# **National Bank of Poland**

**Monetary Policy Council** 

# **INFLATION REPORT Second quarter 2001**

Warsaw, August 2001

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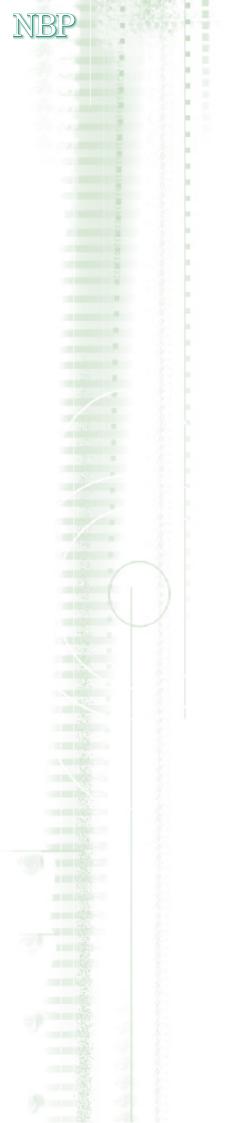
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#### **SUMMARY**

- 1. In the second quarter of 2001, the levels of inflation rate varied. During the first two months of the quarter, the annual inflation rate increased again to reach 6.9%, after eight consecutive months of steady decline. In June, however, the annual consumer goods and services prices index declined, returning to 6.2%, the level of the end of first quarter of this year, which is by 4.0 percentage points lower than the level of corresponding period of the previous year.
- 2. The April and May inflation rate increases resulted solely from changes of price groups. The price growth of food and non-alcoholic beverages accelerated, as a result of larger than usual seasonal price increases of fruits and vegetables. The prices of some services on markets which were not fully competitive grew relatively rapidly due to inelastic demand for the services.

The acceleration of inflation in April and May, was also reflected by the growth of some indicators of core inflation. A more thorough analysis of the factors which influenced the growth showed that it resulted from incidental reasons. The actual evolution of the inflation levels in June confirms such diagnosis.

- 3. In the second quarter of this year, the annual producer price indices of industry continued to display a declining tendency. The fastest decline characterized the price indices in manufacturing, which dropped to the level of negative 0.9%. This resulted mainly from a weak growth of domestic demand, a significant appreciation of the Zloty, and lower prices of crude oil and the resultant decline of prices in the processing of this raw material.
- 4. The low level of domestic demand in the second quarter of this year, was accompanied by the decline in the growth rate of exports, which was very high in the first quarter. As a result, the GDP growth rate declined further. According to preliminary assessments, the GDP grew in the second quarter of this year by

- 0.6 to 0.7% (compared to 2.3% in the first quarter). As a result of the weaker growth of exports, which in the first quarter helped to increase the growth rate of industrial output, the second quarter added value in the industry declined below the level of the previous year. The added value in construction declined further, and its growth rate in the market services was lower than in the previous quarter.
- 5. The economic deficit of the state budget reached PLN 16.9 billion in the first six months of the current year, thus reaching the level of approximately 4.7% of GDP. This suggests a much greater role of the state budget in the creation of domestic demand, than in the corresponding period of last year, when the deficit reached the level of 2.6% of GDP.

At the end of the second quarter, the actual budget deficit reached 91.1% of the plan for the entire year. In view of significant shortfall in the budget revenues and a limited possibilities of reducing expenditures due to a high proportion of fixed items, the government decided that a budget plan amendment was required.

- 6. The balance of payments current account deficit reached USD 2.2 billion in the second quarter of this year, i.e. it remained on the same level as in the first quarter of this year and the last three quarters of the previous year. At the same time, the foreign trade balance of payments improved, compared to the first quarter of the current year, due to a relatively high, although declining growth rate in the revenues from exports, coupled with a moderate growth in payments for imports. These changes occurred in the environment of slumping demand on the domestic and foreign markets, and stronger appreciation of the Zloty.
- 7. The decline rate in the average monthly employment in the corporate sector in the second quarter increased as compared to the previous quarter. The unemployment rate, after a insignificant seasonal decline in May, returned to the April level of 15.8% in June.

	1998			6661		6661			2000		2000		2001
	Year	ō	<b>6</b> 5	63	8	Year	ō	65	63	9	Year	ō	67
							Real growth	vth					
GDP	4.8	9.1	3.0	5.0	6.2	4.	5.9	5.0	3.1	2.4	4.0	2.3	0.7
Domestic Demand	6.4	3.4	4.6	5.5	5.7	4.9	5.1	3.3	<u>+</u> .	<u>—</u>	2.8	4.1-	-0.8
Total Consumption	4.2	4.0	4.4	4.8	5.0	4.5	4.1	2.6	1.2	9.1	2.4	1.2	0.2
Individual Consumption	4.8	4.6	5.2	5.7	5.9	5.4	4.8	2.9	Ξ	9.1	2.6	1.5	0.1
Gross Accumulation	13.8	0.7	5.5	7.8	7.1	5.9	9.01	5.9	2.0	2.2	4.2	-13.8	-4.5
Gross spending on fixed assets	14.2	5.7	6.3	9.9	7.0	6.5	5.6	3.0	2.4	2.6	3.1	1.5	-2.4
Households savings rate (%)	13.2	9.0	10.7	8.8	14.8	10.9	4.9	9.5	8.3	14.2	9.3		
Households financial savings													
rate $(\%)^2$	7.6	10.8	2.9	2.8	5.1	5.4	5.5	7.5	<u>-</u>	4.3	4.7		
Unemployment rate (%)	10.4	12.0	9.11	12.1	13.0	13.0	14.0	13.6	14.0	15.0	15.0	15.9	15.8
Disposable income													
(corresponding period of the													
previous year = 100)	105.5	102.7	102.9	101.4	103.7	102.7	100.2	100.2	100.3	98.6	99.8	103.0	100.5
Debt of the State Treasury													
(nominal. PLN million) <sup>3</sup>	<b>237 400.9</b> 259 037.3	259 037.3	255 583.4	261 317.4	264 370.3	264 370.3 <b>264 370.3</b>	270 144.9	279 507.8	287 584.3	267 653.4 <b>267 653.4</b>	267 653.4		
National Budget Deficit													
(PLN million)⁴	-13 192.6	-8 719.2	-11 320.0	-11 270.0	-12 479.0	-12 479.0 <b>-12 479.0</b>	-6 927.4	-10 650.2	-14 041.9	-15 365.6 <b>-15 365.6</b>	-15 365.6	-15 055.2	
Foreign Debt (USD million)		50 720 0	FO 400 O	0001 67	44 OE3 O	44 OE3 O	64 054 0	0 100 37	0 27 17 0	675170	67 517 0		

The relationships of households' savings to gross disposable income. Savings represent a portion of the gross disposable income, which is not spent on consumption.

Relationships of the financial savings of households to gross disposable income. Financial savings represent the growth of households cash resources (a sum of the growth of bank deposits, cash

Source: Main Statistics Office data, Finance Ministry, NBP, NBP estimates.

on hand and the value of investments insecurities less the growth of credits to households).

 $<sup>^3</sup>$  As of the end of the period.  $^4$  Starting from  $\mathbb Q$  4, 1998 the amount includes the item "due to lack of pay increases in the public sector".



Basic Monetary Indicators

Dasic Florietary Indicators													
	1998		6661	66		6661		2000	8		2000	2001	=
	Year	5	<b>0</b> 5	8	\$	Year	<u>~</u>	<b>Q</b> 2	8	9	Year	ō	<b>0</b> 5
					corresp	onding per	iod of the p	corresponding period of the previous year	001 = 1				
Consumer goods and services prices	9.801	106.2	106.5	0.801	8.601	109.8	110.3	110.2	110.3	108.5	108.5	106.2	106.2
Producer prices of the industry!	104.8	104.7	105.2	106.2	1.801	1.801	107.3	108.9	108.3	9:501	9'501	103.8	6:001
			nomina	nominal growth of end of period balances (corresponding period of the previous year	end of peri	iod balance.	s (correspo	anding peric	od of the pr	evious year	r = 100)		
МО	126.8	121.5	118.9	92.9	98.4	98.4	83.9	87.7	110.7	92.4	92.4	8.901	93.6
Σ	113.0	121.8	119.3	1.911	122.0	122.0	105.1	1.801	9.66	94.3	94.3	100.8	95.1
M2	125.2	127.6	122.9	120.9	119.3	119.3	113.8	120.6	1.4.1	111.7	111.7	114.9	108.0
Liabilities to individuals and corporates 127.8	127.8	129.5	124.6	122.3	118.3	118.3	115.5	123.3	1.911	115.5	115.5	116.8	1.601
individuals	126.3	127.5	123.4	120.8	115.2	115.2	114.2	118.5	117.3	120.9	120.9	120.1	116.3
corporates	131.5	135.0	128.0	126.2	125.5	125.5	1.9.1	136.0	113.0	103.7	103.7	108.3	92.5
Receivables from individuals													
and corporates	127.9	129.5	127.6	127.8	127.1	127.1	123.9	130.6	122.0	117.3	117.3	114.6	105.0
individuals	130.0	135.8	141.1	147.6	153.1	153.1	152.1	179.4	140.9	131.7	131.7	125.7	7.86
corporates	127.5	128.3	125.0	123.8	121.6	121.6	1.8.1	119.7	117.4	113.5	113.5	111.7	107.1
			real	real growth $^3$ of end of period balances (corresponding period of the previous year	end of peric	od balances	(correspon	ding period	of the previ	Ш	(001		
МО	116.7	114.4	9.111	0.98	89.7	89.7	76.0	9.62	100.4	85.1	85.I	9.001	88.2
Σ	104.0	114.6	112.0	110.3	III.	Ξ	95.3	98.1	90.3	87.0	87.0	94.9	89.5
M2	115.3	120.2	115.4	6.111	108.7	108.7	103.2	109.4	103.4	103.0	103.0	108.2	101.7
Liabilities to individuals and corporates 117.6	117.6	121.9	117.0	113.2	107.7	107.7	104.7	6:111	105.3	106.5	106.5	110.0	102.8
individuals	116.3	120.0	115.8	6:111	104.9	104.9	103.5	107.5	106.4	111.5	1.5	113.1	9.601
corporates	121.0	127.1	120.2	116.9	114.3	114.3	108.0	123.4	102.4	95.7	95.7	102.0	87.1
Receivables from individuals													
and corporates	117.8	121.9	119.8	118.3	115.7	115.7	112.3	118.5	9.011	1.801	1.801	107.9	6.86
individuals	1.9.7	127.9	132.5	136.6	139.4	139.4	137.9	162.8	127.7	121.4	121.4	118.4	93.0
corporates	117.4	120.8	117.3	114.6	110.8	110.8	107.1	108.6	106.5	104.6	104.6	105.2	100.8
Reference rate (%) <sup>2</sup>	15.5	13.0	13.0	14.0	16.5	16.5	17.5	17.5	19.0	19.0	19.0	17.0	15.5
Discount rate (%) <sup>2</sup>	18.3	15.5	15.5	15.5	0.61	19.0	20.0	20.0	21.5	21.5	21.5	19.5	18.0
Lombard rate (%) <sup>2</sup>	20.0	17.0	17.0	17.0	20.5	20.5	21.5	21.5	23.0	23.0	23.0	21.0	19.5

Source: Main Statistics Office data, NBP, NBP estimates.

 $<sup>^{\</sup>rm I}$  In the last month of the quarter.  $^{\rm 2}\,$  As of the end of the period.  $^{\rm 3}\,$  Deflated by the consumer goods and services price index.

8. In June, despite the information on the May increase in inflation rate, the Monetary Policy Council decided to reduce interest rates by 1.5 percentage points and to maintain its neutral bias towards monetary policy. The Council foresaw the decline in inflation in the following months and noticed multiple factors helping for the achievement of the inflationary target in the year 2001, such as: low growth rate of producer prices, persistence of beneficial monetary tendencies, further significant decline in the inflationary expectations of banks and households, appreciation of the Zloty, a growth in domestic demand lower than output, low salary growth Simultaneously, the MPC remained cautious in cutting the interest rates, noticing the dangers to which the sustainable disinflation process was exposed by the public finance situation and the perspective of increasing budget deficit. The strong expansion of demand from the public finances sector did not stop the Council from deciding to cut rates, because the information on the real sector signaled a clear and gradual easing of demand pressure.

9. In the second quarter of the current year, the commercial banks changed the interest rates on deposits and credits in response to the cutting of the NBP interest rates, which occurred in February and March of the current year. Some of the banks managed to adjust the interest rate in June, almost immediately after the third central bank interest rate cut of the year. However most of the banks lowered interest rates in July.

After the decline of the NBP interest rates in February and March, by a total of 200 basis points, the banks lowered the interest rates on term deposits of individuals also by 200 basis points, and by additional 20 to 40 basis points in the last days of June, after the June cut. However the response of the interest rates on credits to individuals to the first two cuts of core interest rates was limited, and amounted to approximately 80 basis points. The response to the June cut is expected to materialize only in July.

On the other hand the decline in interest rates on term deposits of corporations in

response to the first two NBP interest rate cuts amounted to an average of approximately 100 basis points. After the June cut, the first cuts amounted to an average of 90 points and the following cuts are expected in July. The interest rates on deposits to corporations as a response to the first two NBP interest rates cuts declined by 160 basis points, and by additional 30 points in June. The full scope of the results of June interest rate cuts by the central bank shall be known after July.

Despite the credit and deposit interest rates cuts in commercial banks (in reaction to the current year decisions of the MPC), the growth rate of the Zloty deposits by individuals remains high and the credit growth rate continues its declining tendency. These two phenomena have a positive influence on the future disinflation processes.

10. The nominal and real appreciation of the Zloty, which significantly weakened inflation on the domestic market, continued in the second quarter of the current year. In contrast to the previous quarter, the appreciation of the Zloty was not caused by the inflow of portfolio investments on the Polish market. The deteriorating situation of the state budget and the associated threat of a significant growth in the supply of treasury securities in the second half of the year (and the expected resulting drop in prices of the instruments despite the expected easing of the inflation), resulted in a significant outflow of foreign capital from the bond market. The foreign investors demand shifted towards money market instruments, with the greatest share of synthetic deposits created on the currency swap market. The relative increase in the profitability of investments in short term instruments was associated mainly with the increased risk of the Zloty appreciation.

The strengthening of the Zloty was also supported by non-recurring factors, associated with the expectations of inflow of foreign currencies in connection with the payment of compensation to the slave laborers of the Third Reich, the funds obtained from the sale of the UMTS licenses and direct investments.



11. The change in the forming of inflationary expectations of the individuals, from the static backward looking method towards an increasing consideration of factors shaping inflation in the future (forward looking) was more visible in the second quarter than in the first. As a result, over all of the months of the second quarter, the inflation expected by the individuals for the next year was below the current inflation rate. The inflationary expectations of the bank analysts also declined in regard of the inflation rate for the coming 11 months, and the annual inflation rate for the end of this year expected by the analysts, was slightly below the lower limit of the short term inflation target band for this year.

12. Despite a certain increase in uncertainty associated with the forecasts for the nearest period (regarding most of all the further developments in the public finance sector and the levels of the GDP), the inflation target for this year shall not be exceeded, according to the opinion of the Council. The forecasts prepared by the NBP indicate, that a twelve month con-

sumer goods and services price index for the end of this year may descend even slightly below the level of 6%. The rates of the changes shall vary: in the summer a significant seasonal decline of inflation should be expected followed by a recurring acceleration of inflation in the last months of the year.

Despite multiple factors supporting the disinflation trend, the recent period marks clearer threats to the process in the short term. The foremost of them is the risk of further increase of the public finance deficit, a possible increase in the investment risk in Poland and the associated uncertainty of the future Zloty exchange rate. Therefore a balanced monetary policy is required, which would consider on the one hand the current tendencies in the demand sources of inflation and the need to counter these threats on the other.

This *Report* utilizes statistical data available at the end of July 2001, except for the cost data in the corporate sector, which were available in the end of August of the current year.



# I. Inflationary processes in the second quarter of 200 l

#### 1.1. Prices of consumer goods and services

In the second quarter of 2001 the levels of CPI varied. In the first two months of the quarter, the annual CPI accelerated again to reach the level of 6.9% in May, after eight consecutive months of consistent declines. The reasons for this acceleration were temporary and they concentrated on some price groups only. In April and May, the price growth rate of food and non-alcoholic beverages increased, as a result of stronger than usual seasonal price growth of fruits and vegetables in this period. Also the price growth of some groups of services subject to administrative price control accelerated in the period as a result of one-time price hikes. In June, the twelve month price growth indicator for consumer goods and services declined however to 6.2% (thus returning to the level of the end of first quarter of the current year, and descending 4.0 percentage points below the level of the same period in the previous year).

The main contributors to this change were the following price changes in the main groups of goods and services:

- the increase of food and non-alcoholic beverage prices by 7.2% (a 9.9% increase in the previous year), which contributed to the 2.2 percentage points increase in the CPI;
- a 8.7% increases of service prices in the groups of services, which excluded services with controlled prices
   (a 12.3% increase in the previous year); their contribution to the CPI growth equaled 1.5 percentage points;
- a 5.2% growth of controlled prices (a 12.8% growth in the previous year), with a contribution of 1.3 percentage points to the CPI growth; within this group the prices of fuel declined by 12.2% (as compared to a 50.7% growth in the previous year), which reduced the CPI by 0.4 percentage points;
- a 4.6% growth in the prices of non-food products, excluding the controlled prices items (a 7.2% growth in the previous year), which increased the CPI by 1.2 percentage points.

Table 1 and Figure 1 present the levels of twelve month consumer goods and services indicators and their main categories in the second quarter of 2001, as compared with the second quarter of 2000.



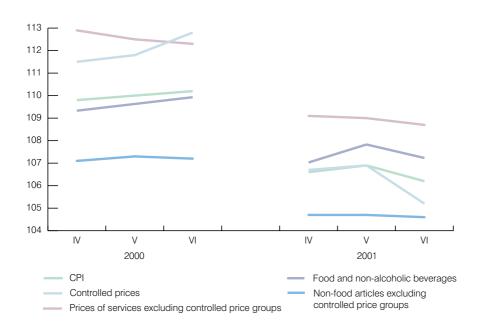
Table 1
Twelve month consumer goods and services price indicators and their main categories

Item			2000					200 I		
	weight	In	dicato	rs	share	weight	In	ndicato	rs	share
	in				in	in				in
	CPI				CPI	CPI				CPI
					growth					growth
					%					%
					points					points
	%	IV	V	V	Ί	%	IV	V	٧	1
CPI Total	100.0	109.8	110.0	110.2	10.2	100.0	106.6	106.9	106.2	6.2
Controlled price groups,	25.1	111.5	111.8	112.8	3.2	25.7	106.7	106.9	105.2	1.3
including fuel	2.8	144.4	143.5	150.7	1.4	3.5	97.4	95.0	87.8	-0.4
Non-food products*	28.3	107.1	107.3	107.2	2.0	27.0	104.7	104.7	104.6	1.2
Services*	16.2	112.9	112.5	112.3	2.0	17.1	109.1	109.0	108.7	1.5
Food and non-alcoholic beverages	30.4	109.3	109.6	109.9	3.0	30.1	107.0	107.8	107.2	2.2

<sup>\*</sup> Excluding the controlled price groups.

Source: Main Statistics Office data, NBP calculations.

Figure 1
Prices of consumer goods and services and their main categories
(corresponding month previous year = 100)



Source: Main Statistics Office data, NBP calculations.



In the second quarter of 2001, the monthly CPI rate was significantly more volatile than in the same period of last year. After a high monthly increase in prices in April and May, as compared to a corresponding period of the previous year, June marked an earlier than usual seasonal decline of CPI, which in the previous year materialized only in August. During the second quarter of the current year, CPI increased by 1.8%, i.e. 0.1 percentage points less than in the second quarter of 2000.

Table 2 and Figure 2 present the monthly consumer goods and services price indicators and their main categories in the consecutive months of the second quarter of the current year, as compared with the second quarter of 2000.

The group of goods, which contributed the most to the growth of CPI in the second quarter was food and non-alcoholic beverages. The prices of this group increased faster than the CPI, and increased by 2.6% in the period between March and June, which is 0.4 percentage points more than in the previous year. The above average growth in prices of goods in this group, characterized the prices of fruits (25.1%), vegetables (13.2%) and fish (6.2%). The strong growth in prices of fruits (especially apples) and vegetables resulted from a stronger price growth than suggested by seasonal factors, connected with low supply in the period and the absence of quality, inexpensive import substitutes.

The grain market was stable in the second quarter of the current year, due to an increased supply, which resulted from the appearance of imported grain on the market. In the beginning of April 2001, a new tariff ceiling was opened for the duty free import of 0.5 million tons of feed grain. Moreover, in the second quarter, based on the "Agreement on mutual liberalization of trade in agricultural goods between Poland and the European Union" Poland imported from the EU approximately 0.1 million tons of consumption wheat with a duty rate of zero percent. The supply of domestic grain was steadily increasing, since the Polish producers became concerned with a large import and low prices of imported grain. The demand was smaller than the supply, since the grain mill companies reserve stocks of grain were twice as high as a year ago. The excess of supply over demand resulted in gradual decline of grain prices.



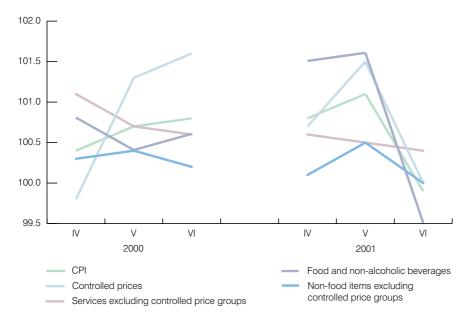
Table 2
Monthly consumer goods and services price indicators and their main categories

Item			2000					2001		
		Indica	tors		share		Ind	licators		share
					in					in
					CPI					CPI
					growth					growth
					%					%
					points					points
	IV	V		VI		IV	V		VI	
	F	reviou	s	III 2000	= 100	F	reviou	s	III 200	I = 100
	mo	nth =	100			mo	nth =	100		
CPI Total	100.4	100.7	100.8	101.9	1.9	100.8	101.1	99.9	101.8	1.8
Controlled price groups,	99.8	101.3	101.6	102.7	0.7	100.7	101.5	100.0	102.2	0.5
including fuel	98.9	104.6	107.8	111.5	0.2	100.0	102.1	99.5	101.7	0.1
Non-food										
products*	100.3	100.4	100.2	101.0	0.3	100.1	100.5	100.0	100.7	0.2
Services*	101.1	100.7	100.6	102.4	0.4	100.6	100.5	100.4	101.5	0.3
Food and non-alcoholic										
beverages	100.8	100.4	100.6	101.7	0.5	101.5	101.6	99.5	102.6	0.8

st Excluding the controlled price groups.

Source: Main Statistics Office data, NBP calculations.

Figure 2
Consumer goods and services indices and their main categories
(previous month = 100)

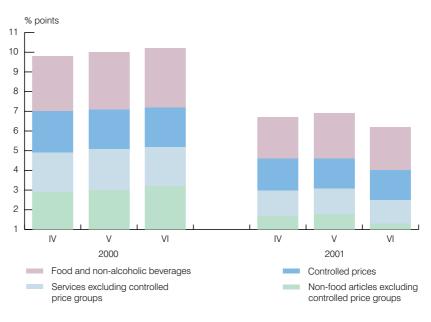


Source: Main Statistics Office data, NBP calculations.



