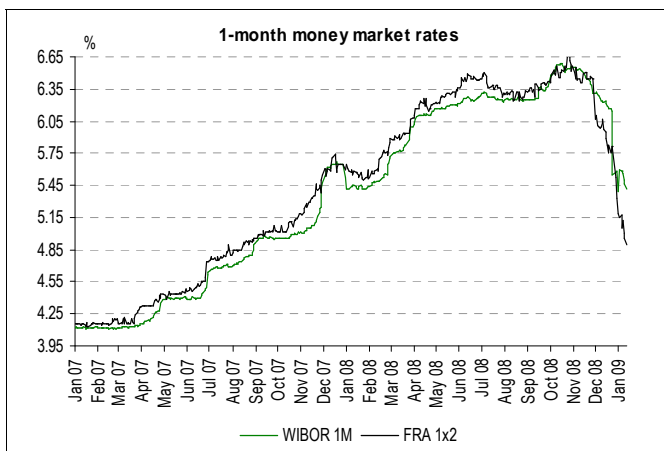
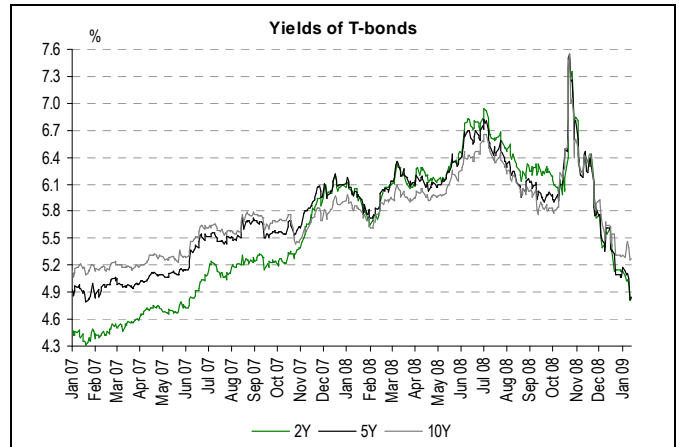
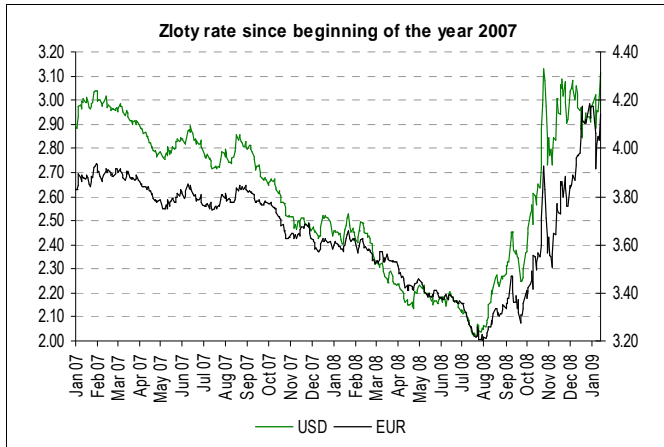
### Low interest rates policy

- After the interest rates in the US reached the lowest range 0-0.25% we do not expect fast interest rate increases due to continued and deepening recession in the US, sudden drop of inflation and even fears over deflation. We also expect further monetary policy easing by the ECB. We presume a drop of main interest rate in the euro zone by 50 bp in Q1 and next 50 bp in Q2 to 1.5%, which will be followed by a long period of central bank's interest rates stabilisation.
- Bonds are going to be hurt by large fiscal spending connected with fiscal packages used to boost the economy and expectations for rate increases in longer perspective (long term bonds), when the business climate starts recover. The rates at the short end of the yield curve will decline more than at the longer end both in the US (5Y swaps down to 2%, 2Y to 1.1%) and euro zone (5Y swaps to 3%, 2Y swaps to 2.15%).

