



Inflation Report

First Quarter 2002

Design:
Oliwka s.c.

Proof-reader:
Maria Betlejewska

Layout and print:
NBP Printshop

Published by:
National Bank of Poland
Department of Information and Public Relations
00-919 Warszawa, 11/21 Świętokrzyska Street
phone: (+48 22) 653 2335, fax: (+48 22) 653 1321

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ISSN 1640 - 0755

Contents

SUMMARY	4
1. Domestic demand and supply	9
1.1. Domestic demand	9
1.2. Domestic supply	12
2. Foreign trade, the balance of payments	13
3. Labour market	20
4. Other supply factors	23
4.1. Structural factors	23
4.2. External prices	24
5. Inflationary processes in Q1, 2002	28
5.1. Consumer prices	28
5.2. Core inflation	32
5.3. Producer prices in industry and construction	36
6. Monetary policy and performance of the inflation target	38
6.1. Monetary policy in the first quarter of 2002	38
6.2. M3 money supply	40
6.3. Monetary policy transmission mechanisms	47
6.3.1. <i>Interest rates</i>	47
6.3.2. <i>Zloty exchange rate</i>	56
6.3.3. <i>Inflation expectations</i>	60
6.3.4. <i>The asset price effect</i>	63
7. Inflation prospects	64
 ANNEX A Voting of Monetary Policy Council members on resolutions adopted in Q1, 2002	 66

SUMMARY

1. The annualised consumer price index went down from 3.6% in December 2001 to 3.3% in March 2002. It was driven by a fall in price rise rate for all basic groups of consumer goods and services, albeit to various extents. The quickest growth pace was seen for service prices (excluding officially controlled prices) and for officially controlled prices, while the slowest for foodstuffs and non-alcoholic beverages and non-food articles (excluding officially controlled prices).

The decline in the CPI was accompanied by a drop in all core inflation measures, what indicates a decreasing role of potentially temporary factors in the inflation slackening.

Producer prices in March 2002 were 0.4% higher than a year ago. Since January this year they have been showing a slow upward trend contrary to a downward trend seen in Q4, 2001.

2. Forecasts for economic conditions in the world were gradually improving in the first quarter of 2002. That applied primarily to the American economy, but also – albeit to a lesser extent – to the euro area and Germany. However, a poor foreign demand for imports maintaining in the second half of 2001 resulted in Q1, 2002 in a steeper downward trend of Polish exports, observed clearly already in the fourth quarter of the previous year. But the decline in export receipts was accompanied – like in 2001 – by a deeper slump in import payments. As a result the deficit in trade and service turnover fell down. However, in the first quarter of 2001 the deficit on the current account practically did not change, as compared with the corresponding period of the previous year, although it deteriorated as against Q4, 2001.

3. The fall in imports in the first quarter of 2002 resulted from the stagnation in domestic demand. The pace of individual consumption growth went up to 3.5%, i.e. it more than doubled that witnessed by Q1, 2001, but at the same time a downward trend of capital expenditure continued. A low investment demand and diminishing exports caused a further decline in the value added of industry in the first quarter of this year by 2% as compared with the first quarter of the last year. The value added of construction also continued to decrease – by 12.9%. The value added in the sector of market service rose by 4%.

According to preliminary GUS estimates the GDP growth rate in Q1, 2002 stood at 0.5%.

4. The situation in the labour market has not improved in the first quarter of the current year; the trend of declining employment in the sector of enterprises and increasing number of unemployed continued. In March this year the unemployment rate remained similar like in February, i.e. 18.1%. In April surveys of economic conditions the entrepreneurs were declaring further cuts in the employment in the coming months, albeit lower than they anticipated a month before.

In those conditions – despite the fact that average gross salary in the sector of enterprises in nominal terms rose in the first quarter of 2002 by 5.3% as compared with Q1, 2001, but as a result of simultaneous fall in average employment by 4.8%, the rise in employee earnings in this sector amounted to only 0.3% in nominal terms.

The purchasing power of gross overall disposable income of households is estimated to be lower in the first quarter of the current year than a year ago. However, these estimates do not take into account the households income originating from the grey area of the economy. A high growth rate of the consumption and notes and coin in circulation may indicate an increase in this income.

5. After the first quarter of this year the performance of the National Budget so far as against the annual plan was lower than a year before. Although no threats for the performance of this year Budget Act have shown up so far, but the deficit around 5% of GDP in the public finance sector will adversely affect the economy. That is because its funding – due to low privatisation revenues – requires the government to issue a substantial amount of Treasury securities. In the first quarter of the current year the total of new Treasury bills issues was by 116% higher than in the corresponding period of the previous year, and that of Treasury bonds – by nearly 130%. That was conducive to

the maintenance of a high level of long-term market interest rates and was constraining financing possibilities for corporates. Moreover, a large inflow of foreign portfolio capital placed in government bonds was driving the zloty appreciation.

6. The annual growth rate of money supply (M3) fell during Q1, 2002 due to the weakening deposits growth rate – primarily those of corporates. The personal deposits growth rate also eased, what was connected with a low growth rate of earnings and a decline in profitability of placing funds at the banking system. The annual growth rate of corporate borrowings went down in the first quarter of 2002, while of household borrowings – increased.

* * *

In the first quarter of this year the Monetary Policy Council reduced the interest rates once, on 30th January 2002. Interest rates were cut by 100–200 basis points, of which the reference rate – playing the key role from the point of view of the assessment of monetary policy restrictiveness – by 150 b.p. At the same time the Council maintained a neutral stance in the monetary policy.

The January decision of the MPC made another step in the process of lessening the monetary policy restrictiveness. This process, initiated in February 2001, resulted in a deep reduction in nominal interest rates. In the period January 2001 – January 2002 the overall reduction in the reference rate amounted to 900 b.p., while in the lombard and rediscount rates – to 950 basis points. Such a material reduction contributed also to a fall in real interest rates. For example, in the period March 2001 – March 2002, the interest rate on one-year corporate loans in real terms went down by 270 b.p. However, the interest rate on one-year personal zloty deposits dropped in the same period by 370 basis points, and having considered the tax on income from savings this decline equalled 500 b.p.

The lessened restrictiveness of monetary policy in 2001 and in Q1, 2002 resulted in the fact that in March this year the interest rates in real terms clearly came close to their level of 1999, i.e. the period preceding the introduction of restrictive stance in the monetary policy by the Monetary Policy Council.

The easing of monetary policy in the first quarter of the current year was also reflected in the decline in its restrictiveness index (MCI), which takes into account the level of real interest rates and of real effective exchange rate. In March 2002 this index reached a level close to that observed in January 2000.

* * *

After a slow down in inflation decline in Q1, 2002, it is expected to continue falling in Q2 and to increase gradually in the second half of the year. The analysis of inflation determinants shows that large fluctuations in the inflation rate should not be expected.

A slow pace of domestic demand growth, which in the first quarter of 2002 maintained on the level as in the corresponding period of 2001, will continue to be conducive to the establishment of low inflation. The GDP growth rate, along with the pace of domestic demand growth, may be expected to increase gradually from the third quarter of the current year. However, till the end of 2002 it shall not result in a supply pressure on the rise in consumer prices.

A very modest rise in producer prices and slow pace of growth rate for all core inflation measures so far indicate the continuation of low inflation this year. In addition, the May data on food prices rise show that their growth rate in 2002 may be weaker than in 2001. Current situation in the oil market, as well as expectations in respect of demand and supply development in this market, allow thinking that the risk of sharp oil price rise went down. Therefore the supply factors may be assessed to contribute this year to further inflation decline. The development of consumer inflation expectations, which in the first quarter of the current year fell to the lowest level in the poll history, should also be considered favourable to inflation weakening.

Basic macroeconomic indicators

	2000				2001				2002	
	Q1	Q2	Q3	Q4	2000	Q1	Q2	Q3	Q4	2001
	real growth									
GDP	5.9	5.0	3.1	2.3	4.0	2.3	0.9	0.8	0.3	1.1
Domestic demand	5.1	3.3	1.4	1.7	2.8	-1.3	-1.8	-2.0	-2.9	-2.0
Total consumption	4.1	2.6	1.2	1.6	2.4	1.2	1.3	1.8	2.8	1.8
Personal consumption	4.8	2.9	1.1	1.6	2.6	1.5	1.6	2.1	3.2	2.1
Gross capital formation	10.4	5.7	1.6	1.7	3.9	-13.1	-12.5	-14.2	-13.5	-13.8
Gross fixed investment	5.4	2.8	2.0	2.1	2.7	1.5	-8.4	-13.6	-14.3	-10.2
Household savings ratio (%) ¹	9.0	10.9	11.3	14.0	11.4	11.4	10.4	10.4	11.7	11.0
Household financial savings ratio (%) ²	5.7	10.8	0.2	5.8	5.6	9.5	3.9	5.2	4.9	5.9
Unemployment (%)	14.0	13.6	14.0	15.1	15.1	16.1	15.9	16.3	17.4	17.4
Disposable incomes										
(corresponding period previous year = 100)	101.8	101.1	99.6	103.1	101.4	103.7	99.7	100.7	100.1	101.1
Treasury debt (million zloty, nominal) ³	270,144.9	279,507.8	287,984.3	266,816.8	266,816.8	273,192.9	271,584.9	291,795.1	283,939.5	302,151.6 ⁴
Central government deficit (million zloty)	-6,927.4	-10,650.2	-14,041.9	-15,391.0	-15,391.0	-14,992.5	-18,805.5	21,865.0	-32,352.2	32,352.2
Foreign debt (USD million)	65,702	66,882	65,607	69,610	69,610	70,977	70,098	72,375	70,160	70,160.0

¹ Household savings to gross disposable incomes. Savings represent that portion of gross disposable incomes not allocated to consumption.

² Household financial savings to gross disposable incomes. Financial savings represent the growth in household money stocks (the sum total of growth in bank deposits, notes & coin and investments in securities, less growth in household borrowings).

³ Period end.

⁴ As of February 2002 end; no data available for March.

Source: GUS, Ministry of Finance & NBP figures; NBP estimates.

Basic monetary indicators

	2000				2001				2002	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2001	Q1
	corresponding period previous year = 100									
Consumer prices ¹	110.3	110.2	110.3	108.5	108.5	106.2	104.3	103.6	103.6	103.3
Industrial producer prices ¹	107.3	108.9	108.3	105.6	105.6	103.8	100.7	99.6	99.6	100.4
	nominal growth, period end balances (corresponding period previous year = 100)									
Money supply (M3)	113.7	120.3	114.7	111.9	111.9	114.7	112.3	108.7	108.7	103.5
Total money supply ²	113.8	120.6	114.1	111.7	111.7	114.9	114.3	113.7	113.7	108.4
Deposits and other liabilities	115.4	123.0	116.7	115.5	115.5	116.4	113.3	108.3	108.3	102.0
of which:										
personal deposits	114.4	118.8	117.3	121.2	121.2	120.3	116.8	105.6	105.6	102.2
corporate deposits	117.5	121.2	110.0	98.6	98.6	105.1	105.5	116.7	116.7	104.5
Claims	125.3	132.0	123.6	116.9	116.9	114.1	111.5	109.4	109.4	107.1
of which:										
claims on persons	152.1	179.4	140.9	131.7	131.7	125.7	118.7	114.7	114.7	114.6
claims on corporates	115.1	117.4	114.5	112.0	112.0	111.2	106.0	103.7	103.7	98.2
	real growth ³ , period end balances (corresponding period previous year = 100)									
Money supply (M3)	103.1	109.2	104.0	103.1	103.1	108.0	107.7	104.9	104.9	100.2
Total money supply	103.2	109.4	103.4	103.0	103.0	108.2	109.6	109.8	109.8	105.0
Deposits and other liabilities	104.6	111.6	105.8	106.5	106.5	109.6	108.6	104.5	104.5	98.8
of which:										
personal deposits	103.7	107.8	106.7	111.7	111.7	113.3	112.0	102.0	102.0	100.0
corporate deposits	106.5	110.0	99.7	90.8	90.8	99.0	101.2	112.6	112.6	101.1
Claims	113.6	119.8	112.1	107.8	107.8	107.5	106.9	105.6	105.6	103.6
of which:										
claims on persons	137.9	162.8	127.7	121.4	121.4	118.4	113.8	110.7	110.7	111.0
claims on corporates	104.3	106.6	103.8	103.2	103.2	104.7	101.6	100.1	100.1	95.0
Reference rate (minimum reverse repo rate) (%) ⁴	17.5	17.5	19.0	19.0	19.0	17.0	14.5	11.5	11.5	10.0
Rediscount rate (%) ⁴	20.0	20.0	21.5	21.5	21.5	19.5	17.0	14.0	14.0	12.0
Lombard rate (%) ⁴	21.5	21.5	23.0	23.0	23.0	21.0	18.5	15.5	15.5	13.5

¹ In the last month of the quarter.² Total money supply (M2) acc. to the definition in force by 30th March 2002.³ CPI deflated.⁴ As of the period end.

Source: GUS, NBP figures.

A slump in annual growth rate for broad monetary aggregates (M2 and M3) in Q1, 2002 should also contribute to continued inflation easing in a medium-term horizon. A moderate rise in earnings and the weakening of their role in the transmission of possible inflation impulses may be expected in the face of difficult situation in the labour market.

A high deficit in the public finance sector, which this year may amount to about 5% of GDP, in the conditions of poor domestic demand and relatively low economic growth, in short term should not result in price rise. However, its maintenance on this level may have other adverse effects for the economy (see point 5). Possible disturbances in the accomplishment of the assumed budget deficit and its funding could cause disturbances in the foreign exchange market. However, the budget performance in the first quarter of this year, consistent with the assumptions, does not indicate a threat of repeated situation of the previous year, which saw its unexpected quick increase.

The commercial banks behaviour is another element of uncertainty at inflation forecasting. They – even without cuts in the base NBP interest rates – may reduce the lending rates for households with improving economic situation. Between February 2001 and January 2002 the NBP reduced base interest rates by 900 basic points, while in the same period such loans rates went down only by 210 b.p.

Also the uncertainty in respect of effects of capital income taxation induces to be cautious in inflation forecasting. This tax will probably result in a fall in the propensity for saving at banks. However, at the moment it is difficult to anticipate to what extent funds released in this way would feed the consumer demand, and to what extent the non-bank forms of saving (equities, pension funds).

The Monetary Policy Council set this year inflation target at 5% with a ± 1 pct. point tolerance. Definite majority of forecast shows now that at the end of this year the year-on-year inflation will fall below the lower limit of the target. Despite the occurrence of certain signals that might result in a stronger price rise in the time-horizon going beyond 2002 and the uncertainty connected with inflation forecasting in such conditions, the analysis of macroeconomic factors does not show, so far, the occurrence of threats for the accomplishment of the medium-term monetary policy target, set below 4% at the end of 2003.

1

Domestic demand and supply¹

1

According to preliminary GUS estimates the GDP growth rate in the first quarter of this year stood at 0.5%. The value added in the industry has been falling for four quarters, and in the construction – for seven quarters. The production decline continuing for such a long time resulted in a fall in service growth rate for corporates involved in real estate and business activities service, which were developing quickly in previous years. The performance of corporates in the financial and insurance sectors also deteriorated. Despite that, as a result of substantial increase in retailer sales, the growth rate of the value added for market services in the first quarter of 2002 kept on the level of previous quarters.

The individual consumption growth rate, at a relatively low increase in disposable income of households, in Q1, 2002 went up to 3.5%, i.e. more than doubled that seen in the first quarter of 2001. At the same time capital expenditures continued to fall. GDP and domestic demand growth estimates are given in Table 1.

Table 1
GDP and domestic demand growth

	2001	Q1	Q2	Q3	Q4	2002 Q1
corresponding period previous year = 100						
Total value added	100.8	102.1	100.8	100.6	100.1	100.6
Industry	99.4	103.3	98.7	98.5	97.5	98.0
Construction	92.4	94.8	92.0	91.8	92.0	87.1
Market services	103.9	103.5	103.7	104.1	104.2	104.0
GDP	101.1	102.3	100.9	100.8	100.2	100.5
Capital expenditure	89.8	101.2	91.5	87.5	86.5	86.7
Individual consumption	102.1	101.5	101.6	102.1	103.3	103.5
Domestic demand	98.1	98.7	98.2	98.3	97.2	100.0

Source: GUS.

The domestic demand in the first quarter of 2002 was close to that seen in Q1, 2001. However, the net exports – despite lower turnover in foreign trade – were slightly more favourable than a year before. According to the customs statistics in the first quarter of the current year exports (at current prices, in zloty terms) were 3.4% lower than a year ago, and imports – by 4.6%. Consequently the deficit in the foreign trade went down in Q1, 2002 to 12.2bn zloty from 13.3bn zloty in the corresponding period of the previous year.

1.1. Domestic demand

On the basis of data on nominal rise in employee earnings and social benefits the growth of **gross disposable incomes** of households in the first quarter of this year is estimated to be lower than in the previous quarter.

¹ All growth rates in this section, unless indicated otherwise, are given in real terms and annualised.

As compared to the first quarter of the previous year the average gross salary in the sector of enterprises rose in the first quarter of the current year by 5.3%. However, because of simultaneous decline in the average employment by 4.8%, the nominal growth of labour incomes in the corporate sector went up in Q1, 2002 only by 0.3% against the corresponding period of the previous year. Because of the lack of data on earnings and employment in the general government sector in the first quarter of the current year they are assumed not to decrease – contrary to the situation in Q4, 2001. At this assumption the overall nominal employee earnings in the first quarter of 2002 would be on the level close to that achieved in a similar period of 2001.

The growth of average old-age and disability pensions in the first quarter of the current year was high (as against the corresponding period of 2001 they went up by 13.8%). However, taking into account one-off compensations made in the first quarter of the previous year the old-age and disability pensions are estimated to be 2.4% higher in Q1, 2002 than a year before.

Despite deterioration of price relationships in the agriculture the increase in production contributed to the maintenance of substantial rise in farmers nominal incomes. However, the growth rate of incomes from non-agricultural proprietary business and income from property went down.

Overall, the nominal growth of gross disposable incomes of households in the first quarter of this year is estimated to stand at about 2.0% as compared to Q1, 2001. Despite a fall in quarterly CPI to 3.4% the purchasing power of those incomes was lower than a year ago. However, these estimates do not take into account incomes of households from the grey area of the economy. A high growth rate of the consumption and notes and coin in circulation may indicate an increase in this income.

The growth of households' deposits in Q1, 2002 was lower than a year before, and the rise in loans – higher. Other components of gross savings, in particular non-financial ones (expenditures on fixed and current assets) are also estimated to diminish. In such conditions the growth rate of **individual consumption** in the period considered was higher than the incomes growth rate and amounted to 3.5%. The acceleration of retail sales volume growth in medium and large commercial companies (from 3.7% in Q4, 2001 to 5.8% in Q1, 2002) indicated also the maintenance of consumption growth on a high level in the first quarter of this year.

The growth of **capital expenditures** continued to slacken. The investment construction work executed in medium and large enterprises in the first quarter of the current year was lower by 18.3% than a year ago. The output of industrial enterprises manufacturing mainly investment goods fell in this period by about 6%. Investment imports continued to lower.

Gross capital expenditures in Q1, 2002 were 13.3% less than in Q1, 2001. Like a year ago, stocks of tangible current assets diminished substantially, the gross capital formation went down as against Q1, 2001 by 18.4%.

* * *

In February 2002 the Sejm passed the 2002 Budget Act, which stipulates that the central government revenues should amount to 145.2bn zloty, expenditures to 185.2bn zloty, and the **National Budget deficit** to 40bn zloty, i.e. approx. 5.3% of GDP. It shall be emphasised that during the parliamentary work the amounts of planned revenues and expenditures were increased as against the governmental proposition by 1.2bn zloty. As a result of those changes the Budget Act stipulates that the expenditure in real terms will increase by 2.5% as compared to their previous year level, and not by 1% as declared by the government. Considering that last year they rose in real terms by 8.5% at a high level of budget deficit, their increase this year will adversely affect the macroeconomic stability.

The first quarter of the current year witnessed, like in a similar period of the previous year, a high National Budget deficit, which equalled 16.4bn zloty. It is estimated that this deficit reached 9.6% of GDP as against 9.1% a year before. However, after Q1, 2002 the deficit performance as compared to the annual plan is lower than a year ago.

Table 2
National Budget performance

	Q1 (million zloty)		Progress (%)	
	2001	2002	2001*	2002
REVENUES:	31,603.4	31,293.6	22.5	21.6
Tax revenues, of which:	26,804.1	28,459.4	22.5	21.6
– indirect tax	19,091.4	20,239.3	23.2	22.2
– corporate income tax	3,053.9	3,471.2	23.0	25.1
– personal income tax	4,658.8	4,748.9	19.9	17.9
Non-tax revenues	4,799.3	2,834.2	22.6	21.1
EXPENDITURES, of which:	46,658.6	47,724.0	27.0	25.8
– debt service	5,482.1	6,338.3	26.2	17.8
– subsidy for the Labour Fund	748.6	1,228.7	28.2	33.8
– subsidy for the Social Insurance Fund	6,646.0	7,295.8	30.9	26.7
DEFICIT	-15,055.2	-16,430.4	46.2	41.1
DEFICIT FUNDING SOURCES	15,055.2	16,430.4	46.2	41.1
Domestic, of which:	13,081.7	16,886.2	29.8	43.5
– Treasury bills	3,124.5	6,750.8	29.0	115.4
– bonds	5,247.1	11,999.0	19.6	45.1
– privatisation revenues	1,093.6	621.9	16.9	9.4
Foreign	1,973.5	-455.8	-17.4	-38.6

* The Q1 to the annual performance – due to a very large discrepancy between the plan and the performance.
Source: NBP calculations based on the Ministry of Finance figures.

The central government revenues in the first quarter of this year were lower than in the corresponding period of the previous year. This was driven by the lack of extraordinary revenue, which occurred in Q1, 2001 (foreign revenue connected with advance redemption of foreign debt and proceeds from UMTS licence fees). However, the fiscal revenue in Q1, 2002 turned out to be 6.2% higher than a year ago, of which revenue on indirect taxes – by 6% (resulting primarily from relatively high annual growth of retail sales – by 7%).

On the other hand in the first quarter of the current year the central government expenditure was 2.3% higher than a year before. Its growth, less the debt service cost, amounted to only 0.5%. So in real terms it dropped. This shows that the National Budget had a lesser role in the domestic demand creation in Q1, 2002 than a year ago. However, in relation to GDP this expenditure remained on a high level of approx. 24.3%, as against 24.9% in Q1, 2001 and 21.6% in Q1, 2000.

High central government deficit in the first quarter of 2002, connected with low privatisation revenues, substantially increased the central government needs to borrow. The net value of Treasury securities issued in this period stood at 18.7bn zloty, i.e. was more than twice higher than in Q1, 2001. Attention shall be paid to the fact that the volume of Treasury bills in the first quarter of the current year has already exceeded the whole year plan. Bonds issued in the domestic market continued to enjoy a high interest of foreign investors, whose net debt due to this reason rose in Q1, 2002 by 5.7bn zloty². Thereby the share of bonds held by foreign investors in the total of outstanding bonds at March 2002 end went up to 17.8% from 14% at 2001 year end.

A large volume of issued Treasury securities in the first quarter of 2002 contributed to the retention of long-term market interest rates on a high level and stimulated the inflow of foreign capital, placed in Treasury securities, what was driving the zloty appreciation.

² Ministry of Finance figures.

1.2. Domestic supply

According to preliminary estimates the value added increased in the first quarter of this year by 0.6%. This resulted from a continuing decline in value added in industry and construction, the maintenance of its growth rate in market services and a larger than a year ago value added in agriculture.

In the discussed period the industrial output (of large and medium enterprises) was 1.6% lower than in a similar period the year before (in Q4, 2001 the fall stood at 2.6%), of which in the manufacturing by 2.3%. The output decline continued to be driven by a poor investment demand and weakening exports. The output of enterprises manufacturing mainly production supplies and investment goods went down by about 6% and of those manufacturing consumer goods went up by approx. 3%. The output of sectors considered as high-tech fell by 6.8%.

The output decline that has been continuing for a year was driving flagging growth of services for enterprises involved in real estate and business activities service. The growth of communication services sales was also much smaller. A much higher than in previous quarters increase in commercial companies turnover contributed to the maintenance of growth in the market service sector. The growth of value added in the section of financial intermediation and insurance was estimated to be lower in Q1, 2002 than in the previous year.

