

# Inflation Report

Second Quarter 2003

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#### SUMMARY

- 1. In the second quarter of 2003, the twelve-month Consumer Price Index (CPI) remained low, although showing high variation from one month to another from 0.3% in April to 0.8% in June. The CPI growth rate in the second quarter of this year compared to the corresponding quarter of the previous year displayed a slower decrease in food prices and a weaker growth in officially controlled prices, as well as that of other goods and services.
- 2. The twelve-month Producer Price Index (PPI) in the second quarter declined from 3.6% in March to 2.1% in June. The index was principally influenced by movements in manufacturing prices, and in particular in the 'manufacture of coke, refined petroleum products and nuclear fuel' section where price falls were due to fuel prices declining in international markets and the zloty appreciation against the US dollar during that period.
- 3. The annual money supply dynamic, measured with the M3 index, was positive in the second quarter and remained low. This was attributable to corporate deposit growth accompanied by a high annual dynamic of coins and notes in circulation (of about 15%). Meanwhile, household deposits continued to shrink, which could be linked, among other things, to the continuing appeal of alternative methods of saving (bonds and investment fund trust units).

The annual dynamic of household loans in the second quarter stayed at a relatively stable, moderate level of 7-8%. Households tended to draw housing loans, which attract significantly lower interest than consumer credits. Meanwhile, annual growth of corporate loans slowed down during the period.

- **4**. The central government budget deficit in the second quarter amounted to 8.4bn zloty, 1% lower than in the corresponding period of 2002. This, however, could be explained by the NBP transferring its profits a month earlier than in the previous year. Tax receipts in the second quarter were lower than a year before, with expenditure much higher (a 10.8% increase). The performance of the budget deficit after the first six months was similar to previous years and stood at 61.5%.
- 5. According to the NBP preliminary estimates, in the second quarter of 2003 GDP grew by 3.0%, compared to the second quarter of 2002. GDP growth was fuelled by increased domestic demand and net exports. Gross fixed investment after eight consecutive quarters of decline overran the figure recorded in the corresponding quarter of 2002. Meanwhile, consumption growth was slightly lower than a year before. It is estimated that in the second quarter the consumption dynamic was still superior to that of registered household disposable incomes.

Accelerated economic growth in the second quarter was attributable to added value growth in industry and reduced added value decline in construction. This was higher than in the first quarter.

- 6. Movements in the labour market in the second quarter fell within the limits of seasonal change. Employment levels continued to decline, although at a slower rate than in 2002. Similarly, both the number of registered jobless persons and the unemployment rate followed a downward trend. Output growth in the second quarter was linked to labour efficiency growth, as in the previous quarters.
- 7. The current account deficit in the second quarter of 2003 was 0.8bn euro lower than in the corresponding period of 2002, and in relation to GDP contracted to 2.7%. Further reduction in the commodity trading deficit and a higher positive balance of non-classified trading were instrumental in improving the current account balance. From April to June, commodity exports expanded by 4.2%, while imports fell by 0.5% (in euro terms, on a cash basis) in relation to the corresponding period of 2002.

\* \* \*

In the second quarter, the Monetary Policy Council (MPC) reduced the NBP base interest rates on three occasions. During the period, the NBP reference rate was reduced from 6.00% to 5.25%, and from 5.4% to 4.4% in real terms (when CPI-deflated) from 5.4% to 4.4%.

The prime factors in favour of interest rate cuts in the second quarter 2003 included the continuingly low inflation rate and the persistence of factors hampering its future growth.

In the second quarter, annual CPI and core inflation indices as well as household inflation expectations remained low, while PPI index declined.

In the context of further employment falls, salary growth in the corporate sector remained low. Domestic demand followed a pattern similar to that recorded in the previous quarter.

Despite the persistently bleak outlooks for economic growth in the euro area and the recession in Germany, symptoms of gradual recovery prevailed in the Polish economy. After April, the volume of sold industrial output has been growing steadily. In the construction sector, the continuous decline in output was halted and the changes in the sectional structure pointed to a possible increased investment demand in the second half of the year.

When taking decisions to cut interest rates in the second quarter, the MPC also considered factors presenting potential sources of inflationary pressure in the future. These included primarily the unstable condition of public finances, the persistently high growth of notes and coin in circulation (of around 15% annually), as well as rising oil prices in international markets (average Brent oil barrel price grew from US\$ 24.9 in April to US\$ 27.6 in June) and the possibility of further increases.

Additionally, the MPC took account of the scale of the interest rate cuts made so far which would have a delayed bearing on the gradual growth in domestic demand in the second half of 2003 and in 2004.

\* \* \*

This year's inflation target (measured with the annual CPI in December 2003) stands at 3% with a permissible band of deviation of 1%. The annual CPI, at 0.8% in July, is expected to grow slowly until the year-end and settle right below the lower boundary of the inflation target in December.

In December 2004, the inflation rate should reach 2.5%, in accordance with the inflation target adopted as the so-called continuous target for the period beyond 2003 at 2.5% with a permissible band of deviation of 1%. The primary factors accelerating inflation include higher economic growth in 2004 and the elimination of supply-side factors that lower food prices.

These expectations are based on the following objectives:

- Over-running of the economic deficit of the public finance sector envisaged in the draft budget act is still likely this year. On the other hand, *Guidelines for the 2004 draft state budget*, adopted by the government, point to possible further exacerbation of the imbalance of the public finance sector next year;
- The August projection, when compared against the April one, predicts a deterioration in the prospects for economic growth in the region in the years 2003-2004. It revises projected growth of the euro area economies downwards, including in particular Germany in 2003 and to a lesser extent in 2004, leaving forecasts for the US economy unchanged;
- Given the pessimistic forecasts for Poland's economic environment, trends in investment become
  decisive for the Polish GDP growth rate in this period. Depending on whether their growth
  accelerates as late as 2004 (as in the April forecast) or gathers momentum as soon as the
  beginning of the third quarter (as projected under the second scenario of the August forecast),
  GDP growth is estimated at 2.8% or 3.1% this year and in 2004, respectively, at 4.1% or 4.6%;
- As shown in the August oil price forecast, in the second half of 2003 the average Brent oil price
  will go up from US\$ 26.1 per barrel in the second quarter to approximately US\$ 27.6 per barrel
  in the second half of the year, ultimately to fall to an average of US\$ 25 per barrel in 2004;
- The August forecast for domestic food prices in 2003 is definitely higher than the April projection. Due to unfavourable weather conditions (drought), higher price growth is foreseen for cereal-

based produce and meat. As a result, the food prices in December will be approximately 2% higher than a year before (previously, their growth was projected at 0.5%), and by the end of 2004 – higher by 2.5% (2.0%);

- Meanwhile, the annual growth of officially controlled prices at year end is expected to be slower than forecasted in April (around 3%) and reach 2%. According to the projection, it will remain stable in 2004;
- The August forecast of the price group of **other goods and services** at year-end 2003 and in 2004 foresees their increase, respectively, by 1.2% and 2.7%, almost identical with the April projection.

Basic macroeconomic indicators

	41	<b>0</b> 5	69	Q4	2001	4	Q2	69	45	2002	41	Q2
		2001	5				2002	2			2003	33
						Rea	Real growth					
GDP	2.2	6.0	0.8	0.2	1.0	0.5	6.0	1.8	2.2	1.4	2.2	3.0
Domestic demand	-1.0	-1.7	-1.5	-2.3	-1.7	-0.1	1.1	1.2	1.3	0.9	2.3	2.1
Total consumption	1.2	1.1	1.7	2.7	1.7	2.8	2.6	2.8	3.2	2.8	1.0	2.4
Personal consumption	1.5	1.5	2.1	3.2	2.0	3.5	2.9	3.1	3.5	3.3	1.4	2.8
Gross capital saving	-12.6	-12.2	-12.5	-13.0	-12.6	-17.9	-5.5	-5.6	-3.7	-6.9	12.7	0.8
Gross fixed investments	2.1	-8.0	-11.7	-12.0	& 89 89	-12.8	-7.9	-5.9	-3.6	-6.8	-3.6	0.8
Household savings rate (%)¹	9.4	10.9	10.6	11.6	10.6	5.0	8.5	6.5	8.4	7.1	4.3	7.6
Household financial savings rate (%) <sup>2</sup>	5.3	3.9	4.0	4.8	4.5	2.0	3.2	-0.5	9.0	1.3	2.4	2.2
Unemployment rate (%)	16.1	15.9	16.3	17.5	17.5	18.2	17.4	17.6	18.1	18.1	18.7	17.8
Disposable income (corresponding period previous year = 100)	101.8	101.2	102.6	100.1	101.4	98.7	100.1	98.6	8.66	99.2	100.4	101.8
State Treasury indebtedness (PLN million, nominal) <sup>3</sup>	273,192.9	271 584.9	291 795.1	283,939.5	283,939.5 283,939.5	309,388.4	320,880.1	331,205.4	327,924.2	327,924.2 327,923.8	353,421.4	362,638.9
Central government deficit (PLN million)	-14,992.5	-18 805.5	-21 865.0	-32,358.3	-32,358.3 -32,358.3	-16,436.8	-24,922.5	-29,146.7	-39,112.5	-39,112.5 -39,112.5	-15,495.5	-23,818.4
External indebtedness (EUR million)	80,817.0	83,528.0	80,262.0	81,266.0	81,266.0	84,559.0	80,399.0	81,064.0	79,450.0	79,450.0	80,460.0	

Household savings to gross disposable incomes. Savings represent that portion of gross disposable incomes not allocated to consumption.
 Household financial savings to gross disposable incomes. Financial savings represent the growth in household money stocks (the total of bank deposit growth, notes & coins and investments in securities, less household borrowing growth).
 Period end.
 Source: GUS. Ministry of Finance and NBP figures, NBP estimates (GDP and domestic demand in the second quarter of 2003, gross savings rate, financial savings rate, disposable incomes).

Basic monetary indicators

CPl1												ļ
		2001					2002	2			2003	
					correspond	ling period	corresponding period previous year = 100	ar = 100				
	106.2	106.2	104.3	103.6	103.6	103.3	101.6	101.3	100.8	100.8	100.6	100.8
Ppl1 1	103.8	100.9	100.7	9.66	9.66	100.3	101.2	101.1	102.2	102.2	103.6	102.1
			Nominal	growth rate	of end-of-pe	riod figures	(correspondi	Nominal growth rate of end-of-period figures (corresponding period previous year = 100)	evious year =	= 100)		
Money supply (M3)	114.7	107.8	112.6	109.2	109.2	103.2	102.5	98.5	0.86	98.0	100.5	101.3
Deposits and other liabilities (within M3)	116.4	108.9	113.6	108.9	108.9	101.7	100.5	96.5	95.9	95.9	7.76	98.1
of which:												
Household deposits	119.9	115.9	117.0	106.7	106.7	103.3	100.1	95.2	96.3	96.3	94.2	93.2
Corporate deposits	105.1	8.66	105.3	116.4	116.4	104.9	112.9	110.8	101.4	101.4	111.4	116.8
Claims <sup>2</sup>	114.1	104.8	111.4	109.3	109.3	107.0	109.4	105.1	105.2	105.2	108.7	106.1
of which:												
Claims on households	121.1	102.2	119.9	114.7	114.7	117.7	115.5	108.4	108.5	108.5	107.2	108.5
Claims on corporate entities	111.2	106.8	106.0	103.7	103.7	98.2	102.1	101.2	101.5	101.5	108.3	103.3
			Real gr	owth rate <sup>3</sup> c	of end-of-peri	od figures (c	orrespondin	growth rate $^3$ of end-of-period figures (corresponding period previous year = 100)	ious year =	100)		
Money supply (M3)	108.0	101.5	107.9	105.5	105.5	6.66	100.9	97.3	97.3	97.1	6.66	100.5
Deposits and other liabilities	109.6	102.5	108.9	105.2	105.2	98.5	98.9	95.3	95.1	95.1	97.1	97.4
of which:												
Household deposits	112.8	109.1	112.1	103.0	103.0	100.0	98.5	94.0	95.5	95.5	93.7	92.4
Corporate deposits	101.3	6.86	104.6	116.9	116.9	104.6	111.6	109.6	99.2	99.2	107.6	114.5
Claims	107.5	98.6	106.7	105.6	105.6	103.6	107.6	103.8	104.4	104.4	108.1	105.2
of which:												
Claims on households	114.0	96.2	114.9	110.8	110.8	114.0	113.7	107.0	107.7	107.7	106.6	107.7
Claims on corporate entities	107.2	105.9	105.3	104.1	104.1	6.76	100.9	100.1	99.3	99.3	104.6	101.3
Reference rate (%) <sup>4</sup>	17.00	15.50	14.50	11.50	11.50	10.00	8.50	7.50	6.75	6.75	00.9	5.25
Lombard rate (%) <sup>4</sup>	21.00	19.50	18.50	15.50	15.50	13.50	11.50	10.00	8.75	8.75	7.75	6.75

In the last month of the quarter.
2 Claims are made up of claims on: households, non-monetary financial institutions, corporations, non-commercial institutions operating for the benefit of households, local government institutions, social security funds. They encompass all categories of loans and advances, purchased debt, enforced guaranties, due and outstanding interest, receivables on repurchase agreement transactions, debt securities and other claims.
5 Period end.
4 Period end.
5 Pource: GUS and NBP.

## 1 Domestic demand and supply

#### 1.1. Domestic demand<sup>1</sup>

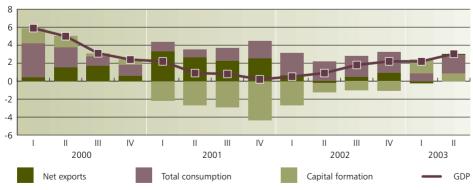
According to the preliminary NBP estimates, domestic demand growth in the second quarter of 2003 was slightly lower than that witnessed in the first quarter, although still higher than a year before.

Table 1
GDP and domestic demand growth, 2001–2003

			20	001				20	02		20	03
	2001	Q1	Q2	Q3	Q4	2002	Q1	Q2	Q3	Q4	Q1	Q2
			Co	orrespo	onding	perio	d previ	ious ye	ear = 1	00		
GDP	101.0	102.2	100.9	100.8	100.2	101.4	100.5	100.9	101.8	102.2	102.2	103.0
Domestic demand	98.3	99.0	98.3	98.5	97.7	100.9	99.9	101.1	101.2	101.3	102.3	102.1
Consumption	101.7	101.2	101.1	101.7	102.7	102.8	102.8	102.6	102.8	103.2	101.0	102.4
Personal Consumption	102.0	101.5	101.5	102.1	103.2	103.3	103.5	102.9	103.1	103.5	101.4	102.8
Capital saving	87.4	87.4	87.8	87.5	87.0	93.1	82.1	94.5	94.4	96.3	112.7	100.8
Gross fixed investment	91.2	102.1	92.0	88.3	88.0	93.2	87.2	92.1	94.1	96.4	96.4	100.8
Share of net exports												
in GDP growth	2.7	3.3	2.6	2.3	2.6	0.5	0.6	-0.2	0.5	0.9	-0.2	0.8

Source: GUS, NBP estimates.

Figure 1
Contribution of final demand components to GDP growth



Source: GUS data.

<sup>1</sup> Unless indicated otherwise, all growth figures in this chapter are quoted annually, in real terms.

Gross fixed investment – after eight consecutive quarters of decline – in the second quarter exceeded the figure recorded in the corresponding quarter of 2002. Inventory growth was similar to that seen a year before and, consequently, gross capital saving growth in the second quarter was close to that of gross fixed investment and higher than in 2002. Nevertheless, it remained less pronounced than in the first quarter.

Meanwhile, growth in consumption was more extensive than in the first quarter 2003 though smaller than that recorded in 2002. According to NBP estimates, consumption dynamic continued to exceed the dynamic of registered disposable household incomes.

Movements in GDP and domestic demand from the first quarter of 2001 to the first quarter of 2003 are presented in Table 1, and the contribution of final demand components to GDP growth is shown in Figure 1.

Higher domestic demand and net exports contributed to increased GDP dynamic in the second quarter of 2003.

#### 1.1.1. Consumption

On the basis of the data on nominal salary and social benefit growth, it is estimated that in the second quarter the dynamic of registered gross disposable household income was higher than in the first quarter.

In the second quarter, average gross monthly remuneration in the corporate sector grew by 2.2% in nominal terms compared to the corresponding period of 2002. Given a 3.9% decrease in average employment, hired labour incomes in this sector were nominally 1.8% lower than a year before (falling by 2.3%, in the first quarter of 2003 and the fourth quarter of 2002). According to estimates, as in the first quarter of the year, central government institutions experienced more significant growth in average remuneration and less marked employment loss. Summing up, in the second quarter, incomes from hired labour were higher than in 2002 by more than 1% (in the first quarter, they were similar to those recorded in the corresponding quarter of the previous year).

Earlier than in previous years outgoings in respect of old age and disability pensions (in March instead of June, as in 2002) contributed to accelerated growth in social security benefits. In the first quarter, these grew nominally by 2.9% compared to the corresponding period of the previous year, and by 5.4% in the second quarter. Similarly to previous quarters, disbursements of unemployment benefits as well as family and nursing allowances continued to contract. Instead, disbursements of social security allowances as well as pre-retirement allowances and benefits expanded, although at a lower rate than in 2002.

It is estimated that in the second quarter both farmers' nominal incomes and interest income continued to fall. At the same time, accelerated growth was observed in incomes from registered non-agricultural business activity conducted for own account and in incomes derived from private ownership. In total, it is assessed that nominal growth of gross disposable incomes in the second quarter was superior to that in the second quarter of 2002 by approximately 2.0%. Given the fall in quarterly CPI to 0.4%, the purchasing power of registered gross disposable household incomes in the second quarter exceeded that of the corresponding period of 2002 by roughly 1.6%.

Financial household savings<sup>2</sup> in the second quarter were positive and more or less reflected the level attained in the first quarter (3.0bn zloty against 3.2bn zloty), i.e., were lower than a year before by roughly 30%. Significant growth was recorded in notes & coins in circulation (by 3.2bn zloty) and in other financial assets of households (by about 6.2bn zloty, of which investment funds accounted for some 4.5bn zloty). Net household savings in banks declined by roughly 6.4bn zloty,

<sup>&</sup>lt;sup>2</sup> Financial savings represent the net growth in household money/savings (the total of bank deposit growth, notes & coins and investments in securities, less household borrowing growth). Gross savings represent that portion of disposable household incomes not allocated to consumption. They are equal to the sum of financial and non-financial savings (capital accumulation by households, i.e., total investment in fixed assets and working capital).

with total deposits shrinking by 4.4bn zloty; meanwhile, household indebtedness resulting from credits, loans and other claims expanded by 2.0bn zloty. On the basis of the performance of the housing sector, it is assumed that gross fixed investment and capital saving (non-financial savings) by households increased in the period. Combined, gross household savings in the second quarter were roughly 8% lower than a year before (about 15% in the first quarter).

**Personal consumption** growth rate exceeded that of the purchasing power of gross household disposable incomes and, according to NBP estimates, reached 2.8% in the second quarter (compared to 1.4% in the first quarter).

#### 1.1.2. Capital saving

The figures on investment expenditure by large and medium-sized enterprises and on investment construction work and manufacturing of investment goods indicate that gross fixed investment rose (by 0.8%) in the second quarter, for the first time since the first quarter of 2001. According to NBP estimates, the fall in investment construction work carried out by large and medium-sized building enterprises contracted from 22.9% in the first quarter to approximately 6.5% in the second. At the same time, output of enterprises manufacturing investment goods increased from about 4% in the first quarter to some 10% in the first half of the year.

In the first six months of 2003, investment by enterprises employing more than 9 persons was lower than a year before by 2.2% (in 2002, decline in investment, in constant prices, compared to the previous year exceeded 15%). Despite a marked fall in construction output in the first quarter, investment construction work in the first half was only 2.1% smaller than in 2002. Therefore, it can be estimated that in the second quarter investment was higher than in the corresponding period of the previous year.

The decline in purchases of machines, equipment and means of transport was less pronounced in the first half of the year than the fall in investment in buildings and structures. The share of investment in machines and equipment in total investment grew to 67.4% (in the first half of 2002 it stood at 64.8%, while in the first half of 2001 – at 61.4%). The share of imported machines and equipment in purchases expanded (from 31.2% in 2002 to 33.8% this year). The change of the technical structure of investment derived from the changes in the sectoral structure of investment projects. In sections and sectors of the economy characterised by a high proportion of investment in buildings and structures (mining, transport and telecommunications, trade, energy supply and distribution) investment expenditure was smaller than a year before. In manufacturing, however, investment spending rose.

Following the 1999 decline, in the first half of 2003 investment in manufacturing grew in relation to the corresponding period of the previous year by 15.7%. A 10% and more increase was observed in 9 sectors whose combined investment accounts for almost 75% of total investment in processing. In most cases, the observed high investment dynamic was attributable to its very low 2002 levels. Still, in some sectors investment growth was sustained for the second consecutive year. Dramatic growth – by over 80% in relation to the first half of 2002 – was recorded in the manufacture of machines, electrical appliances and in furniture production. Still, it was the investment boom in food industry that had a decisive effect on investment growth in manufacturing. Investment expenditure in this industry exceeded the low 2002 level by 53.6% and accounted for 22.2% of total investment made by the manufacturing sector in the first quarter of 2003.

According to GUS estimates, the first quarter saw a considerable increase in gross capital saving (by 12.7%), accompanied by a decline in gross fixed investment. Capital saving growth was fully attributable to, other than in the first quarters of 2001–2002, inventory levels of tangible working capital assets. It is estimated that in the second quarter inventory increase was similar to that of 2002 and thus gross capital saving growth was similar to gross fixed investment growth.