Source: Reuters, BZ WBK



# Market monitor



**Treasury bills auctions (PLN m)**

Auction date	(OFFER)*SALE			
	52W	39W	26W	13W
24.11.2008	800-1800/1815	-	-	200-700/326
01.12.2008	800-1800/1807	-	200-500/449	200-500/500
08.12.2008	1000-1800/1910	-	200-500/542	200-500/563
15.12.2008	1200-1500/1850	-	300-500/489	300-500/514
22.12.2008	-	1500-1800/1585	-	-
05.01.2009	-	500-600/500	-	-
12.01.2009	500-600/505	-	-	-
19.01.2009	500-1000	-	-	-
26.01.2009	1000-1500	-	-	-
02.02.2009	-	-	-	-
09.02.2009	-	-	-	-
16.02.2009	-	-	-	-
23.02.2009	-	-	-	-

\* based on data of the Ministry of Finance

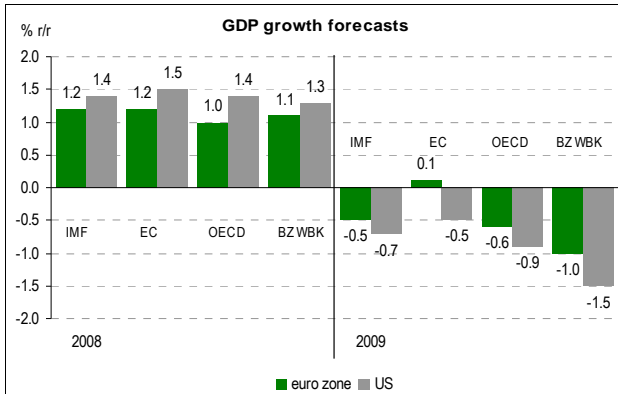
**Treasury bond auctions in 2008/2009 (PLN m)**

month	First auction			Second auction			Switch auction				
	date	T-bonds	offer	sale	date	T-bonds	Offer	sale	date	T-bonds	sale
July	02.07	OK0710	1 000	1 000	09.07	DS1017	700	705	23.07	PS0413	1558
August	06.08	OK0710	1 800	1 830	13.08	WZ0118 IZ0823	1 000   500	1 000   451	22.08	DS1017	1244
September	03.09*	PS0413	2 640	2 640	10.09	WS0429	1 000	1 000	17.09	DS1017/WS0429	3113/590
October	01.10*	PS0414	2 160	2 160	08.10*	DS1019	3 000	3 000	24.10	IZ0816/WZ0118	620 / 655
November	-	-	-	-	-	-	-	-	12.11	OK0710/PS0414	874 / 313
December	10.12*	OK0711	3000	3430	17.12*	PS0414 DS1019	1800   2500	2042 2340	03.12	PS0414/DS1019	1212 / 1350
January	07.01*	OK0711	4200	4296	14.01*	WS0429	1800	1800	21.01	-	-
February	04.02	OK and/or PS	-	-	11.02	DS and/or WS	-	-	-	-	-
March	04.03	OK and/or PS	-	-	11.03	DS and/or WS	-	-	-	-	-
April	01.04	OK and/or PS	-	-	08.04	DS and/or WS	-	-	-	-	-
May	06.05	OK and/or PS	-	-	13.05	DS and/or WS	-	-	-	-	-
June	03.06	OK and/or PS	-	-	10.06	DS and/or WS	-	-	-	-	-