The increase in production of livestock and milk as well as a high stock of swine at the beginning of the year indicate maintenance of rise in livestock production in 2002. Good wintering of cultivated plants and relatively good agro-meteorological conditions allow assuming that crops and plant production this year will be on average level of previous years. Therefore the growth of value added in agriculture in the first quarter of this year is estimated to continue. The fall in purchase prices and profitability, accompanying the current supply increase, may contribute to a decline in farming production only in 2003.

Value added in construction continued to slump in Q1, 2002. Low demand for investment work was driving a plunge in output of medium and large construction companies by 15.6%. Construction work of investment nature went down by 18.3%, while repairs by 6.5%. Lesser decline in repair work demand, the majority of which are performed by small enterprises, makes that the fall of output in the entire construction sector was weaker than witnessed by large and medium enterprises.

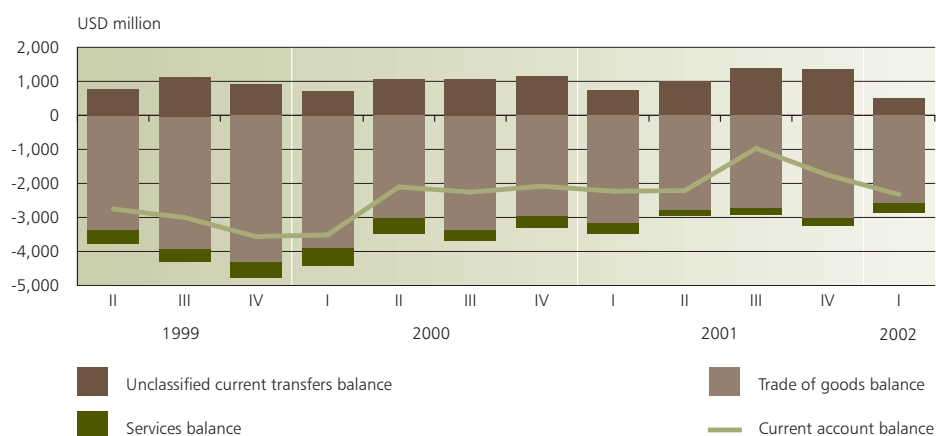
2

Foreign trade, the balance of payments

Balances of the most important items of current account continued to improve in the first quarter of 2002. The deficit in trade of goods and in services went down as compared with Q1, 2001 by USD 610m. This improvement was fuelled both by decline in receipts and payments, where – like last year – payments shrank more. However, a larger deficit in income and much lower surplus in unclassified current transfers were driving the increase in current account deficit. The deterioration in income balance was brought about on the one hand by enlarged payments on Poland's foreign debt service and on the other hand by significant reduction in receipts as against Q1 of the previous year³. The smaller surplus in unclassified current transfers resulted, however, with one-off events, i.e.: the introduction to circulation of the euro in European Union countries and increased imports to Poland of second-hand cars.

As a result of these movements the current account deficit in the period reviewed (USD 2.3bn) remained practically unchanged as compared with the corresponding period of the previous year, while it deteriorated as against Q4, 2001 (Figure 1).

Figure 1
Current account balance, 1999–2002 (quarterly figures)



Source: NBP figures.

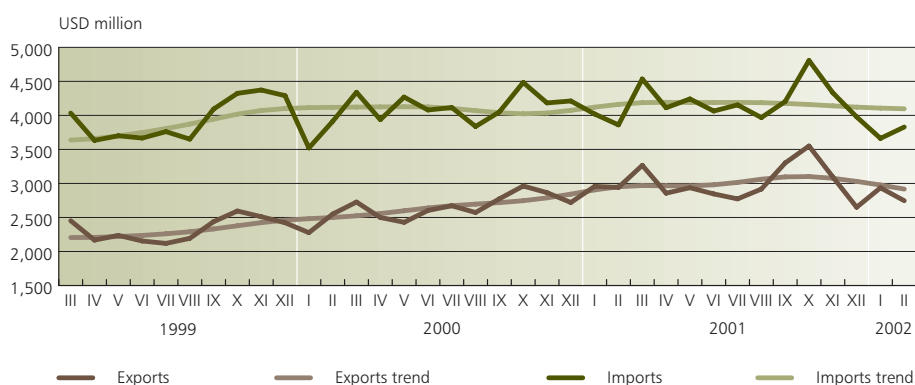
A downward trend in Polish exports – clearly seen in the fourth quarter of 2001 – even deepened in the first quarter of 2002 (Figures 2, 3, 4). This is confirmed both by payment and physical trade volume statistics. Export receipts (in USD) fell in Q1, 2002 by 6.8% (against Q1 the previous year). However, according to GUS figures, in the January–February 2002 period Polish exports, as expressed in USD, declined by 3.7% (as compared with similar period of the past year).

NBP research shows that the demand of German economy affects Polish exports in the strongest way⁴. Last year the German economic growth lessened most among euro area countries (Table 3). The

³ Because of the sale by the State Treasury of US Government bonds portfolio, which collateralised Brady bonds redeemed in December 1998 and October 2000, the accrued interest was booked as "portfolio investment income" in January 2001.

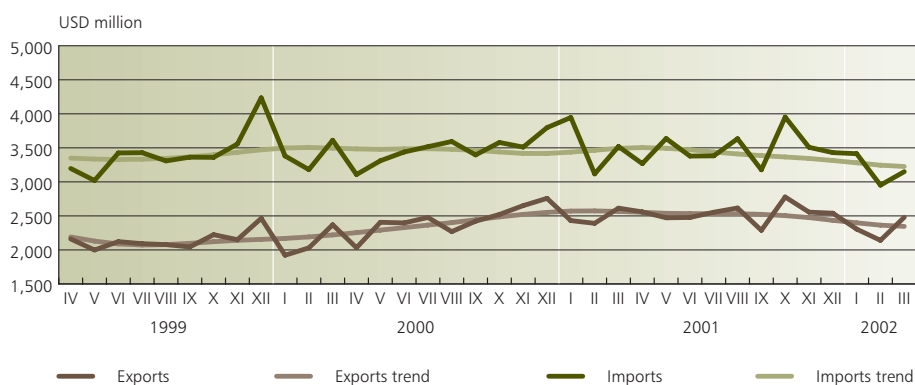
⁴ See J. Przystupa: *Makroekonomiczny model gospodarki polskiej* (Macroeconomic model of Polish economy), Warsaw 2000 IKC-HZ; the time lag in Polish exports response to demand movements in German economy equals 8 months for total domestic demand, and 5 months for imports demand.

Figure 2
Foreign trade, customs statistics (monthly figures)



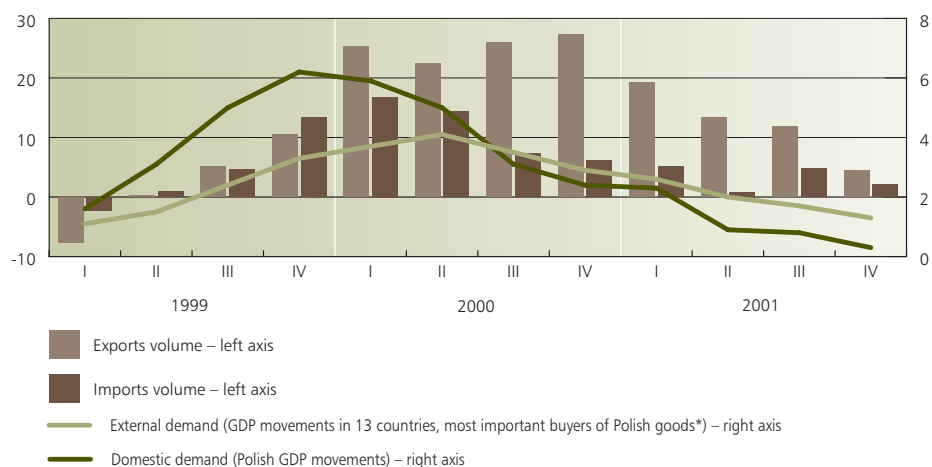
Source: GUS figures, NBP calculations.

Figure 3
Foreign trade on a cash basis (monthly figures)



Source: NBP figures.

Figure 4
Movements in exports and imports volumes vs. movements in external and domestic demand (% as against corresponding period of previous year, at constant prices)



* weighted by Polish exports structure.

Source: GUS and Bloomberg figures, NBP calculations.

fall in GDP growth from 1.2% in the first half of 2001 to 0.2% in the second half contributed to absolute decline in German imports. In the second half of 2001 the volume of German imports went down by 3.5% (as against July–December 2000), while in the first half of the year it was still rising at 4.8%. Imports continued to slump also at the beginning of 2002; in January the imports to Germany as expressed in US dollars plunged by as much as 20%⁵. Strong response to this fall by Polish exports is confirmed by GUS figures: during the initial two months of 2002 the exports to Germany fell by 10%.

Weakening demand in the Western-European market narrowed exports primarily of the automotive industry (both exports of cars and car parts), as well as sectors supplying – mainly EU countries markets – with raw materials and semi-finished goods, such as steel products and also wood and wooden products.

Table 3

Selected economic indices for euro area and Germany

(% change as against corresponding period of previous year, at constant prices)

	Euro area				Germany			
	2001				2001			
	quarters							
	I	II	III	IV	I	II	III	IV
GDP	2.4	1.6	1.4	0.6	1.8	0.7	0.4	0.0
Domestic demand	1.8	1.1	0.7	-0.1	0.5	-0.5	-1.4	-2.0
Individual consumption	2.0	1.7	1.7	1.6	1.6	1.2	1.2	1.0
Social consumption	2.0	2.0	2.1	1.8	1.4	1.7	1.8	1.8
Gross capital expenditures	1.7	0.2	-1.2	-2.0	-2.0	-3.6	-6.3	-6.0
Movements in stocks*	-0.1	-0.1	-0.3	-0.4	-0.8	-0.6	-1.0	-0.6
Exports	8.4	5.4	1.7	-1.5	9.5	7.2	4.4	-0.1
Imports	6.8	4.2	-0.2	-3.5	5.8	3.8	-1.0	-6.0
Value added in industry	3.5	1.4	0.7	-1.6	4.6	1.1	-1.3	-3.1
Value added in construction	-0.8	-0.3	-0.4	-0.3	-7.9	-6.2	-6.1	-4.7

* As % of GDP.

Source: Eurostat.

The situation in CEE countries markets was more favourable for Polish exports. In the second half of 2001 a two-digit (12%) imports growth continued in the Czech Republic⁶, which is the most important buyer of Polish goods in the region. Import demand in Russia was also very high; having jumped up 27% last year this country imports (from outside the CIS) in January–February 2002 grew 19%⁷ (as compared with the corresponding period of 2001). In those conditions Polish exports to the CEE countries went up by 11% in the two months considered.

The downward trend in Polish exports continuing since mid-2001 resulted also from the deterioration of price and exchange rate terms and conditions⁸. However, it shall be emphasised that an improvement in the development of real zloty exchange rates has been observed since the mid-last year (Table 4, Figure 5). In the first quarter of the current year the zloty exchange rate index, based on unit labour cost and deflated by producer prices in the manufacturing, has slightly depreciated. Slower growth rate of relative costs and prices in Poland in this period more than offset an insignificant appreciation of the effective nominal exchange rate.

⁵ Euro-Indicators, News Release, No 48/2002 – 19 April 2002, Eurostat.

⁶ However, the year 2002 has already witnessed demand slowdown symptoms in the Czech economy; in Q1 imports of this country fell by 3%. Source: Czech Statistical Office.

⁷ Ministry of Economic Development of the Russian Federation.

⁸ *Inflation Report 2001*. NBP research shows that exports respond to the zloty exchange rate movements with a delay of maximum three quarters.

Table 4**Effective zloty exchange rates, 2001–2002 (previous quarter = 100)**

Zloty exchange rate index	2001				2002
	Q1	Q2	Q3	Q4	Q1
Nominal	5.6	6.9	-6.7	2.7	0.3
CPI deflated	5.8	7.9	-7.1	3.5	1.0
PPI deflated	3.5	6.3	-7.1	1.6	-0.2
Deflated by unit labour cost	9.0	4.4	-10.9	8.5*	-0.2*
Deflated by export prices	3.1	0.2	-1.1	-1.1	n.a.

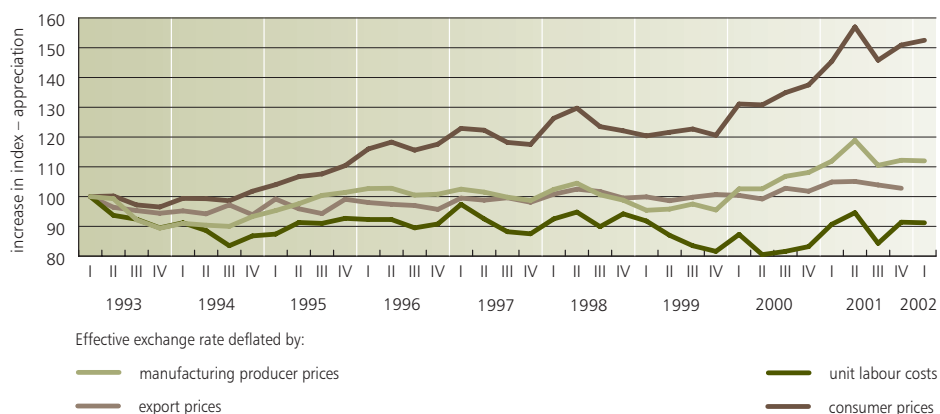
"+" – stands for the zloty exchange rate appreciation

* – figures based on estimations

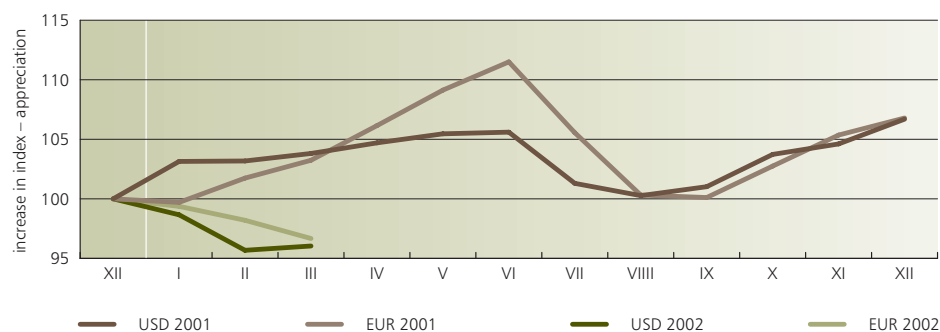
n.a. – figures not available

Source: NBP figures.

The first quarter of 2002, against corresponding period previous year, was marked with favourable changes in the development of zloty exchange rates against currencies of our main trade partners – the USA and the euro area (Figure 6). As compared with December 2001 in March 2002 the zloty in real terms depreciated against the US dollar by 4.0% and against the euro by 3.3% (in a similar period of 2001 the zloty appreciated by 3.8% and 3.2%, respectively).

Figure 5**Real effective zloty exchange rate, 1993–2002****(quarterly figures, January 1993 = 100)**

Source: NBP figures.

Figure 6**Real zloty exchange rate* against main trade partners, 2001–2002****(December previous year = 100)**

* PPI deflated.

Source: NBP figures.

DECLINE IN EXPORTS GROWTH IN POLAND, CZECH REPUBLIC AND HUNGARY IN 2001

Like in Poland, a diminishing exports growth, starting from Q1, 2001, continues also in the Czech Republic and Hungary, albeit currencies of those countries appreciated slower than the zloty.* In 2000 and in initial three quarters of 2001 Poland was showing the highest growth of exports volume among those three countries and experienced its plunge as the last. Hungary, which currency from 1999 was appreciating slowest in the analysed group of countries, recorded in Q4, 2001 the deepest slump in exports (see the following table and figure). So it was caused by factors other than the exchange rate.

Exports of all the three countries strongly depend on the imports demand of the euro area**, of which primarily Germany. In 2002 more favourable – as compared to the Czech Republic and Hungary – outcomes of Polish exports to Germany resulted from significant differences in the export structure of those countries. Polish exports featured much more diversified product structure than exports of the other two countries. Consequently it turned out to be less susceptible to the slump in imports demand in Germany. Because it affected strongest the products of machine and electrical engineering industry, which constituted 21% of Polish exports to Germany value in 2001, while 35% in the Czech Republic, and 52% in Hungary.

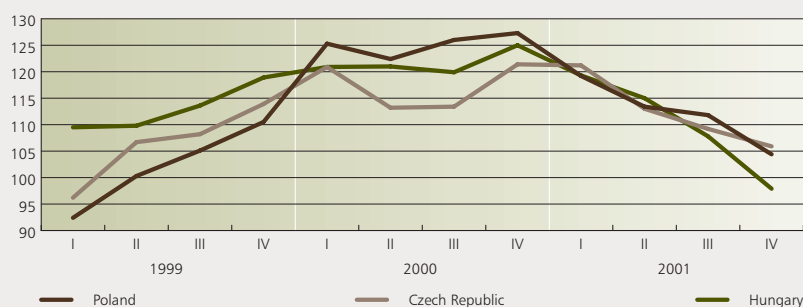
In turn, the slump in the world trade in high-tech products (IT) in 2001 affected most the Hungarian exports, in which the share of such products is the highest among analysed countries (in 2001 IT products made more than 12% in the group of machinery and equipment, while in the Czech Republic 8%, and in Poland merely 1%).***

* Currencies of all three countries in real terms appreciated against the euro, where the pace of this appreciation accelerated when the euro in 1999 started to depreciate against the dollar. The zloty was appreciating strongest (due to the strongest nominal appreciation), and the forint weakest (the effect of the weakest nominal appreciation).

** Hungary has the highest share of EMU countries in its foreign trade – 68.7%, in the Czech Republic it stands at 61.7%, and in Poland at 58.5%.

*** Annual Report 2002 – World Trade Developments, 2 May 2002, WTO.

Exports volume growth in Poland, Czech Republic and Hungary



Exports volume growth in Poland, Czech Republic and Hungary

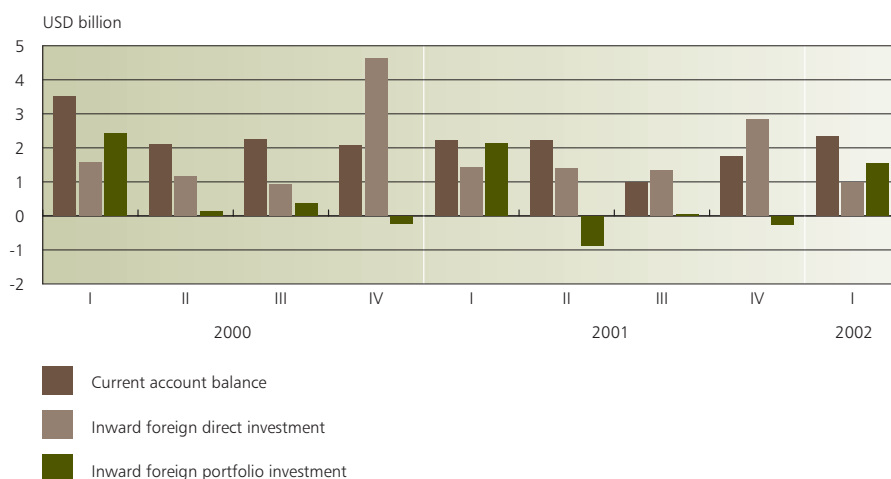
	2000				2001			
	I	II	III	IV	I	II	III	IV
Poland	125.3	122.4	126.0	127.3	119.2	113.4	111.8	104.4
Czech Republic	120.9	113.2	113.4	121.4	121.2	113.0	109.2	105.9
Hungary	120.9	121.0	119.9	125.0	119.3	115.0	107.8	97.9

Source: GUS, HSO, CSO.

In the first quarter of the current year Polish exports growth continued to be supported by industries dominated by companies with foreign capital. For majority of main product groups, where the share of such companies exceeds the average for the whole Polish exports, the upward exports trend was maintained – first of all for paper products, furniture and products classified as machinery and equipment. In the initial two months of 2002 exports in the last group rose by 10% as compared with the corresponding period of the previous year. In particular that was fuelled by increased sales of TV sets assembled in our country.

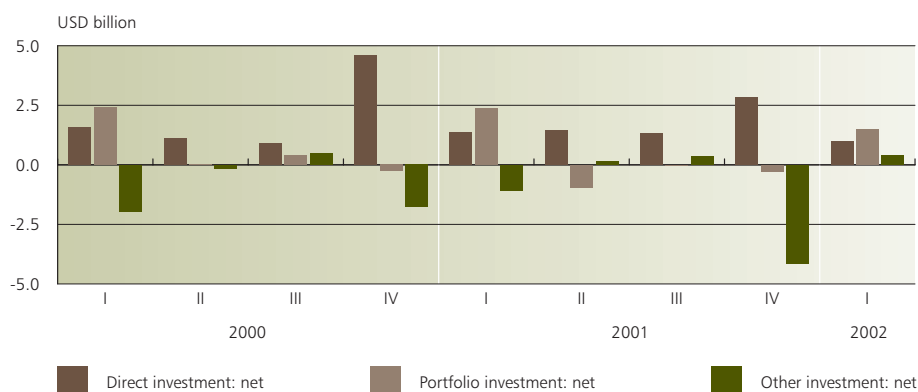
The structure of current account deficit funding has clearly deteriorated in Q1, 2002 (Figures 7, 8). The deficit was financed in 42% by the inflow of long-term foreign capital in the form of direct investment at the amount of nearly USD 1.0bn (as against 60% and USD 1.3bn in a similar period of 2001, respectively). The fall in the direct investment share in current account deficit funding in the first quarter of the current year resulted from the decline in privatisation revenues in this period (from 1.1bn zloty in Q1, 2001 to 0.6bn zloty in Q1, 2002). The structure of foreign capital inflowing in the form of direct investment was also less favourable, because loans received from direct foreign investors equalled 25.8% of this capital, as against 16.3% last year.

Figure 7
Current account deficit vs. foreign investment inflow



Source: NBP figures.

Figure 8
Structure of financial account within the balance of payments



Source: NBP figures.

In those conditions the importance of portfolio investment as a source of current account deficit funding relatively increased (Figure 8). In the analysed period it was dominated by non-residents investment in Treasury bonds⁹. This resulted from a large supply of Treasury bonds in the primary market (the supply of Treasury bonds in Q1, 2002 stood at 17.1bn zloty, as compared with 10.1bn zloty a year ago and 8.6bn zloty two years before) at continued high demand of foreign investors. Consequently – according to the Ministry of Finance figures – the value of indebtedness to foreign investors on Treasury bonds issued in the domestic market grew in the first quarter of the current year by 5.7bn zloty, to reach 25.5bn zloty¹⁰.

The analysis of selected warning indices, signalling a probability of disturbances in financial markets due to movements in the state of external disequilibrium and methods of its funding (Table 5), shows that despite certain deterioration in the structure of current account deficit funding, the overall assessment of the external disequilibrium situation remains positive.

Table 5
Selected warning indices

Warning index	2001				2002
	Q1	Q2	Q3	Q4	Q1
Current account balance/GDP (%)	-5.4	-5.3	-4.4	-4.1	-4.1
Trade balance/GDP (%)	-7.8	-7.3	-6.8	-6.6	-6.3
Direct investment/current account balance (%)	60.4	65.6	134.5	161.0	42.1
(Current account balance – direct investment)/GDP (%)	-2.2	-1.7	0.8	2.2	-3.3
Foreign debt service/exports (%)	43.0	46.6	46.1	63.8	-
Official reserve assets – in months of imports	7.9	7.9	8.3	7.3	8.5
Real effective exchange rate*	3.5	6.3	-7.1	1.6	-0.2

* Real effective zloty exchange rate adjusted by movements in manufacturing producer prices; previous quarter = 100; increase in index value stands for appreciation.
Source: NBP figures.

⁹ There was a net inflow of capital at the amount of USD 642m (EUR 750m) connected with the issuance of Eurobonds in foreign markets and at the amount of USD 1,223m in connection with the purchase of Treasury bonds issued in the domestic market.

¹⁰ Thereby the share of foreign investors in the Treasury indebtedness on Treasury securities issued in the domestic market went up at March end to 17.8% (from 16.4% on 31st December 2001).