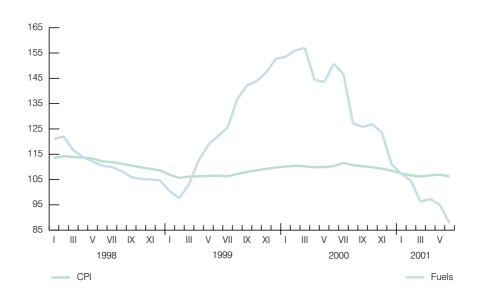
Figure 3

The impact on CPI of price changes of main groups of consumer goods and services (corresponding month previous year = 100)



Source: Main Statistics Office data, NBP calculations.

Figure 4
CPI and fuel price index
(corresponding month previous year = 100)



Source: Main Statistics Office data.



The meat market, after a short lived rebound in the beginning of the second quarter of this year, marked a decline in the volume of consumption of higher grade meet categories by the domestic consumers. Despite a limited supply of livestock, the prices of pork displayed declining tendencies. On the other hand the prices of beef increased slightly, mainly in result of the interventionary buying by the Agency for Agricultural Market. The demand for poultry remain steady, which resulted in a slight increase in price.

The controlled price goods and service groups ranked second among the groups of consumer goods and services in terms of their impact on the overall price growth in the second quarter of this year. Their prices increased by 2.2% from March till June, which exceeded by 0.4 percentage points the overall growth of consumer goods and services in the period (as compared with a 2.7% increase in the previous year). Controlled prices, excluding the prices of fuel, increased by 2.3% in the second quarter, while they grew 1.6% in the same period of the previous year. The prices of electricity (a growth of 3.6%), network natural gas (a growth of 11.8%), railway transportation (a growth of 4.6%) and telephone subscription (a growth of 26.7%) grew faster than the entire group, and as a result faster than the CPI. As can be seen the growth characterized the prices of goods and services with inelastic demand, and on markets where their producers/distributors are local monopolies in fact, or as is the case with Polish Telecommunications SA, nationwide monopolies in fact.

The prices of fuel, which belong to the group of controlled prices, and which significantly boosted CPI in the recent years, were driving the towards the increase of the CPI also in the second quarter of the current year (see Figure 4). In the period between March and June, the prices of fuel grew by 1.7%, were 0.1 percentage points lower than the CPI and 9.8 percentage points lower than in the same period last year. The prices of fuel in the second quarter of the current year, were driven to their level by a nominal depreciation of the Dollar against the Zloty and only a slight increase in global prices. Moreover, June marked the introduction of the second increase in the excise tax on fuel this year (by approximately 6%). The following table presents the impact of the above mentioned factors on the retail prices of fuel in particular months of the second quarter 2001.



Table 3
Impact of select factors on changes of retail prices of fuel in second quarter 2001 (in %)

	Global price	USD	Import	Import	Excise tax	Excise
		exchange	price	price		tax impact
		rate		impact		on retail
				on retail		price in %
				price in %		points
				points		
April	20.5	-1.0	19.2	5.3	0.0	0.0
May	6.8	-1.8	5.0	1.6	0.0	0.0
June	-19.4	0.1	-19.3	-6.2	6.0	2.4
Quarter 2	3.7	-2.7	1.0	0.3	6.0	2.4

- The June excise tax hike of 6% resulted in the increase in retail prices of approximately 2.5 percentage points. However, the global price of gasoline dropped 19.4%, the dollar exchange rate, used in the calculation of the import price, increased by 0.1%, which resulted in the drop of the retail price in June by 6.2 percentage points. (The composition of the retail price was presented based on the data from Nafta Polska SA Polish Oil Joint Stock Company).
- The June drop in prices limited the second quarter increase of global prices to only 3.7%. At the same time, the price of the dollar declined by 2.7%. As a result, the import price increased by only 1%, which could not be expected after the significant price increases in April and May of the current year.

The service prices excluding the controlled prices increased by 1.5% in the second quarter of this year, which is 0.9 percentage points less than in the corresponding period of the previous year and 0.3 percentage points less than the CPI in the same period. The strongest price growth in the group was characteristic of some utilities, such as the supply of cold water and sewage services in multi-apartment buildings (3.5%), other transportation services (8.6%), domestic tourism (2.2%) and foreign tourism (4.0%).



The prices of non-food products excluding the controlled prices grew at a slower pace than the prices of services in the second quarter of the current year. In the period of March to June, they increased by 0.7%, which is 1.1% less than the CPI in the same period and 0.3% less than in the corresponding period of the previous year. The strongest price growth in the second quarter characterized the goods with a moderate contribution to the CPI basket, such as: medication (3.0%), press and educational and other periodicals (respectively 1.7% and 1.3%) and educational stationary, drawing and painting products (1.5%). On the other hand the prices of goods with a significant contribution to the CPI basket grew significantly below the average rate for the group: clothing prices by 0.2% and footwear prices by 0.1%. Such data point to a continued weakness of the consumer demand in the second quarter of the current year.

The growth of consumer goods and services prices in the first six months of 2001, counting from December to June, equaled 3.2% and was 2.3 percentage points lower than in the previous year. Over the same period, the following prices grew faster than the CPI:

- controlled prices (by 3.3% this year, compared to 7.6% in the previous year); the contribution to the CPI growth: 0.9 percentage points;
- prices of services excluding controlled prices (by 5.0% compared to 7.6% a year ago); contribution to the CPI growth 0.9 percentage points;
- prices of food and non-alcoholic beverages (by 3.5% compared to 5.5% a year ago); contribution to CPI growth: 1.0 percentage point.

The following prices grew slower than the CPI in the first six months of the current year:

- fuel prices (5.5% drop compared to 19.5% increase a year ago); contribution to CPI growth: -0.2 percentage points;
- non-food products, excluding controlled prices (1.5% growth compared with a 2.7% growth a year ago); contribution to the CPI growth 0.4 percentage points.

The basic indicators describing the growth of consumer goods and services prices in the first six months of the current year are presented in Table 4, and the levels of select price groups of consumer goods and services are presented in Figure 5.

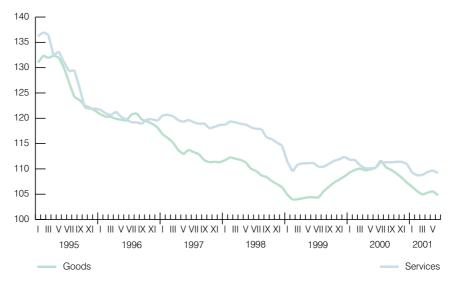


Table 4
Rates of changes of various price categories

Item	1999	2000			20	DI		
	I-XII	I-XII	ı	II	III	IV	٧	VI
	chang	ge comp	ared w	ith cor	respon	ding pe	riod las	t year
СРІ	7.3	10.1	7.4	6.6	6.2	6.6	6.9	6.2
Core inflation indicators:								
excluding controlled prices	6.3	9.4	7.5	6.8	6.5	6.6	7.0	6.6
excluding most volatile prices	7.2	10.0	7.8	7.2	6.7	6.8	6.5	5.3
excluding most volatile prices and the price of fuel	6.7	9.1	7.8	7.3	7.1	7.2	7.0	6.2
excluding prices of food and fuel ("net" inflation)	9.3	9.0	7.2	6.8	6.7	7.0	7.2	6.8
15% trimmed average	6.9	8.4	7.4	7.1	6.8	6.8	6.5	6.0
Food and non-alcoholic beverages	1.5	10.0	7.9	6.5	6.2	7.0	7.8	7.2
Clothing and footwear	7.7	5.5	3.4	2.9	2.5	2.4	2.3	2.0
Household equipment	5.6	4.3	4.0	4.0	3.9	3.9	3.8	3.6
GOODS	5.5	9.6	6.5	5.6	4.9	5.3	5.6	4.8
SERVICES	11.1	11.0	9.3	8.7	8.8	9.4	9.7	9.2

Source: Central Statistics Office data, NBP calculations.

Figure 5
Consumer goods and services indices
(corresponding month previous year = 100)



Source: Central Statistics Office data, NBP calculations.



#### Selected CPI indices

#### 5.1 Food prices indices group

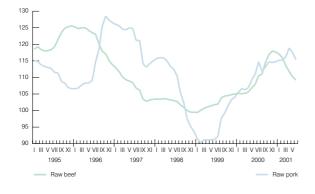
Figure 5.1a

Bread and food price indices
(corresponding month previous year = 100)



Figure 5.1c

Price indices of raw pork and beef (corresponding month previous year = 100)



#### 5.2 Controlled prices indices group

Figure 5.2a

Alcoholic beverages and tobacco price indices (corresponding month previous year = 100)

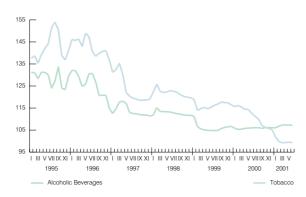


Figure 5.1b
Fruits and vegetables price indices (corresponding month previous year = 100)

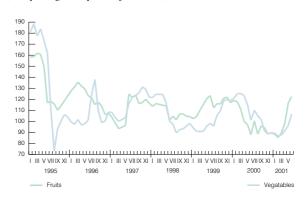


Figure 5.1d

Price indices for milk, cheese and eggs, and sugar, jam, honey, chocolate and pastries

(corresponding month previous year = 100)

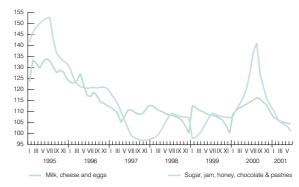


Figure 5.2b

Electricity and natural gas price indices (corresponding month previous year = 100)

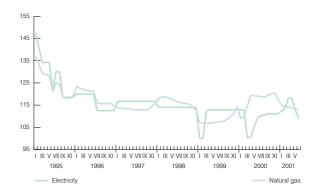




Figure 5.2c

Hot and cold water price indices
(corresponding month previous year = 100)

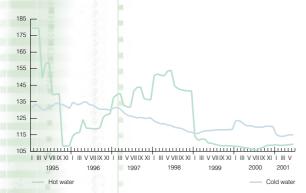


Figure 5.2e

Domestic phone calls and telephone subscription price indices

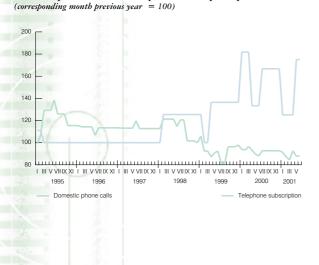


Figure 5.2d

Rent and central heating price indices
(corresponding month previous year = 100)

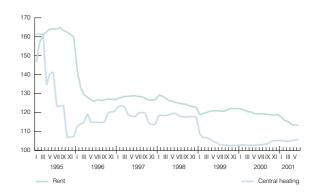


Figure 5.2f
Fuel and transportation price indices
(corresponding month previous year = 100)



5.3 Non-food prices indices group

Figure 5.3a

Footwear and clothing price indices (corresponding month previous year = 100)

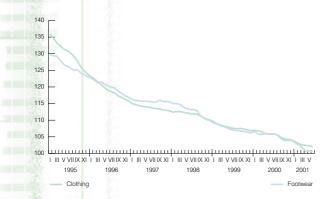
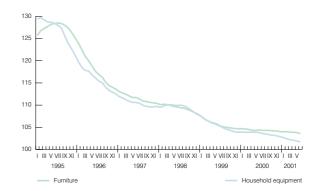


Figure 5.3b

Furniture and household equipment price indices (corresponding month previous year = 100)



MBIP

Figure 5.3c

Audio-visual and data processing equipment price indices (corresponding month previous year = 100)

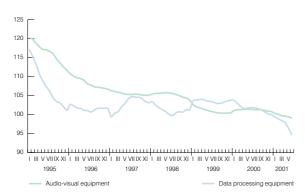
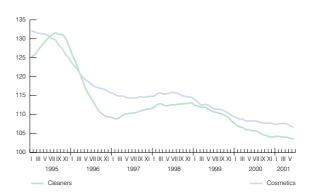


Figure 5.3d

Cleaners and cosmetics
(corresponding month previous year = 100)



#### 5.4 Service prices indices group

Figure 5.4a

Domestic and foreign tourism price indices (corresponding month previous year = 100)

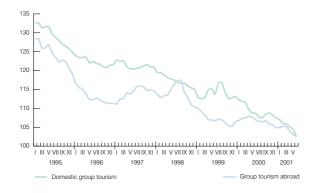
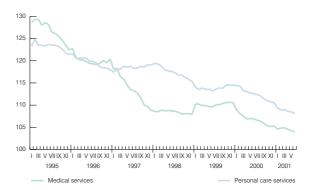


Figure 5.4b

Medical and personal care services price indices (corresponding month previous year = 100)



Source: Central Statistics Office data.

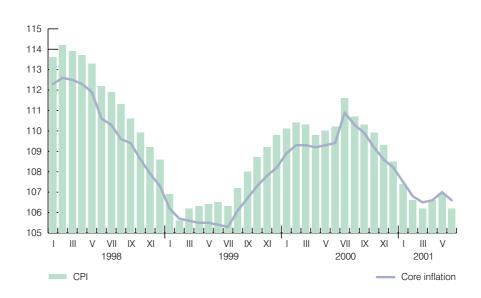
#### 1.2. Core inflation

The twelve month indicators of core inflation in the second quarter of 2001, despite its smoothed out shape as compared with the CPI series, displayed a significant volatility. The CPI declining trend, which started in August 2000 and continued to the first quarter of the current year, decelerated in April of the current year, during the period of increase of the annual CPI indicator and all analyzed measures of core inflation. The



Figure 6

Core inflation rates excluding controlled prices (corresponding month previous year = 100)



Source: Main Statistics Office data, NBP calculations.

Figure 7
"Net" inflation rate excluding food and fuel prices
(corresponding month previous year = 100)



Source: Main Statistical Office data, NBP calculations.



growth rate of two out of five core indices (core inflation excluding controlled prices and the so called "net" inflation, i.e. inflation excluding the prices of food and fuel) was very close to the growth rate of the overall CPI price indicator both in April and in May of the current year, during two consecutive months of growth, and in June, during the period of decline. The remaining indicators (15% trimmed average and both measures which exclude the most volatile prices, including one which additionally excludes the prices of fuel), displayed a consistent declining tendency during two months, after a slight increase in April.

The core inflation indicator excluding the controlled prices (Figure 6) remained on a level very close to the CPI indicator in the second quarter of the current year, exceeding the latter by only 0.4 percentage points in June. Among the prices included in this measure, the prices of some food products, such as bread, raw pork, fish and berries, grew the most. A significant price increase was noted also in the service group (rent and utilities, most of all cold water charges). The prices of pit-coal, medication, press and periodicals had the most significant impact on the this measure of core inflation among the non-food products.

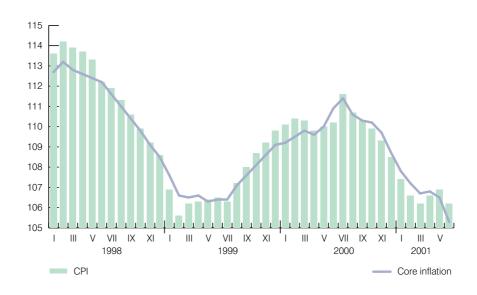
The "net" inflation indicator, which is created by the exclusion of food and fuel prices (Figure 7), was the only indicator which remained above the CPI indicator throughout the entire second quarter, and it reached the level of 6.8% by the end of June. This resulted from a relatively moderate price growth of the excluded elements or event their decline (particularly the fuel prices). However the growth of this indicator in the second quarter of the current year was stimulated mostly by the growth in telephone subscription fee and the prices of spirits, utilities, energy (electricity, natural gas, pit-coal, coke), medication, press and periodicals, which belong to the controlled price group or which price growth was incidental, e.g. the changes in the price lists of medication.

The core inflation indicators created by the exclusion of the most volatile prices from the overall CPI indicator and additionally the prices of fuel (Figure 8 and 9), and created by the method of 15% trimmed average (Figure 10), increased slightly in April and declined in the remaining months of the second quarter of 2001. At the same time, the indicator which only excludes the most



Figure 8

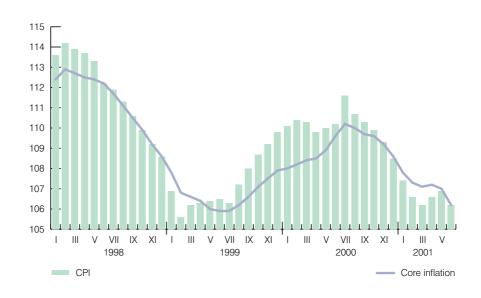
Core inflation rate excluding the most volatile prices
(corresponding month previous year = 100)



Source: Main Statistics Office data, calculations NBP.

Figure 9

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



Source: Main Statistics Office data, NBP calculations.



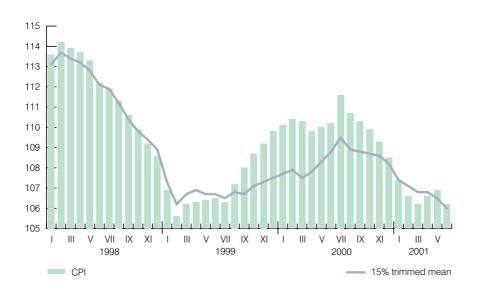
volatile prices (5.3% in June of the current year) remained on a much lower level than the indicator which additionally excluded prices of fuel (6.2% at the end of the second quarter), which shows the impact of the declining trend of the excluded prices of fuel on the overall inflation indicator. The prices of bread, smoked meat and sausages, pork, fish, spirits, natural gas, pit-coal, medication, press and periodicals increased the most among the price groups of goods comprising both of the measures.

The core inflation indicator (Figure 10), created by trimming 15% of the groups of goods and services (on both tails of the distribution), which were subject to the highest and the lowest change compared with the previous period, reached the level of 6.0% at the end of June, i.e. below the CPI indicator. This resulted from the exclusion of almost all the groups with the highest growth of prices during the creation of the indicator, namely the telephone subscription, rent, cold water, natural gas, berries, fish, pork,

Figure 10

Core inflation rate – 15% trimmed mean

(corresponding month previous year = 100)



Source: Main Statistics Office data, NBP calculations.



smoked meat and sausages, vegetables, press and periodicals. Also the prices with the smallest increases were excluded (fuel, domestic phone calls). The prices of electricity, medication, spirits and pit-coal increased the most among the groups comprising this measure of inflation.

# I.3. Producer prices in the industry and construction and assembly

In the second quarter of 2001, producer prices in the industry increased by 0.2% as compared to the prices of the first quarter of this year (in the first quarter of the current year they were 0.9% lower than in the fourth quarter of 2000). The growth of producer prices in the section of electricity, natural gas and water supply (by 4.6% as compared to the previous quarter) was the major factor, which contributed to the growth of producer prices in the industry. The remaining two sections experienced a decline in producer prices. Mining and quarrying experienced a 2.7% price decline, compared to the first quarter of the current year (in the first quarter, the prices remained at the level of the fourth quarter of 2000), and manufacturing experienced a 0.4% decline (in the first quarter the manufacturing producer prices declined by 1.6% as compared to the fourth quarter of 2000) (see Table 5).

On the other hand the growth rates of producer prices and its three component sections in the second quarter of 2001 as compared with the corresponding period of the previous year were positive. The comparison with the growth of prices in particular quarters of the previous year present a diversity of growth rates between the sections of the industry in the second quarter of the current year in a clearer way (see Table 5). Quarterly indicators illustrate that the producer price growth rate were stagnant in the period, as compared with the levels of the previous year and they show an almost 12% price growth in the section of electricity, natural gas and water supply in the same period.

Such significant diversity of price growth rates between the component sections resulted in significant changes in the composition of influence of the particular section price growths on PPI. The impact of manufacturing price growth on PPI declined from approximate-



Table 5
The growth rates of PPI and its three sections in the quarters of years 1999–2001 (in %)

Item		19	99			20	00		20	001
	QI	Q2	Q3	Q4	QI	Q2	Q3	Q4	QI	Q2
				previ	ous qua	arter =	100			
Industry	101.3	101.9	101.6	102.4	101.6	102.1	102.1	101.0	99.1	100.2
including:										
Mining and Quarrying	100.7	101.3	101.5	104.5	101.9	102.0	103.3	103.3	100.0	98.7
Manufacturing	100.9	101.4	101.7	102.6	101.7	101.8	101.9	100.7	98.4	99.6
Electricity, natural gas										
and water supply	103.7	105.9	100.8	100.3	101.1	104.3	103.3	101.0	102.4	104.6
		corr	espond	ing qua	rter of	the pro	evious y	year =	100	
Industry	104.1	105.1	105.8	107.5	107.9	108.1	108.5	106.9	104.2	102.2
including:										
Mining and Quarrying	102.2	104.3	105.4	108.1	109.4	110.3	112.2	111.0	108.9	105.4
Manufacturing	103.9	104.4	105.1	106.8	107.6	108.1	108.2	106.2	102.7	100.4
Electricity, natural gas										
and water supply	106.0	110.5	111.0	111.0	108.1	106.5	109.1	109.9	111.5	111.7

Source: Main Statistics Office "Statistics Bulletins"; NBP calculations.

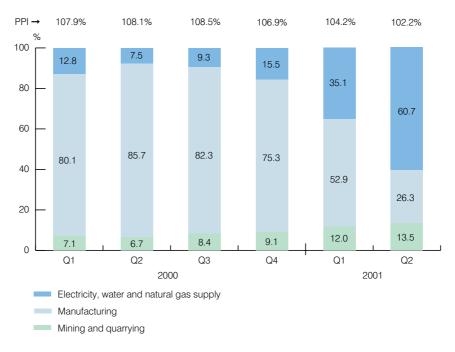
ly 86% in the second quarter of the previous year to approximately 26% in the second quarter of the current year<sup>1</sup>. As a result, PPI in the second quarter of the current year was shaped mainly (in approximately 60%) by the price growth of the electricity, natural gas and water supply section (as compared with approximately 7.5% a year earlier) – see Figure 11.

The first six months of the current year marked significant changes to the price growth rates in particular sectors of the industry, with the trends of the first quarter persisting in the second quarter. Producer price indicators calculated for particular months (quarters) of the period varied in the industry and its three sectors (the corresponding month or quarter of the previous year = 100) (Figure 12):

<sup>&</sup>lt;sup>1</sup> This impact declined so significantly despite the fact that the contribution of manufacturing to the output of the industry in the second quarter of 2001 reached a level of, on average, 83.3%, thus remaining only 1.6% lower than in the second quarter of 2000.

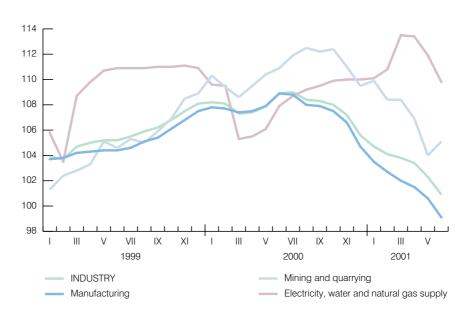


Figure 11
Contribution to PPI of price movements in selected sections of industry (corresponding quarter of previous year = 100)



Source: Main Statistics Office data, calculations NBP.

Figure 12
Producer Prices in the Industry and its three sections
(corresponding period previous year = 100)



Source: Central Statistics Office data.