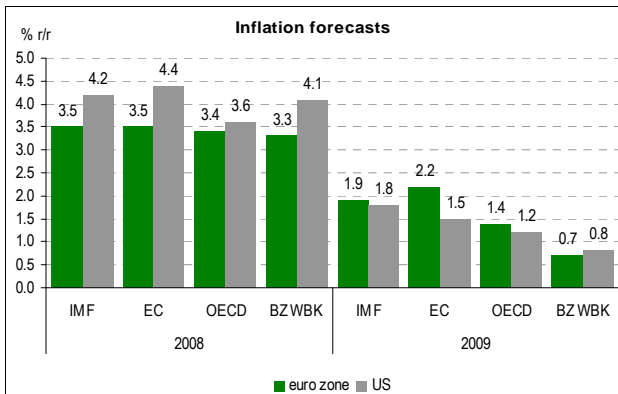
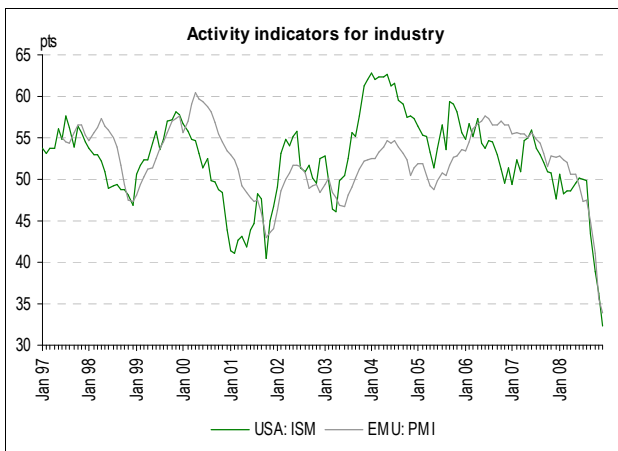
\* with supplementary auction

Source: Ministry of Finance, Reuters, BZ WBK

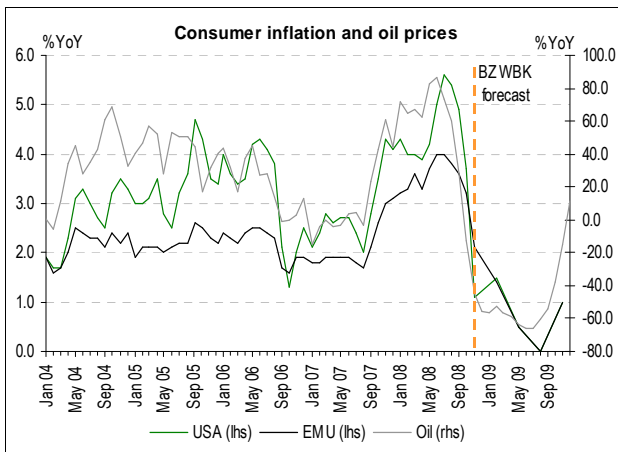
# International review



Date of forecast release: International Monetary Fund - 6.11.08, European Commission - 23.10.08, OECD - 25.11.08, BZ WBK - 13.01.09



Date of forecast release: International Monetary Fund - 6.11.08, European Commission - 23.10.08, OECD - 25.11.08, BZ WBK - 13.01.09



Source: Reuters, ECB, Federal Reserve

## Deep slowdown in 2009

- According to the last official estimates of the IMF from November 2008 the global growth is going to slow down to 2.2% in 2009 from 3.7% in 2008 and 5% in 2007. In the developed economies a negative GDP growth is expected at -0.2%, for the first time since the World War II and in its scale similar to periods from 1975 and 1982.
- However, since the break of financial crisis in the world markets and together with more and more weaker economic data from different countries the global growth forecasts are gradually revised downwards.
- At present the market consensus points to deeper GDP decline in the US than in the euro zone. Our estimates show GDP growth drop by as much as 1.5%YoY in the US, and by 1% in the euro zone.
- The US GDP growth will be negatively affected by deterioration of households' situation due to fall in employment fall, house and equity prices, which in the environment of still tightened conditions in the credit market will negatively affect private consumption. Poor consumer moods are reflected by consumer confidence and sentiment indices. Moreover construction investment will still have negative influence on the GDP growth. Looking from more optimistic perspective the housing market may find bottom at the end of 2009 and lower inflation will support consumer disposable income. Low interest rates and fiscal spending should help the economy.
- Economic indicators in the euro zone (PMI, economic sentiment) signal deep recession. The consumer moods also clearly declined.
- The economic recovery in the US and euro zone may appear at the year-end (first positive GDP QoQ growth in 4Q09) and will be gradual (0%YoY in 1Q10 and first positive annual GDP growth rate will be in 2Q10). The GDP growth in 2010 both in the EMU and US will be still below potential.