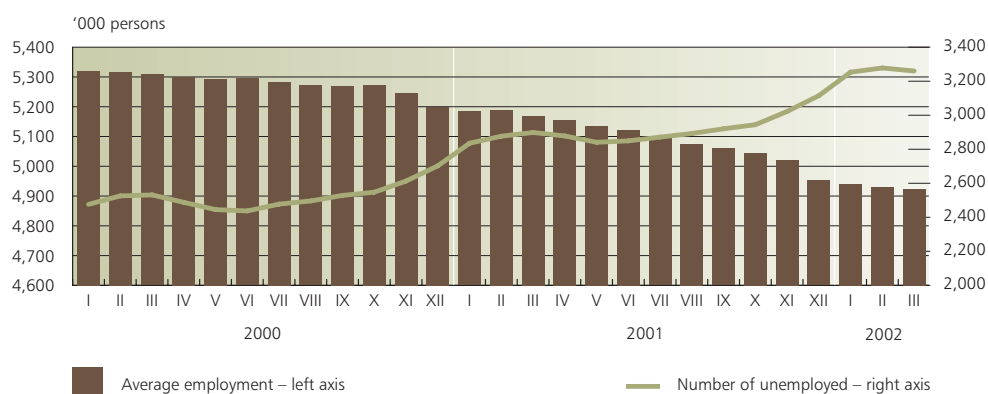
3

Labour market

The last year trend of a sharp decline in employments in the corporate sector and a rise in unemployed number continued in the first quarter of 2002.

Average employment in the sector of enterprises was going down relatively uniformly in consecutive months of Q1, this year. In the entire first quarter of the current year the annual rate of average employment fall was twice as high as a year before (Figure 9).

Figure 9
Average employment in the corporate sector and the number of registered unemployed



Source: GUS figures.

The structure of employment decrease by divisions of economy in the considered period changed as against a similar period of the previous year. Average employment in mining and quarrying (including primarily hard coal and lignite mining) was diminishing slower than a year before, and also in metals manufacturing and in the post and telecommunication division. However, in most of industrial manufacturing divisions the employment in Q1, 2002 was falling quicker than a year before. Admittedly further employment cuts are anticipated there in the nearest months, but assessments of their scale are less pessimistic than at the beginning of the year¹¹.

The greatest plunge in employment in the first quarter of this year, as compared with the corresponding period of last year, was seen in construction – by as much as 12%. Recent research shows that a general climate of economic conditions in construction for the first time for over half a year is positively judged, and the anticipated scale of redundancies in this division may be slightly less than indicated by previous forecasts¹².

More favourable than a year ago trends in employment occurred in Q1, 2002 in the sector of market services, in particular in trade and repairs, which saw a fall in employment last year, while this year it rose as against Q1, 2001 by 0.8 pct point. Entrepreneurs in small private trade firms assess the situation in the future less pessimistically than in February or March. However, large trade enterprises fear the need of large employment cuts in the nearest period¹³.

¹¹ *Koniunktura w przemyśle, budownictwie i handlu w kwietniu 2002 r.* (Economic conditions in industry, construction and trade in April 2002), GUS.

¹² Ibid.

¹³ Ibid.

Between the end of December 2001 and the end of March 2002 more than 50,000 unemployed were registered, i.e. by over 26% less than in the corresponding period of the previous year. At the same time more unemployed were cancelled from the register than a year ago and more persons cancelled from the register took up a job (Table 6). The unemployment rate increased in that period by 0.7 pct. point – up to 18.1% – as against a 1.1 pct. point rise in a similar period of the past year.

Table 6

Unemployed cancelled from register, including those due to taking up a job ('000s)

	2001			2002		
	I	II	III	I	II	III
Number of cancelled from the register	142.7	132.1	150.3	142.7	151.8	179.9
Cancelled from register, took up a job	67.1	67.3	78.0	64.7	76.9	89.6

Source: GUS figures.

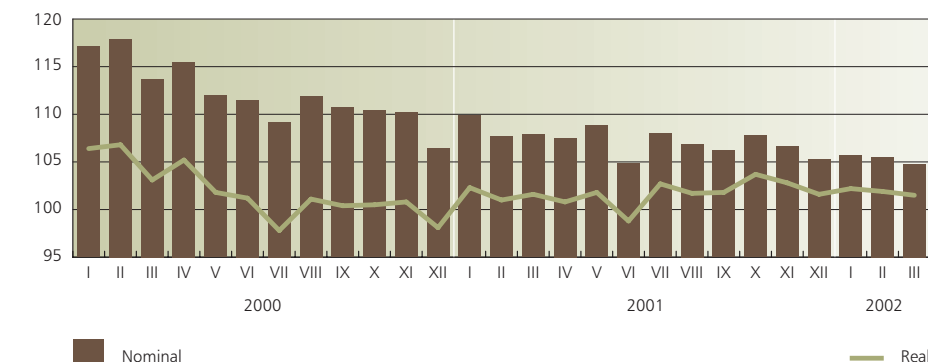
As it stems from those figures, certain symptoms of restraining the unfavourable trends appeared in the labour market in the first quarter of 2002. However, as yet they are too weak and short lasting to determine clearly whether they are of temporary nature or whether they are an augury for more permanent changes.

The achievement of permanent improvement in the labour market situation requires primarily the performance of complex reforms making its operation more flexible. In the first quarter of the current the government took the initiative in that respect within the implementation of its economic strategy "Enterprise – Development – Work". It was primarily directed towards the reduction of unemployment among youth entering the labour market for the first time and making activities of private businessmen easier. To this end the government suggested *inter alia* numerous facilities for employers employing the youth (a possibility to pay in the initial period salaries lower than the obligatory minimum pay, reimbursement for some period of social insurance cost by the state, etc.), as well as the simplification of procedures required at establishing an own business, staff hiring and laying-off, and the reduction of new personnel employment cost, etc. However, the overrunning social consultation and legislative procedures made the taking effect of suggested solutions impossible as yet.

The survey carried out in March by Profile SMG/KRC Poland¹⁴ shows that most of Poles would be eager to lower their pay expectations in exchange for the obtaining of employment.

Figure 10

**Employee earnings growth in nominal and real terms
(corresponding month previous year = 100)**



Source: GUS figures.

¹⁴ "Prawo i Gospodarka" of 23.04.2002.

Moreover, about two thirds of employed are ready to accept a lower ranking position or lower pay as long as they could retain the job, and one fourth express the readiness to change the residence to achieve that.

Hence a difficult situation in the labour market resulted in the lowering of the pressure on the pay rise. No inflation impulses should be expected from this side as no substantial improvement in this market situation is predicted in the nearest future.

4

Other supply factors

4.1. Structural factors

The work on reformulation of restructuring programmes for sectors so important for Polish economy as power and gas industry, oil sector, coal mining and metallurgy was commenced in the first quarter of 2002¹⁵.

Hitherto attempts to restructure those sectors turned out ineffective and constituted a significant financial burden for the central government. However, the advancement of reform in individual sectors varies. For example, in coal mining attempts to implement 18 versions of restructuring programme were made so far. This reform has absorbed until now more than 5bn zloty and the next correction of the programme stipulates that it will involve another 3bn zloty in the period 2003–2006. However, privatisation processes have not been successfully completed in that sector. Also in the steel sector privatisation has not been managed yet, mainly due to a poor financial standing of the mills. The current version of the restructuring programme assumes performance of consolidation actions in the sector. The establishment of Polskie Huty Stali SA (Polish Steel Mills) holding (PHS SA) was agreed, which groups four mills: Katowice, Sendzimir, Cedler and Florian. The holding is to provide about 70% of the sector output and its initial capital would amount to about 900m zloty.

An urgent need to complete structural reforms in the aforementioned sectors is best proven by the fact that numerous enterprises from those sectors, included in the list of largest¹⁶ companies in Poland, have started the year 2002 at a loss. They comprise, *inter alia*: PSE SA, PGNiG SA, KGHM Polska Miedź SA, Huta Katowice and Huta Sendzimir and Coal Companies SA (Nadwiślańska, Rybnicka, Rudzka). These firms, although as former great state enterprises had a strong initial competitive position in their industries, encounter now increasingly large difficulties in adjusting to the changing market situation. They feature low effectiveness and excess employment. The companies, that were building their position in the market from scratch and were gradually taking over smaller competitors, have been operating much better than them.

The assumption that the restructuring should precede privatisation is the key premise of changes suggested now. Hence presented propositions are dominated by the issues of organisational and financial restructuring of enterprises, which would prepare them to privatisation.

The elaboration of common strategies by enterprises from various industries, connected by cooperation and technology and planning capital links, is a new solution. This type of cooperation is predicted within the oil, chemical and pharmaceutical sectors. In the power industry that applies to merging mines and power stations – primarily connected with brown coal.

The work carried out in the period considered on restructuring programmes sometimes raises serious doubts. For example:

- no final plan to divide and privatise Polskie Górnictwo Naftowe i Gazownictwo SA (Polish Oil and Gas Mining SA) has been worked out yet,

¹⁵ These actions were declared in the Government Economic Strategy *Enterprise – Development – Work*. Cf. in particular Annex 4 “Restructuring of selected sectors of the economy”.

¹⁶ As regard the revenue on the overall economic activity.

- suggested restriction of Polskie Sieci Energetyczne SA (Polish Power Grids SA) functions to the role of transmission system operator only (without a possibility to trade in power) is impossible without solving the problem of long-term contracts,
- further progress in restructuring and privatisation in the liquid fuels market was made dependent on the privatisation of Rafineria Gdańska SA (Gdańsk Refinery SA), which proceeds with great difficulties,
- remedial programme for small refineries situated in southern Poland, which are supposed to switch from fuels to highly specialised chemical products manufacturing, is only being prepared,
- the concept of merging collieries in 3–4 coal companies prior to their privatisation raises doubts due to lack of foreign investors interest in large enterprises, entailing inefficient entities,
- the process of metallurgy restructuring is made difficult by a critical economic standing of the sector; assumptions on its consolidation and privatisation are strictly connected with mills' debts writing off.

In the first quarter of this year, parallel to actions aimed ultimately at increasing the competitiveness, opposite trends were seen to intensify, heading towards the establishment of capital groups of dominant position in the market, e.g.:

- establishment of a joint-venture company from companies involved in petrochemical business within the PKN ORLEN SA and an international chemical concern Basell Europe Holdings BV,
- announcement of Polskie Huty Stali SA (Polish Steel Mills SA) holding project, which is to be established from the merger of four steel mills,
- suggestion to merge certain infrastructure, passenger and cargo traffic companies, previously spun off from PKP, which indicates withdrawing from actions of demonopolisation nature undertaken earlier in the sector.

A strong monopolistic position is still hold by the company Telekomunikacja Polska SA (Polish Telecommunication SA)¹⁷, which pursuant to the Telecommunications Law of 2001 retained the monopoly in the field of international telephony till 2003 (contrary to solutions prevailing in the world, in Poland the decision was made to liberate the local calls market first, and only afterwards – those of long-distance and international calls). TP SA has been fully using its monopolistic position in the local calls market and for example has not made full capacity available to Niezależny Operator Międzystrefowy (NOM, Independent Long-distance Operator). It has also been overusing its privileged position in the market of Internet links lease, restricting access to this service.

4.2. External prices

A downward trend in most important raw materials prices in the global market, observed since mid-2000, was stopped in Q1, 2002 (Table 7). The rise in non-energy raw materials group in the first quarter of 2002 was fuelled primarily by agricultural raw materials for industry and metals. It influenced first of all the acceleration of economic growth in the USA and accompanying improvement in expectations in respect of recovery in other regions of the world. Food prices, like in previous periods, featured relatively smaller fluctuations (Figure 11).

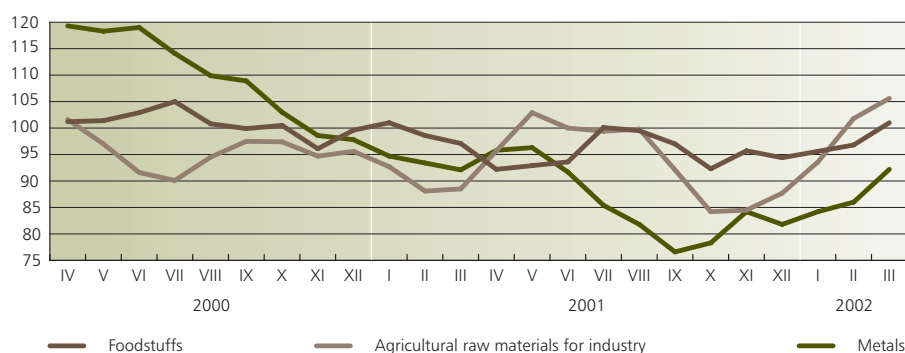
The upward trend in oil prices, seen since the beginning of 2002, was clearly pronounced in March this year¹⁸. Its reasons were primarily of supply nature. The oil prices increase at the

¹⁷ 47.5% of TP SA shares are held by the France Telkom and Kulczyk Holding consortium, while 22.5% by the State Treasury. TP SA is the largest Polish land-line telephony operator (in respect of customers number – 95% share in the market). It is also a dominant operator in the line-lease market.

¹⁸ In March average oil price amounted to 23.7 USD per barrel, so clearly above the quarterly average (21.2 USD per barrel). At the end of that month prices exceeded 25 USD per barrel. As compared with the minimum price in Q4, 2001, the oil price at March end was almost 50% higher.

Figure 11

World price indices for basic non-energy raw materials
(corresponding period previous year = 100)



Source: "The Economist" figures.

Table 7

Movements in basic raw materials prices (%)

	As against corresponding period, previous year				As against previous quarter			
	2001		2002		2001		2002	
	II	III	IV	I	II	III	IV	I
Non-energy raw materials	-5.4	-6.1	-10.6	-4.4	-2.0	-3.0	-5.2	6.0
of which:								
– foodstuffs	-7.1	-1.1	-5.9	-2.2	-4.3	2.1	-3.2	3.4
– raw materials for industry	-3.2	-12.3	-16.9	-7.2	1.0	-9.3	-8.0	10.1
of which:								
Agricultural raw materials	-0.5	-2.9	-14.5	0.2	9.3	-8.0	-12.9	14.5
Metals	-5.4	-18.8	-18.6	-12.6	-4.9	-10.4	-3.9	6.7
Oil (Brent)	1.3	-17.3	-35.2	-18.1	5.6	-7.2	-23.5	9.2

Source: "The Economist" and Reuters.

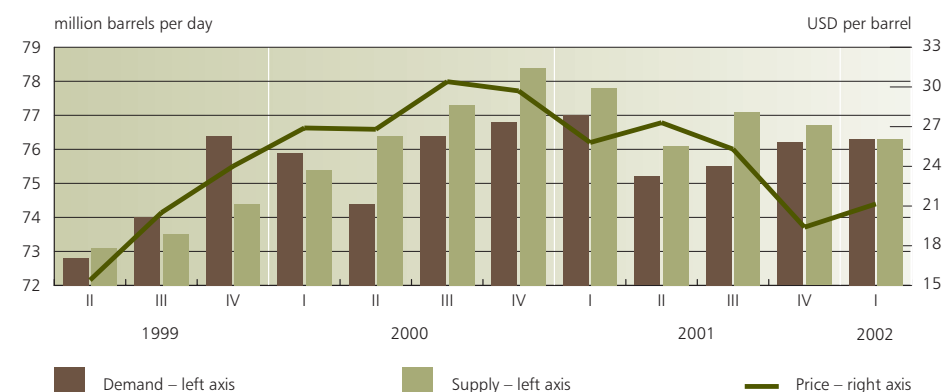
beginning of the year was driven by the largest producers (OPEC and Russia, Norway and Mexico) decision to continue the reduction of output. In the first quarter of 2002 the global markets were supplied by 1.5m oil barrels per day less than in the corresponding period of the previous year. So significant oil production reduction resulted in the liquidation of the excess of supply over demand, which continued since Q2, 2000 (Figure 12).

Since mid-March 2002 the rise in oil prices was accelerated by speculations connected with strong increase in the political risk in the areas of this strategic commodity production and transport, as the escalation of Israeli – Palestinian conflict has increased the likelihood of stopping oil export by Islamic countries as retaliation. The upward trend in oil prices continued in April this year (Figure 13). At the beginning of the month a barrel of June Brent oil was worth nearly USD 28¹⁹. The Middle East conflict is estimated to increase the price of oil barrel by USD 3 to 5²⁰.

¹⁹ Iraq, protesting against Israeli war activities in the Palestinian Autonomy, on 8th March 2002 suspended oil exports for 30 days. This country on average produces 2.5m barrels daily, what makes over 3% of the global supply. The price rise, apart from the war in the Middle East, resulted also from internal tensions in Venezuela. Oil supplies from this country have been consequently disturbed.

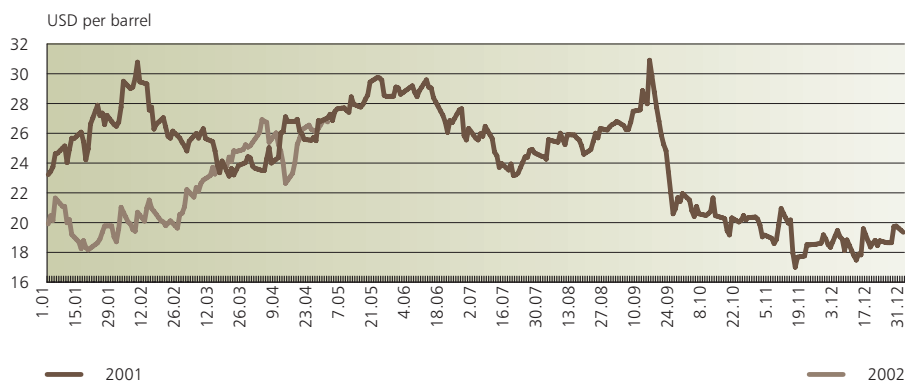
²⁰ *The Global Economy*, Merrill Lynch, 5 April 2002.

Figure 12
Oil (Brent) supply and demand, and prices



Source: International Energy Agency – *Monthly Oil Market Report* and Reuters.

Figure 13
Oil price (Brent), 2001 and 2002 (daily quotations)



Source: Reuters figures.

According to the International Energy Agency estimates the economic growth that American economy experienced in the first quarter of this year has not contributed yet to the demand for oil²¹. In March 2002 the fuel stocks in the USA were the highest in three years²², what resulted primarily from a warm winter. A quicker increase in demand for oil is expected as early as in the second quarter of the current year.

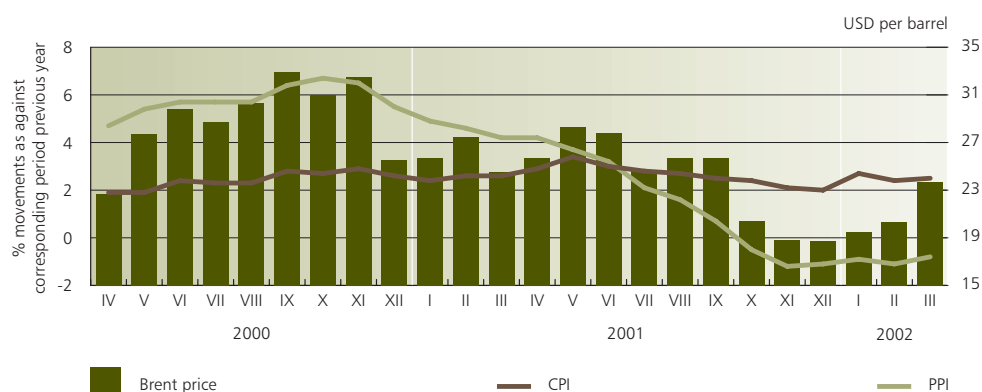
The oil price rise propped up the growth of oil products and other fuels prices. In the first quarter of this year the price of Premium unleaded petrol went up on average by more than 6% as against Q4, 2001. In the same period the natural gas (Henry Hub brand) prices also increased by 5%.

Higher prices of fuels and other raw materials in the world markets contributed to a rise in producer and consumer prices in the largest market for Polish economy – the euro area. The annual index for producer prices in the euro area changed from –1.1% in December 2001 to –0.8% in March 2002. However, a harmonised index of consumer prices in the same period increased from 2.0% to 2.5% (Figure 14). The rise in fuel prices in the United States was primarily reflected in the movement in the PPI value from –1.8% in December 2001 to –1.4% in March this year.

²¹ According to the International Energy Agency figures the global demand for oil in Q1, 2002 amounted to 76.3m barrels daily, so it was 0.7m barrels daily lower than in Q1, 2001 and 0.4m barrels daily less than expected in December 2001. Source: *Oil Market Report*, International Energy Agency, April 2002.

²² American Fuel Institute figures.

Figure 14
CPI and PPI indices in the euro area and oil prices



Source: Bloomberg figures.

If the supply policy of the largest producers does not change in the second half of 2002, so if they do not increase the output, the increasing demand may additionally (parallel to unstable situation in the Middle East) cause an increase in this commodity price. The maintenance of such situation by the end of the current year may weaken the expected recovery in the global economy. This is important to the extent that its foundations, in particular in Western Europe, have not become durable yet.

5

Inflationary processes in Q1, 2002

5.1. Consumer prices

During the first quarter of 2002 inflation, measured with year-on-year consumer price index (CPI), declined by another 0.3 pct. points, going down to 3.3% in March 2002 (a year ago it stood at 6.2%, having fallen by 2.3 pct. points during the first quarter).

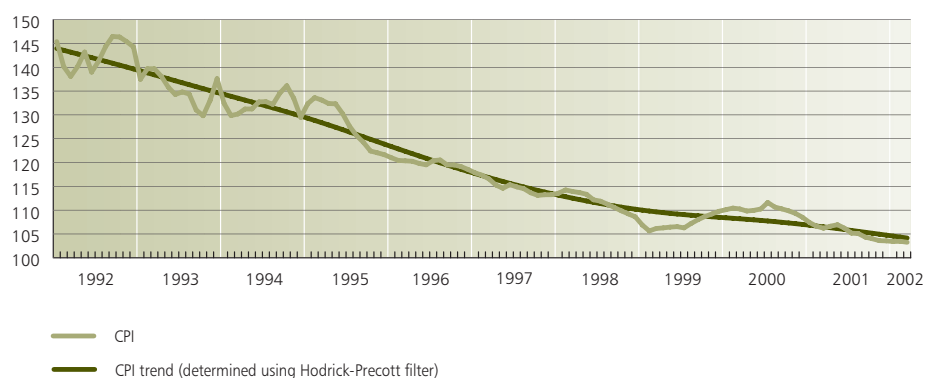
Year-on-year inflation rate in the first quarter of the current year was less than a half of that seen a year ago. It resulted from the slowdown in price growth rate for all basic groups of consumer goods and services, albeit to various extent. Prices of foodstuffs and non-alcoholic beverages heightened at a pace three times less than a year before, and non-food products prices (excluding officially controlled prices) and service prices (excluding officially controlled prices) – twice less. Officially controlled prices diminished relatively the least.

In consecutive months of the period considered the annual rise in consumer price indices for basic groups were on an even level, contrary to the situation a year before, when they were showing a clear downward trend.

In the first quarter of 2002 the conditions conducive to low inflation becoming established continued to exist. In the face of maintenance of large food supply the movements in prices of individual foodstuffs groups were small and generally were of seasonal nature. The rise in officially controlled prices in Q1, 2002 was also insignificant (larger growths in officially controlled prices should be expected in the following months of the year). Relatively low domestic demand was still constraining the pressure on price rise, primarily in those goods and services, which do not satisfy basic consumer needs. As a result of all those factors inflation in the first quarter of the year remained below the trend line (Figure 15).

The development of year-on-year inflation rate and main categories of consumer prices in the first quarter of 2001 and 2002 is shown in Table 8 and Figure 16.

Figure 15
CPI and CPI trend, 1992–2002 (corresponding month previous year = 100)



Source: GUS figures, NBP calculations.