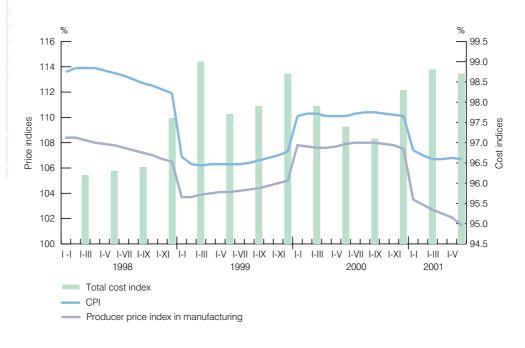


- the indicators of producer prices in the industry were decreasing from month to month, which represented a continuation of the declining trend of the second half of year 2000 (a drop from 8.9% in June of last year to 0.9% in June of the current year);
- the indicator of producer prices in manufacturing declined at a faster rate than the PPI; the price growth rate in manufacturing dropped from 9.8% in June of the previous year to negative 0.9% in June of the current year, which resulted in the diminishing impact of the manufacturing producer price growth on PPI; the greatest price declines in the analyzed period were recorded in the following sectors: the production of coke, crude oil and derivative products – by 11.7% (compared to an increase of 48.6% a year before), the production of pulp and paper - by 4.0% (a previous years' growth of 16.7%), production of motor vehicles – by 3.2% (a previous years' growth of 2.5%); the negative value of the manufacturing producer prices growth rate in June of the current year, was the first such phenomenon during the past decade;
- the growth rate of producer prices in the section of electricity, natural gas and water supply, due to a high increase of the prices in April of this year, reached a very high level in the second quarter, by increasing 11.7% as compared to the second quarter of the previous year (the highest growth rate among the quarterly indicators over the last 2.5 years); the price growth rate of this sections has been exceeding the PPI growth rate since August of the previous year;
- the indicator of price growth in the mining and quarrying remain on a relatively high level, although they display a declining trend since the end of the previous year; in June of the current year, the producer price growth rate in this section reached 5.2% (compared to 10.9% a year ago), which marks a significant excess over the PPI level; the price levels in mining and quarrying, where the operation of market mechanisms is limited, was mainly determined by the prices of coal used by the power plants, which were set at a high level, and the significant costs incurred in relation to the liquidation of mines and the restructuring of employment.



The growth rates in particular sections of the industry are determined by the different conditions in which each of them operates<sup>2</sup>. The companies in the energy sector operate in the conditions of a monopolistic market (one or two producers in a given region) as opposed to manufacturing. Moreover, the producers of energy service the same clients based on long term agreements on the supply of energy, natural gas and water. The situation of the manufacturing section is determined by a competitive market, which includes imports. The demand for energy and water is relatively inelastic, whereas the consumer goods and supply materials market is subject to a changing domestic and foreign demand, with the latter being described by the companies<sup>3</sup> as insufficient.

Figure 13
CPI, price and cost indices in manufacturing
(cumulative; price indicators – corresponding period last year = 100)



Source: Central Statistics Office data.

<sup>&</sup>lt;sup>2</sup> See chapter 5 "Other supply factors".

<sup>&</sup>lt;sup>3</sup> This is confirmed by the opinions of the companies – see the monthly analysis of market conducted by the Main Statistics Office.



The low growth rates of prices in the manufacturing section of the industry was accompanied by a high cost level indicator<sup>4</sup> (Figure 13). This resulted on one hand from a lower growth of producer prices in the period, which in turn resulted in the decline of the corporate revenues, and on the other hand, from the costs of production incurred earlier, and expressed in prices from the previous period, which were relatively higher. Such situation led to a declining profitability of companies, which attempted to control the costs of production by the reduction of employment<sup>5</sup>.

Table 6
Production cost structure and efficiency relationships in select sections of the industry in quarter 2 of years 1999–2001

Item	Ma	anufacturir	ng	Elect	tricity, natu	ral gas
				ar	nd water su	pply
		Quarter 2			Quarter 2	<u> </u>
	1999	2000	2001	1999	2000	2001
Cost structure by category (%)	100.0	100.0	100.0	100.0	100.0	100.0
<ul><li>material costs</li></ul>	51.8	54.6	53.0	29.6	30.8	29.6
<ul><li>energy costs</li></ul>	2.6	2.5	2.7	7.1	4.0	5.1
- costs of external services	11.2	11.2	11.6	15.6	21.5	23.6
<ul> <li>taxes and duties</li> </ul>	8.5	8.6	9.0	2.6	2.3	4.0
- full costs of labor	18.2	15.7	16.0	24.0	21.5	19.9
<ul><li>depreciation</li></ul>	4.5	4.5	4.8	18.9	18.1	16.4
Relationship of costs and gross income (zl/zl)						
Total cost/gross income	24.24	27.72	60.82	59.08	-176.45	73.31
– material costs/gross income	12.55	15.12	32.24	17.48	-54.37	21.68
<ul> <li>– energy costs/gross income</li> </ul>	0.63	0.70	1.62	14.17	-7.08	3.74
- costs of external services/gross income	2.70	3.09	7.03	9.22	-37.88	17.30
<ul> <li>taxes and duties/gross income</li> </ul>	2.06	2.38	5.50	1.52	-4.08	2.94
– full costs of labor/gross income	4.42	4.36	9.74	14.17	-37.89	14.59
<ul> <li>depreciation/gross income</li> </ul>	1.08	1.23	2.94	11.20	-31.88	12.02

Source: based on F-01 reports, Main Statistics Office data.

 $<sup>\</sup>overline{^4}$  The cost level indicator is expressed as a proportion of total operating costs to total operating revenues.

<sup>&</sup>lt;sup>5</sup> See chapter 4 "Labor Market".



In the second quarter 2001, manufacturing experienced a rapid "jump" of costs per unit of gross income, which more than doubled in comparison to the second quarter of the previous year<sup>6</sup> (see Table 6). At the same time, the section of electricity, natural gas and water supply, experienced a decline in the costs per gross income unit of approximately 60% compared to the second quarter of the previous year. It is worth noting, however, that the measure of costliness of obtaining a gross income unit in the second quarter of 2001 is positive, whereas the section of electricity, natural gas and water supply experienced a negative measure in the second guarter of 2000, which means that each unit of loss incurred by the companies of this section, was associated with very high costs. This was the main reason for the attempts of the companies of this section to increase prices.

The producer prices of the petrochemical sector in the second quarter of 2001 were 5.4% lower than the prices in the second quarter of the previous year. April and May marked the increases (as compared with the previous month), and June – a decline. These changes were tantamount to prices declines of respectively 1% (in April), 3.4% in May and 11.7% in June, as compared to the same periods of the last year, when the prices of crude were very high.

The declining tendency in the prices of construction and assembly, observed since the mid-year of 2000, persisted in the second quarter of 2001. In June, the prices were 3.8% higher than in June 2000, when the rate reached the level of 8.8%. The declining growth rates of the producer prices in construction were caused both by the decline in investment activity in the Polish economy and by the growth of competition on the construction services market. The prices, however remain on a relatively high level, due to high growth rates in the costs of construction. The costs of construction companies in the second quarter of the current year increased 19% in comparison to the first quarter of this year. At the same time, the costs of energy grew by 24.3%, and the costs of outsourced services by 32.7%.

 $<sup>\</sup>overline{^6}$  The cost data are obtained from F-01 financial reports and as a result only concern large and medium enterprises.



### 2. Domestic demand and supply

#### 2.1. General comments

The domestic demand remained weak in the second quarter of 2001. At the same time, the growth rate of exports, very high in the first quarter, declined. As a result, the GDP suffered a continued decline of growth rate. According to preliminary estimates, the GDP growth rate reached 0.7% in the second quarter of the current year (compared to 2.3% in the first quarter). In result of the slowing GDP growth rate, which helped to increase the growth rate of industrial output in the first quarter, the value added of the industry in the second quarter remained below the level of the previous year (1.0% below). The decline of the value added in the construction continued, and the increase in value added in market services was lower.

A decline in the domestic demand in the first quarter of the current year below the level from the previous year resulted completely from the decline in tangible working assets7 (which equaled PLN 3.2 billion in current prices according to the Main Statistics Office data). Consequently the accumulation was 13.8% lower than in the first quarter of the previous year, despite the 1.5% increase of expenditures on gross fixed assets. The consumption increased by 1.2% including the 1.5% growth of individual consumption. According to preliminary calculations, the accumulation in the second quarter of the current year, also remained below the level of the previous year, which is a result of a smaller growth of inventories than in the corresponding period of the last year, and a further decline in expenditures on gross fixed assets. Due to the decline in the households disposable income growth, the growth of individual consumption in the first quarter was also lower. Table 7 presents the estimates on the GDP and the domestic demand growth rates.

 $<sup>^{7}</sup>$  The tangible working assets are intended to mean the stocks of materials (including fuels), unfinished products, finished products, goods and the material portion of the tangible part of the inter-period transfers of own costs. In individual farming, the change in tangible working assets is comprised of the change of the value of agricultural plants and livestock and the change of the value of the trading flock of livestock.



Table 7
GDP and domestic demand growth rates

Item			2000			20	001
	year	QI	Q2	Q3	Q4	QI	Q2
		correspo	onding peri	iod of the <sub>l</sub>	previous ye	ear = 100	
Total added value	103.8	105.7	104.8	102.9	102.3	102.1	100.6
Industry	106.8	110.1	109.3	106.4	102.5	103.4	99.0
Construction	99.4	104.3	100.8	97.8	97.6	94.8	91.5
Market services	104.6	105.4	105.2	103.3	104.5	103.5	103.1
GDP	104.0	105.9	105.0	103.1	102.4	102.3	100.7
Accumulation	104.2	110.6	105.9	102.0	102.2	86.2	95.5
Expenditure on fixed assets	103.1	105.6	103.0	102.4	102.6	101.5	97.6
Consumption	102.4	104.1	102.6	101.2	101.6	101.2	100.2
Individual consumption	102.6	104.8	102.9	101.1	101.6	101.5	100.1
Domestic demand	102.8	105.1	103.3	101.4	101.8	98.6	99.2
Domestic demand as percentage							
of GDP	106.9	108.9	106.7	105.9	106.9	105.4	ca. 105

Source: Main Statistics Office, own estimates.

#### 2.2. Domestic demand

Based on the data on nominal growth of salaries and social expenditures, the growth gross disposable income in the second quarter of 2001 is lower than in the first quarter. The average monthly gross salary in the corporate sector increased by 6.2% (compared with a 8.5% growth in the first quarter) as compared with the corresponding period of the previous year. The decline in employment increased from 2.4% in the first quarter to 2.8% in the second quarter of the current year. This means that the work compensation in the sector grew nominally as compared with the corresponding period of the previous year by 3.2%, and their purchasing power was 3.2% lower. The work compensation in the public sector is estimated to be higher than in the corporate sector (among others, in April the price increases for the period starting from January were paid), and the real labor compensation remained on the level of the second quarter of the previous year.

In June the retirement and disability pensions were indexed using very high rates, which was associated with the underestimation of the last year price growth. After



the indexation, the average gross retirement and disability compensation were 14.4% higher than in June of the previous year and their purchasing power increased by 6.9%. The significant growth of the purchasing power of retirement and disability pensions will have a significant impact on the increase of the growth of disposable income of households and the consumer demand in the second half of the current year. An average retirement and disability pension was 1.5% higher in the second quarter of this year than a year ago (in the first quarter it was 1.0% lower). The growth rate of other social expenditures, including pre-retirement welfare payments increased more than 60%, similarly to the first quarter, and their share in the total social expenditures increased significantly.

Over the entire first half of 2001, the amount of paid pre-retirement benefits equaled PLN 633.1 million, and was 65.8% higher than a year ago. The average number of benefits paid in the period increased by 29.8% to 359.4 thousands, as compared with the first half of the previous year. The increase of the amount of benefits paid was effected by both the higher number of recipients and the increase in the amount of particular benefits paid. Both the average compensation and the pre-retirement benefits were higher in the first half of the current year than in the corresponding period of the last year.

The total nominal growth of gross disposable income reached around 7% in the second quarter (compared to around 10% in the first quarter), and their purchasing power increased by around 0.5% (around 3% in the first quarter).

The growth of credits to individuals remained below the level of the second quarter of 2000, although it has increased significantly from the first quarter of the current year. The credits increased by PLN 1.8 billion (compared to PLN 3 billion in the second quarter of previous year and to PLN 190 million in the first quarter of the current year). The growth of deposits was smaller than in the second quarter of the previous year and in the first quarter of the current year (and it amounted to PLN 4.6 billion compared to PLN 6.8 billion in the same period of the previous year and to PLN 11.3 billion in the previous quarter). The growth of financial savings was also lower than in the first quarter of the current year. The expenditures on the fixed assets of households are estimated to have grown substantially, including the expen-



ditures on residential construction (the number of finished apartments was 40% higher than in the second quarter of the previous year) and the investments in individual farming. In total, the gross savings of households, despite a slower growth in financial savings, grew faster than disposable income (by over 10%).

The growth of consumer demandunder such conditions is estimated to be lowerthan in the first quarter of the current year. According to initial estimates, the individual consumption in real terms declined only slightly (by 0.1%) to the level of the previous year. The decline in the consumption growth rate occured despite the decleration of the decline in the growth rate in the volume of retail sales of medium and large trading companies declined. In the second quarter of the current year it dropped by 0.2% as compared to the same period of the previous year and by 3.1% as compared to the first quarter of the current year. The sales of furniture, radio and television equipment and household appliances, clothing and footwear, pharmaceuticals, cosmetics and food have increased. However the increase was accompanied by the decline in sales of non-specialized stores, selling mainly food (super and hyper markets). The sales of automotive products remained smaller than in the previous year, however the decline rate decreased from 15.1% in the first quarter to 3.8% in the second quarter of the current year.

Investment outlays of households and the public sector institutions (central and local government) have increased, which transpired in, among others, good results of residential construction, land and water engineering projects (among others waterways), and public utility buildings. In spite of these increases, and as a result of the decline in investment outlays in the corporate sector, the growth rate in expenditures on gross fixed assets has further declined. The expenditures in the second quarter of the current year are estimated to be only 2.5% smaller than in the corresponding period of the last year (while in the first quarter of this year they were 1.5% higher).

By the end of the second quarter of the current year, the state budget deficit reached PLN 18.7 billion, which constituted 91.1% of the budgetary law plan for 2001, with the deficit reaching 73.5% of the plan by the end of March of the current year. On one hand it was a result of high expenditures, partly the expenditures



postponed from the previous year, on the other it was precipitated by lower than expected revenues. The expenditures of the state budget were lower in the second quarter than in the previous, however the revenues did not improve. Although the revenues increased by approximately PLN 4.5 billion compared to the first quarter, it resulted from the division of the NBP income and the receipt of PLN 4.9 billion therefrom. On the other hand the tax revenues remained low, and in case of the corporate income tax, they were even lower than in the first quarter of the current year. As a result the actual total tax revenues in the first six months of 2001 reached only 39.3% of the budgetary law plan. In the previous year, this indicator reached 43.4% after the first half, and 94.3% by the end of the year.

The adverse revenue situation of the state budget resulted from multiple factors, including an unforeseen development of the macroeconomic environment. According to the assumption of the budgetary law for 2001, the economic growth should have reached 4.5% in the current year, and the mid-term inflation 7%. These indicators are currently known to reach significantly lower levels. The budgetary revenue shortfall can be estimated to reach the maximum of 50% of the budgetary plan for the year, due to adverse discrepancies between the assumed and actual levels of the indicators. The remaining portion of the shortfall will result from the revaluation of the previous year nominal GDP (which constituted the basis for the preparation of the budgetary plan for the current year) and the failure to reach the goals of the tax and duty collectability ratios.

The adverse situation on the revenue side was accompanied by the lower expenditures of the budget as compared with the first quarter. The total expenditures of the second quarter of the current year reached 21.9% of the annual plan compared with 25.7% in the first quarter of the current year and with 25.7% in the corresponding period of the previous year. The decline in the budgetary expenditures after the first quarter is a seasonal phenomenon, which occurs every year, however this years decline was deeper than in the previous years. This may evidence a tendency to limit expenditures in relation with the low budgetary revenues. For instance The Social Insurance Fund received in the second quarter of the current year only 14.3% of the planned subsidy. However, on the other hand, some other categories



Table 8
National budget realization in Quarter 1 and 2, 2001

Item	Nominal values (billions of zl)		Realization of the budgetary law plans (in %)		
	QI	Q2	QI	Q2	I half-year
Revenues	31.6	36.I	19.6	22.4	42.I
Tax revenues	26.9	27.2	19.5	19.8	39.3
Indirect taxes	19.1	20.1	20.2	21.3	41.5
Corporate Income Tax	3.1	2.3	17. <del>4</del>	13.0	30.3
Personal Income Tax	4.7	4.8	18.2	18.8	37.0
The income of state budgetary units	4.5	3.6	27.5	22.0	49.5
including the duty revenues	1.0	1.1	19.9	21.9	41.8
including the UMTS concession fee	0.9	0.8	28.9	27.0	55.9
Remaining revenues	0.3	5.3	4.7	75.I	79.8
including the dividend on NBP income	0.0	4.9		99.9	99.9
Expenditures	46.7	39.8	25.7	21.9	47.6
Servicing of domestic debt	4.8	4.1	28.9	24.8	53.7
Servicing of foreign debt	0.7	1.4	12.5	26.6	39.0
Labor Fund subsidy	0.7	0.9	36.9	45.5	82.4
Pension and Retirement Fund subsidy	3.9	3.6	25.3	23.2	48.6
Social Insurance Fund subsidy	6.6	3.8	24.9	14.3	39.2
Local government general subsidies	9.8	7.6	34.4	26.6	61.1
Budget deficit	15.1	3.7	73.3	17.8	91.1

Source: Finance Ministry.

of expenditures display substantial ratios of realization, e.g. subsidy to the Labor Fund was realized in 82% in the first half of the current year.

Due to a significant shortfall in the budgetary revenues and limited possibilities of reducing expenditures in result of the high proportion of fixed items in the plan, the government decided that an amendment to the budgetary law was required.

The privatization revenues in the second quarter of the current year, similarly to the first quarter, remained very low compared to the plan, and reached only PLN 2 billion as of the end of June, compared to the PLN 18 billion planned for the entire year.

The economic deficit of the state (which is calculated as the fiscal deficit plus the payment of compensation for the public sector employees, the retirees and the recipi-



ents of the disability pension equal to PLN 1.1 billion, plus revenues from the UMTS licensing fee equal to PLN 1.7 billion, less the social insurance premiums in the amount of PLN 4.6 billion transferred from the Social Security Office to the open pension funds) reached PLN 16.9 billion in the first half of the current year, i.e. the level of 4.7% of GDP. This indicates that the role of the state budget in the creation of domestic demand was much more significant in the first half of the current year, than in the corresponding period of the last year, when the economic deficit reached the level of 2.6% of GDP.

# 2.3. Domestic supply

According to the preliminary estimates, the real supply growth rate in the second quarter of the current year, measured by the added value, declined to 0.6% from 2.1% in the first quarter of the current year. This was a result of the decline in the value added in the industry (by 1.0%) and a deepening decline in the value added in construction (to 8.5%). The growth rate in market services was lower than in the first quarter of the current year. At the same time the decline in added value in agriculture has been contained.

In the second quarter of the current year, the output of the industry (in large and medium enterprises) was 0.9% lower than in the corresponding period of 2000 (in the first quarter of the current year it increased by 4.1%). The decline was caused by the decline in the output of manufacturing, which was 4.8% higher in the first quarter of the current year, than in the corresponding period of the previous year. The output of the manufacturing companies, which produce mainly supply and consumer goods increased in the first half of this year by respectively 2% and 3%, while the companies producing investment goods recorded an approximately 3% decline in the output sold. The segment composition of the output indicates, that the decline was caused, apart from a continued low domestic demand, by a lower growth of exports as compared with the first quarter of the current year. The output of the other transportation equipment in the second quarter of the current year, which increased by 26.5% in the first quarter of the current year, was only 6.6% higher than in the same period of the previous year. The growth of coke and petrochemical products output declined respectively from 19.7% to 3.8%, and radio, television and telecom-



munication equipment and devices from 13.0% to approximately 1.0%. The output of the industry producing automobiles and trailers, which in the first quarter was 1% lower than in the previous year, declined in the second quarter to a level 17.2% lower than in the corresponding period of the previous year.

The continued decline in retail sales, the decline in the growth of volumes of wholesalers and the decline in the sales of transportation services resulted in the decline in growth rate of the value added in the market services. A growth in this group of the sector was a product of a continued high growth rate of sales of the telecommunications services and the services catering to real estate and economic activity. The growth rate of the value added of financial intermediation and insurance services is estimated to be lower than in the previous year.

Despite the June and July heavy rains and floods, the crops of basic agricultural products are estimated to be better than in the previous year. In result, the total output of cultivated plants shall increase after two years of declines. The increase in the prices of slaughter animals resulted in the improvement in the profitability of breeding. The acceleration in the reproduction of livestock is evidenced by the increase in the prices of piglets and an increased insemination of sows. The level of slaughter animals production in 2001 can therefore be estimated to reach a level similar to that which was recorded in the year 2000, despite a drop in the purchases of slaughter animals in the first half of the current year. In general the total output and the value added in agriculture are expected to grow.

The second quarter of the current year saw a continued slump in the value added in construction. Low demand for investment work and change in its composition (increase in the share of modernization investment, expenditures on purchases of machinery and equipment in the investment expenditures) contributed to a 10.0% fall of output by medium and large construction enterprises (compared to 8.5% drop in the first quarter). The sales of investment work in the first half of the year was 10.7% lower and for renovation work 5.7% lower than in the corresponding period of the previous year. The smaller drop of demand for renovation work suggests that the output of small enterprises, which are not included in monthly reporting, declined less than is the case for large enterprises. Therefore it is estimated that the fall of total construction output did not exceed 8%.



## 3. External imbalance

The factors which shaped the external imbalance in the first quarter, kept exerting their influence in the second quarter of 2001. The deterioration in the conditions of demand on the domestic and foreign markets, were accompanied by the stronger appreciation of the zloty.

The tendencies in the domestic economy pointed to a slackening growth of domestic demand (see chapter 2), which on one hand resulted in the decline in the growth of imports, and on the other hand on the increase in the volumes of exports, which was associated with the sale abroad of the portion of the output, which could not be absorbed on the domestic market.

The first half of the current year saw a clear deterioration in the growth indicators in the euro zone. German GDP grew in the first quarter of 2001 by 2.0%, as compared with the first quarter of the previous year (while in the corresponding period of the previous year, it grew by 2.6%). Also France (2.9%) and Holland (2.2%) recorded slower economic growth. The decline in the GDP growth rate resulted in the decline in the growth of imports into these countries. The growth of imports in Germany reached 9.6% in the period (while in the first quarter of 2000 it reached 14.1%), in France 9.9% and in Holland 6.8%8. The slowing growth of value added in the German industry to the level of 4.7% in the first quarter of the current year and its drop in absolute terms in construction by 10.6% (compared to the first quarter of 2000) had an adverse influence on the import of supplies into the country. The second quarter of the current year saw a deterioration in the leading economic indicators in the Euro zone countries. Slackening growth of manufacturing was accompanied by a substantial deterioration in the economic outlook for the third and fourth quarter 20019. The economic climate on the eastern markets presented a more positive picture. Russia's GDP grew by 4.4% in the first quarter of

<sup>8</sup> Eurostat

 $<sup>^9</sup>$  For example the confidence indicator in the manufacturing industry of the euro zone reached the level of -7 in June as opposed to +5 and +3 in respectively December 2000 and January 2001.



