NATIONAL BANK OF POLAND

MONETARY POLICY COUNCIL

REPORT

ON MONETARY POLICY IMPLEMENTATION

IN 2004

WARSAW, 2005

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SUMMARY

1. Pursuant to Article 227, Paragraph 1, of the Constitution of the Republic of Poland „the central bank of the State shall be the National Bank of Poland. It shall have the exclusive right to issue money as well as to formulate and implement monetary policy. The National Bank of Poland shall be responsible for the value of the Polish currency". The Article 3 of the Act on the National Bank of Poland of 29 August 1997 states that „the basic objective of NBP activity shall be to maintain price stability, and it shall at the same time act in support of Government economic policies, insofar as this does not constrain pursuit of the basic objective of the NBP".

In February 2003 the Monetary Policy Council in its first term of office adopted the *Monetary Policy Strategy beyond 2003*, which served as the basis for the *Monetary Policy Guidelines for the Year 2004* prepared by the same Council. In 2004, the second-term Council confirmed the basic principles presented in the *Strategy* in the information from its February meeting by stating that:

- monetary policy shall be pursued within the framework of direct inflation targeting strategy (DIT), and the floating exchange rate regime should be maintained until the entry to ERM II,
- the aim of monetary policy is to stabilise inflation rate at the level of 2.5% with a tolerance band for deviations of +/- 1 percentage point,
- the most favourable course of action for Poland shall be to adopt an economic strategy oriented at securing conditions that would allow Poland to introduce the euro at the earliest possible date.

The pursuit of *permanent* inflation target means that it refers to inflation as measured month against the corresponding month of the previous year, and not, as it used to be the case in 1999-2003, only in December in relation to December of the previous year. The *Strategy* implies that in the event of unexpected and strong shocks which would be conducive to pushing inflation out of the deviation tolerance band, the Council will take action to ensure its coming back into the band, and then moving close to the target itself. The time that inflation takes to return to the target mainly depends on monetary policy transmission mechanism lags and also the strength and character of the shocks. International experiences and studies on the transmission process in Poland indicate that the effect of most shocks on inflation may be neutralised, without

leading to excessive output fluctuations, in the horizon of 1 to 3 years after the change of interest rates.

2. In view of the fact that the time elapsing between an interest rate decision and its strongest impact on inflation amounts to about six quarters, inflationary processes in 2004 were affected by the monetary policy pursued in 2002-2003. In spring 2004, the Polish economy witnessed some strong unexpected shocks in the form of food and oil price hikes, which were reflected in a considerable rise in CPI inflation.

3. 2004 brought a continuation to the recovery in the Polish economy which had been started in the previous year. The recovery coincided with a powerful demand stimulus related to Poland's accession to the European Union. The growth rate of GDP in 2004 stood at 5.4%, which means that Polish economy was developing over 2 times faster than EU-25 countries, where GDP growth was estimated at 2.5% per year. However, the economic growth differed in particular quarters of 2004 – it was significantly faster in the first half of the year than in the second. After reaching a very high level (of almost 7%) in 2004 Q1, the growth rate was decreasing and in the last quarter of the year it amounted to approx. 4%.

The rapid growth of GDP in the first half-year pointed to the possibility that the current GDP may reach and in the longer perspective exceed the level of potential GDP, which would mean the closing up of a negative output gap and could invoke inflationary pressure. In particular, a rise in investment growth rate was expected, as could be suggested by positive tendencies in this respect in the enterprise sector, especially in industry. At the same time, at least a continuation of private consumption dynamics was expected, in particular in the face of nominal wage increases that could have occurred as a consequence of growing inflation and inflation expectations (second round effects). In the second half of 2004, as new data were flowing in, it turned out that the fast economic growth recorded in Q1 and Q2 had been triggered by one-off factors and was related to, among others, the transient growth in demand accompanying Poland's EU entry. The released data indicated a weaker than forecast investment revival, while real wage growth rate diminished and the exceptionally high growth rate in inventories recorded in the first half of the year halted. As a result, the considerable step-up in GDP in the first half of 2004 was not of permanent nature and the prospect of the negative output gap's closure was once again delayed.

4. The high 2004 economic growth dynamics resulted from a strong revival in industry and market services, whose contributions to the total value added were equal to 2.4

and 2.3 percentage points, respectively. A particularly dynamic growth was observed in manufacturing. Its high rate was connected to growing exports and improving competitiveness in the domestic market. In turn, the acceleration in services was due to growing trade turnover (particularly in the period of pre-accession boom) as well as to favourable climate in telecommunications and financial intermediation, which was linked with the overall recovery in economic activity.

The analysis of GDP on the demand side indicates that the greatest contribution to its growth was made by consumption (2.84 percentage points). Following a three-year period of decline, fixed capital formation reported a rebound and its contribution to GDP growth came to 1 percentage point. The surge in economic activity was also accompanied by a gradual rebuilding of inventories, thanks to which their contribution to GDP growth amounted to 1.3 percentage points. Exports also displayed a robust rate of growth, which was driven by the improvement in economic conditions among Poland's main trading partners, the country's accession to the EU as well as the fact that zloty exchange rate was favourable to exporters in the first half of the year. Imports, however, rose more slowly and consequently the contribution of net exports to GDP growth proved positive at 0.3 percentage point. The current account deficit melted to approx. 1.5% of GDP, which is a sign of a further reduction in external imbalance.

5. Inflationary processes in 2004 were to a large extent affected by price shocks related to Poland's accession to the EU and also commodity price hikes in world markets. In the first three months of 2004, inflation as measured with the Consumer Price Index remained at the level of 1.6-1.7% y/y, i.e. a little below the inflation target. Starting from Q2 a significant step-up was felt in the rate of price growth up to 4.6% y/y in July and August 2004. In the second half of 2004 the growth rate of consumer goods and services persisted at a high level of 4.4-4.6%, i.e. above the upper tolerance limit for deviations from the inflation target. Inflation, which stayed above target from May 2004 on, was mainly the effect of price hikes connected to Poland's EU accession (food price rises and indirect tax rate increase) and also oil and other commodity price hikes in world markets. The impact of other factors on inflation is evidenced by the fact that starting from April 2004 net core inflation index, which does not account for food, non-alcoholic beverages and fuel prices, ran considerably lower than the inflation measured with the CPI.

6. One of factors exerting influence on the decisions of the Monetary Policy Council was uncertainty surrounding the situation of public finance. In spite of a better expected

implementation of the budget than it had been laid down in the 2004 Budget Act, the structural deficit of the public finance was enlarged. The Council was preoccupied with delays in reforms that were to curb deficit and credit needs of the public finance sector. Putting off the necessary reforms might have caused disruptions in financial markets leading to a steep rise in the yield on Treasury securities and a corresponding weakening of zloty exchange rate, which constitutes an important factor of inflationary risk. Moreover, further public debt accretion could have jeopardised the sustainability of economic growth. In particular, the Council was concerned about:

- little progress in works on a legislative package of bills prepared by the government in February 2004 in terms of *Public Expenditure Reform and Reduction Programme*,
- persisting uncertainty as to the eventual shape of the budget for 2005, among others due to it having optimistically accounted for financial effects of bills raising insurance premiums for entrepreneurs and farmers even before they were actually passed by the Parliament. As feared, in the end the Parliament did not approve all of the government-proposed solutions aimed at reducing the public finance deficit,
- increasing political instability, translating into shrinking probability of passing bills aimed at cutting public expenditure.

7. In 2004 the Monetary Policy Council increased NBP interest rates in three consecutive months – in June, July and August. In total, the reference rate was raised from 5.25% to 6.5%, the rediscount rate – from 5.75% to 7.0%, the lombard rate – from 6.75% to 8.0%, and the deposit rate from 3.75% to 5.0%.

These rate increases were meant to limit the risk of secondary effects of the inflation growth related to Poland's EU accession and the hikes in the prices of oil and other commodities in world markets. The mid-2004 climb in inflation amid strengthening economic recovery might have resulted in a permanent surge in inflation expectations. This would breed the risk of wage pressure building up and, consequently, would be conducive to the fixing of inflation at its higher level, i.e. to the occurrence of the so-called *second-round effects*, even though the assessment of the risk of such occurrence was subject to considerable uncertainty. The risk was primarily raised by the strength of shocks in the economy and also the relatively short period of low inflation in Poland. In turn, the main factor which might have restricted the impact of rising inflation expectations on wage increases was the persistently high level of unemployment.

Additional impulse towards decreasing inflationary pressure was possibly the impact of supply shocks and the accompanying price rises on the fall in demand.

Through taking decisions to raise the interest rate the MPC intended to send a clear signal to market participants suggesting that the central bank was determined to achieve the inflation target in the mid-term, and so, that inflation rise was transitory in nature. In line with these premises in the *Monetary Policy Guidelines for the Year 2005* the Council declared that it is determined to continue actions aimed at prompt inflation reduction down to the level of 2.5% in 5-7 quarters.

In 2004 Q4 the outlook for inflation in the monetary policy transmission horizon became significantly brighter. Most important factors conducive to limiting future inflation included:

- interest rate increases in the summer months of 2004,
- low growth rate of wages in enterprises, which indicated that the reviewed period did not see any second-round effects primarily in connection to high unemployment,
- abating of the effects of Poland’s accession to the European Union,
- strong appreciation trend of the zloty, acting towards diminishing inflation by bringing down prices of imported goods and weakening the economic activity; the trend was mainly the result of reduction in the premium for investment risk in Poland brought about by Poland’s accession to the EU and the stabilisation in domestic political situation.

In view of the fact that in 2004 Q4 the outlook for inflation was improving, the Council assessed there was no need for further interest rate increases. However, the pursuit of monetary policy was subject to uncertainty surrounding the exchange rate. At the same time, the inflation projections prepared by the NBP supported the Council’s assessment that the probability of inflation staying above target (of 2.5%) in the monetary policy transmission horizon was still higher than the likelihood of inflation sliding below target. That is why, until the end of 2004 the Council maintained its tightening monetary policy bias.

8. 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.

9. In 2004 the Council held three meetings with the representatives of economic ministries of the Government of the Polish Republic. The meetings were devoted to the analysis of the current and future situation of the public finance sector and also to the issue of Poland's future participation in ERM II and the accession to the euro area. The adoption of the single currency is conditional on the compliance with the so called Maastricht criteria. As a result of a temporary surge in inflation in 2004, Poland has not been complying with the price stability criterion since last August. Nevertheless, the expected fall in inflation down to the level consistent with the target of 2.5% y/y should result in a corresponding decrease in the average annual price growth rate down to the value that would enable Poland to re-comply with the criterion of price stability. As a result, the monetary policy in 2004 was aimed at bringing inflation down to target as soon as possible and thus supported the strategy of Poland's prompt accession to the euro area.

10. In 2004 the NBP pursued its monetary policy by affecting the level of inflation with the help of interest rates. The Monetary Policy Council set the level of the official NBP rates which in turn determined the yields on monetary policy instruments. In order to influence the short-term interest rates, the NBP used the following instruments: open-market operations, credit-deposit operations and reserve requirements. By influencing the level of nominal short-terms interest rates of the money market, the MPC strived to attain such level of interest rates in the economy that would be consistent with the set inflation target. In 2004, similarly to the previous years, the rates determining the direction of the NBP's monetary policy were: the reference rate, the lombard rate and the deposit rate.

In 2004 the banking sector over-liquidity was continued. In average annual terms, over-liquidity as measured by the scale of issuance of NBP money bills stood at 5.275 billion zloty in comparison to 6.251 billion zloty in 2003. This decrease in over-liquidity resulted primarily from changes in the structure of banking sector fund absorption – in 2004 the funds absorbed by the Ministry of Finance and held in the form of term deposits at the central bank increased.

2004 saw the introduction of changes to the rules of reserve requirement holding and calculation, which brought NBP reserve requirement closer to Eurosystem standards.

INFLATION TARGET PERFORMANCE IN 2004

The present report is concerned with the 2004 pursuit of the monetary policy the guidelines for which had been formulated by the Monetary Policy Council in the first term in office. The starting point for the *Monetary Policy Guidelines for the Year 2004* were the rulings of the *Monetary Policy Strategy beyond 2003*. Its basic elements were confirmed by the current MPC in February 2004.

In accordance to the *Strategy* and *Guidelines* under the direct inflation targeting strategy since January 2004 a permanent inflation target of 2.5% has been pursued in year-on-year terms, with a symmetrical tolerance band for deviations of +/- 1 percentage point.

The implementation of a *permanent* target means that it refers to inflation as measured month to the corresponding month of the previous year and not as it used to be the case in 1999-2003 – only in December in relation to the December of the previous year. In case some unexpected and strong shocks occur that would be conducive to pushing inflation out of the tolerance band for deviations, the Council will take measures to ensure inflation returns back to the acceptable deviation range and then close to the target itself. The period that inflation takes to move back close to the target is conditional on the length of lags characterising the mechanism of monetary policy impulse transmission in Poland and also on the strength and nature of the shocks themselves. International experiences and studies on the transmission process in Poland both indicate that the effects of most shocks on inflation may be successfully neutralised, without triggering off excessive fluctuations in output, in the horizon of 1-3 years after the given change of interest rates.

Due to the fact that the lag between the time of interest rate decisions and their most powerful impact on inflation extends to approx. six quarters, the inflationary processes in 2004 were affected by the monetary policy pursued back in 2002-2003. In the spring of 2004, the Polish economy experienced some strong unexpected shocks in the form of food and oil price hikes, which were in turn reflected in a substantial growth in CPI inflation.

Economic climate and inflationary processes

2004 brought a consolidation of the economic recovery in the Polish economy initiated in the previous year. GDP growth rate amounted to 5.4%, which means that the Polish economy was expanding at a rate over two times faster than that of the UE-25 countries, where GDP growth is estimated at 2.5% per annum. The economic growth, however, differed in particular quarters of 2004 – it was substantially faster in the first half of the year and slower in the second. After having achieved a very high level in 2004 Q1 (almost 7%) the growth rate of GDP started to decline steadily and in the last quarter of the same year stood at approx. 4%.

Rapid growth of GDP in the first half of the year pointed to the possibility of current GDP reaching and, in the longer perspective, even crossing the level of potential GDP, which would mean the closing-up of the negative output gap and could be conducive to inflationary pressure. In particular, a soar in the growth rate of investment outlays was expected, which could be suggested by some positive tendencies in this respect observed in the enterprise sector and particularly in industry. At the same time it was expected that private consumption growth rate would be at least sustained, particularly in case of nominal wage growth occurred in the wake of growing inflation and increased, inflationary expectations (second-round effects). In the second half of the year, as new data was flowing in, it became clear that the rapid economic growth recorded in Q1 and Q2 had resulted from one-off factors and had been connected with, among others, a transitory growth in demand which accompanied Poland’s EU accession. The released data pointed to a weaker than expected investment revival, a slide in real wage growth rate and also a halt to the exceptionally strong growth rate of inventories in the first half of 2004. As a result, the significant step-up in GDP growth in the first half of 2004 did not prove permanent and, consequently, the prospect of closing the negative output gap was once again postponed.

Inflationary processes in 2004 remained under a strong influence of price shocks connected with Poland’s entry to the EU and also with commodity price hikes in world markets. In the first three months of 2004, inflation measured with the Consumer Price Index remained at the level of 1.6%-1.7% y/y, which was slightly below the inflation target. Starting from Q2 there was a considerable acceleration in the price growth rate up to 4.6% y/y in July and August 2004. In the middle of 2004, the growth rate of prices of consumer goods and services remained high at 4.4-4.6%, i.e. above the upper tolerance limit for deviations from the inflation target (see Appendix 1).

Among inflationary impulses which appeared in the period preceding the accession and in the first months of Poland’s EU membership should be listed: increased demand, both domestic and external, for some domestic commodities and goods, introduction of EU regulations related to indirect taxes, customs policy, agricultural policy and also the effects of disturbances which were then troubling the world markets of energy and industrial commodities. The heaviest inflationary impact was exerted by unexpectedly powerful price shocks in the form of food and oil price hikes. The great strength of these shocks was among others revealed by the size of the spread which appeared between the CPI and net core inflation index not accounting for changes in food and fuels (Table 1).