Table 8

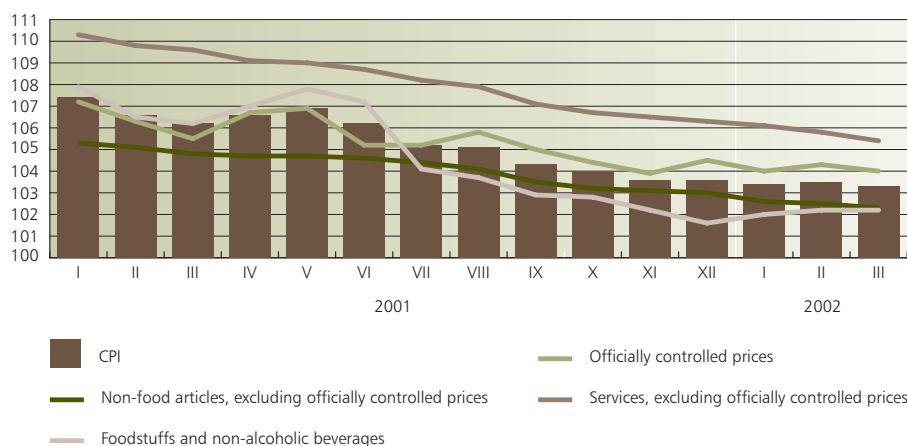
Year-on-year CPIs and main categories of consumer prices

	2001				2002			
	%	I	II	III	%	I	II	III
	weight	corresponding month	corresponding month	corresponding month	weight	corresponding month	corresponding month	corresponding month
		previous year = 100	previous year = 100	previous year = 100		previous year = 100	previous year = 100	previous year = 100
CPI	100.0	107.4	106.6	106.2	100.0	103.4	103.5	103.3
Officially controlled prices	25.7	107.2	106.3	105.5	27.1	104.0	104.3	104.0
of which fuel	3.5	107.3	104.5	96.2	3.7	91.9	92.0	96.2
Non-food articles, excluding								
officially controlled prices	27.0	105.3	105.1	104.8	26.1	102.6	102.5	102.3
Services, excluding officially								
controlled prices	17.1	110.3	109.8	109.6	17.1	106.1	105.8	105.4
Foodstuffs and non-alcoholic beverages	30.1	107.9	106.5	106.2	29.7	102.0	102.2	102.2

Source: GUS figures, NBP calculations.

Figure 16

CPI and main price categories, 2001–2002 (corresponding month previous year = 100)



Source: GUS figures, NBP calculations.

Diversified growth rate of basic price groups affected the change in the CPI rise structure in March 2002 as compared with March 2001 (Figure 17). In this period the share of foodstuffs and non-alcoholic beverages in the CPI increase fell in a twelve-month calculation (from about 30% to about 20%), and the share of officially controlled prices went up (from about 22% to about 33%). The contribution of non-food articles excluding officially controlled prices and of services excluding officially controlled prices remained, however, on the level close to that of previous year.

In the year-to-date calculation (from December 2001 to March 2002) consumer prices in Q1, 2002 rose by 1.2%, i.e. by 0.2 pct. point less than a year ago. Service prices, excluding officially controlled prices, which in this period increased 2.5%, and foodstuffs and non-alcoholic beverages – up accordingly 1.7%, had the greatest effect on such CPI growth. The price rise in the other groups was lower than for the CPI.

The development of prices for individual groups of goods and services in consecutive months of the first quarter of this year is shown in Table 9.

Figure 17
Contribution of individual price categories to the CPI, 2000–2002
 (corresponding month previous year = 100)



Source: GUS figures, NBP calculations.

Table 9
Monthly indices for consumer prices and their main categories

	2001						2002					
	indices			% share in the CPI			indices			% share in the CPI		
	I	II	III	III		I	II	III	III			
	previous month = 100			XII 2000 = 100		previous month = 100			XII 2001 = 100			
CPI	100.8	100.1	100.5	101.4	1.4	100.8	100.1	100.2	101.2	1.2		
Officially controlled prices	100.5	99.9	100.8	101.1	0.3	100.5	100.0	100.3	100.8	0.2		
of which fuel	97.1	99.0	96.6	92.9	-0.2	100.1	99.1	101.0	100.3	0.0		
Non-food articles, excluding												
officially controlled prices	100.6	100.2	100.1	100.9	0.2	100.2	100.1	99.9	100.2	0.1		
Services, excluding officially												
controlled prices	101.9	100.9	100.7	103.4	0.6	101.6	100.6	100.3	102.5	0.4		
Foodstuffs and non-alcoholic												
beverages	100.6	99.8	100.5	100.9	0.3	101.2	100.1	100.4	101.7	0.5		

Source: GUS figures and NBP calculations.

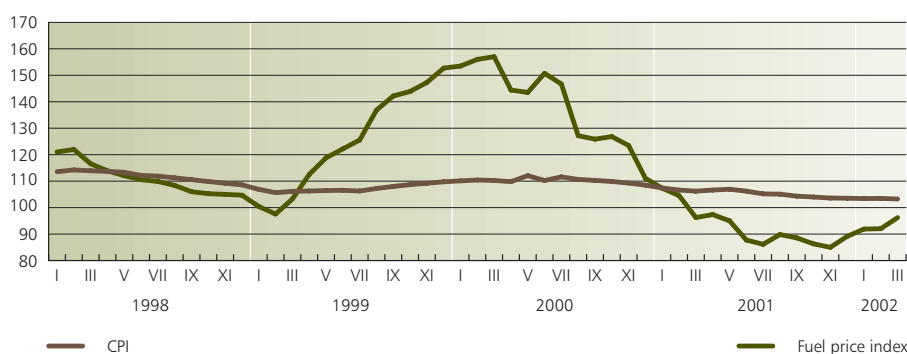
In the first quarter of the current year, counting from December 2001 to March 2002, *service prices, excluding officially controlled prices*, were rising fastest – like a year ago – doubling the inflation rate. Despite the fact that the growth of this price group was 0.9 pct. point slacker than last year it continued to exceed several times the pace of price increase for non-food articles, excluding officially controlled prices. In this group the sharpest price rise in Q1, 2002 was seen for this group of services, for which the demand is fixed, and their share in the basket of analysed price group high. They include payments for: housing occupancy (up almost 3%), and also water supply and other services connected with the dwelling (up over 11%).

Foodstuffs and non-alcoholic beverages prices went up in the first quarter of 2002, calculating year-to-date, by 1.7% and were 0.5 pct. point above the CPI. Their growth was 0.8 pct. point higher than a year ago. Albeit it resulted from temporary factors, they managed to upset the foodstuffs price rise in a significant way. This was driven primarily by vegetable prices, which soared four times as much as a year before (by 21%) due to much poorer crops, in particular for potatoes. Other groups of food prices have not witnessed material changes. Prices of meat, sugar and confectionery grew only a little – after a small decline a year ago, and prices of fish, milk, cheese and eggs were rising at a slower pace than last year. Prices of bread and cereal products were up to the same extent as a year before.

Officially controlled prices increased in the first quarter of the year, between December 2001 and March 2002, by 0.8%, i.e. less than the CPI, and by 0.3 pct. point less than a year ago. By 2000 the first quarter was connected with a concentration of officially controlled price rises. Starting from 2001 the growths in various groups of officially controlled prices have been distributed more evenly over a year. Q1, 2002 saw higher payments for: radio and TV (up 12%), postal services (up more than 4%) and passenger transport. Hot water and district heating prices – controlled on a local level – advanced most among energy carriers. Prices of some basic articles subject to the excise duty, including alcoholic beverages and tobacco products, went also up – in total by 0.8%. A small decline was observed only for gas prices – by 0.4%²³ (last year witnessed prices in this group to heighten).

Fuel prices included in the group of officially controlled prices show a high volatility, disturbing the overall CPI development in the periods of strong sudden changes. However, in the period considered fuel prices did not contribute to inflation rise, as they were up 0.3%, while a year before they were 7.1% down. In March 2002 fuel prices were 3.8% lower than last year (Figure 18).

Figure 18
CPI vs. fuel prices (corresponding month previous year = 100)



Source: GUS figures.

As the Nafta Polska figures on the fuel prices structure show on the basis of EU 95 petrol example (Table 10), the rise in domestic fuel prices in the first quarter of the year was driven primarily by oil price increase in global markets, the dollar appreciation against the zloty and the January growth of excise duty on oil products and fuels by about 2.2% (for EU 95 petrol the excise duty went up 2.7%). However, the fall in manufacturers and distributors margin (calculated as the difference between retail price and wholesale price) by 42% was causing fuel prices to decline.

Non-food articles prices, excluding officially controlled prices, went up least in Q1, 2002 among all price categories, rising 0.2%, i.e. four times less than in a similar period of 2001. In this group the largest rise was recorded by newspapers and periodicals (up 2.0%) and cars (up 2.2%),

²³ New tariffs for gas payments were approved by the Energy Regulatory Authority in mid-March and took effect on 1st April 2002.

Table 10

Influence of selected factors on movements in EU 95 petrol retail prices in Q1, 2002 (%)

Period	Global price	USD exchange rate	Import price	Import price impact on retail price (pct. points)	Domestic factors	Domestic factors impact on retail price (pct. points)
January	7.7	0.5	8.2	1.4	-18.0	-3.1
February	1.8	3.0	4.8	0.9	-9.5	-1.4
March	23.4	-0.2	23.2	4.6	-21.8	-2.9
Q1	35.3	3.3	39.7	8.3	-42.0	-5.3

Source: Nafta Polska SA figures, NBP calculations.

of which new by 1.2%, and second-hand by 2.7% – as a result of increased excise duty on imported second-hand cars). At the same time clothing and footwear got cheaper (down 1.1% and 2.0%, respectively), overall contributing 21% of this price group. Such development of non-food articles prices proves the maintenance of poor consumer demand.

5.2. Core inflation

Table 11

Core inflation indices

	2001												2002		
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	I	II	III
movements against corresponding month previous year = 100															
CPI	7.4	6.6	6.2	6.6	6.9	6.2	5.2	5.1	4.3	4.0	3.6	3.6	3.4	3.5	3.3
core inflation indices, excluding															
Officially controlled															
prices	7.5	6.8	6.5	6.6	7.0	6.6	5.2	4.8	4.1	3.9	3.5	3.2	3.2	3.1	3.0
Most volatile prices	7.8	7.2	6.7	6.8	6.5	5.3	4.5	4.2	3.6	3.2	3.0	3.1	2.9	2.8	2.6
Most volatile prices															
and fuel prices	7.8	7.3	7.1	7.2	7.0	6.2	5.4	4.9	4.3	4.0	3.8	3.7	3.4	3.3	2.9
Food and fuel prices															
("net" inflation)	7.2	6.8	6.7	7.0	7.2	6.8	6.7	6.5	5.8	5.5	5.3	5.1	4.7	4.7	4.1
15% trimmed mean	7.4	7.1	6.8	6.8	6.5	6.0	5.5	5.0	4.6	4.2	3.9	3.7	3.5	3.2	2.9

Source: GUS figures, NBP calculations.

All core inflation measures featured a downward trend of year-on-year growth in the first quarter of 2002 (Table 11, Figures 19–25). They were moving in the same direction as the CPI. However, where the CPI went down in Q1, 2002 by 0.3 pct. point, most of core inflation measures declined by 0.5–1.0 pct. point. The core inflation excluding officially controlled prices was an exception, falling in the period only by 0.2 pct. point.

A systematic decline in all core inflation indices continuing non-stop since May 2001 indicates that the CPI drop in this period resulted not only from temporary factors but also from more permanent disinflation trends in the economy.

In March 2002 nearly all core inflation indices – apart from so-called 'net' inflation, excluding food and fuel prices – were below the CPI value. That means that the growth rate of consumer prices, which

are not subject to administrative control, or do not reveal sudden changes, was smaller than the overall inflation rate in the first quarter of 2002. So this marked a clear change in that respect as compared with year-end 2001, when only two out of five core inflation indices were lower than the overall inflation.

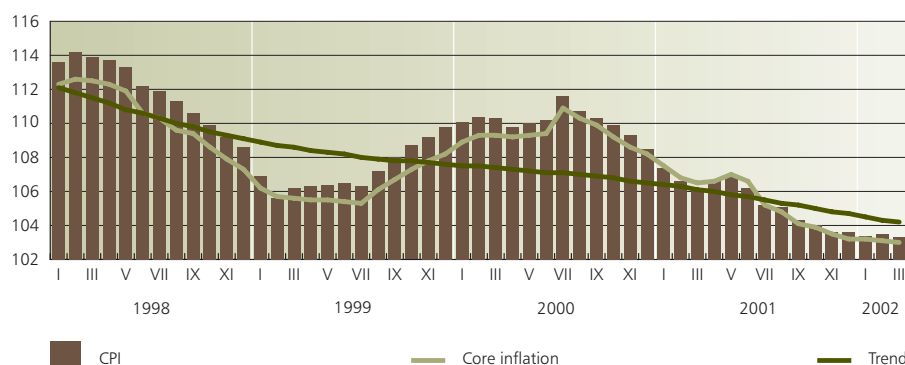
The core inflation obtained after stripping out the *most volatile prices* from the CPI in March this year was the lowest among all analysed indices. This measure covers groups of goods and services of more stable price growth, which at the same time feature a high sensitivity to movements in disposable income of the public. Therefore the drop in this inflation measure growth rate from December 2001 to March 2002 by 0.5 pct. point proves the lack of demand pressure in the goods and services market. This is confirmed by even deeper decline in the first quarter of 2002 – by 0.8 pct. point – in a close core inflation measure, in which fuel prices are excluded from the CPI, in addition to most volatile prices. A poor consumer demand continuing in the market in the period considered was driving a low price rise inter alia in such groups as clothing, footwear, household appliances, entertainment and cultural, restaurant and hotel services.

So-called *15% trimmed mean*, a core inflation measure excluding 15% of extremely high and low price movements, also diminished in the first quarter of the current year by 0.8 pct. point. This confirms the maintenance of a clear trend of growth rate constraining in groups featuring relatively low amplitude of price fluctuations.

The “*net*” inflation, i.e. the measure created by stripping from the CPI food and fuel prices out, which for over a year have had a particularly strong impact on inflation lowering, was the highest among all core inflation measures in Q1, 2002. Net inflation indices, from February last year onwards, have been maintaining on a level invariably exceeding substantially the CPI. They were fuelled by increasing charges for housing occupancy (cold water, electricity, district heating price rises), pharmaceuticals and telephone rental prices growth. Despite that in March 2002 the net inflation, as against December 2001, went down by as much as 1.0 pct. point. That means that parallel to the decline in food price growth and in fuel prices the total rise in other groups of consumer price was clearly constrained in the first quarter of the year.

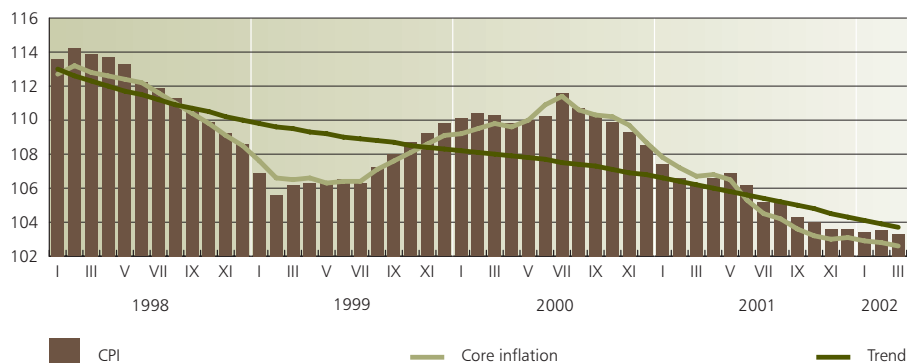
Core inflation, excluding officially controlled prices, in the entire 2001 and the first quarter of 2002 was closest to the CPI. This indicates an increasingly diminishing scale of officially controlled prices rises as compared to other consumer prices and a different than in previous years distribution of rises during the year. Nevertheless, prices in this group are seen to be relatively fixed (a fall from December 2001 to March 2002 by only 0.2 pct. point). The exclusion of officially controlled prices did not cause a visible slowdown in this core inflation measure growth, as it retained both groups substantially speeding inflation up (such as energy carriers or telephone rental) and slackening its growth (e.g. fuels).

Figure 19
Core inflation excluding officially controlled prices
(corresponding month previous year = 100)



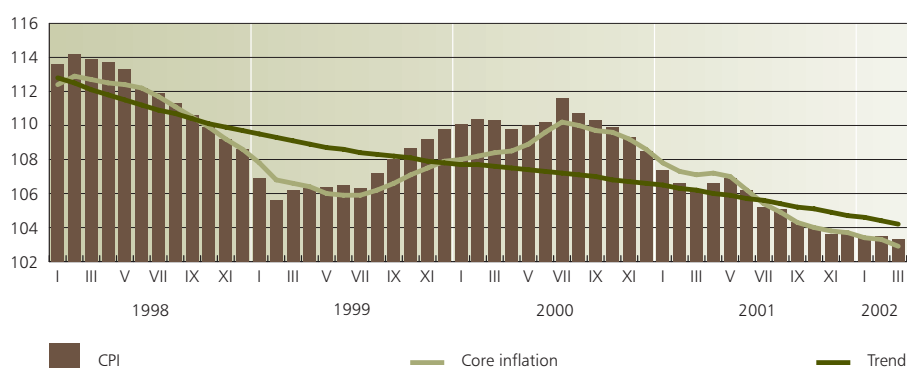
Source: GUS figures, NBP calculations.

Figure 20
Core inflation excluding most volatile prices
(corresponding month previous year = 100)



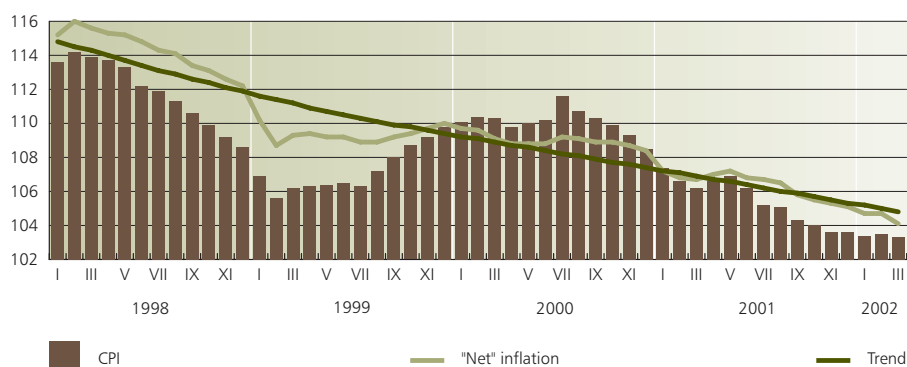
Source: GUS figures, NBP calculations.

Figure 21
Core inflation excluding most volatile prices and fuel prices
(corresponding month previous year = 100)

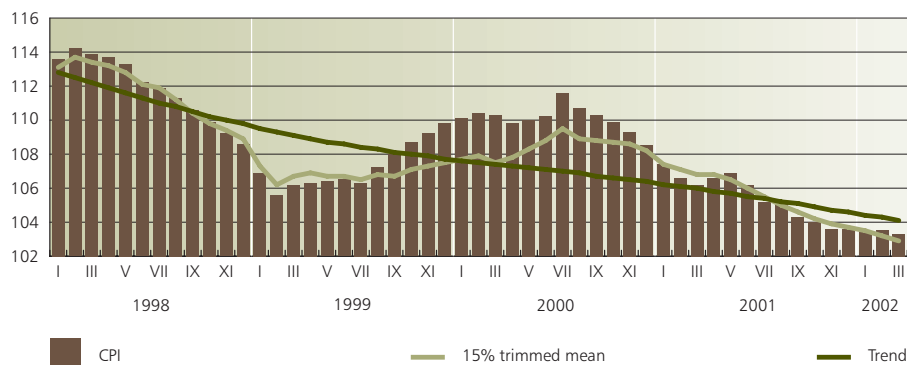


Source: GUS figures, NBP calculations.

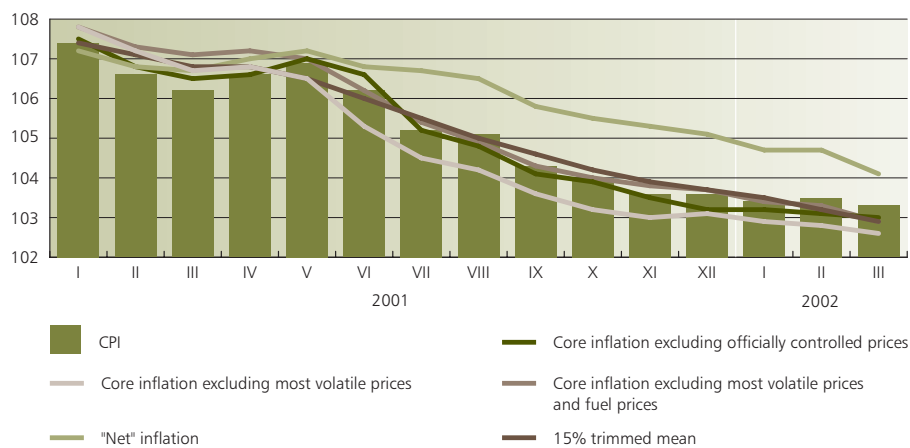
Figure 22
"Net" inflation excluding food and fuel prices
(corresponding month previous year = 100)



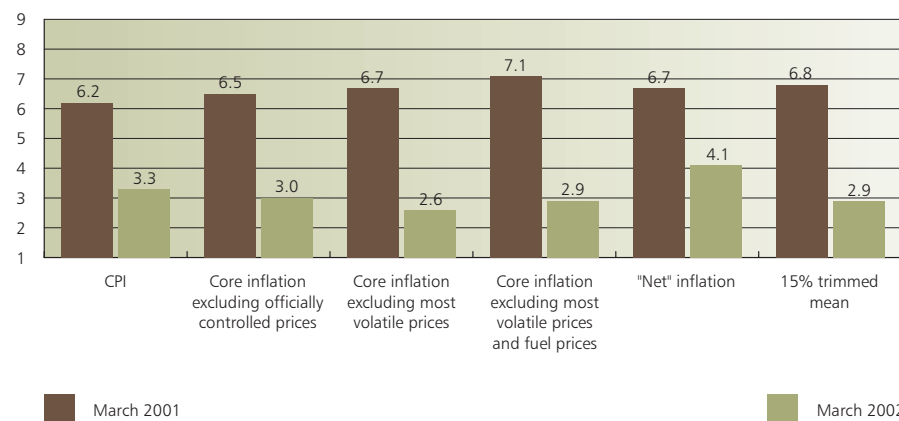
Source: GUS figures, NBP calculations.

Figure 23**Core inflation – 15% trimmed mean****(corresponding month previous year = 100)**

Source: GUS figures, NBP calculations.

Figure 24**CPI and core inflation indices (corresponding month previous year = 100)**

Source: GUS figures, NBP calculations.

Figure 25**CPI vs. core inflation (corresponding month previous year = 100)**

Source: GUS figures, NBP calculations.

In the first quarter of 2002 a low inflation rate stemmed to a large extent from exceptionally favourable price trends in the food (shrinking prices of poultry, eggs, flour, sugar and butter) and fuels market (decline in the world oil quotes). Both groups affect the inflation to a large extent. This originates a risk of trend reversal in the case of decaying positive impulses in the two areas. In addition, a decrease in domestic telephone calls also contributed to the inflation lowering. On the contrary, prices of municipal services and energy carriers (housing occupancy charges, cold water, electricity, gas, district heating) and also of pharmaceuticals and telephone rental were rising quickest in the first quarter of the year.

5.3. Producer prices in industry and construction

In the first quarter of 2002 *producer prices in industry* differed only slightly from prices a year before and in Q4, 2001. The maintenance of low PPI²⁴ growth to the largest extent was driven by the growth rate of producer prices in manufacturing²⁵. It was negative – both as against prices in Q1 and in Q4, 2001 (Table 12).

Table 12

Producer price indices in industry and construction in Q1, 2001 and 2002

	Q1		
	2001	2002	
	Q1 previous year = 100	previous quarter = 100	
INDUSTRY	104.2	100.2	99.9
of which:			
– mining and quarrying	108.9	103.6	101.6
– manufacturing	102.7	98.4	99.5
– electricity, gas and water supply	111.5	109.0	100.8
CONSTRUCTION	106.3	102.0	100.6

Source: GUS figures.

In the other two sections quarterly producer price indices were seen to rise, although less than in Q1, 2001. Prices in the electricity, gas and water supply went up particularly sharp, what was connected with a high degree of power market monopolisation.