#### 1.1.3. Public finance situation

In the second quarter of 2003, the central government deficit of 8.4bn zloty was recorded, 1% smaller than in the corresponding period of the previous year. This was due, however, to the NBP transferring a portion of its profits (4.68bn zloty) in June 2003, unlike in 2002 when the

payment was made in July. Meanwhile, tax receipts were lower than in the corresponding period of the previous year because of slightly smaller income from indirect taxation and significantly smaller receipts from corporate income tax (CIT). CIT receipts were relatively low already in the first quarter 2003 despite the fact that GUS figures pointed to an improvement in the financial performance of enterprises compared to the corresponding period of the previous year. Among other things, a further fall in these receipts in the second quarter could be traced to the settlement of corporate losses from previous years or to the application of more beneficial methods of depreciating the value of new investment projects launched by enterprises in 2002. Given the relatively high retail sales recorded in the second quarter<sup>3</sup>, the dynamic of indirect taxation receipts in this period seems paradoxically low. This is partially explained by the exceptionally high reference base from June 2002. Other possible causes of this phenomenon include movements in the structure of consumer demand (the trend to purchase goods subject to lower tax rates) or less effective tax collection.

In the second quarter, central government expenditure was significantly higher than in the corresponding period of the previous year, their dynamic amounting to 110.8%. Expenditure growth involved primarily expenses related to debt servicing and subsidies to special purpose funds – Employment and Social Security Funds. The subsidisation of these funds in mid-2003 was considerably more extensive than a year before. By the end of June 2003, the Social Security Fund received 52.8% of the subsidy allocated for the entire year, whereas in the corresponding period of the previous year this stood at 44.7%. The subsidisation of the Employment Fund was even higher, reaching 76.8% at mid-year, against 58.6% at the end June 2002. The higher subsidy resulted from lower than planned receipts from social security and Employment Fund contributions. The transfer from the central government budget of subsidies in the first half of

Table 2
Performance of central government budget in the first half of 2003

	Q2	Q1–Q2	Q1–Q2 2003/	Q2 2003/	Performance
	2003	2003	Q1–Q2 2002	Q2 2002	plan after Q2
Receipts	38,506.4	71,903.3	110.4*	113.8**	46.2
Taxation, of which:	29,957.9	60,624.9	102.2	97.4	43.7
– indirect taxation	22,900.7	45,039.2	103.2	98.3	46.5
– corporate income tax	1,987.1	5,266.5	84.6	71.9	36.6
– personal income tax	5,070.7	10,319.3	109.3	108.2	37.7
Other income	8,548.5	11,278.4	194.5	277.3	66.0
Expenditure	46,894.6	95,721.7	106.3	110.8	49.2
– debt servicing	6,872.3	12,259.1	98.7	112.9	45.6
- original expenditure, of which:	40,022.4	83,462.6	107.5	110.5	49.8
– Employment Fund subsidy	1,650.0	3,030.0	142.3	183.3	76.8
– Social Security Fund subsidy	6,420.7	14,767.3	120.8	130.5	52.8
Deficit	-8,388.3	-23,818.4	95.6	98.9	61.5
Original deficit	-1,516.0	-11,559.3	92.5	63.2	97.7
Adjusted deficit***	-6,706.8	-20,556.5	96.8	94.9	67.1

<sup>\*</sup> Under comparable conditions (excluding the NBP profit payment), the dynamic is 103.2.

<sup>\*\*</sup> Under comparable conditions (excluding the NBP profit payment), the dynamic is 100.0.

<sup>\*\*\*</sup> The deficit adjusted for contributions transferred to open-ended pension funds and compensation for failure to raise old-age pensions and salaries in the state budget sector in the years 1991–1992.

Source: Ministry of Finance.

<sup>&</sup>lt;sup>3</sup> Twelve-month retail sales growth in the months of April, May and June 2003 amounted to 111.0, 109.7 and 108.1, respectively.

2003 signified that, following complete utilisation of the planned state budget funding, to special purpose funds will be forced to enlarge their indebtedness in the banking sector to finance benefit disbursements in the second half of the year. This, in turn, could mean that the deficit of extra-budgetary funds, and in consequence the economic deficit of the public finance sector, would once again be higher than had originally been assumed. Additionally, low receipts from healthcare contributions would result in further indebtedness of healthcare institutions despite the contributions having been raised by another 0.25 percent.

The net value of domestic issues of treasury securities in the second quarter was 64% higher than a year before and roughly totalled 6.7% of GDP. On the other hand, in the first quarter 2003 domestic issues of treasury securities were lower than in 2002 due to the partial financing of the deficit via euro bond issues. In total, in the first half of the year the net value of domestic issues of treasury securities stood at 7.1% of GDP, against 7.3% of GDP in 2002. In addition to the central government deficit volume, high levels of treasury bill and bond issues continue to be fuelled by low privatisation receipts. In the first half 2003, these issues financed a mere 5% of the then central government deficit, i.e. 1.2bn zloty (or 15.8% of the annual plan). The high borrowing needs of the state budget in the domestic market reinforce the negative trend, consisting of the limitation of private businesses' access to loans supplied by the public finance sector.

#### Guidelines for the 2004 draft budget act

In June, the government adopted *Guidelines for 2004 Draft Budget Act*. This document was subsequently revised to render more real planned receipts, expenditure and central government budget deficit. Ultimately, the basic macro-economic and budgetary assumptions for the year 2004 are as follows:

- Real GDP growth 105.0
- Average annual consumer price growth 102.2
- Central government budget receipts 150.0bn zloty, expenditure 195.5bn zloty, and deficit 45.5bn zloty.

At the same time, a material change was proposed in the classification of budget expenditure. As a result, a substantial portion of it was transferred to the expense side, which resulted in the lowering of the central government budget deficit. This applied primarily to central government budget subsidies for financing contributions transferred to open-ended pension funds, amounting to 11.9bn zloty. About 3.6bn zloty for prefinancing of the EU contribution shall be allocated to the central government budget expenditure. Changes in classification will result in the underestimation of the budget deficit which, measured according to the classification applied until 2003, would amount to approximately 57bn zloty.

This above indicates large-scale fiscal expansion despite projected continued economic recovery and return onto the path of rapid GDP growth. Such expansion will result, primarily, from increased central government budget expenditure related to Poland's joining the European Union. New items will appear in the state budget, including, first of all, the contribution to the EU budget. There will also be a substantial increase in expenditure on co-financing EU financial aid. Additionally, among other things, to expand the possibility for co-financing EU aid by local governments, the government presented a draft new act on the receipts of local government institutions, raising their receipts at the expense of the central government budget. Concurrently, the government resolved to reduce corporate income tax rate from the present 27% to 19%. The above measures will result in an overall loss of 5bn zloty in the receipts of the central government budget.

The changes listed above will contribute to higher budget deficit as no effective steps have been taken to implement the urgently needed reform of the central government budget expenditure. Proposals presented under the *Program Naprawy Finansów Rzeczypospolitej* [Agenda for the Repair of Poland's Finances] in the area of eliminating indexation and revaluation mechanisms in public expenditure are warranted and necessary. However, they can be useful only in limiting the growth of central government spending. In the light of the current scale of imbalance within the public finance sector and the challenges it faces, these measures seem to be grossly inadequate.

The undertaking of the reforms aimed at curbing public spending remains an urgent challenge in the coming years, even more so that the maintenance of high central government budget deficit in the context of expected rapid economic growth will undermine the country's macro-economic equilibrium. This will also contribute to public indebtedness build-up and overrunning of the subsequent warning limits envisaged in the Act on Public Finances, and ultimately of the constitutional central budget limit of 60% of GDP.

#### 1.2. Domestic supply

In line with the preliminary NBP estimates, GDP growth rate in the second quarter of 2003 rose to 3.0%. Accelerated growth was attributable to added value increase in industry being higher than in the first quarter and to a less marked decline in added value in construction. Output growth in the second quarter, similarly to previous quarters, was associated with increased labour efficiency. Employment continued to fall although at a slower rate than in 2002. Both the number of registered jobless persons and the unemployment rate declined. Movements in the labour market were within the limits of seasonal changes.

Trends in GDP and added value dynamic in major groups of sections of the national economy are presented in Table 3.

Table 3
GDP and added value dynamic, 2001–2003

			20	001				20	02		20	03
	2001	Q1	Q2	Q3	Q4	2002	Q1	Q2	Q3	Q4	Q1	Q2
			Co	orrespo	onding	perio	d previ	ious ye	ear = 1	00		
GDP	101.0	102.2	100.9	100.8	100.2	101.4	100.5	100.9	101.8	102.2	102.2	103.0
Total added value	101.0	102.2	100.9	100.9	100.2	101.4	100.5	100.9	101.9	102.1	102.0	102.8
Industry	99.7	103.7	98.9	98.5	97.9	101.0	98.0	99.0	102.7	104.0	104.1	108.0
Construction	92.1	94.4	91.7	91.5	91.7	92.5	86.7	89.1	96.8	94.2	80.5	94.1
Market services	102.7	102.5	102.5	103.0	102.9	103.4	103.7	103.5	103.3	103.0	103.3	102.9

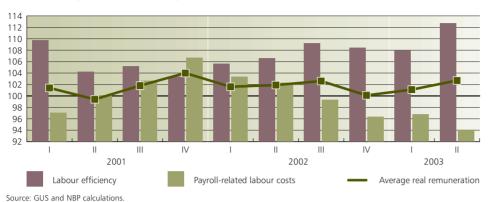
#### 1.2.1. Output and GDP

According to NBP estimates, in the second quarter of 2003 total added value grew in relation to the corresponding period of 2002 by 2.8% (2.0% in the first quarter of 2003), whereas GDP rose by 3.0% (2.2% in the first quarter). Added value growth in industry was faster than in the first quarter. The rate of decline in added value in construction slowed. GDP growth rate ran, similarly to previous quarters, below the potential growth rate estimated using the output function method.

Sold industrial output in the first quarter 2003 (in large and medium-sized enterprises) was 9.0% higher than in the corresponding period of the previous year (in the first quarter of 2003, its growth was 4.4%), of which processing industry growth accounted for 11.1%. High output growth was attributable to continuously rising exports and improved competitiveness of domestic output in the internal market. Given the moderate growth in domestic consumer demand, symptoms of increased investment demand were becoming noticeable. In the first half of 2003, highest output growth was recorded in enterprises manufacturing primarily investment goods (a 10% growth compared to the first half of 2002). This could be partially traced to increased exports of investment goods but also to steeping up investment purchases by domestic enterprises. In enterprises manufacturing primarily input goods, output was higher than in the first half of 2002 by approx. 8%, and in those producing consumer goods – by roughly 7%.

Favourable changes in the output structure are becoming more and more evident. The shares of manufacturing and industry sections and groups considered to be leaders of technical progress in total industrial output are expanding (respectively, to 81.9% and 13.2% in the first half of 2003). Output growth of modern industries was significantly higher than in total industry and manufacturing. In relation to the first half of 2002, sales generated by industry sections and groups considered carriers of technical progress grew 17.1%, while those of manufacturing rose 8.1%, and those of total industry – 6.7%.

Figure 2
Labour efficiency, real remuneration and payroll labour cost growth in industry
Corresponding quarter previous year =100



Output growth in industry, as in previous quarters, was generated in the context of falling employment, owing to increased labour efficiency. In the second quarter, efficiency measured by the volume of sold output (in constant prices) per employee was almost 13% higher than in the corresponding period of the previous year. Since the third quarter of 2002, efficiency growth is accompanied by declining payroll labour costs. In the second quarter, the spread between efficiency and payroll labour cost growth widened to nearly 18 percent.

The fall in construction output was reduced. Compared to the corresponding quarters of 2002, in the first quarter 2003 construction output was lower by about 23%, and in the second quarter – by about 7%. The decline in investment construction work was also distinctly smaller. The output of building enterprises involved in the preparation of building sites more than doubled.

Added value growth in the sectors and sections of market services, according to NBP estimates, was slightly lower in the second quarter than in the first. Sales growth of transport and telecommunications services declined. Wholesale trade did not exceed last year's levels. Meanwhile, retail sale growth was higher than that generated in the first quarter.

#### 1.2.2. Labour market

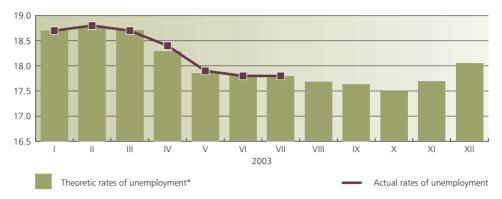
In the first half of 2003, the fall in average employment in the enterprise sector was slightly lower than in the corresponding period of 2002 and amounted to 202,000 persons against 248,000 a year before. However, in some sections employment cuts was significantly bigger than in 2002, for example, in construction – by 16.7% against 11.8% in 2002, in the 'hotels and restaurants' section by 9.5% against a nearly 4% growth in 2002.

In the second quarter, a smaller number of the new unemployed was registered than during the previous quarter, and more persons were deleted from the register of the unemployed. Among the latter ones, some 52.5%, i.e., over 5% more than in the first quarter, got jobs (mainly government-subsidised). The number of job offers in employment offices in the second quarter was by 63,000 higher than in the corresponding period of the previous year and by 77,300 higher than in the first quarter. At the end of June, some 20,000 positions remained vacant against approximately 14,000 in June 2002, which reflects a growing mismatch (both geographic and skill-based) between existing job offers and the labour available.

Trends in unemployment rate in 2003 indicate that, in the context of growth trend in registered unemployment rate, it was affected primarily by seasonal factors (Fig. 3).

In June, unemployment rate fell to 17.8%. This was the fourth consecutive month in which a seasonal decline in registered unemployment had been recorded. However, as early as in July the

Figure 3
Trends in real unemployment rate and theoretically determined based on seasonal indicators, 2003



\* Unemployment levels were determined on the basis of real unemployment rate in January 2003 and seasonal indices. Source: GUS and NBP calculations.

number of the newly registered unemployed usually exceeds the number of persons registered from the register of the unemployed. This regularity has been reflected in GUS data as of 1999, i.e., as of the beginning of the second wave of rapid unemployment growth.

The end-of-June figures show that 1,400 employers announced plans to lay off about 45,000 persons, i.e. 2,000 more than in May (though still about 9,000 less than in 2002), of which 67% in the public sector.

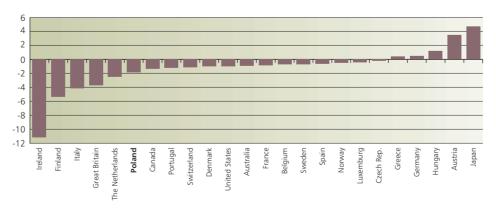
An important factor impairing employment growth in Poland stems from high labour costs related to the existence of the so-called tax wedge. Amendments made so far to the Polish tax law have only slightly contributed to its elimination, and new initiatives in the area of income tax recently announced by the government, on the contrary, may result in its further expansion (See the box below).

The tendency to lower taxation of labour and business activity income in numerous OECD countries in the years 1995–2001 resulted in the reduction of tax wedges.

In OECD countries, including Poland, there is still room for further cuts in labour costs by reducing the tax wedge.

Figure 4

Movements in the tax wedge in OECD countries, 1995–2001\* (%)



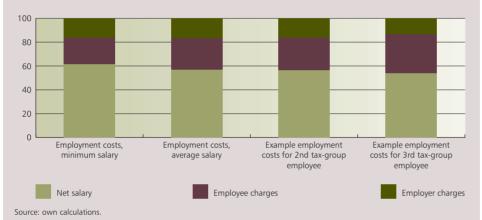
<sup>\*</sup> The estimated value as computed for an employee whose earnings equal the national average salary and who is not using tax allowances. Source: OECD data, NBP calculations.

#### Labour costs and "tax wedge" in Poland

The significant difference between labour costs and net salary is frequently quoted as the reason behind the high labour costs in Poland. This difference set against total labour costs is referred to as the tax wedge. The size of the tax wedge is affected by all kinds of social charges (social security and pension contributions), employers' charges related to employee recruitment and income tax.

The high tax wedge adversely impacts the labour market as it translates into high labour costs for the employer and a low salary for the employee, discouraging the former from raising employment and the latter from seeking it. As a result, in the longer run, a high tax wedge forces employers to substitute legal labour with capital and stimulates the growth of illegal employment. The high proportion of non-payroll labour costs in total costs reduces the competitiveness of enterprises and the appeal of the economy for potential investors and encourages employment cutbacks.

Figure
The structure of labour costs, assuming that no tax allowances have been utilised



For an ordinary Polish citizen earning average salary and not entitled to any tax breaks, the tax wedge stands at 42.9%. Because of progressive tax system, the tax wedge grows with the salary, net of tax breaks.

Once tax breaks have been incorporated (see Table ), it becomes clear that persons in the third tax group are subject to the highest tax wedge. The value of taxes paid by them corresponds to one-third of total income tax receipts. Meanwhile, 51.2% of total tax receipts is generated by the 95.2% of taxpayers in the first tax group.

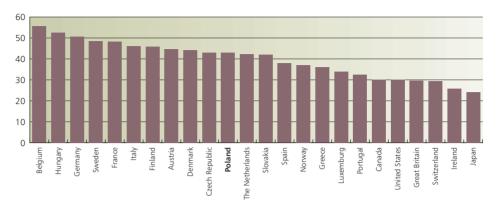
Table
The structure of income taxes levied in 2001 (%)

Income level as a tax base in particular thresholds	Structure of taxpayers	Structure of tax revenues	Effective rate of income tax after tax deductions*
The first tax threshold	95.2	51.2	5.3
The second tax threshold	3.8	15.8	10.0
The third tax threshold	1.0	33.0	24.8

<sup>\*</sup> Tax due after tax deductions, as a percentage of the total gross income before tax deductions. Source: Ministry of Finance, NBP calculations.

The increase in effective employee taxation, recently proposed by the government, will lead to the expansion of the tax wedge as most tax breaks will be abolished and existing tax rates retained, thus making the fight against unemployment even more difficult.

Figure 5
Tax wedge (%) in selected OECD countries, 2001\*



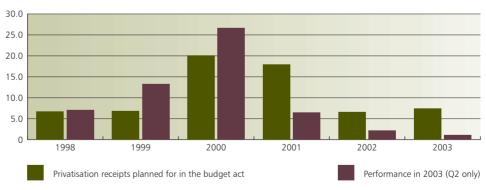
\* The estimated value as computed for an employee whose earnings equal the national average salary and who is not using tax allowances. Source: OECD data, NBP calculations.

#### 1.2.3. Privatisation processes

Privatisation receipts planned in the 2003 budget act stand at 7.4bn zloty. In the course of the first six months of the year, the central government budget received 1.2bn zloty, representing 15.8% of the planned amount (against 10.1% in the corresponding period of the previous year). Incomplete performance of the plan and little progress made in the privatisation of large state-owned companies suggest that, as in the years 2001–2002, planned privatisation receipts have been overestimated and that a larger than originally assumed portion of the central government budget deficit will have to be financed from other sources.

In relation to the first quarter 2003, privatisation receipts in the second quarter were over four times higher. However, the receipts secured in the first half of the year account for 53.6% of the 2002 figure, owing chiefly to the STOEN privatisation completed at the end of the last year.

Figure 6
Plans and financial effect of privatisation, 1998–2003



Source: Budget Acts 1998–2003, Ministry of Finance data.

#### 1.2.4. Producer prices in industry and construction (PPI)

In the second quarter 2003, PPI index fell in relation to the corresponding quarter of the previous year as its growth slowed down. Annual PPI growth in the second quarter declined compared to that observed in the first quarter in all industry sections (see Table 4). Still, the largest effect on quarterly PPI index was that of price movements in *manufacturing* (See Fig. 7). Similarly

to the first quarter, these changes were, to a large extent, dependent on the price index of the 'manufacture of coke, refined petroleum products and nuclear fuel' section, itself closely linked to movements in oil and fuel prices in international markets.

Following its growth in the first quarter, twelve-month PPI indices in the second quarter declined (see Fig. 8). Price decrease in the 'manufacturing' section in April and May was due chiefly to price falls in the 'manufacture of coke, refined petroleum products and nuclear fuel' section. Meanwhile, in June prices grew in this department along with the prices in the 'manufacturing' section. These price trends were attributed, among other things, to movements in fuel prices in international markets<sup>4</sup>. PPI index in the 'manufacture of coke, refined petroleum products and nuclear fuel' section displays strong correlation (correlation coefficient of 0.87)<sup>5</sup> with fuel prices quoted on the Amsterdam exchange (See Fig. 9).

Price falls in the second quarter were also recorded in the 'manufacture of chemicals and chemical products'. Price movements in this section were provoked by both price changes of petrochemically derived raw materials and foreign exchange movements (See Fig. 10).

Meanwhile, in June prices grew in relation to June 2002 in the sections of 'manufacture of base metals' by 8.9%,6 'manufacture of pulp, paper and paper products' by 4.8%, and 'manufacture of rubber and plastic products' by 3.4%. As a result, annual price indices in these sections were higher in June than in the entire manufacturing industry (1.9%).

The sectional structure of PPI movements confirms the recently growing effect of raw material prices and foreign exchange movements on the PPI index.

In June, after April and May falls, a monthly price growth was observed in *mining and quarrying* (by 0.9% in relation to May). Nevertheless, the annual index of these prices in June stood at 99.2%. Monthly price decreases in *mining and quarrying* in the second quarter of the year are seasonal in nature and related to lower demand for coal in the summer period. This year, the price fall was exacerbated by the difficult economic situation in the mining industry.

Table 4
PPI in industry and construction

Item		20	002				20	03	
	Q1	Q2	Q3	Q4	Annual	Q1		Q2	
	Co	rrespond	ling qua	rter	average	Corresp.	Prev.	Corresp.	Prev.
	р	revious	year =10	0		Q prev.	Q	Q prev.	Q
						year = 100	=100	year = 100	=100
INDUSTRY (PPI),									
of which:	100.2	100.7	101.4	101.9	101	103.0	101.0	102.3	99.9
– mining and									
quarrying	103.6	103.9	101.9	102.7	103.0	101.7	100.3	99.4	97.0
<ul> <li>manufacturing</li> </ul>	98.4	99.6	100.4	101.0	99.9	102.7	101.2	102.0	100.1
– electricity, gas									
and water supply	109.0	105.5	106.9	106.9	107.0	106.4	100.3	105.8	100.5
CONSTRUCTION	102.0	101.4	101.0	100.6	101.2	99.4	99.3	99.0	99.8

<sup>&</sup>lt;sup>4</sup> Average monthly fuel price on the Amsterdam exchange by month of the second quarter of 2003 fluctuated as follows: US\$ 284.5 per tonne in April (a monthly decline of 9.8%), US\$ 272.8 per tonne in May (a 4.1% fall), and US\$ 282.1 per tonne in June (a 3.4% growth).