2001, compared with the same period of the previous year, and imports expressed in current prices grew 15% in the period between January and April 2001 (while it increased only 8% in the whole year 2000)<sup>10</sup>.

The first quarter of 2001 marked an improvement in the terms of trade of Polish foreign trade (data for the second quarter are unavailable). The Dollar export and import prices were respectively 1.7% and 0.2% higher than in the first quarter 2000. This marked a reversal of the tendency recorded throughout the year 2000, where the growth of import prices was higher than the growth of export prices.

The appreciation of the zloty which began in the fourth quarter of the previous year, became deeper in the second quarter of the current year. The real effective exchange rate of the zloty, adjusted for the change in the manufacturing producer prices, increased 5% compared to the 4.2% growth in the first quarter of the current year. The real exchange rate of the zloty (calculated as above) increased in the first half of the year by 9.4%, compared with a 6.4% growth in the second half of 2000 and to 0.9% growth in the first half of 2000. At the same time the real exchange rate adjusted for the consumer price changes in the periods increased respectively by 14.8%, 8.3% and 3.6% (Figure 14).

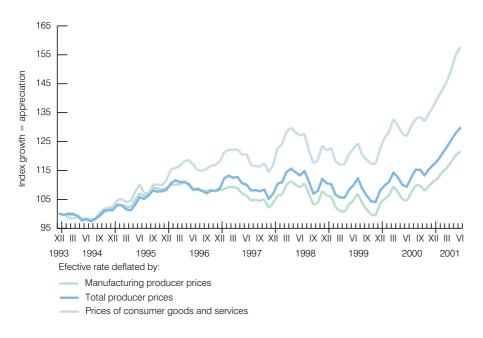
Similarly to the first quarter, the above changes did not yet exert a substantial influence on the external imbalance in the current trading in the second quarter of 2001. The deficit on the balance of payment current account in the period reached USD 2.2 billion and was close to the level of the first quarter of 2001 and the three last quarters of 2000. Despite the deterioration of balance of revenues to USD -0.6 billion<sup>11</sup>, the stabilization of the balance of trade was supported by the decline, both in comparison with the first quarter of the current year and with second quarter of the previous year, of the foreign trade deficit in goods respectively by USD 0.4 and USD 0.3 billion, and in services, by respec-

<sup>10</sup> The Russian Federation Agricultural Development Ministry.

<sup>&</sup>lt;sup>11</sup> The balance of revenues deteriorated both in relation to the first quarter of the current year and to the second quarter of the previous year, by respectively, USD 0.8 and 0.5 billion. This was a result of an extraordinary increase in the salaries in June which were paid from the profits and dividends transferred abroad from the shares of several companies operating in Poland.



Figure 14
Real efective exchange rate of the zloty in 1994–2001
(December 1993 = 100)



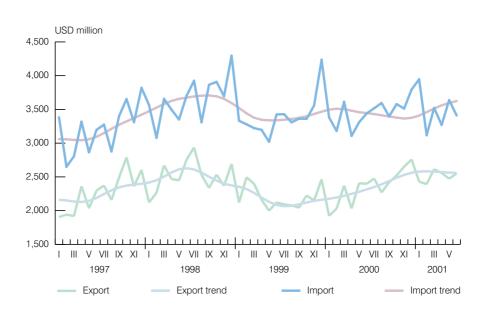
Source: NBP calculations.

tively USD 0.1 and USD 0.2 billion. At the same time the positive balance of the non-classified trade in the second quarter was USD 0.2 billion higher than in the first quarter of the current year, but almost USD 1 billion lower than in the second quarter of the previous year. The balance of the current transfers in the second quarter of the current year reached the level close to both the previous quarter and to the same period of last year.

The foreign trade deficit in the first half of the current year reached USD 5.9 billion and was lower than the deficit in the same period last year by almost USD 1 billion. The improvement in the balance of payments resulted from a relatively high growth of export revenues (14.2% compared with the first half of the previous year), accompanied by a moderate growth in the payments for exports (4.3%). In consequence, the ratio of coverage of the payment for imports with the revenues from exports was in the second quarter of the current year the highest since 1997 and reached 73.5%. Such a substantial growth of exports was influenced mostly by the high growth of sales in the first



Figure 15
Foreign Trade turnover based on payments



Source: NBP data.

quarter of this year. However, the export growth rates for particular months since the beginning of the year (excluding April), were ever slower (see Figure 15). Adjusting for seasonal changes and irregularities, we observe a consistent decline in the monthly growth rates of exports. Although such growth rate reached 18.5% in January, it declined to 10.6% in June. In turn, the growth rate of payments for imports increased respectively from -2.5% to 5.2%.

The above described tendencies in the Polish foreign trade were reflected not only in the payment statistics, but also in the real statistics. The volume of exports in the first quarter of 2001 (no data for the second quarter are available) grew 16.3%, and the volume of imports grew  $4.5\%^{12}$  compared to the same period of the previous year. The growth was slower for both imports and exports than in the corresponding period of the previous year (respectively 25.3% and 16.8%).

<sup>12</sup> Main Statistics Office.



In the period between January and April of the current year, the exports expressed in USD increased by 17.5%, while the imports by 4.7%. The growth of exports to the European Union countries by 17.5%, including the growth of exports to Germany by 17.9%, had the greatest influence on the growth of total exports (according to the German statistics the imports from Poland increased in the same period by 12.1%<sup>13</sup>). The imports from the EU grew at a slower pace than from other countries. As a result, the trade deficit with the EU declined by USD 970 million. After the first four months of the current year, Poland recorded a positive balance in the trade with Germany, which reached almost USD 400 million (a year before Poland had a deficit of USD 120 million). However, at the same time the negative balance of trade with Russia increased by an additional USD 100 million.

Among the groups of goods, means of transportation, whose exports grew by 40% since the same period of last year, played a fundamental role in the shaping of high growth rate of sales in the first four months of 2001. This included a further growth of sales of passenger cars (by almost USD 150 million, compared with the period of January-April 2000), auto parts (by USD 110 millions) and ships (by USD 140 millions)<sup>14</sup>. The substantial increase in the automotive exports could be explained, among others, with the decline in domestic imports, and the associated decline in sales of new cars on the domestic market. Also the sales of machines and other devices increased faster than the total exports. This resulted most of all, from the high growth of diesel engine exports, which stabilized on the level of the third quarter of the previous year. Compared with the previous year, the value of exports of among others, iron and steel and wood products declined. These declines are associated most of all with the restrictions on the import of supplies in the EU countries.

<sup>&</sup>lt;sup>13</sup> A characteristic feature of the differences occurring in the mirror statistics of the trade between Poland and Germany, is the increasing disproportion between the value and growth rate in the Polish exports to Germany and the German imports from Poland, when the share of sea vessels in the Polish exports increased. As a rule, a majority of this export to Germany is not recorded as a German import from Poland, since the German buyer registers the ships under a flag different than German.

<sup>&</sup>lt;sup>14</sup> The Center for Foreign Trade Information.



The slackening of the economic growth rate and the domestic demand was reflected in the level and composition of the volume of imports. In the first quarter of the current year, the volume of investment goods (excluding the means of transportation) and consumer goods remained on the level of the previous year. At the same time, the volume of imports of supplies increased by almost 6%. In result, the share of investment imports (excluding the means of transportation) and consumer goods imports in the total import declined in the first quarter by respectively 1 and 0.7 percentage points, as compared with the first quarter of 2000, while at the same time, the share of imports of supplies and industrial means of transportation increased by respectively 0.4 and 1.2 percentage points.

The decline in the growth rate of imports was significantly affected by the decline in imports of passenger cars and parts for the industrial assembly of the cars (which was connected with the decline in domestic demand for new cars) and the decline in volumes of the import and prices of crude oil. In the period of January-June 2001, Poland imported 300 thousands tons of crude oil less than in the previous year (in January 2001, the volume of imports of crude oil was larger than in January 2000, while the following months marked a decline in imports, and it reached for instance 12.5% in April). The price of oil on the global market declined in the period by 0.5%. The growth of imports would be lower still, if it was not for the imports of natural gas. The price of natural gas in the first quarter of 2001, grew by almost 80% compared with the same period of the previous year. The increase in the volume of natural gas import by 9%, which comprised over 3% of the total imports of Poland resulted in the 93% growth of the value of imported gas in the first quarter of 2001 compared with the same period of last year.

The trade balance deficit in the second quarter of the current year was funded most of all by the inflow of long term foreign capital in the form of direct investments (USD 1.4 billion, of which 15.5% comprised credits from foreign investors) and by long term credits (USD 0.4 billion) and derivative financial instruments (USD 0.7 billion). In the same period, almost USD 1.0 billion of portfolio investment capital flowed out of Poland.

The evaluation of the external imbalance in the second quarter of the current year was conducted based on select-



Table 9
Select warning indicators (in %)

	2000	20	01
		Quarter I	Quarter 2
Current account balance/GDP	- 6.2	- 5.3	-5.2
Foreign trade balance/GDP	- 8.3	- 7.7	-7.2
Direct investment/current account balance *	95.2	56.5	63.6
Capital contribution <sup>2</sup> /current account balance **	83.7	41.6	52.3
(Current account balance – direct investments) /GDP *	-0.4	-2.3	-1.8
Current account balance/Official reserve assets – years	2.8	3.2	3.1
Foreign debt servicing/exports	19.1	23.6	21.7
Official reserve assets – in months of imports	8.0	7.9	7.9
Real effective exchange rate ***	5.8	6.6	13.6

<sup>\*</sup> The high level of indicators considering the direct investments in 2000 is connected with the inflow of foreign capital in result of privatizations, especially the privatization of Polish Telecommunications SA (TP SA).

ed warning indicators (Table 9). All of the indicators presented (with the exception of the trade balance deficit as a percentage of official reserve assets and the official reserve assets as a percentage of imports, which remained practically unchanged) improved in the second quarter of the current year as compared with the previous quarter. However, the zloty depreciation risk increased significantly in result of the increasing appreciation of the currency in the second quarter of the current year.

<sup>\*\*</sup> Net inflow of capital in result of investments in shares and capital supplementing.

<sup>\*\*\*</sup> Real effective exchange rate of the Zloty adjusted by the changes in producer prices in manufacturing; corresponding period of the previous year = 100; the increase of the indicator signifies appreciation.

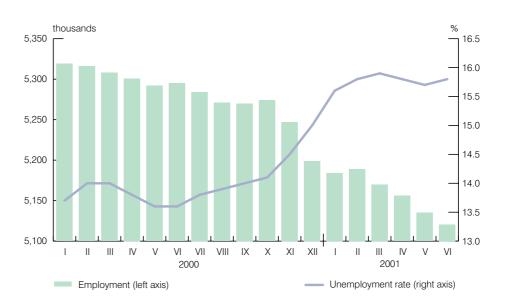


# 4. Labour market

Average monthly employment in the corporate sector in the second quarter of the current year again declined at an increased pace, after a period of a slight deceleration of the declining tendency, which was observed since the second half of year 2000. The decline in employment in June of the current year as compared with the same month previous year was even higher and reached 3.3% (see Figure 16).

The cumulative drop in employment in the first half of the current year was, however, 0.9 percentage points slower than in the corresponding period of the previous year (although it was 0.3 percentage points higher than in the first quarter of the current year) and reached 2.6%. The declining scale of layoffs in the restructured and privatized companies, mainly in mining and metal production (Table 10), and the deceleration in privatization processes in other sections of the corporate sector, were the main factors, which helped for the slowdown in the drop of employment. At the same time, the increasing frequency of employment

Figure 16
Employment in industry and unemployment rate



Source: Main Statistics Office data, calculations NBP.



reductions in small industrial and construction companies (including the private sector, which recorded a small growth of employment only in the market services section) – Table 11, worked towards the drop of employment compared with the first half of the previous year.

In the first quarter of the current year (in absence of data for the first half of the year), among the newly registered unemployed, there were fewer persons laid off by the employer, and more persons unemployed hitherto and graduates of various schools, as compared with the same period last year.

The proportion of persons with the highest education is rising among the unemployed, although the most likely to

Table 10 The decline in employment in select corporate sectors, including the restructured and privatized companies (in %)

(corresponding period of the previous year = 100)

Item		20	00		20	01
		Quarters				
	ı	I-II	1-111	I-IV	I	1-11
Pit-coal and brown-coal mining	14.8	14.5	14.1	13.8	9.8	9.2
Production of metals	19.3	19.6	19.7	18.5	16.1	15.8
Production of chemicals	6.8	6.8	7.4	7.9	7.9	8.3
Electricity, natural gas, steam						
and hot water supply	3.8	4.1	3.8	4.1	4.1	4.3

Source: Main Statistics Office data.

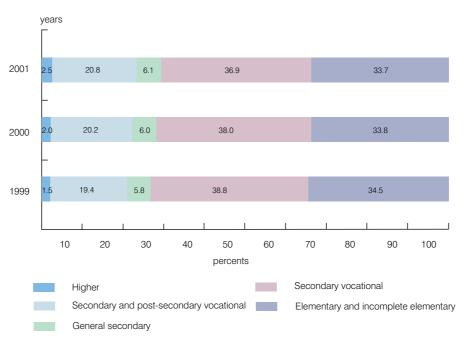
Table 11
Employment in select sections of the private sector (in %)
(corresponding period of the previous year = 100)

Item		2000			2001
		Quarters			
	1	1-11	I-III	I-IV	ı
Private sector total	101.3	100.9	100.7	100.2	102.3
Industry	97.8	97.6	97.7	97.4	99.5
Construction	97.7	97.1	97.4	97.5	96.0
Trade and repair	101.8	104.0	103.5	103.3	100.2

Source: Main Statistics Office data.



Figure 17
Composition of unemployment according to education level in 1999–2001
(as of end of March)



Source: Main Statistics Office data, calculations NBP.

become unemployed the soonest (and to remain the longest among the unemployed) are people with the lowest education. However, due to the fact that the number of new jobs is steadily declining (first half of the year recorded almost 84 thousands fewer, which is equivalent to 26.5% fewer new jobs than in the first half of the previous year), graduates of various school types, including universities and post-secondary schools, are more frequently registered as unemployed, immediately after graduation. Hence, the proportion of this group is steadily growing in the total number of unemployed (Figure 17).

The age composition of unemployment is characteristic of unemployment in Poland. The largest group of unemployed are young people, which are best educated, creative and efficient. Persons up to 34 years of age, as of the end of March of the current year (later data is unavailable), comprised almost 57% of the total registered unemployment. Table 12 presents the growth of the number of unemployed in particular age bands during the last two years, starting with the first quarter 1999 until the first quarter of the current year.



Table 12 Unemployment growth by age-bands in the period of Quarter 1, 1999 to Quarter 1, 2001

Age band	Figures as of the	Figures as of the end of the period		
			thousands	
			of persons	
	Quarter I, 1999	Quarter I, 2001		
Under 24 years	653.7	864.8	211.1	
25-34 years	600.6	776.0	175.4	
35-44 years	550.3	699.1	148.8	
45-54 years	325.5	505.5	180.0	
55 years and over	40.3	53.3	13.0	
Total	2.170.4	2.898.7	728.3	

Source: Main Statistics data, NBP calculations.

Persons aged 55 or more most frequently receive retirement, welfare or pre-retirement benefits, which results in a small increase of employement in this age band.

During the last year, starting from June 2000, the number of unemployed increased by 412 thousands, to reach a total of alreade 2,849.2 thousands persons. The unemployement rate in the period increased by 2.2 percentage points and reached the level of 15.8% at the end of June of the current year (increasing by 0.1 percentage points since May of the current year). The seasonal drop of unemployment in the summer, connected with seasonal employement and with the interventionary and public works funded by the Labor Fund, reached only approximately half of the previous year figure. The number of unemployed declined by almost 50 thousand in the second quarter of the current year, while it dropped almost 95 thousands in the second quarter of the previous year.

Demographics played an important role in the shaping of the Polish labor market. During the next few years, each year approximately 300 thousands persons more than in the previous decad will enter the market (the result of the boom of the early eighties).

As long as the barriers to the growth of employement on the labour market, associated with the high degree of its regulation, remain effective, the inflow of the new entrants to the labour market will result mostly in the growth of the unemployment rate.



The most important barriers to growth, apart from the absence of mechanisms helping for the creation of small and medium companies (which create approximately 80% of new jobs), include: surcharges to the costs of labor (the contribution to the Social Insurance Office and to health insurance); labour market regulation, which are adverse to the employers (e.g. the necessity to pay the employees salary during the first 35 days of the employees sick-leave – despite the full payment of the contribution to the health insurance system); high costs of laying an employee off (the notice period, severance pay in case of group lay-offs); and relatively high minimum wage (approximately 40% of the average salary), which is not differentiated by regions. The market price of simple labor (the pay for which the employee would be ready to take the job) is frequently lower than the effective minimum wage, which becomes an additional barrier in the employement of low-skill labor. In Poland, where over 70% of the unemployed only have an education on the level of vocational school, elementary or lower, this factor additionally limits the possibility of employing such persons, even in the case of creation of a substantial number of new jobs.

Upon making the investment decision, the enterpreneur, chooses technology thus deciding on the level of demand for labor. This is particularly important in the case of simple, low-skill labor. The choice is made based on the comparison of costs of employing an employee with the cost of labor-saving investments, which are more likely to replace simple labor than complex labor. The higher the level of employee "protection", the greater the risk and cost of labor to the employer, and as a result, the smaller the employer's demand for labor, particularly simple labor.

As the OECD research shows, the lowering of the employee "protection" (measured by the EPL indicator – Employment Protection Level<sup>15</sup>) allows to establish stronger connections between the economic and

<sup>&</sup>lt;sup>15</sup> The summary indicator depicting the costs, which the employer must incur if he wants to lay an employee off. The weights set are ascribed to particular procedures regarding the employee lay-offs, both individual and collective (the notice period, severance pay, procedural impediments in the lay-off process, etc.), in the case of the permanent and temporary employment agreements. The detailed description of the indicator is presented in OECD Employment Outlook, 1999.



employment growth<sup>16</sup>. The OECD analysis of 27 member countries in years 1985-1997 indicates additionally that high degree of labor market regulation impacts particular segments of the market with varying strength. The impact is stronger, where the cost of labor offerred on the market is cheaper (as already explained, simple labor is easier to be substituted by labor-conserving investments, compared with complex labour, offered by highly-skille employees). Thus, the lowering of the level of employee protection makes the employment of lowskill (cheap) labor more efficient, lowers the costs of production and helps accelerate economic growth (higher competitiveness and more funds on investments). In result of deregulation of the labor market, the economic growth is more dependant on the growth of employement and less on the growth of productivity of labour.

The deregulation of the labor market, which allows for a more efficient management of labour resources, connected with the completion of structural reforms, which reduce the role of the governement in the economy and reduce the pressure on the budget, would play a key role in the stimulation of economic growth and the creation of lasting foundations for a dynamic development of the economy based on the labour resources.

<sup>&</sup>lt;sup>16</sup> The America economy is characterized by the lowest level of EPL index, which reached 0.2 in the eighties (on the scale of 0 to 6). The average level of the EPL index for the EU–15 countries was close to 3. One can state that the reason for the EU employers to increase output through the increase of efficiency of labor, as opposed to the increase in employment, is the high relative cost of labor as compared to the USA (considering the level of employee protection).



# 5. Other supply factors

#### 5.1. Structural factors

The financial results of other sections of industry were adversely affected in the first half of 2001, and in particular in the second quarter of the year, by high growth rates of prices in the section of electricity, natural gas and water supply. The twelve month growth indicators of producer prices in the section exceeded the level of 10% in particular months of the first half of the year, and even the level of 13% in March and April (see Figure 12). The reasons for this situation could be found among the specific characteristics of the energy sector and in the provisions of the law, agreements between branches and long-term agreements concluded in the past and influencing the privatization and restructuring processes in the energy sector.

#### Energy

The energy market, which is a part of the economic infrastructure sphere, is one of the most difficult to demonopolize. The transmission of energy is a natural monopoly. The fundamental question of the energy sector is how to improve competitiveness on the energy market <sup>17</sup> and how to protect the environment. The condition of stimulating competition on the energy market is the solution of the problem of long-term energy supply contracts.

The prices of energy are regulated and vary based on the geographical factors. The prices of electricity, which the end-user pays have a remote connection with the costs of production and transmission. There are 33 distribution companies. Their price lists are approved by the Office for the Regulation of Energy Industry. The factors which influence the prices of energy include:

• a legal requirement of including justified costs into the price; qualification of costs is negotiable;

<sup>&</sup>lt;sup>17</sup> Currently only 2% of electricity is traded at the electrical power exchange.



- long-term contracts signed in the years 1994–1998, which include 70% of the total energy output<sup>18</sup>;
- the duty to purchase certain quantity of energy from the main distributor, i.e. the PSE – Polish Energy Networks (over 60%) which binds all the energy companies;
- the requirement (introduced in the second half of 1998 by the executive decisions of the Minister of the Economy to the "Law on Energy" of December 5, 1997) to buy electrical energy from heat and electricity suppliers if one is located in the area; it is worth mentioning that the prices of electricity produced "jointly" with heat are most frequently substantially higher (even by 40%) than the prices of electricity produced in electrical power plants;
- high prices of coal used for the production of electricity (higher than in imports), which is a reflection of the projectionist policy towards coal mines; approximately 60% of electricity in Poland is produced from coal;
- excessive prices lists for the transportation of coal (electricity production is the most important client of the Polish State Railroads – PKP);
- high costs of labor (high employment in electricity production approximately 125 thousands, high salary growth rates, social privileges, cheaper electricity); in June of the current year, the average gross salary in the section of electricity, natural gas, steam and hot water supply was 31% higher than in the entire corporate sector and increased by 7.8% compared to June 2000 (in the corporate sector, by 4.9%);
- broad-scale investments to modernize the industry and preserve environment;
- penalty fees for the contamination of the environment;
- monopolistic practices on the regional markets, by changing prices without the approval of prices lists by the President of the Office for the Regulation of Energy Industry.

<sup>&</sup>lt;sup>18</sup> Polish Electricity Networks (main wholesale distributor) guaranteed in the contracts the purchase of a determined quantity of electricity at a set (high) price. Thanks to such contracts, which secured the loans granted by the PEN (the banks did not lend as a result of poor financial standing of the power plants), some of the power plants modernized.



Privatization of the energy sector has encountered substantial difficulties. Practically all privatization processes are completed with a delay towards the plan. Until now, the privatization of the distribution sub-sector is being conducted much more effectively than in the production subsector. There is a disproportion in the privatization of the so called professional power plants (producing solely electricity) and the heat and electricity producers. The privatization of the latter is more advanced due to their privileged position on the market (which is connected with the above mentioned duty of purchasing electricity which is produced jointly with heat).

The privatization of the transmission network (PSE) depends on the progress of privatization of all companies in the sector and a significant advancement of the implementation of the competitive market for energy.

April 2001 marked the adoption of the Program of introduction of the market for electricity. It assumes, that the market will become operational on July 1, 2001. The power plants will be able to sell electricity to buyers at a market price, and the President of the Office for the Regulation of Energy Industry ("URE") will be able to exempt them from the duties to present price lists for approval, which is supposed to cause the decline in the prices of energy. However, until the problem of the forward contracts is solved, the competition on the electricity market will be only makebelieve. The Program assumes a gradual liquidation of long-term contracts and their replacement with a Compensation Fee System ("SOK"). SOK SA (SOK Joint Stock Company) became the administrator of the system, after being spun-off from PSE SA, which undertook the renegotiation of the long term contracts on the supply of electricity and their replacement with the financial contracts settled within the framework of SOK. A gradual implementation of the SOK System is planned to continue until March 30, 2002.

#### Coal mining

The costs of the supply of electricity, natural gas and water are under a strong influence of the prices of coal, which is the main raw material used in power plants and heat and electricity production plants. High prices of pit-coal are intended to improve the financial situation of coal mining industry. The growth



rates of prices in the section of mining and quarrying in particular months of the first half of 2001 ranged between 9.9% in January and 5.2% in June. The high prices of coal, however, did not lead to the liquidation of unprofitability of coal mines, but only to its reduction. The net loss of coal mining after the first five months of the current year reached PLN 381.2 million (compared with PLN 1.6 billion a year ago and approximately PLN 800 million planned for the 2001 year end). Around 2/3 of the losses incurred by the mines result from high costs of financing (interest on liabilities). The total liabilities of pit-coal mining reached PLN 21.1 billion in the end of May of the current year, which means a decline by approximately PLN 1 billion over the last 5 months.

The privatization activities conducted in the sector according to the pit-coal mining reform program concerned so far:

- privatization of two independent mines Joint Stock Companies wholly owned by the State Treasury: Lubelski Węgiel "Bogdanka" and Pit-Coal Mine "Budryk" SA,
- creation of capital links with other economic entities (in particular including the power plants),
- privatization of the non-production assets of the mines and the creation, based on the assets, of independent economic entities.

Work on the financial restructuring of mining continued throughout the second quarter of the current year. The subsidy for this purpose planned for 2001 equals PLN 1.4 billion. Part of the agreements on the forgiveness of debts was signed (five coal mining corporations with the tax offices), while others are being finalized. The conclusion of the debt-forgiveness agreements (with ZUS) is planned for five out of 7 coal mining companies by July 20, 2001. PLN 4.5 billion out of the total of PLN 7.7 billion in arrears towards ZUS will be forgiven. The remaining PLN 3.2 billion will be repaid until the end of 2007. The financial restructuring program includes also PLN 2.6 billion of arrears in VAT, which is to be repaid after 2002. The forgiveness of debts of the coal mining companies is an activity preparatory to privatization. Not all the coal mining companies meet the preconditions of forgiveness of debt, and as a result will not be privatized in the near future.



#### Railroad transport

The main source of income to the Polish State Railroads is the transportation of coal for the needs of the energy industry (and the level of transportation tariffs is an cost item strongly influencing the prices of energy). The tariffs for the transportation of goods are overinflated in such a way, as to allow the PKP to subsidize from this source the loss generating passenger transportation.

Based on the law on Commercialization, restructuring and privatization of the state owned company PKP of September 8, 2000, the reform of the transportation services market commenced. On December 1, 2000, PKP was transformed into a joint stock company PKP SA. The law allows for the separation of particular railroad services (passenger transportation, cargo, etc.), and the separation of the infrastructure maintenance function from the transportation services. The process of spinning-off companies associated with the reform is already underway. Most of them will become operational since October of the current year. The funding of the reform is to be obtained from the credits from, among others, the European Bank for Reconstruction and Development and the World Bank, and from the sales of PKP real estate and a planned issue of bonds.

After the break-up of PKP, 24 independent companies will emerge. They will takeover the assets of PKP, which is currently only left to their administration and will be relieved from the debts of the railroads, which will be taken over by the parent company. All these companies are to be privatized by 2003. The only company which will remain a property of the state will be the Polish Rail Lines. They will take over the PKP infrastructure, and they will collect fees from the private companies-users of the infrastructure. It needs to be pointed out, that the railroads infrastructure will require significant expenditures (approximately PLN 40 billions), to meet the world standards.

The function of PKP SA will change. It will cease to be the provider of transportation services and undertake the servicing of its debt and the management of the entire reform of the railroad market, which will entail a restructuring of employment and the purchase of new freight carriers. The railroads owe over PLN 6 billions to various institutions.



The organizational restructuring is to be accompanied by the financial restructuring. In May, 2001, the PKP obtained a government guaranteed credit of PLN 700 millions, which is earmarked, among others, for the repayment of the previous debts. Also in May, the World Bank loaned euro 150 millions to PKP for the restructuring of employment.

#### The liquid fuel market

The monopolistic position of the Polish Crude Oil Consortium PKN ORLEN SA on the liquid fuels market is beyond dispute. The high prices set by the monopolist are a source of high revenues, which allow for the investment expansion of the Consortium. The sale of the first and second tranch of the shares of the consortium is planned for the near future.

Within the restructuring and privatization of the oil sector, there were some negotiations conducted in the second quarter of the current year, on the cooperation of PKN ORLEN SA with foreign partners: Austrian OMV or Hungarian MOL. On the current stage of the oil sector privatization it is assumed that all the shares of PKN ORLEN SA owned by "Nafta Polska" SA (18%) will be sold. OMV and MOL placed their bids. The transaction is to be finalized in September 2001.

Actions were undertaken in the second quarter of the current year, to strengthen the privatization of Rafineria Gdańska SA – the Gdańsk Refinery SA and, on the basis of the refinery, to build a competitor to PKN ORLEN SA in terms of production and distribution of fuel. A foreign bidder, who intends to invest USD 1 billion, obtained exclusive rights to negotiate the purchase of 75% of stock of Gdańsk Refinery SA. The participants in the privatization of Gdańsk Refinery SA include Kredyt Bank SA and Gdańsk Consortium (Konsorcjum Gdańskie).

The privatization of Naftobaza SA, according to the decision of the Council of Ministers of May 2001, will be possible only after the completion of the privatization of Rafineria Gdańska SA.

Rafinerie Poludniowe – Southern Refineries (Rafineria Czechowice SA, Rafineria Trzebinia SA, Rafineria Jasło SA, Rafineria Jedlicze SA, Rafineria Nafty Glimar SA) are being prepared for privatization and are on various stages of pre-privatization work.



#### Natural gas market

The natural gas market remains highly monopolized. The starting point to the privatization of the natural gas sector is the organizational restructuring of the Polskie Górnictwo Naftowe i Gazownictwo (PGNiG SA) – Polish Oil Mining and Gas Production, which will be accomplished in several stages.

In December 2000, PGNiG SA created six companies along the functional lines: four distribution companies and one exploration-production company, which are limited liability companies, and one transmission and storage company, which remained the property of the State Treasury and remains under the Treasury's full control.

The second stage of privatization will consist of negotiations with creditors of PGNiG SA on the restructuring of the company's debt and the division of liabilities among the newly created companies.

In the third stage, a "Gaz Polski" – Polish Natural Gas company shall be created (4 distribution companies and a packet of shares of the exploration and production company), and the company which will retain the name of PGNiG SA (transmission and storage of natural gas, long term contracts for the supply of gas). The State Treasury will by 100% owner of the shares of both of these companies.

The fourth stage will consist of the privatization of:

- the distribution companies by "Gaz Polski" (mixed privatization the sale of shares to strategic investors, and at a later date a public offering),
- the exploration and production company by PGNiG SA (by means of the sale of shares to a strategic investor),

and a subsequent listing of the shares of the distribution companies to public trading on an exchange.

In the fifth stage, "Gaz Polski" will be liquidated by the end of 2004, and the shares owned by the company will be assumed by the State Treasury. The privatization of PGNiG SA (the transmission and storage company) should be decided after 2005.

#### **Telecommunications**

Telekomunikacja Polska SA (TP SA) – the Polish Telecommunication SA, remains the monopolist, particularly in the area of wire services. The position of TP SA



is protected by licenses and protective actions of the telecommunications ministry, until the end 2001 on the long distance market and until 2003 on the international market. Also until the end 2003, the monopoly will not be subject to appropriate regulations on the maximum fees, which gives it the freedom of setting prices for phone calls and subscription fees.

The timetable of the demonopolization of the telecommunications services, adopted by the government provides for:

- the issuance in 2001 of at least 3 licenses for the third generation cellular telephone services (TP SA is to participate in the open bid on general conditions);
- full liberalization of the market for local services from January 1, 2002; until such time a duopolistic model will be maintained (TP SA and one additional operator in each zone), excluding the Warsaw area code, where two competitors will be allowed to offer their services in addition to TP SA;
- full liberalization of the long distance telecommunications services starting from January 1, 2002; until that time three operators are expected to start providing long distance services in competition with the TP SA;
- full liberalization of the international telecommunications services market from January 1, 2003.

Long distance services have been partly liberalized in the first half of the current year by the decision of the Council of Ministers. The Minister of Telecommunications granted licenses for the provision of long distance services to three providers: Niezależny Operator Międzystrefowy (NOM) – Independent Inter-zone Provider, Netia and Energis Poland. This did not change the actual situation of TP SA, which makes the access to the network difficult for the competing provider NOM, thus maintaining its monopolistic position. NOM is the first company to offer long distance services at a competitive price.

The President of the Office for the Protection of Competition and Consumers, Urząd Ochrony Konkurencji i Konsumentów (UOKiK) decided that TP SA should be considered a dominant provider on the market of general telecommunications services (40% market share). This means that the President of the Office for the Regulation of Telecommunications, Urząd Regulacji Telekomunikacji (URT) will be able to use full regulatory prerogatives toward this entity (levying fines, block-



ing and introducing new price lists). TP SA was, despite that, authorized by the Minister of Telecommunications and the President of the URT to perform the role of an intermediary in the transactions between the competing operators and their clients, as the company, which has appropriate infrastructure to perform the billing for long distance services.

URT is analyzing the increase in the subscription prices introduced by TP SA in May to decide if it was a monopolistic practice. TP SA presented new tariff plans with the subscription fee slightly lowered. At the same time the argument continues, whether the subscription to the telephone is a part of a telecommunications service, which would subject it to a VAT surcharge.

#### Sugar market

The above mentioned attempts at antimonopolistic activities, undertaken in relation to PKN ORLEN SA, PGNiG SA and TP SA, were accompanied in the second quarter of the current year, with decisions leading to the creation of a sugar monopoly.

In June of the current year, the Parliament passed a law on the regulation of the sugar market, according to which the Minister of the State Treasury was obliged to establish a National Sugar Company – Krajowa Spółka Cukrowa, by merging companies, whose shares were not sold in the privatization process until the day of the law becoming effective.

28 sugar refineries are expected to be included into the Polski Cukier company – Polish Sugar, with the sugar lobby demanding the inclusion of a total of 49 refineries. Under such circumstances even the least efficient refineries would have a chance to survive, naturally, at the expense of increasing the prices of sugar. The Office for the Protection of Competition and Consumers opposes the creation of Polski Cukier which would include 49 sugar refineries, since it would have a dominant position on the Polish market. The office however does not oppose the creation of the Company, which would include 25 sugar refineries, since its market share would then not exceed 40%.

The economic outlook for the Polski Cukier company is not optimistic. It will be burdened with a huge debt, the refineries would require very expensive mod-



ernizations to cut the costs of production and the increase productivity. It is connected with the modernization of production lines and expenditures on the environmental protection.

To successfully compete with the European competitors, Polish refineries must produce cheaper, while they are among the most expensive producers in the world. In March 2001, the price of ton of white sugar on the London exchange equaled PLN 925, while on the Polish commodities exchanges it reached PLN 1,980. An average sugar refinery in the EU processes four times the quantity of sugar beets of their Polish counterparts, with the productivity of labor presenting a similar picture. Bearing this in mind, the foreign investors, co-owners of some of the sugar refineries in Poland, are quickly improving their profitability and production, which poses a real threat to the remaining refineries.

Thus an urgent technological and organizational restructuring of the sugar industry is required, as well as obtaining substantial capital. The economic calculations show, that the most efficient procedure would be to close the weakest refineries and to focus on the restructuring of the remaining. This would be connected with a necessity to lay off approximately half of the employees and reducing the output. Without those changes the entire industry faces a threat of collapse. A privatization, coupled with an injection of capital, may prevent the bankruptcy of the refineries.

Currently, six refineries from the Śląska Spółka Cukrowa – Silesian Sugar Company, are awaiting the finalization of the contract with Saint Louis Sucre, and five refineries from the Kalisz-Konin group are hoping for the sale of their shares to Pfeifer und Langen company. The Ministry of State Treasury counts on the finalization of both of the deals, which may prevent further deterioration of the financial situation of these sugar refineries.

It is worth remembering that the demand for sugar in Poland is stagnant (the production of sugar in Poland reached the level of 2.01 million tons in 2000 and 1.97 million tons a year earlier), and the production capacity of the Polish refineries significantly exceeds the domestic demand. The planned production of sugar in 2002, according to the decision of the Council of Ministers should reach 1.54 million tons.



### 5.2. External prices

The declining trend of the non-energy raw materials on the global market, which was observed since the middle of 2000, continued in the second quarter of 2001. Compared with the second quarter of the previous year, the prices declined by 11.1%, and compared with the first quarter of the current year by 1.7% (Figure 18 and 19). The drop in the prices of metals and food had the greatest impact on the decline in the prices of non-energy raw materials. The prices of metals dropped in the second quarter of current year by 5.3% compared with the same period last year, and by 5.1% compared with the first quarter of the current year. The prices of food were respectively 7.3% and 4.7% lower.

According to the predictions contained in the Report on Inflation in the first quarter of 2001, the crude oil market experienced a continued excess of supply over demand (in the second quarter of the current year the daily supply was 1.5 million barrels, i.e. 2.0% higher than the demand), which did not provide a basis for a substantial and lasting increase in the price growth of this raw material. However in May of the current year, the prices temporarily increased, due to seasonal factors<sup>20</sup>. In result the average price of Brent crude oil in the second quarter of the current year (USD 27.3/barrel) was 5.6% higher than in the first quarter, and 1.3% higher than in the second quarter of the previous year<sup>21</sup> (Figure 20). The prices of gasoline were growing much faster than the prices of crude oil in the second quarter 2001. In the April–June period, the average price of gasoline (type PU ARA) was 17.4% higher than in the first quarter. The disproportion between the growth rates of the crude oil and gasoline prices was growing.

The reason for the declining trend in the prices of raw materials on the global market was, similarly to the first quarter of the current year, a further decline in the demand associated with a lower growth rate of the global GDP. The economic slowdown expected in the third quarter of the current year, should further reduce the

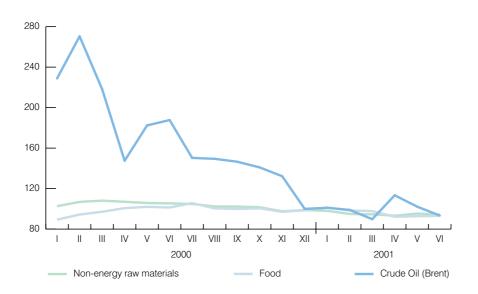
<sup>19 &</sup>quot;The Economist".

<sup>&</sup>lt;sup>20</sup> In May 2001, there were some information about the declining oil reserves of the industrialized countries, mainly the United States, as a result of an increase in demand connected with the vacation travels.

<sup>21</sup> Reuters.

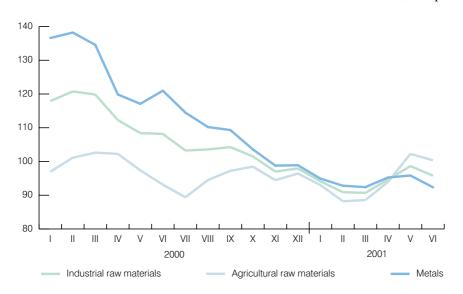


Figure 18
Prices of basic raw materials on world markets
(corresponding month last year = 100)



Source: The Economist data.

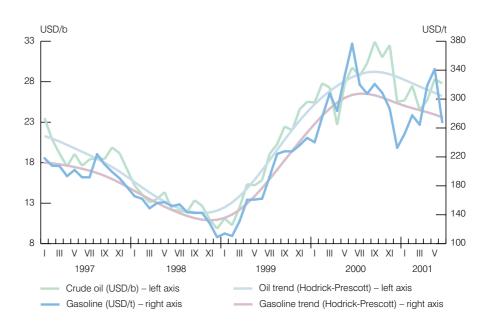
Figure 19
Prices of basic non-energy raw materials on world markets
(corresponding month last year = 100)



Source: The Economist data.



Figure 20
Average monthly price of oil (Brent) and unleaded (PU-ARA)



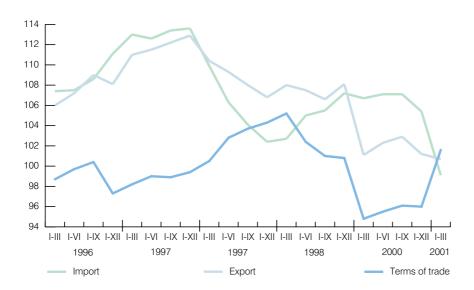
Source: data Reuters.

demand for raw materials. The effect of the deterioration in the economic climate is the drop in prices of most of the groups of raw materials recorded in the beginning of July.

The average price of crude oil could be expected to stabilize in the third quarter of the current year on the level of USD/b 26, i.e. around 5% lower than in the second quarter. The oil price stabilization is also suggested by the prices of oil *futures*<sup>22</sup>. According to the forecasts of the International Energy Agency, the global demand for crude oil, considering seasonal factors, will increase in the third quarter by 1.9% compared with the previous quarter and in the fourth quarter by respectively 3,5%<sup>23</sup>. The OPEC countries decided in the end of July to reduce the limits of oil production by 1 million barrels per day starting from September 1, 2001, due to a slackening demand.

<sup>&</sup>lt;sup>22</sup> For example, according the quotations of July 23, 2001, a barrel of Brent oil to be delivered in December 2001, reached USD 25.04, and in June 2002 – USD 23.54. <sup>23</sup> Oil Market Report, International Energy Agency, July 2001.

Figure 21
Transaction prices in Polish foreign trade
(corresponding period last year = 100)



Source: Central Statistics Office data.

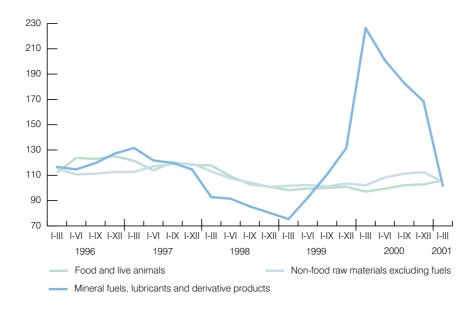
The declining tendency in the global crude oil market in June of the current year, helped for the reduction of consumer price and producer price growth on the EU market – the most important market for the Polish economy. The Harmonized Consumer Price Index calculated for the EU countries reached the level of 2.8% in June, compared with 3.1% in May<sup>24</sup>. The main reason for the slower growth of prices in June was the slower growth of prices of energy and the drop of transportation prices. The most significant price growth (by 6%) was recorded for food, which was associated with the disturbances on the European food market, resulting from the mad cow disease and foot-and-mouth disease (aphthous fever).

The Polish foreign trade experienced in the first quarter of 2001 (no data for the second quarter are available) an improvement in the terms of trade

<sup>&</sup>lt;sup>24</sup> Eurostat.

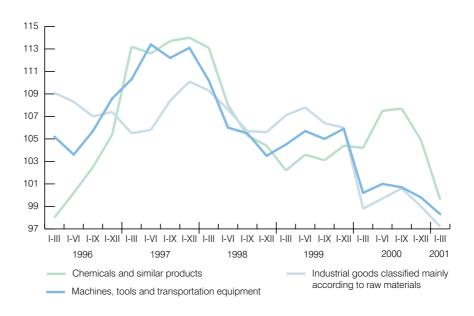


Figure 22
Cumulative transaction price indices in Polish imports of raw materials (corresponding period last year = 100)



Source: Central Statistics Office data.

Figure 23
Transaction price cumulative indices in Polish imports of processed goods (corresponding period last year = 100)



Source: Central Statistics Office data.



(Figure 21): the *terms of trade* indicator reached in the January–March period the level of 101.6%<sup>25</sup> (compared with 94,8% in the corresponding period of the previous year). The improvement in the terms of trade is a result of the decline of import prices on one hand and the increase in export prices on the other.

The average level of zloty import prices resulted, apart from the changes in the exchange rate of the zloty, from the international markets' prices. In the first quarter of the current year, the transaction import prices were 0.9% lower than in the corresponding period of the previous year. The decline of prices in the group of machine and transportation devices and industrial goods classified according to raw material (Figure 22 and 23) had the greatest impact on the decline in import prices. In the latter case, the change was a result of a visible decline of the global metal prices in the first quarter of the current year. The decline of import prices was to an extent decelerated by the growth of prices in the groups of food and animals (which reflected the growth of global food prices in the period by 6%) and mineral fuels (despite the decline in the price of crude oil in the period by 4%, the price of natural gas increased).

In turn the zloty export prices in the first quarter of 2001 were 0.7% higher than in the first quarter of the previous year. This growth resulted mainly from the growth of the prices of fuels (main factor responsible for the growth was the growth of coal prices by 24%), and also – although in a much more limited scale – the price growth of chemical products. The largest drops in the export prices were recorded in the period in case of food and animal prices, and the so called other industrial products (where clothing and furniture, among others, are recorded).

Due to a delayed reaction of the domestic prices to the changes of external prices and exchange rate, the changes in the factors in the first quarter of the current year are influencing the inflation of the second quarter of the current year. The import prices, weighted by its currency composition, were 1.8%

<sup>&</sup>lt;sup>24</sup> Main Statistics Office.



higher than in the fourth quarter of the previous year. In the same period the nominal effective exchange rate of the zloty increased 5.7%. Hence, the external prices caused a growth of CPI in the second quarter (twelve month indicator calculate for the end of June, 2001) by 0.13 percentage points, and the appreciation of the zloty reduced it by 0.57 percentage points. The end result of the operation of both of these factors was the decline of CPI by 0.44 percentage points in the second quarter of the current year.



# 6. Monetary policy and the realization of the inflationary target

# 6.1. Monetary policy in the second quarter of 2001

Realization of the short term (annual) inflationary target is a stage in the realization of the mid-term target of reducing inflation below 4% by the end of 2001. In the first quarter, the inflation has dropped significantly, from 8.5% in December of last year to 6.2% in March of the current year. In all of the months of the first half of the current year the CPI fell in the inflation target band adopted for year 2001, i.e. 6% to 8%, and by the end of the second quarter it came close to the lower limit of the band (similarly to the situation of March).

Starting from the fourth quarter of the previous year, many phenomena have been noted to positively influence the realization of the inflationary target in 2001. In result the NBP interest rates were cut twice, in February and in March 2001, each time by 1 percentage point. The positive tendencies persisted in the second quarter of the year in the area of inflationary processes, and the probability of reaching the annual inflationary target close to its lower limit, increased. This allowed for the following NBP interest rate cut. On June 28, 2001, the reference, lombard and discount rates were cut by 1.5 percentage points to the levels of respectively 15.5%, 19.5% and 18%.

The twelve month PPI declined to the level of 0.9% in June, 2001, from the level of 2.3% in May, 3.9% in March, 2001 and 8.9% in June, 2000. The low growth rate of the producer prices in the industry provided positive conditions for the future consumer goods and services prices.

The decision to cut interest rates was made despite the information on the growth of inflation in May and the increase in the core inflation ratios in the period (the controlled prices ratio and the so called net inflation, i.e. after the exclusion of the fuel and food prices). The Monetary Policy Council, however, forecasted then that the inflation should decline in the coming months, and the analysis of the core inflation indicator presented clear evidence the that growth of CPI in May was not a



result of the inflationary pressures, but rather resulted from incidental factors. In June of the current year, all the indicators of twelve month core inflation declined to 5.3% and 6.8%.

Monetary tendencies positive for the future prices persisted, including a strong propensity of the households to save in the banking system. In June 2001, the supply of money increased by 0.9% compared to May of the current year, which was the lowest indicator for this month in the last six years. In turn, the annual growth rate of money supply declined from 13.5% in May to 12.3%. The growth rate of credits was gradually declining, with a simultaneous strong growth of zloty deposits. During the first six months of the current year, the total amount of zloty deposits of individuals increased by PLN 15.4 billion (i.e. by 10%). The twelve month growth rate of individuals' deposits reached the level of 21.4% in June (compared with 21% in the previous month). The growth in credit action has declined again in June; the amount of has declined for the first time in June; the total amount of the credits extended increased by 10% compared with June of the previous year, while in May it was 11.3% higher. The decline was recorded in the twelve month growth rate of credits to individuals (from 22.1% in the previous month to 20.3%), and to corporations (from 8.4% in May to 7.2% in June of the current year).

A further clear decline in the inflationary expectations of banks and households was an important factor of the NBP interest rates cuts. The bank analysts expected the end of year inflation reached 5.9% in June, and was close to the lower limit of the target band. The inertia in the forming of inflationary expectations by individuals also declined. The "Demoskop" polls were presenting a consistent decline in the individuals inflationary expectations for the corresponding period of the next year, which for the annual inflation reached the levels of 10.2% in January, 7.6% in March and 6.1% in June of the current year. The expectations of bank analysts (Reuters poll), were declining for the year-on-year inflation rate for the month preceding the corresponding month of the following year, from 6.6% in January, to 5.9% in March and 5.6% in June.

A gradual decline in the scope of external imbalance was helping for the appreciation of the zloty, since November 2000. The tendency of the zloty appreciation



persisted in the second quarter of the current year. In the period of November 2000 to June 2001, the zloty gained nominally 16.4% against the dollar and 14.7% against the euro. This become an additional factor of containment of inflation.

The restoration of balance was further assisted by the low domestic demand growth rate. The weakening of demand was accompanied by the decline in production. In June of the current year, the sold production of the industry declined by 4.8% compared with the same period of the previous year (and by around 3% after the adjustment for the difference in the number of workdays), and the construction and assembly production by 10.1%. The employment in the corporate sector further declined in June. The number of employed declined by 0.3% compared to May, 2001, and by 3.3% compared with June of the previous year. The average salary in the corporate sector increased in June 2001 by 4.9% nominally, compared to June of the previous year, and declined by 1.2% in real terms. In the January-June period of the current year, the average salary in the corporate sector increased nominally by 7.3% (by 0.6% in real terms) as compared to the same period last year. This resulted in an additional slackening of demand and easing of inflationary pressures in the economy.

Despite the positive inflationary conditions in the second quarter of the current year, the MPC remained cautious in reducing interest rates, in order to assure a lasting decline in inflation. The influence on the decision of the MPC came from the evaluation of the current and future threats to the inflation reduction process. The public sector finances and the prospect of increasing budgetary deficit posed such threat.

Eventually, however, the June rate cutting decision was made despite the negative development in the situation of the public sector finances. The realization of the budget deficit plan as of end of May, 2001, reached 99.3% of the figure provided in the budgetary law (before the amendment), however it was subsequently reduced to 91.1% at the end of June (among others, in result of the payments from the division of the NBP profit and the payment of the due installment for the third generation cellular telephony license). The real sector data suggested a need of a reduction, by showing a clear, gradual decline in the demand pressure.



However the high public sector deficit and the uncertainty connected with the deficit limit the options of the monetary policy and exert adverse influence on the long term development of the economy. The threat of not realizing the planned revenues from privatization is growing, which means that the threat of further increasing budget deficit is growing, with all the negative consequences of such action to the growth of money supply and demand. The punctuality of funds transfer to the Open Pension Funds (PFE) is also uncertain. The delays in the transfers signify a further increase of the economic deficit.

#### 6.2. Money supply

In the second quarter of 2001, there were no fundamental changes in the monetary policy tendencies which persisted since the beginning of the year. The total money supply as measured by the aggregate M2<sup>26</sup>, reached at the end of June 2001, a level of PLN 307.5 billion, which marks a zl 6.5 billion increase compared to the first quarter of the current year. The annual nominal total money supply growth rate reached an average of 11.8% in the second quarter, thus decelerating compared with the previous quarters figure (of 14.7%). This resulted mainly from a high level of this category recorded in June of the previous year<sup>27</sup>. However, if the increase in money supply in June of the previous year was adjusted down by PLN 11 billion (which is the estimated figure of the extraordinary growth in the period), the annual nominal money supply growth rate in the second quarter of the current year would reach

<sup>&</sup>lt;sup>26</sup> Total money supply (M2) is defined as the sum of the domestic money and the foreign currency deposits of the non-financial sector. The domestic money is equal to the sum of cash in circulation (excluding cash in banks) and the zloty deposits on the accounts of non-financial entities (corporations and individuals).

<sup>&</sup>lt;sup>27</sup> In June 2001, the money supply increased by PLN 16 billions. The rapid growth of zloty liabilities towards individuals and the corporate sector, caused by the subscriptions for the shares of the Polish Oil Consortium ORLEN (PKN ORLEN SA), during the following stages of the PKN ORLEN SA privatization, constituted the fundamental reason for the increase. The deposits of individuals and corporations for the purchase of the shares of PKN ORLEN SA are estimated to have reached approximately PLN 8 billion. At the same time, the zloty liabilities towards the corporate sector increased significantly in result of the transfer of the funds for the redemption of the zloty bonds to the Brokerage House of PEKAO SA by the state treasury (a short term deposit of approximately PLN 3 billion). In total, the extraordinary growth of money supply in June is estimated to have reached PLN 11 billion. In the beginning of July 2000, the zloty liabilities towards the corporate sector declined rapidly, in result of a significant reduction of the purchase offers for the shares of PKN ORLEN SA and the liquidation of the aforementioned deposit.



an average of 13.3%. In real terms, the average growth rate of M2 in the second quarter of the current year also declined compared to the previous quarter, and reached the level of 4.9% (compared with around 7.5% in the first quarter of the current year), and after the adjustment for the extraordinary factors, it reached 6.3%.

The increase in the total money supply in the second quarter of the current year, was, similarly to the previous quarter, mostly a result of the increase in the zloty deposits of individuals. The high growth of the value of deposits, both in nominal and in real terms, persisted in the particular months of the second quarter. As a result, individuals' savings increased in the second quarter of the current year by 2.7% compared to the end of March 2001, to reach a level of PLN 169.1 billion. The annual individuals' deposit growth rate in the period reached an average value of 20.5% nominally and 13.1% in real terms, and was higher than in the first quarter of the current year (22.4% nominally and 14.7% in real terms). However, it is worth noting, that this change was mainly a result of the above mentioned one-time "jump" of the value of deposits in June 2000. Having adjusted for the factor, the rate increases to 21.2% nominally and 13.7% in real terms. The comparison with the second quarter of the current year, when the individuals' zloty deposits in the banking sector increased respectively by 17.5% and 6.8% is a testimony of the persistence of a high propensity to save.

The declining tendency in the zloty deposits of corporations, associated with their deteriorating financial standing in the current year was contained in the second quarter 2001. Although these deposits in the first quarter of the year dropped by PLN 6.5 billion, or 10.3% nominally and 11.5% in real terms (compared to the previous quarter), in the second quarter they increased slightly: by PLN 0.8 billion or 1.4% nominally (which translated to a 0.4% decline in real terms).

The total amount of non-financial sector entities zloty deposits in the banking sector increased in the second quarter of the current year by PLN 5.3 billion, as compared with the previous quarter, and reached at the end of June a value of PLN 226.7 billion. In the period, the nominal growth rate of zloty deposits of the non-financial sector reached 2.4% and the real rate 0.6%. The analysis of the twelve month growth rates of this category over the particular months of the second quarter of the current year suggests that, excluding the distortion of June of last year, the



twelve month growth rate of the category remained stable over the analyzed period, both in nominal and in real terms (on average reaching 15.7% and 8.6%).

Foreign currency deposits of the non-financial sector at the end of June 2001, reached the level of USD 11.5 billion. In the second quarter, they increased by USD 275 million, as compared with the previous quarter, in result of the growth of individuals deposits by USD 253 million. The currency deposits of corporations were only subject to a slight increase in the period and grew by USD 22 million.

The deposits of the non-financial sector expressed in zloty reached the level of PLN 45.9 billion at the end of June 2001, which marks a decline in the category by PLN 0.2 billion in the second quarter of 2001. Compared with the end of March of the current year, the non-financial sector foreign currency deposits growth rate was negative and reached -0.4% in nominal and -2.1% in real terms. The reason for this was the continued appreciation of the zloty in the second quarter of 2001. The exchange rate reached in the end of June 3.9871 PLN/USD and at the end of March 4.1000 PLN/USD. During the quarter the domestic currency appreciated by 2.8%, while the nominal growth rate of the non-financial sector deposits expressed in zloty reached -0.4%. Without adjusting for the exchange rate effect, the zloty value of the analyzed category increased in the second quarter by PLN 1.2 billion.

The decline in the balance of foreign currency deposits of the non-financial sector expressed in zloty and observed in the analyzed period, resulted mainly from the decline in the foreign currency deposits of corporations. At the end of June 2001, the foreign currency liabilities of the banking system towards the corporate sector equaled PLN 12.3 billion, and declined by PLN 0.3 billion during the second quarter of the current year.

The zloty equivalent of the foreign currency deposits of individuals in the second quarter of the year displayed a slight increase by PLN 0.1 billion as compared to the balance for the end of March, to reach a total of PLN 33.6 billion at the end of June<sup>28</sup>. This signified a nominal growth of 0.3% and a real decline of 1.5%.

 $<sup>^{28}</sup>$  The exchange rate effect contributed in the second quarter of the current year to the decline in the value of individuals foreign currency deposits by PLN 0.9 billion in zloty terms.



Table 13
Money supply growth rates in Quarter 2, 2001

Item	Growth		Previous		Previous	Corre	sponding	period	
	rate		month = 100	q	uarter = 100	previ	ous year	= 100	
		IV	V	VI	Q2	IV	V	VI	
Total money	nom.	100.7	100.7	100.8	102.2	114.0	113.5	108.0	
	real.	99.9	99.6	100.9	100.4	106.9	106.2	101.6	
Cash money	nom.	102.8	98.0	103.4	104.2	99.6	99.5	99.6	
	real.	102.0	96.9	103.5	102.4	93.4	93.1	93.7	
Zloty deposits	nom.	101.1	101.2	100.1	102.4	118.6	118.2	110.4	
	real.	100.3	100.1	100.2	100.6	111.3	110.5	103.9	
Zloty deposits									
of individuals	nom.	100.8	100.7	101.2	103.0	121.1	121.0	119.4	
	real.	100.0	99.6	101.3	100.9	113.6	113.2	112.4	
Zloty deposits									
of corporations	nom.	102.1	102.6	96.8	101.4	111.9	110.9	90.4	
	real.	101.3	101.5	96.9	99.6	105.0	103.7	85.1	
Foreign currency									
deposits (in zl)	nom.	96.9	100.1	102.7	99.6	105.2	103.8	103.3	
	real.	96.1	99.0	103.7	97.9	98.7	97.I	97.3	
Foreign currency									
deposits									
of individuals	nom.	98.1	101.1	101.1	100.3	102.9	103.4	103.0	
	real.	97.3	100.0	102.1	98.5	96.6	96.7	97.0	
Foreign currency									
deposits									
of corporations	nom.	93.8	97.4	107.2	97.9	112.3	105.1	104.1	
	real.	93.0	96.4	108.3	96.2	105.4	98.3	98.0	

Source: NBP, Consolidated balance sheet of the banking system.

Cash was a significant factor in money supply in the second quarter of the current year. During the period the amount of cash in circulation increased by PLN 1.4 billion to the level of PLN 35.0 billion. Compared with the end of March, 2001, this signified the increase of both nominal and real cash supply growth rate by respectively 4.2% and 2.4%. The higher than expected (seasonal) growth in cash in circulation in June of the current year (PLN 1.2 billion) was associated with the indexation of disability and retirement pensions. A high growth was also recorded in April of the current year (PLN 0.9 billion), which was mainly the result of pay raises in the public sector.



#### Money creation factors

The main factor of money creation in the banking sector in the second quarter of 2001, was the growth of the balance of other net items, the net indebtedness of the public sector and the receivables from individuals and corporations<sup>29</sup>, i.e. mainly bank credits. The money creation was adversely affected by the decline in net foreign assets (Table 14).

Table 14

Money creation factors

Item	Increase in	Increase in	Increase in
	Quarter 2	Quarter I	Quarter 2
	2000	20	01
		in billions of zl	
Total money supply	22.9	6.6	6.5
Net foreign assets	6.9	5.0	-8.9
Receivables from individuals and corporations	19.4*	4.6	2.6
Public sector net debt	3.5	-5.4	4.0
Balance of the remaining net positions	-6.8	2.4	8.8

<sup>\*</sup> Including receivables for the purchase of PKN ORLEN SA shares, which constituted approximately PLN 9.1 billion.

Source: NBP data, Banking Statistical Information.

In the second quarter of 2001, the negative balance of other net items declined by PLN 8.8 billion or by 9.5% to reach the amount of PLN –83.6 billion by the end of June. The greatest impact on the level and direction of the change was exerted by other net assets in the NPB. During the second quarter the passive balance of other net assets in the NBP declined by PLN 9.7 billion or

<sup>&</sup>lt;sup>29</sup> The receivables from the individuals and the corporate sector comprise all categories of credits independently of their standard, and purchased debt, realized guarantees and warranties, interest, receivables from subsidies to the preferential agricultural loans interest rates.



by 29.6%. This declined was caused by the decline in the balance of reserves for the risk of the rate of exchange of the zloty into foreign currencies (due to negative differences in the valuation of foreign currency assets and liabilities expressed in zloty) and the NBP transfer of a portion of its net profits to the state budget. The changes in the other assets in the NBP did not directly impact the total of money supply in the second quarter of the current year.

Financial results of commercial banks was another position of the balance of net positions, which caused its decline. The negative value of the item declined by PLN 2.4 billion or 40.2%. Such a substantial decline was a result of the approval of annual financial reports of the commercial banks for the year 2000 by appropriate statutory bodies and as a result of the division of PLN 4.1 billion, which were earlier recorded as financial result under approval. According to the "Accounting Law", the approval of the annual reports should be conducted no later than the end of June. The amounts, which were dedicated during the division to the increase of financial assets of among others corporations and individuals (e.g. by the payment of dividend) stimulated the growth of total money supply.

A portion of the funds from the division of *financial result under approval* supplemented during the second quarter of the current year *commercial banks and NBP funds*, which increased by PLN 3.5 billion or by 9.4%. The change in this category, which is a result of transfers within other net items, did not directly influence the total money supply.

The increase in the *provisions for bad loans and depreciation reserves in commercial banks* by PLN 1.7 billion or 7.6% increased the negative balance of other net items. This change however did not directly impact the total money supply.

The changes recorded in other components of the balance of other net items of the banking system consolidated balance sheet, based on data for the end of March and June, did not have a substantial effect on the eventual value of this category nor on the total money supply.

Net indebtedness of the public sector in the domestic banking system reached the level of PLN 49.3 billion at the end of June, 2001, which represents an increase of PLN 3.9 billion compared to the end of March. It resulted from the increase in public sector liabilities towards the banking system by PLN 1.2 billion and from the decline in its receivables by PLN 2.8 billion. From the beginning of the current year, the net



Table 15
Public sector indebtedness in the banking system in the first half of 2001 (billion zl)

Item	As of	Change in	As of	Change in	As of	Change in
	31.12.2000	QI	31.03.2001	Q2	30.06.200 I	QI
Net indebtedness of the public sector	50.8	-5.4	45.4	3.9	49.3	-1.5
including:						
– state budget	55.5	-2.4	53.1	2.8	55.9	0.4
<ul> <li>targeted funds</li> </ul>	-2.6	-0.9	-3.6	0.6	-3.0	-0.4
<ul> <li>local government budgets</li> </ul>	-2.1	-2.1	-4.2	0.6	-3.6	-1.5

Source: NBP, Consolidated balance sheet of the banking system.

indebtedness of the sector declined by PLN 1.4 billion, or significantly less than in the corresponding period of the last year, where the decline reached PLN 6 billion.

The greatest influence on the net indebtedness of the sector was exerted by the state budget, which net indebtedness increased in the second quarter of the current year by PLN 2.8 billion, which is an amount similar to the one recorded in the second quarter of the previous year. The comparison of the semiannual data presents a completely different picture of the budget. The net indebtedness increased by almost PLN 0.4 billion during the first half of the current year, while in the same period of the last year it declined by PLN 4.7 billion. Such a substantial drop of net debt was then an effect of high privatization revenues and an euro bonds issue. Although a similar issue was organized this year, the budget deficit was increasing in the first half of the year at a much faster pace, than a year before, which explains to a large extent the change in net debt.

Targeted funds and local government budgets increased the total net debt of the public sector finances in the second quarter of this year by PLN 1.2 billion, mostly due to the decline of their assets on bank accounts. During the first half of the current year, local governments budgets reduced their debt by PLN 1.5 billion, while in the corresponding period of last year by PLN 2.2 billion. Similarly to the national budget this difference resulted from a more difficult budgetary situation of the local governments in the current year. The net debt of targeted funds declined by PLN 0.4 billion in the first half of the year, mainly in result of the repayment of bank loans by



ZUS. In the previous year the net debt of these entities increased in the first half of the year by PLN 1 billion, which was also a result of the difficult situation of the ZUS.

In summary, the increase of the net debt of the public sector in the second quarter of the current year, and in the entire first half of the year, was significantly larger than in the corresponding periods of the last year. Hence the money creation from that source was higher than in the previous year.

Receivables from individuals and corporates increased by 5.0% in the end of June 2001, as compared with the same period of last year. The growth rate declined in particular months of the second quarter. The receivables from corporation were 7.1% higher in the period than a year before, and the receivables from individuals were 1.3% lower, in result of a substantial growth of receivables in June 2000 due to credits to individual investors for the purchase of PKN ORLEN SA shares. After the adjustment down of the receivables from individuals for the debt repaid by individual investors in the first decade of July 2000, their growth reached 20% (Figure 24). In real terms<sup>30</sup> the receivables from individuals and corporates as of the end of June 2001 declined by 1.1%.

In the second quarter of the current year, bank credits to corporations increased by PLN 0.8 billion and to individuals by PLN 1.8 billion. Corresponding increases in the second quarter of the previous year equaled respectively PLN 7.1 and 12.3 billion (PLN 3.2 billion after the adjustment for the loans to purchase the PKN ORLEN SA shares).

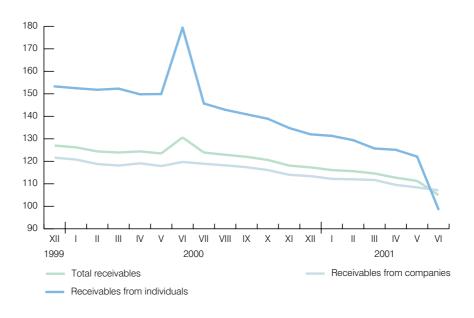
The declining rate of new bank credits to individuals in the second quarter, was a continuation of a trend observed since the beginning of the previous year and concerned all types of bank credits to individuals and in particular consumer loans (Table 16 and Figure 25).

In the second quarter of the current year, an increase in demand for denominated credits was recorded. The proportion of the foreign currency receivables in the total receivables reached 22.5% by the end of June 2001, compared with 21.1% in the end of June 2000.

 $<sup>\</sup>overline{^{30}}$  Having considered the twelve month consumer goods and services price growth rate equal to 6.2%.

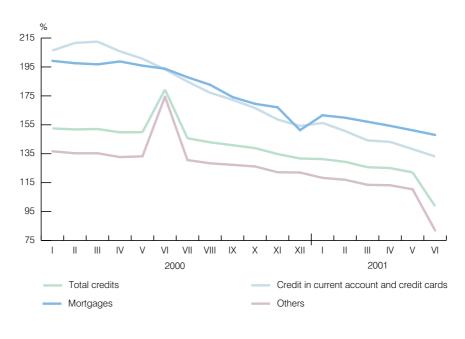


Figure 24
Growth of receivables from individuals and companies
(corresponding month previous year = 100)



Source: NBP data.

Figure 25
Growth of receivables from individuals
(corresponding month previous year = 100)



Source: NBP data.



Table 16
Growth rate and composition of total receivables from individuals

Item	Increase	in QI	Composition as of end of	
	2000	2001	VI 2000	VI 2001
	in billions of zl		in %	
Total bank loans	12.3*	1.8	100.0	100.0
including:				
Current account and credit card loans	0.9	0.5	14.0	18.8
Residential loans	1.0	0.9	14.5	21.8
Others ***	10.4**	0.4	71.5	59.4

<sup>\*</sup> Including the loans for the purchase of shares of PKN ORLEN SA the growth amounted to PLN 3.2 bln.

Source: NBP data, Banking Statistical Information.

Net foreign assets<sup>31</sup> in the banking system declined by 1.7% in the second quarter of the current year, reaching the level of PLN 128.2 billion at the end of June. This was a result of the decline in foreign assets (by 0.9% to PLN 163.6 billion) and a simultaneous increase in foreign liabilities (by 2.2% to PLN 35.5 billion). At the end of second quarter 2001, the net foreign assets reached USD 32.1 billion.

The share of net foreign assets of commercial banks in the net foreign assets of the banking system declined to 16.3% at the end of the second quarter from 17.1% at the end of the first quarter. The net foreign assets of commercial banks declined to PLN 20.9 billion or by 11.2% in the period.

The NBP net foreign assets at the end of the second quarter reached PLN 107.3 billion, which market a 5.5% drop compared with the balance at the end of the first quarter. The official reserve assets, comprising a major part of the NBP net foreign assets, declined in the second

<sup>\*\*</sup> Including the loans for the purchase of shares of PKN ORLEN SA, the growth amounted to PLN 1.3 bln.

<sup>\*\*\*</sup>According to the terminology of the Banking Statistical Information, this item is a sum of receivables from individuals from: discount loans, other credits and loans, debt purchased, exercised guarantees, and accrued interest.

<sup>&</sup>lt;sup>31</sup> Net foreign assets in the banking system include the foreign assets at the disposal of the NBP (official reserve assets and other foreign assets) and the foreign assets of the commercial banks, less the foreign liabilities of the NBP and the commercial banks towards non-residents in foreign and domestic currencies.



quarter of the current year. Their value expressed in the PLN declined by 5.8% to PLN 108.1 billion (USD 27.1 billion). The decisive factor in the decline was the servicing of foreign debt and redemption of Brady bonds (PLN 3.9 billion), the differences in exchange rate due to the PLN appreciation (PLN 1.9 billion) and the repayment of liabilities from the passive repurchase agreements (PLN 1 billion). The receipt of interest from the debt securities in the NBP portfolio (PLN 0.4 billion) affected the official reserve assets in the opposite direction.

#### 6.3. The transmission of monetary policy

#### 6.3.1. Interest rate

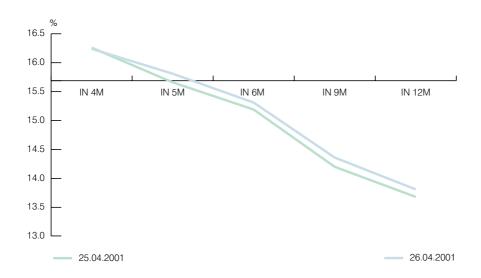
Monetary policy and the interest rates on the interbank market

The level of the short term interest rates in the second quarter of 2001 testifies to the change in the market expectations towards the speed and the scale of the NBP rate cuts. In the first quarter of 2001 there were strong expectations, that the NBP will perform relatively large reductions in the interest rates. In result a clear and consistent process of 3-, 6- and 12-month rate cuts occurred in relation to the NBP stabilized 1-month rate, despite the fact that the central bank's intervention rate was reduced twice. A smaller than earlier expected scale of the NBP rate cuts resulted in the investors revision in the second quarter of 2001 of their earlier assumptions concerning the sequence of interest rates changes. Further interest rate cuts were assumed to be postponed compared to previous forecasts in that respect. The market participants received a signal from the MPC that the rate reductions would be gradual in nature. Therefore, in the second quarter the 3-, 6- and 12-month interest rates continued a decline in relation to the NBP stabilized 1-month rate, but the rate of the decline was substantially lower. It is well depicted by the jump in correlation between the changes of 1-month rates and the changes in 3-, 6- i 12-month rates<sup>32</sup>.

<sup>&</sup>lt;sup>32</sup> The rolling correlation, calculated for the last 60 observations, describes the strength of the connection between the absolute changes of the interbank placements interest rates.

MBP

Figure 26 The shift of the 3-month forward yield curve before and after the April meeting of the MPP



Source: Reuters, NBP data.

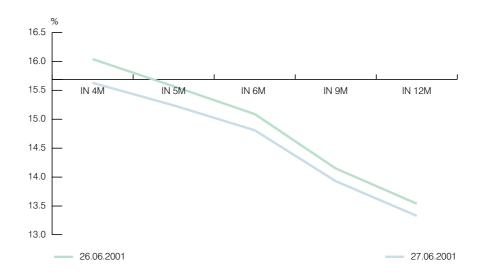
Compared with the first quarter, the second quarters correlation coefficients were characterized with higher values and were statistically significant (the average value of the correlation in the second quarter between the 1-month WIBOR and the 3-, 6-, and 12-month WIBOR equaled 72%, 68% and 53%, compared with respectively 27%, 16% and -2% in the first quarter).

In April, the market participants were surprised with the lack of decision on the change of NBP interest rates, expecting rate cut of around 100 basis points. In reaction to the lack of the decision on the change of rates the three months forward yield curve shifted upwards (Figure 26)<sup>33</sup>. In June, on the other hand, the market participants were surprised not by the date of the reduction, but by the size. After the MPC decision the three month forward yield curve

 $<sup>\</sup>overline{}^{33}$  Three month forward yield curve is based on the three month WIBOR FRA quotations (1x4, 2x5, 3x6, 6x9 and 9x12).

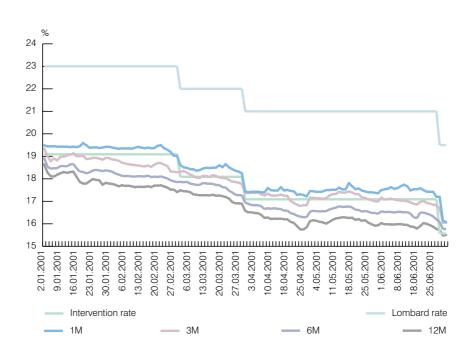


Figure 27
The shift of the 3-month forward yield curve before and after the June RPP meeting



Source: Reuters, NBP data.

Figure 28
Money market rates in the first half of 2001



Source: Reuters, NBP data.



shifted down, with the strongest decline in the interest from a FRA contract for the three month WIBOR, with the date for the settlement of the interest differential after one month (FRA 1x4) – Figure 27.

Over the entire second quarter of 2001, the one month WIBOR remained close to the 28-day NBP intervention rate. In relation the first quarter, the difference between the one month WIBOR and the NBP reference rate declined on average by 3 basis points. One month WIBOR was approaching the NBP reference rate the closest in the periods before the MPC meetings (Figure 28).

After the June reduction of basic NBP rates by 150 basis points the one month WIBOR interest rate made a jump adjustment to the new level of the NBP intervention rate.

In the second quarter of 2001 the money market yield curve shifted downwards in its short end (one month deposit) by 136 basis points and by 101 basis points in its long end (twelve month deposit).

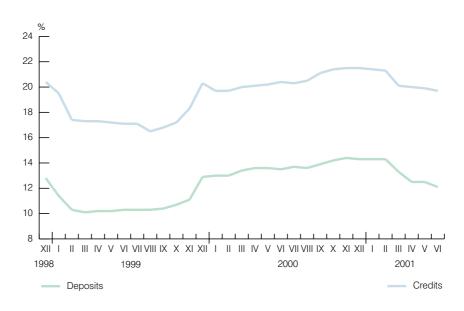
#### The banks reaction to the central bank policy

In the second quarter the commercial banks changed the interest rates on deposits and credits in response to the NBP interest rates reductions of February and March. Some banks managed to adjust interest rates in June, almost immediately following the third rate cut of the year by the central bank. However most of banks reduced interest rates in July. It is possible that some of the banks will reduce rates in August; the full results of the June reduction in NBP interest rates will be presented in the next *Report*.

After the February and March NBP interest rates reduction by a total of 200 basis points, the banks reduced the interest on term deposits of individuals also by 200 points (Figure 29). The interest rate of 1 month deposits declined the least (by 160 basis points), the 3- and 12-month deposits interest rates declined the most (by respectively 210 and 220 basis points). As already mentioned, the banks reacted very swiftly to the next interest rate cut, performed in June. The interest rate on deposits declined by 20-40 basis points in the last days of June.



Figure 29
Weighted average interest rate on term deposits and credits



Source: NBP data.

The reaction of the interest rates on credits to individuals to the first two cuts of basic interest rates was not sizeable. The rates declined by only 80 basis points. The reaction of banks to the NBP rate cut in June will take place in July and will be described in the next *Report*.

The interest rates on term deposits of corporations were reduced by 100 basis points after the first two NBP rate cuts. This is the scale of the reduction of interest rates on one month deposits, which comprise around two thirds of the deposits of corporations. The interest rates on other deposits with maturities up to one year declined much stronger (by 130 to 170 basis points). After the June NBP interest rate cut, the banks performed the first reductions of interest rates on deposits to corporations in the same month (similarly to interest rates on deposits of individuals). In June, the rates declined on average by 90 basis points, with the one month deposit rate declining the most (100 points), with the least declines for the longest term deposits (36 month), which do not play any significant role



in the corporate assets. The remaining banks are expected to lower their rates in July.

The reduction of interest rates on credits to corporations after the first two NBP cuts reached 160 basis points and was larger than the drop of rates on deposits. In June the interest rates on credits declined by an additional 30 points. Undoubtedly, the very weak demand for credit from corporations was an encouragement for the banks to lower interest rates on credit. The full picture of the result of the June interest cuts by the central bank will be known after July. It is worth stressing, that the interest rates on credits to corporations were dropping since the beginning of the year, with the declines of interest rates on the interbank market. The interest on credits to corporations is highly dependent on the WIBOR rates.

#### Interest rates and the demand for credits

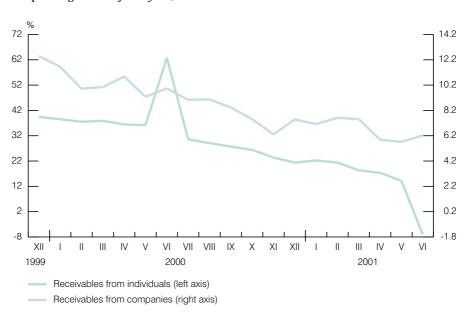
The real growth rate of receivables from individuals and corporations declined in the first two months of the second quarter and in June it remained on the may level<sup>34</sup> (Figure 30). In relation the end of the previous quarter, the real indebtedness of households declined by approximately 4 percentage points and the real indebtedness of corporations by around 1.5 percentage points. Despite the nominal reductions in interest rates, their real level remained high, which, coupled with a poor economic climate, resulted in the relatively low level of demand for credit.

Similarly to the previous quarter, the households demand for residential loans was increasing rapidly. Due to a sizeable positive difference between the zloty and the foreign currency credit interest rates, the household demand was directed mostly at the foreign currency credit. Mortgage loans reached 58.4%

<sup>&</sup>lt;sup>34</sup> The slight increase in the rate in June, visible on the graph, is attributable to a rapid one-time drop of the producer price index in the industry caused by a fuel price drop. The receivables from individuals include: credits and loans, purchased debt and realized guarantees and accrued interest. Credits and loans comprised approximately 98% of the receivables of individuals in the second quarter of 2001. Receivables from corporations include the above mentioned items plus: debt securities, repo and the so-called other operations. Credits and loans comprised approximately 92% of receivables from corporations. The receivables from individuals were deflated by the consumer goods and services price index, and from corporations by the producer price index.



Figure 30
Growth rate of receivables from individuals and companies
(In real terms, compared to corresponding month of last year)



Source: Main Statistics Office and NBP data, NBP calculations.

of the total foreign currency credits in June (compared with 51.9% in March of the current year) and 7.9% receivables from individuals (6.1% in March). The share of foreign currency credits and loans in the total amount of credits and loans to individuals increased from 11.8% in March to 13.6% in June (while it reached 9.9% in December 2000). Due to an increased interest in residential loans from households, the share of the long term credits in the total receivables with maturities over five years increased. The share of installment credits declined from 32% in March to 31% in June, which reflects a low consumer demand, including the demand for large ticket consumer goods. The share of credits in the current account stabilized mainly due to the decline in currency credits of the sort.

The borrower composition of receivables from corporations slightly changed as compared to the previous quarter. The share of receivables from corporations and state owned companies declined slightly, and the share of receivables from private enterprises, companies and

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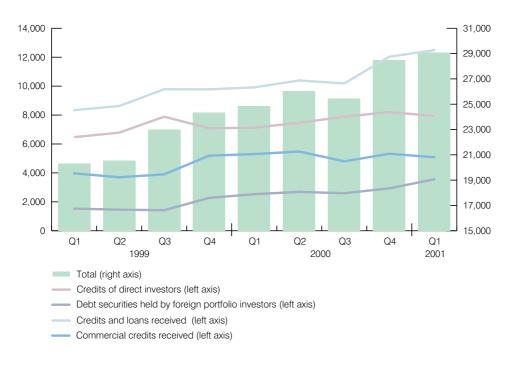


Figure 31
Foreign debt of the non-government and non-bank sector (USD million)

Source: NBP data.

cooperatives increased. The share of foreign currency receivables in the total receivables from corporations declined slightly as compared with the level March of the current year.

The NBP poll of the opinions of corporations<sup>35</sup> shows, that the interest rate level in the second quarter was mentioned as a third most important impediment, after the exchange rate and the low demand, in the operations of companies. The level of interest rates may, therefore, convince the companies to fund themselves to a larger extent from own funds.

The external source of funding to corporations is, apart from domestic credit, the issue of securities on the domestic and foreign markets and foreign credits.

 $<sup>\</sup>frac{35}{4}$  Approximately 400 companies from all over Poland participated in the poll. This sample is not fully representative and it depicts mainly the situation of the large domestic enterprises.



At the time of printing this *Report*, we only have data on the foreign indebtedness in the first quarter of the current year. The foreign debt of the non-government and non-bank sector in the first quarter of 2001 (Figure 31) reached USD 29,276 million, which represents a 2.2% compared to the end of the previous year. The credits of direct investors declined by 3.3% and the remaining credits by 3.8%. The liabilities of corporations resulting from debt securities issued on the foreign markets increased by 21.3% and reached USD 3,558 million. This was a result of two issues of eurobonds by two large companies: Telekomunikacja Polska SA and Elektrociepłownia Turów – Heat and Electricity Production Plant Turów.

The liabilities resulting from the issuance of short term securities on the domestic market reached PLN 11.3 billion by the end of the second quarter, which represents a nominal growth of 18.9% compared with the corresponding month of the previous year. The corporate liabilities resulting from the issuance of long term securities reached PLN 7.2 billion, which represents a growth of PLN 0.3 billion or 4.8% compared with the previous quarter, and 112.5% compared with the corresponding period of the previous year. In June, the liabilities of corporations resulting from the issuance of short and long term securities as a percentage of the liabilities towards the banking system, reached 11.3% and was identical as in March of the current year. It is worth stressing, that a portion of the debt securities issued by corporations (20-30% according to the NBP data) is owned by the commercial banks, i.e. they constitute the liabilities from the non-financial sector.

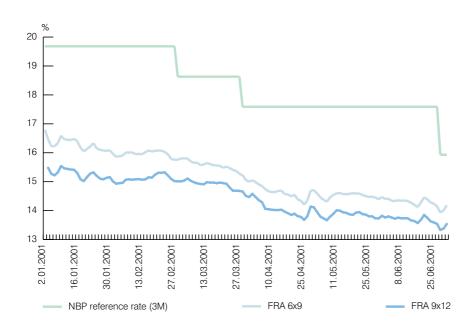
#### Expected interest rates

#### Short term expectations

The analysis of the FRA market, which allows for the evaluation of the investors interest rates expectations in the horizon of several months, shows that the expectations regarding the sequence of the future rate reductions changed in the second quarter of 2001, however, the expectations of the general size rate reductions during the year did not materially change.

MBP

Figure 32
Interest rates on 3-month WIBOR contracts FRAs



Source: data Reuters, NBP.

The interest rates on 3-month WIBOR contracts maturing at the end of December of the current year (FRA 6x9 of March 30 and FRA 3x6 of June 29) was almost identical as in the end of the first quarter. Between March 30 and June 29 the interest rates of FRA 6x9 changed by only 5 basis points, from 15% to 14.95%. The size of the FRA interest rates in the end of the second quarter showed that the market participants were assuming the overall size of the 2001 NBP rate cuts to reach 150 basis points, considering the 350 basis points interest cuts already performed earlier in the year. Similarly to the first quarter, the investors were assuming, that the cumulative interest rate reduction during the year will reach 500 basis points (Figure 32).

The stability of overall rate reduction expectations in 2001 resulted mainly from the assumption made by investors, that the Monetary Policy Council will not change its current bias towards the monetary policy.



#### Long term expectations

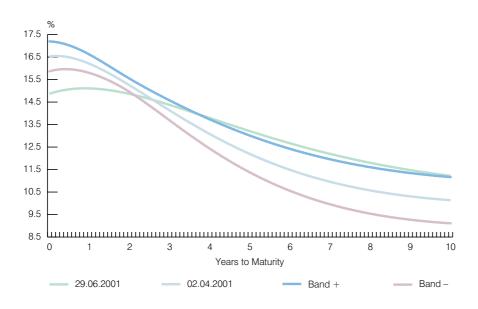
The second quarter of the current year marked the increase of the annual forward interest rates with maturities in the following years (Figures 33 and 34). This should not be interpreted as a result of the change in inflationary and interest rates expectations for the end of the year and for the future years. The shifts in the yield curve and the resulting changes in the annual forward interest rates should be mainly considered the result of the revisions of investor expectations regarding the sequence of the interest rates reductions, and most of all the increase in the uncertainty on the financial markets in result of the deterioration of the budgetary situation. The fundamental reason for the increase in the investors uncertainty was the lack of information on the size and composition of potential, additional issues of treasury securities to cover the increasing shortfall, which became more likely with the increasing likelihood of the 2001 budget amendment.

The change in the investors assumptions regarding the expected sequence of interest rate reductions was one of the most important reasons of the upward shift of the mid-term and long end of the yield curve. The high level of short term rates which persisted in the period caused the high funding cost of the long term treasury securities. The expected return from the maintenance of such portfolio is the lower, the smaller the likelihood of short term interest rate cuts in the short term. The change in the investors expectations regarding the time distribution of future rate cuts convinced some of them to sell Polish Treasury Bonds. The resulting decline in prices caused the shift of the yield curve and the increase in the annual forward interest rates.

The information appearing during the second quarter of the current year on the degree of the budget execution became a source of the investors uncertainty. The market participants were becoming increasingly convinced of the likely broad scale increase in the supply of treasury securities to cover the funding of the budgetary revenue shortfall. However, the Finance Ministry plans on the size and composition of additional issues remained unknown. This resulted in the increased uncertainty of

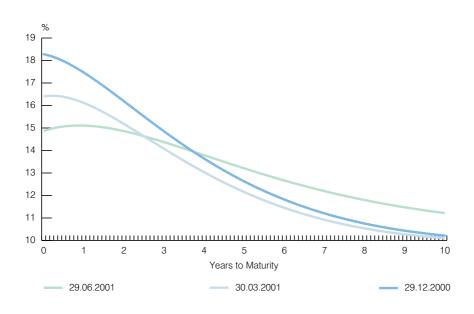
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Figure 33
Zero-coupon yield curves – confidence level band



Source: Reuters, NBP data.

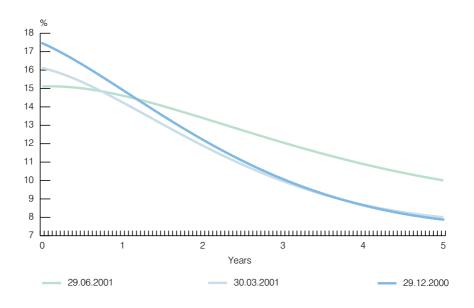
Figure 34 Zero-coupon yield curves



Source: Reuters, NBP data.



Figure 35
Resulting future annual interest rates



Source: Reuters, NBP data.

investors, regarding the valuation of treasuries on the secondary market. Thus the required risk premium increased. This also worked to shift the yield curve and to increase the annual forward interest rates calculated based on the curve<sup>36</sup>.

The above resulted in the upward shift in the second quarter of 2001 of the implied annual forward interest rate over its entire length<sup>37</sup> (Figure 35). Compared with the date of the end of the first quarter, the level of the 1 year forward interest rates with the maturity at the end of the current year increased by 19

<sup>&</sup>lt;sup>36</sup> The data on historical variation in the two-year, five-year and ten-year bond yields demonstrate, that the mid-June 2001 marked a dynamic growth of yields, particularly in case of midterm and long-term maturities securities. The scale of the growth was inversely related to the maturity date of the instrument. The variation for ten-year bonds on June 29, 2001, reached 3.37% (a level not observed since the end of February of the current year). A similar indicator for the five-year bonds reached 1.46%; thus reaching the level of mid-February of 2001. The historical variation is measured by the standard deviation of the daily differences of the logarithms of theoretical prices of zero-coupon bonds, which deviation is calculated in a 20-day time band. The values of the deviation are presented on an annual basis.

 $<sup>^{\</sup>rm 37}$  The discussed forward yield curve is estimated for the period of up to 5 years.



basis points. The 1 year interest rate with maturing in the end of 2003 increased much more, with the increase reaching 233 basis points. According to the arguments mentioned above, the increase in forward rates, which happened in the second quarter, should not be interpreted as the effect of the change of investors expectations regarding the interest rates in the coming years. It was to a large extent caused by the shift of the yield curve itself, based on which, the forward curves for 1 year interest rates are calculated.

#### 6.3.2. Exchange rate

The tendency of nominal and real appreciation of the zloty persisted in the second quarter of 2001. In nominal terms, the zloty rose by 2.4% against the dollar and by 7.6% against the euro compared with the first quarter of the current year. In the period of January to June 2001, the zloty rose respectively by 7.9% and 12.7%<sup>38</sup>.

The influence of investments in debt instruments on the zloty exchange rate varied, as opposed to the end of year 2000 and the end of first quarter 2001. The foreign capital was recorded to flow out of the bond market and the investors interest shifted to money market instruments, with the significant share in the increase of the synthetic deposits created on the foreign exchange swap markets. A relative growth in profitability of investment in short term instruments was associated mainly with the increase in the zloty appreciation risk. The effect of the nominal and real appreciation of the Polish currency, which started in the middle of the previous year, was a growing scale revaluation of the currency<sup>39</sup>. The bank opinion polls, conducted by Reuters, also pointed in the second quarter of the year to a growing risk of the weakening of the zloty. Investment in the money market

 $<sup>\</sup>overline{^{38}}$  The changes in the levels of the zloty real exchange rate is presented in chapter 3 "External imbalance".

 $<sup>^{59}</sup>$  According to the NBP calculations, the scale of the revaluation of the zloty, measured by the deviation from the long term trend of the zloty real, effective exchange rate, deflated by the changes in producer prices in manufacturing in the first quarter of the current year, reached 4.5%, and 10.1% in the second quarter of the current year. In July 2001, as a result of the depreciation of the zloty, the deviation declined by 6.4% as compared to June, 2001, and reached 5%.



instruments (the so called "carry trade" strategy<sup>40</sup>), which is a more liquid market compared to the bond market, reduced the risk on heavy losses in case of the zloty depreciation, since it allowed the investors to realize profits on the disparity of nominal and real interest rates (Figure 36 and 37), at the same time allowing for a rapid reaction to a possible exchange rate shifts.

An important factor limiting the investments on the bond market were the deteriorating budgetary conditions and the related increase in the likelihood of a significant increase in treasury securities supply in the second half of the year, and the resulting decline in the prices of the instruments despite the expected decline in inflation.

The above described changes were reflected in the balance of payments statistics. The data for the second quarter of the current year, regarding the portfolio investments, point to a persisting negative balance of investments in debt securities over all months of the period.

The turnover on the currency swap market was increasing. In June of the current year, the volume of swap transactions was 2.5 times larger than that of December 2000.

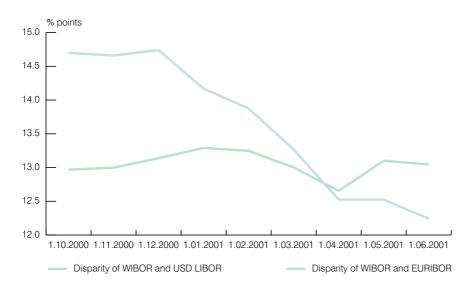
The strengthening of the zloty in the second quarter of 2001 was also aided by non-recurring factors, connected with the foreign currency inflow expectations resulting from the payment of compensation for the slave laborers of the III Reich, from the inflow of funds from the governmental sale of the UMTS licenses and from direct investments.

The impact of the global market cross exchange rate of euro to the dollar on the exchange rate of the zloty to these currencies was in the second quarter of 2001 (just as in the

<sup>&</sup>lt;sup>40</sup> The "carry trade" strategy requires the combination of two sale transactions of a low interest rate currency (e.g. the USD) on the spot market to obtain the zloty and a foreign exchange swap. An investor in a foreign exchange swap sells the zloty on a spot market and simultaneously buys it in a forward market, at a forward rate determined on the day of the purchase. As a result of the combination of the spot market transaction and the swap, the investor obtains an open forward contract. The source of the profit to the investor is the forward premium, resulting from the difference of the dollar and the zloty interest rates. The "carry trade" strategy is effective when the expected change in the zloty exchange rate is not higher than the difference in the interest rates in the two currencies. The appreciation of the zloty is a side effect of the primary sale of the foreign currency on the spot market to obtain the zloty. The purchase of the foreign currency on the spot market within the swap operation does not effect the depreciation of the zloty, since the foreign currency is a "security" of sorts of the zloty "deposit" operation on the money market and not an independent operation.

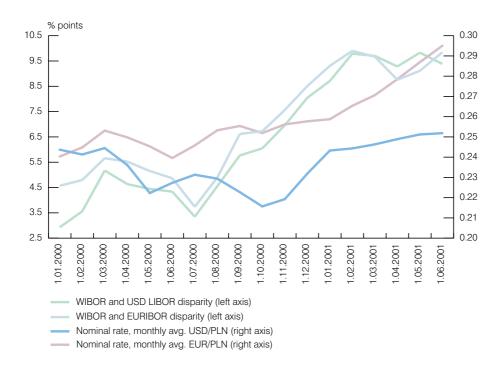
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Figure 36 Disparity of 3-month WIBOR, LIBOR USD and EURIBOR rates



Source: Reuters, NBP data.

Figure 37 Real disparity of 3-month WIBOR, LIBOR USD and EURIBOR rates and zl appreciation

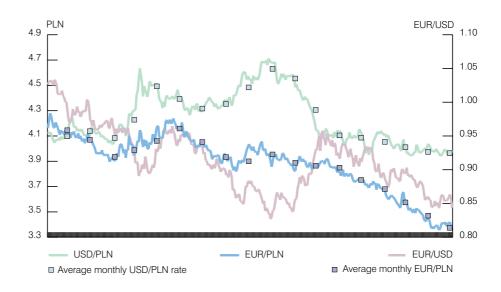


Source: Reuters, NBP data.



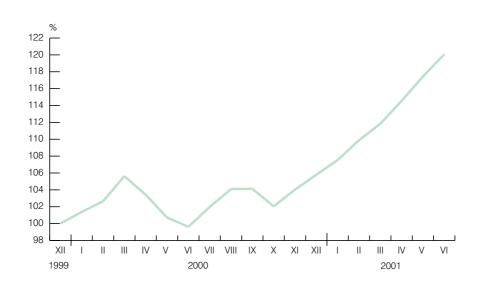
Figure 38

Zloty exchange rates to USD and EUR and EUR/USD rate



Source: NBP data.

Figure 39 Nominal effective Zloty exchange rate in 2000–2001 Monthly data (December 1999 = 100)



Source: NBP calculations.



previous quarter) weaker than in the second quarter of 2000 (Figure 38). The euro/dollar relationship was becoming consistently weaker. The price of the euro remained on the level of an average of USD 0.87 in the period, compared with USD 0.92 in the first quarter 2001. This was accompanied by a consistent strengthening of the zloty towards both the euro and the dollar. At the same time, an increase was noted of the cross exchange rate of EUR/USD on the exchange rate of the zloty to the euro: the correlation coefficient equaled 0.93 compared with 0.81 in the first quarter. Over the second quarter 2001, the nominal effective zloty exchange rate increased by 7.4% compared with 5.7% in the first quarter of the current year (Figure 39).

The zloty exchange rate significantly influenced the weakening of inflation on the domestic market in the second quarter 2001. Considering the delay in the CPI reaction to the changes in the exchange rate, it may be estimated, that in absence of the exchange rate movements, the twelve month consumer goods and services price index would have been 0.57 percentage points higher in June 2001.

#### 6.3.3. Inflationary expectations

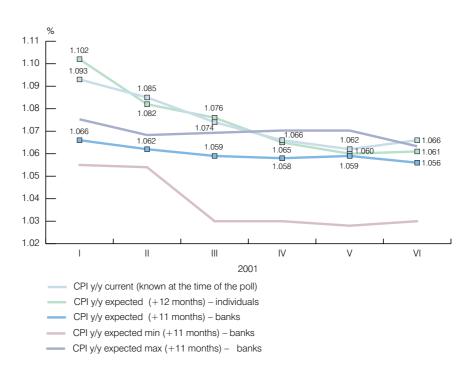
The strategy of direct inflationary target is designed specifically to the directing of the market game participants' expectations by the central bank in such way, as to create beneficial conditions to the realization of the main target of the policy: the stability of prices. The *Mid-term strategy of monetary policy for the years of 1999–2003*, a program document of the NBP Monetary Policy Council, published in September 1998, stated that this kind of monetary policy strategy would be the most adequate: "in conditions of increasing integration of the Polish economy with the global economy, and of the necessity to overcome inflationary expectations, which are one of the main barriers in the process of further reduction of inflation"41.

The experience gained so far, and in particular the tendencies, which transpired in the first quarters of 2001, testify that the introduction of the strategy of direct inflationary target in Poland and the connected determination of the monetary authority to continue the

 $<sup>\</sup>overline{^{41}}$  The National Bank of Poland (1998), Mid-term monetary policy strategy for years 1999-2003, www.nbp.pl, page 8.



Figure 40
Expectations of individuals and bank analysts in Quarter 1 and 2 of 2001



Source: Demoskop data, NBP calculations.

disinflation process, are exerting an increasing influence, not only on the inflationary expectations of the specialized participants of the market game, such as bank analysts, but also on a gradual change in the way the expectations are formed by individuals (figure 40).

# The inflationary expectations of individuals in the second quarter of 2001

The analyses of inflationary expectations of individuals conducted by the National Bank of Poland are based on: first of all, the analysis of the structure of responses to the Demoskop poll questions, which give an idea of the way in which the inflationary expectations of the group are formed and, second, on the quantification of the expected inflation rates, which allows for an evaluation of the expected levels. In the second quarter of 2001, symptoms of gradual change in the nature of the inflationary expectations could be noted on both areas.

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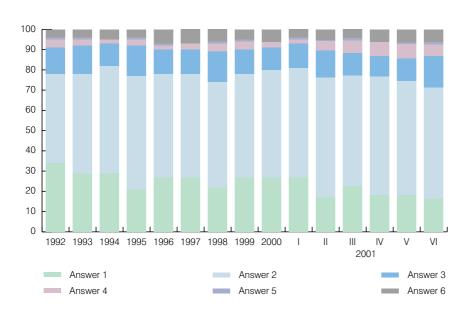


Figure 41 Composition of responses of individuals to the poll on inflationary expectations

Source: Demoskop data.

The following is the form of the Demoskop poll questions, based on which the inflationary expectations of individuals are gauged: "Judging by what is happening currently, what do you think the prices will do in the next twelve months: (1) they will grow faster than now; (2) they will grow at the same rate; (3) they will grow more slowly; (4) they will remain on the current level; (5) they will be lower; (6) hard to tell". Over the last twelve months, the structure of the responses has been undergoing clear changes, which may be interpreted as the sings of a transition from the static way of inflationary expectations forming (*backward-looking*) to a way, which considers to a greater degree the factors shaping the actual inflation in the future (*forward-looking*) – Figure 41.

According the graph, the main tendency, which may be observed during the period of 1992 to 2000, was the decline of persons claiming that the prices will grow faster than currently in the number of responding persons (from around 34% in 1992 to around 27% in 2000) and the increase in the number of persons claiming that the prices will grow at the same rate (from 44%)



in 1992 to 53% in 2000). The remaining groups of respondents remained relatively stable and the changes in the groups did not show clear trends.

In the January–June 2001 period, the changes in the structure of responses to the Demoskop poll accelerated. The number of respondents expecting that the prices will grow faster than currently declined rapidly: in June 2001 this percentage equaled 16.7% which marks a decline of 10.1 percentage points compared with the average percentage of respondents selecting this option in 2000 and over half compared to the corresponding period of 1992. Despite such a significant drop of the number of most pessimistic respondents, the group of the persons expecting that the prices will grow at the same rate as hitherto, which is the group experiencing the most significant inflows of the previously most pessimistic respondents, remained on the level comparable to that of 2000 and it reached 54.6% in July. It is worth noting that this group comprised 59.4% of respondents in February. The decline in the group of people responding that the prices will grow faster than hitherto, was accompanied by the increase of the groups of respondents, which in the period of 1992-2000 were relatively stable: in June 2001 the percentage of respondents claiming that the prices in the next 12 months will be growing slower than hitherto increased by 4.1 percentage points compared with the 2000 data, the percentage of persons claiming that the prices will remain the same increased by 2.4 percentage points and the group of persons expecting that the prices a year from now will be lower than currently increased by 1.1 percentage points.

Based on the structure of responses to the Demoskop poll the inflation rates expected by individuals are quantified according to the method of appropriately adjusted probabilistic method of Carlson and Parkin (1975)<sup>42</sup>. Despite the weaknesses resulting from the assumptions of the method, the results are a supplement to the pool of information, which may be derived from the structure of

<sup>&</sup>lt;sup>42</sup> The description of this method is presented in T. Łyziak: *The Analysis of Inflationary Expectations of Individuals based on the Qualitative Questionnaires*: "Bank and Credit" no. 6/2000.



the responses to the Demoskop poll itself. This are relative questions. In its construction, it is intended to ask for a comparison of inflationary expectations in the future, with the price changes observed currently. In other words, the same structure of responses to the poll questions in different periods may mean a completely different inflationary expectations, depending on the current price changes, which for the reference point to the respondents answers. The analysis of the structure of responses allows us to only evaluate the change in the way inflationary expectations of individuals are formed (in a more or less static way). It does not allow us to determine beyond doubt, whether the inflationary expectations increased, compared to the previous periods, whether they declined, or remained unchanged. The solution of this problem is enabled by the quantification of inflationary expectations, despite all its limitations, by considering not only the structure of the responses to the poll questions, but also the accompanying changes in current inflation rate<sup>43</sup>.

The inflation rate for the next year expected by individuals during all the months of the second quarter of 2001 remained below the actual current inflation. This fact is worth noting, since it constitutes an exception to the trends observed in the previous period, when the expected inflation rate was as a rule higher than the current inflation. In April 2001 the expected inflation rate declined by 1.1 percentage points as compared to the March expectations and it reached 6.5% or 0.1 percentage points less than the then current inflation rate. In May 2001, the inflationary expectations of individuals reached the level of 6% and were 0.2 percentage points lower than the then current inflation rate. In June, a small increase in the inflationary expectations was noted, and the individuals expected a 6.1% inflation rate in connection with a strong increase in current inflation (from 6.2% in May to 6.6% in June), however the expected inflation rate remained below the then current inflation rate.

<sup>&</sup>lt;sup>43</sup> The Demoskop poll is conducted in the first decade of every month (the July poll was conducted between the sixth and the ninth day of the month), which is before the publication of the Main Statistics Office inflationary indicators for the previous month. As a result, the quantification method (adjusted Carlson and Parkin method) assumes that the current inflation rate is the annual inflation rate from two months before, which is known to the persons conducting the poll at the time of the poll.



It needs to be noted that in June 2001, the year-on-year inflation rate expected by individuals for the corresponding month of the next year for the first time fell into the band of the banks' inflationary expectations<sup>44</sup>. The inflationary expectations of individuals were only 0.7 percentage points higher than the average year-on-year inflation rate expected by the banks for March 2002, and the expectations of the banks which presented declarations closer to the upper limit of the band were greater or equal to the inflationary expectations of individuals.

## Inflationary expectations of bank analysts in the second quarter of 2001

Inflationary expectations of bank analysts<sup>45</sup>, were to a far greater degree than those of individuals, impacted by the current information influencing the real price changes in the future. This is reflected among others in a lower level and lower variance of inflationary expectations of this group of entities.

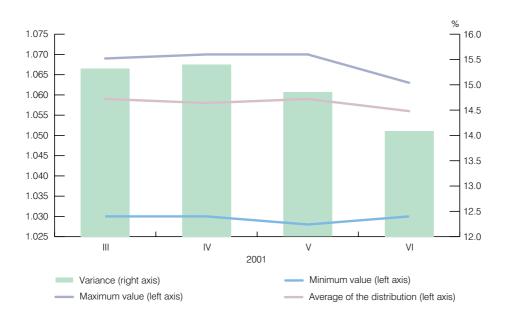
Starting with the first quarter of 2001, the inflationary expectations of bank analysts are displaying a declining tendency. After the first quarter of 2001 decline by 1 percentage points of the annual inflation rate expected for the month preceding the corresponding month in the next year, the second quarter inflationary expectations of bank analysts declined by an additional 0.3 percentage points. In April 2001, the banks declared that in the month preceding the same month next year, the year-on-year inflation rate will reach 5.8%. In May these expectations increased slightly to 5.9%, to fall to 5.6% in June 2001. The dispersion measures for the distribution, such as width of the band in which all the declaration of the banks are included, the level of standard deviation or the variance coefficient, suggest, that the banks uncer-

<sup>&</sup>lt;sup>44</sup> It is worth remembering, that starting from November 2000, when changes were introduced to the Reuters poll, the inflationary expectations of individuals and banks are not fully compatible. While the expectations of the individuals refer to the year-on-year inflation rate for the corresponding period of the next year, the banks' inflationary expectations refer to the year-on-year inflation for the month preceding the corresponding month of the following year.

<sup>45</sup> The inflationary expectations of bank analysts are quoted from Reuters.

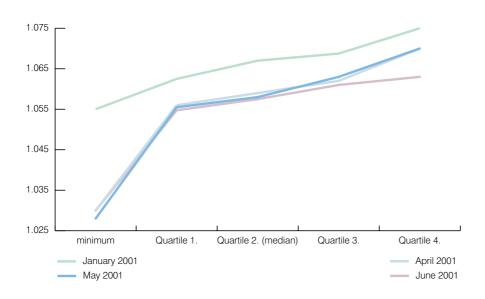
MBP

Figure 42 Dispersion measures of the analysts inflationary expectations' distributions



Source: Reuters data, NBP calculations.

Figure 43
Features of the distribution of inflationary expectations of bank analysts in Quarter 2,
2001 and in January 2001



Source: Reuters data, NBP calculations.



tainty of the future price changes was gradually subsiding in the second quarter of 2001<sup>46</sup> (Figure 42).

The quartile analysis shows, that in the second quarter of 2001 the largest changes took place in the portion of the distribution of the bank analysts inflationary expectations which is above the third quartile. In the period between April and June 2001, the value of the fourth quartile, which is identical to the maximum value of the distribution, declined by 0.7 percentage points, while the remaining quartiles declined by only around 0.1 percentage points (Figure 43).

Apart from the year-on-year inflation rate for the month preceding the same month of the next year expected by the bank analysts, the banks participating in the Reuters poll also answer questions regarding the year-on-year inflation rate for December of the current year, which allows for the verification of credibility of the short term inflationary target of the central bank. In the second quarter of 2001, banks forecasted the annual inflation rate for December 2001 to fall slightly below the lower limit of the short term inflation target band set for 2001 between 6% and 8%. In April, the banks were forecasting that by the end of 2001, the inflation rate will reach 5.7%, in May 5.8% and in June the expectation increased to 5.9%.

In the context of realization of short and mid-term inflationary targets of the monetary policy, the levels of the inflationary expectations of individuals and bank analysts in the second quarter of 2001 could be considered as positive.

#### 6.3.4. The income effect

The changes in prices in the second quarter of 2001 on the stock market were reflected in the composition of investments of individuals. The situation in the sector in the beginning of the period (end of Quarter 1, 2001) compared with the end of 2000 is presented in Table 17.

<sup>&</sup>lt;sup>46</sup> However it is worth noting, that the measures of corresponding indicators of the previous quarters, present a significantly greater dispersion of the distribution. This results however from the declaration of just one bank, whose expectations vary significantly from the expectations of the remaining banks starting from March 2001. In February 2001, this bank declared the expectation that the year-on-year inflation rate in the month preceding the corresponding month of the next year will reach 6%, while in March and April 2001 these expectations were reduced to 3%, to reach 2.8% in May 2001, and 3% in June 2001.



Table 17
Direct and indirect forms of individuals' investments on the Polish capital market (changes in Quarter 1, 2001) – in billions of zloty

Type of participation in the capital investment	As of end of 2000	As of end of Q1, 2001
1. Direct portfolio investments – securities in the accounts		
of individuals (total)	21.5	17.5
Shares	16.6	12.1
Treasury bonds (market) *	3.1	3.1
Treasury bills **	1.9	2.3
2. Indirect portfolio investments (total)	17.1	16.9
Investment funds (net assets)	7.2	5.2
Open pension funds (net assets)	9.9	11.7
Total	38.6	34.4
The above investment forms (total)		
as a percentage of zloty and foreign currency		
receivables from individuals		
in the banking system	20.6	17.3

<sup>\*</sup> A portion of the savings of individuals was invested in savings bonds of the State Treasury, which, due do the particular characteristics of the instrument, are not reflected in the above table. As of end of 2000 and in Quarter 1, 2001, the total savings invested in the instruments equaled respectively PLN 1.9 and 2.3 billion.

Source: materials from the Finance Ministry, NBP and Main Statistics Office.

As demonstrated in Table 17, the strong declining trend on the stock market in the first quarter of 2001 resulted in a significant decline in the value of the share portfolios of individuals and funds managing their investments. In result, the importance of the capital segment to the size of the individuals savings in the banking sector declined significantly.

The continuation of the declining stock market trend in the second quarter of the current year reinforced this tendency. It transpired in weak financial results of the open pension funds during the two years of their operations.

The assets of investment funds grew slightly in the second quarter of 2001 and reached PLN 5.9 billion by the end of the period (of which a portion represented the assets of juridical persons), while the continually growing assets of Open Pension Funds (OFE) reached PLN 13.7 billion.

<sup>\*\*</sup> Based on the reporting of dealer banks.



The PLN and foreign currency liabilities from the banking sector to the individuals also increased from PLN 198.0 billion (end of Quarter 1) to PLN 203.2 billion (end of Quarter 2).

In summary, the first half of 2001 marked a regression in both the value of consumer savings invested in the capital market and their effectiveness. It was closely related to the situation on international stock markets, where the instruments were losing value and with the domestic economic situation.



### 7. Perspects for inflation

The inflationary process varied in the second quarter of 2001. In the first two months of the quarter, the annual inflation rate, after eight consecutive months of systematic declines, accelerated again, reaching the level of 6.9% in May. In June, the twelve month consumer goods and services price index declined to the level of 6.2%, returning to the level of the first quarter of the current year and dropping by 4 percentage points compared with the level of the previous year.

The reasons for the acceleration of inflation in April and May of the current year lied in only certain price groups. The price growth rate of food and non-alcoholic beverages increased in result of a stronger-than-usual seasonal price increase of fruits and vegetables. The impact of some inelastic demand service prices, which were discovered on not-fully competitive markets, remained relatively strong.

The April and May acceleration of inflation was reflected also in the increase in core inflation indicators. A thorough analysis of the factors causing such changes showed however, that the increase in core inflation indicators resulted from incidental reasons, such as the price growth of food included in the core inflation indicators, or the price growth of electricity and some group of medications. The NBP analyses demonstrated, that the acceleration of inflation in the second quarter was of a temporary nature and the a low growth rate of domestic demand and the tendency of declining inflationary expectations persist. This diagnosis was confirmed with the actual development of inflation in June 2001.

Analyzing the scenarios for future development of the economic situation the Monetary Policy Council must consider the growth of uncertainty associated with the forecasts for the coming period. It results mainly from the uncertainty of the further development of the public finances situation and the levels of the GDP.

In the opinion of the MPC, the inflation may reach the level close to the lower limit of the inflationary target band in the end of the current year, which is 6%. However, the prices growth rates will have a varied nature: in the summer a clear seasonal drop of inflation could be expected, while a recurring acceleration should take place in the last months of the year.



The available information and forecasts indicate that the domestic demand will not pose an inflationary threat in the current year, and that the likelihood of an inflation growth due to strong distortion of food market and fuel market supply is also small. Moreover, the gradual change in the way the individuals inflationary expectations are formed, from the static way (backward looking) towards a way which considers in an increasing way the factors shaping the future levels of inflation (forward looking), is enabling a more effective inflation reductions at lower costs.

Apart from the factors, which strengthen the inflation decline tendencies, the last period witnessed the emergence of threats which may distort the disinflation process in a longer perspective. The foremost of them is the risk associated with the growth of the public sector deficit, a potential increase in the risk of investments in Poland and the related uncertainty regarding the future exchange rates of the zloty. The conduct of a balanced monetary policy is therefore required, to consider on one hand the current tendencies in the area of demand sources of inflation, and the need to counteract these threats on the other hand.



## **ATTACHMENT I**

# The voting of members of the Monetary Policy Council on resolutions passed in the second quarter of 2001

Date	Subject of the resolution	MPC decision	Votes of the
of the			MPC members
resolution			
25.04.2001	on the approval of the		For: L. Balcerowicz
	Financial Report of the		B. Grabowski
	National Bank of Poland		C. Józefiak
	for December 31, 2000		J. Krzyżewski
			W. Łączkowski
			J. Pruski
			D. Rosati
			G. Wójtowicz
			W. Ziółkowska
			Absent during
			the vote: M. Dąbrowski
30.05.2001	on the approval of the Report		For: L. Balcerowicz
	on realization of the monetary		M. Dąbrowski
	policy assumptions in 2000		B. Grabowski
	and Evaluation of the		C. Józefiak
	Performance of the NBP		J. Krzyżewski
	Management Board in		W. Łączkowski
	realization of the assumptions		J. Pruski
			D. Rosati
			G. Wójtowicz
			W. Ziółkowska
30.05.2001	on the approval of report from		For: L. Balcerowicz
	operations of the National		M. Dąbrowski
	Bank of Poland for 2000		B. Grabowski
			C. Józefiak
			J. Krzyżewski
			W. Łączkowski
			J. Pruski
			D. Rosati



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			G. Wójtowicz
			W. Ziółkowska
0.05.2001	motion to cut all the interest	the motion did not win	For: J. Krzyżewski
	rates by 2 percentage points	a majority of votes	D. Rosati
	rates by 2 per centage points	a majority of votes	G. Wójtowicz
			W. Ziółkowska
			Against: L. Balcerowicz
			-
			M. Dąbrowski
			B. Grabowski
			C. Józefiak
			W. Łączkowski
			J. Pruski
0.05.2001	motion to cut all the interest	the motion did not win	For: J. Krzyżewski
	rates by I percentage point	a majority of votes	D. Rosati
			G. Wójtowicz
			W. Ziółkowska
			Against: L. Balcerowicz
			M. Dąbrowski
			B. Grabowski
			C. Józefiak
			W. Łączkowski
			J. Pruski
			j. Fruski
7.06.2001	motion to cut all the interest	the motion did not win	For: J. Krzyżewski
	rates by 2 percentage points	a majority of votes	D. Rosati
			G. Wójtowicz
			W. Ziółkowska
			Against: L. Balcerowicz
			M. Dąbrowski
			B. Grabowski
			C. Józefiak
			W. Łączkowski
			J. Pruski
7.04.2001		15	F   D.
27.06.2001	on discount rate and interest	1.5 percentage point rate	For: L. Balcerowicz
	on refinancing loans	cut for the basic rates	B. Grabowski
			C. Józefiak
			J. Krzyżewski
			W. Łączkowski
			J. Pruski
			<b>Against:</b> M. Dąbrowski
			D. Rosati



			G. Wójtowicz
			W. Ziółkowska
27.06.2001	on the rules of open	1.5 percentage point cut	For: L. Balcerowicz
	market operations	of the reference rate	B. Grabowski
			C. Józefiak
			J. Krzyżewski
			W. Łączkowski
			J. Pruski
			Against: M. Dąbrowski
			D. Rosati
			G. Wójtowicz
			W. Ziółkowska