Growth rates for producer prices in industry, manufacturing and mining & quarrying in the first quarter of this year were clearly lower than in similar quarters of previous two years (Figure 26).

In consecutive months of the first quarter of 2002 year-on-year producer price indices in industry were showing a slightly upward trend (Figure 27). It was marked after a declining trend in these prices continuing during all Q4, 2001. In March 2002 these prices were 0.4% higher as compared with March 2001.

In most divisions of industrial manufacturing the twelve-month indices in consecutive months of Q1, 2002 were seen to fall. Exceptions comprised such divisions as: tobacco products manufacturing, publishing activities, printing and reproduction, manufacturing of other transport equipment, manufacturing of foodstuffs and beverages and also manufacturing of products from non-metallic raw materials, for which those indices were going up.

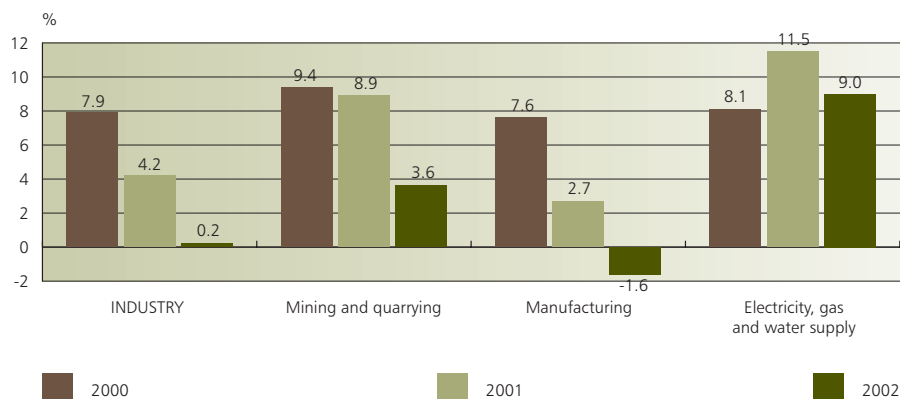
March 2002 saw a large monthly rise in producer prices in the division of oil processing (up 6%). The growth rate of this division is estimated to contribute in about 70% to the monthly producer price growth.

²⁴ Producer Price Index.

²⁵ In Q1, 2002 the output in the manufacturing section contributed 78.4% of the overall industrial output.

Figure 26

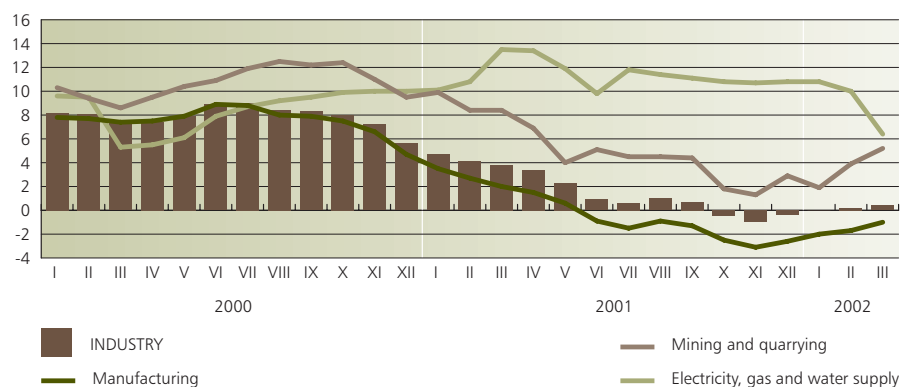
Producer price growth in industry and its three sections, Q1, 2000–2002
(corresponding quarter previous year = 100)



Source: GUS figures.

Figure 27

Producer price indices in industry and its sections
(corresponding month previous year = 100)



Source: GUS figures.

The trend of weakening growth of *producer prices in construction* observed since mid-2000 onwards continued in the first quarter of the current year. In March 2002 they were 2% higher than in March 2001 (a year before – by 5.7%). Slow pace of construction producer prices growth was reflecting a diminishing demand for construction services connected with slackening investment activities in the economy and increasing competition in the construction services market.

6

Monetary policy and performance of the inflation target

6.1. Monetary policy in the first quarter of 2002

In the first quarter of 2002 – on 30th January – the Monetary Policy Council resolved once to reduce interest rates. The yield of 28-day open market operations (reverse repo rate), playing the key role in the assessment of monetary policy restrictiveness, was cut by 150 basis points, the lombard and rediscount rates by 200 b.p., and the deposit rate by 100 b.p. The diversification in those interest rates cuts resulted from the desire to maintain a symmetric difference between the reference rate and the other NBP rates. At the same time the Council retained neutral stance in the monetary policy.

Table 13

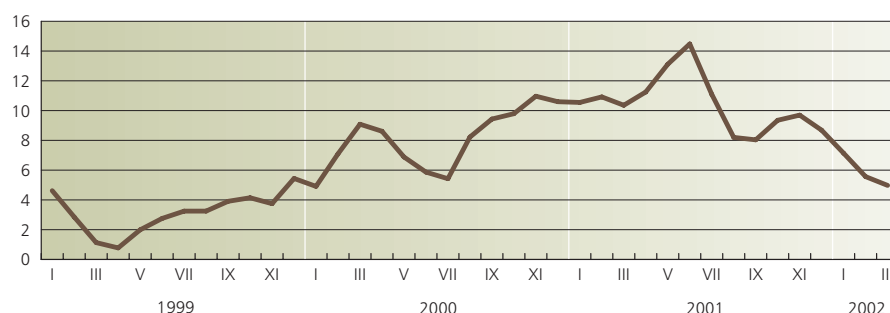
Most important decisions of the Monetary Policy Council in the second half of 2001 and in the first quarter of 2002

Date ^a	Decision:
22 August 2001	– minimum 28-day reverse repo rate reduced from 15.5% to 14.5% per annum
	– lombard rate reduced from 19.5% to 18.5%
	– rediscount rate reduced from 18% to 17%
	– <i>Monetary Policy Guidelines for the Year 2002</i> adopted
26 October 2001	– minimum 28-day reverse repo rate reduced from 14.5% to 13% p.a.
	– lombard rate reduced from 18.5% to 17%
	– rediscount rate reduced from 17% to 15.5%
28 November 2001	– minimum 28-day reverse repo rate reduced from 13% to 11.5% p.a.
	– lombard rate reduced from 17% to 15.5%
	– rediscount rate reduced from 15.5% to 14%
	– deposit rate introduced (7.5%)
30 January 2002	– minimum 28-day reverse repo rate reduced from 11.5% to 10% p.a.
	– lombard rate reduced from 15.5% to 13.5%
	– rediscount rate reduced from 14% to 12%
	– deposit rate reduced from 7.5% to 6.5%

^a Date of decision.

The decline in most annualised core inflation indices seen in December last year was one of arguments for easing the monetary policy restrictiveness. Only inflation excluding most volatile prices rose then slightly. A downward trend in all core inflation indices continued also in the first quarter of 2002. The difference between so-called net inflation and the CPI was systematically decreasing from December 2001 onwards. That meant that the impact of low food and fuel prices on inflation rate was lessening, which nevertheless remained on a relatively low level. The fall in most core inflation measures and the dwindling difference between the net inflation and the overall inflation rate were indicating that the CPI narrowed not only due to the effect of potentially temporary factors. This had a favourable influence on the prospects for permanent inflation stabilisation on a low level in the following quarters of this year.

Figure 28
Monetary Conditions Index*



* Base period = December 1994.
Source: NBP figures.

The trend of lowering current inflation continuing in Q4, 2001, conducive to a systematic decline in consumer inflation expectations, formed primarily under the influence of past and current inflation level, was also justifying cuts in interest rates. Results of polls carried out in consecutive months of the first quarter of 2002 were showing further fall in inflation expectations of this group. In conditions of high and still increasing unemployment this was favourable to constrain the pay pressure in enterprises, what connected with the lack of salaries valuation in the general government sector indicated continued improvement in inflation prospects for 2002. This was also confirmed by forecasts for situation development in the external environment of Polish economy, showing a little probability of external inflation impulse occurrence.

The slackening growth of lending, both to corporates and to persons, was also a premise to ease the monetary policy restrictiveness. Annual growth rate for corporate loans went down from 13.5% in December 2000 and 6.5% in November 2001 to 5.0% in December last year, while the annual pace of personal borrowing growth fell in this period from 31.7% and 16.1% to 14.6%, respectively.

The January MPC decision constituted another step in the process of monetary policy easing. This process, initiated in February 2001, led to a deep slump in nominal interest rates. In the period January 2001 – January 2002 the reference rate was reduced altogether by 900 b.p., and the lombard and rediscount rates by 950 b.p. Such a significant cut contributed also to a fall in real interest rates. For example, real interest rates for one-year corporate loans went down by 270 b.p. in the period March 2001 – March 2002. In the same period real personal zloty deposit interest rates declined by 370 b.p., and after considering the tax on income from savings this decline stood at 500 b.p. The easing of monetary policy in 2001 and in Q1, 2002 resulted in the March 2002 level of real interest rate coming close to that of 1999, i.e. from the period preceding the implementation of restrictive stance in the monetary policy by the MPC.

The easing of monetary policy in the first quarter of the year was also reflected in the lowering of the Monetary Conditions Index (MCI) value, which takes into account real interest rates and real effective exchange rate. In March 2002 this index reached a level close to that seen in January 2000.

Monetary policy instruments

In the first quarter of 2002 the National Bank of Poland continues activities aimed at making Polish system of monetary policy instruments closer to the Eurosystem standards. That complied with a long-term direction of changes in operating procedures of monetary policy. To this end the

principles and method of calculation and holding by banks the required reserves²⁶ and the open market operations system²⁷ were modified.

The changes carried out resulted in a requirement imposed on banks to hold the required reserves on current accounts at full amount. A possibility to hold up to 10% of the required reserve in the form of declared vault cash was cancelled. At the same time the reserve requirement ratio was reduced from 5% to 4.5% for all deposit types (zloty and foreign currency, demand and time). The changes made were neutral for banks in view of their reserve requirement burden. They also did not impact the NBP earnings. Banks are required to continue holding cash stocks almost three times higher than the hitherto declared level to secure current cash payments. At the same time the amount of the reserve held on current accounts and required reserve accounts was not subject to major changes.

The desire to eliminate occurring incidental liquidity disturbances was the reason for changes in the open market operations system. To this end regular (once a week – on Friday²⁸) issues of money-market bills of 28-day maturity have been introduced. The regularity of basic open market operations conduct should stimulate the development of inter-bank market and contribute to the improvement of liquidity management by commercial banks. On days between regular NBP operations the commercial banks will be forced to close occurring liquidity gaps²⁹, through the performance of operations in the inter-bank market.

The introduction of regular open market operations required broadening NBP instruments by carried ad hoc (without determination of regular dates) fine-tuning operations, such as:

- issuance of NBP money-market bills of 1 to 7-day maturity,
- “repo” type transactions, i.e. supplying the banking system with liquidity by purchasing from banks (through tenders) Treasury securities for periods from 1 to 7 days,
- redemption of NBP money-market bills before their maturity.

The moderation of the effect of changes in liquidity situation on market interest rates should be the basic objective of fine-tuning operations. These operations yield (like for basic operations) cannot be lower than the reference rate level set by the Monetary Policy Council. Fine-tuning operations should be used in exceptional situations, when the NBP deposit-credit operations available to the banks – according to the central bank assessment – are insufficient to eliminate liquidity disturbances.

Liquidity disturbances occurring in Q1, 2002 resulted from irregular maturities of money-market bills issued previously by the NBP and from the necessity to adjust to the new system by banks. Despite that the scale of liquidity disturbances was moderate to the extent that there was no need to use fine-tuning operations by the NBP.

6.2. M3 money supply³⁰

As of March 2002 end M3 money supply amounted to 319.4bn zloty and as against December 2001 end went down by 6.8bn zloty (-2.1%). However, its annual growth rate in nominal terms at the end of March 2002 stood at 3.5%, while in real terms at 0.2%.

The analysis of individual months of Q1, 2002 shows that if M3 money supply in January and February was developing in accordance to trends seen in previous years, then in March

²⁶ Principles and method of calculation and holding by banks the required reserves are regulated now by MPC Resolution No 10/2001 of 19th December 2001 (Dz.Urz. NBP No 23/2001, item 48) and NBP Management Board Resolution No 64/2001 of 21st December 2001 (Dz.Urz. NBP No 23/2001, item 50). These resolutions were for the first time applicable to the required reserves subject to holding starting from 28th February 2002.

²⁷ Resolution No 1/2002 of the Monetary Policy Council of 29th January 2002 on procedures applicable to open market operations (Dz.Urz. NBP No 2/2002, item 2).

²⁸ If Friday is a holiday another day is determined and banks are notified of that at appropriate notice.

²⁹ That is to place surpluses or cover shortages of funds.

³⁰ See “M3 definition”.

movements in individual counterparts to changes in money stocks differed from seasonal trends so far.

Total M3 money supply declined in March this year by 3.7bn zloty, i.e. 1.1% (as against a 1.9% rise a year earlier), of which deposits and other liabilities narrowed by 4.7bn zloty (as compared with 1.7% growth a year before). The falls were seen for corporate deposits, non-monetary financial institutions and non-commercial institutions operating for households. To a large extent the resulted from reallocation of funds from bank accounts to other financial assets, inter alia to Treasury bills and bonds.

M3 DEFINITION

Starting from the data as of March 2002 end the National Bank of Poland has replaced the M2 measure used so far by a new measure M3, the definition of which has been adjusted to standards in force in countries associated within the European System of Central Banks. Principles of entities' sectoral classification also comply with European standards (ESA95).

Instruments (deposits and debt securities) of original maturity above 2 years have been excluded from the money supply. The "deposits" category will include demand deposits and time deposits of maturity up to and equal 2 years and so-called deposits "on hold". In addition, funds deposited at banks by self-government institutions and social security funds – included so far in the net general government debt – have been included in the money supply. Apart from notes and coin in circulation and deposits, M3 money includes also debt securities of original maturity up to and equal two years issued by banks and purchased by non-bank entities as well as banks liabilities on repurchase agreements made by banks with non-bank entities.

Counterparts to M3 money supply are presented now in a sectoral arrangement adjusted to European standards:

- **households** – entail the hitherto subsector "persons" as well as individual farmers and individual businessmen (sole traders) employing up to and 9 persons, included so far in "corporates",
- **non-monetary financial institutions** – currently non-bank financial institutions included hitherto in "corporates",
- **enterprises** – state and private enterprises and companies and also cooperatives, included so far in "corporates",
- **non-commercial institutions operating for households** – included hitherto in "corporates", comprise non-profit organisations, inter alia charity institutions, trade unions, scientific societies, political parties, churches, etc.,
- **self-government institutions** – include local self-government units (so far: "local budgets" and "special-purpose funds of local budgets") – operations carried out with them by the banking system were up to now included in the "net general government debt",
- **social security funds** – include ZUS and KRUS and managed by them funds and health trusts – these entities were included in "special-purpose funds of the National Budget (central government)" and in the "National Budget".

A decline in M3 money supply in the first quarter of 2002 stemmed from a drop in the deposits and other liabilities category by 7.5bn zloty, i.e. by 2.6%. The deepest slump in deposits in that period (down 8.4bn zloty, i.e. 5.4%) was witnessed by enterprises. Deposits of non-monetary financial institutions, social security funds and non-commercial institutions operating for households also shrank – altogether by about 5.3bn zloty. On the contrary, deposits of self-government institutions and households increased (by 1.9bn zloty and 4.3bn zloty, respectively). The rise in household deposits resulted solely from the increase in personal savings by 5.4bn zloty, at a fall in farmer and private businessmen deposits. Despite raised balance of personal deposits, year-on-year growth of this category continues to slacken and it went down from 5.6% in December 2001 to 2.2% in March this year.

The decrease in enterprises and non-monetary financial institutions deposits during Q1, 2002 resulted from deteriorating financial standing of economic operators in conditions of economic stagnation, and also from the change in their financial assets structure and increased share in them of Treasury securities (what could be proved by a huge interests of those entities in purchasing Treasury bills and bonds in the first quarter of the year). To the contrary, a worrying phenomenon of weakening growth of household deposits in the analysed period was related to a low pace of incomes rise and a diminishing profitability of funds placement at the banking system.

Notes and coin in circulation in the first quarter of 2002 increased by 0.6bn zloty, i.e. 1.5%. However, their annualised growth at March end slightly slackened but remained on a high level of 15.6%.

The rise in notes and coin in circulation was primarily connected with a fall in bank deposit rates and, following that, dwindling opportunity costs of holding cash stocks. The share of notes and coin in circulation in so-called narrow money – M1 aggregate – was increasing from Q1, 2001 onwards and at the end of March 2002 stood at 33.9%. However, the share of demand deposits in M1 was decreasing. That means that funds on current accounts were replaced with cash. At the same time the year-on-year growth of M1 aggregate in the first quarter of this year remained on a high level – over 10%.

Table 14
Money supply in Q1, 2002

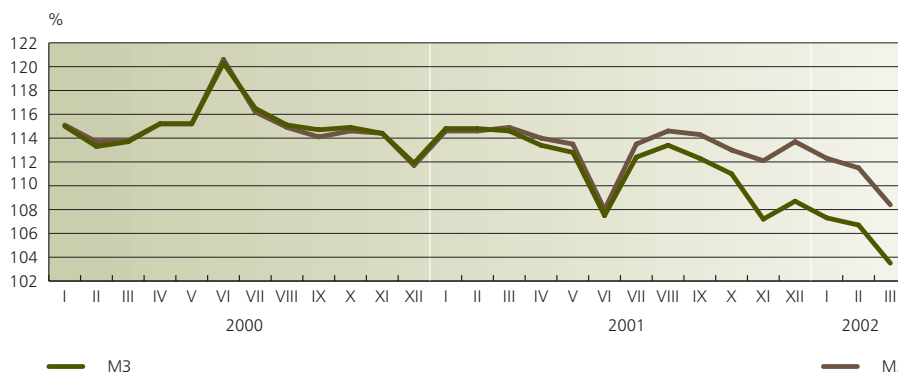
	Balance on	Change against		Change against	
	31 March 2002	31 March 2001	%	31 December 2001	%
	bn zloty	bn zloty	%	bn zloty	%
I. M1 money supply	114.5	12.1	11.8	-2.7	-2.3
II. M2 money supply					
(acc. to old definition)	326.4	25.4	8.4	-8.4	-2.5
III. Total M3 money supply	319.4	10.8	3.5	-6.8	-2.1
1. Cash stocks (excluding vault cash)	38.8	5.2	15.6	0.6	1.5
2. Zloty deposits and other liabilities	280.2	5.5	2.0	-7.5	-2.6
2.1 Households	207.7	6.5	3.2	4.3	2.1
2.2 Non-monetary financial institutions	5.8	-1.1	-15.5	-3.1	-35.1
2.3 Enterprises	46.2	2.0	4.5	-8.4	-15.4
2.4 Non-commercial institutions operating for households	8.9	-0.3	-2.8	-0.9	-9.0
2.5 Self-government institutions	9.6	-0.1	-1.4	1.9	24.5
2.6 Social security funds	2.0	-1.5	-41.7	-1.2	-36.8
3. Other counterparts to M3	0.4	-0.04	-10.0	0.1	30.3

Source: NBP figures.

The comparison of M2 (acc. to the old definition) and M3 money supply measures shows that they feature a similar downward trend (Figure 29). A clearly lower M3 than M2 level seen since November last year was the consequence of published then announcement on taxation of bank deposit interests. This caused that more than 10bn zloty was placed on deposits of original maturity over 2 years, not included in M3. The balance of over 2-year zloty deposits, after a slight decline in January 2002, in February and March continued at around 13.5bn zloty, and the balance of over 2-year foreign currency deposits at March 2002 end amounted to approx. 1.5bn zloty.

Figure 29

Total money supply growth, nominal terms (corresponding month previous year = 100)



Source: NBP figures.

The analysis of the basic component of M3 money supply, i.e. deposits and other liabilities category, shows its structure to be stable in long term. Household deposits – around 71% (of which persons – 99%) and enterprises deposits – about 19% make primary contributions. The share of the other four items totals approx. 10%. Annual growth of deposits and other liabilities, as well as of most of their components, was showing a lowering trend in Q1, 2002.

The analysis of monetary processes indicates that two unfavourable trends continued in the first quarter of 2002. Firstly, the twelve-month growth of notes and coin in circulation remained high. Increasing cash stocks were connected, as previously mentioned, with decreasing interest on bank deposits and following that diminishing opportunity costs of holding cash stocks (Figure 30).

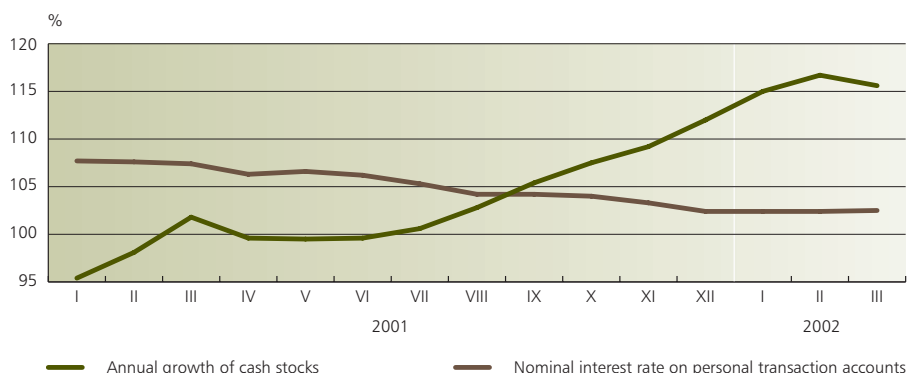
Secondly, a downward trend of personal deposits at the banking system growth continued. The drop in those deposits growth resulted on the one hand from a lower interest on time deposits,

Table 15

**Deposits and other liabilities growth, nominal terms
(corresponding period previous year = 100)**

Period	Deposits and other liabilities						
	total	households	non-monetary financial institutions	enterprises	non-commercial institutions operating for households	self- -government institutions	social security funds
XII 2001	108.3	106.4	120.8	116.7	109.9	98.7	88.5
I 2002	106.4	105.9	88.7	116.0	110.5	96.0	70.5
II 2002	105.5	104.6	96.5	114.2	112.5	96.5	75.7
III 2002	102.0	103.2	84.5	104.5	97.2	98.6	58.3

Source: NBP figures.

Figure 30**Cash stocks growth vs. personal transaction accounts interest rate, nominal terms**

Source: NBP figures.

Figure 31**Personal deposits growth vs. time-deposit rate, nominal terms**

Source: NBP figures.

additionally reduced by the 20% tax on bank interest income charged as of 1st March 2002 (Figure 31), and on the other hand – from a slow pace of households income growth connected with a low level of economic activity.

Low level of disposable income of households, combined with the tax on income from money holdings introduced in March this year, may cause further decline in the propensity for saving, increase in the demand for cash and the orientation towards a rise in consumption, and in consequence – the appearance of inflation pressure.

Counterparts to changes in money stocks

The first quarter of 2002 saw a drop in the money supply growth and the structure of its creation has substantially changed as compared with a similar period previous year. Only net foreign assets were creating the money in the period considered, while the net central government institutions debt, and the balance of other items (net) and of claims were driving it down.

Net foreign assets³¹ of the banking system in the first quarter of the year went up by 3.2% to reach the value of 139.0bn zloty at the end of March 2002. This stemmed from the rise in

³¹ Net foreign assets of the banking system comprise foreign assets (official reserve assets and other foreign assets) administered by the NBP and foreign assets of commercial banks less foreign liabilities of the NBP and of commercial banks to non-residents, denominated in foreign currencies and in the zloty.

Table 16

Counterparts to changes in money stocks

	2001		2002	
	Change in Q1 as against previous year end, bn zloty	% share in change	Change in Q1 as against previous year end, bn zloty	% share in change
Total money supply	8.4	100.0	-6.8	100.0
Net foreign assets	5.0	59.6	4.4	-64.3
Claims	3.9	45.8	-0.8	11.3
Net central government				
institutions debt	-2.8	-33.7	-6.0	88.5
Other items net	2.4	28.3	-4.4	64.5

Source: NBP figures – Banking Statistical Information.

foreign assets (by 3.0%, to 177.8bn zloty) and the decline in foreign liabilities (by 2.4%, to 38.8bn zloty) at the same time. As expressed in dollar terms, the net foreign assets at the end of Q1, 2002 stood at USD 33.7bn, i.e. fell during the quarter by USD 0.1bn.