Table 1

Selected annual core inflation indicators and CPI

	Excluding food and fuel prices ("net" inflation)	**15% trimmed mean**	**CPI**
Sep-03	0.9	1.2	0.9
Oct-03	1.2	1.2	1.3
Nov-03	1.3	1.4	1.6
Dec-03	1.4	1.5	1.7
Jan-04	1.2	1.5	1.6
Feb-04	1.1	1.5	1.6
Mar-04	1.1	1.5	1.7
Apr-04	1.2	2.0	2.2
May-04	2.0	2.7	3.4
Jun-04	2.3	3.2	4.4
Jul-04	2.3	3.1	4.6
Aug-04	2.3	3.2	4.6
Sep-04	2.4	3.1	4.4
Oct-04	2.4	3.1	4.5
Nov-04	2.4	3.2	4.5
Dec-04	2.4	3.1	4.4

Source: GUS data, NBP calculations.

Inflation was accelerating in conditions of strengthening economic recovery. The growth in inflation, which in June crossed the upper tolerance limit for deviations from the target, was accompanied by a significant increase in inflation expectations. This was true both about private individuals and bank analysts (Tables 2 and 3). According to GUS surveys, the price expectations in retail trade and manufacturing were also increasing (Table 4). The development of inflation expectations in 2004 was rather alarming not solely because of the growth in the rate of inflation expected by households as in Poland these expectations are broadly adaptive in nature and usually follow the current inflation. Symptomatic for the first half of 2004 was a substantial deterioration in the structure of responses, among others a considerable increase in the share of respondents expecting inflation in one-year horizon to be higher than the current inflation. Additional factor acting towards increasing inflationary pressure was the depreciation of the nominal effective exchange rate of the zloty started in 2003, which in the situation of a closing output gap could be conducive to enhancing the inflationary pressure.

Table 2

Inflation expectations of individuals (inflation in 12 months)

Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
1.6	2.1	2.2	2.4	2.5	2.4	2.7	4.0	4.5	4.6	4.4	4.0	4.3

Source: Ipsos survey, NBP calculations.

Table 3

Inflation forecasts of bank analysts (inflation in 11 months)

Dec-03	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
2.5	2.6	2.6	2.8	2.9	2.9	2.7	2.8	2.8	2.7	2.5	2.7	2.7

Source: Reuters survey, NBP calculations.

Table 4

Economic climate indicators (seasonally adjusted)

(Forecast – prices)

	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04

Manufacturing	11.7	10.6	16.1	26.6	25.1	26.2	20.4	13.3	10.3	10.9	-1.7	-6.1
Retail trade	15.9	23.7	29.9	38.5	43.0	45.8	43.5	32.1	30.0	27.3	25.2	23.6

The indices are calculated in the form of balances produced as differentials between positive and negative responses.

Source: GUS.

As the temporary inflationary impulses were abating, also the growth of the current rate of inflation and inflation expectations of individuals was halted. Despite the expectations remaining at a higher level in 2004, no signals suggesting the rise of wage demands were recorded. There was a continuation of the tendency, observed from the mid-2002, for real and nominal wage growth rate to stay well behind the growth rate in real productivity per employee. High wage discipline in enterprises raised their competitiveness and prepared ground for achieving a high rate of economic growth in the longer term.

In 2004 Q4 the outlook for inflation in the monetary policy transmission horizon was significantly improved. The main factors that helped curb future inflationary pressure included:

- interest rate increases made in the summer months of 2004,
- high wage discipline in enterprises amid the persistently high growth rate in labour productivity, which indicated that there did not appear any second-round effects in the analysed period, which was primarily associated with high unemployment figure.
- fading out of price effects brought about by Poland’s accession to the European Union,
- strong appreciation trend of the zloty with interest rates at stable level, acting towards lowering inflation by lowering the prices of imported goods and also by dampening economic activity.

External factors

2004 saw an acceleration in world economy growth. In line with expectations the improvement of economic climate extended to all major regions of the world (Tables 5 and 6). GDP growth rate in the euro area settled at 2.0%, which was consistent with expectations. However, significantly faster than expected growth was seen in the US and Chinese economies. A high increase in both investment and consumption demand in these countries was a fundamental factor operative in the robust price growth in international commodity markets, especially as regards fuels[1] and metals. Amid soaring demand and the proceeding depreciation of the American dollar, dollar prices of commodities, including oil prices, increased in 2004 by over 30%[2].

Table 5

External conditions of monetary policy in 2003-2004

	2003	2004				
	I-IV	I-IV	I	II	III	IV
United States – GDP growth (in %)[1]	3.0	4.4	5.0	4.8	4.0	3.9
Euro area – GDP growth (in %)[1]	0.5	2.0	1.6	2.2	1.9	1.6
of which Germany	-0.1	1.6	1.6	1.9	1.2	1.5
Crude oil prices (Brent, US$/b)[2]	28.8	38.3	32.0	35.3	41.5	43.9
United States – CPI inflation (in %)[3]	2.3	2.7	1.8	2.9	2.7	3.3
Euro area – CPI inflation (in %)[3]	2.1	2.2	1.7	2.3	2.2	2.3
United States – Federal Funds rate[4]	1.00	2.25	1.00	1.25	1.75	2.25
Euro area – refinancing rate[4]	2.00	2.00	2.00	2.00	2.00	2.00

[1] in relation to the corresponding period of the previous year
[2] period average
[3] period average in relation to the corresponding period of the previous year
[4] at the end of the period
Source: Bloomberg, Eurostat, International Energy Agency.

The rise in the commodity and material prices in world markets found reflection in the behaviour of the Producer Price Index in Poland. In 2004, a dynamic growth was observed in the PPI in industry, which was mainly the result of supply factors. Average annual growth rate of producer prices came to 7%, while the largest leap in prices was recorded in section mining and quarrying (a growth of 23.7%). In divisions less dependent on raw materials and also those focused on export production, in 2004 inflationary pressure was moderate.

Table 6

[1] In 2004, the joint share of the USA and China in total growth of the demand for crude oil amounted to 60%.
[2] Source: HWWA.

GDP growth forecasts for 2004

	Spring 2003	Autumn 2003	Spring 2004	Autumn 2004	Actual GDP
USA	2.5	3.8	3.4	4.4	4.4
Germany	2.0	1.6	1.5	1.9	1.6
EU-15	2.4	2.0	2.0	2.3	2.2
Euro area	2.3	1.8	1.7	2.1	2.0

Source: European Commission.

The recovery in world economy contributed to the acceleration in Polish foreign trade turnover in connection to the increased demand for Polish goods (which was reflected by the rise in the volume of exports) and also to price hikes in international market (leading to the increase in transaction prices). At the same time, the high growth rate in the exports of processed products brought about an increase in imports, especially supply imports. The impact of the significantly higher oil prices on domestic inflation was mitigated by the zloty appreciation persisting from 2004 Q2, in particular in relation to the American dollar, as world prices of commodities are most often expressed in this currency.

Table 7

Effective zloty exchange rate index
(% change in relation to the corresponding quarter of the previous year)

Effective zloty exchange rate index	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
Nominal	-10.8	-4.7	-10.1	-9.9	-6.8	0.8	10.1
CPI deflated	-11.9	-5.4	-10.1	-9.7	-5.7	3.1	12.4
PPI deflated	-9.8	-3.4	-7.8	-5.9	-0.3	6.7	13.8
Deflated by unit labour costs*	-19.5	-11.9	-23.2	-23.3	-18.4	-5.3	8.6**

"*" – calculated as the relationship of wage cost per one employee to labour productivity measured with output in industrial manufacturing (volume) in relation to one employee in the sector
"**" – estimate based on ECB and NBP data (prepared using GUS monthly data).
Source: Own calculations on the basis of NBP, ECB and GUS data.

In the first four months of 2004, the exchange rate of the zloty continued on its depreciation tendency from years 2002-2003 and ranged between 4.66 and 4.91 in relation to the euro, and 3.65 and 3.98 against the American dollar. However, in the period between May and the end of 2004 zloty exchange rate was consolidating, with the scale of the appreciation markedly exceeding the expectations of financial markets. In consequence, in 2004 the zloty strengthened by 13.5% and 21.1% against the euro and American dollar, respectively[3].

Exchange rate forecasting is subject to large uncertainty. Even the explanation of present tendencies in the exchange market with the use of economic variables is only possible to a very limited extent. An e*x post* hypothesis might by formulated that the zloty appreciation, whose scale came as a shock to currency market participants, occurred primarily as the result of decline in the premium for the risk of investment in Poland in connection with the country's EU accession and the temporary stabilisation of the internal political situation. At the same time, a strengthening might have been favoured by the continuing improvement in the current account balance, low unit labour costs and a high rate of economic growth. Also conducive to the appreciation of zloty exchange rate were the interest rate increases introduced by the Council.

The appreciating tendency of the Polish currency and also other currencies of the region was further consolidated by international developments such as: decrease in the risk of investing in the emerging markets and low interest rates in the markets for the major world currencies. These factors, coupled with a high supply of Polish Treasury securities, bolstered an increased inflow of foreign portfolio capital.

Food prices and regulated prices

In average annual terms the prices of food and non-alcoholic beverages rose by 6.3% in 2004, i.e. almost 4 percentage points more than anticipated in *Monetary Policy Guidelines for the Year 2004* (2.4%). The largest deviations of the actual price moves from their forecasted values took place in the prices of sugar, butter, milk and meat, and they occurred in the period before and immediately after Poland’s EU entry.

In analysing the reasons behind this discrepancy between forecasted and actual price increases we have to bear in mind that food and non-alcoholic beverage prices are among the most volatile components of consumer price basket, among others because they are largely dependent on unpredictable weather conditions. In 2004 this yearly uncertainty was accompanied by additional, not fully predictable, price movements connected with Poland’s entry to the EU.

[3] Change in the exchange rate value as measured by relating its level at the end of December 2004 to the level at the end of December 2003.

A more detailed analysis of the reasons behind the growth in the prices of food and non-alcoholic beverages in 2004 points to the emergence of an external demand shock related to EU accession (this was particularly true about the rising demand for Polish meat and milk products in the European Union) and also to the continuation in the negative supply shock of 2003, brought about by lower supply of many agricultural products (especially grains). It has to be emphasised that the National Bank of Poland does not forecast agricultural commodity prices, which are the main indications for the forecast of food prices, by itself. Instead, it takes into consideration all available external sources of information published by specialised institutes and agencies on the level of commodity prices and on the factors that can influence them (such as demand, competitiveness, supply, climate conditions etc.). The above mentioned discrepancies between the forecast and the actual prices mainly followed from difficulties in estimating the scale of price movements in the agricultural market in connection with the accession, including the changes in the external demand for Polish agricultural products. It is important to realise that at the time the *Guidelines* were being prepared the external forecasts from the first half of 2003 were available. Although the external forecasts assumed some export recovery stirred up by the adoption of the Common Customs Tariff, but its actual extent far outpaced the expectations. The opening of agricultural market within the EU in the first few months following the accession contributed to a robust growth in the external demand for Polish food. What is more, the elimination of all the limitations in the food trade between Poland and the EU revealed a remarkably higher than expected competitiveness of many Polish food products, primarily beef, poultry and milk produce. Beef makes a good example here. Before the accession the prices of beef in Poland had been markedly lower than in EU countries and so was expected that its imports would attract interest of consumers in the common market. However, due to the lower quality of the meat if compared to that in the old Union, it was expected that its prices will grow at a relatively slow pace. Contrary to expectations, the actual growth in beef prices proved much faster. In the first half of 2004 the rise in price competitiveness in international markets was further consolidated by the exporter-friendly exchange rate of the euro against the zloty.

Another factor causing food price to grow more dynamically in February-April 2004 was the rise in demand for some food articles related to the general public’s fears as to the growth in their prices after the accession. The growing demand brought about a temporary but significant soar of prices, which was particularly prominent in the case of sugar.

The total rise of regulated prices in 2004 in average annual terms amounted to 3.2%, while in August 2003 it was expected to stand at mere 1.9%. This higher than expected growth in regulated prices was mainly the result of fuel price increases underpinned by the unexpectedly high growth of oil prices in world markets. Fuel price increase amounted to 1.7 percentage point (i.e. 53.8%) of the growth in regulated prices.

Fiscal policy

An important factor influencing the conditions of the pursuit of monetary policy and also the longer-term economic growth is the situation in the public finance. By excreting its impact on global demand, fiscal policy also affects inflation. A loose fiscal policy necessitates maintaining higher real exchange rates in order to achieve a low and stable inflation. Higher interest rates lead to curbing private investment, but high level of inflation that is not addressed with an adequate monetary policy reaction has a negative effect on investment. Thus, the non-optimal macroeconomic policy mix which couples a restrictive monetary policy with a loose fiscal policy, increases the cost of price stability maintenance in the form of lower GDP growth (in relation to the optimal mix).

In 2004 some growth in the public finance sector deficit was anticipated, accompanied by a large probability of the public debt crossing the second prudential threshold (i.e. 55% of GDP), and a vague fiscal outlook in the mid-term. The Council was concerned about delays in deficit-curbing reforms and credit needs in the public finance sector. The lags in the necessary reforms might have brought about some disruptions in financial markets leading to an increase in the yields on Treasury securities and a weakening of zloty exchange rate, which constituted an important factor of inflationary risk. Moreover, further public debt accretion might have jeopardised the sustainability of economic growth. In particular, the Council was concerned about:

- little progress in works on a legislative package of bills prepared by the Government in February 2004 in terms of *Public Expenditure Reform and Reduction Programme*,
- persisting uncertainty as to the eventual shape of the budget for 2005, among others due to it having optimistically accounted for financial effects of bills raising insurance premiums for entrepreneurs and farmers even before they were actually passed by the Parliament. As feared, in the end the Parliament did not approve all of the government-proposed solutions aimed at curbing the public finance deficit,

- growing political instability, translating into shrinking probability of passing bills aimed at cutting public expenditure.

In line with the *Budget Act*, in 2004 a considerable growth was envisaged in the imbalance of the public sector and, consequently, also in the credit needs of the state. The planned deficit of the sector at approx. 2% of GDP in relation to 2003 largely resulted from a soar in public expenditure related to Poland’s EU accession. This increase in public spending was the sum of the following elements: net payment[4] of membership contribution to EU budget, expenditure on co-financing EU structural funds, among others through increasing the contribution of local governments in income taxes and expenditure on supplementing of direct subsidies for farmers from the central budget. What is more, due to the change in the indirect tax settlement principles at the moment of EU accession, one-off drop in the inflows from these taxes was anticipated in 2004..

In 2004 the state budge deficit was still very high and in relation to 2003 it rose by 0.2% of GDP[5]. According to the data of the Ministry of Finance, the deficit of the total public finance sector (in cash terms) came to 4.8% of GDP in 2004 (which after adjusting the expenditure for transfers to open pension funds represents a growth at 0.6 percentage point of GDP against its 2003 value). Thus, cash deficit landed below the value planned for 2004, which resulted partly from a lower than assumed central budget deficit and a better then expected result of the remaining public finance sector units. In 2004 the Social Security Fund and local governments recorded a positive balance and not deficit as it had been assumed.

The lack of improvement in the condition of the public finance sector in 2004 is attested by a rise in the structural deficit. The deficit, by definition unaffected by cyclical factors, grew in 2004 by 0.9% of GDP[6] in relation to 2003, i.e. more than the public finance sector deficit.

Table 8

Measures of fiscal imbalance

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[4] Expenditure on membership contribution diminished by funds received by the central budget from the EU (among others special cash flow facility for the purpose of improving liquidity).

[5] In comparable terms (i.e. after adjusting central budget expenditure for the subsidies to the Social Security Fund by way of compensation for social security premiums transferred to open pension funds, which in 2004 were excluded from *expenditure* and classified as *below the line*) central budget deficit increased in relation to 2003 by 1.4% of GDP.

[6] Since 2004 the structural deficit has been permanently increased by the net payment of membership contribution to EU budget.