## Commodity prices result in inflation fall

- Global economic growth slowdown contributes to clear decline of inflation. It occurs due to collapse of commodities prices and weakening of consumer demand, deteriorating business climate and situation in the labour market, which curbs wage pressure.
- Recently inflation forecasts were gradually revised to the downside similar to GDP growth estimates together with worsening prospects of global economy and current data surprising on the downside.
- According to forecasts of the OECD the average annual inflation in the euro zone is going to fall to 1.4%YoY this year (similar as in the last ECB projection from December – return to price stability), while in the US to 1.2%YoY. According to our assumptions monthly inflation in the euro zone may reach 0%YoY in the mid-year, and the annual average will fall to 0.7%YoY (oil prices, food) against 3.3% in 2008, while in the US the CPI growth will decrease to 0.8%YoY from 4.1% in 2008.
- Oil prices fell since the peak at the end of July from ca. 145\$ per barrel to ca. 40\$ at the start of January, which results in sudden drop of inflation globally.
- According to update of October IMF report World Economic Outlook, which was released at the start of November, the average price of oil barrel will fall from 107\$ in 2008 to 68\$ in 2009 as compared to 100\$ expected yet in October. The current oil price is at levels around 40-50\$ per barrel. The new oil price forecast of OECD from the end of November assumes average oil price in 2009 at 60\$ against 99\$ in 2008. According to our assumptions the average oil price will drop to 45\$ per barrel.
- Moreover, the OECD forecasts a decline of food index this year by 18%YoY after increase of 25% in 2007 and 39% in 2008.

## Economic calendar

Monday	Tuesday	Wednesday	Thursday	Friday
<b>12 January</b> <i>PL: Auction of Treasury Bills</i>	<b>13</b> US: Trade balance (Nov)	<b>14</b> <i>PL: Auction of 20Y bonds</i> <i>PL: Money supply (Dec)</i> <i>PL: CPI (Dec)</i> EZ: Industrial production (Nov) US: Import prices (Dec) US: Retail sales (Dec)	<b>15</b> <i>PL: Balance of payments (Nov)</i> EZ: Final HICP (Dec) EZ: ECB meeting - decision US: NY Fed index (Jan) US: PPI (Dec) US: Philadelphia Fed index (Jan)	<b>16</b> US: CPI (Dec) US: Capacity utilisation (Dec) US: Industrial production (Dec) US: Capital flows (Nov) US: Preliminary Michigan (Jan)
<b>19</b> <i>PL: Auction of Treasury Bills</i> <i>PL: Wage and employment (Dec)</i> US: Market holiday	<b>20</b> <i>PL: Industrial production (Dec)</i> <i>PL: PPI (Dec)</i> DE: ZEW index (Jan)	<b>21</b> <i>PL: Switch auction</i> <i>PL: Core inflation (Dec)</i> JP: BoJ meeting - decision	<b>22</b> <i>PL: MPC minutes (Dec)</i> <i>PL: Business climate (Jan)</i> US: House starts (Dec) US: Building permits (Dec)	<b>23</b> EZ: Flash manufacturing PMI (Jan) EZ: Flash services PMI (Jan)
<b>26</b> <i>PL: Auction of Treasury Bills</i> US: Home sales (Dec)	<b>27</b> <i>PL: MPC decision</i> JP: Market holiday DE: Ifo index (Jan) US: Case/Shiller report (Nov) US: Consumer confidence (Jan)	<b>28</b> US: Fed meeting - decision	<b>29</b> <i>PL: GDP (2008)</i> <i>PL: Retail sales (Nov)</i> <i>PL: Unemployment rate (Nov)</i> EZ: M3 money supply (Dec) EZ: Economic sentiment index (Jan) US: Durable goods orders (Dec) US: New home sales (Dec)	<b>30</b> EZ: Flash HICP (Jan) US: Flash GDP (Q4) US: Core PCE (Q4) US: Chicago PMI (Jan) US: Final Michigan (Jan)
<b>2</b> <i>PL: Auction of Treasury Bills</i> <i>PL: PMI (Jan)</i> EZ: Manufacturing PMI (Jan) US: Core PCE (Dec) US: Manufacturing ISM (Jan)	<b>3</b> EZ: PPI (Dec) US: Pending home sales (Nov)	<b>4</b> <i>PL: Auction of Treasury bonds</i> EZ: Services PMI (Jan) EZ: Retail sales (Dec) US: ADP report (Jan) US: Non-manufacturing ISM (Jan)	<b>5</b> EZ: ECB meeting decision US: Labour productivity & unit labour costs (Q4) US: Factory orders (Dec)	<b>6</b> US: Non-farm payrolls (Dec) US: Rate of unemployment (Dec)
<b>9</b> <i>PL: Auction of Treasury Bills</i>	<b>10</b> US: Wholesale inventories (Nov)	<b>11</b> <i>PL: Auction of Treasury bonds</i> US: Trade balance (Dec)	<b>12</b> EZ: Industrial production (Dec) US: Retail sales (Jan)	<b>13</b> EZ: Preliminary GDP (Q4) US: Preliminary Michigan

Source: CSO, NBP, Finance Ministry, Reuters

## MPC meetings and data release calendar for 2009

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

\* quarterly data, <sup>a</sup> preliminary data for January, <sup>b</sup> January and February, <sup>c</sup> November 2007

Source: CSO, NBP

## Economic data and forecasts

### Monthly economic indicators

		Dec 07	Jan 08	Feb 08	Mar 08	Apr 08	May 08	Jun 07	Jul 08	Aug 08	Sep 08	Oct 08	Nov 08	Dec 08	Jan 09
Industrial production	%YoY	6.4	10.7	15.0	1.0	15.1	2.4	7.3	5.9	-3.7	6.8	-0.1	-8.9	0.0	-11.4
Retail sales <sup>c</sup>	%YoY	12.4	20.9	23.8	15.7	17.6	14.9	14.2	14.3	7.7	11.6	7.9	2.7	8.3	3.9
Unemployment rate	%	11.4	11.7	11.5	11.1	10.5	10.0	9.6	9.4	9.3	8.9	8.8	9.1	9.6	10.2
Gross wages <sup>b,c</sup>	%YoY	7.2	11.5	12.8	10.2	12.6	10.5	12.0	11.6	9.7	10.9	9.8	7.4	8.0	6.3
Employment <sup>b</sup>	%YoY	4.9	5.9	5.9	5.8	5.6	5.4	4.8	4.7	4.2	4.1	3.6	3.1	2.5	0.2
Export (€) <sup>d</sup>	%YoY	8.0	22.6	29.1	10.6	33.6	12.1	18.7	22.8	9.4	20.9	-1.2	-10.5	-11.6	-23.2
Import (€) <sup>d</sup>	%YoY	16.6	19.8	31.4	12.2	33.1	15.3	21.7	22.5	17.8	21.0	4.5	-12.2	-14.5	-21.1
Trade balance <sup>d</sup>	EURm	-1673	-780	-808	-1345	-1195	-1420	-1661	-1635	-1329	-1249	-1664	-1000	-1200	-816
Current account balance <sup>d</sup>	EURm	-2314	-1211	-1322	-1807	-1521	-1745	-2219	-879	-1300	-1881	-2219	-1620	-1750	-1266
Current account balance <sup>d</sup>	% GDP	-4.7	-4.6	-4.7	-4.9	-5.1	-5.1	-5.1	-4.9	-5.0	-5.2	-5.3	-5.6	-5.4	-5.4
Budget deficit (cumulative)	PLNbn	-16.9	4.4	0.0	1.9	0.6	-1.9	-3.5	-2.7	-0.3	-4.2	-11.6	-14.8	-25.8	-1.0
Budget deficit (cumulative) <sup>e</sup>	% of FY plan	100.0	-16.4	-0.1	-6.9	-2.2	6.8	12.8	9.9	1.2	15.5	42.7	54.7	95.3	5.5
CPI	%YoY	4.0	4.0	4.2	4.1	4.0	4.4	4.6	4.8	4.8	4.5	4.2	3.7	3.5	3.4
PPI	%YoY	2.3	2.9	3.2	2.9	2.5	2.7	2.6	2.1	2.0	2.3	2.6	2.2	2.6	1.8
Broad money (M3)	%YoY	13.4	12.9	13.5	13.6	15.0	15.1	16.3	16.8	16.8	17.3	17.3	18.0	17.8	14.6
Deposits	%YoY	14.5	14.3	14.7	15.3	16.7	17.4	18.5	19.4	18.9	20.0	18.7	19.2	18.9	15.8
Loans	%YoY	29.9	30.3	29.5	29.7	28.3	27.6	27.7	25.3	26.7	28.0	32.8	31.4	34.9	31.0
USD/PLN	PLN	2.47	2.46	2.43	2.28	2.19	2.19	2.17	2.07	2.19	2.34	2.69	2.93	2.98	3.07
EUR/PLN	PLN	3.60	3.61	3.58	3.54	3.45	3.40	3.37	3.26	3.29	3.37	3.57	3.73	4.01	4.08
Reference rate <sup>a</sup>	%	5.00	5.25	5.50	5.75	5.75	5.75	6.00	6.00	6.00	6.00	6.00	5.75	5.00	4.50
Lombard rate <sup>a</sup>	%	6.50	6.75	7.00	7.25	7.25	7.25	7.50	7.50	7.50	7.50	7.50	7.25	6.50	6.00
WIBOR 3M	%	5.67	5.64	5.74	6.03	6.29	6.41	6.58	6.62	6.52	6.56	6.80	6.74	6.40	5.68
Yield on 52-week T-bills	%	5.78	5.75	5.66	6.09	6.10	6.10	6.63	6.70	6.60	6.46	6.45	6.52	6.10	5.00
Yield on 2-year T-bonds	%	6.06	5.92	5.90	6.17	6.20	6.27	6.73	6.66	6.32	6.25	6.46	6.26	5.43	4.80
Yield on 5-year T-bonds	%	6.07	5.94	5.93	6.20	6.12	6.25	6.62	6.53	6.15	6.01	6.48	6.21	5.42	4.80
Yield on 10-year T-bonds	%	5.85	5.81	5.82	5.98	5.98	6.10	6.41	6.43	6.10	5.89	6.39	6.25	5.57	5.25

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

<sup>a</sup> at the end of period <sup>b</sup> in corporate sector <sup>c</sup> in nominal terms <sup>d</sup> balance of payments data on transaction basis <sup>e</sup> 2006 - % of Dec, 2007 - % of plan

## Quarterly and annual economic indicators

		2006	2007	2008	2009	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09	4Q09
GDP	PLNbn	1 060.0	1 175.3	1 272.3	1 333.5	295.3	309.9	312.1	355.0	309.4	324.3	326.0	373.8
GDP	%YoY	6.2	6.7	4.8	2.0	6.0	5.8	4.8	2.9	1.4	1.8	1.9	2.7
Domestic demand	%YoY	7.3	8.6	4.7	1.6	6.2	6.0	4.3	2.8	0.9	1.7	1.6	2.1
Private consumption	%YoY	5.0	5.0	5.2	3.2	5.6	5.5	5.1	4.5	3.5	3.2	3.0	3.0
Fixed investments	%YoY	14.9	17.6	7.2	0.1	15.7	15.2	3.5	2.0	-5.0	-2.0	1.0	3.0
Industrial production	%YoY	12.5	9.7	4.4	-0.4	8.5	8.5	3.4	-3.0	-7.0	0.2	2.4	2.9
Retail sales (real terms)	%YoY	11.9	14.0	9.8	1.7	16.0	11.1	8.0	4.0	2.0	1.9	1.4	1.3
Unemployment rate <sup>a</sup>	%	14.8	11.4	9.6	12.3	11.1	9.6	8.9	9.6	11.0	10.7	11.3	12.3
Gross wages (real terms) <sup>c</sup>	%YoY	4.2	6.7	6.1	1.9	7.2	7.7	5.6	4.4	2.3	1.7	2.1	1.5
Employment <sup>c</sup>	%YoY	3.2	4.6	4.6	-1.7	5.9	5.2	4.3	3.1	-0.4	-1.5	-2.3	-2.6
Export (€) <sup>b</sup>	%YoY	20.4	13.4	12.4	-9.8	20.3	21.3	17.9	-7.5	-19.3	-13.7	-7.0	2.0
Import (€) <sup>b</sup>	%YoY	24.0	19.5	13.6	-10.7	20.5	23.2	20.6	-7.0	-18.9	-14.1	-8.0	-1.0
Trade balance <sup>b</sup>	EURm	-5 539	-12 369	-15 270	-12 630	-2 927	-4 272	-4 207	-3 864	-2 481	-3 561	-3 558	-3 030
Current account balance <sup>b</sup>	EURm	-7 445	-14 586	-19 477	-15 460	-4 333	-5 478	-4 077	-5 589	-3 811	-3 761	-3 808	-4 080
Current account balance <sup>b</sup>	% GDP	-2.7	-4.7	-5.4	-4.6	-4.9	-5.1	-5.1	-5.4	-5.3	-5.0	-5.1	-4.6