In the first quarter of the current year the contribution of net foreign assets of commercial banks to the net foreign assets of the banking system narrowed from 22.9% at the end of Q4, 2001 to 20.8%. The value of net foreign assets of commercial banks decreased by 6.2%, to reach 28.9bn zloty.

Net foreign assets of the NBP at the end of the first quarter of 2002 equalled 110.2bn zloty, what marked a 6.2% increase as compared to the value at Q4 end, 2001. Official reserve assets, constituting the main part of NBP net foreign assets, as expressed in zloty terms, grew in this period by 12.2% to 111.8bn zloty, what was the equivalent of USD 27.1bn (rise by USD 0.5bn). Movements in those figures were primarily driven by the following factors: change in the balance of transactions carried out by the government and other entities on accounts with the NBP, including mainly funds originating from the issuance of Euro-bonds in foreign markets transferred in March 2002 to the Ministry of Finance account with the NBP, change in the foreign exchange differences and changes in gold and securities valuation.

At the end of March this year the **net central government institutions debt** to the banking system reached the level of 62.5bn zloty, i.e. went down by 6bn zloty as against December 2001. The decline in the net debt in Q1 is typical, however this year this decline was much deeper (8.8%) than in the corresponding period of the previous year (5%).

The reduction in the net debt in Q1, 2002 was the resultant of:

- significant rise (by 10.9bn zloty, i.e. 79%) in central government funds on bank accounts, expressed both in zloty and in foreign currencies,
- increase in claims – by 4.9bn zloty (5.9%) – on loans and debt securities.

The current financial position of the central government and sources of funding its borrowing needs had a decisive influence on the fall in the net debt in the first quarter of the year. Although in the discussed period these needs were very high, there were no problems in their financing. As the attractiveness of investing in Treasury securities remained high, the demand for them in Q1 more than doubled their anyhow very high supply. In conditions of small privatisation revenues (0.7bn zloty, i.e. approx. 10% of the annual plan) a high volume of Treasury securities issue allowed to ensure in the first quarter sufficient funds for current and future central government needs in the form of deposits.

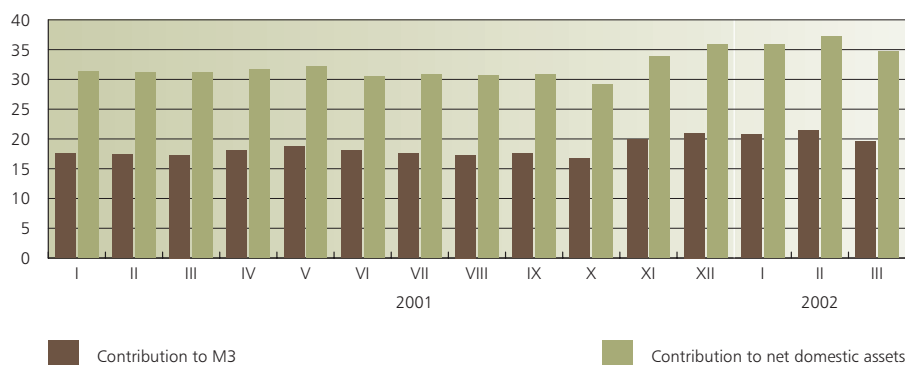
The issue of 10-year euro-bonds made in February 2002 in foreign markets was another source of funds financing the central government obligations. The face value of the issue equalled 750m euro and their yield stood at 5.73% and was 75 b.p. higher than the yield on German bonds of similar maturity. The proceeds of euro-bonds sales supplied the currency account of the Ministry of Finance in March 2002 with the aim to service foreign liabilities of the central government.

The net central government institutions debt decline at the end of March this year reversed the upward trend of this category initiated in October last year. However, its annual growth remained high and in March 2002 amounted to 17.1% as against 22.0% in December 2001 and -13.1% in March 2001.

As a result the importance of net central government institutions debt as a counterpart to changes in money stocks waned in the first quarter of the year as against the previous quarter. However, as compared to the corresponding period of last year its role in the money supply development was clearly higher (Figure 32).

Figure 32

**Net central government institutions debt contribution to money supply (M3)
and to net domestic assets**



Source: NBP figures.

In the first quarter of 2002 the negative **balance on other items (net)** went up by 4.4bn zloty, i.e. 4.0%, and at March end stood at -113.5bn zloty.

Other assets (net) at the NBP had a decisive impact on the scale and direction of the change in this category. During Q1, 2002 the liability *balance on other assets (net) at the NBP* expanded by 3.9bn zloty, i.e. by 15.3%. This increase was mainly driven by the rise in the balance on the "currency translation reserve" resulting from translation gains on the revaluation of foreign currency assets and liabilities due to the zloty depreciation. Movements in *other assets (net) at the NBP*, connected with memorandum entries on "currency ... reserve" accounts did not affect the total money supply in the first quarter, as they resulted neither in creation of money stocks, nor in their absorption.

At March 2002 end **claims** (on households, non-financial sector and self-government institutions sector, and social security funds)³² constituted 72.4% of total money supply in the banking system, against 69.6% a year before. The fall in claims in the first quarter of the year as compared with Q4, 2001 stemmed from contracted claims on enterprises, non-monetary financial institutions and non-commercial institutions operating for households, at a simultaneous growth of claims on households, self-government institutions and social security funds.

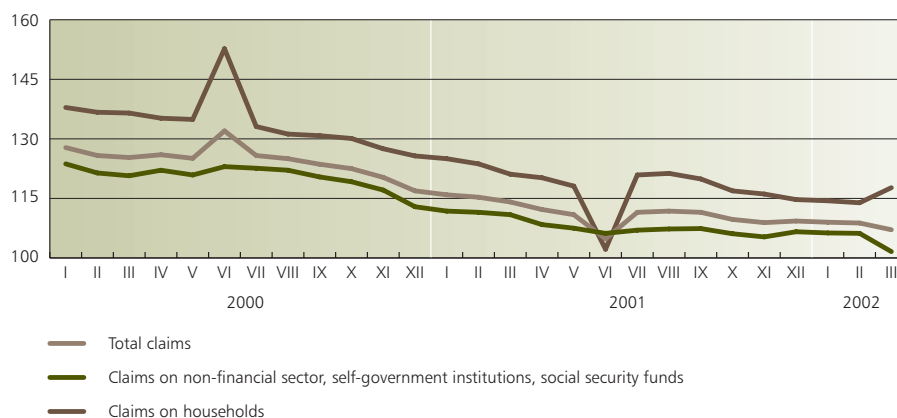
³² The claims comprise claims on households, non-monetary financial institutions, enterprises, non-commercial institutions operating for households, self-government institutions, social security funds. They include all categories of loans and advances, purchased debts, performed guarantees and endorsements, accrued and non-paid interest, claims on securities purchased under repurchase agreements, debt securities and other claims. These claims do not include equity securities.

The share of claims on households³³ in the total claims at the end of March this year equalled 26.9% (23.5% a year ago), on non-financial sector entities 42.3% (44.5% a year ago), and on self-government institutions and social security funds 3.2% (1.7% a year ago).

In nominal terms at the end of March 2002 claims grew by 7.1% as against corresponding period previous year, of which claims on households – by 17.7%, and on non-financial sector, self-government institutions and social security funds – by 1.6%. In consecutive months of the first quarter the annual growth of claims in nominal terms was systematically diminishing. In real terms³⁴ the year-on-year increase in claims at March end stood at 3.6% (7.5% a year before).

Figure 33

Claims growth, nominal terms (corresponding month previous year = 100)



Source: NBP figures.

6.3. Monetary policy transmission mechanisms

6.3.1. Interest rates

Monetary policy and inter-bank market rates

The development of the situation in the money market in Q1, 2002 was reflecting the belief being established among its participants that the cycle of interest rates cuts commenced by the NBP in February 2001 was gradually approaching the end. This was proven by clear changes in the position of the money market yield curve. This curve was visibly flattened and the interest rate per annum started to rise since mid-January (Figure 34 and 35). The spread between 12M and 3M rates narrowed from 122 basis points in January to 22 basis points at March end this year.

In the first quarter of the year sharpest falls in short-term interest rates occurred before the January meeting of the MPC, when market participants expected a significant cut in NBP interest rates. After the interest rates reduction on 30th January a downward trend of short-term interest rates was reversed due to occurrence of temporary shortage of liquidity in the banking system, which lasted till mid-February. Like in November 2001 the shortage of liquidity resulted from the previous speculative demand of banks for NBP money-market bills (Figure 36).

³³ The category of households is made of persons, individual farmers and individual businessmen (sole traders) employing up to and 9 persons.

³⁴ Having considered twelve-month consumer price index equal to 3.3%.

Figure 34
1, 3, 6, 12M WIBOR rates

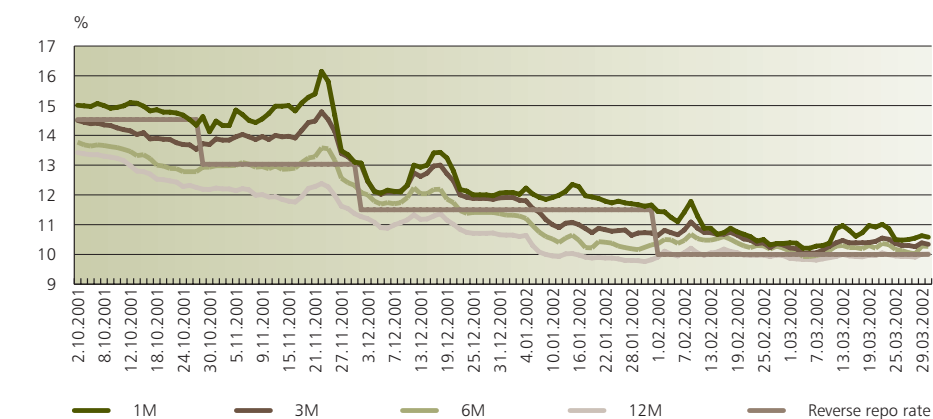


Figure 35
O/N rates vs. 1M WIBOR

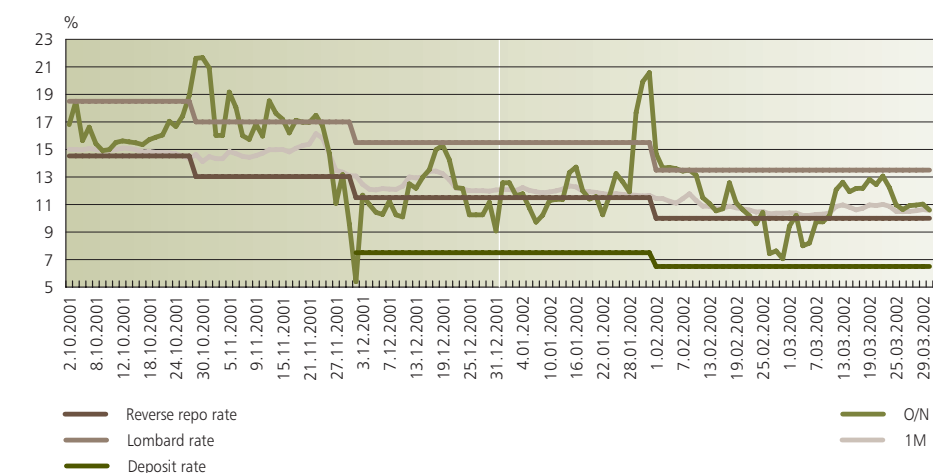
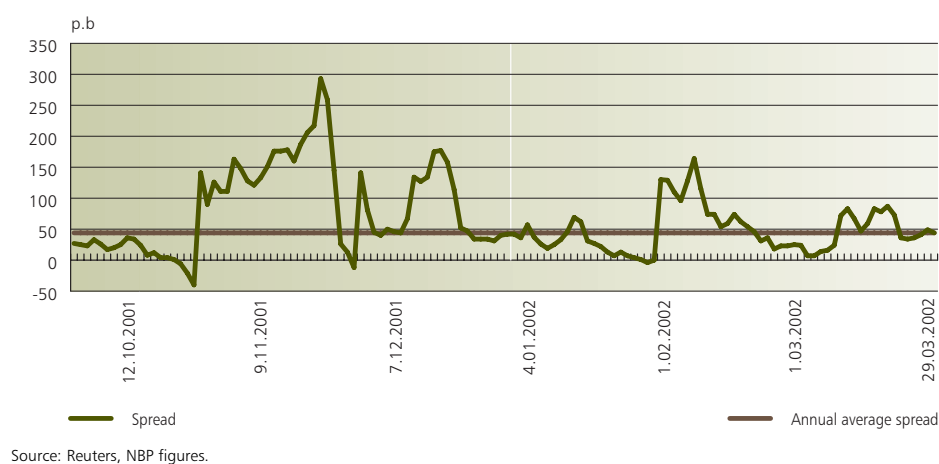


Figure 36
Spread, 1M WIBOR vs. NBP reverse repo rate (one-month basis)



At the beginning of March money market interest rates (except 12M WIBOR) reached the low in Q1, 2002, and then short-term interest rates gradually started growing, while 12M WIBOR reached the low (9.75%) at the end of January and then fluctuated around 10%.

Overall, in the first quarter of the current year the situation in the money market was similar to the situation in Q1, 1999, when the reduction in the reference rate by 250b.p. in February 1999 was also perceived as approaching the end of interest rate cuts started in 1998.

Commercial banks response to central bank policies

In the first quarter of 2002, responding to the January reduction in base NBP interest rates, commercial banks have substantially reduced the deposit and lending rates. Most banks implemented the first cuts in interest rates within two weeks since the announcement of the MPC decision. In February this year the deepest decline was seen in personal deposit and credit product rates, while March was dominated by cuts in corporate and personal lending rates³⁵.

The largest movements in the deposit market in February, both in respect of the reduction scale and of the adjustment speed, occurred for personal deposit rates. The average rate for 24-month deposits and one-month deposits slumped then most (down 130 b.p. and 120 b.p., respectively), while the interest rates on personal transaction accounts went down least (by 4 b.p.). At the same time the average rate on personal lending also considerably declined. Interest rates on personal consumer (cash) advances narrowed by 160 b.p., while average corporate lending rates shrank – depending on maturity – by 50–60 b.p.

In March 2002 banks lowered mainly the lending rates and the deposit rates changed only little. Personal consumer lending rates were cut more than the rates on corporate lending. If the average corporate lending rates lessened by approx. 50 b.p., then the rates on personal loans by 120 b.p.

Despite that substantial differences remained between lending rates for both groups of bank customers. Weighted average personal consumer rates in March this year exceeded corporate lending rates by 390 b.p. (in December 2001 – by 510 b.p.). This resulted from a different competitive position of both groups in the credit market. The position of corporates, which take larger loans than persons and therefore are capable to negotiate terms and conditions of loans individually, and in addition an alternative funding source in the form of short-term debt securities issuance³⁶ is available to some of them, is much stronger than that of persons.

Increasing differential between base interest rates at commercial banks and lending rates for corporates is being observed. Consequently, the trends of those rates developments are less and less reflected by their average values. For example, the analysis of interest rates of up to 1 year maturity distribution shows that their median fell from 15% in December 2001 to 11.9% in March 2002. In the same period the interest rates spread at the surveyed banks rose slightly: from 8.25 pct. points to 8.75 pct. points.

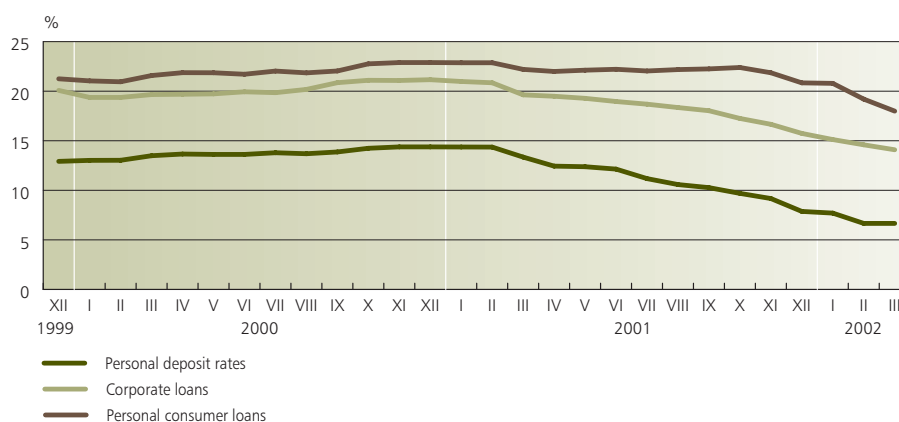
The NBP reference rate was reduced by 150 b.p. in the period considered. However, the cumulative cut in average personal time deposit rates stood at 120 b.p., in corporate loans by 165 b.p., and in personal consumer loans by 285 b.p.

In real terms weighted average personal time deposit rates went down in the first quarter of the year by 0.9 pct. point. The fact that in March 2002 this interest rate has slightly increased – for the first time since September 2002 – is noteworthy. That was the consequence of larger decline in inflation than in nominal interest rates in the period considered. However, real average corporate and personal consumer lending rates fell in the first quarter of the current year by 257 b.p. and 242 b.p., respectively.

³⁵ Movements in interest rates were analysed on the basis of data on interest rates submitted to the NBP by 11 largest commercial banks. Shares of those banks in the deposit or credit markets were taken as weights at the calculation of weighted average deposit and lending rates of those banks.

³⁶ The value of short-term corporate debt securities issue at the moment equals about 25% of the value of their short-term indebtedness at commercial banks.

Figure 37
Weighted average nominal time deposit and lending rates



Source: NBP figures.

Figure 38
Weighted average personal deposit and lending rates, real terms*



* Nominal personal deposit and lending rates were CPI deflated, and the corporate ones – PPI deflated.

Source: NBP figures.

Interest rates vs. demand for loans

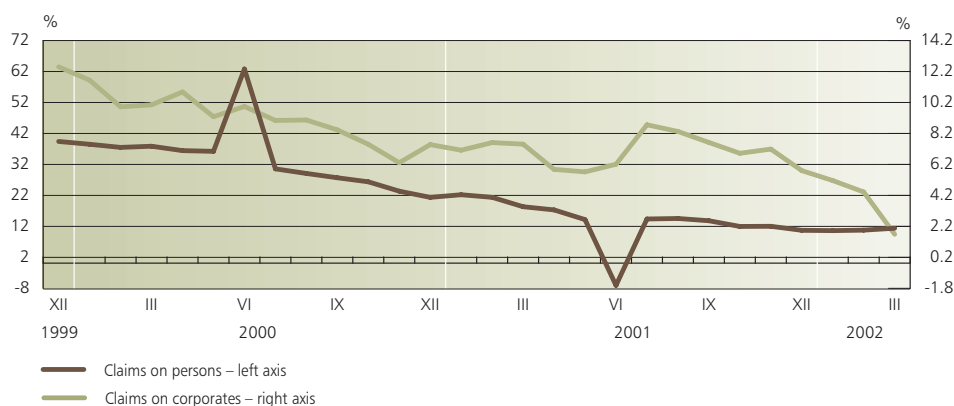
In the first quarter of 2002 the real growth rate of claims on persons and corporates³⁷ slackened. Contrary to previous quarters this resulted from a material drop in real growth of claims on corporates. The growth rate of claims on persons fell to the minimum in January and then started rising slightly (Figure 39).

Like in 2001, Q1 of this year saw a much weaker growth of persons demand for zloty loans than for foreign currency loans³⁸. Demand of persons was primarily directed towards foreign currency housing loans. "Other" foreign currency loans increased in February, too. Because of a

³⁷ Claims on persons comprise loans and advances, purchased debts as well as funds disbursed under guarantees and outstanding unpaid interest. Loans and advances constituted approx. 98% of claims on persons in 2001. Claims on corporates entail the aforementioned items and debt securities, repurchase agreements and so-called other items. In the first two months of 2002 loans and advances made up about 92% of claims on corporates. Claims on persons were CPI deflated, while claims on corporates – PPI deflated.

³⁸ Because of the change in the money definition which took effect in March 2002 and mistakes made by institutions submitting data to the NBP, so far we do not have reliable data on the time and currency structure of claims on persons and corporates.

Figure 39
Growth rate of claims on persons and corporates, real terms
(as against corresponding month previous year)



Source: NBP figures.

significant import of second-hand cars in that period, one may presume that they were intended to purchase them. The share of foreign currency loans in claims on corporates also grew in the first quarter of the current year.

In spite of reduction in zloty lending rates a substantial differential between zloty and foreign currency loans persisted. Questionnaire survey carried out by the NBP on a sample of more than 400 corporates³⁹ shows that it lessened from 11.8–12.7 pct. points in Q2, 2001 to 6.8–9.1 pct. points in Q1, 2002, depending on the loan maturity and the borrower's creditworthiness (when calculating this differential the expected movement in the exchange rate was neglected).

The continuing trend of zloty appreciation against the euro and the US dollar at a lower interest rate, despite periodical exchange rate fluctuations, was inducing to take foreign currency loans. The expectation that, in connection with the accession of Poland to the EU, and then to the ERM2, the foreign exchange risk will diminish cannot be excluded to be encouraging to take long-term foreign currency loans. The aforementioned survey of economic conditions shows that a significant part of corporates with outstanding foreign currency loans (nearly 69%) takes into account the danger of serious consequences of movements in the exchange rate. Corporates cover the foreign exchange risk first of all by export receipts and – to a much lesser extent – hedge this risk by purchasing appropriate financial instruments. Commercial banks offer a possibility to change the currency, in which the loan has been denominated, to personal customers.

Real growth of claims on corporates reached 1.7% in March this year and was 4.1 pct. points lower than in December last year. The studies on economic conditions show that the contribution of enterprises' own funds in financing the operations has risen. That applied primarily to capital expenditures and less to current activities.

Like in the previous quarter, the number of surveyed corporates specifying the interest rates level as a barrier to their development dwindled. However, at the same time corporates did not increase their indebtedness due to the lack of clear signals of economic recovery abroad, poor rise in domestic consumer demand and lessening degree of existing capacities utilisation.

The issuance of securities in the domestic and foreign market and foreign loans⁴⁰ are the source of external funding for corporates, apart from loans taken in the domestic market. The corporates indebtedness on the issuance of short-term securities at Q1 end amounted to 12,514.1m zloty and fell

³⁹ This sample is not fully representative and reflects only the situation in large domestic enterprises. Full analysis of questionnaire survey results is presented in the paper: "Koniunktura" ("Economic conditions"), NBP (www.nbp.pl/publikacje/koniunktura).

⁴⁰ When this Report goes to press the figures on foreign indebtedness in Q1, 2002 are not available.

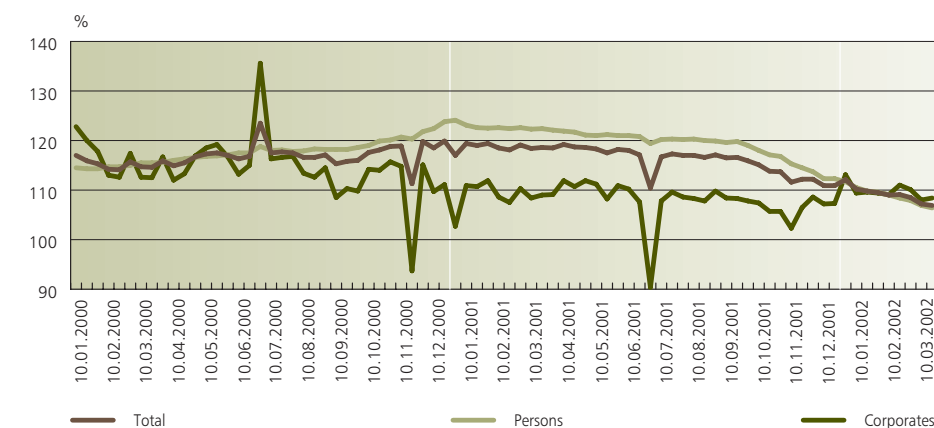
2.5% as compared with year end 2001, while against March 2001 it rose 8.6%. The indebtedness on issuance of securities of maturity exceeding one year at the end of the discussed quarter stood at 5,661.6m zloty, what meant a 17.5% slump as against previous year end. Compared to March 2001 their balance was 36.5% lower. The ratio of corporates indebtedness on short- and long-term securities to their indebtedness to the banking system shrank in the period by 1.9 pct. point and equalled 10.9%. It shall be emphasised that part of debt securities issued by enterprises – about 30% according to NBP figures – is held by commercial banks, i.e. they constitute claims on non-financial sector.