 $<sup>^{\</sup>rm 5}$  Sample taken from January 2002 to June 2003.

<sup>&</sup>lt;sup>6</sup> Price growth in the second quarter 2003 in the 'manufacture of basic metals' section was affected by higher copper prices in international markets.

Figure 7
Share of PPI price growth by industry section in PPI growth (corresponding quarter previous year = 100)

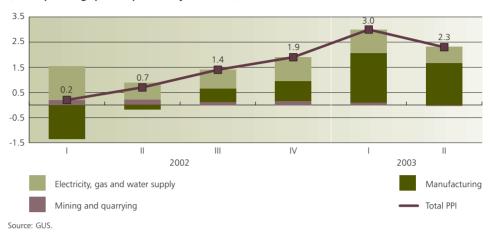


Figure 8
PPI in industry and its sections (corresponding month previous year =100)

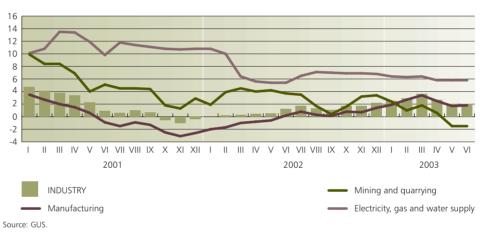
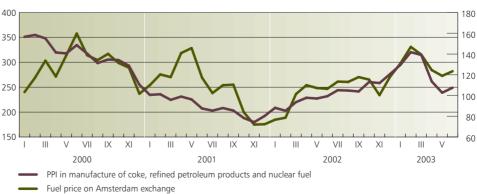


Figure 9
PPI growth in the 'manufacture of coke, refined petroleum products and nuclear fuel' section (corresponding month previous year =100) and fuel prices on the Amsterdam exchange (in US\$ per tonne)



Source: GUS and Reuters.

Figure 10

PPI growth in the 'manufacture of chemicals and chemical products' section (corresponding month previous year =100)
and average monthly euro and US dollar exchange rate

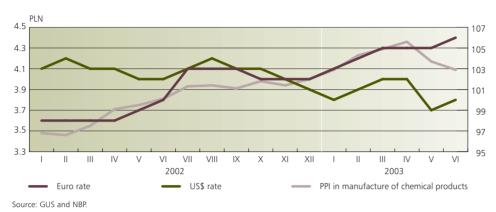
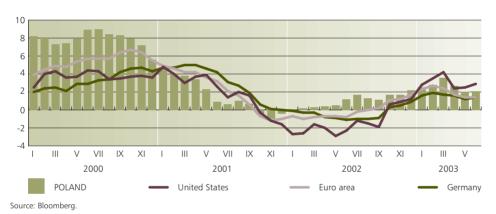


Figure 11
PPI in Germany, euro area, the US and Poland (corresponding month previous year = 100)



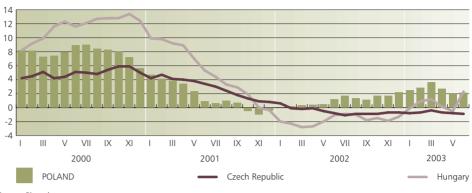
Relatively low monthly price increases were recorded in the second quarter in *electricity, gas* and water supply (a 0.5% increase in the second quarter in relation to the previous quarter). High annual PPI in this section, remaining at a similar level for a number of months (about 5–6%) is the result of rapid growth from April to August 2002. Approval by the Energy Sector Regulatory Office (URE) of new rates for the energy delivered by power plants signifies that price rises for retail customers can be expected from July onwards, so the annual PPI in this section will remain high.

In the second quarter, deflationary tendencies in *construction* observed since early 2003 were not reversed. In June, the relevant prices were 1.1% lower than in 2002. Their fall was due to weak output growth in construction.

Trends in PPI indices, similar to those in Poland, are seen in the euro area countries. In subsequent months of the second quarter, their growth was slowing down to 1.7% in April and 1.4% in May and June (See Fig. 11). Meanwhile, the US PPI index in May and June 2003 grew in relation to the corresponding period of the previous year, reaching 2.9% in June. This was attributable to movements in oil prices in international markets to which manufacturing prices in the US respond very quickly.

A different situation is observed in the Czech Republic where in June manufacturers' prices decreased. In Hungary, on the contrary, after the deflation (-0.5%) in May, manufacturers' prices grew significantly to 2.3% in June, again in connection with foreign exchange movements (See Fig. 12).

Figure 12
PPI in the Czech Republic, Poland and Hungary (corresponding month previous year = 100)



Source: Bloomberg.

## **2** External factors

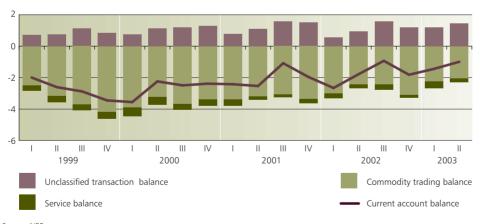
#### 2.1. Foreign trade and the balance of payments

In the second quarter of 2003, the current account deficit amounted to 990m euro and was 790m euro lower compared to the corresponding period of the previous year (Fig. 13). A decisive effect on its improvement was the further lowering of the commodity trading deficit and, similarly to the first quarter of 2003, growth in positive balance on unclassified transactions. Meanwhile, the widening income deficit contributed towards the expanding negative current account balance. The balances on services and transfers remained relatively stable compared to the second quarter of 2002.

Owing to these favourable changes, the relation of current account deficit to GDP decreased in the second quarter do 2.7% (against 3.1% in the first quarter 2003 and 3.6% in the second guarter 2002).

The reduction in the negative commodity trading balance in the second quarter to 2bn euro (by 400m euro compared to the second quarter of 2002) reflected, similarly to the first quarter 2003, the export growth being higher than that of imports (Fig. 14 and Fig. 15). In the period April–June 2003, euro-denominated export receipts grew by 4.0% in terms of value compared to the corresponding period of the previous year, whereas import expenditure dropped by 0.5%. Against the previous quarter, both export value growth and import value reductions took place at a slower rate<sup>7</sup>.

Figure 13
Current account balance, 1999–2003 (in euro billion, by quarter)

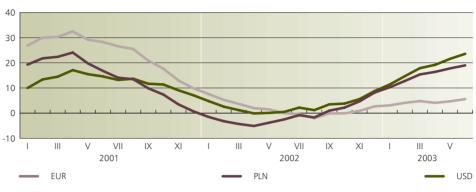


Source: NBP.

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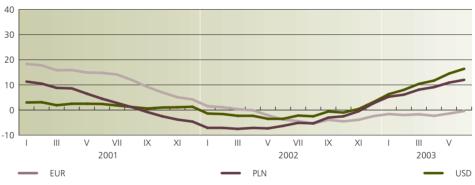
<sup>&</sup>lt;sup>7</sup> Foreign trade growth was still strongly influenced by foreign exchange movements. In the second quarter, the US dollar depreciated against the euro by 23.8% (22.4% in the first quarter 2003), which significantly reduced the value of euro-denominated foreign trade (based on exchange rates of the European Central Bank). US dollar-denominated export receipts grew by 28.6% in the second quarter and import expenditure rose 23.0%. In US dollar terms, negative commodity trading balance in the period April–June grew by US\$ 70m in relation to the second quarter of 2002.

Figure 14
Polish export growth, cash basis –12-month progressing average (percentage change on corresponding period previous year)



Source: NBP.

Figure 15
Polish import growth, cash basis – 12-month progressing average (percentage change on corresponding period previous year)



Source: NBP.

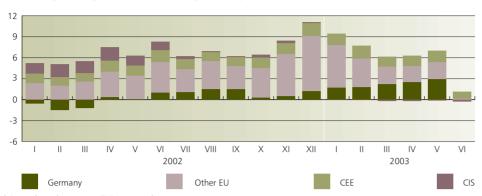
Since the beginning of the year, the value of export receipts grew by 5.1%, whereas import expenditure shrank by 1.5% in relation to the corresponding period of 2002 (in euro terms, on a cash basis). Compared to the first half of 2002, foreign trade growth accelerated significantly (from January to June 2002, exports dropped by 0.8% and imports declined by 5.5%). The negative commodity trading balance was reduced in the first half of 2003 by 1.2bn euro compared to the first six months of 2002.

According to the statistics itemised, in the period January–June 2003 exports rose by 3.3% while imports dropped by 2.0%. As a consequence, trade deficit was brought down once again by 1.3bn euro compared to the corresponding period of the previous year. Still, the growth in euro-denominated exports remained weaker than in the corresponding period of the previous year (6.8%). This was primarily due to a significant fall in the prices of euro-denominated transactions8. Net of the effect of movements in transaction prices, export growth was substantially stronger than in 2002. In the first five months of 2003, export volume expanded by 12.4% against 2.8% in the corresponding period of the previous year. Import volume also increased (3.7%). However, its growth was slower than in 2002 (6.5%).

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<sup>&</sup>lt;sup>8</sup> From January to May 2003, euro-denominated transactional export prices fell by 7.7% (against a 3.5% growth in the corresponding period of the previous year), and in imports by 4.3% (against a 2.3% fall in the corresponding period of the previous year).

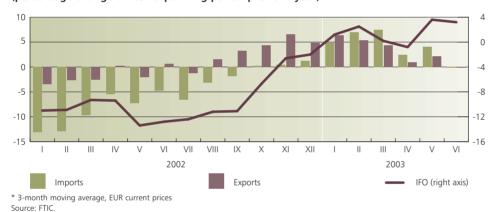
Figure 16
Share of major trading partners in Polish export growth\*
(percentage change on corresponding period previous year)



\* 3-month moving average, EUR current prices Source: FTIC.

Figure 17

Movements in German foreign trade\* and movements in IFO index (a 8-month delay) (percentage change on corresponding period previous year)



Increased sales to Germany positively affected Polish export growth in the course of the first six months of 2003 (Fig. 16). From January to June 2003, the value of exports to our largest trading partner climbed by 3.3%. This was a major change compared to the corresponding period of the previous year when sales to the German market decreased by 0.3%, contributing to the weakening of the growth in total Polish exports.

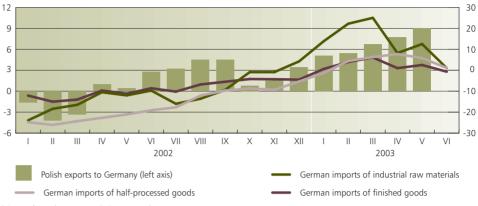
A distinct change took place in the trend of Polish exports to Germany despite the lack of improvement in the general outlook for the German economy. In the second quarter, the country's annual GDP fell by 0.2%. Most forecasts of financial institutions and research centres agree that GDP growth throughout 2003 will be close to zero in Germany<sup>9</sup> and accelerated growth in the German economy cannot be expected until 2004.

Despite weak internal demand, the relatively high growth of German imports (see Fig. 17) was generated from movements in the structure of import demand where the share of inexpensive products from China and Eastern and Central Europe, including Poland, expanded<sup>10</sup>.

<sup>&</sup>lt;sup>9</sup> Projections from July 2003. According to DIW institute and J. P. Morgan, GDP will decline by 0.1% this year. Meanwhile, most respondents to The Economist survey replied that GDP growth in Germany in 2003 would be zero.

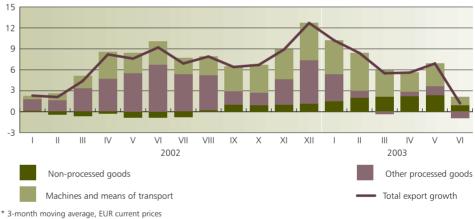
<sup>&</sup>lt;sup>10</sup> From January to May 2003, the value of German imports from China grew 20.5% compared to the corresponding period of the previous year, and from the countries of Central and Eastern Europe – by 8.9%. Imports from developed countries grew at a significantly slower rate in that period: from euro area countries by 3.8% and from the US – by a mere 0.4%.

Figure 18
Polish exports to Germany and growth of major product groups in German industrial imports (percentage change on corresponding period previous year)



<sup>\* 3-</sup>month moving average, EUR current prices Source: FTIC and Statistiches Bundesamt.

Figure 19
Share of major commodity groups in Polish export growth (percentage change on corresponding period previous year)



<sup>\* 3-</sup>month moving average, EUR current prices Source: FTIC.

The effect of movements in German import demand was also reflected in an accelerated growth in imports of semi-processed and non-processed goods as against finished good imports (Fig. 18)<sup>11</sup>.

Growth in exports to Poland's other major trading partners slowed down from January to June 2003 in relation to the corresponding period of 2002 (Table 5). This slowdown was diversified, due primarily to movements in demand and foreign exchange in various countries. Sales to the EU member states, except for Germany, grew in the period January–May 2003 by a mere 3% against 10% in 2002.

Economic growth in the countries of Central and Eastern Europe, higher than in the European Union, contributed to the relatively positive export performance to this group of countries. During the period examined, sales to these countries expanded by 10% compared to

<sup>&</sup>lt;sup>11</sup> Finished good imports from January to June 2003 grew 2.6%, that of half-processed goods – 3.6%, and that of non-processed products – 12.7%. As a result, the share of the last two groups in German industrial imports expanded to 17%.

Table 5
Movements in exports by major groups of countries (in EUR)

		Structure	9		Growth		Gr	owth eff	ect
		(%)		(%	change	to		(%)	
				pre	evious ye	ear)			
	2002	2002	2003	2002	2002	2003	2002	2002	2003
	I–VI	I–XII	I–VI	I–VI	I–XII	I–VI	I–VI	I–XII	I–VI
Total	100.0	100.0	100.0	6.8	8.2	3.3			
Developed countries	75.8	75.1	75.6	5.6	8.3	2.9	4.3	6.2	2.2
EU	69.7	68.8	69.8	4.8	7.5	3.4	3.4	5.2	2.4
Germany	32.8	32.3	32.8	-0.3	1.8	3.3	-0.1	0.6	1.1
France	6.0	6.0	6.3	20.4	20.6	9.2	1.1	1.1	0.6
Great Britain	5.3	5.2	4.8	11.9	12.4	-7.1	0.6	0.6	-0.4
Italy	5.6	5.5	5.6	-1.3	10.4	2.1	-0.1	0.6	0.1
Central and Eastern									
Europe	12.3	12.8	13.0	12.5	12.5	9.8	1.5	1.5	1.2
CIS	7.0	7.2	6.6	24.1	11.2	-3.4	1.5	0.8	-0.2
Russia	3.4	3.3	2.9	38.3	19.7	-11.7	1.0	0.6	-0.4
Developing countries	4.7	4.8	4.7	-7.6	-5.2	2.8	-0.4	-0.3	0.1

Source: FTIC (as at August 11, 2003).

2002. The major effect on such dramatic export growth had, first of all, increased sales to Lithuania and Slovakia, i.e. to the countries characterised by the highest GDP growth in the region (in the first quarter of 2003, GDP in Lithuania grew by 9.4%, while in Slovakia -4.1%).

Table 6
Movements in exports by major SITC groups of goods (EUR)

:	Structure	9		Growth		Gr	owth eff	ect
	(%)		(%	change	to		(%)	
			pre	evious ye	ear)			
2002	2002	2003	2002	2002	2003	2002	2002	2003
I–VI	I–XII	I–VI	I–VI	I–XII	I–VI	I–VI	I–XII	I–VI
100.0	100.0	100.0	6.8	8.2	3.3			
14.1	15.0	15.1	-4.8	1.0	10.7	-0.8	0.2	1.5
6.7	7.5	7.5	0.2	4.2	15.2	0.0	0.3	1.0
2.4	2.5	2.8	-1.1	4.4	19.6	0.0	0.1	0.5
5.0	5.0	4.8	-12.4	-5.1	0.1	-0.8	-0.3	0.0
85.9	85.0	84.9	9.0	9.6	2.1	7.6	8.1	1.8
6.1	6.3	6.5	0.1	8.8	10.9	0.0	0.6	0.7
38.2	37.6	36.3	13.9	12.5	-1.9	5.0	4.5	-0.7
41.6	41.1	42.1	6.2	7.2	4.4	2.6	3.0	1.8
	2002 I-VI 100.0 14.1 6.7 2.4 5.0 85.9 6.1	2002 2002 I-VI I-XII 100.0 100.0 14.1 15.0 6.7 7.5 2.4 2.5 5.0 5.0 85.9 85.0 6.1 6.3 38.2 37.6	2002 2002 2003 I-VI I-XII I-VI 100.0 100.0 100.0 14.1 15.0 15.1 6.7 7.5 7.5 2.4 2.5 2.8 5.0 5.0 4.8 85.9 85.0 84.9 6.1 6.3 6.5	(%) (%) (%) pre 2002 2002 2003 2002 1-VI 1-XII 1-VI 1-VI 100.0 100.0 15.1 -4.8 6.7 7.5 7.5 0.2 2.4 2.5 2.8 -1.1 5.0 5.0 4.8 -12.4 85.9 85.0 84.9 9.0 6.1 6.3 6.5 0.1 38.2 37.6 36.3 13.9	(%) (% change previous yet)  2002 2002 2003 2002 2002 1VI 1XII 1VI 1VI 1XII 1.00.0 100.0 100.0 100.0 6.8 8.2 14.1 15.0 15.1 -4.8 1.0 6.7 7.5 7.5 0.2 4.2 2.4 2.5 2.8 -1.1 4.4 5.0 5.0 4.8 -12.4 -5.1 85.9 85.0 84.9 9.0 9.6 6.1 6.3 6.5 0.1 8.8 1.3 1.3 13.9 12.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1	(%)       (%)       (%)       technology         2002       2002       2002       2002       2003         I-VI       I-VI	(%)       (% change to previous year)         2002       2002       2002       2003       2002       2003       2002       2003       2002       2003       2002       2003       2002       2002       2003       2002       2003       2002       2003       2003       2002       33.3         14.1       15.0       15.1       -4.8       1.0       10.7       -0.8         6.7       7.5       7.5       0.2       4.2       15.2       0.0         2.4       2.5       2.8       -1.1       4.4       19.6       0.0         5.0       5.0       4.8       -12.4       -5.1       0.1       -0.8         85.9       85.0       84.9       9.0       9.6       2.1       7.6         6.1       6.3       6.5       0.1       8.8       10.9       0.0         38.2       37.6       36.3       13.9       12.5       -1.9       5.0	(%)       (% change to previous year)         2002 2002 2003 2002 2002 2002         I-VI       I-VII       I-VI       I-VI       I-VII       I-VII       I-VI       I-VII       I-

Source: FTIC.

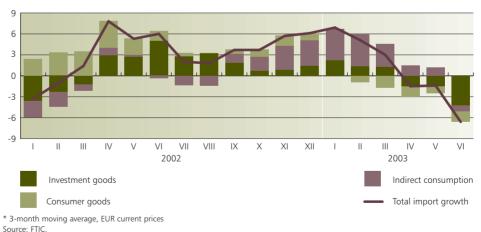
A distinct fall in the value of exports to Russia and other CIS countries took place despite relatively high economic growth in this region (in the first quarter of 2003, the Russian GDP grew by 6.8%). This situation was primarily attributable to the depreciation of the US dollar, the currency prevailing in settlements between Poland and the countries of that region. As a consequence, eurodenominated sales to Russia in the first six months of 2003 shrank by about 12% in relation to the corresponding period of the previous year (while from January to June 2002, they expanded by nearly 40%).

Movements in the import demand structure of Poland's major trading partners, in particular Germany, affected the goods structure of Polish exports by expanding the share of goods characterised by a lower level of processing (Table 6). As a result, whereas in 2002 (especially in the second and third quarter) growth in Polish exports was primarily determined by increased sales in the group of machines and means of transport (Fig. 19), in the first half of 2003 the main role in stimulating exports was taken over by so-called "other processed goods" (in particular, furniture, iron and steel, wood products) and non-processed goods (mainly agricultural produce and fuels, excluding coal).

The key reasons for the drop in value of exports in the group of machines and means of transport in the period January–June 2003 against the corresponding period of the previous year include lower exports of ships<sup>12</sup> and growing a share in exports of parts and subassemblies, instead of finished goods. This trend was most pronounced in the case of sales of private cars (a 9% decline in sales of finished vehicles, accompanied by nearly 30% increase in spare part exports), TV sets (sales of finished sets dropped by 27%, whereas spare part exports climbed by over 70%) and engines (sales of finished engines shrank by 12%, while that of their spare parts grew by nearly 20%). The above changes resulted in the lowering in unit prices of the goods classified in the group of machines and means of transport<sup>13</sup>.

The fall in the value of Polish imports between January and June 2003 was, to a large extent, affected by the slow growth in domestic demand. This was primarily reflected in the declining value of consumer and investment imports (Fig. 20). Among consumer goods, the imports of foodstuffs and durable goods declined the most (Table 7).

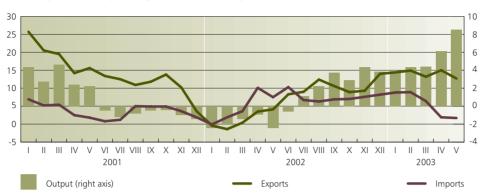
Figure 20
Shares of major commodity groups in Polish import growth (% change on corresponding period previous year)



<sup>&</sup>lt;sup>12</sup> Between January and June 2003, ship exports dropped by 17%, slowing down Poland's total export growth in the examined period by 1.0 percent.

<sup>&</sup>lt;sup>13</sup> In the first quarter of 2003, unit prices in the 'machines and means of transport' group dropped by 11.3% compared to the first quarter of 2002, i.e., definitely more than total Polish exports (6.8%). Cf. Foreign trade, January–March 2003, GUS, Warsaw 2003.

Figure 21
Polish foreign trade growth vs. sold industrial output growth (% change on corresponding period previous year)



\* 3-month moving average, EUR current prices

Table 7

Movements in import distribution structure according to purpose (EUR)

		Structure	·		Growth		Gr	owth eff	ect
		(%)	(	(% chang	e to pre	vious yea	r)	(%)	
	2002	2002	2003	2002	2002	2003	2002	2002	2003
	I–VI	I–XII	I–VI	I–VI	I–XII	I–VI	I–VI	I–XII	I–VI
Total	100.0	100.0	100.0	3.8	4.4	-2.0			
Investment goods	19.2	19.2	18.0	11.1	9.8	-8.3	2.0	1.8	-1.6
Investment goods, exclusive									
of means of transport	14.1	14.1	13.2	0.1	-1.9	-8.0	0.0	-0.3	-1.1
Industrial means of transpo	rt 5.1	5.1	4.7	59.1	66.5	-9.0	2.0	2.1	-0.5
Indirect consumption	58.5	59.3	60.8	-1.0	1.6	1.9	-0.6	1.0	1.1
Indirect consumption,									
exclusive of fuels	51.5	50.3	53.3	1.1	3.0	1.3	0.6	1.5	0.7
Fuels and lubricants	8.8	9.0	9.6	-12.1	-5.7	7.3	-1.2	-0.6	0.6
Consumer goods	22.2	21.5	21.1	11.8	7.8	-7.0	2.4	1.6	-1.6
Foodstuffs and beverages	3.9	3.6	3.4	4.2	-1.0	-12.7	0.2	0.0	-0.5
Personal cars	4.9	4.6	5.2	21.1	20.6	3.6	0.9	0.8	0.2
Durable goods	2.6	2.7	2.3	6.8	0.0	-12.7	0.2	0.0	-0.3
Semi-durable goods	4.1	4.0	3.8	17.7	12.8	-8.7	0.6	0.5	-0.4
Non-durable goods	6.6	6.5	6.1	8.8	5.6	-9.2	0.6	0.4	-0.6

Source: FTIC.

The drop in the value of investment good imports was not due, as in the case of consumer goods, to the lowering in the import volume (according to GUS figures, investment good volume expanded in the first quarter by 6.2% compared to the corresponding period of the previous year), but to the decline in unit prices<sup>14</sup>. This was partially attributable to shifts in the

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<sup>&</sup>lt;sup>14</sup> Euro-denominated unit prices in investment good imports (except for industrial means of transport) declined in the first quarter by 8.8% compared to the corresponding period of the previous year.

sources of Polish imports within the group. Products imported from developed countries are being primarily replaced with imports originating from developing countries<sup>15</sup>. Most of investment goods from the developing countries come to Poland from China. During the first six months of 2003, the imports from China increased 20% in relation to 2002. At the same time, China has become the third largest supplier to the Polish market in terms of investment goods and the fifth in general<sup>16</sup>.

The only major commodity group where growth in import value was recorded in the period from January to June 2003 was distributive goods. This growth could be traced mainly to higher fuel prices in the period<sup>17</sup>. In the remaining items of distributive imports, import value growth was relatively small, especially compared to sold industrial output and export growth (Fig. 21). This was probably related to the replacement of foreign elements with domestic ones, on the one hand, and movements in export structure described earlier (shifts in export structure from finished goods towards spare parts), on the other. This trend led to a (probably temporary) decrease in importintensiveness of Polish exports.

Figure 22
Real effective zloty exchange rate, 1993–2002 (quarterly figures, Q1 1993 = 100)

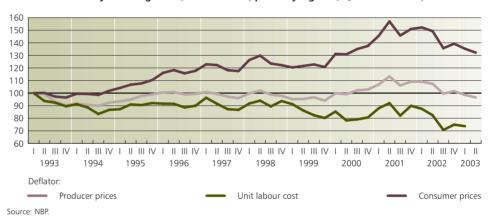


Table 8
Effective zloty exchange rates, 2001–2003 (% change on corresponding period previous year)

Zloty exchange rate index		20	01			20	02		20	003
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Nominal	6.3	15.9	5.8	8.1	2.7	-5.3	-6.4	-6.6	-9.4	-10.2
Real PPI-deflated	6.9	14.2	3.8	6.1	2.1	-5.1	-6.1	-6.9	-9.7	-10.1
Real CPI-deflated	10.9	20.0	8.0	9.8	4.6	-4.9	-6.9	-7.7	-11.1	-11.5

 $_{"}$ -" – denotes depreciation of zloty exchange rate, \* – estimated value Source: NBP and GUS.

<sup>&</sup>lt;sup>15</sup> The value of investment good imports from developed countries shrank between January and June 2003 by 7.1%, while that originating from developing countries grew 4.5%. Developed countries still hold a dominant share in Poland's investment good supplies (78% in the period January–June 2003). Nevertheless, in recent years the share of imports from developing countries has been expanding dramatically (from 12% in 2001 to 17% in 2003).

<sup>&</sup>lt;sup>16</sup> Worthy of note is the systematic growth of the Chinese share of investment good imports (from January to June 2003 alone, these accounted for 35% of total imports from China). The key items in Chinese imports currently include PCs and computer hardware. The imports of these goods from China jumped by 34% in the first half of 2003 compared to the corresponding period of the previous year, while imports from other countries fell by a total of 22%.

<sup>&</sup>lt;sup>17</sup> Net of the effect of movements in oil prices on total import growth, its value would drop by 2.3% compared to the previous year.

Table 9
Selected prudential ratios

Prudential ratio	2002			2003		
	Q1	Q2	Q3	Q4	Q1	Q2
Current account balance to GDP (%)	-4.0	-3.6	-3.6	-3.6	-3.1	-2.7
Commodity trading balance to GDP (%)	-6.1	-5.8	-5.5	-5.5	-5.2	-5.2
Direct investment to current account balance (%)	42.9	51.7	69.2	71.5	57.8	57.3
(Current account balance less direct investment) to GDP	(%) -3.1	-1.7	-0.6	-1.0	-1.4	-0.9
Foreign debt service to export receipts (%)	42.3	42.3	40.5	62.8	49.8	-
Official reserve assets expressed in monthly imports	8.6	7.7	7.9	6.8	8.1	7.6

Source: NBP figures and estimates

The primary reason behind the narrowing deficit in Polish foreign trade in the second quarter (both registered and not registered) is persistent zloty depreciation, especially against the euro<sup>18</sup>. Combined with the low domestic inflation rate, it contributed to the improvement in the competitiveness of Polish exports. The real zloty exchange rate (both PPI- and CPI-deflated) depreciated by over 10% in the second quarter in relation to the corresponding period of 2002, the change being more pronounced than in the preceding quarter (Cf. Fig. 22, Table 8).

In the second quarter of 2003, the current account deficit was financed in 57.3% by long-term inward foreign capital in the form of direct investment. The maintenance of this ratio at the level recorded in the previous quarter, despite the shrinking current account deficit, was attributable to inward direct investment falling to 0.6bn euro down from 0.9bn euro in the first quarter. The structure of inward direct investment continued to be dominated by the capital contributed to enterprises in the form of stakeholdings. The repayment of loans granted by direct foreign investors exceeded in the second quarter the value of new loans. In the examined period, the net outflow of capital in the form of portfolio investment (the effect of pulling out both foreign and Polish capital from debt securities).

The assessment of external imbalance in the second quarter was carried out on the basis of selected prudential ratios (Table 9). All ratios remain at a safe level, close to that recorded in the previous quarter.

#### 2.2. External prices

In the second quarter of 2003, the absence of symptoms of recovery in the world economy, in particular the US economy, led to a slowdown in price growth of all major groups of non-energy raw materials as against the corresponding period of the previous, and – in relation to the previous quarter – to their decline. In the examined period, oil prices also were subject to changes analogous in terms of direction, though distinctly more dramatic (Cf. Table 10).

The average Brent oil barrel price in the second quarter was US\$ 26; US\$ 5.5 lower than in the previous quarter. In that period, oil prices were characterised by high volatility (Fig. 23). In April, their falling trend (a minimum price of US\$ 22.9 per barrel) was exacerbated, in addition to the end of the Iraqi war<sup>19</sup>, by the expectation that this country will shortly resume its oil exports. The prolonged lack of Iraqi oil supplies in international markets hindered the restoration of oil reserves in developed countries. In effect, in May and June oil prices went up again (a maximum price of US\$ 28.9 per barrel).

<sup>18</sup> Cf. Point 4.3.2 "Exchange rate"

<sup>&</sup>lt;sup>19</sup> The end of the Iraqi war contributed to a significant decline in the effect of political risk on oil prices, though failing to eliminate it altogether. Regardless of reaching relative stability in Iraq, political developments in Nigeria and Iran as well as the terrorist bombing in Saudi Arabia also had a short-term effect on price growth.

Table 10

Movements in prices of basic raw materials (% change on previous year)

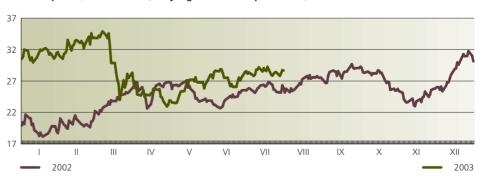
	In relation to the corresponding quarter for the previous year				In relation to the previous quarter				
	2002		2003		2002		20	003	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	
Non-energy raw materials,	8.4	17.4	13.4	10.2	6.1	2.7	2.4	-1.2	
of which:									
Food	12.3	19.0	14.8	12.3	11.4	2.6	-0.3	-1.5	
Industrial raw materials,	3.0	15.0	11.3	7.3	-1.2	2.8	6.6	-0.8	
of which:									
Raw materials of agricultural origin	6.8	26.1	18.3	11.1	1.3	2.8	7.4	-0.6	
Metals	-0.6	6.6	5.7	3.9	-3.7	3.0	5.8	-1.0	
Oil (Brent)	6.4	38.7	48.5	4.0	7.5	-0.4	17.0	-17.0	

Source: "The Economist" and Reuters.

The key role in shaping oil prices in the second quarter was also played by supply-side factors related to the end of the Persian Gulf war. By taking control of a substantial portion of Iraqi oil fields during the initial stage of the conflict, the US and British troops saved the Iraqi oil infrastructure from extensive damage. Given the above, it was expected that within one month of the end of hostilities Iraq would resume oil exports and achieve, by the end of 2003, its pre-war oil export volume (approximately 2.5m barrels a day). However, according to various estimates, in June oil extraction in Iraq still stood at less than 0.5m barrels a day, being considerably lower than the current needs of the ravaged Iraqi economy<sup>20</sup>.

To a large extent, the situation in Iraq determined the OPEC's oil supply policy. Initially, the cartel (primarily to Saudi Arabia) increased output to mitigate the war's effect on world oil markets. Concurrently, Venezuela continued to rebuild its production capacity which had been dramatically downsized following local strikes. As a result, ten OPEC member states jointly produced 26.2m barrels a day in the second quarter, i.e., 1.5m barrels a day more than in the first quarter. These efforts, however, fell short of making up for the absence of Iraqi supplies which had dropped by 1.8m barrels a day in the same period. (Fig. 24).

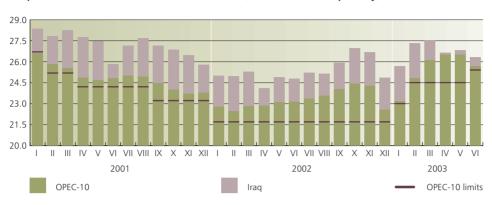
Figure 23
Brent oil prices, 2002–2003 (daily figures in US\$ per barrel)



Source: Reuters.

<sup>&</sup>lt;sup>20</sup> In late June, Iraq exported 8m barrels of oil from the Turkish port of Ceyhan and 2m barrels from southern Iraqi port of Mina Al Bakr. The exported oil, however, came from pre-war reserves.

Figure 24
Oil production in OPEC countries, 2001–2003 (in million barrels per day)

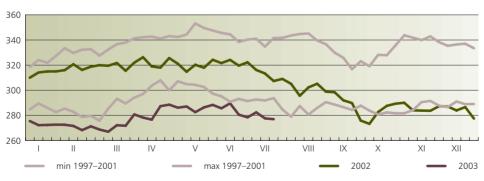


Source: Bloomberg.

Following the end of hostilities, OPEC was concerned that rapid resumption of oil production in Iraq would result in further price falls. Therefore, it resolved to limit the actual oil extraction as of June 2003<sup>21</sup>. The next envisaged step was the lowering of official production limits. However, due to delays in the resumption of Iraqi oil supplies and low volume of oil reserves in industrialised countries, the cartel decided to retain the current quotas, at its meeting held on June 11.

The shortage of Iraqi oil remains the primary obstacle to the reconstruction of the reserves of this raw material in developed countries. Following the strike of the Venezuelan fuel sector and the severe winter, at the end of the second quarter 2003 the US oil reserves hit a record low in 25 years (i.e., since the time when the American Petroleum Institute first monitored their volume). Although the second quarter of the year usually sees seasonal increase in reserves, this time their level dropped in relation to the end-of-March figure (Fig. 25). In the remaining OECD countries, the situation was slightly more promising in this respect. Still, in western Europe and in Japan the level of oil reserves also ran below the minimum volume recorded in the last five years<sup>22</sup>. Low oil reserves contribute to the high volatility of oil prices. There is also a serious threat that developed countries will enter the new heating season with low reserves, which further favours the maintenance of high prices.

Figure 25
US oil reserves, 2002–2003 (end-of-week figures in millions of barrels)

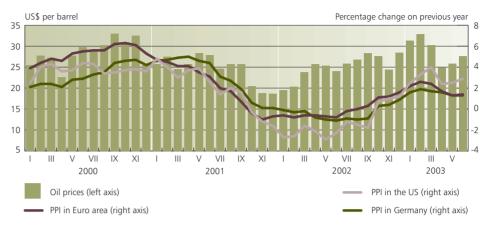


Source: American Petroleum Institute.

<sup>&</sup>lt;sup>21</sup> In June 2003, oil extraction in OPEC countries dropped over 800,000 barrels a day compared to May.

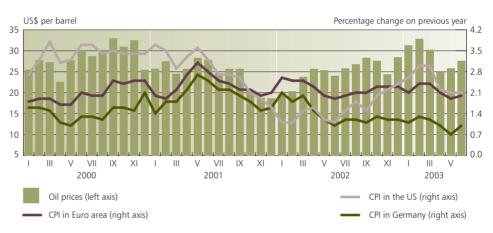
<sup>&</sup>lt;sup>22</sup> According to the estimates of the International Energy Agency, oil reserves in Northern America would last for 45 days, in the Pacific Rim – 53 days and in Western Europe – 61 days (Cf. Oil Market Report, July 11, 2003).

Figure 26
Oil prices and PPI in the US, Euro area and Germany



Source: Reuters and Bloomberg.

Figure 27
Oil prices and CPI in the US, Euro area and Germany

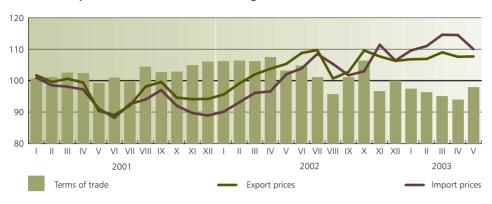


Source: Reuters and Bloomberg.

Alongside decline in oil prices came a slowdown in price growth in the largest economies of the world. To oil price increases and decreases alike, PPI index responded more strongly than CPI index (Fig. 26). The annual PPI index in the United States in June 2003 stood at 2.9% (against 4.2% in March), and in the euro area at 1.4% (2.4%). Meanwhile, the annual CPI index (Fig. 27) in the United States in June 2003 dropped to 2.1% (from 3% in March), with the Harmonised Index of Consumer Prices (HICP) in the euro area falling to 2% (from 2.4% in March).

Oil price growth also contributed to a deterioration of pricing terms in Poland's foreign trade (Fig. 28): the *terms of trade* index in the period January–April 2003 reached 95.7 against 106.4 in the corresponding period of the previous year. This could be attributed to the higher growth of zloty-denominated import transactional prices compared to export pricing. In the course of the first four months of 2003, unit import prices grew by 12.5% (compared to their 5.9% decline between January and April 2002). At the same time, export prices were 7.6% higher than in the period January–April 2002 (compared to their 0.1% growth in the corresponding period of the previous year).

Figure 28
Transactional price indices (PLN) in Polish foreign trade, 2001–2003



Source: GUS.

### 3 Inflationary processes

#### 3.1. Consumer prices

In the second quarter of 2003, the 12-month CPI index stayed low. It did show, however, considerable variation from one month to another. In April, CPI index fell to 0.3%, its lowest level in the first half of 2003, to go up in subsequent months and reach in June 0.8%, its December 2002 value. The increase in the annual inflation rate resulted from a weaker and delayed, compared to 2002, seasonal slowdown in consumer price growth. A monthly drop in these prices was not recorded until June, whereas the year before it first began in May.

Compared to the corresponding quarter of 2002, CPI growth in the second quarter took place in the context of:

- a visible slowdown in the downward trend in foodstuff prices, and
- weaker growth of officially controlled prices and prices of other goods and services.

The production situation in agriculture continued to stimulate low food pricing. Last year's crop harvests met domestic needs, with only small imports of products used for cereal-based produce and bread baking. Meat production, in particular pork, significantly exceeded domestic demand, which strengthened price falls. This year, however, the seasonal halt in food price growth came in June, whereas in 2002 it began earlier in May.

Within the group of officially controlled prices, there were not many growth accelerating stimuli in the second quarter. The observed increase in prices of tobacco products represented the delayed effect of an excise duty increase early in the year. On the other hand, the effect of increased charges for hot water, introduced locally throughout the country at the beginning of the year, gradually faded out during the quarter. The decline in domestic fuel prices recorded in every month of the second quarter hindered price growth in this group.

The prices of other consumer goods and services in the second quarter followed the trends observed in the previous quarter. Weak demand pressure persisting in the market did not

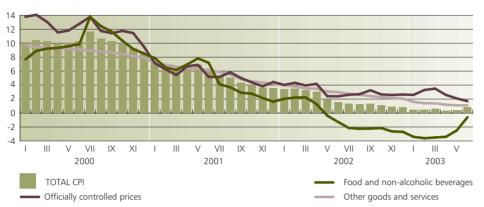
Table 11
Price growth in basic consumer good and service groups

	2002	2003		2002			2003	
	Weight	structure	IV	V	VI	IV	V	VI
	o,	6	Corresponding period previous year = 100					
Total	100.0	100.0	103.0	101.9	101.6	100.3	100.4	100.8
Food and non-alcoholic beverages	29.7	28.2	101.3	99.6	98.7	96.6	97.5	99.4
Officially controlled prices	27.1	27.2	104.2	102.4	102.4	102.6	102.1	101.7
of which: fuel	3.7	3.7	99.2	96.9	96.8	112.3	107.8	105.5
Other goods and services	43.2	44.6	103.5	103.1	103.0	101.2	101.1	101.1
of which: non-food goods	26.1	26.7	102.4	102.0	101.9	100.2	100.1	100.1
Services	17.1	17.9	105.1	104.8	104.7	102.7	102.6	102.6

Source: GUS figures and NBP calculations.

Figure 29

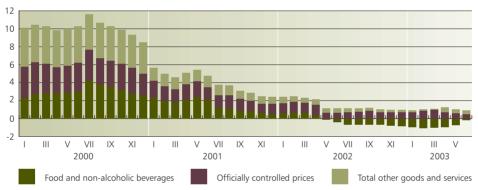
Movements in CPI and major price categories, 2000–2003
(corresponding month previous year = 100)



Source: GUS figures and NBP calculations

Figure 30

Share of individual price categories in CPI, 2000–2003 (corresponding month previous year = 100)



Source: GUS figures and NBP calculations.

create favourable conditions for raising retail prices of domestic goods, despite gradual producer price growth in manufacturing. Meanwhile, prices of services showed limited growth (Table 11, Fig. 29, Fig. 30).

Annual prices of *food and non-alcoholic beverages* in the second quarter were on average over 2% lower than a year before (in the second quarter of 2002 they remained stable, falling by 3.5% in the first quarter of 2003). The most significant decrease, of 7–8%, was recorded in meat prices and, of over 4%, in vegetable prices. Prices of bread and cereal produce dropped by about 0.3%, on average.

Movements in food prices in the second quarter reflected the good production situation in the agricultural market that encouraged low pricing of raw materials of agricultural origin. As of the second half of 2002, high demand persisted on the domestic food market, mainly for cereals, pigs and poultry. This was due to last year's high crop harvest and pig production peaks. Although the utilisation of these products for consumption purposes grew, it did so at a slower rate than supply growth. This led to further lowering of prices for basic produce and, consequently, to a decline in the retail prices of food products.

Towards the end of the second quarter, however, the monthly food price growth accelerated, owing mainly to bread and cereal-based produce, and, to a lesser extent, to meat. This acceleration

Figure 31

Annual CPI volatility and seasonality ratios for prices of food and non-alcoholic beverages



Source: GUS figures and NBP calculations

could be traced, among other things, to temporary factors related to local shortages of cereals and a relatively strong response of market prices of cereal-based produce. The fall in pork prices was also halted owing to intervention by the Agricultural Market Agency. The persistently high supply of poultry suppressed meat price growth in the retail trade.

Updated estimates of market supply of this year's crop harvest and the forecast imminent decline phase in pork production (despite high existing stocks of pork meat) point to the possibility of slow growth of produce prices in the longer run (at the turn of the years 2003/2004 and in 2004).

In the second quarter of 2003, annual *officially controlled prices*<sup>23</sup> followed a falling trend. Their growth was weaker both compared to the previous quarter and the corresponding quarter of 2002, by an average of 1 percent. Among other things, this was due to the decline in fuel prices and the absence of gas and electricity price rises in the first quarter, extending to the subsequent months of the second quarter of 2003. Among officially controlled prices, strong growth in the second quarter was recorded in passenger rail transport charges in connection with higher pricing of regional trips. Tobacco-based goods continued to appreciate following the January increase in excise duty.

Allocated to the group of officially controlled prices, *fuel prices* constitute a highly volatile category distorting the overall CPI index in periods of dramatic changes. In the second quarter of 2003, fuel prices contributed to the lowering of the inflation rate, falling month after month by an average of roughly 3%.

As shown by the Nafta Polska data on the structure of fuel prices based on the example of EU 95 fuel, the main cause of domestic fuel price decreases in the second quarter 2003 was the decline in its import price related to a 10.0% fuel price fall in international markets and a 4.6% US dollar depreciation against the zloty. Meanwhile, fuel price growth was encouraged in this period by a 1.1% increase in producer and distributor mark-ups (computed as the difference between retail and sale prices).

<sup>&</sup>lt;sup>23</sup> Officially controlled prices include prices of goods and services which are under limited influence of market mechanisms due to various types of administrative interference into their pricing process. The category of officially controlled prices isolated for analytic purposes includes prices:

<sup>–</sup> indirectly regulated by excise duty rates; this applies to those groups of goods and services in which excise duty share in the retail price structure is significant (for instance, alcoholic beverages, tobacco goods, fuels, and electricity);

<sup>-</sup> subject to control and approval by competent governments agencies, primarily the Energy Sector Regulatory Office (electricity, gas, local district heating, and hot water);

<sup>-</sup> with unified levels across the country (postal services, rail transport, TV and radio subscription);

<sup>-</sup> controlled by local authorities (municipal public transport); and

<sup>-</sup> set by the central government (court and public administration service fees).

#### Sensitivity of retail food prices to price movements in produce markets

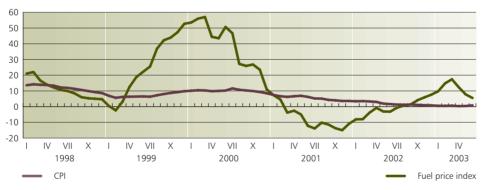
According to the research, movements in agricultural produce collection prices are accompanied by adjustment movements in retail food prices. However, the latter are delayed and take place on a significantly smaller scale. This suggests that the level of retail food prices is affected not only by prices in produce markets but also by food production costs (for instance, costs of energy). Furthermore, the share of collection prices in foodstuff prices varies and depends on the degree of food processing. The largest share of collection prices in foodstuff prices is observed in the production of low-processed foodstuffs (for instance, the collection price accounts for 84.4% of the chicken retail price, and in the case of Poznan flour it stands at 45.8%), whereas in highly-processed products it is low (for instance, in mixed bread it amounts to 13.6%).

The analysis also showed that:

- the correlation between selected current food prices and prices of relevant produce is strong in each of the examined delayed periods (0.8–0.9),
- in the longer run, retail prices of bread and cereal-based produce are affected only by rye collection prices (rye collection prices being statistically irrelevant),
- retail meat prices are most sensitive to movements in pig and poultry prices,
- in the case of retail prices of milk and dairy products, moderate dependence on collection prices is observed,
- movements in agricultural produce prices more strongly affect the price levels of low-processed foodstuffs than those of highly-processed goods.

Source: GUS figures and NBP calculations.

Figure 32
CPI and fuel price index (annual growth, %)



Source: GUS

Among the remaining groups of officially controlled prices, costs of district heating and hot water expressed in the rates approved by the Energy Sector Regulatory Office for local suppliers, and not on a nationwide scale, as well as the prices of basic energy carriers, in the second quarter rose in excess of the group's average, due to the previous year's increases in electricity consumption rates, the imposition of excise duty as of July 2002, and increases in gas prices as of April 2002. The charges for television and radio subscription were also raised (ca. 6%), similarly to court and legal-service fees (ca. 5%) and, to a lesser extent, to prices of tobacco products, following an excise duty rise in January 2003. A slight drop was recorded only in the price group of alcoholic beverages as a result of a sudden reduction in the applicable excise duty in October 2002.

In the price group of *other goods and services* in the second quarter of 2003, the twelvementh price growth was on average slower than a year before and in the first quarter. In the examined quarter, prices of non-food products making up this group grew annually a mere 0.1% on average, while prices of services climbed by about 2.6%, half that of the year before (Cf. Fig. 33).

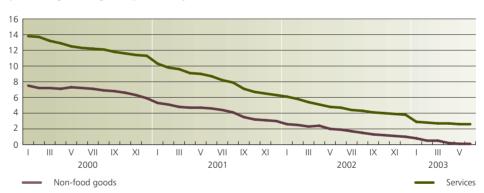
#### The sensitivity of consumer retail prices to movements in domestic fuel prices

The analysis of sensitivity of consumer retail prices to movements in domestic fuel prices confirmed that fuel prices have an effect on CPI and its components. Furthermore, the analysis showed that:

- the correlation between current CPI values and fuel prices is moderate in each of the delayed periods and roughly the same. The highest positive correlation coefficients (of 0.6–0.8) were recorded between transport group prices and fuel prices.
- most sensitive to movements in fuel prices are the following categories of transport group services: municipal public transport, coach transport, rail transport (despite the fact that prices in these groups are among those officially controlled, which delays their adjustment);
- administrative regulation leads to a slowdown in the adjustment process, which was proven for electricity and gas retail prices approved by the president of the Energy Sector Regulatory Office,
- movements in CPI, food prices (excluding vegetables and fruit), most prices of the transport group services and goods, and gas prices are caused (in the Granger's meaning) by movements in fuel prices; and
- no co-integrating relation was identified between clothing and footwear prices and fuel prices, which may be attributed to the fact that clothing and footwear prices are highly sensitive to demand fluctuations and subject to intense foreign competition.

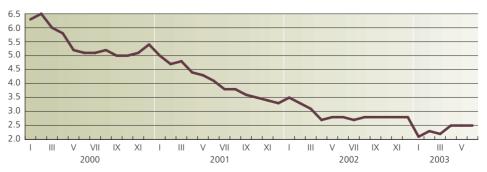
Source: GUS figures and NBP calculations.

Figure 33
Prices of other consumer goods and services (percentage change on previous year)



Source: GUS figures and NBP calculations.

Figure 34
Difference in price movements of other non-food goods and services (%)



Source: GUS figures and NBP calculations.

In the group of *non-food goods* (allocated to *other good and service* prices), aggregate prices remained stable in the second quarter. A lasting slowdown in price growth of non-food goods was due to the persistently low consumer demand. Internal proportions of price growth in the subgroups making up non-food goods also did not change. For instance, annually averaged prices of clothing and footwear continued to fall, while prices of furniture and household articles were still subject to relatively high and stable growth.

Growth of *service prices* (allocated to *other good and service prices*) in the second quarter followed, similarly to the previous quarter, a falling trend, although it remained significantly higher than price growth of the goods allocated to that group. The largest increases in this group were those involving charges related to the use of flats or houses and prices of healthcare and education services.

#### 3.2. Core inflation

In the second quarter of 2003, the falling trend in the CPI index and most measures of core inflation was reversed. In April, the inflation rate was still decreasing: the 12-month CPI dropped to a historic low of 0.3%, i.e., by 0.3% in relation to March, and the scale of decline in core inflation indices in this period reached 0.5 percent. Meanwhile, as of May the annual CPI and core inflation indices started to recover (growth by as much as 0.7% in June in core inflation, net of officially controlled prices) (Fig. 37).

Table 12
CPI and core inflation indices (Change over the corresponding month for the previous year)

	2002											
	- 1	Ш	Ш	IV	٧	VI	VII	VIII	IX	Х	ΧI	XII
СРІ	3.4	3.5	3.3	3.0	1.9	1.6	1.3	1.2	1.3	1.1	0.9	8.0
				(	Core in	nflatio	n excl	uding	:			
Officially controlled prices	3.2	3.1	3.0	2.6	1.7	1.3	0.8	0.7	0.6	0.5	0.2	0.2
Most volatile prices	2.9	2.8	2.6	2.5	2.1	1.9	1.6	1.5	1.3	0.9	0.8	0.7
Most volatile and fuel prices	3.4	3.3	2.9	2.7	2.4	2.1	1.7	1.6	1.3	8.0	0.6	0.4
Food and fuel prices												
("net" inflation)	4.7	4.7	4.1	4.0	3.2	3.1	2.9	2.8	2.8	2.3	2.1	2.0
15% trimmed mean	3.5	3.2	2.9	2.6	2.0	1.9	1.7	1.7	1.5	1.3	1.3	1.2

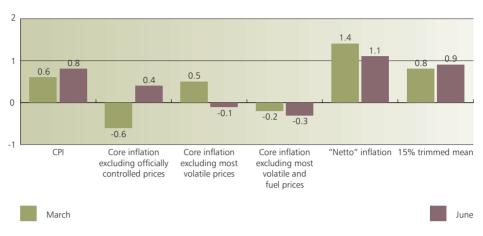
Source: GUS figures and NBP calculations.

Table 13
CPI and core inflation indices (Change over the corresponding month for the previous year)

		-			•		
		2003					
	- 1	II	Ш	IV	V	VI	
СРІ	0.5	0.5	0.6	0.3	0.4	0.8	
		Cor	e inflatio	n exclud	ling:		
Officially controlled prices	-0.3	-0.5	-0.6	-0.6	-0.3	0.4	
Most volatile prices	0.5	0.5	0.5	0.0	-0.1	-0.1	
Most volatile and fuel prices	0.1	-0.1	-0.2	-0.5	-0.5	-0.3	
Food and fuel prices ("net" inflation)	1.6	1.5	1.4	1.2	1.2	1.1	
15% trimmed mean	1.0	0.8	0.8	0.6	0.8	0.9	

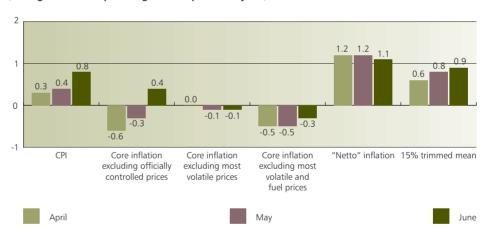
Source: GUS figures and NBP calculations.

Figure 35
CPI and core inflation, March 2003 and June 2003
(change on corresponding month previous year)



Source: GUS figures and NBP calculations.

Figure 36
CPI and core inflation, Q2 2003
(change on corresponding month previous year)



Source: GUS figures and NBP calculations

Core inflation excluding officially controlled prices (Fig. 38), expressed as a 12-month index, assumed a positive value in June for the first time since the beginning of the year, climbing by 0.4%. In the second quarter, this measure continued to run below CPI although the gap between the two narrowed distinctly. This could be traced to the increasingly weak inflationary pressure from consumer prices subject to administrative control which grew annually 1.7% in June. Among the excluded groups the highest rises involved charges for energy carriers (electricity, hot water and district heating) and transport services (passenger rail and sea transport), as well as fuel prices.

Core inflation excluding the most volatile CPI prices (Fig. 39), running closest to the registered inflation rate in recent months, in the second quarter declined significantly and even moved into negative values (a 0.1% fall in May and June 2003, on an annual scale). This was caused by the exclusion of prices with a material effect on the inflation rate (fruit, vegetable, flat use, electricity, TV and radio subscription charges).

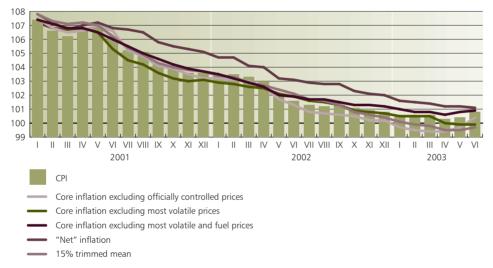
As far as *core inflation excluding the most volatile and fuel prices* (Fig. 40) is concerned, its annual decline of 0.3% was recorded in June. The difference between this measure and core inflation excluding only the most volatile prices (i.e., a measure inclusive of fuels) amounted to a mere 0.2 percentage point. The reason was a slowdown in fuel price growth, differentiating both indices.

"Net" inflation (Fig. 41) index, obtained through the exclusion of CPI from food and fuel prices, in the second quarter dropped to 1.1%. As of August 2001, this measure ran, on average, 1.3% above the overall inflation index, pointing to the strong anti-inflationary nature of excluded groups (especially food). It was not until June 2003 that this index approached CPI, exceeding it by 0.3% only, due to the acceleration in the annual growth of food and fuel prices.

Similarly to "net" inflation, another measure of core inflation, so-called 15% trimmed mean (Fig. 42), remained above CPI and totalled 0.9% in June. In June, groups showing the lowest and the highest price growth were excluded from the index. The groups marked by the lowest price growth included foodstuffs (meat, cured meats and vegetables) spirits, audio-visual and computer

Figure 37

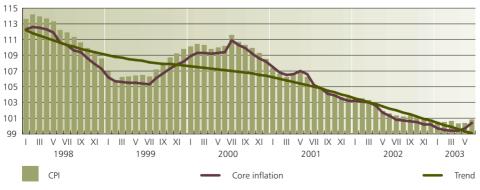
CPI, core inflation and trended core inflation indices (corresponding month previous year = 100)



Source: GUS figures and NBP calculations

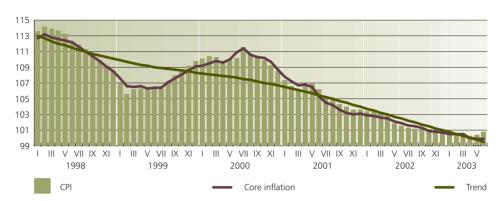
Figure 38

CPI and core inflation indices excluding officialy controlled prices (corresponding month previous year = 100)



Source: GUS figures and NBP calculations

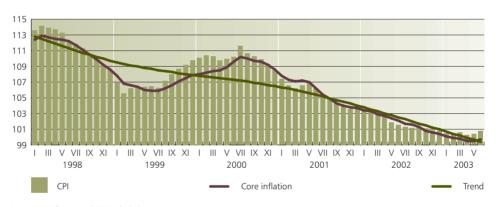
Figure 39
CPI and core inflation indices excluding most volatile prices (corresponding month previous year = 100)



Source: GUS figures and NBP calculations.

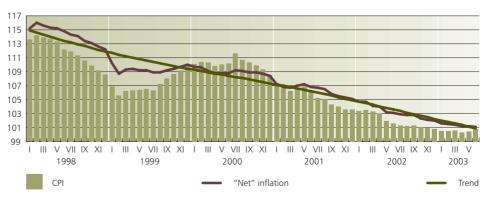
Figure 40

CPI and core inflation indices excluding most volatile and fuel prices (corresponding month previous year = 100)



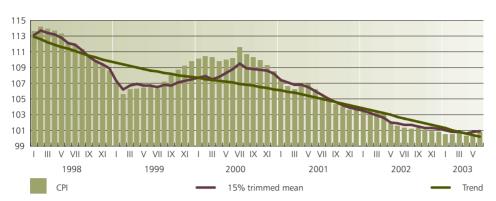
Source: GUS figures and NBP calculations.

Figure 41
CPI and "net" inflation indices excluding food and fuel prices (corresponding month previous year = 100)



Source: GUS figures and NBP calculations.

Figure 42
CPI and core inflation indices (15% trimmed mean) (corresponding month previous year = 100)



Source: GUS figures and NBP calculations.

equipment and clothing. The groups showing the biggest price growth comprised the following goods and services: fruit, charges related to the use of flats (sewage and water supply), energy carriers (hot water and electricity), transport services (rail and sea transport), fuels, as well as newspapers and magazines.

## 4 Monetary policy and performance of the inflation target

#### 4.1. Monetary policy in the 2nd quarter of 2003

In the second quarter of 2003, the Monetary Policy Council lowered NBP base rates on three occasions (Table 14). As a result, the NBP reference rate having key importance from the point of view of the assessment of the restrictive nature of monetary policy, dropped from 6.00% to 5.25%, or from 5.4% to 4.4% in real terms (when deflated with current CPI). In total, under the current cycle of interest rate cuts, i.e., starting from February 2001 till June 2003, NBP interest rates were reduced on twenty counts. The reference rate decreased by 13.75 percentage points in this period.

The degree of the restrictive nature of monetary policy in the second quarter is illustrated by the indices calculated by the NBP that take account of movements in both short-term real interest rate and real effective zloty rate. The mean value of both fixed and variable-base indices in the second quarter was lower than in the first quarter.

The Monetary Policy Council was encouraged to cut interest rates in the second quarter by the continuously low inflation rate and persistent factors limiting its growth in the future. All core inflation indices remained low also in the second quarter, and the net inflation index showed a slightly falling trend.

The annual PPI growth rate decreased in the second quarter from 3.6% in March to 2.1% in June.

Low inflation expectations of household were reinforced. The annual inflation rate expected within the following 12 months and measured with CPI fell to 0.3% in June down from 0.4% in April and 0.5% in May.

Table 14
Key decisions taken by the Monetary Policy Council in the second quarter of 2003

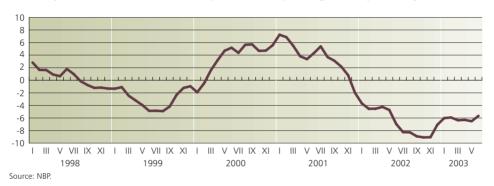
Date <sup>a</sup>	Decision taken
April 24	Minimum 14-day open market operation rate lowered from annual 6.00% to 5.75%
	Lombard rate lowered from 7.75% to 7.25%
	Rediscount rate lowered from 6.50% to 6.25%
	Deposit rate left unchanged at 4.25%
May 28	Minimum 14-day open market operation rate lowered from annual 5.75% to 5.50%
	Lombard rate lowered from 7.25% to 7.00%
	Rediscount rate lowered from 6.25% to 6.00%
	Deposit rate lowered from 4.25% to 4.00%
June 25	Minimum 14-day open market operation rate lowered from annual 5.50% to 5.25%
	Lombard rate lowered from 7.00% to 6.75%
	Rediscount rate lowered from 6.00% to 5.75%
	Deposit rate lowered from 4.00% to 3.75%.

<sup>&</sup>lt;sup>a</sup> Date decision taken.

Figure 43
Monetary Conditions Index (MCI) Base period: December 1994



Figure 44
Monetary Conditions Index (MCI) Base period: corresponding month previous year



In the context of the further decrease in employment levels, the second quarter saw continued slow salary growth in the corporate sector. As a result, hired-labour incomes in this sector were nominally 1.8% lower than a year before. Meanwhile, growth of social security benefits was 5.4% higher in relation to the corresponding quarter of 2002. In total, it is estimated that in the second quarter registered gross disposable household incomes grew about 2.0% nominally, or 1.6% in real terms compared to the second quarter of 2002.

Personal consumption growth continued to exceed the growth in the purchasing power of registered gross disposable household incomes and (according to NBP estimates) reached 2.8%.

Household deposits kept shrinking during the second quarter. This was attributed to the continuously slow growth of registered disposable incomes and the waning appeal of bank deposits compared to alternative forms of saving (investment funds and bonds). The annual growth of household loans in the second quarter was moderate (7–8%). Overall, household financial savings in the period were positive and reached levels similar to those recorded in the first quarter of 2003.

In the second quarter, corporate loans were characterised by a moderate annual growth dynamic (a fall of about 7% in April to about 3% in June).

Despite persistently weak prospects for economic growth in the euro area and the recession in Germany in the second quarter, symptoms of gradual economic recovery became increasingly visible in Poland.

After April 2003, the volume of sold industrial output began to grow, in particular with regard to the processing industry. In June, industrial output was 7.8% higher than a year before, while manufacturing output increased by 9.6%. Net of the effect of seasonal fluctuations, industrial output growth in June amounted to 8.0%, while manufacturing output growth stood at 9.9%.

The conditions in construction in the second quarter remained poor, although the falling output trend was halted. In June, construction production sales were 16% higher than in May and only 1.2% lower than in June 2002. In subsequent months, the sectional structure of construction altered, pointing to a possible growth in investment demand in the second half of the year. June was the third consecutive month with more than doubled (in relation to the corresponding months of the previous year) growth in the output of enterprises involved in preparing building sites and of accelerated growth in the output of enterprises carrying out construction finishing work (to 65.3% against approx. 40% in May). The GUS research conducted in June also pointed to a distinct improvement in the assessment of the overall situation in construction, with a continued positive evaluation of manufacturing.

In the second quarter, the Monetary Policy Council identified the following factors constituting potential sources of inflationary pressure in the future:

- the unstable condition of public finances;
- a persistently high growth of notes & coins in circulation (about 15% annually);
- rising oil prices in world markets (the price of average Brent oil per barrel increased from US\$ 24.9 in April to US\$ 27.6 in June) with a possibility of further growth.

Among these factors, the Council's biggest concerns were raised by the condition of public finances. Although the central government budget performance did not threaten to overrun the statutory deficit limit assumed for 2003, there was high uncertainty regarding the scale of the economic deficit of the public finance sector in 2003 and even higher concerning the shape of fiscal policy in 2004 and beyond.

Assumptions for the 2004 draft budget act adopted by the government in June 2003 pointed to possible enhancement of the imbalance of the sector of public finance in the following year. Changes made on the income (the inclusion – against the NBP's opinion – of 9bn zloty from the revaluation reserve) and on the expense side (the exclusion of subsidies for contributions transferred to open-ended pension funds in the amount of 11.9bn zloty) seemingly reduced the central government deficit in 2004 from approx. 54bn zloty (6.3% of GDP) to 33.1bn zloty (3.9% of GDP)<sup>24</sup>. High deficit of central government budget in 2004 and 2005 would result in a dangerous increase in central government indebtedness and the running over of the second prudential threshold (55% of GDP) adopted under the Act on Public Finance. This would mean a serious build-up of problems in the public finance sector after 2005 with its negative consequences for the economy.

In its decisions on interest rates taken in the second quarter, the Council also considered the scale of the cuts made so far which had a delayed bearing on the gradual increase in domestic demand in the second half of 2003 and in 2004.

#### 4.2. The money supply

Movements in money supply in the second quarter of 2003 were characterised by:

- stabilisation of annual M3 money supply growth at a low level,
- · maintenance of high growth in notes and coins in circulation (excluding vault cash), and
- moderate annual growth of claims on households and corporations.

M3 money supply grew in the second quarter of 2003 in relation to the balance at the end of March by 5.7bn zloty, i.e., by 1.8% nominally and 1.4% in real terms. The 12-month growth rate of the M3 broad monetary aggregate was positive, though low, starting from March 2003 and reached 1.3% in June.

<sup>&</sup>lt;sup>24</sup> The government revised these assumptions in July 2003, abandoning the inclusion of the funds from the revaluation reserve in central government budget receipts and simultaneously expanding budget expenditure. As a result, central government budget deficit widened from 33.1bn zloty to 45bn zloty.

Table 15 Money supply in Q2 2003

Item	Balance at	Chan	ge over	Change over	
	June 30, 2003	March	31, 2003	December	31, 2002
	billion z	loty	%	billion zloty	%
I. M1 money supply	146.4	10.1	7.5	9.7	7.1
II. M3 money supply	326.6	5.7	1.8	4.7	1.5
1. Notes and coins in circulation					
(except for bank cashier desks)	47.4	3.2	7.3	5.2	12.3
2. Deposits and others liabilities	275.5	1.8	0.6	-2.5	-0.9
2.1. Households	191.6	-4.0	-2.0	-4.7	-2.4
2.2. Non-monetary financial institution	s 7.2	0.5	7.7	-0.1	-1.1
2.3. Corporate entities	56.7	5.3	10.2	1.7	3.1
2.4. Non-commercial institutions opera	ating				
for the benefit of the households	8.3	0.2	2.6	0.1	1.0
2.5. Local government institutions	10.0	-0.2	-1.8	1.6	18.8
2.6. Social security funds	1.6	0.0	-1.3	-1.1	-40.4
3. Other M3 constituents	3.8	0.7	23.8	2.0	111.7

Source: NBP

The change in the level of deposits and other liabilities included in M3 resulted, on the one hand, from a 2.8bn zloty (1.2%) increase in zloty-denominated liabilities and, on the other, from a 1.0bn zloty (2.2%) fall in foreign currency liabilities. The lowering of currency deposits was almost entirely attributed to foreign exchange movements.

Higher M3 money supply in the second quarter was traced mainly to increased liabilities of the banking system<sup>25</sup> towards corporate entities, in particular zloty-denominated liabilities (by 5.0bn zloty, or 12.0%). The surge in liabilities towards corporate entities in the second quarter was significantly higher than in the corresponding period of previous years. So did expand the banking system's liabilities towards non-monetary financial institutions and non-commercial institutions operating for the benefit of the households.

Meanwhile, the level of deposits and other liabilities towards households kept on bank accounts decreased further. Both zloty-denominated (by 2.7bn zloty, or 1.7%) and currency (by 1.3bn zloty, or 3.8%) deposits shrank. The actual decline in currency-denominated household deposits (by 0.6bn zloty) was further exacerbated by foreign currency movements (by 0.7bn zloty). The outflow of funds from household bank accounts was partially related to the continued appeal of alternative saving methods, including placements in investments funds. Their assets expanded by 4.8bn zloty in the second quarter.

M3 money supply growth in the second quarter was strongly encouraged by the increased levels of notes and coins in circulation (excluding vault cash). This increase was seasonal but its scale was bigger than in the corresponding periods of previous years (7.3% against 6.3% in 2002 and 4.2% in 2001). The annual growth of this category accelerated compared to the previous quarter and varied between 14.9% and 15.7% from one month to another.

<sup>&</sup>lt;sup>25</sup> According to the methodology applicable as of March 2002, the concept of the "banking system" has been replaced with a broader notion of "monetary financial institutions" covering the central bank and other monetary financial institutions (formerly referred to as "commercial banks"). For greater clarity and transparency, the material includes the previously applicable terminology.

25 20 15 10 5 0 -5 -10 VII Ш V VII IX ΧI VII IX ΧI Ш V IX ΧI Ш 2000 2001 2002 2003 M1 МЗ

Figure 45
M3 and M1 nominal annual growth (corresponding month previous year = 100)

Source: NBP.

The growth in the balance of M1 narrow monetary aggregate, made up of notes and coins in circulation and current deposits in the banking system, in the second quarter could be traced to growth in both of these categories. Current deposits expanded in the discussed period by 6.9bn zloty (7.5%), primarily due to the 6.0bn zloty (7.8%) increase in zloty-denominated deposits. Meanwhile, currency-denominated current deposits expanded by 0.9bn zloty (6.3%), with their actual growth (by 1.2bn zloty) limited by movements in foreign exchange rates (-0.3bn zloty). The highest growth in the examined period was recorded in corporate current deposits – by 4.5bn zloty (16.6%).

The surge in current deposits was, to a large extent, attributed to the reclassification, starting from the June figures, of 'tomnext' and 'spotnext'<sup>26</sup> deposits as current deposits. To date, these were allocated to term deposits. The change made was aimed at rendering uniform the classification of current deposits, in accordance with the principles applicable within the European System of Central Banks (ESCB). The estimated value of reclassified funds reached 2.5bn zloty, or roughly 2.5% of current deposits.

#### 4.2.1.1. Money supply factors

Table 16 presents movements in the structure of money supply factors in the second quarter of 2003 as against the previous quarter and the corresponding period of the previous year. During the period, the primary source of money supply were net indebtedness of central government institutions and claims. Meanwhile, money absorption was caused by movements in net foreign assets.

#### Net indebtedness of central government institutions

Whereas in the first quarter 2003 net indebtedness of central government institutions appeared on the side of money-absorbing factors, in the second quarter this category constituted the primary money supply factor. By the end of June, net central government indebtedness stood at 64.8bn zloty, growing in the discussed period by 4.2bn zloty (nominally by 7.0%, or 6.6% in real terms). The reasons for this increase included:

- a 6.7bn zloty (8.1%) growth in banking sector claims on central government resulting from credits and debt securities, including a 7.0bn zloty (8.7%) increase in claims resulting from debt securities and a 0.3bn zloty (13.4%) decline in claims resulting from credits; and
- growth in banking sector liabilities towards central government of 2.5bn zloty (11.0%).

<sup>&</sup>lt;sup>26</sup> "Tomnext" (tomorrow next) and "spotnext" – overnight deposits are characterised by the fact that the deposit agreement is concluded on a given day, whereas the deposit itself is actually placed on the working day following the transaction day ("tomnext") or on the second working day following the transaction day ("spotnext").

Table 16
Money supply factors\*

Item	Change in		Change in		
	over Q1	2003	over Q2	2002	
	billion zloty	%	billion zloty	%	
M3 MONEY SUPPLY (1+2+3-4+5+6)	5.7	1.8	4.2	1.3	
Money supply factors:					
1. Net foreign assets	-5.7	-4.0	-1.1	-0.8	
2. Claims	2.5	1.0	14.4	5.9	
3. Net indebtedness of central government institutions	4.2	7.0	-1.1	-1.7	
4. Long-term financial liabilities	1.9	1.9	8.8	9.2	
5. Fixed assets (exclusive of financial assets)	0.2	0.8	2.2	7.9	
6. Other net item balance	6.4	-9.4	-1.4	2.4	

<sup>\*</sup> Following methodological changes implemented in March 2002, money supply factors encompass long-term financial liabilities of the banking system (negative value) and banks' fixed assets (exclusive of financial assets).

Source: NBP.

Similarly to previous periods, budget receipts and expenditure of the central government, being the largest entity in that sector, were decisive in determining the rate and direction of movements in the net indebtedness of the central government. In the face of privatisation receipts (15.8% by the end of June), significantly lower than originally assumed in the 2003 budget act, the funding secured from the sale of treasury securities constituted an important source of financing for central government borrowing needs. The additional source of financing for budget liabilities in the examined period was provided by the May bond issue in foreign markets, of the face value of 800m euro. In June, the state budget received 4.7 bn zloty from the NBP's profit contribution.

#### Claims

Total claims of the banking system expanded in the second quarter by 2.5bn zloty (an increase of 1.0% nominally and 0.6% in real terms) and constituted, though on a smaller scale than in the previous quarter, one of the money supply factors. At the end of June, claims accounted for 79.7% of M3 broad monetary aggregate against 76.3% in 2002. The upward trend in 12-month claim growth observed since November 2002 was reversed in April 2003.

Table 17 Structure of claims in Q2 2003

Item	Balance at	Chang	je over	Change	over
	June 30, 2003	March 3	31, 2003	December	31, 2002
	billion	zloty	%	billion zloty	%
Total claims on	260.3	2.5	1.0	9.7	3.9
1. Households	94.2	2.1	2.2	4.4	4.9
2. Non-monetary financial institutions	14.8	0.1	0.8	0.0	0.3
3. Corporate entities	136.0	-0.6	-0.4	4.7	3.5
4. Non-commercial institutions operating					
for the benefit of households	1.0	0.0	-0.6	0.0	-4.2
5. Local government institutions	11.3	0.3	2.4	0.0	0.4
6. Social security funds	3.0	0.7	27.7	0.6	24.0

Source: NBP.

The implementation of a uniform method for classifying credits and loans indexed to foreign currencies in June 2003 resulted in the allocation of indexed credits, until now shown in zloty, to currency credits. As a result, there was a significant increase in currency claims in June, with a simultaneous decline in zloty-denominated claims. The share of credits denominated in foreign currency (inclusive of the effect of foreign exchange movements) in total credits, oscillating in 2003 between 26.2% and 28.0%, rose to 30.5% in June. Material changes, resulting from this reclassification, took place in the sectors of individual consumers and individual entrepreneurs, included in the household category and in the corporate sector.

The share of claims on households in total claims expanded systematically since the beginning of 2003 to reach 36.2% in June. Similarly to previous periods, household credits were primarily directed towards housing purposes (26.1% in June). Credits taken out to finance purchases of residential housing property also represented the largest item in the structure of total credits extended to individual consumers (36.2%). In the meantime, individual entrepreneurs, included in the household category, incurred mostly investment credits (35.4%), working capital credits (25.7%) and current account credits (21.5%).

The share of claims on corporate entities in total claims decreased slowly since March and amounted to 52.2% at the end of June. The indebtedness of this sector in the banking system resulting from credits, loans and other claims declined in the period by 0.8bn zloty (0.6%). The increased demand for new credits, though considerably lower than in the previous quarter, was displayed by enterprises and privately-owned partnerships and co-operatives. In relation to March 2003, their banking system indebtedness grew by 0.4bn zloty (0.4%). Meanwhile, state-owned enterprises and partnerships reduced in the second quarter their borrowing needs by 1.3bn zloty (5.2%) in relation to the previous quarter. Enterprises used credit facilities mainly to finance their operations (33.9%) and investment projects in process (32.7%).

Claims on other sectors expanded in the second quarter by 1.0bn zloty, with the largest contribution from growing claims on social security funds at 0.7bn zloty (27.7%).

#### Net foreign assets

Net foreign assets of the banking system amounted to 138.2bn zloty at the end of June and shrank in relation to March by 5.7bn zloty, or 4.0%. This fall was attributable on the one hand to a foreign assets' decrease of 6.0bn zloty (3.2%) and on the other to a 0.3bn zloty (0.7%) decline in foreign liabilities. These falls were primarily accounted for by foreign exchange movements. In US dollar terms, net foreign assets came to US\$ 35.5bn at the end of the second quarter and basically did not change in relation to the end-of-March figure.

Movements in foreign assets represented the resultant of a 3.0% growth in this category at NBP and its simultaneous decrease at commercial banks by 6.2%. Growth in foreign asset balances at NBP was attributable, among other things, to the amount of 800m euro obtained by the central government budget on issues of treasury bonds on foreign markets and deposited at NBP in a foreign currency account.

Meanwhile, the foreign liabilities of the banking system grew in the second quarter as a result of a 6.1% growth in NBP liabilities and a 4.2% increase in the liabilities of commercial banks.

#### Other items (net) balance

In the second quarter of 2003, negative (net) balance of other items decreased 6.4bn zloty, or 9.4%, and amounted to -61.4bn zloty at the end of June.

The scale and direction of changes within this category were determined by other net assets at NBP. During the second quarter of the year, the negative balance of other net assets at NBP shrank by 6bn zloty, or 14.8%, and stood at –33.5bn zloty at the end of June. This was primarily due to a reduction in the balance of provisions to cover foreign exchange risk in connection with the valuation of foreign currency assets and liabilities converted into zloty. These changes resulted from technical book entries and had no direct effect on the M3 money supply.

Other elements contributing to the reduction of the negative other items (net) balance in the second quarter of 2003 included the financial performance of monetary financial institutions which dropped by 1.4bn zloty, or 40.6%, and amounted to –2.0bn zloty (as a component of other items (net) balance) at the end of June. This change was accounted for by the reduced balance of financial performance under approval procedure. Funds held at the accounts (e.g., in the form of dividend) of households, corporate entities, non-monetary financial institutions, as well as other central and local government institutions contributed to an increase in M3 money supply.

#### Banks' fixed assets

The value of banks' fixed assets (exclusive financial assets) at the end of the second quarter of 2003 stood at 29.3bn zloty and grew by 0.2bn zloty (or 0.8%) in relation to the end of the first quarter.

#### Long-term financial liabilities

Long-term financial liabilities of the banking system expanded in the second quarter by 1.9bn zloty, or 1.9%, and reached 104.7bn zloty at the end of June. Growth of this category was determined by a 1.9bn zloty (2.4%) higher balance of capitals and reserves. In relation to the previous quarter, the balance of deposits with maturity dates beyond two years remained stable.

#### 4.3. Monetary policy transmission mechanisms

#### 4.3.1. Interest rates

#### Monetary policy and interbank rates

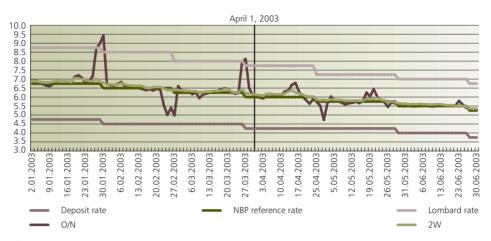
In the second quarter of 2003, short-term interest rates continued to fall in accordance with persistent market expectations regarding further NBP rate cuts (Fig. 46, Fig. 47).

Following a series of three NBP reference rate cuts by 25 basis points (bps) each in the first quarter, the market was unsure of the date of its next reduction. For this reason, the April cut of the NBP reference rate by another 25bps was not fully discounted by the money market, as shown by the maintenance of the positive spread between two-week (2W) rate and NBP reference rate, before the MPC meeting in April. Following the MPC decision on interest rate cuts, the money market's yield curve fell by an average of 14bps. The significant shift downwards of the longer end of the yield curve reflected increased market expectations regarding further cuts in the NBP reference rate.

In response to the MPC's April decision and the falling inflation rate, market expectations as to NBP rate cuts intensified in April. As a result, interest paid on interbank deposits with maturity dates beyond one month dropped significantly. The 1M rate declined in May by approximately 25bps, while 9M and 12M rates dropped roughly by 40bps. As a consequence, the slope of the money market's yield curve increased (Fig. 49). Market participants were almost certain that the MPC would reduce the reference rate by another 25bps in May, as suggested by the 2W deposit rate falling below the NBP reference rate right before the MPC meeting. The negative spread between the 2W deposit rate and the NBP reference rate was also recorded prior to the June meeting of the MPC, pointing to the discounting by the market of another expected reduction of the reference rate by 25bps.

The flattening of the yield curve's section between 2W and 3M maturity after the MPC meeting in June was related to the break in the cycle of mitigatory monetary policy announced by

Figure 46
NBP rates and interest charged on O/N and 2W interbank deposits



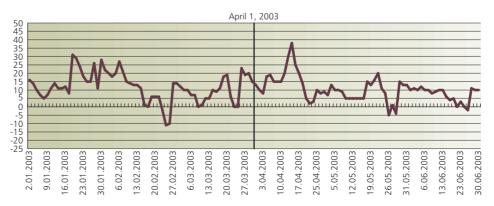
Source: Reuters and NBP.

Figure 47
Reference rate and interest charged on 1M, 3M, 6M, and 12M interbank deposits



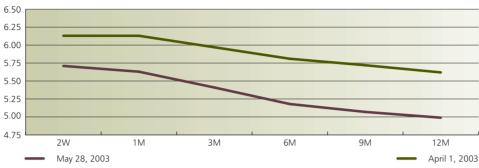
Source: Reuters and NBP.

Figure 48
Spread between the reference rate and 2W deposit rate



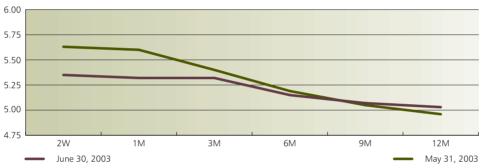
Source: Reuters and NBP.

Figure 49
Movements in yield curves in interbank deposit market in May



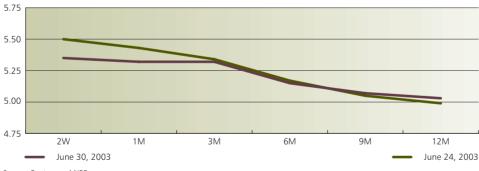
Source: Reuters and NBP.

Figure 50
Movements in yield curves in interbank deposit market in June



Source: Reuters and NBP.

Figure 51
Yield curves in interbank deposit market before and after MPC meeting in June



Source: Reuters and NBP.

MPC members<sup>27</sup> and reflected the absence of expectations regarding changes in NBP rates in July (Fig. 50). Meanwhile, a slight growth trend in the rate of deposits with longest maturity dates, observed in June, accounted for a decrease in market expectations regarding NBP reference rate cuts in the longer run.

<sup>&</sup>lt;sup>27</sup> Podczas konferencji prasowej zorganizowanej po posiedzeniu RPP wskazano, że na lipcowym posiedzeniu w dniach 17–18 lipca nie będą jeszcze znane nowe dane makroekonomiczne.

#### Commercial bank reactions to central bank policies

In the second quarter of 2003, the reference rate of the National Bank of Poland was reduced by 0.75%. During that time, 1M WIBOR rate declined by 0.83%. Meanwhile, similarly to previous periods, movements in the interest offered by commercial banks varied depending on the product and customer category (Cf. Table 18).

Table 18
Movements and levels of selected interest rates

Туре	Change between		Change over March 2003			
	December 2002	Ш	VI	IV	V	VI
	and March 2003			2003		
Total zloty-denominated time deposits	-0.41	3.82	3.15	-0.26	-0.48	-0.67
Total consumer loans	-0.95	16.51	15.93	-0.23	-0.33	-0.58
Total corporate loans	-0.64	9.92	9.13	-0.27	-0.64	-0.79
1M WIBOR	-0.83	6.15	5.32	-0.32	-0.55	-0.83
NBP reference rate	-0.75	6.00	5.25	-0.25	-0.50	-0.75

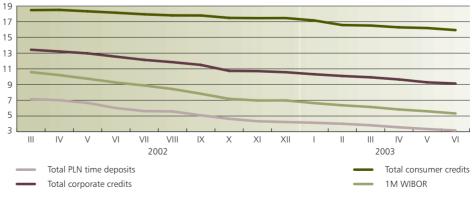
Source: NBP.

The dynamics of movements in borrowing and lending rates in the second quarter had a different character than in the previous quarter. Unlike in the first quarter 2003, relatively small changes in total interest on consumer loans were recorded. They were smaller than movements in interest on corporate credits, total deposits, and 1M WIBOR rates. Meanwhile, interest on time deposits fell to a relatively larger extent than in the first quarter.

Among the aggregates analysed, the most marked decline in the second quarter was seen in interest on corporate credits. At the same time, a regularity was identified for a number of quarters consisting in the scale of movements in interest on corporate credits and interbank rates being similar.

A long-term analysis of movements in the interest offered by commercial banks to their customers (Cf. Fig. 53) shows that as of March 2002 both the borrowing and lending rates decreased at a slower rate than interbank rates. However, whereas aggregate changes in time deposit and corporate lending rates were similar, interest on consumer loans decreased at a significantly slower

Figure 52 Selected interest rates



Source: NBP.

Figure 53
Aggregate movements in selected interest rates as of March 2002

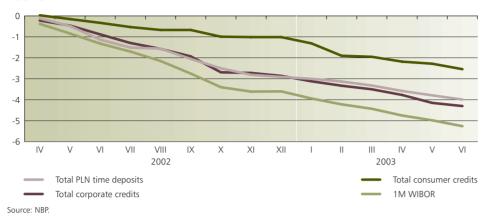
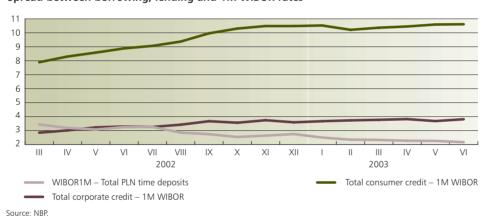


Figure 54
Spread between borrowing, lending and 1M WIBOR rates



rate. This is indicative of the continuous differentiation in the treatment of individual customer groups by commercial banks.

As a result of movements in interest rates, the spread between interest on consumer loans and interbank rates widened systematically. Meanwhile, the same spread for corporate loans stabilised. At the same time, the spread between interbank rates and deposit rates offered by commercial banks narrows (especially for time deposits with declared maturity beyond two years).

The stabilisation of margins charged by commercial banks in crediting corporate entities in relation to interbank rates may attest to a gradual reduction in the risk involved in crediting business activity perceived by commercial banks in connection with the imminent economic recovery. Meanwhile, less aggressive cuts in long-term deposit rates indicate that banks, in anticipation of the future intensification of the crediting campaign, have already begun to secure sources of financing. In the face of growing competition for customer savings from other financial institutions, these measures may prove essential for banks wishing to secure adequate returns.

#### Interest rates and credit demand

In the second quarter of 2003, commercial banks continued to lower interest on loans. As a result, average interest on household consumer loans in June amounted to 15.9% (15.6%

in real terms), on corporate loans -9.1% (6.9% in real terms), and on housing loans -7.7% (7.4% in real terms)<sup>28</sup>.

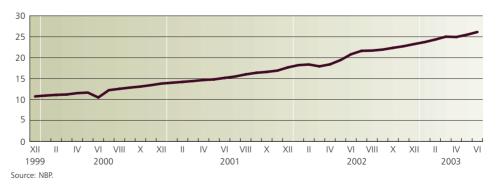
Lending rate cuts in the second quarter were accompanied by the halt in the falling trend in annual household credit growth, and subsequently by its slight increase. In June, annual growth in loans granted to households reached 8.5% nominally against 7.2% in March. Net of the effect of exchange rate movements, the reversal of the trend in annual household credit growth became even more pronounced: in June, it stood at 6.0% as against 3.3% in March.

Housing loans represented the main component of the surge in household loans. Household loans expanded in the second quarter by 2.1bn zloty, where housing loans accounted for 1.5bn zloty. After taking out the effect of exchange rate movements, housing credit growth reached approximately 1.7bn zloty. The rapid growth in housing loans was encouraged by the fall in their interest rates, which in the period proceeded faster than the decline in consumer lending rates. The relatively low interest on housing loans is due to the fact that these facilities are usually secured much better than other household loans. The lowering of interest-rates on housing loans was also affected by strong market competition. Alongside falling interest on zloty-denominated housing credits, the appeal of currency credits for households decreases. An accurate comparison of the growth in zloty-denominated and currency housing loans in the second quarter is not possible in the light of the discussed changes in bank reporting standards introduced in June 2003. The share of housing credits in total household loans has been growing steadily to reach 26.1% at the end of the second quarter (Fig. 55).

Despite falling interest, corporate credit growth still remains slow. In the second quarter, a slowdown in annual growth of corporate indebtedness was recorded nominally from 8.4% in March to 2.8% in June. Net of movements in exchange rates, the annual corporate credit growth amounted to 1.2% in June.

According to the findings of a survey conducted by the NBP<sup>29</sup>, in the opinion of corporate entities the interest charged on credit facilities did not constitute a barrier to their availability in the second quarter. Despite numerous symptoms of economic recovery, the sample group examined is dominated by companies not planning to expand their credit indebtedness. Credit financing is usually more readily available to large enterprises. Still, research findings suggest that during the second quarter credit availability ratings improved to the greatest extent in the small enterprises group.

Figure 55
Share of housing loans in total household credits (%)



<sup>&</sup>lt;sup>28</sup> In setting real interest rates on household consumer loans and housing loans, household inflation expectations served as the deflator (available on www.nbp.pl), and for corporate loans the deflator was the current PPI index.

<sup>&</sup>lt;sup>29</sup> Research into business confidence conducted by the NBP is a questionnaire-based survey on a sample of 400 enterprises. A comprehensive analysis of research findings can be found on the internet at www.nbp.pl/publikacje.

#### Interest rates and deposit levels

Consecutive cuts in NBP interest rates in the second quarter of 2003 were accompanied by the lowering of interest rates on deposits by commercial banks.

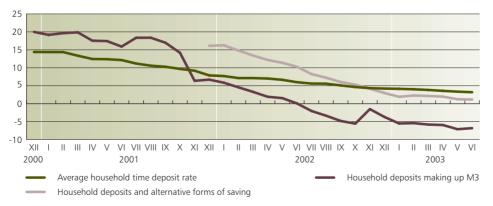
In the second quarter, alternative placements such as, for instance, purchase of investment fund units or treasury bonds, generated higher returns than bank deposits. The interest payable on 10-year treasury bonds stood at 4.91% in June, whereas investment in funds potentially offered even higher yield rates. The value of trust units in most investment funds operating in the debt securities market grew in the first six months of 2003 by over 3%, and in many equity funds exceeded 15%, promising similarly high growth in the future. A comparison of the above yield rates with the deposit rate proposed in the banking system encouraged many entities to transfer their savings from banks to investment funds, for example. As a result, investment funds continued to enjoy an intense inflow of assets in the second quarter.

Falling interest rates and their structure contributed to a 4.5bn zloty, or 2% nominally, decline in household deposits at commercial banks in the second quarter. After removing the effect of exchange rate movements, the fall totalled 3.6bn zloty. At the same time, however, alternative household savings (treasury bonds, investment fund units and deposits at SKOK savings fund) expanded by about 2.6bn zloty. Thus, total financial assets of households shrank in the second quarter by approximately 1bn zloty, for the first time since 2000. The annual growth of household deposits making up the M3 broad monetary aggregate remained negative in the second quarter and stood at –6.8% in June. Meanwhile, the annual growth of total household financial assets, though decreasing, was positive and reached roughly 1.2% in June (Fig. 56).

Further intensive substitution by households of bank deposits with alternative forms of saving observed in the second quarter attests to active efforts being made by households to raise yields on privately held financial assets. Placing assets with investment funds not only promised higher returns but also enabled avoidance of interest income taxation. The opportunity to avoid paying taxes also constituted the primary incentive for households to purchase bank bonds. Their volume rose in the second quarter by 0.75bn zloty.

Corporate deposits expanded in the second quarter by 5.2bn zloty (10.2%). The annual growth of corporate deposits reached 16.6 % in June, i.e., its record high since 2000. The rapid surge in corporate deposits may be a symptom of accelerated economic growth in the second quarter of 2003.

Figure 56
Annual growth of household deposits (two perspectives) and average household time deposit rates



Note 1: Comparability of household deposit rates prior to and after March 2002 is limited due to changes in the methodology of interest rates statistics.

Note 2: Forms of household savings alternative to deposits making up M3 aggregate include investment fund units, treasury securities and deposits held at SKOK savings fund.

Source: NBP.

VIII X

2002

IV VI

Time deposits

Annual growth of current and time deposits

30
25
20
15
10
5

Figure 57
Annual growth of current and time deposits

2000

Current deposits

Source: NBP.

1999

-5 -10 -15

Following the decrease in interest rates and the resulting reduction in alternative costs of maintaining notes and coins, as of the end of 2001 dynamic growth was recorded in notes and coins in circulation and the accompanying growth of the M1 narrow monetary aggregate. The additional factor encouraging rapid growth of notes and coins in circulation was the "nominal shock" reflected in the belief that the current deposit rate offered by the banking system is too low. It seems that after some time households will get accustomed to lower interest rates and will reduce the scale of substitution of their bank deposits with notes and coins.

VIII

2001

Due to the above mentioned changes in the definition of the M1 aggregate introduced in June, it is not possible to accurately determine M1 growth in the second quarter. The estimated M1 growth in the examined period was 7.5bn zloty, and its annual growth amounted to roughly 14%. Whereas the annual growth of current deposits continued to be high, running at some 13% in June, the annual growth of time deposits remained negative at approximately –7% (Fig. 57). The falling volume of time deposits varied in nature. Deposits with maturities beyond 2 years were expanding rapidly. On the other hand, the balance of time deposits with maturities of up to 2 years was shrinking. In June 2003, annual growth of these categories amounted to 10.3% and ca. –8.1%, respectively.

Movements in deposit volumes observed in the second quarter represented the extension of the processes initiated in late 2001. Bank deposit rates falling below yields on alternative assets and interest income taxation encouraged consumers to revise the structure of their financial assets in order to maximise profit and enhance their liquidity.

#### Expected interest rates

#### Short-term expectations

In the second quarter, the market continued to expect further NBP rate cuts.

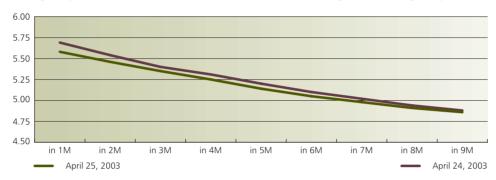
Initially, after three consecutive monthly NBP rate cuts during the first quarter, these expectations were not over-optimistic. It was not until the April rate reduction that the market became confident that further movements in the central bank's interest rates may be expected (Fig. 58). The persistently low inflation rate was also a key reason behind increased market expectations regarding further NBP rate reductions (0.3% year-on-year in April).

The expectations concerning the continuation of a series of NBP rate cuts were reflected in the falling trend of FRA interest which persisted basically until the end of May<sup>30</sup> (Fig. 59).

<sup>&</sup>lt;sup>30</sup> FRA market is an interbank market where FRA (Forward Rate Agreement) transactions are concluded. These are forward contracts for a short-term interest rate (1M, 3M or 6M WIBOR). FRA 1x4, 2x5 and 3x6 contracts are forward contracts for interest rate issued for 3M WIBOR, whose settlement date has been agreed within one month (1x4), two months (2x5) and three months (3x6), counting from the contract conclusion date.

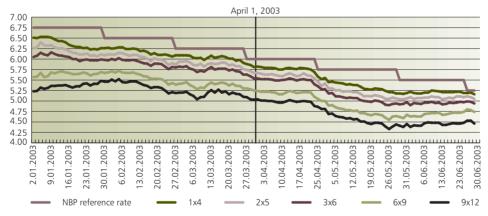
The strength of market confidence was attested by the fact that at the end of May the expected 3-month WIBOR at the end of July was 35bps below its current level (Fig. 60). Furthermore, towards the end of May the interest rates offered on FRA contracts discounted the 25bps NBP reference rate cuts decided at the MPC meetings held in May and in June. Some market participants did not rule out that the MPC would reduce the NBP reference rate by as much as 50bps in May. In most cases, however, analysts were confident that the MPC would continue to lower interest rates by 'small steps' of 25bps.

Figure 58
Change in position of 3-month forward interest rates, following MPC meeting in April 2003



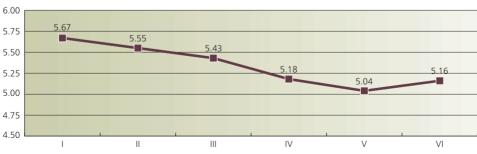
Source: Reuters.

Figure 59
FRA contract rates for 3M WIBOR and NBP reference rate



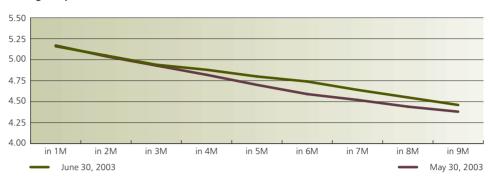
Source: Reuters.

Figure 60 3-month FRA contract rates with maturities at end July 2003



Source: Reuters.

Figure 61
Change in position of 3-month forward interest rates in June 2003



Source: Reuters.

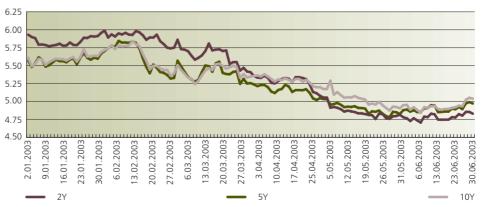
The publication of the figures, worse than anticipated by the market, on food and non-alcoholic drink prices for the first half of May dramatically altered the market's attitude towards further liberalisation of the monetary policy. This change was also encouraged by the government's announcements regarding the widening of the central government budget deficit in 2004. The market expectations as to further cuts in NBP rates subsided. At the end of June, the expected 3M WIBOR at the end of July grew some 12bps in relation to May (Fig. 60). The most dramatic weakening was recorded in the market expectations for NBP rate cuts in the longer run, i.e., within a minimum 6-month time horizon (Fig. 61). Despite general concerns, the market continued to expect a 25bps reduction in the NBP reference rate at the MPC meeting in June.

#### Long-term expectations

From the beginning of the second quarter of 2003 to the turn of May and June bond yields followed a downward trend. (Fig. 62).

This trend was determined by the market participants' expectations that further rate cuts by NBP would follow. The lowering of the NBP reference rate in the second quarter by 75bps led to a 59bps decline in yield rates for two-year benchmark bonds<sup>31</sup>.

Figure 62
Treasury bond yield rates



Source: Reuters and NBP.

<sup>&</sup>lt;sup>31</sup> Zero-coupon bonds are bonds whose maturity is close to 2 years.

The factor which could potentially contribute to the fall in yield rates all along the curve was the incorporation on May 1 of the Polish treasury bond index into the *World Government Bond Index* (WGBI) published by Citibank. This information was of key importance for all investment funds which base their strategies on the WGBI index<sup>32</sup>.

At the turn of May and June, the decline in bond yields ceased. The events on Hungary's financial market adversely affected Poland's market climate. Towards the end of May, the forint to euro rate was subject to strong depreciation and at the beginning of June Hungary's central bank announced a devaluation of the central parity. To stabilise the exchange rate, Hungarian monetary authorities raised interest rates on two occasions (by a total of 3 per cent). The losses suffered in the Hungarian market and increased uncertainty as to the further direction of the monetary policy in Hungary drove some investors away from bond markets in accession countries, including Poland.

Higher bond yields were also attributable to growing uncertainty concerning political developments in Poland. The related concerns were mitigated neither by the favourable outcome of the referendum on the EU membership nor by the vote of confidence given to the ruling government. The additional factor with negative effect on investors' mood were fears of the possible widening of the central government deficit pursuant to the 2004 draft budget act.

Higher bond yields in late June 2003 could also be attributed to the shift in the expectations of market participants as to the direction of NBP interest rate cuts. Investors believed that the likelihood of another reduction in interest rates in July was low. Their expectations were revised both in response to macroeconomic data pointing to a steady economic recovery and as a result of the comments made by the MPC representatives signalling that interest cuts in July would be rather unlikely.

The symptoms of gradual improvement in the macro-economic sphere were observed in other countries. Investors' growing optimism with regard to economic prospects translated into higher popularity of stock exchange investment and thus contributed to the outflow of capital from bond markets. This global trend was also seen in the domestic market of Treasury securities. In the period from late May to June, the commitment of foreign investors to the Polish bond market, measured by nominal value of the non-residents' portfolio, fell 8.5%<sup>33</sup>.

Lower demand for bonds was reflected in the primary market figures. Demand-to-supply relations in the bids for two- and five-year wholesale bonds in the second quarter remained at levels similar to long-term average values calculated since October 1999. Nevertheless, in this period the values of this index were distinctly lower than in the first quarter 2003, especially for five-year bonds.

Growth of zero-coupon yield curve<sup>34</sup> in the second quarter of 2003 is presented in Fig. 63.

The short end of the curve was subject to a statistically relevant downward shift<sup>35</sup>. This change was due to the continuation of the cycle of the central bank's interest rate cuts as evidenced by the convergence of the scale of reduction: the section of the curve with maturity dates of up to 2 years moved downward by an average of 69bps, i.e., only 6bps less than the aggregate lowering of the NBP reference rate.

The curve's segment with maturities ranging from 4 to 10 years shifted downward by 30bps, on average. The small scale of the shift resulted from the exhaustion of the fall potential of the domestic yield curve which used to be determined by investor expectations regarding the

<sup>&</sup>lt;sup>32</sup> A fund management strategy, especially a passive one, envisages the preservation of the portfolio structure close to the structure of a defined index. Thus, the incorporation into the index of new type instruments results in increased demand for such instruments.

 $<sup>^{33}</sup>$  May 28, 2003 – the date of the highest ever level of foreign investor commitment to the domestic bond market - was adopted as the point of reference.

<sup>&</sup>lt;sup>34</sup> The zero-coupon yield curve illustrates the relation between yields and maturities of zero-coupon bonds. The basic model, used at the National Bank of Poland to estimate the zero-coupon yield curve, is that developed by Svensson (1994) – cf. 1999 Inflation Report.

<sup>&</sup>lt;sup>35</sup> The statistical relevance of the curve's shift in a given period is determined by its ultimate location with respect to the confidence range (95%), constructed based on the data on the curve's volatility. In particular, if the curve estimated at period end falls within the set confidence range, this means that, with a 95% probability, no material changes have taken place in the shape and location of the curve compared to the beginning of the period.

Figure 63 Zero-coupon yield curve in Q2 2003

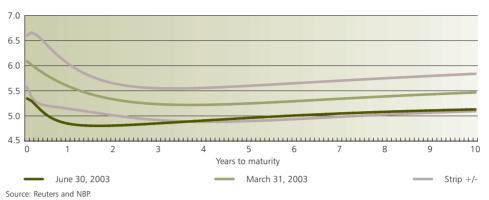
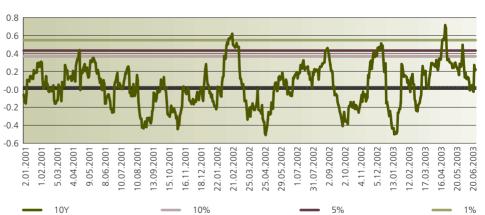


Table 19
Movements in bond yield rates in Q3 and Q4 2002, and Q1 and Q2 2003\*
(quarter-end figures as against preceding quarter-end figures)

		Maturity	
	2 years	5 years	10 years
Q3 2002	-109	-108	-81
Q4 2002	-105	-130	-90
Q1 2003	-51	-32	-28
Q2 2003	-59	-28	-30

<sup>\*</sup> The table lists absolute changes (in bps) in yields on tradable bonds with maturities close to 2, 5 and 10 years.

Figure 64
Correlations between yields on 10-year German and Polish bonds



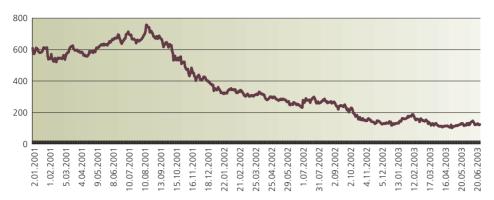
Note: Correlation coefficients are calculated for daily absolute movements in yield rates (21 observations). Horizontal lines mark critical levels above which correlation coefficients assume non-zero values on a given level of relevance.

Source: Reuters and Bloomberg.

adjustment of the domestic yield curve to the euro area curve. This factor was decisive in lowering the Polish yield curve as of mid-2001. The above point is well illustrated by Table 19.

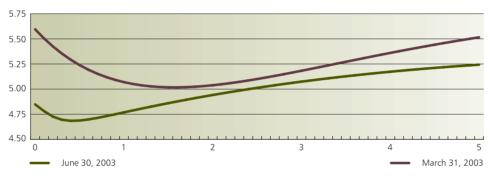
The gradual disappearance of the effect of the factors involved in the so-called 'convergence game' is illustrated by two facts. Firstly, since the beginning of 2003 the spreads between domestic bond yields and German government bond yields with analogous maturities remain stable. Secondly,

Figure 65
Spread in yields on 10-year German and Polish bonds (in base points)



Source: Reuters and Bloomberg

Figure 66
Annual output-time curve, Q1 and Q2 2003



Source: Reuters and NBP.

the second quarter saw a periodic strong increase in the correlation between yield rates of relevant domestic and euro area bonds, especially those with long maturity dates<sup>36</sup> (Fig. 64 and Fig. 65).

In the second quarter of 2003, market participants revised their expectations with regard to both the minimum annual interest rate and the time horizon in which this minimum level would be achieved. In late March, investors expected that the minimum annual interest rate (5.02%) would be achieved after about 19 months. Towards the end of the examined period, the achievement of the minimum level (4.69%) was expected within less than 5 months (Fig. 66).

#### 4.3.2. Exchange rates

In the second quarter of 2003, there was further depreciation of the zloty rate. The nominal effective zloty rate against a basket of the currencies most important to the Polish economy dropped in relation to the previous quarter by 2.3%, whereas in relation to the second quarter of 2002 – by 10.2%. It should be noted that in June 2003 the average monthly nominal effective zloty rate was 18.0% lower than in the corresponding month of 2001 (Fig. 67).

In the second quarter, the trends in zloty exchange rate continued to be strongly affected by movements in the EUR/US\$ rate. High dependence of the EUR/PLN rate on the

<sup>&</sup>lt;sup>36</sup> Co-variation is measured with the correlation coefficient of absolute movements in yield rates of Polish and German bonds for the last 21 observations.

Figure 67
Nominal effective zloty rate, 2001–2003 (monthly figures, Dec. 2000 = 100)

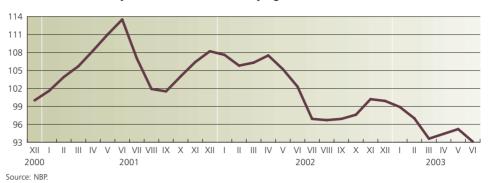
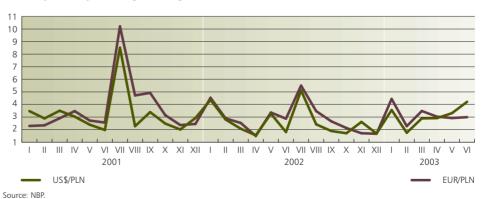


Figure 68
Zloty rate against USD and EUR and EUR/USD relation



Figure 69 Volatility of zloty exchange rate against USD and EUR



EUR/USD cross rate is confirmed by the value of the correlation coefficient at 94.7% for monthly figures from January 2001 to June 2003 (Fig. 68). As a result, in the second quarter the zloty appreciation against the US dollar (period average) of 1.6% in relation to the first quarter was accompanied by a 4.1% zloty depreciation in relation to the euro. Ultimately, in the second quarter the EUR/PLN rate was 17.2% and 24.8% weaker, while the US\$/PLN rate was 3.9% and 6.1% stronger than their levels in the corresponding periods of 2002 and 2001, respectively.

66

The zloty depreciation trend in the second quarter was most pronounced in June when the nominal effective rate of the Polish currency weakened by 2.2%. This reflected the then high risk associated with investment in Polish assets, resulting from three factors:

- the "contagion" effect (considerable depreciation of the Hungarian forint led to investors' reluctance to make capital investments in Central European countries),
- increased uncertainty as to Poland's future fiscal policy;
- the resulting lowering by Standard and Poors of Poland's rating in terms of credit worthiness prospects, from stable to negative.

It should be added that zloty depreciation in the second quarter would have been deeper if it had not been for the positive outcome of the accession referendum held on June 7–8, 2003.

The factors listed above led to a high volatility in the zloty exchange rate in June 2003 (Fig. 69).