General government balance	% GDP	-3.8	-2.0	-2.7	-3.4	-	-	-	-	-	-	-	-
CPI	%YoY	1.0	2.5	4.2	2.8	4.1	4.3	4.7	3.8	3.3	2.8	2.5	2.5
CPI <sup>a</sup>	%YoY	1.4	4.0	3.5	2.6	4.1	4.6	4.5	3.5	3.3	2.5	2.5	2.6
PPI	%YoY	2.5	2.3	2.6	1.3	3.0	2.6	2.1	2.5	1.5	1.0	1.1	1.6
Broad money (M3) <sup>a</sup>	%YoY	16.0	13.4	17.8	5.9	13.6	16.3	17.3	17.8	13.4	11.3	9.5	5.9
Deposits <sup>a</sup>	%YoY	15.2	14.5	18.9	6.3	15.3	18.5	20.0	18.9	14.4	11.4	8.4	6.3
Loans <sup>a</sup>	%YoY	23.4	29.9	34.9	7.5	29.7	27.7	28.0	34.9	26.7	22.6	16.3	7.5
USD/PLN	PLN	3.10	2.77	2.41	3.00	2.39	2.18	2.20	2.87	3.09	3.03	2.96	2.92
EUR/PLN	PLN	3.90	3.78	3.52	3.95	3.58	3.41	3.31	3.77	4.08	3.99	3.91	3.81
Reference rate <sup>a</sup>	%	4.00	5.00	5.00	3.50	5.75	6.00	6.00	5.00	3.75	3.50	3.50	3.50
Lombard rate <sup>a</sup>	%	5.50	6.50	6.50	5.00	7.25	7.50	7.50	6.50	5.25	5.00	5.00	5.00
WIBOR 3M	%	4.21	4.73	6.36	4.05	5.80	6.43	6.57	6.65	5.02	3.77	3.70	3.70
Yield on 52-week T-bills	%	4.18	4.69	6.26	4.19	5.84	6.28	6.59	6.36	4.60	4.15	4.00	4.00
Yield on 2-year T-bonds	%	4.57	5.23	6.22	4.21	5.99	6.40	6.41	6.05	4.65	4.20	4.00	4.00
Yield on 5-year T-bonds	%	5.03	5.52	6.15	4.35	6.02	6.33	6.23	6.04	4.70	4.30	4.20	4.20
Yield on 10-year T-bonds	%	5.22	5.56	6.06	4.84	5.87	6.16	6.14	6.07	5.15	4.80	4.75	4.65

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

<sup>a</sup> at the end of period; <sup>b</sup> balance of payments data on transaction basis <sup>c</sup> in corporate sector

This analysis is based on information available until 12.01.2009 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**

### **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.