Interest rates impact on deposits

In the first quarter of 2002 the downward trend of household zloty deposits continued. As a result, despite the growth of corporate zloty deposits rising since November 2001 onwards, the growth of total zloty deposits of the non-financial sector was waning.

Figure 40

**Growth of non-financial sector zloty deposits, nominal terms
(as against corresponding month previous year)**



The growth of non-financial sector foreign currency deposits also eased in the first quarter of the current year, where the corporate deposits featured substantial fluctuations in this period.

Household deposits make up approx. 70% of non-financial sector bank deposits, denominated both in zloty and in foreign currencies. Hence trends in the household deposits market significantly affect the total of banks liabilities to the entire non-financial sector.

The cycle of cuts in base NBP interest rates and resulting reductions in deposit rates, initiated in February 2001, made bank deposits much less attractive. This trend was deepened by the tax on interest income, which took effect in March 2002. It increased the interest of the public in more profitable forms of savings placement. Consequently, the weakening growth of bank deposits was accompanied by a quick rise in investment funds assets – in Q1, 2002 by 1.6bn zloty, i.e. 14%. Further decline in real deposit rates may result in more profound changes in the savings structure of the public.

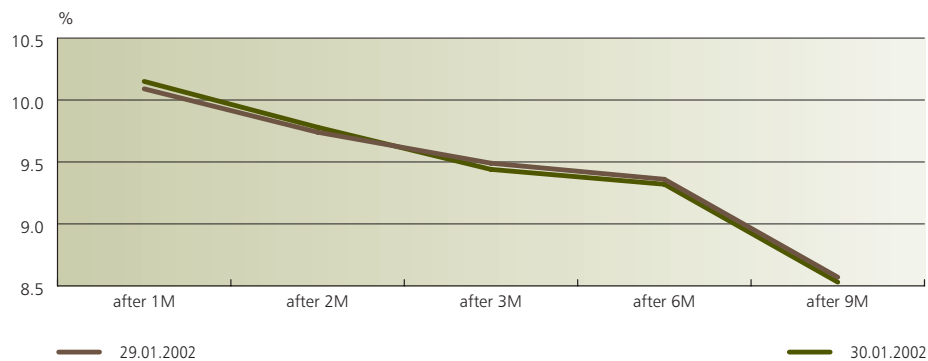
Interest rate expectations

Short-term expectations

After the January cut in NBP interest rates the curve of 3-month interest rates expected in the following months has slightly moved down in the time horizon above 3 months⁴¹. The fact that the

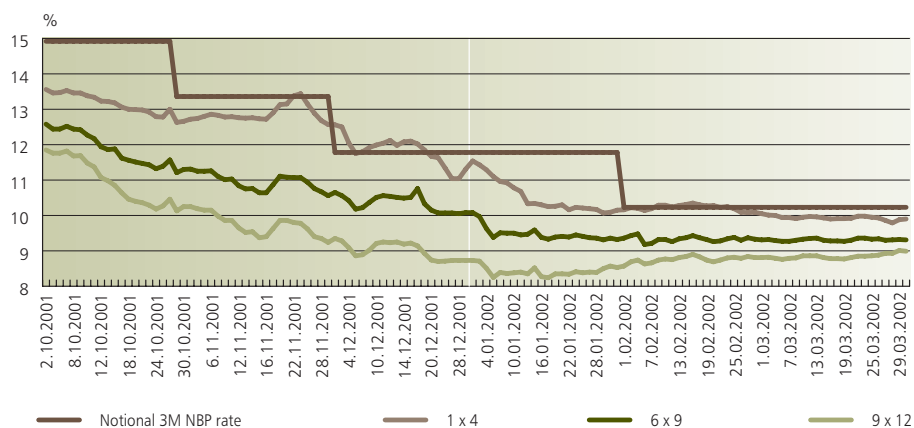
⁴¹ The curve is based on interest rates for FRAs written against 3M WIBOR (1x4, 2x5, 3x6, etc.), for which the settlement date is set in one-month time (1x4), in two months (2x5) and in three months (3x6) from the contract date.

Figure 41
Shift in 3-month forward interest rates after the MPC meeting
in January 2002



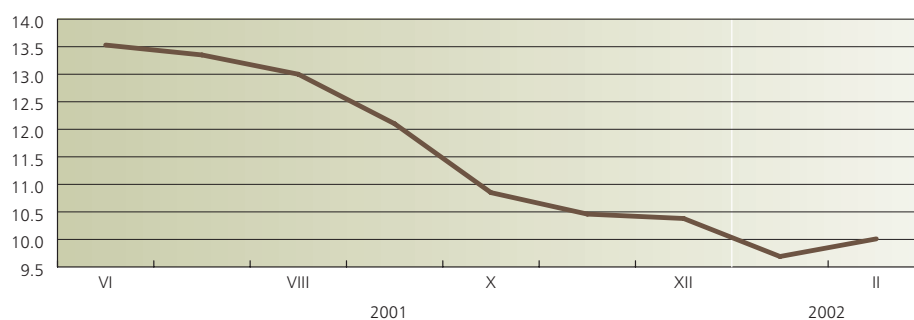
Source: NBP figures.

Figure 42
3M WIBOR FRAs



Source: NBP, Reuters figures.

Figure 43
Shift in the interest rate of FRAs maturing on 29th March 2002
(3M forward rate for 29th March 2002 in consecutive months)



Source: NBP figures.

Table 17**Change in the interest rate of 3M WIBOR FRAs maturing on 30th September 2002**

On	9x12	8x11	7x10	6x9
30.09.2002	8.64	8.55	8.89	9.04
	(28/12/2001)	(30/01/2002)	(27/02/2002)	(28/03/2002)

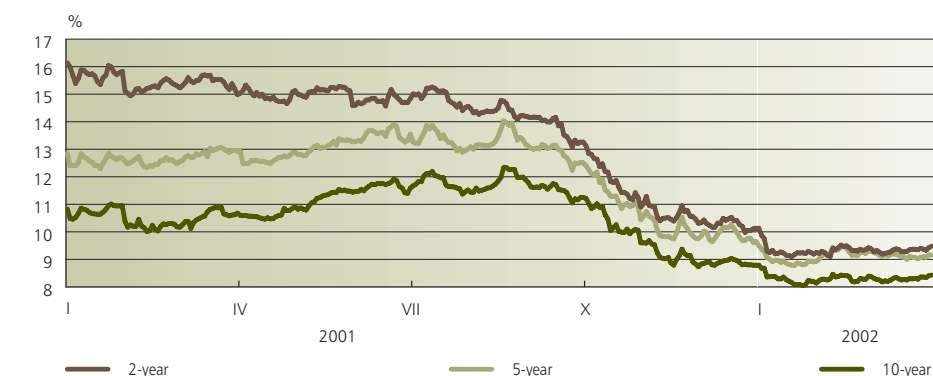
curve has not shown any substantial movement in its situation has proven that the time and scale of NBP rates cut were consistent with market expectations (Figure 41).

Before February and March MPC meetings the market expected relatively little change in the NBP rates. This was caused by a large scale of previous cuts and the conviction expressed by the MPC that they would bring positive effects. The expectations of rate cuts in a one-year horizon weakened sharpest. Between mid-January and March 2002 the interest for FRAs (9x12) rose by about 80 b.p., and in the last days of March – by another 20 b.p. (Figure 42).

As shown in Table 17, the strongest expectations of NBP rate reductions occurred in January, and then these expectations were gradually dwindling.

Long-term expectations

In the first quarter of the year also bond market players reduced their expectations of further interest rates reductions. The trend of declining bonds yield seen from August 2001 disappeared in mid-January 2002 (Figure 44). This change reflected the verification of previous market

Figure 44**Yields on 2, 5, 10-year bonds****Table 18****Scale of expected movement in annual interest rate based on the zero-coupon yield curve and IRS yield curve***

	In a year		2003 end	In two years		In five years	
	zero-coupon	IRS		zero-coupon	IRS	zero-coupon	IRS
	curve	curve	curve	curve	curve	curve	curve
31.12.2001	-255	-342	-318	-318	-303	-416	-362
15.01.2002	-334	-399	-377	-379	-355	-448	-366
29.03.2002	-139	-165	-179	-189	-176	-268	-239

* The scale of expected decline in annual interest rate on the basis of a zero-coupon curve (IRS curve) is calculated as the differential between the NBP reference rate on an annual basis and the level of one-year forward interest rate in a year time, determined on the basis of Svensson model (data from the IRS market).

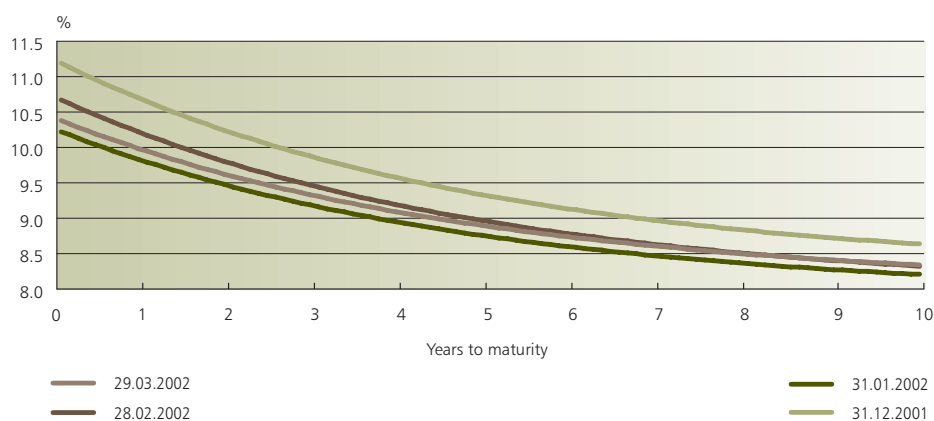
Source: Reuters, NBP figures.

expectations in respect of the length of interest rates cuts cycle initiated in February 2001. The scale of market expectations verification is shown in the following Table 18.

The cut in NBP rates, made on 30th January 2002, did not shift down the zero-coupon curve. This proves that the movement in NBP rates has already been discounted in bond prices.

With waning expectations of the continuation of interest rate reductions policy the investors' uncertainty increased. In consequence, the fluctuation of Treasury securities yield went up (Figure 44). Also the zero-coupon yield curve fluctuated (Figure 45).

Figure 45
Zero-coupon yield curve

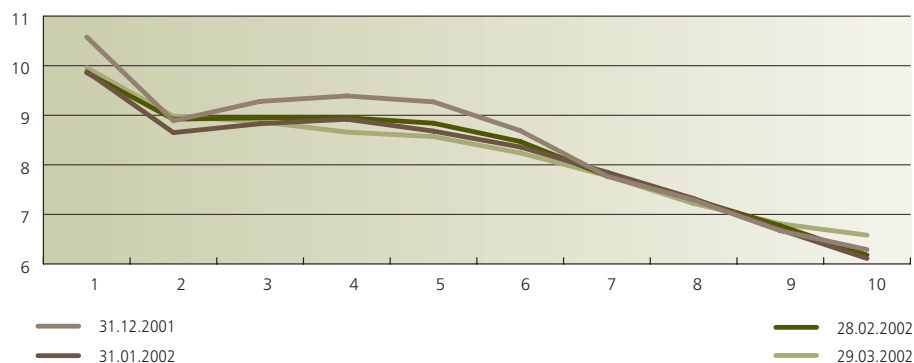


Source: Reuters, NBP figures.

In the situation, where expectations of the following cuts in interest rates were fading, investors' interest focused on the macroeconomic situation of Poland and on the information on Treasury bonds supply in consecutive tenders. The fears, persisting from Q2, 2001 onwards, that there would be a high increase in bonds supply resulting in a material fall in Treasury securities prices have not confirmed. The supply of Treasury bonds, offered in monthly tenders, has not exceeded previous analysts' forecasts. Moreover, it seems that investors positively perceived the consistence of the Ministry of Finance in pursuing the implementation of assumptions of public debt management strategy, including in particular the pursuit of systematic increase in issuance of securities enjoying the highest interest by offering swaps of outstanding securities.

The decreasing fears of effects of a higher bonds supply reflect changes that occurred in the first quarter of the current year in the middle segment of implied yield curve for one-year forward

Figure 46
Implied one-year forward rates based on IRS contracts



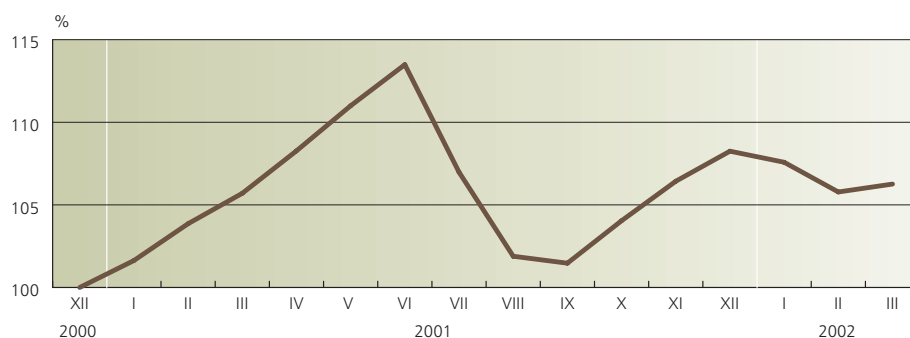
Source: Reuters, NBP figures.

rates, determined on the basis of IRS contracts (Figure 46). Positive slope of this curve, witnessed still at the end of December 2001, faded at February 2002 end. In March this year the middle section of the curve assumed a negative slope.

6.3.2. Zloty exchange rate

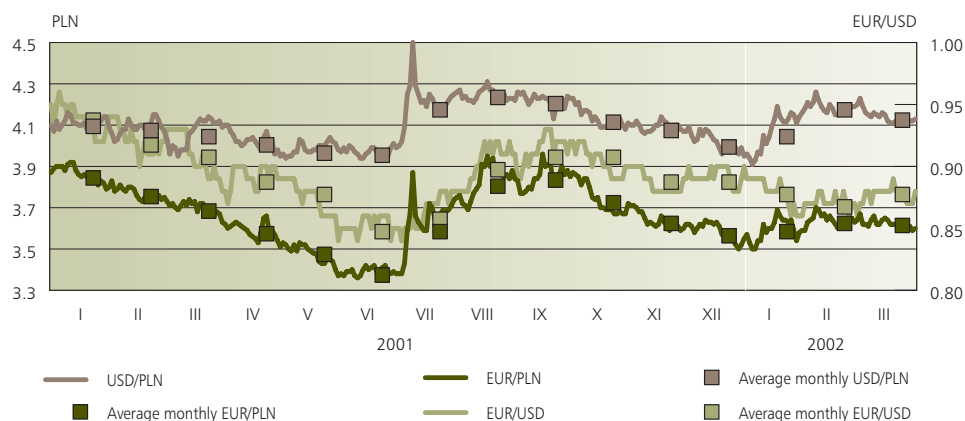
In the first quarter of 2002, in both nominal and real terms, the zloty depreciated in January and February, and in March it was back on the appreciation track. Consequently, the nominal effective zloty exchange rate against a basket of currencies of major Polish commercial partners remained close to the value of Q4, 2001 (Figure 47). In the first quarter of the year the zloty depreciated against the US dollar by 1.2%, while it appreciated 0.9% against the euro. This resulted from the euro depreciation in the global FOREX market. In the first quarter of 2002 the euro/dollar cross rate influence on the zloty against dollar exchange rate development strengthened⁴² (Figure 48).

Figure 47
Nominal effective zloty exchange rate, 2001–2002
(monthly figures; December 2000 = 100)



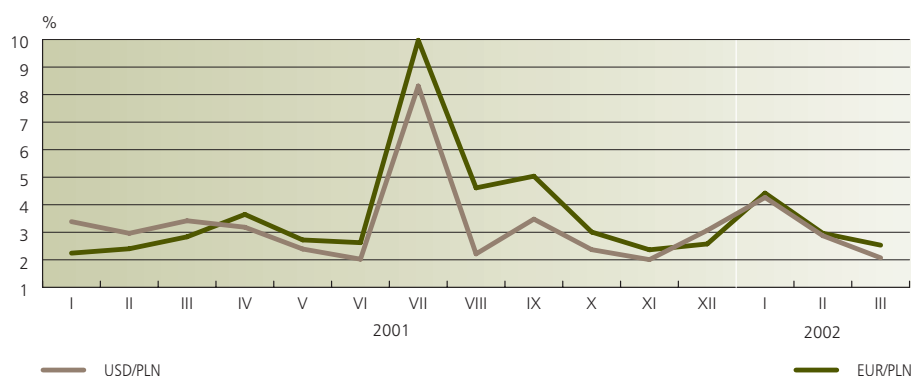
Source: NBP figures.

Figure 48
Zloty exchange rates vs. USD and EUR and the EUR/USD rates



Source: NBP figures.

⁴² In the first quarter of 2002 the correlation coefficient for the dollar / zloty and euro / dollar exchange rates amounted to -0.74 (against 0.47 in Q4, 2001), and for the euro / zloty relationship it equalled -0.40 (against 0.81 in Q4, 2001).

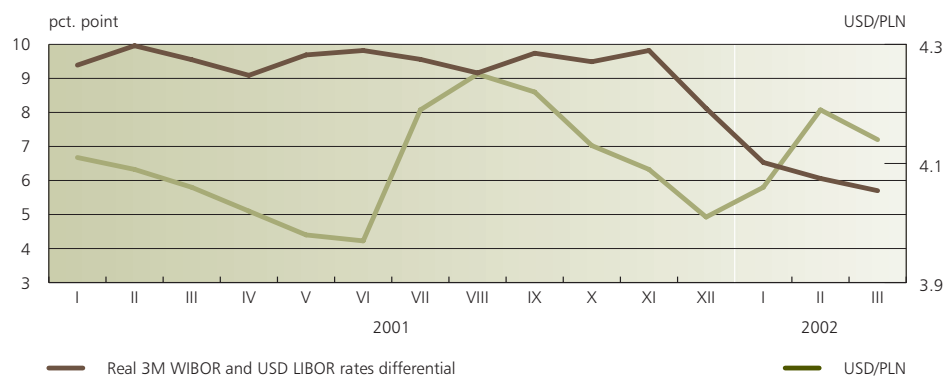
Figure 49**Volatility of zloty exchange rates against USD and EUR**

Source: NBP figures.

In all the first quarter of the current year the zloty exchange rate was relatively stable – its average volatility amounted to approx. 3% (as against about 3.5% last year) (Figure 49).

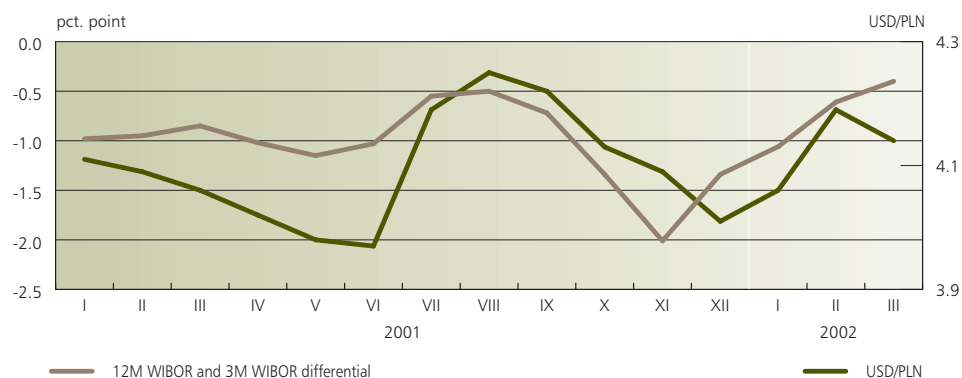
In Q1, 2002 the arrangement of factors affecting the zloty exchange rate changed as compared with the situation a year ago:

- Favourable movements in the real interest rates differential, started in December 2001, progressed (Figure 50). The reduction in interest rates in 2001 and in the first quarter of 2002 in Poland, while last year they were kept stable in the USA and in the euro area countries, made Polish securities to be already much less attractive. In the period reviewed market analysts were indicating an advantage in that respect of the Hungarian market after a substantial decline in the interest rates differential between Poland and Hungary.
- A series of interest rates cuts by the central bank resulted in waning expectations of the market for their further reductions (Figure 51). The maintenance of unchanged interest rates by major central banks was also not favourable to those expectations (Figure 52). However, the market opinion that the cycle of easing the monetary policy has not finished yet contributed to the zloty appreciation.
- However, a high supply of Polish Treasury securities was the strongest zloty-appreciating factor in this period. This was connected with seasonally increased borrowing needs of the central government at the lack of privatisation revenues. In the first quarter of the current year, as compared with the corresponding period previous year, the sales of Treasury securities saw a

Figure 50**Real interest rates differential vs. the zloty exchange rate**

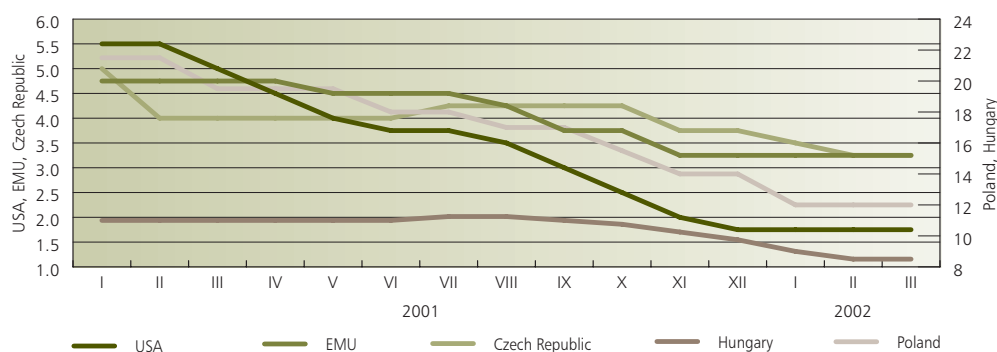
Source: Reuters, NBP figures.

Figure 51
Expectations of interest rates cuts vs. zloty exchange rate



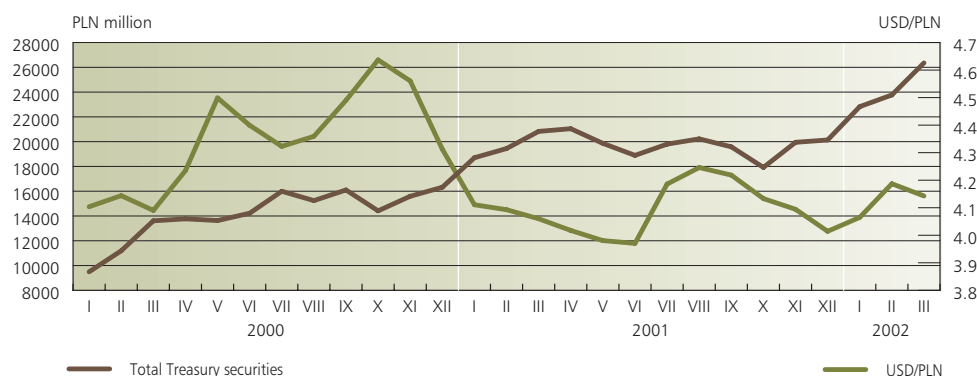
Source: NBP calculations.

Figure 52
Official interest rates



Source: Bloomberg figures.