\* \* :

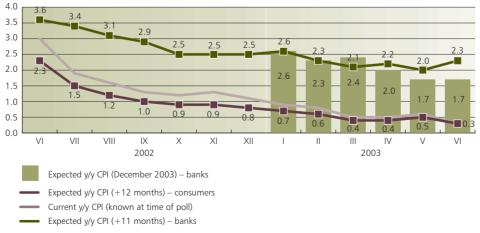
The long-term pass-through coefficient determining the effect of movements in the nominal effective zloty rate on the price growth of consumer goods and services, adjusted for the shift in inflation expectations and cyclical fluctuations in general economic conditions, stands at 0.19, with 54% of the pass-through effect cumulated in the first two quarters, and 89% in the first year.

Given the value of the pass-through coefficient and the time structure of the responses of internal prices to movements in the exchange rate, it may be estimated that in the second quarter of 2003 consumer prices (calculated in relation to the corresponding period of the previous year) grew by 0.10% as a result of foreign exchange movements. If, additionally, the pass-through effect on the CPI of movements in external prices, estimated at 0.05%, were to be taken into consideration (as evidenced by Brent oil prices), a 30% CPI growth in the second quarter could be attributed to foreign exchange and external price movements.

#### 4.3.3. Inflation expectations

In the second quarter of 2003, inflation expectations of consumers and inflation forecasts developed by bank analysts stabilised at a low level (Fig. 70). It should be kept in mind that the projections of both groups are not fully comparable. This is due, among other things, to the different time horizon of formulated expectations. Whereas bank analysts present forecasts of the annual inflation rate in the month preceding the corresponding month of the following year and

Figure 70
Consumer inflation expectations and bank analysts' inflation forecasts, June 2002–June 2003



Source: Reuters, GUS, and own calculations based on Ipsos-Demoskop data

in December of the current year, the expectations by individual consumers relate to price growth in the twelve months ahead. Also, attention should be drawn to the fact that inflation expectations of consumers are objectified, i.e., quantified on the assumption that respondents perceive the course of price processes through official inflation statistics (more relevant information can be found, for instance, in the 2001 Inflation Report).

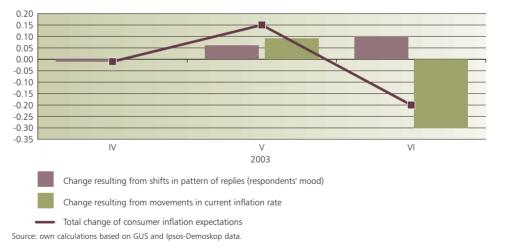
#### Consumer inflation expectations

In the second quarter, the objectified measure of consumer inflation expectations<sup>37</sup>, being a function of the pattern of replies to the question of the Ipsos-Demoskop poll<sup>38</sup> and the current inflation rate, fell 0.1% in relation to the figure recorded in March and amounted to 0.3% in June. The decline in consumer inflation expectations in the period may be attributed in full to the slowdown in price growth (Fig. 71).

The second factor affecting the outcome of quantification, namely, the change in the manner of formulating inflation expectations, expressed in the shifts in the pattern of replies to the poll question, has been subject to gradual deterioration as of early 2003. A similar trend was also recorded in the second quarter when the fraction of more pessimist respondents foreseeing that in the course of the following twelve months prices would rise at the same or faster rate than at present expanded, whereas that of respondent believing that prices would rise at a slower rate, stay at their present level or go down, shrank (Fig. 72). The deterioration in the manner of formulating expectations signifies that, if in the analysed period the current inflation rate, against which the respondents refer their projections, when replying to the poll questions, had remained unchanged, consumer inflation expectations would have risen.

Figure 71

Decomposition of movements in consumer inflation expectations in Q2 2003



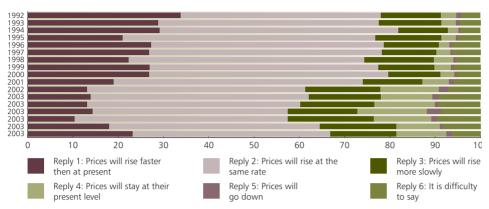
<sup>&</sup>lt;sup>37</sup> In order to calculate quantitative indices of consumer inflation expectations, the probabilistic method is applied (a detailed method profile has been presented in: T. tyziak (2000), Badanie oczekiwań inflacyjnych podmiotów indywidualnych na podstawie ankiet jakościowych [Studying consumer inflation expectations on the basis of qualitative polls], "Bank i Kredyt", nr 6, NBP). The quantified results constitute an objectified measure of the price growth expected by consumers in the twelve months ahead in the sense that the official measure of inflation quoted by GUS and known at the time of the poll is adopted under the calculation procedure as the current inflation rate perceived by respondents. As the Ipsos-Demoskop poll is conducted in the first half of the month, i.e., before the announcement by GUS of the inflation indices for the previous month, the year-on-year inflation rate going two months back is adopted as the current inflation rate.

Updated information on consumer inflation expectations can be found on the NBP website at www.nbp.pl, in the

Statystyka/Szeregi czasowe section.

38 The Ipsos-Demoskop poll question regarding inflation expectations is formulated in the following manner: "Given what is currently happening, do you believe that over the next 12 months prices will: (1) rise faster than at present, (2) rise at the same rate, (3) rise more slowly, (4) stay at their present level, (5) go down, (6) difficult to say".

Figure 72
Pattern of replies to the question of the Ipsos-Demoskop poll for the years 1992–2001 (annualised), for 2002 and for the first half of 2003



Ipsos-Demoskop poll question: "Given what is currently happening, do you believe that over the next 12 months prices will: (1) rise faster than at present, (2) rise at the same rate, (3) rise more slowly,(4) stay at their present level, (5) go down, (6) difficult to say".

Table 20
Pattern of replies to the question on movements in prices of selected product and service categories as a result of Poland's accession to the European Union

	Following the EU accession, prices will:					
	(1) rise	(3) stay at	(2) go down	(4) difficult		
		present level		to say		
(A) Foodstuffs	64	14	10	12		
(B) Clothing and footwear	50	22	14	14		
(C) Cars	35	18	30	17		
(D) Electronic equipment						
(white and black goods)	35	22	27	16		
(E) Flats	56	18	9	17		
(F) Telephone calls	31	18	33	18		

Source: Ipsos-Demoskop.

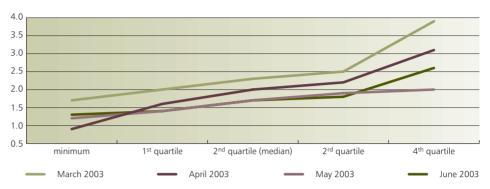
Public opinion researchers put forward a hypothesis that the deterioration in the manner of formulating inflation expectations on the part of consumers may be connected with the concerns voiced in the public debate that Poland's accession to the European Union will entail domestic price growth. Such concerns were reflected, for instance, in the February opinion poll conducted by Ipsos-Demoskop, in which a question was asked concerning forecasted movements in prices of selected groups of consumer goods and services as a result of Poland's joining the European Union (Cf. Table 20)<sup>39</sup>.

#### Inflation forecasts of bank analysts

The data obtained from the Reuters poll show that in the second quarter of 2003 inflation forecasts of bank analysts stabilised at a low level. The average annual inflation rate forecast in the

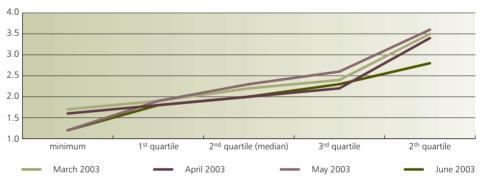
<sup>&</sup>lt;sup>39</sup> This question was formulated in the following manner: "In your opinion, once Poland has joined the European Union, prices of the following product and service categories will: (1) rise; (2) go down; (3) or stay at their present level?: (A) foodstuffs; (B) clothing and footwear; (C) cars; (D) electronic equipment (both white and black goods); (E) flats; (F) telephone calls".

Figure 73
Distribution of bank analysts' inflation expectations formulated with regard to annual inflation rate at the year-end in March 2003 and by month of Q2 2003



Source: Reuters data and NBP calculations.

Figure 74
Distribution of bank analysts' inflation expectations formulated with regard to annual inflation rate in the month preceding the corresponding month of the following year in March 2003 and by month of Q2 2003



Source: Reuters data and NBP calculations

month preceding the corresponding month of the following year, i.e. in June 2003 stood at 2.3%, i.e. grew by 0.2% in relation to the March figure. Meanwhile, the inflation rate projected for the end of 2003 in June amounted to 1.7% and was lower than in March forecasts by 0.7%.

Movements in the distribution of inflation forecasts of bank analysts in both time horizons (Cf. Fig. 73 and Fig. 74) resulted primarily from fluctuations in the size of the sample of banks participating in the poll. The scale of these fluctuations limits the comparability of poll results in individual months<sup>40</sup>.

#### 4.3.4. The wealth effect

In the second quarter of 2003, there was a dynamic growth in share indices on a global scale. This trend reflected the shift in investor preferences from the government bond market, where the three-year long bull market resulted in a speculative bubble, to the share market benefiting from a series of interest rate cuts in many countries.

 $<sup>^{40}</sup>$  In April 2003, the declarations concerning the inflation rate forecasted for the end of 2003 were made by 13 banks, in May - 10, and in June - 14 (in the first quarter of 2003, the corresponding numbers amounted to: 19 in January, 20 in February and 10 in March). Meanwhile, the declarations concerning the inflation rate forecast in the month preceding the corresponding month of the following year in April 2003 were submitted by 11 banks, in May - 8, and in June - 11 (in the first quarter of 2003, the corresponding numbers amounted to: 19 in January, 17 in February and 14 in March).

Table 21 Share index growth in selected markets in Q2 2003

	In US\$	In local currency
Germany	+ 36.46	+29.37
France	+ 24.30	+17.84
Great Britain	+ 18.21	+13.09
United States	+ 15.70	+ 15.70
Japan	+12.26	+ 13.86

Source: local stock exchange quotations.

Table 22 Direct and indirect forms of household investment in the equity market (balances at period end, in PLN billion)

Type of involvement in equity investment	December	March	June
	2002	2003	2003*
1. Direct portfolio investment – securities (combined)*	24.3	24.4	
Shares	8.1	7.3	
Treasury securities (combined)	16.2	17.1	16.4
a) tradable bonds	5.9	7.0	
b) savings bonds	7.7	7.5	
c) treasury bills	2.6	2.6	2.5
2. Indirect portfolio investment (combined)	55.9	62.1	
Open-ended investment funds (household investment assets)*	* 20.1	24.1	28.6
Open-ended pension funds (net assets)	31.6	33.6	
Life assurance (life assurance placements, whereby placement	nt		
risk is borne by the insuring party)	4.2	4.4	
Total (1+2)	80.2	86.5	
Above investment forms (combined) to deposits and other			
liabilities towards household in the banking system (%)	37.7	40.5	

<sup>\*</sup> securities in clients' investment accounts held in brokerage houses and offices

Source: materials of Ministry of Finance, NBP, GUS, open-ended pension funds.

Factors stimulating share index growth included:

- a relatively swift ending of active conflict in Iraq,
- halting the spread of the SARS epidemic, and
- the improved economic growth outlook throughout the world.

The scale of share index growth in major international markets is shown in Table 21.

In Poland, capital flowed into the equity market, with main investors being investment and pension funds (Table 22).

Although in international markets in the second quarter the relation of equity investment to savings placed in the banking system continues to grow (primarily as a result of expanding pension fund assets), in Central European countries bank deposits still prevail. This conclusion is supported by research findings presented in Table 23.

<sup>\*\*</sup> NBP estimates; data on funds known to address their offer exclusively to legal persons were not incorporated.
\*\*\* Not all data at the end of Q2 2003 were available at the time of submitting this Inflation Report.

Table 23
Equity market instruments used as household saving forms in selected countries of Central Europe\* (%)

Financial instruments used	Central	Czech	Hungary	Poland
by households	Europe	Republic		
Shares	4	6	3	4
Bonds	2	6	3	3
Investment funds (Share, mixed and debt instrument based)	6	11	4	2
Short-term bank deposits (savings and current accounts)	31	39	11	36
Absence of capital savings	57	50	79	51

<sup>\*</sup> The study relates to the situation in April 2003. The table ignores such investment opportunities as life assurance and pension funds. Respondents were allowed to give more than one positive answer.

Source: Wall Street Journal Europe/Gfk, Investment Barometer, June 26, 2003.

The consequence of the situation in which over half of households declares lack of savings and the remaining ones place their funds mainly in the banking system, is the persistently limited role of the equities market as a source of securing capital by business entities.

# **5** Prospects for inflation

This year's inflation target (measured by annual CPI growth in December 2003) has been set at 3% with a permissible band of deviations of 1%. It is expected that the annual CPI index which stood at 0.8% in July, will rise slowly till the year-end to settle right below the lower boundary of the inflation target in December. Meanwhile, in December 2004 the inflation rate should reach the level of 2.5%, corresponding to the inflation target of 2.5% +/- 1%, adopted as the so-called continuous target beyond 2003. The basic factor accelerating the inflation rate will be higher dynamic of economic growth in 2004 and the extinction of supply-side factors that lower food prices.

These expectations are based on the assumptions presented below.

The share of the public finance sector in domestic demand growth in 2003, in particular in 2004, remains a source of uncertainty. Although central government budget performance after the first half of 2003 does not indicate that the statutory deficit limit assumed for the year 2003 will be exceeded, the poor financial condition of the remaining segments of the public finance sector (mainly the National Health Fund and the Social Security Fund) will probably lead to the overrunning of the economic deficit of the public finance sector envisaged in the 2003 draft budget act. Meanwhile, *Guidelines for the 2004 draft budget act*, revised in July and adopted by the government, point to possible further exacerbation of the imbalance of public finance sector next year. Following classification changes made on the expenditure side, the central government budget deficit was underestimated from approximately 57bn zloty to 45.5bn zloty. As a consequence, further widening of the economic deficit is projected in 2004.

Prospects for growth in Poland's economic environment deteriorated in the second quarter in relation to the previous quarter. Despite basically unchanged growth forecasts for the US economy, international analysis centres once again revised downward their growth forecasts for the German economy and the euro area in 2003 and, to a lesser extent, in 2004. In this context, the August forecast of economic growth in the environment of the Polish economy in the years 2003-2004 assumed the lowering – other than projected in the April forecast – of GDP growth in Germany in 2003 from 0.4% to 0%, and in the euro area from 1.0% to 0.8%. The 2004 forecasts were revised to a lesser extent: for Germany, respectively, from 1.8% to 1.7%, and for the euro area from 2.1% to 2.0%. Forecasts for the US economy remained unchanged and amounted to 2.5% in 2003 and 3.7% in 2004.

Due to the deterioration in forecasts concerning Poland's economic environment, the trends in investment expenditure will be decisive in determining the country's GDP growth in the years 2003-2004. For this reason, the August GDP forecast was developed for two scenarios<sup>41</sup>. In both of them, the same objectives were adopted for external demand (see above). Under the base scenario, relying on the growth assumptions of individual components of domestic demand corresponding to the April projection, moderate consumption growth is still expected as well as slightly improved investment expenditure in 2003. Accelerated growth of both components of domestic demand is not anticipated until 2004, chiefly owing to the improving financial standing of households, increased expectations concerning external demand and Poland's accession to the European Union. All in all, the forecast envisages a 2.8% GDP growth in 2003 and a 4.1% one in 2004.

<sup>&</sup>lt;sup>41</sup> The forecast was prepared prior to the publication of GUS figures on investment by large and medium-sized enterprises in the first half of 2003.

Due to high uncertainty inherent in investment expenditure forecasting, the second scenario assumes its faster growth as of Q3 2003. Disposable household incomes rising as of Q2 2004 lead to personal consumption being higher than in the base scenario. Because of the high importintensity of the Polish GDP, growth in investment expenditure and consumption is accompanied by higher import dynamic. As a consequence, the contribution of net exports to GDP growth is declining. Projected GDP growth under this scenario stands at 3.1% in 2003 and at 4.6% in 2004.

As indicated in the August forecast of oil prices, their levels until the end of 2003 and in 2004 will be primarily determined by supply-side factors, in particular the resumption of Iraqi oil supplies to international markets. Increased output in Iraq should contribute to the reconstruction of oil reserves in OECD countries and to the gradual lowering of oil prices until year-end 2004. As a result, it is estimated that in the second half of 2003 the average Brent oil price will settle at about US\$ 27.6 per barrel, and at US\$ 25 per barrel in 2004.

The August forecast of **domestic food prices** in 2003 differs considerably from the April projection. Due to unfavourable weather conditions (draught), this year's estimated crop harvests were clearly revised downwards. As a result, accelerated price growth in cereal-based produce and meat is envisaged in the final months of 2003 and in the first six months of 2004. This signifies that food prices in December will be roughly 2% higher than a year before (previously, their growth was projected at 0.5%), and at year-end 2004 – higher by 2.5% (2.0%).

At the same time, it is expected that the annual growth of **officially controlled prices** at the end of 2003 will be lower than forecasted in April (by roughly 3%) and reach 2%. Among other things, this adjustment is traced down to the incorporation in the August forecast of the lower than originally assumed growth of officially controlled prices in the first half of 2003 (the effect of a marked slowdown in annual fuel and gas price growth towards the end of the first half of the year) and to the assumption that in the second half of the year electricity and gas prices will rise at a slower rate than originally envisaged. According to estimates, the annual growth of officially controlled prices in 2004 will stay at 2% (close to 3%, under the previous forecast).

According to the August forecast, prices of **other goods and services** at the end of 2003 and in 2004 are projected to rise, respectively, by 1.2% and 2.7%, as in the April forecast.

### Appendix A

The voting of the Monetary Policy Council members on motions and resolutions adopted in the second quarter of 2003

Date of	Subject	Decision taken by MPC	Voting of Council	
resolution			members	
April 23, 2003	The resolution to		For:	L. Balcerowicz
	accept the NBP annual			M. Dąbrowski
	financial report drawn			C. Józefiak
	on December 31, 2002			J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
			Absent:	B. Grabowski
April 24, 2003	Lowering the reference	Motion failed to receive	For:	D. Rosati
	rate by 0.5 percentage	a majority of votes		G. Wójtowicz
	point			W. Ziółkowska
			Against:	L. Balcerowicz
				M. Dąbrowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
			Absent:	B. Grabowski
April 24, 2003	Lowering the reference	Motion failed to receive	For:	L. Balcerowicz
	rate by 0.25 percentage	a majority of votes		J. Krzyżewski
	point			G. Wójtowicz
			Against:	M. Dąbrowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
				D. Rosati
				W. Ziółkowska
			Absent:	B. Grabowski

April 24, 2003	Lowering the reference rate	Motion received a majority	For:	L. Balcerowicz
	by 0.25 percentage point,	of votes		J. Krzyżewski
	the refinancing credit rate			D. Rosati
	by 0.5 percentage point			G. Wójtowicz
	and leaving the NBP time			W. Ziółkowska
	deposit rate unchanged		Against:	M. Dąbrowski
	3		<b>3</b>	C. Józefiak
				W. Łączkowski
				J. Pruski
			Absent:	B. Grabowski
April 24, 2003	The reference rate,	To lower the reference rate	For:	L. Balcerowicz
	the refinancing credit rate,	by 0.25 percentage point,		J. Krzyżewski
	the time deposit rate	the refinancing credit rate		D. Rosati
	oprocentowania lokaty	by 0.5 percentage point,		G. Wójtowicz
	and the NBP rediscount rate.	the rediscount rate by 0.25		W. Ziółkowska
		percentage point, and to	Against:	M. Dąbrowski
		leave the NBP time deposit		C. Józefiak
		Irate unchanged		W. Łączkowski
				J. Pruski
			Absent:	B. Grabowski
May 27, 2003	Resolution to accept the		For:	L. Balcerowicz
	report on the performance			M. Dąbrowski
	of the 2002 monetary			B. Grabowski
	policy guidelines			C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				G. Wójtowicz
			Against:	D. Rosati
				W. Ziółkowska
27.05.2003	Resolution to evaluate the		For:	L. Balcerowicz
	efforts undertaken by the			M. Dąbrowski
	NBP Management Board			B. Grabowski
	in performing the 2002			C. Józefiak
	monetary policy guidelines			J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska

May 27, 2003	Resolution to accept the		For:	L. Balcerowicz
	NBP operations report			M. Dąbrowski
	for 2002			B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
May 28, 2003	The reference rate,	To lower all interest rates	For:	L. Balcerowicz
	the refinancing credit rate,	by 0.25 percentage point		J. Krzyżewski
	kredytów refinansowych,			D. Rosati
	the time deposit rate and			G. Wójtowicz
	the NBP rediscount rate			W. Ziółkowska
			Against:	M. Dąbrowski
			Against:	M. Dąbrowski B. Grabowski
			Against:	•
			Against:	B. Grabowski
			Against:	B. Grabowski C. Józefiak
			Against:	B. Grabowski C. Józefiak W. Łączkowski
June 25, 2003	The reference rate,	To lower all interest rates	Against:	B. Grabowski C. Józefiak W. Łączkowski
June 25, 2003	The reference rate, the refinancing	To lower all interest rates by 0.25 percentage point		B. Grabowski C. Józefiak W. Łączkowski J. Pruski
June 25, 2003				B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz
June 25, 2003	the refinancing			B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz J. Krzyżewski
June 25, 2003	the refinancing credit rate, the time			B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz J. Krzyżewski D. Rosati
June 25, 2003	the refinancing credit rate, the time deposit rate and the			B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz
June 25, 2003	the refinancing credit rate, the time deposit rate and the		For:	B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz W. Ziółkowska
June 25, 2003	the refinancing credit rate, the time deposit rate and the		For:	B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz W. Ziółkowska M. Dąbrowski
June 25, 2003	the refinancing credit rate, the time deposit rate and the		For:	B. Grabowski C. Józefiak W. Łączkowski J. Pruski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz W. Ziółkowska M. Dąbrowski B. Grabowski