	2003	2004	
	Performance	**Budget Act**	**Performance**
	billion zloty		
Central budget deficit	-37.0	-45.3	-41.4
Cash deficit of the public finance sector	-44.6	-54.3	-42.0
Adjusted cash deficit of the public finance sector*	-34.7		
	% of GDP		
Central budget deficit	-4.5	-5.3	-4.7
Cash deficit of the public finance sector	-5.4	-6.3	-4.8
Adjusted cash deficit of the public finance sector*	-4.2		

***** In line with the methodology adopted in 2004, the cash deficit of the public finance sector **in 2003** was decreased by the transfer of funds to cover insurance premiums handed over to open pension funds.

As a result of higher than expected revenue from privatisation and also the strong zloty appreciation (conducive to a reduction in the value of foreign liabilities expressed in zloty), the ratio of state public debt (with guarantees) to GDP at the end of 2004 settled at the level of 50.3%, i.e. below its 2003 value.

2004 brought a significant change in public debt financing structure. There was a steep rise in the contribution of foreign investors in financing the debt (from 16.4% in 2003 up to 21.4% at the end of 2004)[7], while the financing contribution of domestic banking sector saw a decline (from 34.1% in 2003 down to 29.4% in 2004). The involvement of domestic non-banking sector in public debt financing remained broadly stable in relation 2003, at the level of 49.2%.

[7] The value of investments of non-residents in government Treasury securities increased from 41.1 billion zloty in December 2003 to 62.3 in December 2004.

Decisions of the MPC

The inflation acceleration in the situation of a strengthening economic recovery and also expected continuation to rising tendencies in the economy conducive to a gradual build-up in inflationary pressure persuaded the Council to signal, in February 2004, a possibility of tightening its monetary policy bias. This change was indeed effected in April 2004. In its justification for the decision the Council pointed to facts attesting to a considerable risk of inflation acceleration and crossing the upper tolerance limit for deviations from the inflation target, including in the first place the rise in inflation expectations, the risk of their perpetuation and the depreciation of the nominal effective exchange rate of the zloty.

Even though the majority of shocks which affected Polish economy in the spring of 2004 proved to be of transitory nature, some uncertainty existed as to the way in which these shocks would impact inflationary pressure growth. Amid a sizeable growth of inflation expectations there existed a risk of the emergence of higher wage demands and, consequently, of permanent inflation settling at the level considerably higher than the inflation target established by the Council at 2.5%. The risk of the rise of *second-round effects* was signalled, among others, by the strength of shocks observed in the economy as well as a short period of low inflation in Poland. What is more, in the assessment of the Council heightened wage demand could be more easily satisfied due to the strengthening economic recovery and high profits of enterprises. In turn, the main factor that could potentially check the impact of growing inflation expectations was persistently high unemployment. Additionally, supply shocks accompanied by price growths could be conductive to curbing demand and thus to bringing inflationary pressure down.

In June-August 2004 the Monetary Policy Council raised the key NBP rates on three occasions – in June by 0.5 percentage point, in July by 0.25 pp and in August again by 0.5 pp. Such sequence of interest rate increases reflects the flow of information from the economy, which was affecting the balance of risks for future inflation path in the period of a markedly heightened uncertainty accompanying Poland's EU accession. It has to be emphasised, however, that what matters most from the perspective of the impact on inflationary processes is the total scale of the increases rather than their sequence.

Through its decisions on interest rate increases the Council intended to send market participants a clear signal that the central bank is determined to meet the inflation target in the mid-term and the rise in inflation is of transient nature. On the basis of these premises the Council declared in its *Monetary Policy Guidelines for the Year 2005* that it would continue its actions towards ensuring prompt inflation reduction down to the level of 2.5% in 5 to 7 quarters. The MPC's decisions were meant to counteract a permanent rise in inflation expectations. Although it is true that these expectations in Poland are largely adaptive, still in period preceding the country's accession to the EU and also in a few subsequent months they ranked higher than it was suggested by current inflation indicators. This shows that in certain periods inflation expectations can also be forward looking.

As the outlook for inflation was improving in 2004 Q4, the Council did not think it necessary to introduce further rate increases. Nevertheless, the Council perceived considerable uncertainty surrounding the development of zloty exchange rate. Thanks to pursuing its monetary policy within the BCI strategy and the system of floating exchange rate, the NBP can intervene in the currency market. In 2004, however, the NBP did not recourse to such interventions.

In 2004, while both inflation and nominal NPB interest rates were growing, there occurred a slump in real interest rates. In January 2004, the reference rate deflated by inflation expectations of households stood at 3.1%. In the following months of the year, it fell down to 1.4% in August. In the final months of the year the rate rose again to reach the value of 2.1% in December.

Supply and demand shocks which affected Polish economy in 2004 coupled with significant fluctuations of the exchange rate, greatly increased the scope of uncertainty accompanying monetary policy implementation. In the situation of increased uncertainty the Council deemed it especially important to present the premises for its decisions in a comprehensible and transparent way. According to research, transparent and credible monetary policy contributes to better anchoring of inflation expectations at the target level and, consequently, facilitates bringing inflation back to target after shocks and reduces the cost of adjustment process.

Within the framework of actions taken in 2004 oriented at improving communication of the central bank with the environment, the formula of the *Inflation Report* was modified. This document presents the current assessment of inflationary processes and inflation determinants, and also describes the pursued monetary policy. Bringing forward the publication date of the *Inflation Report* and the inclusion of latest available data allowed a better explanation of the premises behind the current monetary policy decisions. Also, starting from August 2004 the *Report* was fitted with inflation projection prepared with the assumption of unchanged interest rates throughout the projection horizon. Inflation projections are prepared by a team of economists of the National Bank of Poland under the supervision of Krzysztof Rybiński, Deputy President of the NBP. The projection is one of the premises on the basis of which the Council decides on NBP interest rates. Starting from August 2004, each release of the *Inflation Report* is accompanied by press conference and meeting with financial market analysts, which are meant to further improve communication between the central bank and the environment. 2004 also saw a change in the formula of statements of the MPC. The Council strived to make them more forward-looking than before and also wanted them to present the assessment of the balance of risks for future inflation. These modifications should lead to better understanding and predictability of monetary policy parameter shifts. The Council expects that in the long term the increased transparency will contribute to greater effectiveness of monetary policy.

In 2004 three meetings of the MPC with the representatives of Polish government economic ministries were held. This meetings were devoted to the analysis of the current and future condition of the public finance sector and to the issues related to Poland's future participation in the Exchange Rate Mechanism II and its accession to the euro area. The adoption of the common currency is conditional on the compliance with the so-called Maastricht criteria. In the aftermath of last year's temporary rise in inflation, since August 2004 Poland has not been complying with the price stability criterion. Nevertheless, the expected drop of inflation down to the level consistent with the target of 2.5 y/y should also be coupled with the average annual price growth rate slowing down to the level that would allow Poland to re-comply with the price stability criterion. As a result, the monetary policy in 2004, oriented at bringing inflation down to the target as soon as possible, favoured the pursuit of the strategy of Poland's acceding to the euro area at the earliest possible date.

Due to the lags in monetary policy transmission to the economy, the complete assessment of the monetary policy pursued in 2004 will only be possible in 2006.

INSTITUTIONAL CONDITIONS FOR ECONOMIC GROWTH AND INFLATION IN 2004 AND IN THE LONGER PERIOD

Economic growth analyses indicate that the traditional model of its explanation, limited to the observation of shifts in the inputs of production factors: labour, capital and land, and the evolution of utilised technologies is not sufficient to explain the differences in the pace of growth and the level of development across countries. Having deposits of raw materials and demographic potential is neither a sufficient nor necessary requirement to achieve a high and sustainable rate of economic growth. Contemporary models of economic growth treat technological and organisational progress as a fundamental growth factor, which in turn above all depends on institutional factors defining the entire institutional framework for business activity in a particular country.

Institutional weaknesses, by creating barriers to economic activity for enterprises at the microeconomic level and by restricting the competition mechanism, decrease the effectiveness of production factor utilisation for the economy as a whole. This weakening of the supply-side of the economy has far reaching consequences for the pursuit of monetary policy; there is a slowdown in the growth rate of potential GDP consistent with the adopted inflation target. This means that successful reforms reducing systemic barriers would allow the economy to enter a higher, non-inflationary path of growth without the need to increase interest rates. What is more, lower efficiency of the supply-side of the economy linked with low flexibility of markets, means greater fluctuations of actual GDP around its trend and, consequently, greater cost of its stabilising.

What is meant by "institutional factors" are in the main the formal (i.e. sanctioned by law) and informal rules which govern the activity of individuals and other economic agents, including enterprises. These primarily include:

- legal regulations and bureaucratic procedures concerning the start and termination of economic activity,
- type and level of property right protection,
- rules of contracting and enforcement of liabilities,
- scope and type of labour market regulation,
- tax regulations,

- development stage and rules of operation of the financial system,
- legislation related to the prevention against monopolist practices,
- degree of liberalisation of foreign trading,
- independence of the central bank.

Well-functioning institutions bolster the economic activity of individuals and ensure that they can retain profits from this activity. For instance, economic activity is favoured by the freedom to establish a company coupled with possibly simple and cheap registration procedures. Property guarantees encourage development of companies, as owners who can be sure of their rights to generated profits will invest them in physical and human capital. Also, the development of companies will be supported by: the financial system that is tailored to their needs, Labour Code regulations that allow flexible employment decisions, protection of intellectual property and free competition. Vague regulations on property rights and ineffective methods of its enforcement lead to the waste of funds and ineffectiveness, and also politicisation of the economy.

Comparisons of different countries indicate that institutional factors explain to a large extent their differences in terms of:

- the level of economic development,
- the rates of growth,
- the stability of the economic growth.

Institutional reforms constituted a fundamental factor of economic growth in Poland in the transition period. It is thanks to these reforms that Poland managed to secure its membership in the OECD and the European Union. Despite the fact that currently Polish law and institutions do not diverge from the solutions adopted in EU countries, the proper enforcement of the existing legislation and the smooth operation of institutions remains a fundamental challenge. There still exist institutional barriers that are the main reason behind social and economic problems, halt the currently observed recovery and raise concerns about it sustainability. The studies by many analytical centres (OECD, World Bank, EBRD and domestic research institutes) and the NBP all point to the following weaknesses of the institutional sphere in Poland:

- far more complicated process of new business registration in Poland than in the old EU member states,
- long period of the execution of contract obligations,

- high degree of regulation of labour relationships effectively hampering the creation of new jobs,
- high burdens on labour costs, which are one of the major factors restricting the rise in the demand for labour in the economy and persuading the jobless to seek employment in the grey economy instead,
- significant share of the public sector in the economically important industries and a significant scope of public support for some of them, meaning a waste of funds and a curb on the development of free competition in those markets.

In 2004 a number of systemic changes were introduced bearing on the conditions for economic growth and inflation in the long term. The most important of these changes include:

- reduction of the rate of the Corporate Income Tax (CIT) from 27% to 19%,
- introduction of the option for individuals conducting economic activity to be taxed at the 19% rate,
- change in the system of local governments' financing consisting in a rise of the share of the local government in Personal Income Taxes (PIT) (from 30.1% to 45.74%) and CIT (from 5.5% to 24.01%),
- re-introduction of a Labour Code regulation which restricts the maximal number of consecutive fixed-term employment contracts entered with the same employee to two. From the end of November 2002 to the end of April 2004 a temporary regulation was in force allowing employers to make any number of fixed-term contracts with particular employees. The return to the reglamentation of these contracts was necessitated by harmonization of Polish law with EU legal regulations .

It could be asserted that 2004 brought some improvement in the institutional environment for economic growth. However, some institutional weaknesses that still persist in Poland and the high structural deficit of the public finance sector still constitute a stumbling block to faster bridging the development gap between Poland and the developed countries, and also to a significant improvement in the labour market.

MONETARY POLICY INSTRUMENTS

In 2004, the NPB pursued its monetary policy influencing the inflation level through interest rate. The Monetary Policy Council set the NBP's official interest rates which determined the yield of monetary policy instruments. In order to influence the short-term interest rates, the NBP had recourse to the following combination of instruments: open market operations, lending and deposit operations and reserve requirements. Influencing the level of nominal short-term interest rates, the Monetary Policy Council attempted to achieve a level of interest rate which would be consistent with the adopted inflation target.

Banking sector liquidity

Banking sector liquidity in 2004 was affected by a variety of factors. Reduction of liquidity surplus measured as a monthly average balance of NBP money bills was mainly driven by increased balance of budget deposits held at the central bank, increased amount of currency in circulation, higher reserve requirements and sale of net currencies by the NBP. The increase in the scale of liquidity surplus was driven, among others, by the transfer of the NBP's profit to the central budget, payment of interest on NBP bonds, payment of discount on NBP money bills and payment of interest on required reserve.

The strongest factor affecting the level of banking sector liquidity were central budget deposits held at the central bank. The level of funds held by the Ministry of Finance at the NBP was highly volatile. The biggest reduction in the liquidity level was recorded in April – May 2004 when the majority thereof was absorbed from the market by the Ministry of Finance and then deposited at the central bank. This situation changed only after the Ministry of Finance started in May 2004 to deposit part of the budget surpluses in the banking sector and transferred part of the NBP's profit for 2003 to the central budget at the end of June 2004.

The average level of liquidity surplus measured by the scale of issuance of the NBP's money bills dropped in 2004 down to the level of 5.275 billion zloty as compared with 6.251 billion zloty in 2003.

Interest rates

The implementation of the monetary policy under the direct inflation targeting regime means that the NBP's official interest rates are maintained at the level consistent with the adopted target. Open market operations and lending and deposit operations influence the level of interbank interest rates and indirectly affect deposit and credit rates offered by commercial banks. This, in turn, has an impact on the decisions of households related to savings and consumption and the level of corporate investment.

Like in the previous years, the rates which defined the direction of the monetary policy pursued by the NBP in 2004 were the reference rate, the lombard rate and the deposit rate.

The reference rate set the minimum yield on money market bills sold in open market operations. The maturity of the NBP bills issued in 2004 was 14 days. The minimum interest rate on the liquidity-absorbing short-term open market transactions defined the current direction of the monetary policy and influenced the level of interbank interest rates with similar maturity.

The lombard rate determined the cost incurred by banks to obtain money from the central bank for overnight deposits.

The deposit rate specified the price offered by the central bank to commercial banks for overnight deposits at the NBP.

The deposit rate and the lombard rate constituted the fluctuation band for short-term interbank interest rates with its centre determined by the reference rate. The band of +/- 1.5 percentage point was maintained.

In 2004, the Monetary Policy Council raised the reference rate and the lombard and the deposit rate on three occasions (Table 9). These rates were increased by 1.25 percentage point during the year.

The reference rate increases were followed by increases of short-term interest-rates in the interbank market. WIBOR 2W rate influenced directly by the central bank through open market operations oscillated around the reference rate within the band of fluctuations of short-term interest rates.

Table 9

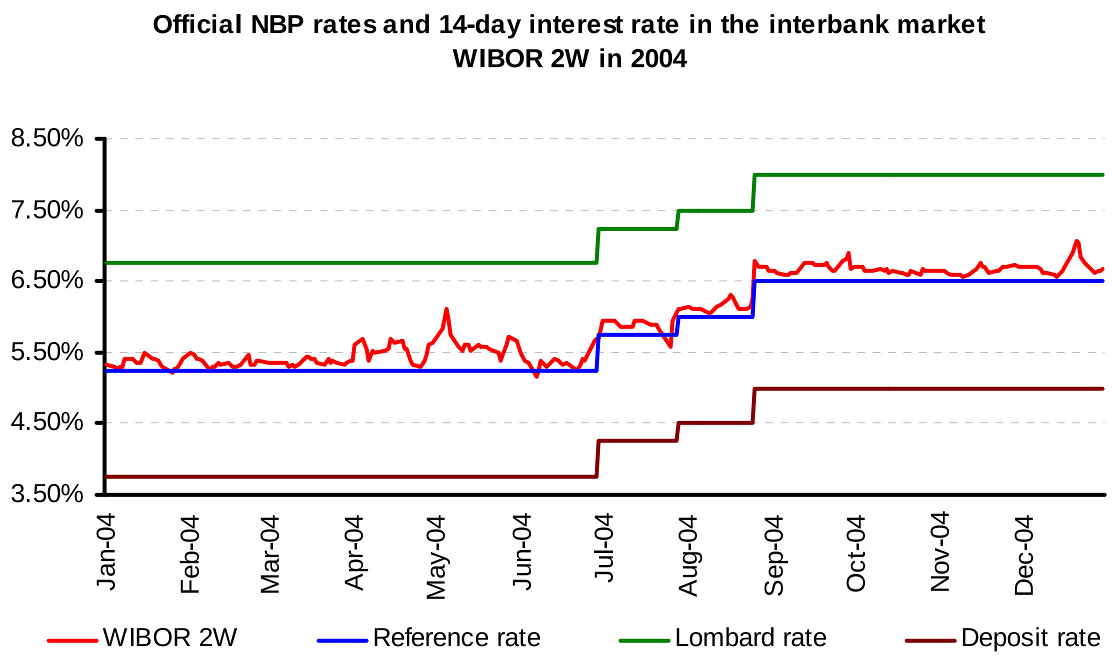
Decisions of the Monetary Policy Council regarding changes in the official interest rates in 2004.

Decision date*	**Decision:**
30 June	- Raising of the minimum yield on the 14-day open market operations from 5.25% to 5.75% - Raising of the lombard rate from 6.75% to 7.25% - Raising of the rediscount rate from 5.75% to 6.25% - Raising of the deposit rate from 3.75% do 4.25%.
28 July	- Raising of the minimum yield on the 14-day open market operations from 5.75% to 6.0% - Raising of the lombard rate from 7.25% to 7.5% - Raising of the rediscount rate from 6.25% to 6.5% - Raising of the deposit rate from 4.25% to 4.5%
25 August	- Raising of the minimum yield on the 14-day open market operations from 6.0% to 6.5% - Raising of the lombard rate from 7.5% to 8.0% - Raising of the rediscount rate from 6.5% to 7.0% - Raising of the deposit rate from 4.5% to 5.0%

Source: NBP data

*Decisions came into force on the following business day

Figure 1



Source: NBP data

Open market operations

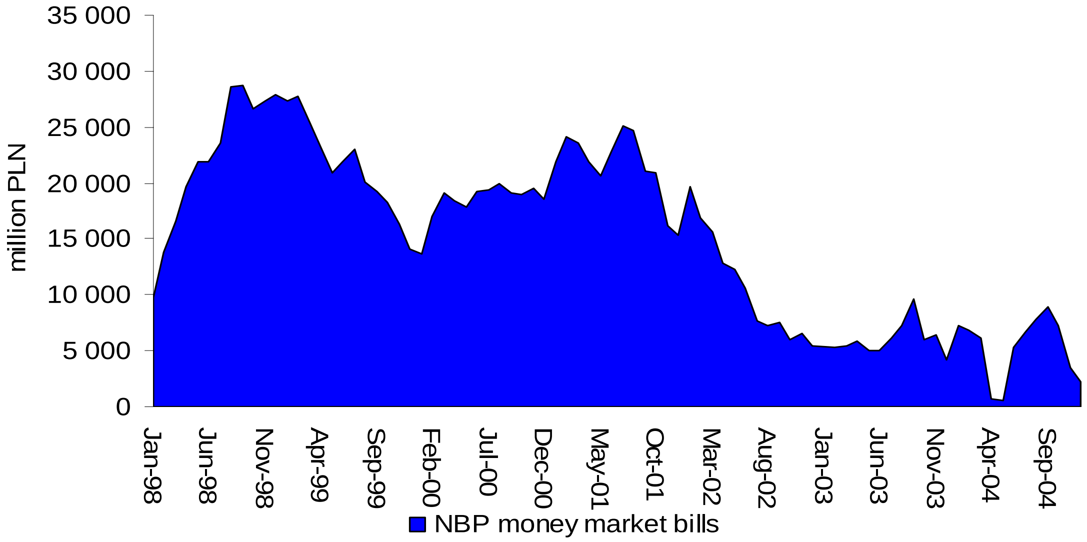
In 2004 like in the previous year, the NBP had recourse to the following categories of open market operations: basic, fine-tuning and structural operations.

The NBP conducted **basic open market operations** on a regular basis, once a week. They were used to absorb the liquidity surplus in the banking sector and involved the issuance of the NBP money market bills with 14-day maturity.

The scale of liquidity-absorbing operations conducted in order to adjust the level of liquidity in the banking sector is depicted in the figure below.

Figure 2

Average monthly balance of basic open market operations 1998-2004



Source: NBP data

The level of issuance of NBP money market bills decreased throughout 2004 by PLN 1.8 billion to reach the average of PLN 2.3 billion in December 2004. The drop resulted from reduced liquidity in the banking sector mainly due to the increased amount of zloty budget funds held at the NBP, increased amount of cash in circulation and increased reserve requirements.

In exceptional situations (e.g. in the case of significant disruptions in liquidity or in the case of threat to the payment system operations), the NBP could use **fine-tuning operations**. These operations could take the form of both liquidity-providing and liquidity-absorbing operations, their maturity depending on the duration of disruption. The instrument was not used in 2004.

In 2004 the market conditions did not require changes in long-term liquidity structure of the banking sector and the use of **structural operations.**

In 2004, open market operations were carried out with a group of 13 entities i.e. 12 banks – money market dealers and the Bank Guarantee Fund. Banks – dealers were selected in accordance with uniform qualification criteria of the Dealer Activity Index. The banks were active in the FRA and IRS markets and held large shares in the market of Treasury securities (bills and bonds), NBP money market bills, interbank deposits and FX swaps.

Reserve requirement

Banks hold required reserves with the NBP on current accounts and on required reserve accounts. Required reserves are calculated on the basis of bank's collected deposits and funds received from the sale of securities[8].

The funds taken from other domestic banks, as well as funds obtained from abroad for at least two years are excluded from the basis for reserve calculation. Required reserves are calculated and held in Polish zloty. The reserve ratio for all types of liabilities except for funds received from repo transactions is 3.5%. All banks reduce the amount of calculated required reserves by the equivalent of EUR 500 thousand.

The banks are obliged to maintain an average balance of funds on accounts with the NBP during the reserve period at the level not lower than the required reserve. Such system mitigates the impact of liquidity fluctuations in the banking sector on interest rate movements.

2004 brought the following changes in the principles of calculation and holding of required reserves:

- Since 1 May 2004 – under art. 38 section 4 and 5 of *The Act on the NBP* – interest has been charged on required reserve funds. The Monetary Policy Council set the interest rate at the level of 0.9 bill rediscount rate. 80% of interest charged on the required reserves i.e. PLN 334.7 million was transferred by the NBP to the EU Guarantee Fund established in 2004, and the remaining 20% in the amount of PLN 83.7 million increased the banks' revenues[9].
- On 30 June 2004, the Monetary Policy Council set a zero required reserve ratio on funds received by banks from repo transactions. The zero required reserve ratio set by the Monetary Policy Council – as in the Eurosystem – has had a positive impact on extending

[8] Until 30 April 2004 the principles of calculation and holding of required reserves were set forth in Resolution no. 64/2001 of the NBP Management Board dated 21 December, 2001 as amended and since 1 May 2004 in Resolution no. 14/2005 of the NBP Management Board dated 13 April 2004 as amended.

[9] On 30 October 2003 the Vice President of the Council of Ministers, the Minister of Finance and the Polish Banks' Association signed, in the presence of the President of the NBP, an agreement establishing the EU Guarantee Fund and allocating part of resources coming from interest on required reserve to this Fund.

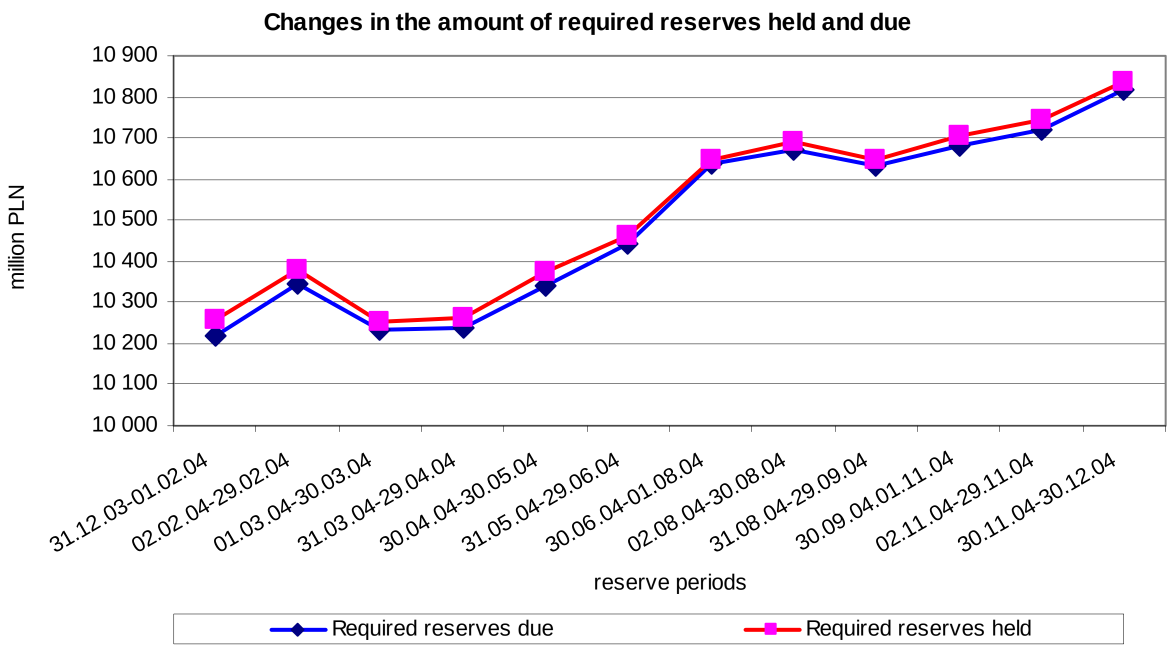
scope of the repo transactions to the non-banking sector and on improving the competitive position of Polish banks against the euro area banks.

- On 1 September 2004 – pursuant to art. 38 section 2 – funds received under individual pension account agreements were exempted from the required reserves calculation basis.

These changes, apart from the last one, brought the NBP required reserve system closer to the Eurosystem standards.

The amount of required reserves is PLN 11,097 million as of 31 December, 2004 showing an increase of PLN 876 million (8.6%) as compared with 31 December, 2003. The change in the amount of reserves in 2004 was driven by the increase in deposits constituting the basis for required reserves calculation – 7.6% on an annual scale.

Figure 3



All reserve periods marked a slight surplus of the average balance of funds held by banks on accounts with the NBP as compared with the level of the required reserves due[10]. In particular periods this surplus ranged from PLN 7 million in July (0.06%) to PLN 34 million in May (0.3%). Average positive deviation of the reserves hold in 2004 in the banking sector – as compared with the required reserves due – amounted to PLN 23 million (0.2% of required reserves) and was lower by PLN 2 million than the corresponding value in 2003.

The minimum differences between the required reserves hold and due persisting in 2004 resulted from the improvement in asset management at banks, the use of instruments facilitating asset management at the NBP (open market operations, and standing facilities) and the charging of interest on required reserve funds. An additional driving force behind more efficient management of banks' assets was NBP's information published daily on the level of required reserves and balance of funds on accounts held at the NBP the previous day (NBPM page at Reuters Website).

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[10] This was connected with the system of calculating the reserve ratio with reference to average monthly bank balances. Banks hedged in this way against the risk of determining incorrectly the average monthly level of required reserve and thus against default interest charged for failure to meet the reserve requirement.

Lending and deposit operations and intraday credit

Lending and deposit operations performed with the central bank initiated by commercial banks were aimed at short-term supplementing of the banking sector liquidity or overnight deposits of the banks' surplus of free funds with the NBP. Lending and deposit operations include lombard facility and deposit facility. These operations are aimed to prevent excessive fluctuations of the interbank interest rates.

The lombard facility used by banks supplemented their current liquidity. The lombard facility interest rate determined the maximum cost of funding with the NBP by setting a ceiling on fluctuations of the inter-bank rates[11].

Lombard facility was collaterised with Treasury securities. The total amount of the lombard facility used throughout the year was PLN 8.0 billion as compared with PLN 11.6 billion in 2003. The banks took credits mainly at dates ending the required reserve maintenance periods.

The banks placed their liquidity surplus on the NBP's term deposit accounts as overnight deposits reimbursable on the following business day. The deposit rate determining the instrument's yield constituted the lower limit for movements in short-term market rates.

In 2004, the total amount of term deposits placed by the banks with the NBP equalled PLN 113.6 billion. They increased by 67.6% as compared with the previous year's corresponding period. The value of a single deposit ranged from PLN 370 thousand to PLN 7.9 billion. The highest amounts were deposited by the banks on the last days of the required reserve maintenance periods, in the period April – May (liquidity disturbances caused by changes in the level of the central budget funds with the NBP) and during the PKO BP privatisation transaction.

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[11] Overnight market rate may be higher than the lombard rate in case the bank does not have a required collateral to take a lombard credit.

In 2004, the banks used the intraday credit facility every day. It was taken and repaid during the same business day. It is a non-interest bearing credit which is collateralised with Treasury securities. Such a credit facility serves to facilitate settlements and liquidity management in the banking system during the business day. The banks’ daily debt under credit facility ranged from PLN 4.0 billion to PLN 8.7 billion.

APPENDIX 1. CPI

In December 2004 the annual CPI (Consumer Price Index) growth stood at 4.4% y/y. Several sub-periods may be distinguished in terms of the inflationary processes developments in 2004. In Q1 inflation was kept at a steady level (1.6 – 1.7%), close to the level recorded in 2003 Q4. In the period directly preceding Poland's accession to the EU and in the first months of Poland's membership in the EU, the CPI growth accelerated considerably to reach 4.6% in July. The growing pressure on price increases resulted, among others, from increased internal and external demand for certain domestic raw materials and goods, introduction of EU regulations relating to indirect taxes, customs policy and agricultural policy. Moreover, the world markets experienced a strong increase in energy and industrial raw materials (mainly crude oil, coal and copper). Those factors pushed inflation upwards to the level of 4.4 – 4.6%.

The CPI growth in 2004 resulted mainly from:

- 7.8% growth in prices of food and non-alcoholic beverages accounting for 48% of total growth in consumer prices,
- 3.7% growth in regulated prices increasing the CPI by approximately 24%
- 2.6% growth in prices of other consumer goods and services, contributing in 28% to the overall price increase.

Table 10

Changes in the basic groups of CPI and weight structure in 2003-2004 (y/y)

	2003	2004	2003				2004				2003	2004
	Weight structure in %		III	VI	IX	XII	III	VI	IX	XII	I-XII	
			Corresponding period of the previous year = 100									
CPI	**100.0**	**100.0**	**0.6**	**0.8**	**0.9**	**1.7**	**1.7**	**4.4**	**4.4**	**4.4**	**0.8**	**3.5**
Food and non-alcoholic beverages	**28.16**	**26.95**	**-3.5**	**-0.6**	**0.5**	**2.1**	**3.3**	**8.1**	**8.1**	**7.8**	**-1.0**	**6.3**
Regulated prices	**27.22**	**27.28**	**3.5**	**1.7**	**1.2**	**2.3**	**1.7**	**4.1**	**3.7**	**3.7**	**2.1**	**3.2**

Fuel	*3.65*	*3.80*	*17.4*	*5.5*	*5.1*	*4.4*	*1.3*	*17.8*	*15.9*	*17.0*	*7.9*	*12.4*
Other goods and services	**44.62**	**45.77**	**1.4**	**1.1**	**1.0**	**1.0**	**0.7**	**2.3**	**2.6**	**2.6**	**1.1**	**1.9**
Non-food products	*26.72*	*27.29*	*0.5*	*0.1*	*-0.1*	*-0.1*	*-0.2*	*2.1*	*2.4*	*2.2*	*0.1*	*1.4*
Services	*17.90*	*18.48*	*2.7*	*2.6*	*2.6*	*2.6*	*2.1*	*2.7*	*3.0*	*3.4*	*2.7*	*2.7*

Source: GUS data, NBP calculations

Figure no. 4

Changes in CPI and main price categories (y/y)

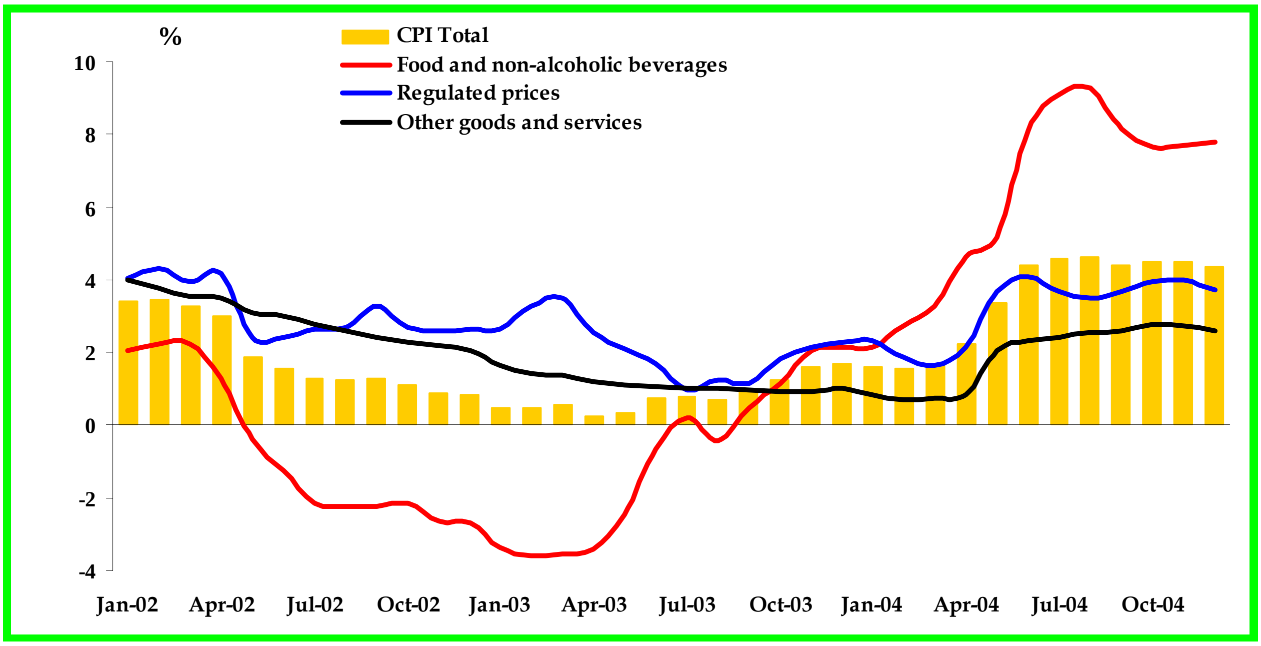
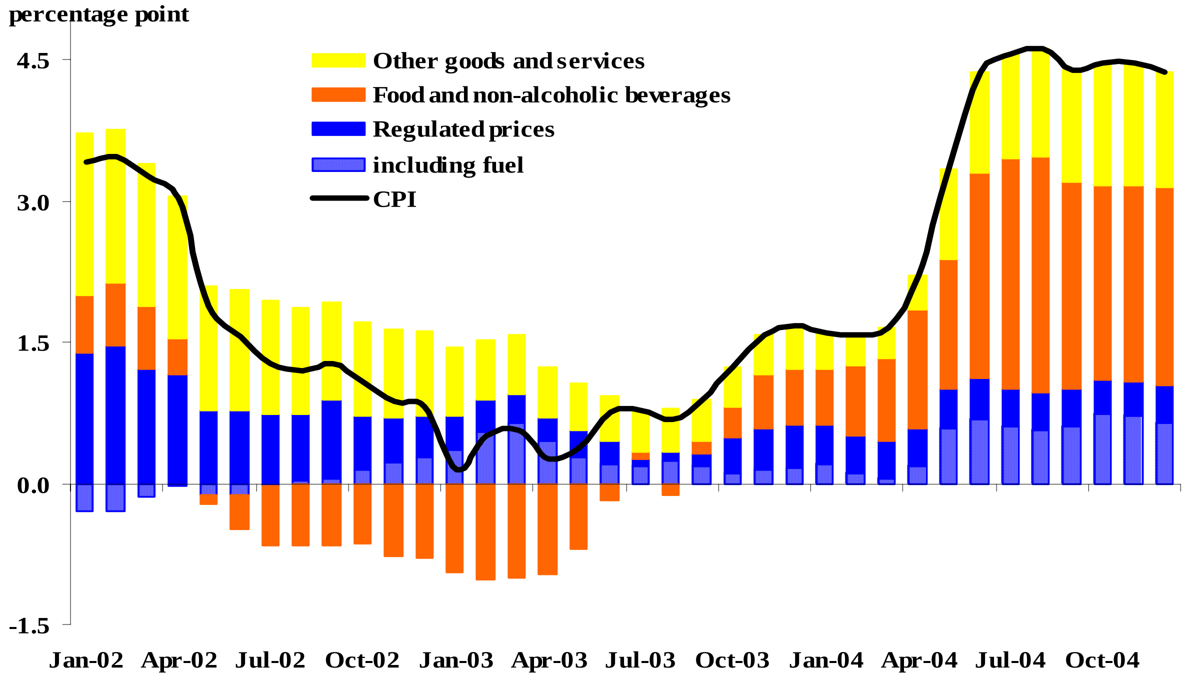


Figure 5

CPI breakdown (y/y)



Prices of food and non-alcoholic beverages

2004 saw a further strong growth in prices of food and non-alcoholic beverages which was the key driving force behind accelerated inflation as measured with the CPI index. Due to the strong price growth in the first months of Poland's membership in the EU, the annual growth of this price category in 2004 stood at a high level of 7.8 % y/y (against 2.1% y/y in the previous year) significantly outpacing the general price growth.

The prices of food and non-alcoholic beverages in 2004 increased faster than in the previous year. In the period January to December 2004, an accelerated growth of retail prices was reported in almost all groups of food products, except for vegetables. The highest growth was recorded in the prices of sugar, honey and chocolate products (24.8%) with sugar experiencing the highest price increase of 67.1%. Pre-accession period experienced the highest price increases in this group of prices (in April 2004, sugar prices rose by 48.5%). They were driven by intensified purchases of consumers concerned about price increases following Poland's accession to the EU. Price increases in 2004 were strongly affected by meat prices which rose by 15.6% during the twelve months' period of 2004 mainly as a result of pork production being reduced for many months and free trade in the EU's single market since 1 May 2004. Meat prices, after marking an accelerated growth in the pre- and post-accession period (between May to July 2005 – 13% growth) stayed at a high annual level until the end of 2004. Oil and fat prices increased by 10.4%, mainly as a result of limited supply of animal fats and increased foreign demand for Polish butter. Low supply resulting from lower cereal crops in 2003 and weaker than expected response of retail prices to very good crops in 2004 contributed to a 12-month price increase in the group “bread and cereal products” (by 5.8%).

The table below presents forecasts of prices of food and non-alcoholic beverages of August 2003 and the actual prices in 2004.

Table 11

Specification	**Forecast of August 2003**	**Actual prices**	**Main reasons for differences**
	Annual average (2003=100)		
Food and non-alcoholic beverages	**102.4**	**106.3**	
Bread and cereal products	103.0	105.3	As a result of steep decline in cereal output in Poland, the 2003/2004 season was marked with high increase in prices paid to producers. Forecasts of retail prices of bread and cereal products were based on the forecasts of cereal prices of agricultural exporters who predicted an increase in this group of prices in the first half of 2004, however, on a smaller scale. According to forecasts, the second half of 2004 was to experience a fall in cereal prices starting from July 2004 as a result of expected high crops in 2004 and the adoption of the EU intervention system and price regulations. Purchase prices of main cereals were considerably reduced (in line with the expectations) which did not drive down retail prices of cereal-based products.

Meat	103.1	109.6	In the first half of 2004 the growing fall in swine was expected to bring about successive increases of pork meat prices. Prior to Poland's accession to the EU meat prices in Poland were also expected to be adjusted to the EU level. However, the process was expected to be a gradual and long-term one. As a result of price increases recorded in the first months following the accession, Polish agricultural prices were aligned to the level of prices in other countries of the enlarged EU. The main driver for the increase in retail prices of meat was the increased export volume of main meat types (beef – total increase of 129%, to the EU 15 – 172% increase), pork meat (total drop of 26.6%, to the EU – 70.8% increase) and poultry meat (total increase of 14.2%, to the EU15 – 20% increase).
Fish	100.3	100.5	
Milk, cheeses, eggs	100.8	105.1	Increase of milk prices as a result of increased export volume from 418 tons in 2003 to 49617 tons in 2004 – i.e. a 118-times growth; 54.6% increase in cheese and cottage cheese prices
Oils and other fats	100.7	110.8	Increase of butter prices as a result of increased total export volume by 195%; to the EU 15 – increase by 135.7%
Fruit	101.5	103.1	
Vegetables	100.2	98.2	
Sugar, honey, confectionery products	101.6	11,0	Increased domestic demand for sugar resulting from consumers' concern about price increases following EU accession.
Non-alcohol beverages	101.3	101.8	
Other food	98.3	100.2	

Since 1 May 2004, the Polish agricultural and food sector has been affected by a demand shock resulting from the introduction of common market principles and extensive instruments of the Common Agricultural Policy.

Full opening of agricultural markets in the EU contributed, in the first few months following the EU accession, to a strong growth in external demand for Polish food on an unprecedented scale. As a result, the first few months following the EU accession saw a considerable increase in domestic prices of major agricultural raw materials, and consequently, prices of food and a considerable growth in inflation rate. September and October experienced a marked fall in current growth of food prices.

In the first half of 2004, the increased price competitiveness in international markets was strengthened by the very favourable for domestic exporters EUR/PLN exchange rate. Elimination of all restrictions in the trade in food between Poland and the EU has immediately revealed a high price competitiveness of many Polish food articles, mainly beef meat, poultry meat and dairy products (butter, powdered milk and ripening cheeses).

Growing participation of Polish exporters and producers in the EU trade and intervention mechanisms imposed by the Common Agricultural Policy will contribute, in the longer run, to price stabilization in the domestic market, yet at a considerably higher level than in the pre-accession period (except for cereals for which the change in the support mechanism resulted in a stable price decrease following the 2004 crops). The factors behind the stabilisation of the Polish agricultural market until mid-2005 have included mainly high cereal crops in Poland and in the region which is translated into lower fodder prices and, with a certain time lag, lower meat prices.

At the same time, after 1 May 2004 the list of goods eligible for export subsidies was considerably extended. Until 1 May 2004 Poland benefited from export subsidies mainly for sugar, pork meat and powdered milk. At present, Polish exporters may apply for export subsidies from the EU budget for many new products, i.e. cream, butter, cheeses, beef and poultry meat and cereals. The latest data on foreign trade in agricultural and food products point at a sustained annual export growth despite appreciation of the zloty against foreign currencies.

Regulated prices

In the analysed period, inflation in the group of regulated prices accelerated from 2.3% (y/y) in December 2003 to reach 3.7% (y/y) in December 2004. The leading driving force behind the increase in those prices were fuel price rises in the domestic market of 17.0% (y/y) in December 2004 mainly being the result of growing fuel prices in the world markets.

In the group of regulated prices, the growth rate in prices of the following products exceeded the average rate recorded for the group: fuel products (17.0%), tobacco products (7.5%) and gas (4.3%). The growth in fuel and oil prices was mainly a consequence of oil price increases in the world markets. Yet, the growth in tobacco product prices was driven by increased excise tax rate resulting from the need to adjust its value to the level required in the EU. The annual fall in prices was recorded in the group of alcoholic beverages only (drop of 0.8%).

No new tariffs for electrical energy and gas were introduced in 2004.

The table below presents the August 2003 regulated price forecasts and the actual prices in 2004.

Table 12

Specification	**August 2003 forecast**	**Actual prices**	**Main reasons for differences**
	Annual average (2003=100)		
Regulated prices	101.9	103.2	
Alcoholic beverages	99.4	99.8	
Tobacco products	103.1	107.0	Prices of tobacco products reported a stronger increase than the one suggested by the excise tax increase. The average increase in excise tax rate in 2004 amounted to approximately 9% which, considering the share of this tax in the retail price, should push tobacco product prices up by approximately 4%.
Fuel	100.9	112.4	- Considerable increases in oil prices. The average level of oil prices in 2004 of 25 USD/b was adopted for the fuel price forecasts in August 2003; the actual average level of oil prices in 2004 was 38.3 USD/b. - Had the August 2003 forecast of fuel oil come true, the annual increase in regulated prices would have reached 1.9% in December 2004.
Electrical energy	103.7	101.9	No change in tariff in 2004
Gas	104.9	104.6	No change in tariff

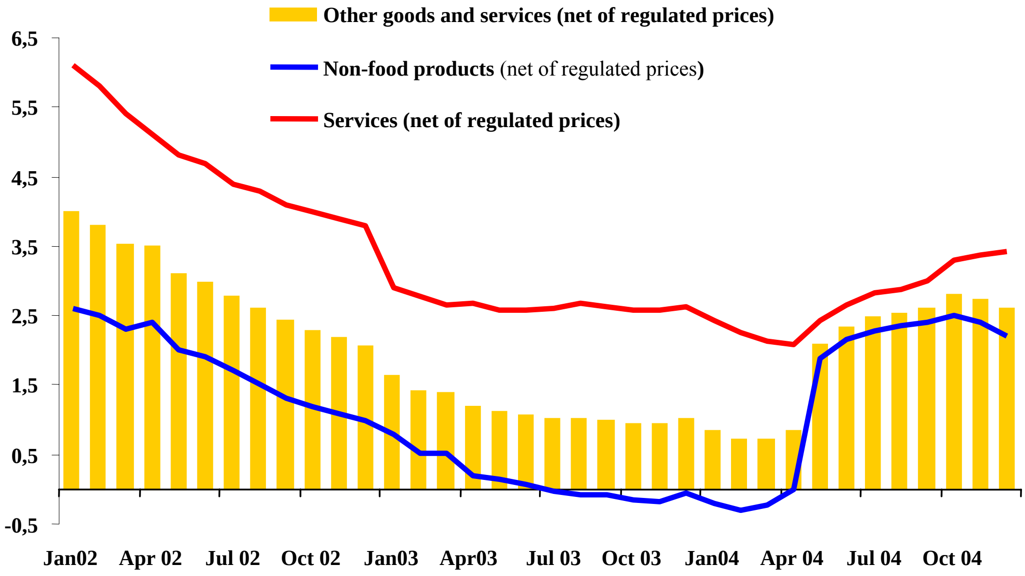
Hot water	103.8	103.9	
Central heating	102.6	101.4	
Other groups of regulated prices	101.,3	100.5	

The rate of growth of other consumer goods and services prices[12] increased from 1.1% (y/y) recorded in December 2003 to 2.6% (y/y) in December 2004. Accelerated growth rate reported in this group of prices resulted mainly from increase of non-food prices in May 2004 and was related to regulations connected with Poland's accession to the EU i.e. change in VAT rates (increase from 7% to 22%) imposed on materials for housing construction and maintenance. The increase in the world prices brought up a considerable rise in fuels, with coke experiencing the most significant rise. As a result, the annual growth in non-food prices in the subsequent months of the second half of 2005 remained at a high level reaching 2.2% (y/y) in December 2004 against a fall of 0.1% (y/y) reported in this group of prices in December 2003. In 2004, services reported a growth in prices from 2.6% (y/y) in December 2003 to 3.4% (y/y) in December 2004; yet, this growth was weaker than the one registered in the group of non-food products.

[12] The group of other consumer goods and services prices includes prices of goods and services driven mostly by market mechanisms i.e. regulated prices are excluded from the group.

Figure 6

Changes in prices of other consumer goods and services (y/y).



Source: GUS data, NBP calculations.

APPENDIX 2. PRODUCER PRICES IN INDUSTRY

2004 witnessed a strong growth in producer prices in industry (annual average growth of 7% against 2.6% growth recorded in 2003). The largest price increase was noted in mining and quarrying (23.7%); prices in the manufacturing section posted a 6.7% increase and in power production industry a 1.9% increase. Two sub-periods may be distinguished in the 2004 developments of producer prices index (PPI). In the first half of the year producer prices increased dynamically (by 2% q/q in Q1 and by 4.1% q/q in Q2) which supported annual price increase by more than 8%. The second half of the year was marked by price stability and a gradual fall in the annual PPI (particularly in Q4). In December 2004, the PPI growth totalled 5.2% y/y.

Table 13

Specification	2004									
	Estimated weight structure in%	I	II	III	IV	I	II	III	IV	I-XII
		Corresponding period of the previous year=100				Previous quarter =100				
INDUSTRY PPI including:	100.0	104.4	108.8	108.3	106.5	102.0	104.1	100.6	99.7	107.0
-mining and quarrying	5.0	118.2	131.3	126.4	119.3	110.6	107.5	101.0	99.3	123.7
-manufacturing	84.7	103.8	108.3	108.3	106.5	101.7	104.4	100.6	99.7	106.7
-production and supply of electrical energy, gas and water	10.3	103.1	102.9	101.1	100.6	100.1	100.3	100.2	100.0	101.9
CONSTRUCTION		99.7	102.1	103.7	104.6	100.4	102.3	101.5	100.4	102.5
Producer prices in the domestic market	73.1	103.5	108.6	109.3	108.8	101.9	104.6	101.6	100.4	107.5

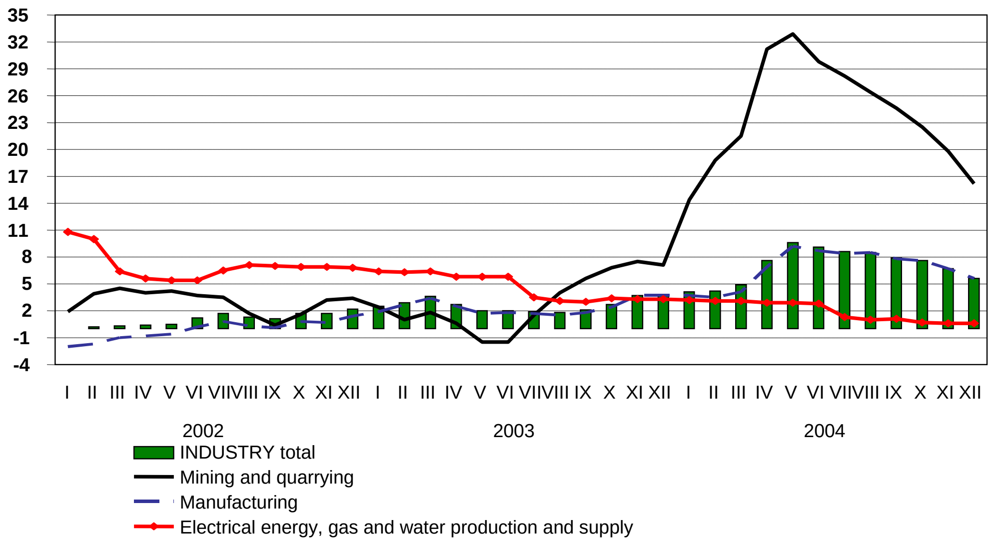
Source: GUS data

Producer prices inflation in 2004 was driven mainly by the increase in prices of raw materials and materials in the world markets and exchange rate fluctuations. Besides, since Q2 Poland witnessed higher inflationary pressure from demand factors as a result of its accession to the EU.

First, 2004 saw an increase in prices of raw materials and materials in the world markets. Crude oil prices (Brent) expressed in USD posted an average annual increase of more than 31% which pushed up the average annual price indicator in division manufacture of coke and refined petroleum products by 37.4%. Copper prices in the world markets increased by more than 61% leading to more than 40% increase of prices in the metal ore mining division. The increase in prices of steel products of more than 50% in the international markets translated into 27.8% increase of prices in the metal manufacturing division. Coal prices in the international markets increased by more than 68% driving prices in the hard coal and brown coal mining division up by 23.1%.

Figure 7

Growth rate of producer prices in industry and in particular sections



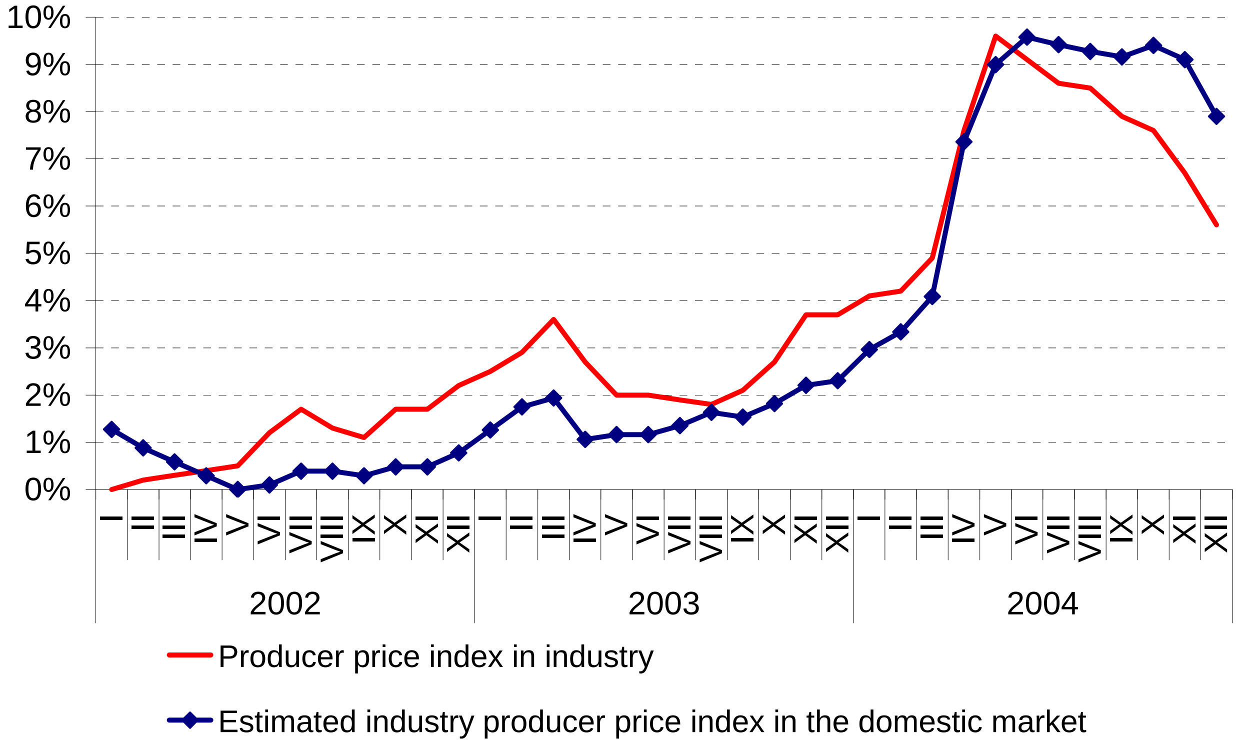
Second, price rise in 2004 Q1 was driven by zloty depreciation (increase of prices obtained in export trade, higher costs of imports).

Besides, as a result of Poland's accession to the EU, prices in food and beverages production rose (on average by 7.2% annually). Considering the importance of this section in industry (approximately 18% share), these increases had considerable impact on the total PPI.

On the other hand, the decline in price growth in the second half of 2004 was led by a fall in prices obtained in export trade, mainly, as a result of zloty appreciation (2004 Q 4 recorded a deflation in producer prices for export products on a year-over-year basis). On the other hand, as far as domestic PPI is concerned, the period until the end of 2004 was marked by a high price growth rate (7.9% growth in December 2004).

Figure 8

Total and domestic producer price index



Source: GUS data

The second half of 2004 saw prices of raw material in the world markets stabilise, except for crude oil prices, which contributed to the price stabilisation followed by the price fall in annual terms in sections largely dependent on raw materials i.e. metal production and coal mining.

In sections less dependent on raw materials and export production-oriented sections, the 2004 price increases were moderate; four sections (tobacco articles production, fibre mass and paper production, radio and television equipment production, medical instruments production) recorded an average annual deflation of producer prices.

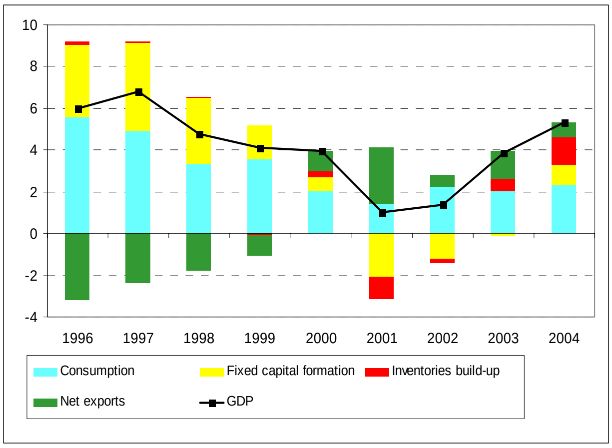
APPENDIX 3. GDP AND DOMESTIC DEMAND

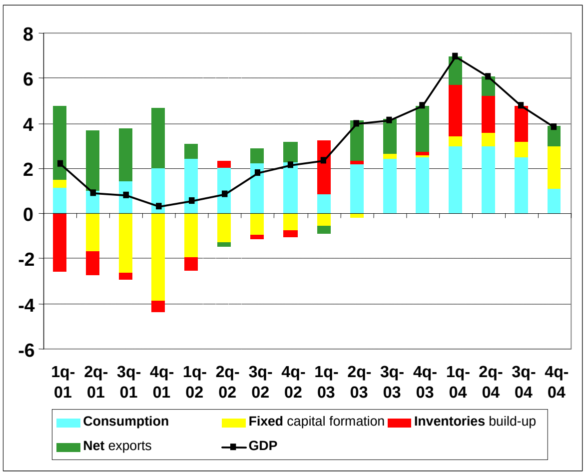
In 2004, a 5% growth in domestic demand was recorded as compared with 2.6% growth in 2003. The accelerated growth of domestic demand stemmed mainly from the strong gross capital formation (12.1%), accompanied by higher level of total consumption (3.4%). In 2004, for the fifth consecutive year an improvement in net exports was recorded, while the pace of the reduction of its deficit was markedly lower than in 2003.

The equivalent of GDP on the side of production, namely the total value added [13] increased by 5.1% which resulted from strong revival in industry and market services (contribution to the total value added by 2.4 percentage point and 2.3 percentage point respectively). Recovery in the trade and repair sector[14] especially during the pre-accession boom was the main driving force behind accelerated revival in services. On the other hand, in industrial production increase was affected by growth in the manufacturing sector which was connected with the rising exports and improved competitiveness of the domestic market.

The GDP and domestic demand growth rates, and their relationship in the years 1996-2004 are shown in Table 14. The share of the domestic demand components in the GDP growth is shown in Figure 5; GDP and domestic demand dynamics by quarters are presented in Table 15[15].

Share of final demand components in the GDP growth





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[13] GDP equals total added value increased by taxes on products (including import duties) and product subsidies.
[14] 6.3% annual growth and 2.5 p.p. contribution to the increase in value added in the services section
[15] Contrary to the annual data, the quarterly data do not reflect the revision of national accounts as made by the CSO on 13 May, 2005.

Source: NBP calculations based on GUS data

Table 14

GDP and domestic demand 1996 – 2004

	1996	1997	1998	1999	2000	2001	2002	2003	2004
	Dynamics (previous year = 100, fixed prices)								
GDP	106.0	106.8	104.8	104.1	104.0	101.0	101.4	103.8	105.4
Domestic demand	109.4	109.1	106.3	104.8	102.8	98.4	100.8	102.6	105.0
Consumption	107.1	106.1	104.2	104.5	102.5	101.7	102.7	102.5	103.4
Individual consumption	108.6	106.9	104.8	105.2	102.8	102.1	103.3	103.1	103.4
Gross capital formation	119.5	120.8	113.8	106.1	103.9	87.4	93.2	103.2	112.1
Gross fixed capital formation	119.7	121.7	114.2	106.8	102.7	91.2	94.2	99.8	105.3
Exports	112.0	112.2	114.3	97.4	123.2	103.1	104.8	114.2	110.2
Imports	128.0	121.4	118.5	101.0	115.6	94.7	102.6	109.3	108.7
Contribution of net exports to GDP growth (percentage points)	-3.2	-2.4	-1.8	-1.0	1.0	2.7	0.5	1.1	0.3
	GDP structure in current prices								
Domestic demand	101.5	104.0	104.0	106.0	106.5	103.7	103.3	102.5	102.0
Consumption	81.0	81.0	80.3	81.3	81.9	82.9	84.5	83.6	81.9
Capital formation	20.5	23.0	24.6	24.9	24.7	20.7	18.9	18.9	20.0
Net exports	-1.5	-4.0	-4.9	-6.0	-6.5	-3.7	-3.3	-2.5	-2.0

Source: GUS data

Table 15

GDP and domestic demand dynamics by quarters (corresponding period of the previous year = 100)

	Year	Q1	Q2	Q3	Q4	Q1 -Q4
Total value added	2004	106.4	105.6	104.5	103.8	105.0
	2003	102.0	104.0	104.0	104.6	103.7
Industry	2004	114.4	112.7	107.4	105.1	109.7
	2003	102.8	106.9	106.9	108.4	106.3
Construction	2004	96.1	97.2	96.8	101.4	98.6
	2003	82.4	94.7	100.3	102.2	97.1
Market services	2004	105.7	105.1	104.9	104.2	105.0
	2003	102.6	104.4	103.4	104.0	103.6
GDP	2004	106.9	106.1	104.8	103.9	105.3
	2003	102.3	104.0	104.1	104.7	103.8
Domestic demand	2004	105.5	105.1	104.6	102.9	104.5
	2003	102.6	102.1	102.5	102.7	102.5
Total consumption	2004	103.3	103.5	102.9	101.5	102.8
	2003	100.9	102.6	102.9	103.3	102.4
Individual consumption	2004	103.9	103.8	103.5	101.8	103.2
	2003	101.3	103.8	103.5	103.8	103.1
Gross capital formation	2004	120.7	113.4	112.6	107.0	111.9
	2003	115.6	99.7	100.9	101.0	102.8
Gross fixed capital formation	2004	103.5	103.6	104.1	107.2	105.1
	2003	96.3	98.9	101.0	100.4	99.5

Source: GUS data

High growth in gross capital formation in 2004 resulted from the rebuilding of the levels of tangible current assets after their steep decline in 2001-2002. Reduced growth in the build-up of inventories in 2004 Q4 shows that this process had been largely completed. Increased growth in the annual gross capital formation in 2004 was also driven by the increase in gross fixed capital formation recorded for the first time in four years (5.3%). 2004 Q 4 was marked by a particularly high growth in gross fixed capital formation. A clear rebound in investment was recorded in the corporate sector, particularly in manufacturing.

The growth rate of individual consumption in 2004 was stronger than a year ago and continued to exceed the growth rate of the purchasing power of households' gross disposable income. Despite further deterioration in the labour market conditions, real incomes on hired employment were at the previous year's level. Social benefits increased as well; however, their growth was lower than a year ago. Apart from higher disposable income, a major source of financing of the consumption growth in 2004 were increasing incomes from private business, incomes of private owners, unregistered incomes and the continuing, although weaker than a year ago, decline in household savings.

In 2004 the high growth rate in exports continued, which was supported by the improvement in the world business conditions, Poland's accession to the EU and the exchange rate of the zloty which was favourable for exporters. Import growth continued at a high level, however net export contribution to the GDP growth remained positive, albeit considerably lower than in 2003. 2004 saw further improvement in the external imbalance as measured with the fall in foreign savings[16] in relation to GDP to approximately 1.5% from the level of 2.2% recorded in 2003. The decline in foreign savings was accompanied by the rise in domestic savings in relation to GDP from 16.7% in 2003 to 18.6% in 2004 which was the result of clear improvement in the financial condition of enterprises. The savings rate in the economy was adversely affected by the widening deficit of public finance and a falling tendency of household savings.

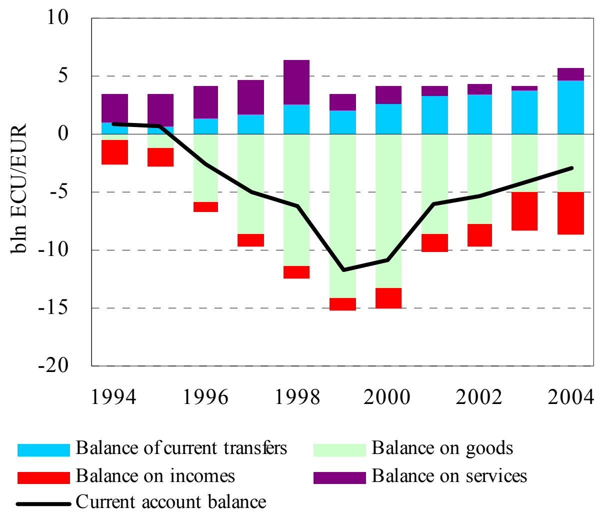
[16] According to national accounts.

APPENDIX 4. EXTERNAL IMBALANCE

In 2004 the current account deficit decreased for the fifth consecutive year. According to preliminary estimates, it totalled EUR 2.96 billion, i.e. was EUR 1.15 billion lower than in 2003 and EUR 8.76 billion lower than in 1999. As a result, the current account deficit - as a percentage of GDP – fell during the last five years from 8.1% to 1.5%. The improvement in the current account deficit in 2004 resulted mainly from a positive balance on current transfers[17] and services and reduction in the trade deficit in goods. The current account deficit deepened further as a result of the increase in the negative balance in incomes.

Figure 10

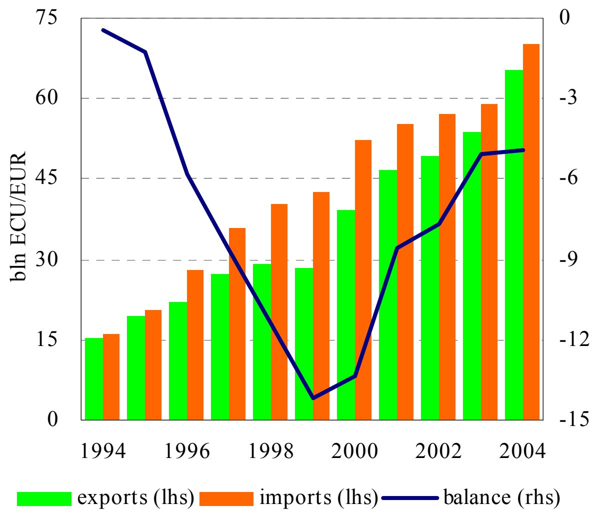
Current account balance 1994-2004



Source: NBP data

Figure 11

Exports and imports 1994-2004



Source: NBP data

[17] The improvement in the balance of this item of the current account was driven mainly by EU transfers whose net inflow recorded in this part of the balance of payments amounted to EUR 0.94 billion in 2004.The remaining part of the EU transfers of EUR 0.62 billion was registered of the capital account.

The values of the balance of trade in goods were affected by the depreciation of the American dollar against the euro, lowering the dynamics of turnover expressed in euro against the dynamics in USD and PLN[18].

The 2004 growth in the balance of trade in goods (in euro terms) was higher than the 2000 growth. Accelerated export growth was driven by:

- increase in the import demand in economies of Poland's major trading partners[19],
- activity of enterprises with foreign capital participation, as demonstrated by high export growth in groups with the biggest participation of foreign companies (plant and machinery and transport equipment). Additionally, in 2004 their share in the exports to Russia increased considerably,
- increase in the world demand for metallurgical products and coal pushing up their prices in the international markets,
- effects of EU accession. Poland's accession to the EU had a particularly positive impact on the sales of agricultural products. The growth in agricultural exports between May and December 2004 more than doubled as compared with the pre-accession period. On the one hand, it was the result of the elimination of customs duties in agricultural trade with the EU countries, and, on the other hand, export subsidies paid to Polish agricultural products exported to third countries.
- competitive advantage of Polish exporters against foreign partners measured with changes in the real effective rate of exchange deflated with unit labour costs (REER ULC). Improvement in the competitiveness measured in this way was clearly visible in the first half of 2004 (21% fall in REER ULC against the corresponding period of 2003). Since 2004 Q3 a gradual weakening in the competitive position of Polish exporters has been witnessed which was supported by zloty appreciation and a lower drop in unit labour costs in Poland. Overall, the

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[18] In 2004, export receipts denominated in EUR increased by 22.0% against the previous year. This increase almost doubled as compared with the 2003 increase (9.1%). The value of import expenditure grew by 19.1% against 3.3% growth recorded in 2002. In 2004, the value of export receipts expressed in USD grew by 33.8% (against 30.5% growth recorded in 2003) while the value of import expenditure grew by 30.6% against 23.6% growth recorded in 2003. The PLN-expressed value of export receipts in 2004 grew by 25.1% (against 24.5% growth recorded in 2003) and the value of import expenditure grew by 22.3% (against 17.9% growth in 2003).

[19] Accelerated economic growth in Germany (GDP rose by 1.6% in 2004 after a three year period of stagnation) led to a nearly doubling of the rate of growth of exports to this country as compared to the previous year.

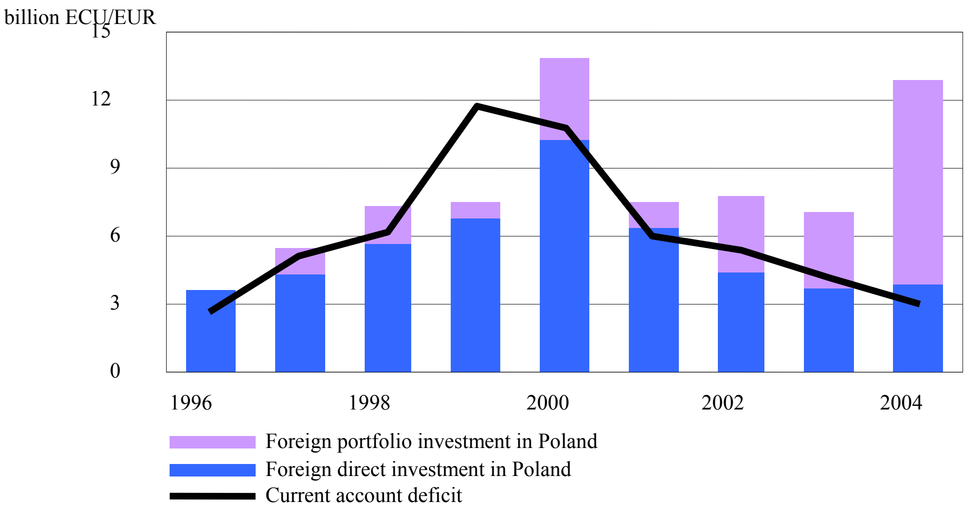
average REER ULC in 2004 decreased by 11.1% combined with a fall in the unit labour costs in manufacturing expressed in zloty by 8.8% as compared with 2003[20]

Import growth accelerated as a result of the following factors:

- increase in the supply imports connected with the growth in export-bound production,
- higher prices of raw materials, mainly crude oil, in the world markets,
- at the beginning of 2004, anticipated EU accession connected with implementation of higher VAT rates.

Figure 12

Current account deficit versus foreign investment inflow 1996-2004



Source: NBP data

2004 witnessed an improvement in the financing structure of the current account deficit (Figure 12 and Table 16). It was fully financed and even exceeded by the inflow of long-term foreign capital in the form of direct investment (against nearly 85% in 2003). This improvement resulted from a marked reduction in the current account deficit with direct investment being kept at the existing level (EUR 3.5 billion). The above mentioned inflow was concurrent with the inflow of portfolio

[20] REER ULC for 2004 Q4 were computed using the ECB estimates.

investment of EUR 8.0 billion, mainly debt securities. The majority of warning indicators remained at a safe level.

Table 16

Major warning indicators

Warning indicator	2001	2002	2003	2004
Current account balance / GDP	-2.9%	-2.7%	-2.2%	-1.5%
Trade balance /GDP	-4.2%	-3.8%	-2.8%	-2.3%
Direct investment/ current account balance	107.7%	76.7%	84.9%	143.8%
(Current account balance – direct investment)/ GDP	0.2%	-0.6%	-0.3%	-.11%
Foreign debt servicing /Exports of goods and services	31.5%	28.2%	30.7%	20.5%
Foreign reserves expressed in terms of monthly imports of goods and services	5.5	5.1	4.8	4.0

Source: NBP calculations based on the balance of payment on a transaction basis

APPENDIX 5. THE MONEY SUPPLY

In 2004 the indebtedness of households in the banking sector reported a significant increase. In the first two quarters of 2004, the deposits of households decreased, but in the second half of the year the trend was halted. In the final months of 2004 a build-up was observed in households' deposits in the banking sector. In 2004 a negative annual growth rate in corporate loans was observed. However, at the end of 2004 the indebtedness of this sector in commercial banks, adjusted for exchange rate fluctuations, stood at a level comparable to that recorded in December 2003. Limited lending was accompanied by a considerable increase in deposits in corporate accounts. Nominal changes of deposits and credits were affected by a strong impact of zloty appreciation observed from 2004 Q2.

Loans to households

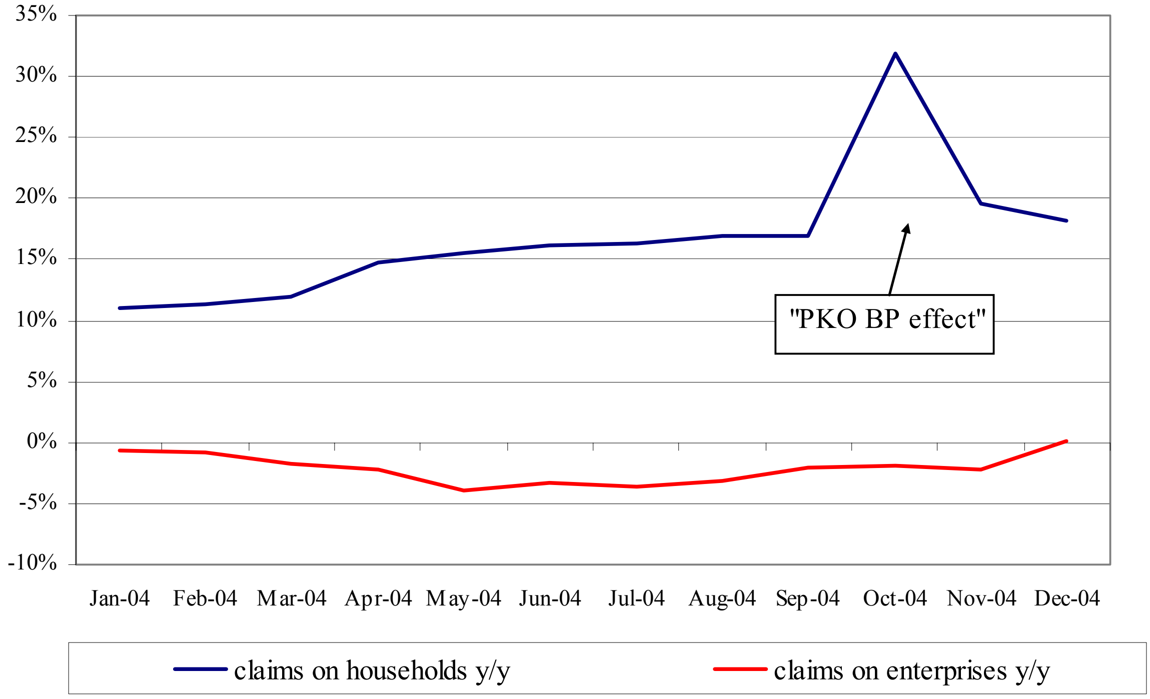
2004 brought a climb in the value of loans to households. The sector's indebtedness in commercial banks rose in nominal terms by 13.5 billion zloty (13.3%). Adjusted for the impact of exchange rate fluctuations the growth was even bigger and amounted to 18.0 billion zloty (18.1%). Two periods of strong acceleration in the growth rate of loans were recorded in 2004 – April and October. Conducive to the significant lending rise in April were intensified purchases connected with fears of price rises after Poland's accession to the EU. In October, the record-breaking accretion in household loans was the result of fund raising for the purchase of shares of bank PKO BP and WSiP publishing house, both privatised in a public offering.

The 2004 growth in household indebtedness was mainly fuelled by housing loans, but starting from the middle of the year the contribution of consumer loans in total claims on this sector was on the rise. Adjusted for the impact of exchange rate fluctuations, in the whole of 2004 the accretion in housing loans accounted for 65.3% of the total growth in household indebtedness, while consumer loans were responsible for 33.9% of the growth. However, while in the first half of 2004 the total growth in claims on households resulted from the hike in housing loans, in the second half of the year the contribution of consumer lending to the total credit growth for this sector slightly outpaced the share of housing loans. In December 2004, the contribution of housing credit in the household debt structure was equal to 43.1%, and in the case of consumer loans it amounted to 56.1%.

2004 saw a rise in the average weighted interest on household loans – in December 2004 it reached 10.4% against 9.6% in January. Upward push on the cost of credit was exerted by the rises of the NBP's interest rates, while the growing competition in the sector of commercial banks and non-banking financial institutions, paired with a general improvement in the economic standing of households acted towards more liberal loan granting conditions.

Figure 13

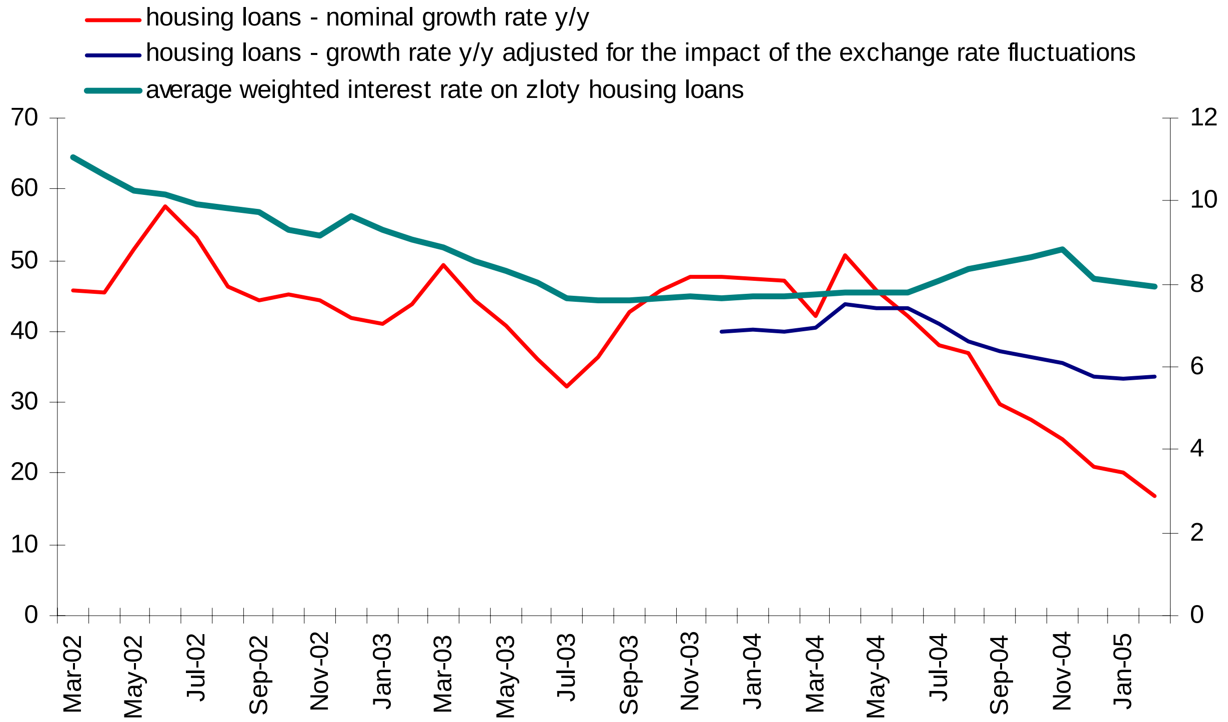
Annual growth rate of claims on enterprises and households in the banking sector adjusted for exchange rate fluctuations



Source: NBP

Figure 14

Annual growth rate of housing loans to households (%, left-hand axis) and the interest rates on housing loans (%, right-hand axis)



Source: NBP

Loans to enterprises

The economic recovery did not find full reflection in the corporate credit market. 2004 marked a slight growth in the lending volume for the sector. Even though nominal claims on enterprises in the banking sector slid down by 5.2 billion zloty (-3.9%), the drop was in full the result of zloty appreciation. Adjusted for the impact of exchange rate fluctuations, the indebtedness of the corporate sector in commercial banks rose by 0.1 billion zloty (0.1%).

Almost throughout the whole 2004 the annual growth rate of claims on enterprises, adjusted for exchange rate fluctuations, assumed negative values; only in December it was above zero. Following a drop in corporate loans in the first half of 2004, in the last months of the year a rise was observed, mainly due to working capital loans. This small growth in loans may be the result of a significant improvement of the financial standing of enterprises which occurred in

2004. As enterprises have considerable own funds at their disposal they are able to finance their current activities without incurring debts in the banking sector.

Weighted average interest on corporate loans rose from 7.1% in January 2004 to 8.3% in December 2004. The NBP's survey studies indicate that in 2004 the level of loan interest rate was still not perceived by the entrepreneurs as a barrier to the development of their activity.

Deposits of households

In the first half of 2004 a drop in household deposits occurred. However the annual growth rate of commercial banks' claims to this sector, adjusted for exchange rate fluctuations, was steadily rising and in September started to assume positive values. In December 2004 the deposits of households were 0.2 billion zloty (0.1%) higher than a year before. Adjusted for the impact of exchange rate fluctuations, the growth was considerably bigger as it amounted to 5.9% billion zloty (3.1%).

The banking sector is not the only place where households deposit their financial surpluses. In 2004, similarly to the previous year, the growth pace of financial assets of households held in non-banking financial institutions was well ahead of the increase in bank deposits. In the period, the value of investment fund units, Credit Unions deposits, government bonds and Treasury bills rose by 6.4 billion zloty (12.2%). This leads to the change in the structure of financial assets of households and a drop in the contribution of bank deposits therein.

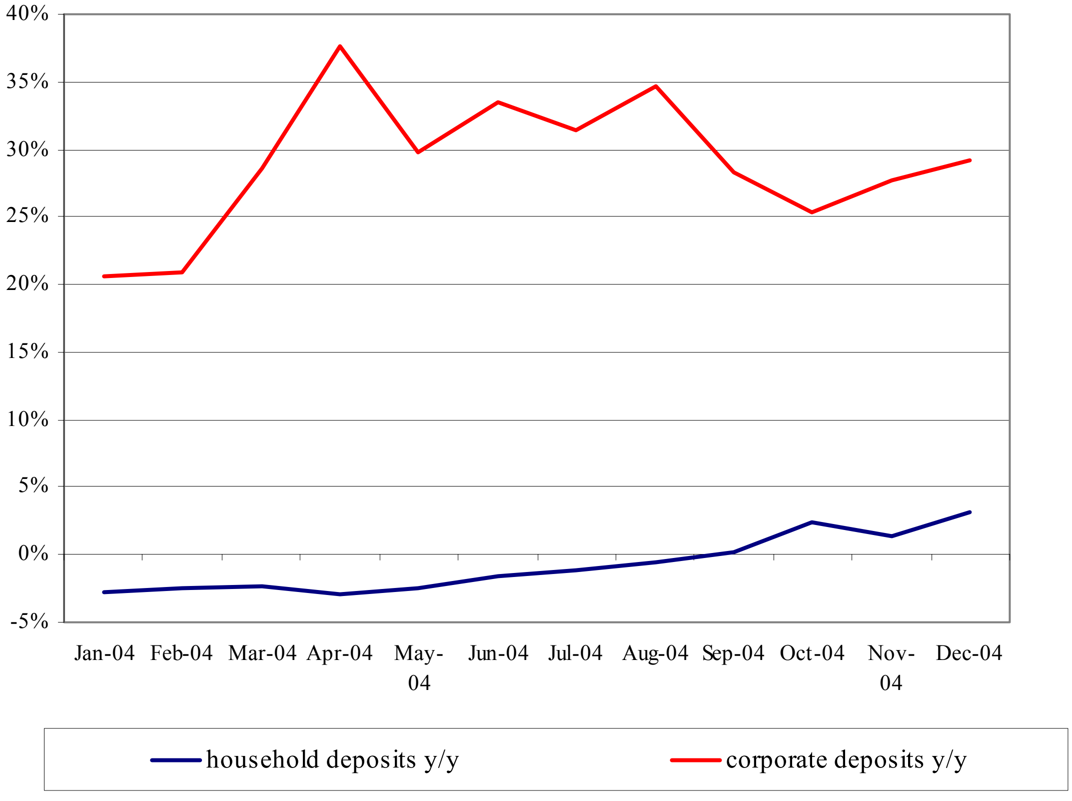
Deposits of enterprises

2004 marked a dynamic accretion of deposits in corporate accounts. Throughout the year the annual growth rate in this category exceeded 20%. In December 2004 corporate deposit level was 16.9 billion zloty (24.8%) bigger than 12 months earlier, while adjusted for exchange-rate-fluctuation its growth came to 19.8 billion zloty (29.2%).

Strong rising tendency of corporate loans can be attributed to increased gains and the improvement of the financial standing of the sector amid the economic revival. The accretion of assets on the corporate accounts was particularly high in the period preceding Poland's EU accession. This accumulation was, on the one hand, accompanied by a strong rise in industrial output and retail sales brought about by intensified purchases of households, but a weak increase in investments on the other.

Figure 15

Annual growth rate of corporate and household deposits in the banking sector in adjusted for the impact of exchange rate fluctuations



Source: NBP

Monetary aggregates

The above discussed tendencies in the loan and deposit market find support in the changes to the main monetary aggregates (Table 17). In 2004 M3 money supply grew in nominal terms by 29.4 billion zloty (8.7%). Adjusted for the exchange rate fluctuations this growth was even larger as it equalled 38.3 billion zloty (11.3%). In consequence, in 2004 the annual growth rate of broad money supply was characterised with a rising trend. The rate grew from 4.8% in January to 11.3% in December 2004.

2004 brought a sizeable fall in the growth dynamics of notes and coin in circulation excluding bank vault cash. The annual growth rate of cash decreased from 15.9% in January to 3.2% in December 2004. These changes should be interpreted as return to balance after a period of a very high growth rate of notes and coin in circulation, which had persisted ever since the start of 2002. The contribution of currency in circulation excluding vault cash in M3 money aggregate fell from 14.5% in December 2003 to 13.7% at the end of 2004.

Table 9

Money supply in 2003-2004

Specification	As of 31 Dec 2003	As of 31 Dec 2004	Growth	Annual nominal growth rate	Annual real growth rate [a]
	PLN billion			%	
I. M1 money supply	158 064.7	175 780.4	17 715.7	11.2	6.5
II. M3 money supply	340 048.9	369 470.1	29 421.2	8.7	4.1
1. Notes and coin in circulation (excluding vault cash)	49 417.0	50 775.5	1 358.6	2.7	-1.6
2. Deposits and other liabilities	288 347.3	311 747.9	23 400.5	8.1	3.6
2.1. Households	192 441.5	192 585.1	143.5	0.1	-4.1
2.2. Non-monetary financial institutions	8 941.5	11 336.5	2 395.0	26.8	21.4
2.3. Non-financial corporations	68 236.1	85 174.0	16 937.9	24.8	19.6
2.4. Non-profit institutions serving households	8 576.7	8 937.9	361.3	4.2	-0.2
2.5. Local governments	8 791.1	11 320.7	2 529.6	28.8	23.3

2.6. Social security funds	1 360.4	2 393.6	1 033.2	75.9	68.5
3. Other M3 components	2 284.6	6 946.7	4 662.1	204.1	191.3

[a] Deflated by the CPI

Source: NBP

Table 10

Claims of the banking system 2003-2004

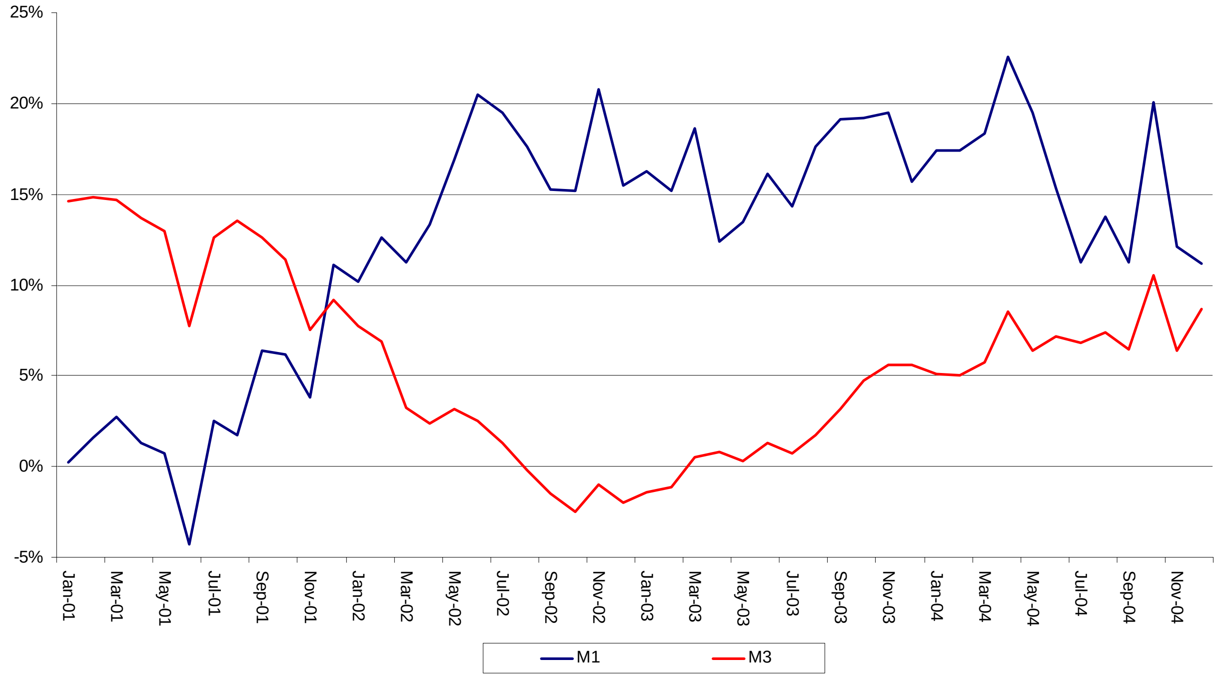
Specification	As of 31 Dec 2003	As of 31 Dec 2004	Growth	Annual nominal growth rate	Annual real growth rate [a]
	PLN billion			**%**	
Total claims	264 268.1	271 812.1	7 544.0	2.9	-1.5
Households	101 970.3	115 485.9	13 515.6	13.3	8.5
Non-monetary financial institutions	11 394.6	10 170.3	-1 224.3	-10.7	-14.5
Non-financial corporations	132 365.1	127 201.5	-5 163.6	-3.9	-8.0
Non-profit institutions serving households	826.3	773.3	-53.0	-6.4	-10.4
Local governments	12 852.7	13 377.7	525.0	4.1	-0.3
Social security funds	4 859.1	4 803.4	-55.7	-1.1	-5.3

[a] Deflated by the CPI

Source: NBP

Figure 16

Annual nomina growth rate of M1 and M3 aggregates



Source: NBP

Appendix 6. Voting records of Monetary Policy Council members on motions and resolutions in 2004

Date	Subject matter of motion or resolution	MPC decision	Voting of the Council members
30 March 2004.	Resolution on the rate of reserve requirement of banks and the interest rate on the reserve requirement		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
31 March 2004.	Resolution on the Rules and Regulations of the Monetary Policy Council		**For**: L.Balcerowicz J.Czekaj D.Filar S.Nieckarz

			M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
26 April 2004.	Resolution on approving the National Bank of Poland's annual financial statement as of 31 December 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
27 April 2004.	Motion to change the monetary policy bias to tightening		**For**: L.Balcerowicz J.Czekaj

			D.Filar M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against:** S.Nieckarz M.Pietrewicz
18 May 2004	Resolution on approving the Report on NBP Operations in 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna

18 May 2004.	Resolution on approving the Report on Monetary Policy Implementation in 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
18 May 2004.	Resolution on the assessment of the activities of the NBP Management Board as regards the monetary policy implementation in 2003		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński

			H.Wasilewska-Trenkner A.Wojtyna
30 June 2004.	Motion to raise all interest rates by 0.25 percentage point.	Motion did not receive a majority vote	**For**: M.Pietrewicz **Against**: L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
30 June 2004.	Resolution on the reference rate, interest on refinancing loans, interest on term deposits and the rediscount rate at the National Bank of Poland	All interest rates raised by 0.5 percentage point	**For**: L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak

			A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against**: M.Pietrewicz
28 July 2004.	Motion to raise all interest rates by 0.5 percentage point.	Motion did not receive a majority vote	**For:** L.Balcerowicz D.Filar **Against**: J.Czekaj S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
28 July 2004.	Motion to raise all interest rates by 0.25 percentage points	Motion received a majority vote	**For**: L.Balcerowicz D.Filar M.Noga A.Sławiński

			H.Wasilewska-Trenkner A.Wojtyna **Against**: J.Czekaj S.Nieckarz S.Owsiak M.Pietrewicz
28 July 2004	Resolution on the reference rate, interest on refinancing loans, interest on term deposits and the rediscount rate at the National Bank of Poland	All interest rates raised by 0.25 percentage point	**For**: L.Balcerowicz D.Filar M.Noga A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against**: J.Czekaj S.Nieckarz S.Owsiak M.Pietrewicz
25 August 2004	Motion to raise all interest rates by 0.5 percentage points	Motion received a majority vote	**For**: L.Balcerowicz J.Czekaj

			D.Filar M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against**: S.Nieckarz M.Pietrewicz
25 August 2004	Motion to raise all interest rates by 0.25 percentage points	Motion did not receive a majority vote	**For:** S.Nieckarz M.Pietrewicz **Against:** L.Balcerowicz J.Czekaj D.Filar M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna

25 August 2004	Resolution on the reference rate, interest on refinancing loans, interest on term deposits and the rediscount rate at the National Bank of Poland	All interest rates raised by 0.5 percentage point	**For:** L.Balcerowicz J.Czekaj D.Filar M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against:** S.Nieckarz M.Pietrewicz
28 September 2004	Resolution on establishing the upper limit for liabilities incurred by the National Bank of Poland by way of loans from foreign banking and financial institutions		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński

			H.Wasilewska-Trenkner A.Wojtyna
28 September 2004	Resolution on establishing the monetary policy guidelines for 2005		**For:** L.Balcerowicz J.Czekaj D.Filar M.Noga S.Owsiak A.Sławiński H.Wasilewska-Trenkner A.Wojtyna **Against:** S.Nieckarz M.Pietrewicz
26 October 2004	Resolution to change the resolution on accounting policies, the structure of assets and liabilities in the balance sheet and the profit and loss account of the NBP		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak

			M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna
23 November 2004.	Resolution on approving the National Bank of Poland's financial plan for 2005		**For:** L.Balcerowicz J.Czekaj D.Filar M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna *S.Nieckarz was absent*
23 November 2004	Resolution on appointing a chartered accountant to audit NBP annual financial statement for the business year 2004		**For:** L.Balcerowicz J.Czekaj D.Filar M.Noga

			S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna *S.Nieckarz was absent*
14 December 2004	Resolution on the rules of conducting open market operations		**For:** L.Balcerowicz J.Czekaj D.Filar S.Nieckarz M.Noga S.Owsiak M.Pietrewicz A.Sławiński H.Wasilewska-Trenkner A.Wojtyna