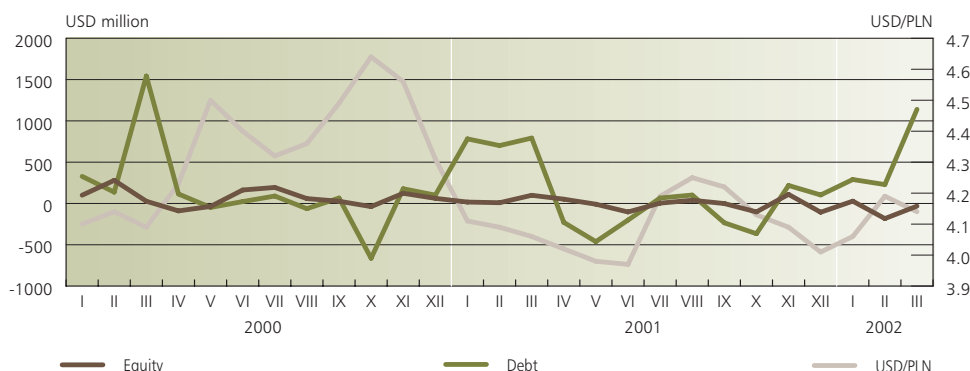
Figure 53
Treasury securities portfolio held by non-residents



Source: NBP figures.

sharp rise of 40%, of which primarily bonds, while their portfolios held by non-residents rose on average by 24% (Figure 53). This phenomenon was reflected in the balance of payments statistics (Figure 54, cf. section Foreign trade, the balance of payments).

Figure 54
Foreign portfolio investment



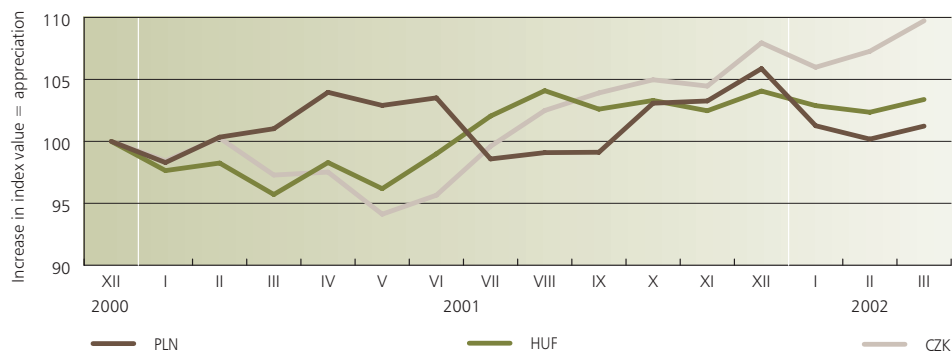
Source: NBP figures.

- The zloty exchange rate was also periodically influenced by political factors, which in the discussed period were conducive primarily to the zloty depreciation. Attacks on the MPC intensified in the first quarter of the year, intended to restrict the central bank independence. Repeated verbal interventions, mainly by the Ministry of Finance, aimed at weakening the zloty exchange rate were also strongly marked. Their impact on the zloty, albeit short term, complied with the expectations.

External events, including the financial crisis in Argentina escalation, had no material influence on the zloty exchange rate in the first quarter of 2002.

The comparison of real exchange rates of currencies of selected countries from our region, EU candidates, shows that Polish currency was the least appreciating one in this period (Figures 55 and 56).

Figure 55
Real PLN, HUF and CZK vs. USD exchange rates (PPI deflated; December 2000 = 100)

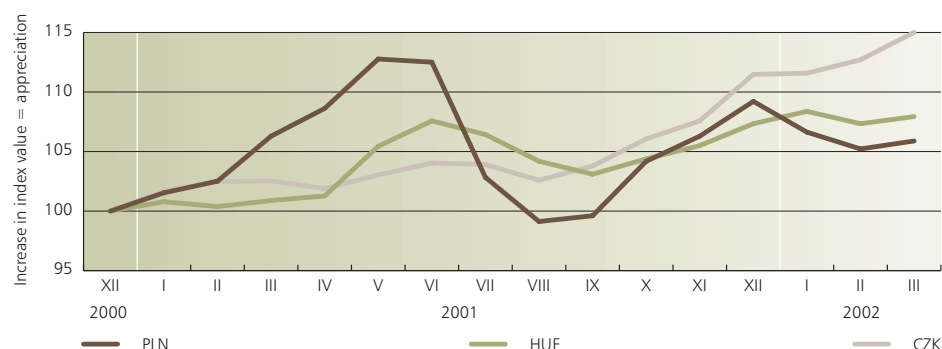


Source: NBP figures.

In 2001 the **statistical pass-through** coefficient estimated for the nominal effective zloty exchange rate amounted to minus 0.45 (-0.53 in 2000)⁴³. This means that **external factors and the appreciation of the nominal effective zloty exchange rate** together reduced the CPI in 2001, December-on-December, by 2.2 pct. points.

On the other hand, the overall impact of external factors and the exchange rate on the CPI calculated from a recurrent VAR model identifying time lags existing between these variables reduced the CPI in 2001 by 1.6 pct. points, at the full pass-through coefficient equal 0.33 – close to the imports penetration ratio.

⁴³ See *Inflation Report 2001*.

Figure 56**Real PLN, HUF and CZK vs. EUR exchange rates (PPI deflated; December 2000 = 100)**

Source: NBP figures.

The difference between the statistical pass-through coefficient and the coefficient calculated analytically (considering time lags) stands at minus 0.6 pct. point and may be interpreted as the potential CPI decline carried over to 2002.

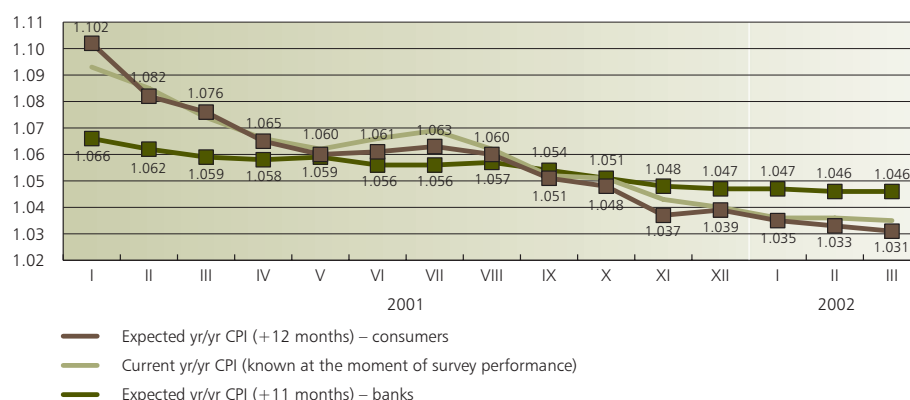
No movements in the nominal effective zloty exchange rate were observed in the first quarter of 2002 as against Q4, 2001. However, taking into account time lags in price response to the exchange rate movements, the zloty appreciation in the fourth quarter of the previous year by 2.7% resulted in a CPI decline by nearly 0.3 pct. points in the first quarter of 2002. The pass-through coefficient for external prices was lower and amounted to minus 0.1 pct. point.

So it may be estimated that:

- 2/3 (0.4 pct. point) of the CPI potential decline carried over to 2002 were realised in the first quarter of the year;
- at the neutral behaviour of the zloty exchange rate and external prices, the inflation in Q1, 2002 would have been approx. 0.1 pct. point higher than at the end of December 2001.

6.3.3. Inflation expectations

The development of consumer and bank analysts' inflation expectations in the first quarter of the year should be considered favourable from the inflation prospects point of view.

Figure 57**Inflation expectations of consumers and bank analysts, 2001 & Q1, 2002**

Inflation expectations of consumers and bank analysts are not fully comparable due to a different time horizon: bank analysts declare their forecasts for the month preceding the corresponding month of the next year, while consumers for the corresponding month of the next year. In addition, it is necessary to consider the fact that consumer inflation expectations are objectified, i.e. quantified assuming that respondents perceive the course of price developments through the official inflation statistics (more information on this subject is provided in the *Inflation Report 2001*).
Source: Reuters, GUS, NBP calculations based on Ipsos-Demoskop figures.

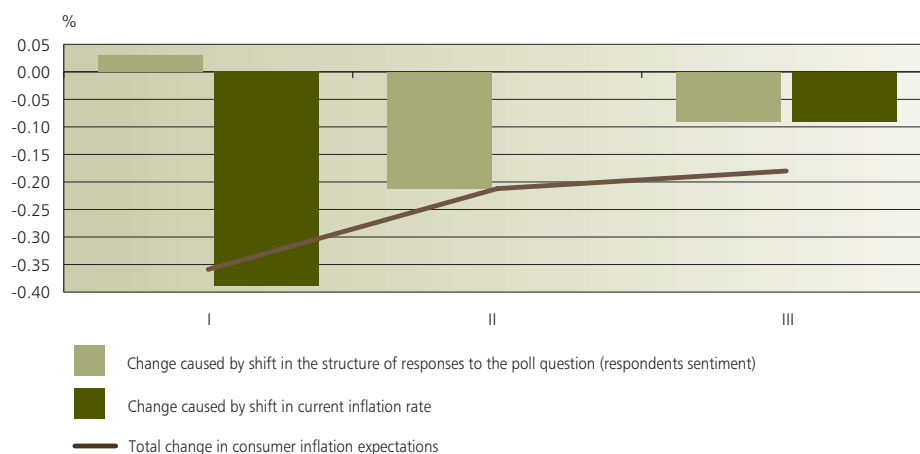
Consumer inflation expectations

In the first quarter of 2002 the objectified measure of consumer inflation expectations narrowed overall by 0.8 pct. point (against December 2001). This measure is quantified using a probabilistic method based on data obtained from the Ipsos-Demoskop poll⁴⁴. The quantifying method takes into account both the structure of responses to this poll question as well as the current inflation rate, to which the respondents refer their predictions for the future, replying to the posed question⁴⁵. Results of the quantification constitute an objectified measure of consumer expectations of the price rises in the nearest 12 months in this sense, that the official inflation measure calculated by the GUS is taken as the current inflation rate, known to the respondents at the moment of replying to the poll questions. As the poll is carried out in the first half of each month, i.e. prior to the announcement by GUS of inflation indices for the previous month, the year-on-year inflation rate two month before is taken as the current inflation rate.

The decline in consumer inflation expectations in Q1, 2002 was driven at around 60% by the drop in the current inflation rate and at around 40% by shifts in the structure of responses to the poll. Figure 58 presents the outcome of monthly movements in the quantified measure of consumer inflation expectations decomposition into selected components. If in January 2002 the expression of inflation expectations slightly deteriorated and the decline in their level could be contributed on the whole to the fall in the current inflation rate, then the lessened consumer inflation expectations in February reflected in total the improvement in expectations expression, illustrated by shifts in the structure of responses to the poll question. In March this year the decline in consumer inflation expectations resulted roughly to the same extent from the fall in the current inflation rate and from the improvement in the structure of responses to the poll question.

When analysing the structure of responses to the Ipsos-Demoskop poll question in the first quarter of 2002, the continuation of positive trends in 2001 should be emphasised. Further improvement in the expression of consumer inflation expectations is proven, *inter alia*, by the sudden slump in the percentage of most pessimistic respondents predicting that during the nearest 12 months prices will rise faster than at present, and at parallel peak in the poll history of the

Figure 58
Decompositions of changes in consumer inflation expectations, Q1, 2002



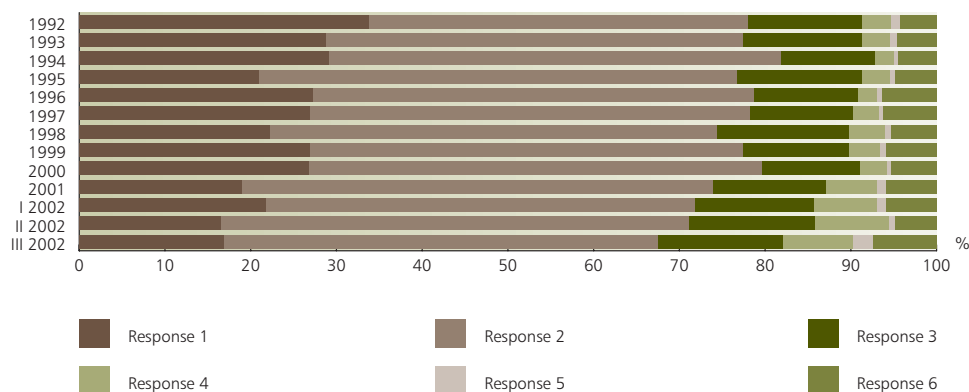
Source: NBP calculations based on GUS, Ipsos-Demoskop figures.

⁴⁴ Adjusted Carlson and Parkin method (1975) is used. Its description is presented in: T. Łyziak: *Badanie oczekiwań inflacyjnych podmiotów indywidualnych na podstawie badań jakościowych* (Studies on consumer inflation expectations using qualitative surveys). "Bank i Kredyt" No 6/2000. Current information on consumer inflation expectations is given on the National Bank of Poland website: www.nbp.pl, in the section: Statistics/Time series.

⁴⁵ The question of the Ipsos-Demoskop poll is worded as follows: "Having regard to what is happening now, do you believe that over the next 12 months prices will: (1) rise faster than at present; (2) rise at the same pace; (3) rise at a slower pace; (4) stay at their current level; (5) go down; (6) difficult to say".

Figure 59

Structure of responses to the Demoskop/Ipsos-Demoskop question, 1992–2001, and Q1, 2002.



Source: Ipsos-Demoskop, NBP calculations.

fraction of poll respondents predicting that in a year time prices will stay at the present level. Then in March 2002 the largest percentage of poll respondents in its history declared that prices in a year time would be lower than now.

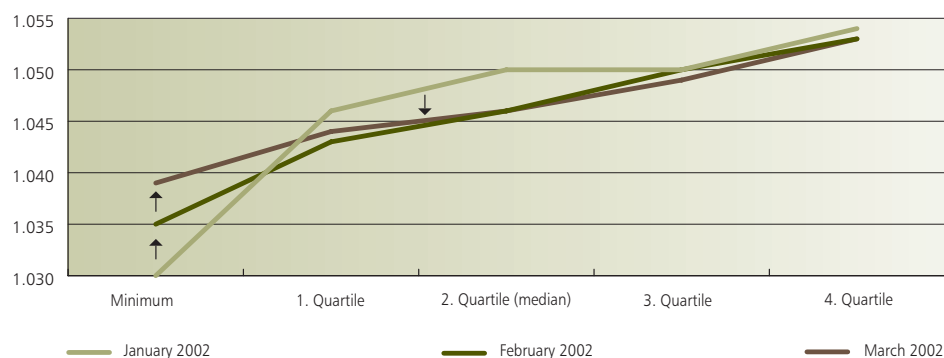
Inflation expectations of bank analysts

Inflation expectations of bank analysts stabilised in the first quarter of the current year. In January 2002 the annual inflation rate expected for the month preceding the corresponding month of the next year was on the level of December 2001, i.e. 4.7%, in February it fell to 4.6% and remained on this level in March. In turn, expectations of bank analysts in respect of annual inflation rate for December 2002 both in February and in March this year stood at 4.6%.

In January this year the uncertainty of bank analysts with regard to the development of prices in the future substantially increased, what was reflected in a sharp decline in the minimum of expected inflation rate distribution for the month preceding the corresponding month of the next year (from 3.7% in December 2001 to 3% in January 2002), in the increase in the distribution maximum (from 5.2% to 5.4%) and resulting from that coefficient of distribution volatility (from 9.5% to 13.4%). In the other months of Q1 the situation reversed. Ranges of bank analysts' declarations narrowed first of all due the increase in minimum declarations of bank analysts (from

Figure 60

Distribution of bank analysts' expectations in individual months of Q1, 2002



Source: Reuters figures, NBP calculations.

3% in January to 3.9% in March 2002), and to a lesser extent because of the decrease in the maximum value of the distribution (from 5.4% in January to 5.3% in March 2002).

It is necessary to emphasise that the increase in the minimum of inflation expectations of bank analysts witnessed since February this year and the accompanying fall in the distribution volatility measures (*inter alia*, the drop in the volatility coefficient from 13.4% in January to 8.4% in March 2002) basically stemmed from changes in the size of banks participating in the Reuters survey sample.

6.3.4. The asset price effect

In the first quarter of 2002 personal deposits on bank zloty and foreign currency accounts rose 2.8% as compared with the year end 2001. This resulted on the one hand from the decline in the capacity to generate a financial surplus by the public in the conditions of slow economic growth in Poland, and on the other – from reduced attractiveness of bank deposits connected with a series of cuts in the base NBP interest rates and the tax on income from bank interests.

At the same time savings of the public, placed in the capital sector, went up. Table 19 shows the growth of selected sectors of the capital market in the first quarter of the year.

Table 19
Growth of selected sectors of the capital market

Capital market sector	Balance at the end of 2001 (billion zloty)	Balance at the end of Q1, 2002 (billion zloty)	Growth rate (%)
Treasury saving bonds	6.0	6.6	10.0
Investment funds	12.1	13.5	11.5
Open-ended pension funds (OFE)	19.4	22.8	17.5

Source: MF, SFI, KNUiFE.

The decline in bank deposits attractiveness caused the following shifts in the capital market in the first quarter of the current year:

- The medium- and long-term Treasury bonds market was the greatest beneficiary of processes occurring in the banking sector in the first quarter, to which most of the funds of the public related to the capital market was moved directly (purchase of Treasury bonds) or indirectly (through investment funds and open-ended pension funds).
- The equity market, despite favourable tax solutions in force, benefited from the reduction in bank deposits attractiveness to a relatively small extent. In the period considered a relatively low interest of the public in direct investment in this market continued, and the institutional investors managing such funds placed only around a third of their assets in equity securities. That was sufficient to stabilise the market, but was a too weak impulse to initiate its significant growth. Table 20 illustrates movements in the equity market in Q1, 2002.
- The market of non-Treasury securities was used by the public as the place for capital investment only to a little extent. This resulted from its poor development. The total value of outstanding corporate, bank and municipal bonds at the end of March 2002 stood only at around 5bn zloty, where usually those bonds are not of public nature.

Table 20
WIG & WIG20, Q1, 2002 (points)

Index	End of 2001	End of Q1, 2002
WIG	13,858.3	15,026.4
WIG20	1,208.3	1,339.1

Source: Warsaw Stock Exchange figures.

7

Inflation prospects

The process of inflation reduction slowed down between November 2001 and March 2002. In this period the CPI fell from 3.6% to 3.3%. In the second quarter of 2002 the inflation is expected to continue its decline, while in the second half of the year – to grow gradually. The analysis of inflation determinants shows that large inflation fluctuations should not be expected.

A poor growth of domestic demand, which in the first quarter of the year remained on the level from the corresponding period previous year, will continue to be conducive to the maintenance of low inflation. It may be expected that the pace of domestic demand growth, and following it the GDP growth, will gradually increase from the third quarter of 2002. However, by the end of the year it shall not result in a demand pressure on the rise in consumer prices.

The maintenance of low inflation this year is indicated also by a very modest, so far, rise in producer prices (the year-on-year PPI went up in March this year by 0.4%) and by a slow pace of growth of all core inflation measures. They show that the inflation drop seen recently was not only driven by a favourable development of cost factors for the inflation decline. The May figures on the rise in food prices show that their growth rate this year may be lesser than last year. The present situation in the oil market and the expectations of the development of demand and supply in this market allow assuming that the risk of sharp oil price rise diminished. Therefore we assess that supply factors may contribute this year to the deepening of inflation decline. The development of consumer inflation expectations, which in Q1, 2002 fell to the lowest level in the Demoskop poll history (so-called objectified measure of this group of entities stood at March 2002 end at 3.1%) shall also be considered favourable to inflation waning.

A quick fall in annual growth rate of broad monetary aggregates (M2 and M3) in the first quarter of the current year shall also contribute to further inflation reduction in medium-time horizon. In the face of difficult situation in the labour market a moderate pay rise may be expected and the slackening of their role in the transmission of inflation impulses, if any.

In this situation phenomena observable in the first quarter, which might induce to be cautious in assessing prospects for the inflation development, should not result in a sharp price rise by the end of this year. In spite of a high growth rate of M1 monetary aggregate in this period (in March it exceeded 11%), there are numerous indications that it may be only a temporary effect, because narrow money measures feature a high volatility. Retail sales were also going up very fast in the first quarter of 2002 (their annual growth rate reached 9.9% in March this year), and at the same time the pace of household bank deposits growth slowed down. However, increased shopping was connected with seasonal factors (Easter Holiday).

In the conditions of poor domestic demand and relatively low economic growth, a high deficit in the public finance sector, which this year may amount to about 5% of GDP, in short term should not result in a price rise. However, its maintenance on this level may have other adverse effects for the economy, because in the face of low privatisation revenues funding of such a high deficit requires the government to issue a lot of Treasury securities. In Q1, 2002 the total of new T-bill issues was 116% higher than in a similar period of the previous year, and of T-bonds – by nearly 130%. This was favourable to the maintenance of a high level of long-term market interest rates and constrained financing possibilities of enterprises. Moreover, a high inflow of foreign portfolio capital, placed in Treasury bonds, was driving the zloty appreciation.

Possible disturbances in the performance of the central government budget deficit assumed for this year and in its funding could, however, cause disorders in the foreign exchange market. But

the performance of the deficit in the first quarter of the year consistent with the assumptions does not indicate a threat of recurring situation of the previous year, when the deficit suddenly went up beyond expectations.

Behaviour of commercial banks is another uncertain component in the inflation forecasting. In the period between February 2001 and January 2002 the NBP cut the base interest rates by 900 b.p., yet the interest on household loans fell in this period only by 210 b.p. So one may think that with improving economic situation banks could reduce their interest rates – even without further cuts in NBP base rates.

The uncertainty in respect of effects of the tax on capital incomes also induces to be cautious in the inflation forecasting. Probably it will result in a decline in the propensity for saving at banks. However, it is difficult to predict now to what extent funds released in this way will feed the consumer demand, and to what – non-banking forms of saving (equities, pension funds).

It is also difficult to forecast the development in this year of recently most important supply factors affecting the price rise. The probability of recurrence of the situation in the year 2001, when successful crops in the agriculture coincided with the fall in oil prices in the world markets, seems to be little. Food prices will probably go up faster than last year, even at relatively good weather conditions during the summer season. OPEC countries will then be probably trying to constrain the oil supply to achieve the stabilisation of its price around 25 USD per barrel. So this year the supply factors may contribute to the inflation rise, however, this should not make the performance of medium-term monetary policy target impossible.

The Monetary Policy Council determined this year inflation target at 5%, with a ± 1 pct. point tolerance. Most of forecasts show at present that the year-on-year inflation rate at the end of this year will be below the lower limit of the target range. Despite the occurrence of certain signals, which may effect a stronger price increase in the time horizon beyond 2002, and the uncertainty connected with the inflation forecasting in those conditions, the analysis of macroeconomic factors does not indicate so far the occurrence of threats for the performance of medium-term monetary policy target, set at below 4% at the end of 2003.

Annex A

Voting of Monetary Policy Council members on resolutions adopted in Q1, 2002

Date of resolution	Subject	MPC decision	Voting of Council members
29.01.2002	procedures for the conduct of open market operations	to implement a new version of open market operations procedures	For: L. Balcerowicz
			M. Dąbrowski
			B. Grabowski
			C. Józefiak
			J. Krzyżewski
			W. Łączkowski
			J. Pruski
			D. Rosati
			G. Wójtowicz
			W. Ziółkowska
30.01.2002	motion to cut the reference rate by 2 pct. points and the lombard rate by 2.5 pct. points.	motion failed to receive a majority	For: D. Rosati
			G. Wójtowicz
			W. Ziółkowska
			Against: L. Balcerowicz
			M. Dąbrowski
			B. Grabowski
			C. Józefiak
			J. Krzyżewski
			W. Łączkowski
			J. Pruski
30.01.2002	motion to cut the reference rate by 1 pct. point	motion failed to receive a majority	For: B. Grabowski
			C. Józefiak
			W. Łączkowski
			Against: L. Balcerowicz
			M. Dąbrowski
			J. Krzyżewski
			J. Pruski
			D. Rosati
			G. Wójtowicz
			W. Ziółkowska

30.01.2002	the rediscount rate,	the reference rate	For:	L. Balcerowicz
	reference rate, refinance	reduced by 1.5 pct. point,		J. Krzyżewski
	rate and time deposit	lombard rate by		D. Rosati
	at the NBP rate	2 pct. points, and deposit		G. Wójtowicz
		rate by 1 pct. point		W. Ziółkowska
			Against:	M. Dąbrowski
				B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
27.03.2002	motion to cut all interest	motion failed	For:	D. Rosati
	rates by 1 pct. point	to receive a majority		G. Wójtowicz
				W. Ziółkowska
			Against:	L. Balcerowicz
				M. Dąbrowski
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski