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Design:
Ryszard Piwowar
Piotr Chodorek
Ed Polinski

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SUMMARY

During the third quarter of 2000, the rise in consumer prices compared to the corresponding period of the previous year was swifter than it had been in the two preceding quarters. At the same time, however, while the annualised rate of inflation increased to 11.6% in July, it then declined in the next months of the third quarter.

Fuel prices dropped in the course of the third quarter of 2000 (from June to September). Nevertheless, compared to the corresponding months of the previous year, fuel price growth remained very high in July (46.7%), coming down to 25.9% in September. The maintenance of rapid annualised consumer inflation in the third quarter was also due to an increase in annualised food price growth. Although the rise in foodstuff prices from June to September was the slowest seen since the beginning of the year, food price growth was still high compared to the third quarter of 1999, running above year-on-year inflation. In the third quarter of 2000, those prices of industrial goods and of services determined by market mechanisms impacted inflation in a different manner to that previously seen, climbing faster than food and fuel prices. On an annualised basis, however, the growth of these prices gradually slackened.

Following a significant rise up until July in various measures of core (underlying) inflation, these then decreased in the subsequent months of the quarter. The sole exception was "net" inflation, which represents CPI growth adjusted to exclude fuel and food prices; this kept relatively steady from March 2000 onwards at around 9%. Industrial producer prices increased more rapidly in the third quarter than they had a year previously.

In real terms, money supply growth in the third quarter of 2000 did not exceed an annualised 5%. It is worth emphasising that the trend for household zloty deposit growth to accelerate was sustained during this period. This was accompanied by slower growth in outstanding loans to households. Nevertheless, the increase in claims on persons and corporates remained the most significant factor fuelling money supply growth. Next in importance was the rise in foreign assets. This stemmed from a portion of privatisation receipts being set aside on a government foreign currency account at the NBP. Thus, despite a considerable decline in net general government indebtedness, the role of this sector as a counterpart to changes in money stocks was only slightly weaker.

Lower loan demand was linked to high real interest rates. However, the large differential between Polish and foreign rates did not substantially swell the inflow of foreign portfolio investment. The nominal effective appreciation of the zloty in the third quarter of 2000 is traceable to expectations of an additional supply of foreign currency from the sale of Telekomunikacja Polska SA (TP SA), to the major softening of the euro on international currency markets, and also to the improvement in the current account of Poland's balance of payments.

The rise in inflation seen as of August 1999 produced increased inflation expectations among consumers, and to a lesser extent also among banks and corporates. At the same time, there was mounting uncertainty as to when price growth might slacken, and thereby lay the basis for beginning to lower interest rates.

The process of curbing domestic demand growth continued in the third quarter of 2000. Growth in demand was still slower than that of GDP. This was primarily the result of slower growth in gross fixed investment and a more subdued increase in personal consumption. The waning growth of household consumption in this period is also evidenced by the decline in the volume of retail sales.

The reduced growth in domestic demand recorded in the third quarter was coupled with slower real growth in imports. At current prices, this slowdown was not so distinct due to greater payments for imported fuels. At the same time, exports continued to grow. This to some extent

Basic macroeconomic indicators

	Q1	Q2	Q3	Q4	1997	Q1	Q2
		1997				1998	
GDP	6.4	7.5	6.7	6.4	**6.8**	6.4	5.4
Domestic demand	7.8	8.9	9.2	10.7	**9.2**	7.4	5.9
Total consumption	6.0	6.3	6.3	5.7	**6.1**	5.5	3.7
Personal consumption	6.7	7.1	7.0	6.6	**6.9**	6.4	4.2
Capital formation, gross	18.6	20.3	20.6	22.3	**20.8**	17.4	14.9
Gross fixed investment	19.6	21.0	21.2	23.2	**21.7**	17.8	15.2
Savings ratio (%)	13.6	13.6	12.7	12.9	**13.2**	12.0	14.9
Financial savings ratio (%)	9.5	8.2	6.7	10.3	**8.6**	8.6	7.8
Unemployment (%)	12.6	11.6	10.6	10.3	**10.3**	10.4	9.6
Disposable incomes							
(corresponding period previous year = 100)	104.8	108.1	110.0	105.4	**107.1**	104.4	103.7
Basic monetary indicators							
Consumer prices[1]	116.6	115.3	113.6	113.2	**113.2**	113.9	112.2
Industrial producer prices[1]	111.8	112.2	113.0	111.5	**111.5**	109.2	107.7
M0	125.5	124.9	135.4	123.7	**123.7**	117.6	120.6
M1	124.7	128.4	125.3	118.2	**118.2**	116.5	113.7
M2	128.0	129.8	131.6	129.1	**129.1**	127.4	126.7
Non-financial sector deposits	130.0	132.1	134.3	131.9	**131.9**	130.9	130.2
personal	129.1	131.5	134.1	136.3	**136.3**	134.0	131.0
corporate	132.6	133.6	134.7	122.1	**122.1**	122.8	127.8
Claims on non-financial sector	147.7	147.3	144.7	133.6	**133.6**	130.4	129.2
persons	200.3	189.6	174.5	156.2	**156.2**	145.3	135.3
corporates	141.4	141.4	140.1	129.7	**129.7**	127.9	128.1
M0	107.6	108.4	119.2	109.3	**109.3**	103.3	107.5
M1	106.9	111.4	110.3	104.4	**104.4**	102.3	101.4
M2	109.8	112.6	115.8	114.0	**114.0**	111.9	112.9
Non-financial sector deposits	111.5	114.6	118.2	116.5	**116.5**	114.9	116.0
personal	110.7	114.1	118.0	120.4	**120.4**	117.7	116.8
corporate	113.7	115.9	118.6	107.8	**107.8**	107.8	113.9
Claims on non-financial sector	126.7	127.7	127.4	118.0	**118.0**	114.5	115.1
persons	171.8	164.4	153.6	138.0	**138.0**	127.6	120.6
corporates	121.3	122.6	123.4	114.6	**114.6**	112.3	114.1
Reference rate (minimum reverse repo rate) (%)[2]						24.0	21.5
Rediscount rate (%)[2]	22.0	22.0	24.5	24.5	**24.5**	24.5	23.5
Lombard rate (%)[2]	25.0	25.0	27.0	27.0	**27.0**	27.0	26.0

[1] final month of quarter
[2] period end

Source: GUS. NBP.

Q3	Q4	1998	Q1	Q2	Q3	Q4	1999	Q1	Q2	Q3
1998					1999				2000	
		real growth								
5.0	2.9	**4.8**	1.6	3.0	5.0	6.2	**4.1**	6.0	5.2	3.3
6.3	6.6	**6.4**	3.4	4.6	5.5	5.7	**4.9**	5.1	3.3	1.3
3.9	3.9	**4.2**	4.0	4.4	4.8	5.0	**4.5**	3.9	2.3	0.9
4.5	4.6	**4.8**	4.6	5.2	5.7	5.9	**5.4**	4.6	2.6	0.8
14.6	12.0	**13.8**	0.7	5.5	7.8	7.1	**5.9**	11.5	6.8	2.6
14.8	12.6	**14.2**	5.7	6.3	6.6	7.0	**6.5**	5.5	2.9	2.4
10.8	15.4	**13.2**	11.0	11.5	9.8	13.3	**10.9**	.	.	.
7.1	7.1	**7.7**	10.7	2.5	3.3	3.2	**4.9**	.	.	.
9.6	10.4	**10.4**	12.0	11.6	12.1	13.0	**13.0**	14.0	13.6	14.0
102.5	107.2	**104.6**	104.1	103.0	102.3	102.2	**102.6**	.	.	.
		corresponding period previous year = 100								
110.6	108.6	**108.6**	106.2	106.5	108.0	109.8	**109.8**	110.3	110.2	110.3
106.4	104.8	**104.8**	104.7	105.2	106.2	108.1	**108.1**	107.3	108.9	108.3
		nominal growth, period end (corresponding period previous year = 100)								
112.7	126.8	**126.8**	121.5	118.9	92.9	98.4	**98.4**	83.6	87.7	110.7
112.6	113.0	**113.0**	121.7	119.3	119.1	122.0	**122.0**	105.1	108.1	99.6
125.4	125.2	**125.2**	127.6	122.9	120.9	119.3	**119.3**	113.8	120.6	114.1
128.6	127.8	**127.8**	129.5	124.6	122.3	118.3	**118.3**	115.5	123.3	116.1
129.6	126.3	**126.3**	127.5	123.4	120.8	115.2	**115.2**	114.2	118.5	117.3
126.1	131.5	**131.5**	135.0	128.0	126.2	125.5	**125.5**	119.1	136.0	113.0
128.2	127.9	**127.9**	129.5	127.6	127.8	127.1	**127.1**	123.9	130.6	122.0
133.8	130.0	**130.0**	135.8	141.1	147.6	153.1	**153.1**	152.1	179.4	140.9
127.1	127.5	**127.5**	128.2	125.0	123.8	121.6	**121.6**	118.1	119.7	117.4
		real growth, period end (corresponding period previous year = 100)								
101.9	116.7	**116.7**	114.4	111.6	86.0	89.7	**89.7**	76.0	79.6	99.4
101.8	104.0	**104.0**	114.6	112.0	110.3	111.1	**111.1**	95.3	98.1	89.9
113.4	115.2	**115.3**	120.2	115.4	111.9	108.7	**108.7**	103.2	109.4	103.0
116.3	117.6	**117.6**	121.9	117.0	113.2	107.7	**107.7**	104.7	111.9	104.8
117.2	116.3	**116.3**	120.0	115.8	111.9	104.9	**104.9**	103.5	107.5	105.9
114.0	121.0	**121.0**	127.1	120.2	116.9	114.3	**114.3**	108.0	123.4	101.9
115.9	117.8	**117.8**	121.9	119.8	118.3	115.7	**115.7**	112.3	118.5	110.1
121.0	119.7	**119.7**	127.9	132.5	136.6	139.4	**139.4**	137.9	162.8	127.1
114.9	117.4	**117.4**	120.8	117.3	114.6	110.8	**110.8**	107.1	108.6	106.0
18.0	15.5	**15.5**	13.0	13.0	14.0	16.5	**16.5**	17.5	17.5	19.0
21.5	18.3	**18.3**	15.5	15.5	15.5	19.0	**19.0**	20.0	20.0	21.5
24.0	20.0	**20.0**	17.0	17.0	17.0	20.5	**20.5**	21.5	21.5	23.0

offset the impact of decreasing domestic demand on economic growth. The continuation of faster growth in export receipts than in import payments also helped improve the deficit on the current account.

A detailed analysis of the factors causing inflation to rise in the third quarter, together with a review of the situation on particular markets, indicates that a major role in keeping inflation high continues to be played by the structural features of the Polish economy, especially by the operation of markets that are not fully competitive in certain areas of significance for household spending (such as telecommunications services, oil refining and distribution, and agricultural produce).

Although the increase in inflation in 2000 has primarily been attributable to factors outside the influence of monetary policy, in August the Monetary Policy Council resolved to raise NBP base interest rates. This stemmed from the need to counter the consolidation of inflationary processes, in a situation where inflation had been on the rise for about a year, with a danger that this might continue as a result of supply shocks.

One reason for the decision to raise official rates was the desire to prevent any excessive fall in real interest rates due to the increase in inflation. The experience of recent years indicates that a long-term easing of monetary policy would threaten a sharp acceleration in consumption growth and a reduction in the propensity to save, thereby hindering the process of disinflation. Any accommodation to the effects of supply shocks could lead to an intensification of inflation expectations and an escalation of wage demands. This would therefore substantially worsen the conditions for continuing the process of disinflation in subsequent years.

The present *Inflation Report* was developed on the basis of statistical data available up to the end of November 2000[1].

[1] Figures on Q3 GDP growth have been taken from a report by the Central Statistical Office (GUS) released on December 21, 2000.

INFLATIONARY PROCESSES IN THE THIRD QUARTER OF 2000

Consumer prices

Consumer price growth in the third quarter of 2000 was marked by the following tendencies:

- year-on-year, price growth during the quarter was the highest so far in 2000 (10.8%), surpassing that recorded in the two preceding quarters (10.3% in Q1, 10.0% in Q2);
- in the course of the third quarter of 2000[2], consumer prices rose 1.4%, which was 0.3 points less than in the corresponding quarter of 1999. Using this measure, consumer price growth in the third quarter was lower than in the first and second (when it stood at 3.6% and 1.9%, respectively);
- at the end of September, year-to-date consumer price growth was higher than it had been twelve months before (7.0%, as against 6.6%);
- annualised price growth, having reached a two-year high in July of 11.6%, had dropped to 10.3% by the end of the third quarter.

In analysing the pattern of consumer price movements during the third quarter, a change is evident relative to previous periods in the respective impact of particular factors on the development of inflationary processes.

Compared to the preceding quarter (table 1), supply shocks on the food and fuel markets proved to be of relatively weaker influence. By contrast, a stronger impact on inflation was exerted by increases in those prices of goods and services that are principally determined by market mechanisms.

A slightly different picture is obtained when the pattern of price growth in the third quarter of 2000 is compared to that seen in the same quarter of 1999 (cf. Fig. 1). Using this approach, a reduction relative to the third quarter of 1999 is visible in the inflationary pressure generated by rising fuel prices[3], while a larger

[2] In this section, the terms "in the course of the quarter" or "over the quarter" refer to price movements as measured by comparing the last month of a given quarter with the last month of the previous quarter; these movements are calculated as the product of the price growth indices for the respective months of the quarter concerned.

[3] Fuel prices are here included in officially controlled prices, since some 60% of the retail price involved represents indirect taxes (VAT and excise duty).

Table 1
Price growth, basic categories of goods & services

	1999					2000				
	Weight	Period price growth				Weight	Period price growth			
		Q1	Q2	Q3	Q1-3		Q1	Q2	Q3	Q1-3
					%					
CPI	**100.0**	**3.1**	**1.7**	**1.7**	**6.6**	**100.0**	**3.6**	**1.9**	**1.4**	**7.0**
Officially controlled prices	24.1	6.7	2.3	2.9	12.3	25.0	5.6	2.5	2.1	10.5
of which: fuels	2.4	4.2	6.2	17.8	42.6	2.8	7.2	11.5	-1.7	17.5
Foodstuffs & non-alcoholic beverages	31.6	0.7	0.5	0.0	1.2	30.4	3.5	1.7	1.0	6.3
Non-food articles, excluding officially controlled prices	28.1	1.7	0.9	2.0	4.8	28.3	1.8	0.9	1.7	4.5
Services, excluding officially controlled prices	16.2	5.9	3.2	2.7	12.2	16.3	5.0	2.4	2.2	9.9

Source: GUS figures, NBP calculations.

contribution to overall CPI growth was made by foodstuff prices. The impact of those prices of goods and services determined by market mechanisms was weaker than a year earlier.

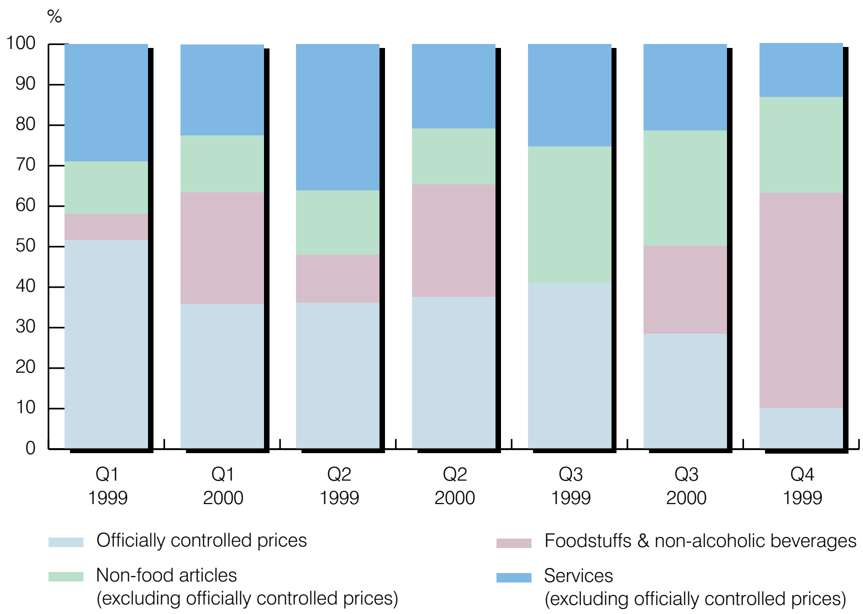
The greatest contribution to inflation in the course of the third quarter of 2000 was made by rises in officially controlled prices (despite the absolute decrease in fuel prices), and those of non-food articles (excluding those subject to official controls). Growth in service prices (excluding those subject to official controls) and in foodstuff prices had just a slightly smaller influence on inflation. The price growth recorded for particular categories of consumer gods and services during the first three quarters of 1999 and 2000 is presented in Table 1 and Figure 2.

Officially controlled prices rose 2.1% over the third quarter of 2000 (0.8 points less than in Q3 1999), thereby contributing 0.4 points to overall inflation. Within this category of prices, the fastest growth in this period was displayed by telephone rental charges, a consequence of July's steep 25% hike in rental charges, the second of the year. A large increase in the third quarter was also seen in the price of bottled gas (up 5.4%).

In the course of the third quarter, for the first time in 2000, fuel prices were not directly responsible for pushing up inflation. For the first time since the surge in fuel prices began in the first quarter of 1999, fuel

Figure 1

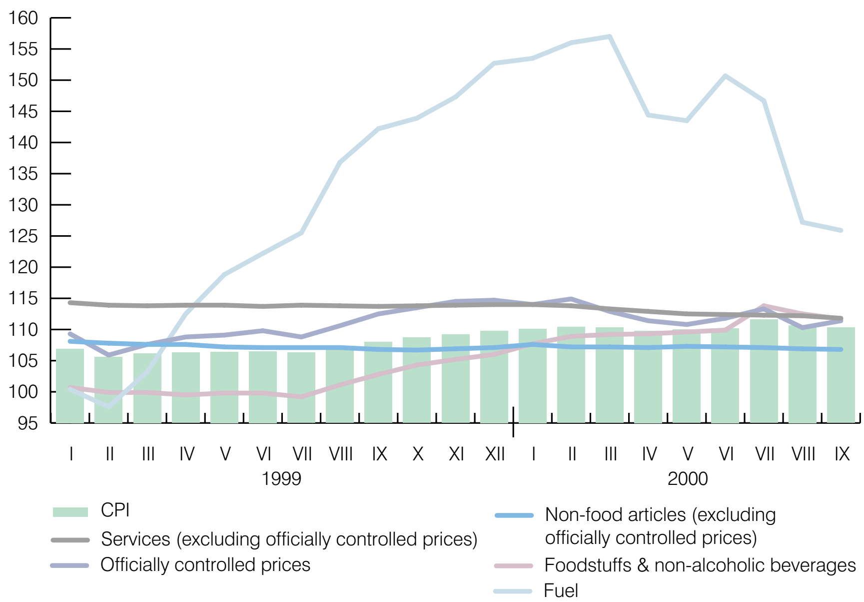
Structure of consumer price growth Q1 1999 - Q3 2000



Source: NBP calculations based on GUS figures.

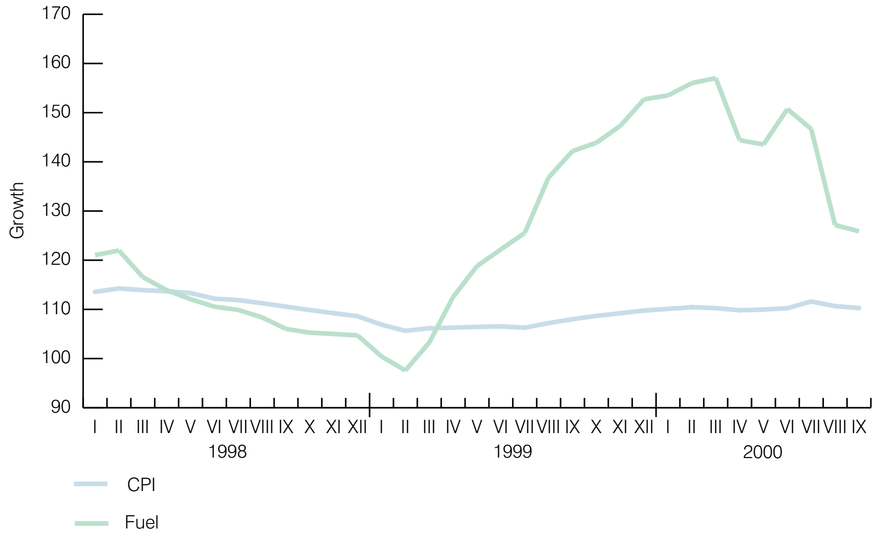
Figure 2

***Consumer price growth** (corresponding month previous year = 100)*



Source: NBP calculations based on GUS figures.

Figure 3
CPI vs fuel prices, 1998 - 2000
(corresponding period previous year = 100)



Source: GUS.

prices fell 1.7% during the third quarter. Notwithstanding this fall, however, annualised year-to-date fuel price growth had still been running above CPI growth throughout 2000, coming to 25.9% in September (cf. Fig. 3). The drop in prices in the third quarter was mainly due to the decrease in world fuel prices in July. This was sufficiently steep to offset the increase in excise duty (which rose around 4.5% on September 1), which constituted the second chief cause of higher domestic retail fuel prices in the third quarter. In all, the refineries raised their factory-gate prices five times over the third quarter and lowered those prices six times, which was the result of volatile conditions on the major world fuel markets and of the change in excise duty. In September, the Government also decided to lift customs duty on petrol and diesel oil earlier than previously planned. The changes in customs tariffs and increase in excise duty together resulted in the "import parity" going up by around 1 point[4].

[4] Import parity represents the price of petrol on international commodity exchanges, translated at dollar exchange rates plus a spread of 1%, with the addition of excise duty and banking/financing costs (around 1.2%); this price is expressed in zloty per tonne.

Prices of non-food articles (excluding officially controlled prices[5]**)** went up over the third quarter of 2000 more rapidly than inflation. In this period, the price of industrial goods rose 1.7%, contributing 0.4 points to overall price growth. A year previously, prices in this category had gone up 0.3 points more. Of those non-food articles where prices are determined by market mechanisms, the largest price increases were recorded for heating fuel (up 5.5%), newspapers and periodicals (up 3.8%), and writing, draughtsman's and painter's supplies (up 3.9%). The latter two classes of goods usually go up in price at this time of year. In the case of heating fuel, the sharp rise in price may to some extent be regarded as a secondary response to many months of steep increases in motor fuel prices. Over the last two years, i.e., since motor fuel prices began to soar, an additional dependence has been observable between the price indices for heating and motor fuels. Disruptions on the market for motor fuel are largely transmitted to the market for heating fuel with a six-month time lag. This can also be explained in terms of a substitution effect between the two goods in question. On the other hand, the third quarter had still not brought the seasonal increase in the price of many manufactured goods, including clothing and footwear, that is generally witnessed in the autumn. It can be presumed that the clear reduction in the pace of consumer demand growth seen in 2000 limited the inclinations of producers to raise their prices. The delay in seasonal price increases could also be associated with the longer spell of good weather, which delayed purchases for the autumn and winter season.

Of those prices of goods and services set on a market basis, a strong increase in the third quarter was also seen in **consumer service prices (excluding officially controlled prices**[6]**)**. As in the first and second quarters, prices for commercial services rose more swiftly than overall price growth. Service prices, excluding those subject to price controls, accounted for 0.3 points of CPI growth in the third quarter. It can be assumed that this increase in commercial service prices reflects the indirect

[5] The prices excluded here are those of tobacco products, fuels and lubricants.

[6] The prices excluded here are electricity, gas, hot water and district heating charges; rail, bus and municipal transport fares; postal charges; terrestrial telecommunications charges (for phone installation, domestic and international calls, telegrams and phone rental); radio and television licence fees; civil service charges; and court and lawyers' fees.

effects of the previous sharp growth in such officially controlled prices as electricity, gas and district heating charges, and also the consequences of fuel price increases. The growth of these officially controlled prices increased the overhead costs of service establishments, thereby causing them to raise the price of the services they provide. Of those services priced on a market basis, the largest rise in prices in the period under examination was reported for cultural and recreational services (up 2.5%), including admission prices for museums, libraries and zoos (up 3.3%), and also cinema, theatre and concert tickets (up 2.4%), with a strong increase also seen in the price of services related to education (up 2.8%) and welfare (up 6.2%). The third quarter also saw a rapid rise in the price of canteen meals (up 4.1%).

Prices of foodstuffs and non-alcoholic beverages rose 1.0% in the third quarter of 2000, contributing an estimated 0.3 points to overall consumer inflation, as did the previous category of prices. Taking into account seasonal factors, the rise in foodstuff prices recorded in the third quarter was relatively high compared to previous years. In the corresponding period of 1999, prices of foodstuffs and non-alcoholic beverages remained flat relative to the preceding quarter. In 2000, movements in this category were the result of prices for non-alcoholic beverages rising 2.1%, while food prices went up 1.0%.

Year-on-year, the increase in these prices registered in the third quarter was the largest so far in 2000, standing at 13.3% (compared to 10% in Q2 and 9% in Q1). This sharp annualised growth was fanned by rising prices for sugar (up 97%), bakery and grain products (21%), milk, cheese and eggs (around 16%), pork (13%) and beef (12%).

Since the beginning of the year, prices have continued to trend upwards on the market for agricultural produce; this refers to both procurement prices and those at outdoor markets. In the course of the third quarter, average procurement prices for the more important agricultural products were higher than they had been at the same point in 1999[7], with prices for wheat up around 26%, for rye up 23%, for fat cattle up 18%, for fat pigs up 28%, and for milk up 32%. In general, average procurement prices rose almost 22% over the

[7] NBP calculations based on GUS figures, with average monthly procurement prices being used to derive average prices for the quarter.

third quarter of 2000, whereas the third quarter of 1999 had seen an overall decrease in all categories of procurement price, averaging 7%.

Grain represents an agricultural product of basic importance, one that has a major impact on other agricultural prices. In the third quarter of 2000, the average procurement of the primary grains was some 28% greater than a year previously, with the largest purchases being made in August (over 31% more than twelve months before). As a result, grain prices in August came down relative to July, yet in comparison with 1999 they still remained high. September then brought a return of the upward trend in grain prices as the amounts being purchased decreased. This was the product of several factors, such as the Government setting a duty-free quota on grain imports in July and August, which commodity brokers believe prompted farmers to sell a large part of the grain stocks they had been holding, and also the official grain purchases carried out from August to October, which involved a gradual increase in the direct subsidies to farmers for wheat and grain purchases. The system of official intervention on the grain market applied in 2000 represented a continuation of the programme of grain purchases introduced a year previously, involving producer subsidies from the Agricultural Market Agency. The programme for 2000 projected subsidised purchases of 3.3m tonnes of wheat (over 20% more than in 1999) and 0.7m tonnes of rye (40% more). Direct subsidies to farmers selling wheat and rye were applied from August to October. The purchase of grain under subsidies from the Agricultural Market Agency was carried out by companies which had concluded contracts with the Agency for grain procurement under direct subsidies. Those companies purchasing grain under direct Agency producer subsidies were required to pay wheat and rye prices no lower than the minimum set for the year 2000, i.e., 480 zloty per tonne for wheat (6.7% more than in 1999) and 330 zloty per tonne for rye (3.1% more). Subsidies were payable solely to those producers that sold their grain to companies holding the relevant contracts with the Agency.

In view of the need to avoid a concentration of grain purchases, with supplies to granaries snowballing in the first weeks of the harvest, a financial incentive for producers was maintained by offering higher subsidies for grain delivered in September and October. In the case of wheat, the increase in subsidies relative to those applied in the corresponding months of 1999 stood at 16.7% in August, 14.3% in September and 11.1% in October. In the case of rye, subsidies were 12.5% higher in August and 14.3% higher in October, while in September they were 9.1% lower[8].

By the end of September, the purchase had been made of 51% of the total volume of grain planned for purchase over the period August-October under the price support programme of the Agricultural Market Agency; this represented 57.1% of targetted wheat purchases and 21.8% of rye purchases[9].

The third quarter of 2000 saw the maintenance of rapid growth in meat prices due to lower procurement of fat pigs than in 1999. Purchases of fat pigs in the third quarter of 2000 averaged 13% less than in the corresponding quarter of 1999. The third quarter also saw an acceleration of price growth in the procurement of fat cattle, which was coupled with smaller supplies. In this period, purchases of fat cattle were down almost 19% on the third quarter of 1999. The third quarter of 2000 also brought an increase in milk procurement prices (up 3.1%), despite supplies rising slightly.

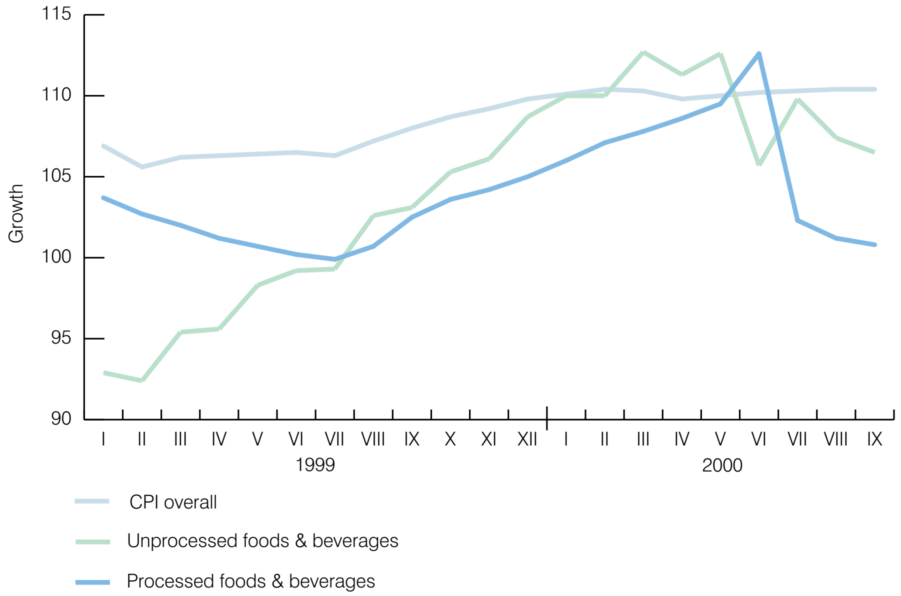
An analysis of annualised food price growth indicates that, from July 1999 to September 2000, prices for unprocessed foodstuffs rose faster than those for processed foods (with the exception of June 2000, when this trend was reversed as a result of surging prices for grain products); these price movements are shown in Figure 4. Over the third quarter of 2000, food price growth began to weaken somewhat in relation to overall CPI growth. Nonetheless, the price relationship involved remains high, considerably exceeding the levels reported in developed market economies (cf. Fig. 5).

At the end of the third quarter of 2000, year-to-date inflation stood at 7.0%. Over this period, the greatest increases took place in officially controlled prices (up 10.5%), including fuel prices (up 17.5%), although in comparison to the corresponding period of 1999 the growth in these price categories slowed, by 1.8 points and 25.1 points, respectively. Commercial service prices went up 9.9% over the three quarters, which was 2.3

[8] *Annual programme of official intervention by the Agricultural Market Agency*, 1999 and 2000.
[9] *Rynek zbóż – stan i perspektywy* (The Grain Market - State and Prospects), Institute of Agricultural Economics, October 2000, p. 22.

Figure 4

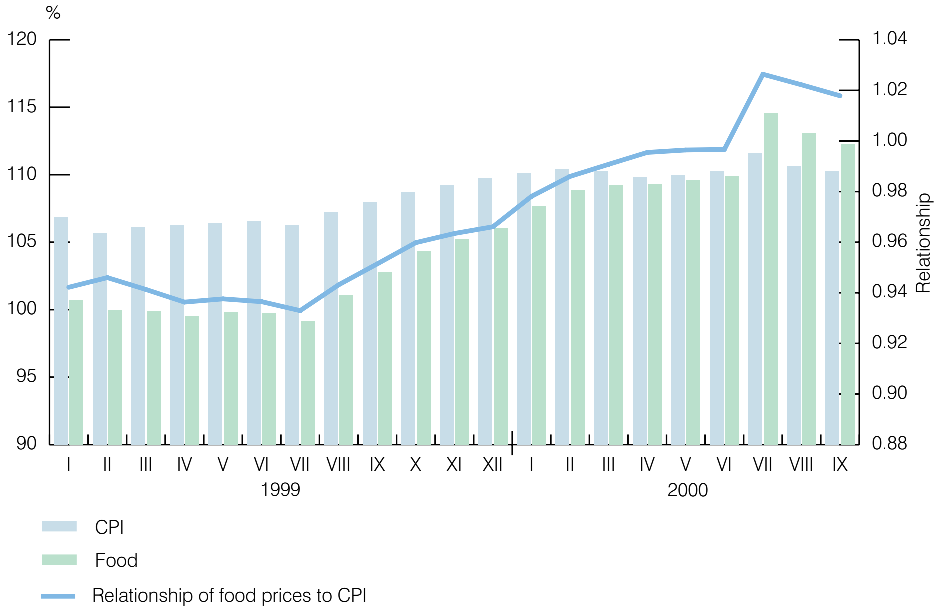
***CPI vs prices for foodstuffs & non-alcoholic beverages (overall, processed & unprocessed), January 1999 - September 2000** (corresponding month previous year = 100)*



Source: NBP calculations based on GUS figures.

Figure 5

***Food price indices vs consumer price index** (corresponding month previous year = 100)*



Source: NBP calculations based on GUS figures.

points less than a year previously. Prices of foodstuffs and non-alcoholic beverages rose 6.3% over the first nine months of the year, whereas in the corresponding period of 1999 they had gone up just 1.2%. Prices of non-food articles, excluding those subject to official price controls, increased 4.5% in this period, which was 0.3 points less than a year earlier.

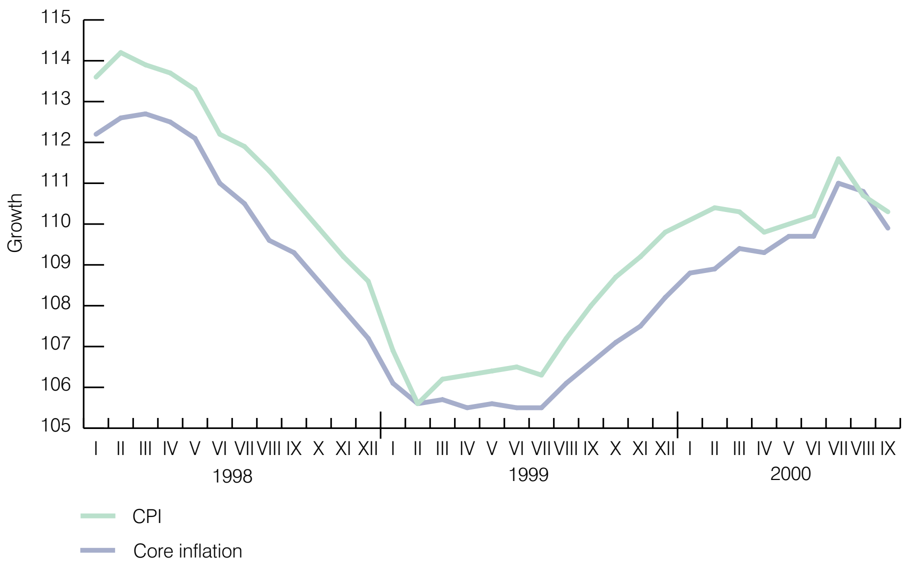
Core inflation

In the third quarter of 2000, CPI growth hit a two-year high in July, after which the upward trend in consumer inflation was checked. The same was true of all the measures of core (underlying) inflation examined, with the exception of "net" inflation, which had been oscillating around the 9% mark since March.

An analysis of movements in core inflation and "net" inflation indicates that the third quarter brought distinctly strong growth in those prices that are excluded in calculating core inflation. These were generally categories of goods and services that are marked by fairly rigid consumer demand; a large influence was clearly exercised by certain foodstuffs that sharply rose in price (bread, sugar, meat and prepared meat products), and by fuels and municipal services. Excluding these prices meant that the growth indices for various measures of core inflation were below the CPI, running 0.6-2.2 points lower in July, 0.1-1.8 points lower in August, and 0.4-1.6 points lower in September. Nonetheless, annualised core inflation rates, particularly those obtained by excluding officially controlled prices, and also by excluding the most volatile prices and fuel prices, remained at a relatively high level, implying that the prices included in calculating core inflation were also subject to considerable growth.

The rate of core inflation obtained by excluding officially controlled prices from the CPI rose to 11% in July, but then trended downwards in the remaining months of the third quarter (cf. Fig. 6). The acceleration of growth in prices considered to be determined by market forces was fuelled by price increases for certain foodstuffs; those worthy of mention include bread, sugar, eggs, cheese, pork and prepared meats. A substantial rise was reported in service prices, particularly charges for housing and housing occupancy, while in

Figure 6
CPI vs core inflation, excluding officially controlled prices
(corresponding month previous year = 100)

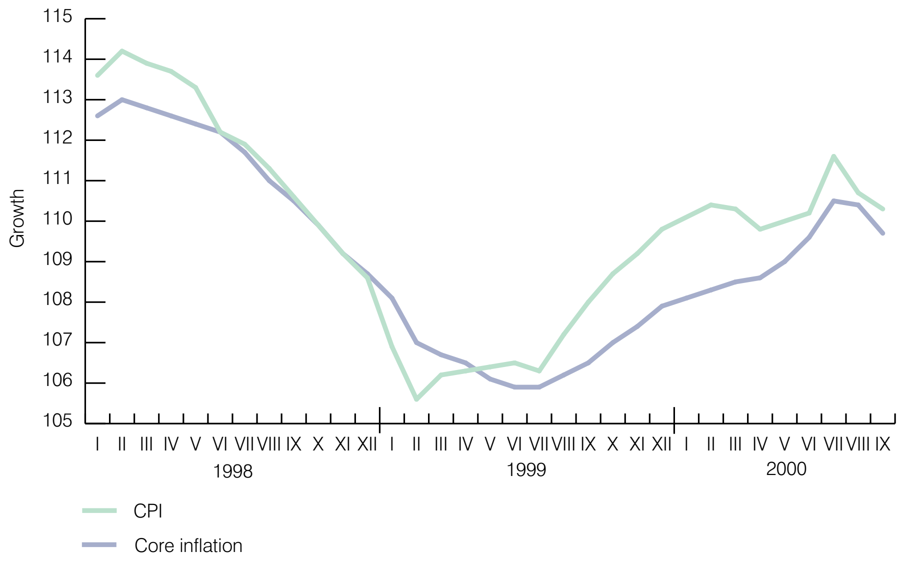


Source: NBP calculations based on GUS figures.

the category of non-food articles a significant contribution to this measure of core inflation was made by the prices of medicines and hard coal. As regards the officially controlled prices excluded from this measure, fuel prices, transport fares and telephone rental charges all played a major role in pushing up headline inflation, as did cigarette prices and electricity and gas charges, yet the exclusion of these failed to produce a visible reduction in this rate of core inflation.

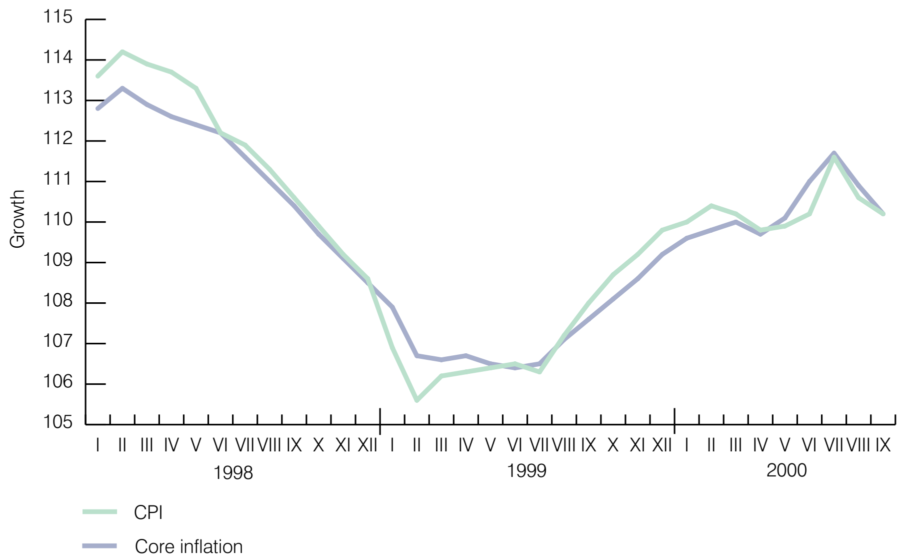
Figure 7 illustrates core inflation as adjusted to exclude from the CPI those prices that exhibit the highest volatility, which include fuel prices. The exclusion of these prices caused this measure of core inflation to run below the CPI. Despite this, however, this rate of core inflation continued to be very high in the third quarter, as was the case with the previous measure of core inflation discussed above, due to the rising prices of various foodstuffs, particularly sugar, bread, flour, pork, processed meats and cheese. The prices boosting this measure of core inflation included those for hard coal, medicines and cigarettes, and for housing occupancy services, all of which were relatively high.

Figure 7
CPI vs core inflation, excluding most volatile prices and oil prices
(corresponding month previous year = 100)



Source: NBP calculations based on GUS figures.

Figure 8
CPI vs core inflation, excluding most volatile prices
(corresponding month previous year = 100)



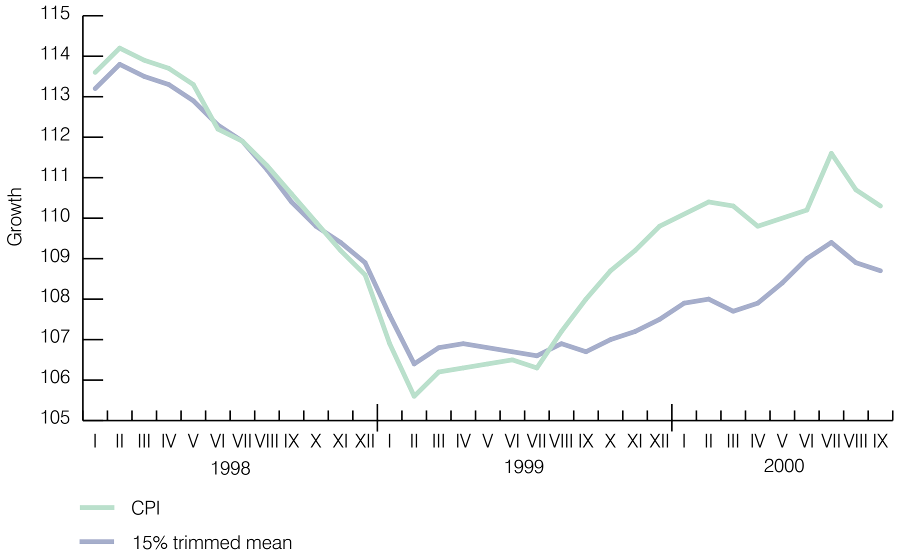
Source: NBP calculations based on GUS figures.

The powerful impact exerted by fuel prices on this measure of core inflation, and indeed on overall CPI inflation, is evidenced by the next version of core inflation (cf. Fig. 8), which differs from the preceding one only as regards fuel prices, which this time have been retained as a component. The rate of core inflation thus obtained ran at a level similar to the CPI, demonstrating that the price growth of the consumer goods and services included within this measure was as strong as that of overall CPI growth.

Figure 9 presents core inflation as adjusted for the outlying 15% of prices subject to the greatest change relative to the preceding period (15% trimmed mean inflation); since the beginning of 2000, this measure of core inflation had been well below the CPI, averaging 2 points less. This lower rate is attributable to the exclusion of those goods and services whose prices were strongly instrumental in raising the headline CPI rate in the third quarter (municipal and telecommunications services, bread, cheese, and also sugar and fuels). The increase nevertheless seen in core inflation as thus calculated can be ascribed to the continuation of steep growth in such prices as those of pork and processed meats, hard coal, medicines, cigarettes, and energy.

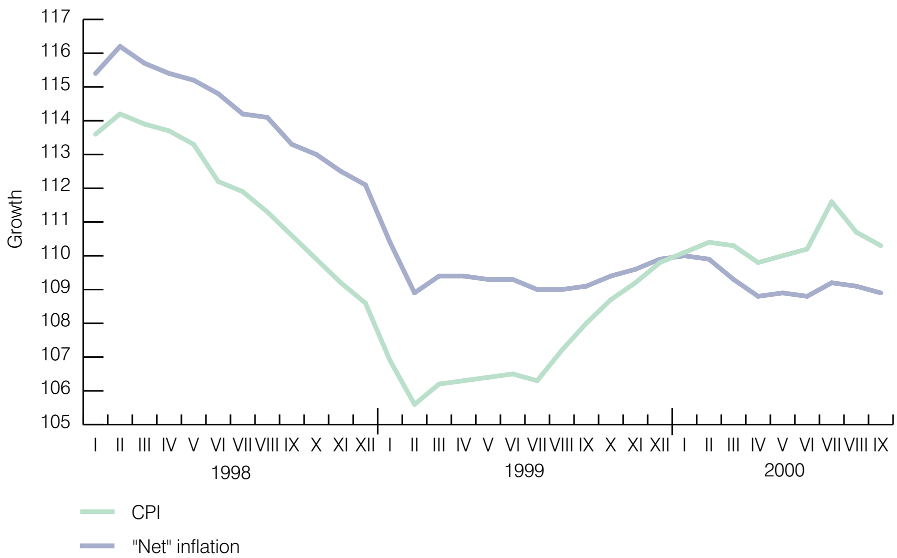
“Net” inflation (cf. Fig. 10), i.e., core inflation as obtained by eliminating the prices of foodstuffs and non-alcoholic beverages, and also fuel prices, began to run below overall price growth as of January. This is traceable to the sharp price growth seen in the categories excluded, primarily fuels, but also many foodstuffs, such as bread and flour, which is associated with the limited market supply of grain products due to the earlier drought. Sugar prices almost doubled compared to the third quarter of 1999, a development stemming from the high degree of monopolisation that characterises this particular market. Higher growth was also seen in the group of food prices that includes pork and processed meats, and also cheese and eggs. Nonetheless, from March onwards “net” inflation held relatively steady at around 9%. As was the case with the other measures of core inflation already discussed, a slight speedup in this rate of inflation was evident compared to the second quarter of the year owing to rising prices for non-food articles such as hard coal and medicines, and to higher transport fares, housing occupancy charges, and also energy prices.

Figure 9
CPI vs 15% trimmed mean
(corresponding month previous year = 100)



Source: NBP calculations based on GUS figures.

Figure 10
CPI vs "net" inflation, excluding food and fuel prices
(corresponding month previous year = 100)



Source: NBP calculations based on GUS figures.

All the particular measures of core inflation displayed a similar tendency in the third quarter of 2000, i.e., they peaked in July, to come down gradually thereafter, right until the end of the quarter. The differences between the respective rates of core inflation involved their relationship to headline inflation. The only one which exceeded overall consumer inflation throughout the third quarter was the rate of core inflation as obtained by excluding those prices that exhibit the highest volatility. At the same time, this is the sole measure of core inflation to include fuel prices. Although annualised growth in fuel prices slowed very sharply in August, and remained at a similar level in September, fuel prices have nonetheless been directly accelerating overall consumer price growth. This becomes apparent when core inflation as adjusted for both the most volatile prices and fuel prices (Fig. 7) is compared to core inflation as adjusted only for the most volatile prices (Fig. 8). Neither did the measure of core inflation obtained by excluding officially controlled prices remain below overall consumer inflation over the whole quarter. This rate of core inflation exceeded CPI inflation in August (cf. Fig. 6). This was rooted in the rapid annualised growth of foodstuff prices, with this particular measure of core inflation including all food prices, which in the period in question acted to push up inflation. This conclusion is further confirmed by the figures on "net" inflation, which excludes foodstuff and fuel prices from the headline rate (cf. Fig. 10). All in all, the rates reported for the various measures of core inflation reaffirm that the principal threats to the process of disinflation continue to be movements in food and fuel prices.

Producer prices in industry and construction

In September 2000, industrial producer prices were 8.3% higher than they had been in the corresponding period of the previous year (as against growth of 6.2% in September 1999). The faster increase in 2000 can be traced to stronger price growth in the sections of mining and quarrying (up 12.2%, as against 5.9%) and manufacturing (up 7.9%, as against 5.4%), while price growth in the section of electricity, gas and water supply fell from 11.0% in September 1999 to 9.5% in September 2000.

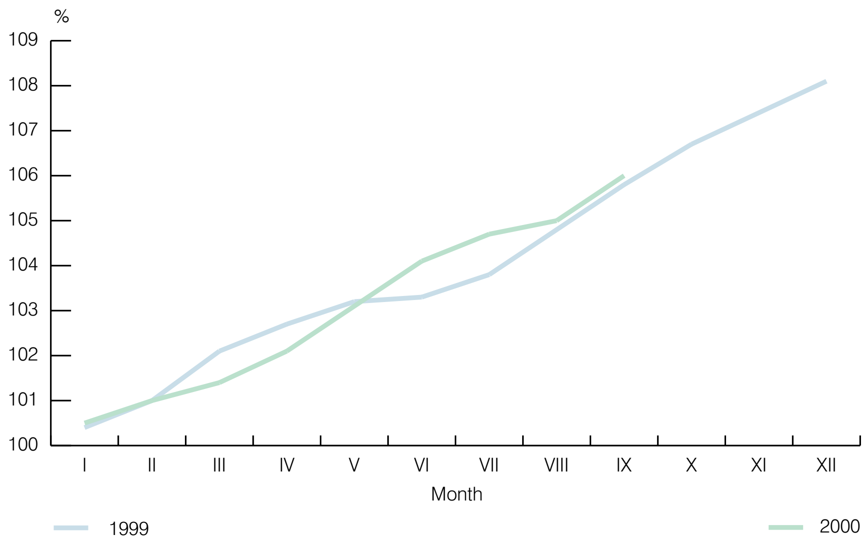
Producer price growth remained high in those divisions of the economy where prices are not fully governed by market mechanisms due to the high degree of market monopolisation, very high sales concentrations, the application of instruments of price regulation, or a policy of protecting the domestic market. In the division of manufacture of coke, refined petroleum products and related products, prices were up 34.7% year-on-year (compared to 39.2% in 1999), in manufacture of pulp, paper and paper products they were up 16.0% (compared to 4.1%), and in manufacture of food products and beverages they were up 10.6% (as against 3.7%).

On a year-to-date basis, industrial producer prices had risen 6.0% by the end of September (compared to 5.8% a year earlier) - cf. Fig. 11. This swifter growth in industrial producer prices was the result of prices climbing faster in the section of mining and quarrying, where they went up 3.2 points to 8.1%, and in manufacturing, where they went up 0.3 points to 5.4%. In the section of electricity, gas and water supply, price growth was more restrained than a year previously, coming down 1.4 points to 9.2%. Given that, by value, in 1999 manufacturing output constituted the overwhelming majority of total industrial output (84.3%), it was the more rapid producer price growth reported in this section that played the greatest role in determining the pace of overall producer price growth. The price movements referred to above are presented in Figures 12, 13 and 14. From August onwards, the manufacturing producer price index began going up more slowly than in the second quarter of 2000, although remaining higher than a year previously (cf. Fig. 13).

In September 2000, the Consumer Price Index was 1.0 points higher than the industrial Producer Price Index (a year earlier, the difference had been 0.8 points). The widening gap between these two indices signifies that the impact of producer prices on consumer prices is declining.

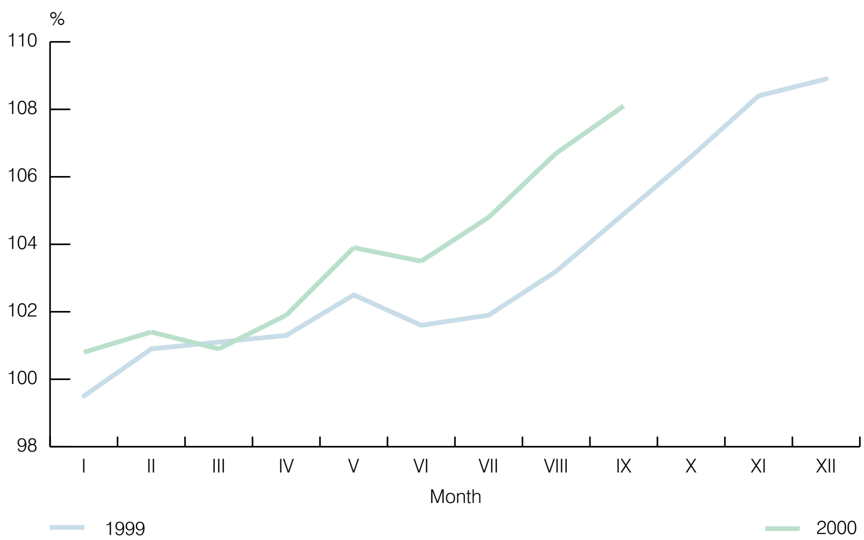
Industrial producer prices rose 2.1% in the third quarter (relative to their level in the second), as against a corresponding increase of 1.6% twelve months before. This 0.5 point higher growth compared to the previous year was the end result of faster producer price growth in all sections of industry, with prices in electricity, gas and water supply up 2.5 points to 3.3%, those in mining and quarrying up 1.7 points to 3.3%, and those in

Figure 11
Industrial producer prices, overall indices
(December previous year = 100)



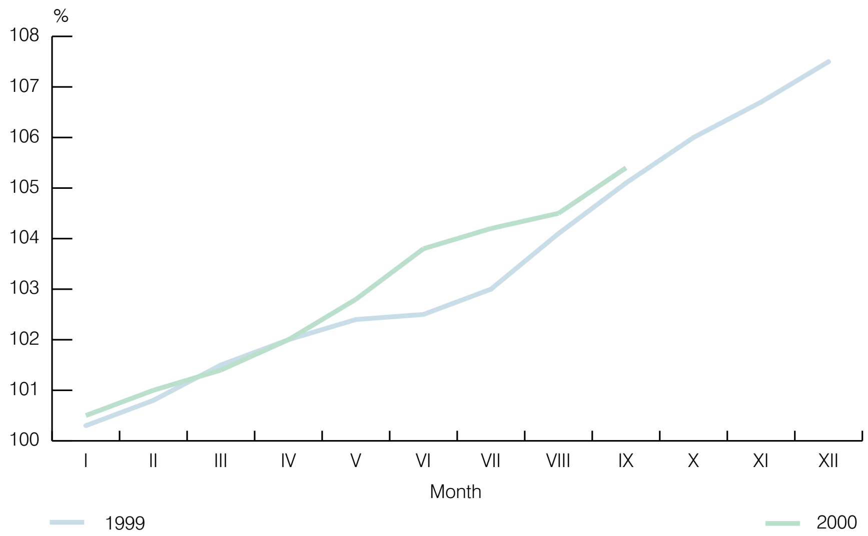
Source: GUS.

Figure 12
Producer price indices, mining & quarrying
(December previous year = 100)



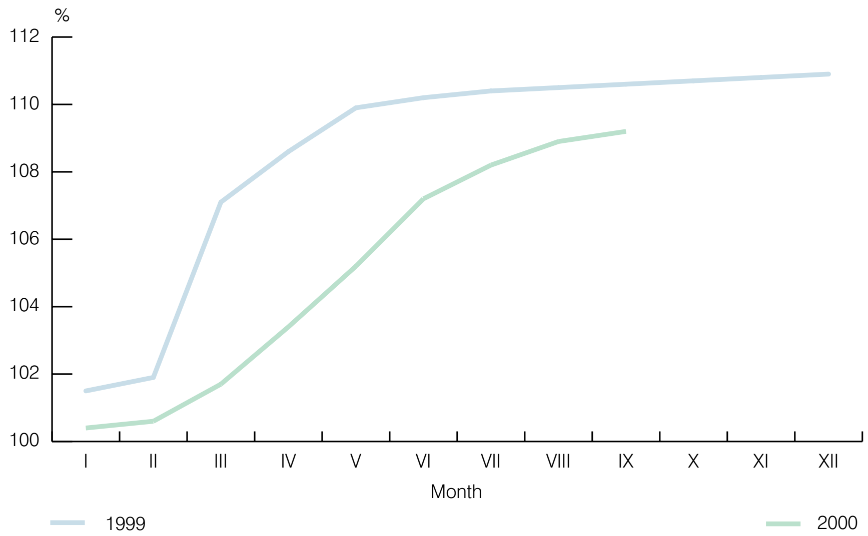
Source: GUS.

Figure 13
Producer price indices in manufacturing
(December previous year = 100)



Source: GUS.

Figure 14
Producer price indices: electricity, gas & water supply
(December previous year = 100)



Source: GUS.

manufacturing up 0.1 points to 1.8%. Thus, the more rapid price growth recorded in industry in the third quarter of 2000 was mainly concentrated in those sections where producer prices are not fully subject to market mechanisms.

Overall, the rate of producer price growth reported in industry during the third quarter was the same as that seen in the second. A substantial acceleration of growth took place in mining (up 1.3 points), yet at the same time growth slowed in electricity, gas and water supply (down 1.0 points).

The 2.1% quarterly growth in industrial producer prices registered in the third quarter of 2000 was accompanied by a 1.8% increase in the volume of output. Thus, price growth clearly outstripped output growth. This represents a reversal of the tendency seen a year earlier, when prices rose more slowly than output (going up 1.6%, as against 5.0%). Thus, the slackening of demand growth as measured by the volume of industrial sales did not prevent producers from raising their prices.

Table 2 sets out those divisions of industry that reported the highest quarterly producer price indices in the third quarter, with price growth of over 1.0%.

In the third quarter of 2000, producer price growth exceeded CPI growth in 4 divisions (out of 21). The strongest growth was seen in divisions producing articles that account for a significant portion of living costs and are included in the consumer price basket, i.e., manufacture of coke, refined petroleum products and related products, and manufacture of food products and beverages. In these divisions, the producer price indices were also higher than those for the second quarter of 2000. This could generate pressure for higher consumer prices in the future.

The third quarter brought a 2.1% decrease in producer prices in the division of manufacture of tobacco products (as against a 3.3% increase a year before), and a 0.4% decrease in manufacture of rubber and plastic products (as against an increase of 0.7%).

In construction, producer prices were up 8.1% in September 2000 compared to the corresponding period of 1999 (a year earlier, the increase had come to 8.2%). This represented the end result of 8.0% price growth in the division of "building of complete constructions or parts thereof; civil engineering" (as against 7.7% a year before), and 9.7% price growth in the division of "building installation" (as against 10.7%).

Table 2
Divisions of industry reporting fastest quarterly producer price growth, Q3 2000

	Division	Q3 1999	Q2 2000	Q3 2000
			previous quarter = 100	
1	Manufacture of coke, refined petroleum products and related products	114.3	106.5	107.7
2	Manufacture of food products & beverages	102.0	102.2	103.7
3	Manufacture of pulp, paper & paper products	100.7	105.0	103.0
4	Manufacture of wearing apparel; dressing and dyeing of fur	100.1	99.7	101.7
5	Manufacture of metals	100.9	102.9	101.5
6	Manufacture of textiles	100.3	100.3	101.1

Source: GUS.

Table 3
Producer price indices, construction

	Division	Q3 1999	Q2 2000	Q3 2000
			previous quarter = 100	
1	Construction	101.5	102.6	101.4
2	– building of complete constructions or parts thereof; civil engineering	101.4	102.5	101.4
3	– building installation	101.6	103.4	101.3

Źródło: dane GUS.

Table 3 presents quarterly producer price indices in construction.

Construction price growth in the third quarter of 2000 was slower than twelve months previously, and was considerably down on the second quarter.

FACTORS CONDITIONING THE MONEY SUPPLY IN THE THIRD QUARTER OF 2000

The money supply and prices on financial markets

The money supply

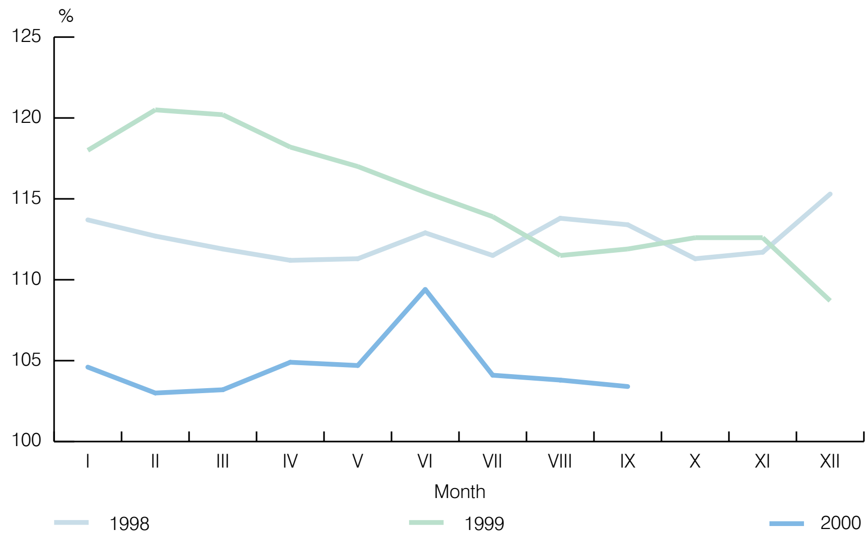
At the end of September 2000, the total money supply stood at 280.6bn zloty[10]. Compared to the end of the second quarter, this represented a decline of 4.3bn zloty, signifying a contraction of the money supply by 1.5% in nominal terms and 2.9% in real terms. However, it should be emphasised that the figures for June do not provide a good basis for analysing growth in the money supply and its particular components in the third quarter of 2000. This is because the figures in question were substantially distorted at the end of June due to the mass subscription for shares in the PKN ORLEN SA Polish Oil Corporation[11]. An analysis of year-on-year indices makes it possible to eliminate this distortion. In the course of the third quarter, annualised nominal money supply growth stood at around 15.0%. In real terms, monetary expansion did not exceed 5.0% year-on-year in any of the particular months of the quarter (cf. Fig. 15). At the same time, this analysis of annualised figures indicates that since April 2000 total money supply growth has steadied at a level much lower than that witnessed in previous years.

At the end of September, the zloty deposits held in the Polish banking system by the non-financial sector totalled 201.1bn zloty. The sharp decrease in these deposits relative to the end of the second quarter is again related to the distorted figures reported for June. The result of this was that July brought a decline in deposits of 8.4bn zloty, representing a nominal fall of some 4.1% (4.8% in real terms). However, zloty balances began to increase again from August onwards, and the decline

[10] The total money supply is defined as the sum of domestic money stocks and foreign currency deposits taken from the non-financial sector. *Domestic money stocks* represent the sum of notes and coin in circulation (excluding vault cash) and zloty balances held at banks by the non-financial sector (corporates and persons).

[11] The impact of this factor on movements in various monetary categories was described in the *Inflation Report* for Q2 2000 (p. 28).

Figure 15
Total money supply growth, real terms
(corresponding month previous year = 100)



Source: GUS and NBP.

finally recorded over the whole of the third quarter came to 4.3bn zloty (a fall of 2.1% in nominal terms and 3.4% in real terms).

The year-on-year growth in non-financial sector deposits exhibited a clear correspondence with annualised growth in the total money supply. The particular months of the third quarter brought nominal growth in the region of 17.0%, equivalent to real growth of around 5.5%. It is worth stressing that this stabilisation of growth, began in January 2000, occurred following a systematic decline in the annualised growth of non-financial sector deposits which lasted throughout 1999.

At the end of the third quarter of 2000, corporate zloty balances at the banks totalled 56.0bn zloty, which represents a nominal decrease in these balances of 12.2% compared to the end of the second quarter, and a decrease in real terms of 13.4%. The main cause of this was a steep fall in corporate zloty balances in July (down 8.9bn zloty, or 14.0% on a nominal basis). In August and September, the absolute increase recorded in these deposits was relatively modest (0.7bn zloty and 0.4bn zloty, respectively).

With the exception of June, all the months of 2000 have so far brought year-on-year indices of corporate zloty deposit growth that were lower than in the corresponding months of 1999. It may be inferred that one reason for the slowdown in the growth of these deposits seen since the beginning of 2000 has been that companies have been increasingly inclined to invest their surplus funds on the stock market or in investment funds[12].

At the end of the third quarter, personal zloty balances at the banks amounted to 145.1bn zloty. This constitutes an increase of 3.5bn zloty on the end of June, equivalent to nominal quarterly growth of 2.5% and real growth of 1.0%. The upward trend in annualised growth in these deposits, begun in January 2000, was thus sustained (cf. Fig. 16). However, it should be noted that, despite the higher interest rates available on bank deposits, the continued maintenance of this trend is not encouraged by the waning growth in real wages observable since the start of the year. In particular, year-to-date growth in real average employee earnings (gross) in the corporate sector stood at 3.5% at the end of June, yet by the end of September this had slipped to 2.4%[13].

A factor that could potentially increase the propensity of consumers to place their funds on bank accounts is the rise in zloty deposit rates in the wake of increases in the central bank's base rates carried out by the Monetary Policy Council[14]. From September 1999 to September 2000, weighted average rates on time deposits at the commercial banks climbed just over 3.4 points, from 10.5% to 13.9% p.a.[15] It should be noted, however, that deposit rates cannot be considered the sole determinant of the opportunity cost of holding funds. The systematic expansion of the product mix offered by investment funds, and the more active role of the Ministry of Finance in securing funding via the issue of "savings bonds" for retail investors, have enhanced the appeal of savings vehicles other than bank deposits.

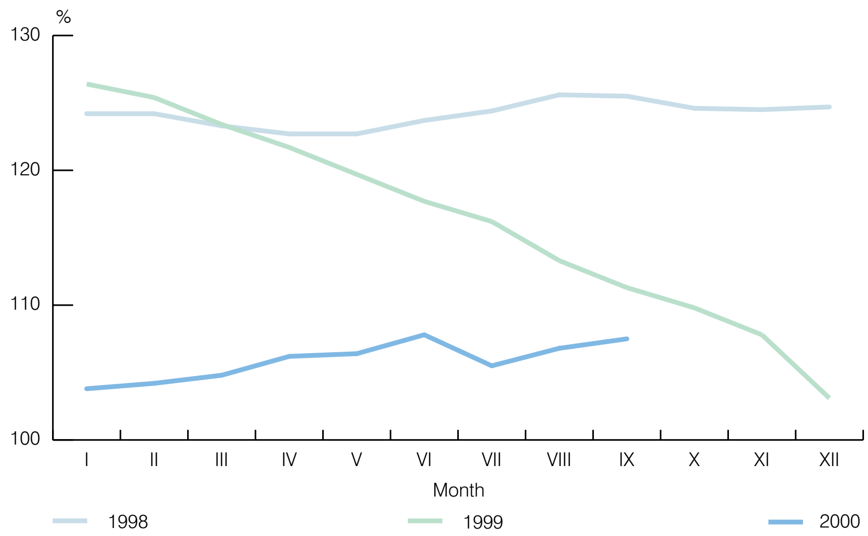
[12] Figures for the end of September 2000 show that investment funds operating on the domestic financial market were at that point managing assets of around 6bn zloty, i.e., over double the amount reported at the beginning of the year. This year, particular interest has been shown in "dividend funds" for corporate investors, which tripled the size of their portfolios in September alone. These currently hold assets of some 3bn zloty.

[13] Includes profit-sharing bonuses.

[14] The first rate hike was performed in September 1999, with subsequent ones in February and August 2000.

[15] The scale of the rate increases involved may prove greater once the banks make available information for October. It was not until that month that some of the banks raised their deposit rates in response to the August hike by the Monetary Policy Council.

Figure 16
Personal zloty deposits growth, real terms
(corresponding month previous year = 100)



Source: GUS and NBP.

Figures for the end of September 2000 show that non-financial sector customers were holding foreign currency balances at the banks to a total value of USD 9.9bn. In the course of the third quarter, there was a slight decrease in these balances, which slipped USD 240m. The main factor in this was a USD 270m fall in corporate deposits. Personal deposits rose USD 30m in that same period.

Expressed in zloty, the foreign currency deposits held by the non-financial sector at the end of the third quarter of 2000 stood at 44.8bn. Compared to the end of June, this represents an increase of 0.4bn zloty. This gives nominal quarterly growth of 0.9%, yet a decline in real terms of 0.5%[16].

The third quarter brought a fall in the zloty value of the corporate foreign currency balances held at the

[16] At the end of September 2000, the zloty/dollar exchange rate stood at USD/zloty = 4.5404. At June 30, 2000, the exchange rate had been USD/zloty = 4.3907. The depreciation of the zloty (3.4% over the quarter) was thus substantially greater than the nominal growth of non-financial sector foreign currency deposits in zloty terms. Without taking into consideration the exchange-rate effect, the zloty value of these deposits would have gone down 1.1bn in the third quarter.

banks. At the end of September, this stood at 11.0bn, whereas at the end of the second quarter of 2000 it had been 11.8bn. The absolute decrease therefore came to 0.8bn zloty, equivalent to a nominal decline of some 7.0% (8.3% in real terms)[17].

At the end of September, the balance on personal foreign currency deposits at the banks, as expressed in zloty, stood at 33.9bn. This constituted an increase on the end of the second quarter of 1.2bn., signifying growth of 3.8% and real growth of 2.4%[18]. It is worth stressing that monthly movements in these deposits largely corresponded to movements in the zloty/dollar exchange rate. This stems from the fact that the great majority of personal foreign currency deposits (some 80.0%) are denominated in dollars, with the dollar value of those deposits fluctuating only slightly during the third quarter.

The volume of notes and coin in circulation at the end of September 2000 amounted to 34.7bn zloty. This represents a year-to-date decrease in cash stocks of 3.4bn zloty[19]. This absolute decline in cash stocks in 2000 occurred for the first ever; in previous years, these stocks had increased. Further, an analysis of nominal year-on-year growth in notes and coin confirms that the successive months of 2000 brought a systematic downward trend in this category (cf. Fig. 17). Compared to the end of the second quarter, cash stocks fell 0.4bn zloty, equivalent to a nominal quarterly decrease of 1.2%, and a real decrease of 2.6%. The contraction in the volume of notes and coin in circulation observed in 2000 is undoubtedly linked both to the slowing growth of personal incomes and to the rapid increase in the role played by non-cash settlements[20].

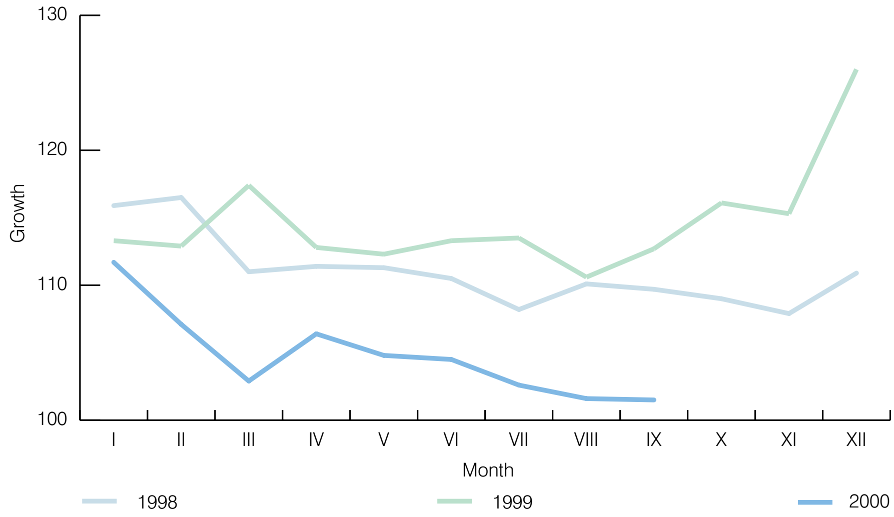
[17] Had it not been for the depreciation of the zloty relative to the US dollar, the fall in the zloty value of these deposits would have been even greater, coming to 1.2bn. It should be underlined, however, that most of the foreign currency assets held at the banks by corporates are in the form of deposits denominated in euros or Deutschemarks (at the end of September 2000, the proportion of D-mark and euro deposits in total corporate foreign currency balances stood at around 56.0%, with the remaining 44.0% denominated in dollars; the figures available refer solely to deposits denominated in these three currencies). In the course of the period in question, the euro weakened against both the dollar and the zloty.

[18] Over the period in question, exchange rate movements caused a 1.1bn increase in the zloty value of personal foreign currency deposits.

[19] It should be noted, however, that the end of 1999 saw heightened demand for cash produced by concern over Y2K. This factor, while short-lived, resulted in a major increase in notes and coin in circulation in December 1999.

[20] The number of bank cards and cash cards is steadily growing, as is the volume of payment transfers. In 1998, the number of cards in use stood at 3.8 million, while at the end of Q2 2000 it came to 9.7 million.

Figure 17
Growth of notes & coin in circulation (excluding vault cash), nominal terms
(corresponding month previous year = 100)



Source: NBP.

The basic factors behind the levelling off of total money supply growth during the third quarter of 2000 were the maintenance of the downtrend in the growth of notes and coin in circulation and the modest increase in corporate zloty deposits. These developments would appear to be structural in nature. Their root cause should be sought in the broader range of services being offered by financial institutions, especially in the area of non-cash settlements, and also in providing savings vehicles that compete with bank deposits. In the period under review, a fairly large role in constraining total money supply growth was also played by the tendencies witnessed on the currency market, particularly the declining value of the euro in relation to both the US dollar and the zloty. On the other hand, it is worth emphasising the upward trend in personal zloty deposits observable since the beginning of 2000. This can be interpreted as reflecting a growing propensity to save.

Counterparts to changes in money stocks

The third quarter of 2000 brought a decline in the money supply, the result of a reduction in general gov-

Table 4
Counterparts to changes in money stocks, 2000 (million zloty)

	Period change		
	Q1	Q2	Q3
Total money supply	**-1 475.7**	**22 907.0**	**-4 296.0**
Net foreign assets	4 738.2	6 857.1	112.9
Claims on persons & corporates	8 105.7	19 383.3	677.1
General government sector debt	-9 441.9	3 480.9	-728.6
Other items, net	-4 877.7	-6 814.3	-4 357.4

Source: NBP (Banking System Statistics).

ernment indebtedness and in other items (net). Factors fuelling money supply growth within the banking system were the increase in **claims on persons and corporates**, and in net foreign assets. This is illustrated in Table 4.

Claims on persons and corporates[21] represented 72.7% of the total money stocks within the banking system at the end of September 2000[22], with claims on corporates accounting for 56.5%, and those on persons accounting for 16.2%.

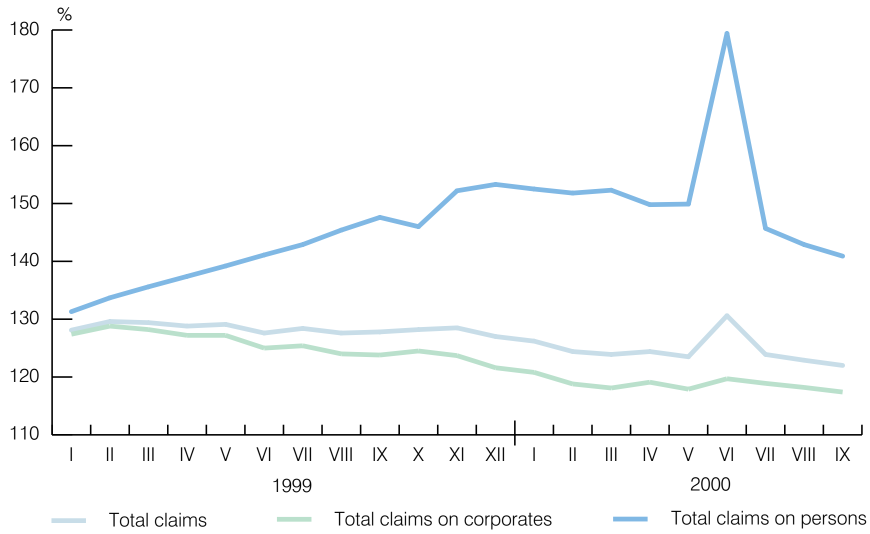
At the end of the third quarter, claims on persons and corporates had risen 22.0% year-on-year. Growth in these claims came down in 2000, and this trend was maintained in the third quarter (cf. Fig. 18). Year-on-year growth in claims on corporates stood at 17.4%, while growth in claims on persons came to 40.9%. In real terms[23], growth in these claims also slowed, to stand at 10.6% at the end of September.

Over the third quarter itself, growth in claims on persons and corporates came to 0.3%, with borrowings in foreign currency up 7.2% and those in zloty up 1.5%. Thus, foreign currency claims increased as a proportion of total claims on both corporates and persons.

Quarterly growth in claims on corporates stood at 3.9% in the third quarter of 2000, as against 4.9% in

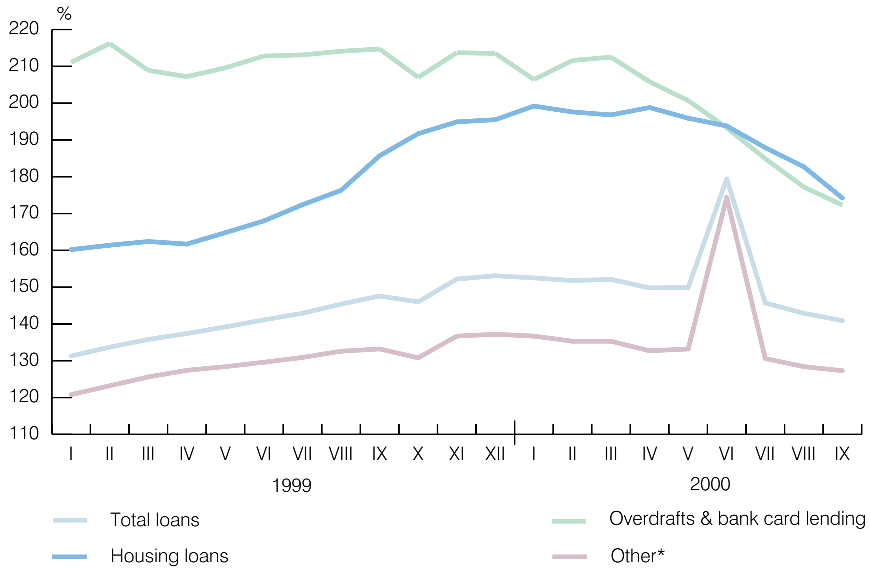
[21] These claims consist of all categories of loan irrespective of risk classification, and also of purchased debt, funds disbursed under guarantees and endorsements, interest receivable, and claims arising on interest subsidies to preferential agricultural loans.
[22] The calculation of these stocks includes other items (net), which chiefly comprise income, capital, interbank and interoffice settlements, suspense accounts, sums due on securities issued and outstanding, sums due to and from other banks, and specific provisions.
[23] As adjusted by reference to consumer price growth, running at 10.3%.

Figure 18
Growth of claims on persons and corporates
(corresponding month previous year = 100)



Source: NBP.

Figure 19
Growth of claims on persons
(corresponding month previous year = 100)



* In line with the classification employed in Banking System Statistics, this item represents the sum total of claims on persons under bills discounted, other loans and advances, purchased debt, funds disbursed under guarantees and endorsements, and interest receivable.

Source: NBP.

Table 5
Total claims on persons, growth & structure

	Change				Structure of claims, at end:	
	Q3		Q1-3			
	1999	2000	1999	2000	September 1999	September 2000
	million zloty				%	
Total personal borrowings at banks						
of which:	**4 046.3**	**-5 224.3**	**8 460.4**	**8 995.5**	**100.0**	**100.0**
– Overdrafts & bank card lending	1 029.7	1 003.1	2 015.3	2 360.9	14.5	17.8
– Housing loans	1 036.2	1 058.7	1 860.6	2 605.1	15.0	18.5
– Other*	1 980.4	-7 286.1	4 584.5	4 029.5	70.5	63.7

* In line with the classification employed in Banking System Statistics, this item represents the sum total of claims on persons under bills discounted, other loans and advances, purchased debt, funds disbursed under guarantees and endorsements, and outstanding interest receivable.

Source: NBP (Banking System Statistics).

the second quarter and 5.9% in the third quarter of 1999. Lower growth in corporate borrowings was also evident in real terms, as adjusted for growth in industrial producer prices.

Growth in claims on persons trended downwards from the beginning of 2000 onwards. This applied to all forms of personal loans and advances made by the banks. Nonetheless, the fastest growth in these loans, albeit waning markedly, particularly in the third quarter, remained that of authorised overdrafts and bank card lending, and also housing loans (cf. Fig. 19). This downward trend can be traced to a number of factors, including the lower growth in real incomes. Reduced demand for consumer loans (including finance for the purchase of cars and household appliances) could also have been related to the rising interest rates on these loans. Lower demand for car loans also stemmed from the increase in fuel prices, in excise duty, and in the expense of third-party vehicle insurance. In addition, the larger sales of durables seen in 1999 (one source of finance being consumer loans) had the effect of deferring demand to future years. Figures on personal borrowings are presented in Table 5.

Short-term claims on the non-financial sector (maturing in up to one year, including overdrafts) grew slightly more slowly in 2000 than long-term claims, whereas a year earlier the tendency had been the reverse[24]. At the end of September, the proportion of short-term claims in total claims had gone down to 41.0%, while a year before it had been 41.6%. In the case of corporate borrowings, this ratio was relatively constant, yet in the case of personal borrowings it increased. Corporates borrowed most heavily under loans maturing in from one to three years, while the greatest personal borrowings were under loans maturing in up to one year, and in over five.

Net foreign assets[25] dropped USD 0.8bn in the third quarter of 2000, to stand at USD 27.0bn at the end of September. In the corresponding period of 1999, the foreign counterpart to changes in money stocks rose USD 1.4bn. The level of net foreign assets was affected by a reduction in the surplus on the capital and financial account, in conjunction with a small decrease in the current account deficit. In addition, movements in currency cross rates (with a strengthening of the US dollar against other currencies, particularly the euro) also contributed to a decline in the value of net foreign assets[26].

The deficit on the current account amounted to USD 2.2bn in the third quarter, down USD 0.8bn on the deficit in the corresponding period of 1999, although remaining flat compared to the second quarter of 2000. This performance on the current balance was primarily determined by a lower deficit on trade in goods and services, and also on income, with the balance on current transfers remaining unchanged and a net surplus on unclassified current transactions of the same size as that reported in the third quarter of 1999.

The deficit on income yielded by the foreign assets and liabilities of domestic counterparties came to USD 0.1bn, a decrease of some USD 0.2bn compared to the same period of 1999. This was caused by an agreement

[24] Claims on the non-financial sector are smaller than claims on persons and corporates, since they exclude claims on insurance companies and other non-bank financial institutions, and also the value of debt securities held and repurchase transactions performed.

[25] Net foreign assets comprise the gross official reserves administered by the NBP and other foreign assets denominated in convertible currencies, less short-term bank liabilities and IMF loans, and other claims on non-residents, such as outstanding loans, securities issued and outstanding, subordinated loans, borrowings with original maturities of over one year, claims in non-convertible currencies, and other illiquid assets.

[26] The impact of movements in the value of the US dollar against other currencies on the level of the official reserve assets, which make up the overwhelming portion of net foreign assets, can be specified precisely. The official reserve assets decreased almost USD 0.6bn in the third quarter of 2000, to stand at USD 25.4bn; assuming that currency cross rates remained constant, however, the reserves would have risen USD 0.4bn.

with creditors to defer a portion of the payments involved in servicing Poland's debt to the Paris Club, since the due date was not a working day (Saturday, September 30).

The surplus on current transfers, standing at USD 0.4bn, was overwhelmingly the result of transactions on the personal foreign currency accounts of Polish residents and other non-official transfers.

The surplus on the capital and financial account in the third quarter of 2000 totalled USD 1.2bn, well below the USD 2.1bn registered in the same period of 1999.

The net inflow of foreign direct investment (FDI) came to some USD 0.9bn, representing a decline of almost USD 1.6bn compared to the third quarter of 1999. This was connected with the postponement of payment for equity in TP SA until October.

The net inflow of foreign portfolio investment in the third quarter of 2000 stood at USD 0.2bn. Foreign investors focussed their attention on Polish equities, with a net investment in these instruments of almost USD 0.3bn, while at the same time there was a net outflow of USD 0.1bn on foreign investment in debt securities. There was also a net outflow abroad of Polish portfolio investment, coming to USD 0.3bn. The end result was thus an outflow of portfolio investment amounting to USD 0.1bn.

Drawings of long-term credits amounted to over USD 0.8bn (compared to USD 1.5bn in the same period of 1999), while repayments totalled almost USD 0.7bn (as against USD 0.5bn).

The third quarter brought a decline in foreign deposits at Polish banks of USD 0.3bn (compared to an increase of USD 0.5bn in Q3 1999). At the same time, Polish banks reduced their placements at foreign banks. The overall balance of outflows and inflows of currency and deposits held by Polish banks at banks abroad came to USD 0.5bn (by comparison, Polish assets abroad had risen nearly USD 2.0bn in Q3 1999).

Net general government indebtedness at the banks shrank 0.7bn zloty in the third quarter, following a strong increase of 3.4bn in the second quarter and a sharp fall of 9.4bn in the first. This was the net result of a 4.2bn zloty increase in claims on general government, combined with a substantial, 4.9bn zloty growth in liabilities to the various components of this sector. Overall, there was a reduction of 0.9bn zloty in the outstanding bank borrowings of central and local government, with a small increase of 0.2bn zloty in the debt of government special-purpose funds.

At the end of September, the net indebtedness of general government stood at 57.9bn zloty, thereby still running much lower than at year end 1999. This figure represents a year-to-date reduction in net government debt of 6.7bn zloty (10.4%).

The movements seen in the net indebtedness of the whole general government sector were most influenced by the financial condition of central government. The borrowing requirements of central government remained high in the third quarter of 2000, with funding required for:

- a government deficit of 3.4bn zloty, and
- a negative balance on international settlements totalling 2.4bn zloty,

together with other expenditure met outside the national budget, including:

  - the payment of compensation for cost-of-living adjustments not performed in the past (1.1bn zloty),
  - the cash redemption of health service debt previously acquired by the banks (around 2bn zloty),
  - the extension of a loan of some 0.5bn zloty to the Social Insurance Board (ZUS).

A major source of finance for central government funding requirements in the period under examination were privatisation receipts, which totalled 3.3bn zloty, chiefly as a result of the sale of the PKN ORLEN oil corporation. It should be emphasised that, for the first time since the beginning of the year, part of the foreign currency proceeds from privatisations were set aside on a government foreign currency account at the NBP[27]. In August, a foreign currency deposit was made to this account, equivalent to 0.9bn zloty (USD 200m). In September, the balance on the account was reduced to 44.2m zloty due to the need to finance foreign debt payments (to the Paris Club) falling due at that time.

Nevertheless, the pronounced increase in privatisation receipts compared to the second quarter of 2000 was considerably less than planned, owing to the non-receipt of the expected proceeds from the sale of equity

[27] This account at the NBP was opened for the purpose of collecting foreign currency privatisation revenues to be applied directly to servicing Poland's foreign debt, and also for the purpose of limiting fluctuations in zloty exchange rates on the domestic market.

in TP SA (some 18.6bn zloty). To ensure ongoing liquidity, central government was compelled to hold additional Treasury bill tenders. With funding requirements high, the Ministry of Finance made more Treasuries available for sale, causing their price to come down.

Yields on government paper continued to run high in the third quarter of 2000, contributing to mounting demand from non-bank institutions. The outstanding debt of central government to the non-banking sector rose 3.1bn zloty in this period, as against 1.4bn zloty in the second quarter.

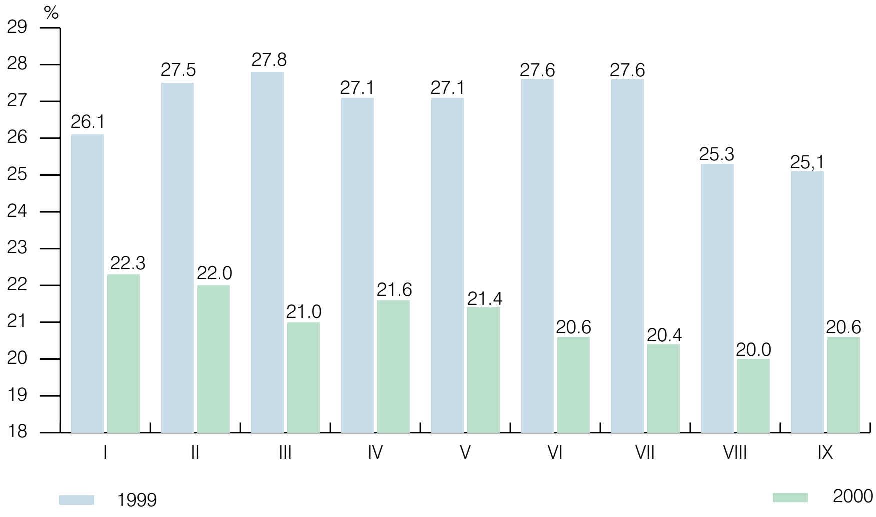
As a result of these operations by the Ministry of Finance (which increased the expense of servicing the domestic debt), central government was able to satisfy its ongoing funding needs, while also setting aside a sizeable sum on government accounts within the banking system. In the course of the third quarter, the balance on these accounts climbed almost 4bn zloty, with the zloty account at the NBP rising 1.2bn zloty, to stand at 2.3bn zloty at the end of September.

Local government saw its net indebtedness decline over the period in question. This stemmed from a larger increase in bank balances than in amounts due to the banks. The growth in local government liabilities to the banks witnessed in the third quarter was probably associated with loans being taken out to finance pay rises for teachers after amendments had been made to the Teachers' Charter, for which the relevant funding provisions had not been made in the Budget, and also with an increase in outstanding debt on local authority securities issued to finance capital spending projects.

In the third quarter of 2000, as in the preceding quarters, the net debt of government special-purpose funds continued to grow. This was related to the continuing adverse financial condition of the Social Insurance Fund, and to problems with maintaining the liquidity of the Employment Fund, due to an increase in payouts of unemployment benefit and pre-retirement benefit. The rise in claims on special-purpose funds can be attributed to the drawing of a loan by the Employment Fund to ensure the funding required to make statutory benefit payments[28].

[28] The Employment Fund has obtained the right to take out loans and advances to ensure the funding required to make payments of benefits, pre-retirement benefits and pre-retirement allowances (under amendments to the Act on Employment and Combatting Unemployment, July 2000).

Figure 20
General government debt (net) in the total money supply



Source: NBP.

ZUS, on the other hand, made use of the 2bn zloty loan facility guaranteed to it by central government for the year 2000. At the end of September, ZUS borrowed 490m zloty from central government to meet ongoing payments of old-age and disability pensions, which raised the bank balances held by special-purpose funds, as these loan proceeds had not yet been utilised.

The fall in net government debt to the banks seen in the third quarter of 2000 does not imply any significant weakening of the role played by general government in stimulating growth in the total money supply, due to the monetary consequences of central government borrowing requirements being financed via privatisation revenues (thereby pushing up the volume of net foreign assets).

The contribution made by net general government indebtedness to the total money supply in the first three quarters of 1999 and 2000 is outlined in Figure 20 (period end figures).

Over the third quarter of 2000, a decrease of 4.4bn zloty was recorded on **other items (net)**. It should be noted, however, that the movements seen in these items in this quarter did not diverge substantially from those registered in the previous quarters of 2000.

Transmission mechanisms

The interest rate channel

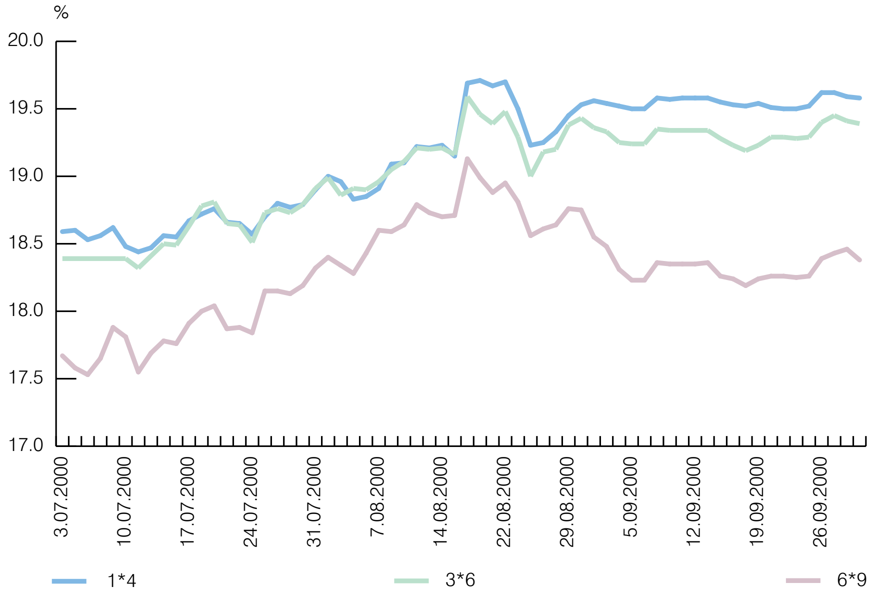
In the third quarter of 2000, expectations that a rate rise was in the offing began to become visible on the money market. These expectations appeared on the market for forward rate agreements (FRAs) right at the beginning of the quarter (cf. Fig. 21). One factor behind this was the rise in food prices, which reduced the likelihood of inflation slackening. While interbank deposit rates did not begin to move upwards until August, the large differential persisting earlier between rates on 3- and 6- month deposits and those on 1-month money testified to the market working on the assumption that a rise in NBP rates was highly probable (cf. Fig. 22).

Rates on 3- and 6-month deposits began to climb when fears emerged that government intervention on the market for agricultural produce was too little and too late to curb food price growth. Rates on interbank deposits and FRAs soared in mid-August on the publication of figures showing inflation at over 11% in July. Market rates then dipped temporarily following news that food prices had fallen in the first half of August, rising once again after the NBP raised official rates on August 30.

Although July and August were dominated by expectations of an NBP rate hike, it was also thought that this hike would be the last. This flowed from investor assumptions that the moment was approaching when inflation in Poland would begin to come down. However, it was not believed that a slowdown in inflation would produce any relatively rapid drop in interest rates. This is evidenced by the rates on FRAs in September. The stability of rates on FRAs settling in one month and in three, with a clear parallel decline in rates on FRAs maturing in six months, indicates that the market felt a cut in NBP rates would not be possible until the first quarter of 2001.

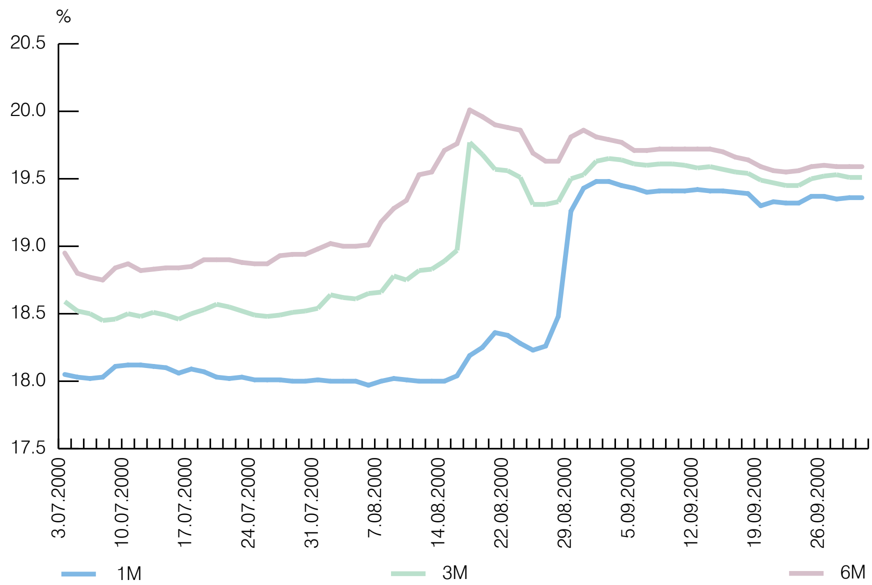
As in previous quarters, the most active segment of the interbank money market, where trading was heaviest, was the market for FX swaps. This attests to the relatively high rate volatility on synthetic zloty loans and deposits, the instruments traded on the FX swap market, compared to the fairly low volatility of rates on interbank deposits for the same maturities (cf. Fig. 23).

Figure 21
FRA rates



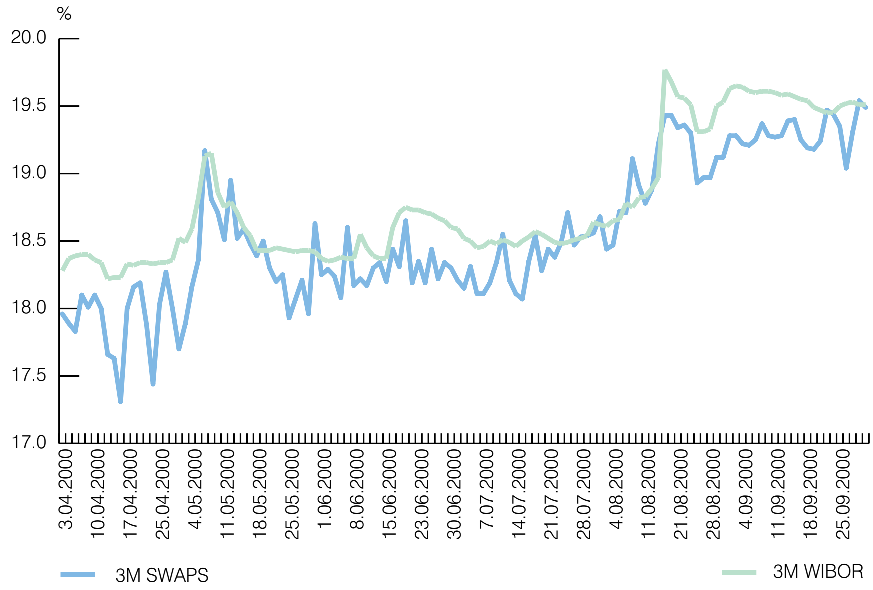
Source: Reuters, NBP calculations.

Figure 22
WIBOR (Warsaw Interbank Offered Rates)



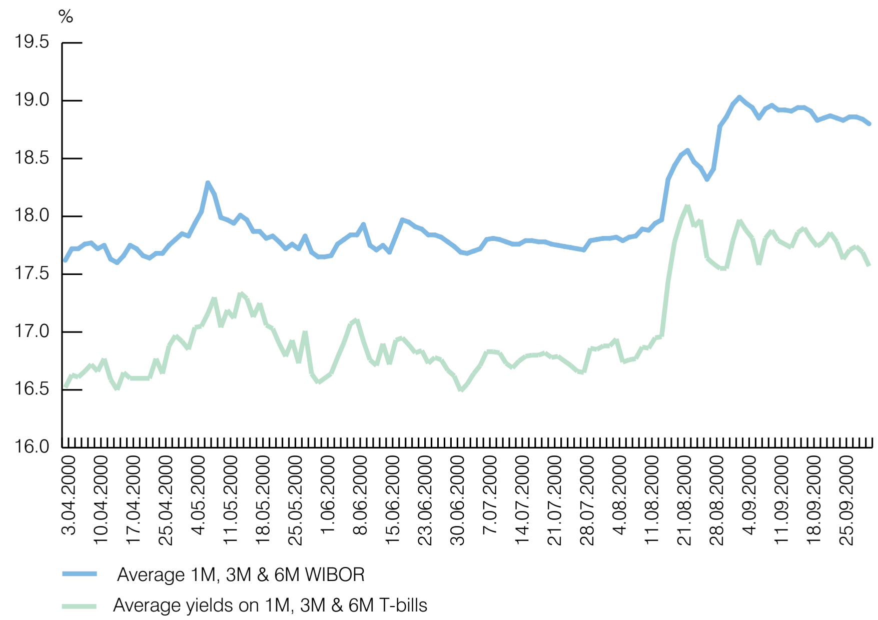
Source: Reuters, NBP calculations.

Figure 23
Rates on interbank deposits and FX swaps



Source: Reuters.

Figure 24
Average interbank deposit rates & T-bill yields



Source: Reuters, NBP.

The fact that FX swap rates oscillated around the rates quoted for interbank deposits indicates the presence of arbitrage trading on the market. The spread between swap and deposit rates reflects both the greater liquidity of swaps and the impact on interbank rates of deposits being subject to reserve requirements (domestic banks are not required to hold regulatory reserves against FX swaps carried out with foreign counterparties, yet they are required to do so against deposits taken from such counterparties; this results in a difference in the cost of funds to the bank).

Signs of arbitrage developing are also in evidence on the T-bill market, which reflects the relatively stable risk premium embedded in the spread between Treasury bills and interbank deposits (cf. Fig. 24).

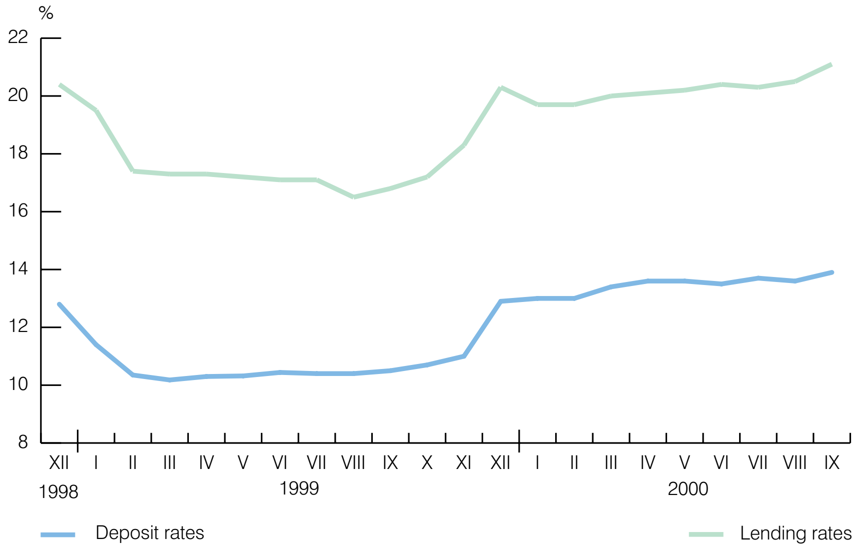
Reaction of commercial bank interest rates to central bank policies

During the first two months of the third quarter, deposit and lending rates at the banks held steady. In the wake of the Monetary Policy Council resolving to raise all NBP interest rates by 150 bps, rates also went up at the commercial banks. This primarily involved rates on corporate loans and deposits. Rates on personal loans and deposits rose much less. Some banks did not respond to August's NBP rate hike until October; a full picture of the consequences of that rate adjustment will therefore be presented in the next *Inflation Report*.

Rates on personal time deposits went up 0.3 points over the quarter, going up 0.2 points in September alone, i.e., after the Monetary Policy Council had increased official rates. The largest rise was on deposits with shorter maturities (1 and 3 months), while the smallest was reported for 12-month deposits. Lending rates for personal customers also increased 0.3 points in the course of the quarter, again rising 0.2 points in September.

Rates on corporate time deposits rose 0.6 points over the third quarter, with 0.5 points being added in September. The steepest increase was in deposits with short original maturities of 1, 3 and 6 months. The much sharper growth in deposit rates for corporates than for persons was no doubt linked to the relatively low, and steadily dwindling, corporate demand for

Figure 25
Deposit & lending rates, weighted averages



Source: NBP.

deposit products. NBP figures indicate that holdings of T-bills on corporate accounts were similar to those at the end of the preceding quarter, and substantially lower than in the corresponding months of 1999. Thus, it was not movements in holdings of Treasury paper that lay behind the weak interest displayed in bank deposits. It may be surmised that the alternative assets attracting corporates were units in investment funds (dividend funds); for tax reasons, corporate investment in these funds increased greatly.

Corporate lending rates, which are largely contingent on interbank rates, went up 0.9 points over the quarter, with 0.7 points of this growth occurring directly after the rise in official rates. The increase in rates was virtually identical for all kinds of loan.

The spread between rates on all time deposits and on loans widened from 6.9 points to 7.2 points (cf. Fig. 25).

Interest rates and loan demand

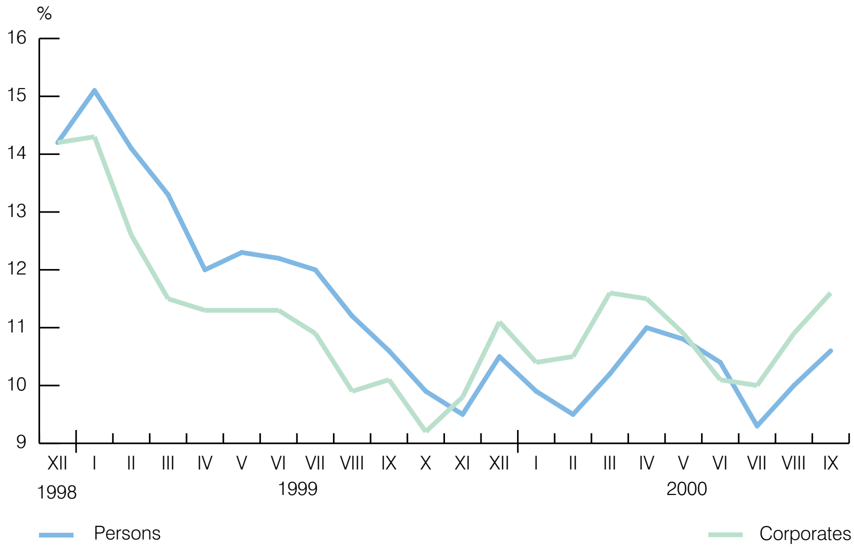
The third quarter saw declining loan demand from both persons and corporates. In real terms (as adjusted by consumer price growth), year-on-year growth in outstanding loans to persons fell from around 34.3% in June to 27.8% in September[29], while loans to corporates (as adjusted by industrial producer price growth) slipped from 9.9% to 8.3%. The demand for hire purchase finance gradually eased, and demand for housing loans denominated in zloty grew much more slowly than in the first half-year; by contrast, the interest shown by personal customers in housing loans denominated in foreign currencies rose systematically. Personal overdrafts appear insensitive to high interest rates, steadily increasing as a proportion of total personal outstandings. Studies by the NBP indicate that interest rate movements principally engender changes in the demand for medium-term loans, i.e., those maturing in over one year and up to five. This applies to both personal and corporate loans.

As in the previous quarters, the high level of interest rates in real terms (ex post, cf. Fig. 26) undoubtedly constituted one of the factors curtailing loan demand. From April to July, real personal lending rates gradually came down. This decline was more marked in the case of real rates on an ex ante basis (i.e., as adjusted by the interest rate expected by consumers). Preventing an undue decrease in real interest rates was one of the motives behind the Monetary Policy Council decision to raise NBP rates in August. An excessive and long-lasting fall in real interest rates could kindle growth in consumption, and therefore in domestic demand.

In real terms (ex post), corporate lending rates were high in the third quarter, and gradually rising. In September, they were running at the same level as in March-April, i.e., following the first NBP rate rise of the year. These high rates undermined corporate loan demand. As in the preceding quarter of 2000, corporates were keen to borrow though issues of commercial paper. This implies that the role of the banking industry in financial intermediation is gradually declining. At the end of the third quarter of 2000, the volume of corporate commercial paper outstanding was 780m zloty higher than at the end of the second quarter. It should be borne in mind, however, that part of this paper is acquired by the banks. In September 2000, the volume of CP outstanding had risen 57.8% year-on-year, while in June the corresponding figure had been 48.6%.

[29] Nominal growth in bank claims on persons in June 2000 has been adjusted for the estimated impact of the privatisation of the PKN ORLEN oil corporation.

Figure 26
Real lending rates



Source: NBP calculations based on NBP and GUS figures.

At the end of the second quarter[30], the foreign debt of the non-government, non-banking sector stood at USD 25,739m, having risen USD 1,360m (5.6%) since the end of the first quarter. An increase was seen in issues of long-term debt securities (up USD 197m, or 7.9%). Borrowings under "other loans and advances" rose slightly more slowly (up USD 674m, or 7.1%). The full float of the zloty, in heightening awareness of exchange-rate risk among domestic corporates, should lead to a gradual reduction in their readiness to access funding on international markets.

While the differential between domestic and foreign interest rates could have inclined corporates to seek funding abroad, it should be stressed that a large part of foreign borrowings are not directly related to this rate differential (or if they are, that relationship is weak). This refers, for example, to loans received by Polish companies from their foreign investors and to a portion of trade credit. Some companies have such large funding requirements that they would not be able to satisfy them on the domestic market (one rea-

[30] Preliminary figures, which could be subject to change.

son being the legal lending limit[31]), and are thus forced to carry out long-term bond issues on foreign markets.

The exchange rate channel

In the third quarter of 2000, zloty exchange rates were fully floating. Thus, under the exchange-rate regime in place, the value of the zloty in relation to foreign currencies was determined on the market by supply and demand, unfettered by any systemic controls.

Over the third quarter, nominal zloty exchange rates strengthened and were more stable than they had been in the second.

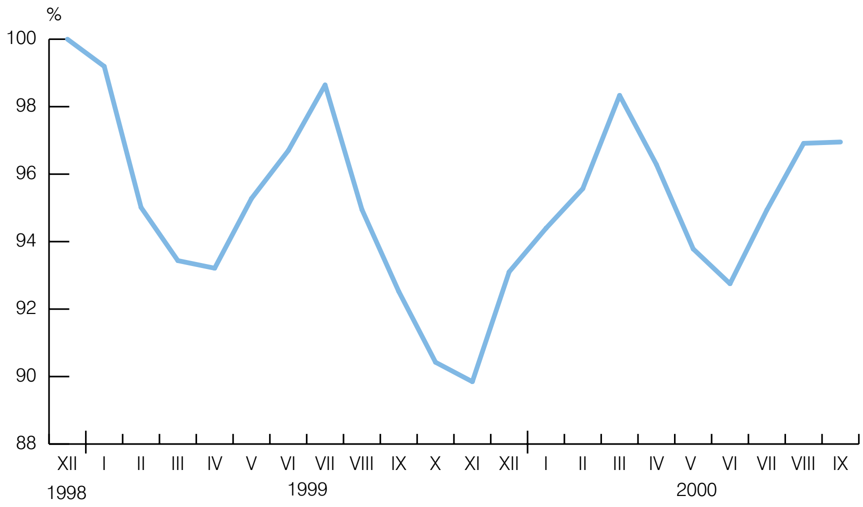
Nominal effective zloty exchange rates rose 4.5% in the third quarter of 2000 (September on June), whereas the second quarter of 2000 and the third quarter of 1999 had seen depreciation of 5.7% and 4.3%, respectively (cf. Fig. 27). From January to September, nominal effective zloty exchange rates went up 4.1% (relative to year end 1999), while in the corresponding period of 1999 they went down 7.5%.

Movements in nominal zloty exchange rates in the third quarter were strongly influenced by the prevailing trends on world currency markets (cf. Fig. 28). On the one hand, this involved a pronounced acceleration of euro depreciation, while on the other it stemmed from the abolition of the currency basket, which had previously cushioned the impact of swings in the cross rates of the currencies of basic significance to the Polish economy. The third quarter of 2000 saw the euro lose ground steadily on international markets, and in September the euro traded against the US dollar down an average of 7.5% on July (see box **Reasons for euro depreciation**).

In these circumstances, the zloty firmed markedly against the euro in the third quarter, while softening somewhat against the dollar. The average zloty rate for the euro over the quarter as a whole stood at 3.9774, a loss of 2.6% for the euro compared to the second quar-

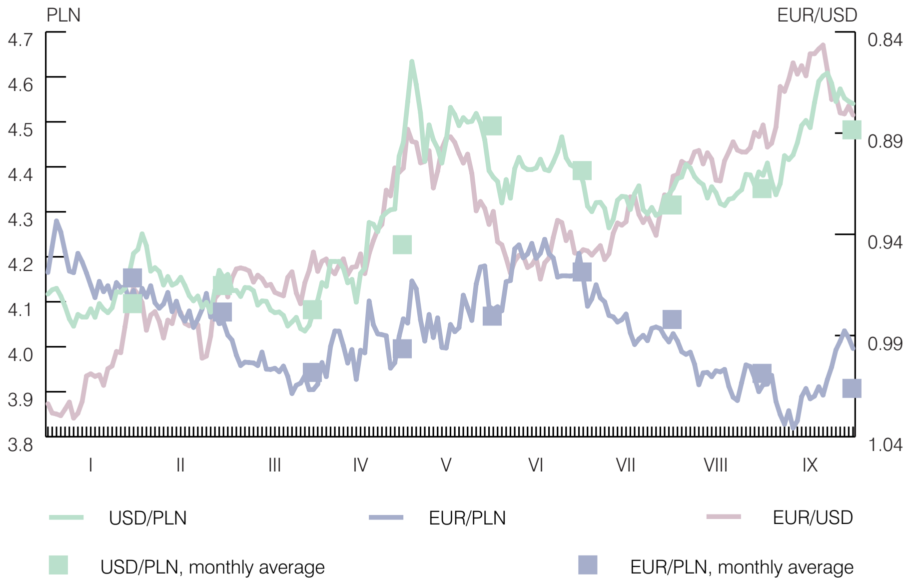
[31] Under the Banking Act, the total amount of loans and cash advances extended, bonds and other debt securities acquired, exposures under guarantees, endorsements and letters of credit, and other exposures of a bank to a single party, or to a group of parties related by capital and management and incurring common economic risk, shall not exceed 25% of the bank's capital.

Figure 27
Nominal effective zloty exchange rates, 1999-2000
(monthly figures, December 1998 = 100)



Source: NBP calculations.

Figure 28
Zloty exchange rates against US dollar &EUR; euro/dollar rates
(first three quarters of 2000)



Source: NBP calculations.

Reasons for euro depreciation

The slide of the euro against the US dollar that has persisted since the launch of Economic and Monetary Union (EMU) raises the question of why the single currency has been so weak. It is worth noting that the downward trend in euro exchange rates has a long-term character, and is not only visible in euro/dollar rates, but was also apparent with the ECU, the synthetic currency of those countries participating in the European Monetary System (EMS) prior to the establishment of EMU (cf. Fig. 29). This trend was temporarily interrupted towards the end of 1998, when investor expectations connected with the creation of EMU produced a short-lived appreciation of the ECU.

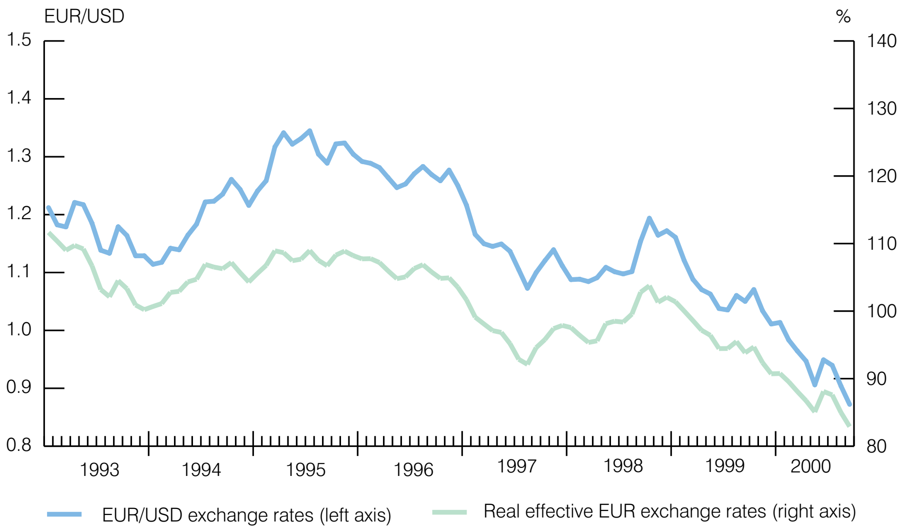
One of the long-range factors conditioning the decline in the value of the euro are the differences in growth rates between the US economy and that of the euro area (cf. Fig. 30). Although there is a relatively close correlation between cyclical fluctuations in the two economies, the American economy has been growing markedly faster since the beginning of the 1990s. This is partially traceable to the crisis of the EMS in 1992, and partially related to the more rapid diffusion of the microelectronic revolution in America than in Europe. This has stimulated an outflow of capital from the euro area in the form of outgoing FDI, and is also conducive - owing to the relatively greater buildup of demand pressure in the US - to the maintenance of a disparity in short-term interest rates between the euro area and America, one that is detrimental to the single currency. This results in higher yields on short-term financial assets denominated in dollars, thereby encouraging the withdrawal of portfolio investment from the euro area (cf. Fig. 31).The lowering of base rates by the European Central Bank (ECB) in April 1999 clearly deepened this disparity, which then gradually narrowed as the ECB tightened its monetary stance in 2000 (cf. Fig. 32).

A short-term cause of the euro's weakness since it was launched is also the process of asset diversification being carried out by portfolio investors. The replacement of the eleven currencies of the countries belonging to EMU by one single European currency created a need to cut back the proportion of euro-denominated assets in investment portfolios, prompting a swelling inflow of portfolio investment to the US and pushing down euro exchange rates.

The reasons for the weakness of the euro in 2000 outlined above do not, however, find full confirmation in the balance of payments statistics of the Eurosystem (cf. Fig. 33). While 1999 did indeed bring a substantial outflow of capital from the euro area in comparison with previous years, the pressure on euro exchange rates exerted by capital transactions lessened distinctly in the year 2000. It is worth pointing out here that a net outflow of capital from the EMU member countries was not an extraordinary event in previous years. The euro area at that time had a hefty current account surplus, and in a floating exchange rate environment became a source of capital for other countries. As a result of the fall in export demand triggered by the crises in Asia and Russia, and also the 1999 oil shock, this surplus has been diminishing systematically since 1997, with the euro area countries recording a current deficit of USD 11.6bn in the first half of 2000. With a waning inflow of investment to the EMU countries, this deficit played a major role in the weakness of the euro in 2000.

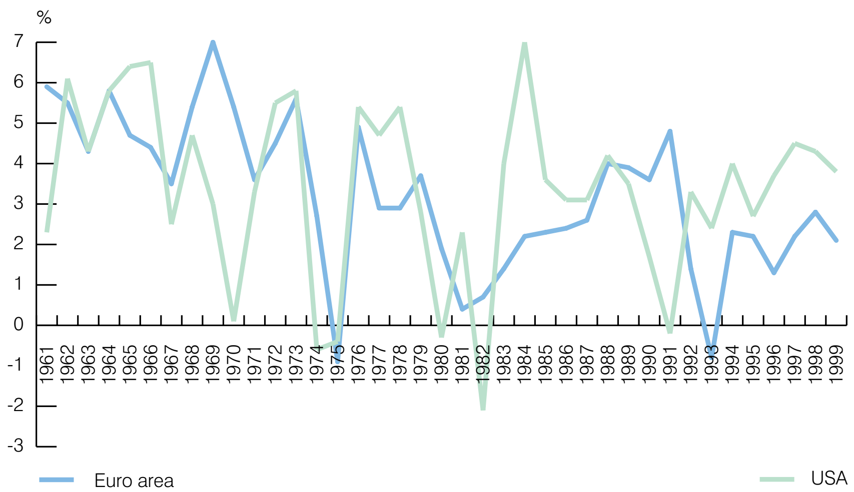
Looking to the medium term, the level of euro exchange rates will be determined by the delayed effects of the increase in the price competitiveness of EMU exports. The 18% decline in real effective euro exchange rates over the period from January 1999 to September 2000 will unquestionably encourage a reestablishment of external equilibrium, and thereby help lift the euro in relation to other currencies. Appreciation will also be promoted by the projected narrowing of the difference between US and euro area growth rates. A third factor affecting the value of the euro will be any measures instituted by the leading EMU countries to increase the flexibility of their labour markets and improve the competitiveness of their tax systems. Such reforms would bring a major improvement in the long-term growth prospects of the EMU countries, which would have a positive effect on the value of the single currency by attracting a greater inflow of direct investment and raising expectations of euro appreciation.

Figure 29
EUR/USD exchange rates & real effective EUR exchange rates (ECU rates prior to 1998), CPI adjusted** (Q1 1999 = 100), **1993-2000



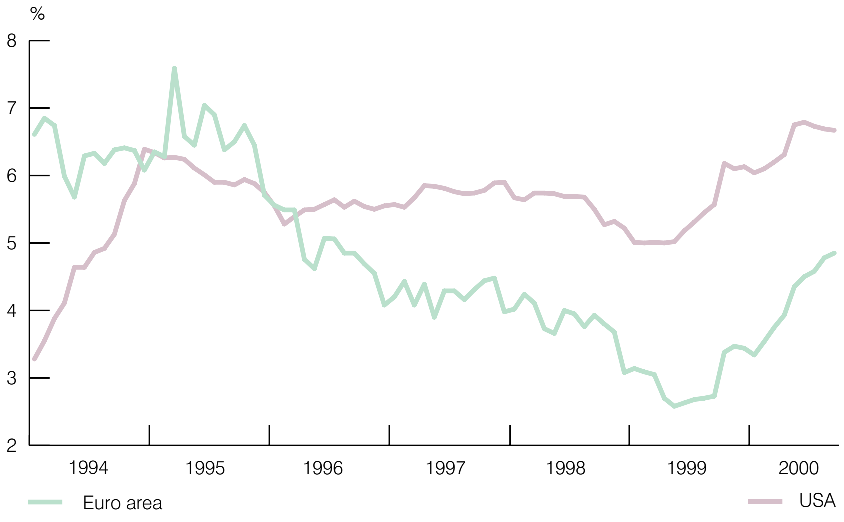
Source: ECB.

Figure 30
Real GDP growth, euro area & USA, 1961-1999



Source: OECD.

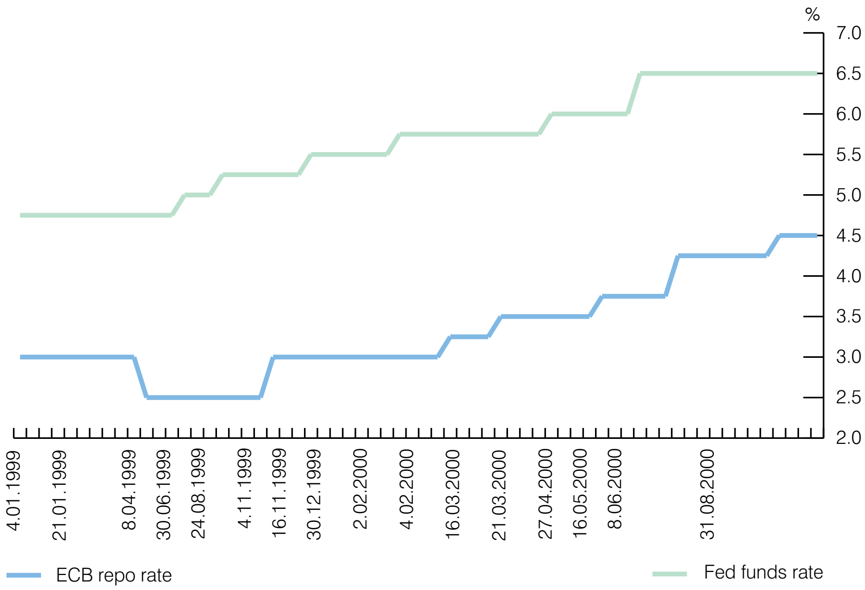
Figure 31
3M interbank deposit rates, euro area[a] & USA[b], 1994-2000



[a] EURIBOR as of January 1999, previously LIBOR
[b] LIBOR

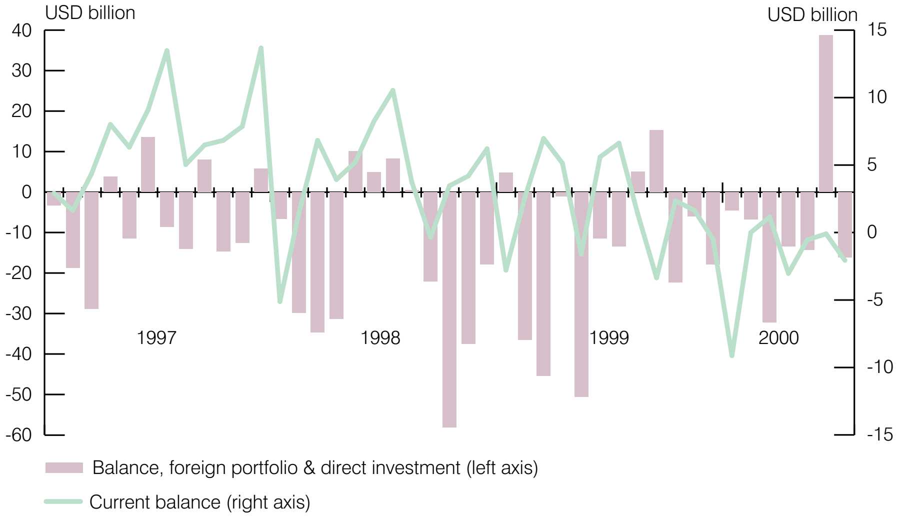
Source: Reuters, ECB.

Figure 32
ECB repo rate & Fed funds rate, 1999-2000



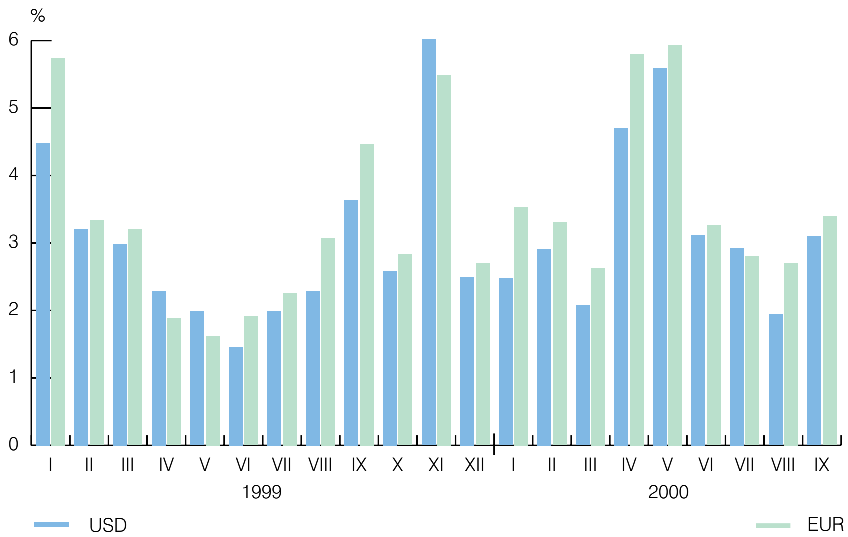
Source: Reuters.

Figure 33
Monthly balance, euro area foreign portfolio & direct investment and current account, 1997-2000



Source: ECB.

Figure 34
Volatility of zloty exchange rates against USD & EUR



Source: NBP calculations.

ter. In relation to the dollar, the zloty traded at an average of 4.3907, with the dollar having gained 0.3% on the second quarter (cf. Fig. 28).

The volatility of zloty/dollar exchange rates[32] steadied in the third quarter at an average of 2.7%, which represents a decrease of 1.8 points compared to the previous quarter (cf. Fig. 34). The volatility of zloty/euro exchange rates stood at 3.1% over the whole quarter (as against 5.0% in Q2). The amplitude of zloty/dollar exchange rate fluctuations in this period decreased to 34 grosze, compared to 54 grosze in the second quarter. The highest rate for the zloty at the fixing in the course of the third quarter was recorded on July 11, when it was valued at 4.2644 to the dollar, while the lowest was on September 21, at 4.6084.

The strengthening of the zloty in the third quarter of 2000 (in effective terms) was assisted by the improvement reported on Poland's current account. The zloty was also boosted by expectations of an inflow of foreign currency from the sale of TP SA. Following the rise in interest rates performed by the Monetary Policy Council on August 30, 2000 the zloty held relatively stable. The increased appeal of Polish securities thus failed to find reflection in a greater influx of foreign capital to the Polish market and an associated movement in zloty exchange rates[33].

The weakening of the zloty against the dollar in the third quarter was related to adverse developments on world markets. Given the increase in oil prices and the faltering euro, a gloomier outlook took hold on international commodity and financial markets. Investor confidence in emerging markets was reduced, while the threats to a continuation of euro area growth in 2001 became stronger. This was mirrored in the declining value of the currencies of those countries which are dependent on oil imports; at the same time, world stock market indices became distinctly more unstable.

[32] Volatility of zloty exchange rates measured as monthly standard deviation, calculated on the basis of daily log rates of exchange rate movements.

[33] Following the August increase in interest rates, yields stood at 18.5% on Polish one-year bonds, 15% on five-year bonds and 12% on ten-year bonds, and were the highest in the region; for example, the yields available on Hungarian and Slovak debt securities were 7.75%-8.5% for five- and ten-year bonds, while in the Czech Republic the corresponding yields ranged from 6.3% to 6.9%.

Inflation expectations

The issue of inflation expectations is of particular significance in pursuing the strategy of direct inflation targetting. The character of inflation expectations, in determining the behaviour of market players, impacts the cost of disinflation as portrayed in the "sacrifice ratio"[34].

The necessity of containing inflation expectations assumes especially great importance when the process of disinflation is temporarily disrupted. In these circumstances, failing an appropriate response from the central bank, expectations could be reinforced at a higher level. This in turn could elicit a series of adverse side effects, such as a fall in the propensity to save, or an acceleration of the wage-price spiral. In relation to the latter, it is worth citing the results of analyses conducted at the National Bank of Poland with respect to the period from 1993 to 1999. These indicate that personal inflation expectations exercised a major influence on price growth in the period concerned, with this in turn causing a rapid adjustment in wages, within the space of one quarter.

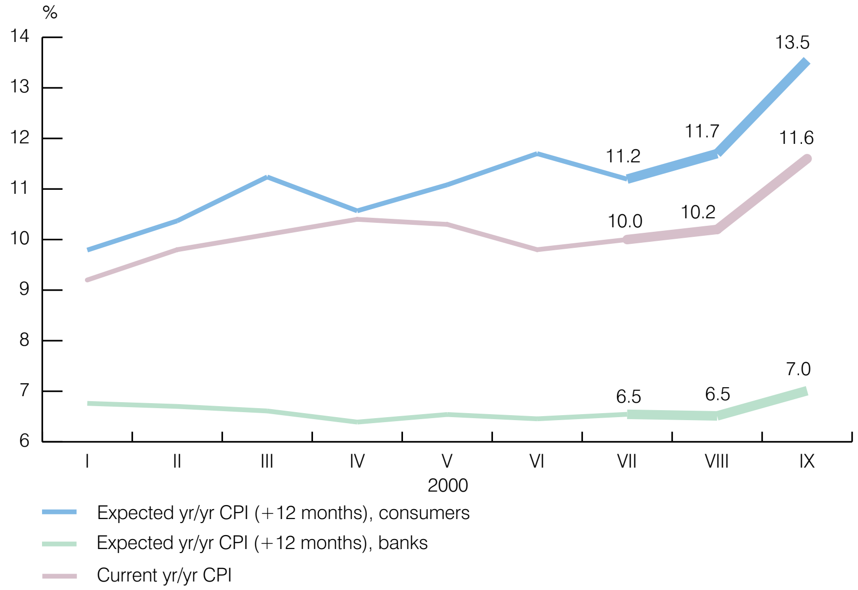
In developing and implementing monetary policy, the National Bank of Poland examines the inflation expectation of agents from various areas of the economy: consumers, corporates and banks. The source of the data analysed are qualitative or quantitative surveys, and also information from the financial markets.

In the third quarter of 2000, inflation expectations were affected both by news of ongoing price movements (studies suggest that particular attention is paid to this factor by consumers) and by various types of information giving some indication of price growth in the future, which are an important point of reference for the banks (cf. Fig. 35).

The third quarter of 2000 – or to be precise, the last two months of that quarter – can be considered a time of mounting consumer pessimism regarding future price growth. This is evidenced not only by the gradual increase in inflation expectations, but also by the widening gap between projected inflation and the current rate of inflation, which determines consumer expectations in a falling rate environment. This gap grew from 1.2

[34] The sacrifice ratio expresses the portion of output that has to be sacrificed in order to reduce inflation by one percentage point.

Figure 35
Inflation expectations of consumers and banks, III quarter of 2000



Source: Demoskop and Reuters figures; NBP calculations.

points in July to 1.5 points in August and 1.9 points in September.

It should be noted that consumer inflation expectations (quantified using a questionnaire from the Demoskop company[35]) are subject to two potential measurement errors. The first refers to the actual surveying procedures employed and reflects both the potentially non-representative character of the sample surveyed, and also the potential lack of understanding of the question posed by the individuals polled, leading to incorrect replies being given. The second potential error relates to the method of quantifying the expected rate of inflation on the basis of the survey results. One of the assumptions of the probabilistic method applied[36] is that in replying to the question posed the respondents formulate their expectations by reference to the current rate of

[35] The Demoskop questionnaire is qualitative in nature; it is used in a monthly poll of a random, representative sample of consumers, who are asked the following question: "Given what is currently happening, do you believe that over the next 12 months prices will: (1) rise faster than at present, (2) rise at the same rate, (3) rise more slowly, (4) stay at their present level, (5) go down, (6) difficult to say".
[36] An adjusted version of the Carlson and Parkin method. This method is described by T. Łyziak in "*Badanie oczekiwań inflacyjnych podmiotów indywidualnych na podstawie ankiet jakościowych*" (Investigating consumer inflation expectations using qualitative surveys), "Bank i Kredyt" no. 6, NBP, 2000.

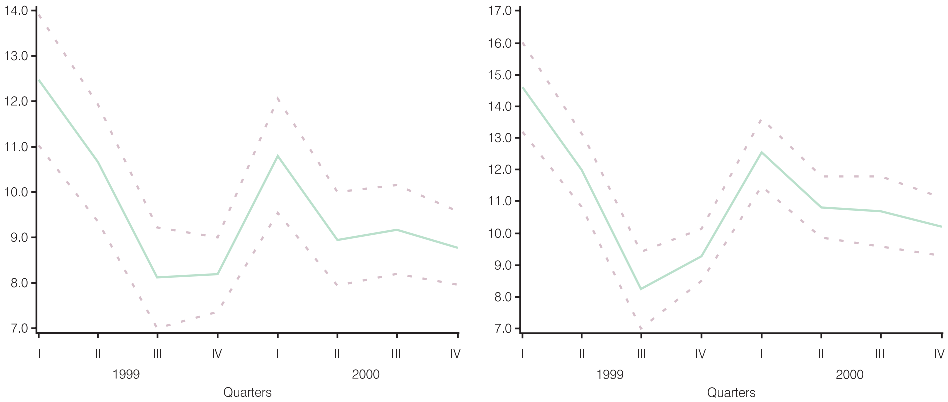
inflation, i.e., the year-on-year rate of inflation as reported by official statistics which is known to them at the time they complete the questionnaire. As a result, the inflation rate subsequently estimated is contingent on both the pattern of replies to the questionnaire and the current rate of inflation.

In July 2000, consumer inflation expectations one year forward had fallen 0.5 points compared to June, standing at 11.2%. Given the simultaneous increase in current inflation (up from 9.8% in June to 10% in July)[37], the decline in inflation expectations can be wholly ascribed to a change in the pattern of replies to the question involved, attesting to an increase in the optimism of respondents[38]. In August, consumer inflation expectations moved up 0.5 points to 11.7%. Of this increase, 0.2 points can be attributed to a change in the pattern of replies to the survey question[39], while 0.3 points can be ascribed to the rise in current inflation (up from 10% in July to 10.2% in August). In September, consumer inflation expectations reached their highest level since April 1998, at 13.5%, which represents an increase of 1.8 points on August. The different pattern of replies to the survey question produced a rise in inflation expectations of just 0.2 points[40], while the surge in current inflation (up from 10.2% in August to 11.6% in September) lay behind the remaining 1.6 points. Thus, September's increase in consumer inflation expectations was chiefly the result of higher current inflation.

Surveys of the inflation expectations of companies in the production industries conducted by NBP regional branch offices indicate that corporates were expecting the fourth quarter of 2000 to bring a decline in inflation, both in terms of consumer price growth, projected to fall to around 10.2%, and producer price growth, projected to drop to some 8.7% (see figures 36 and 37).

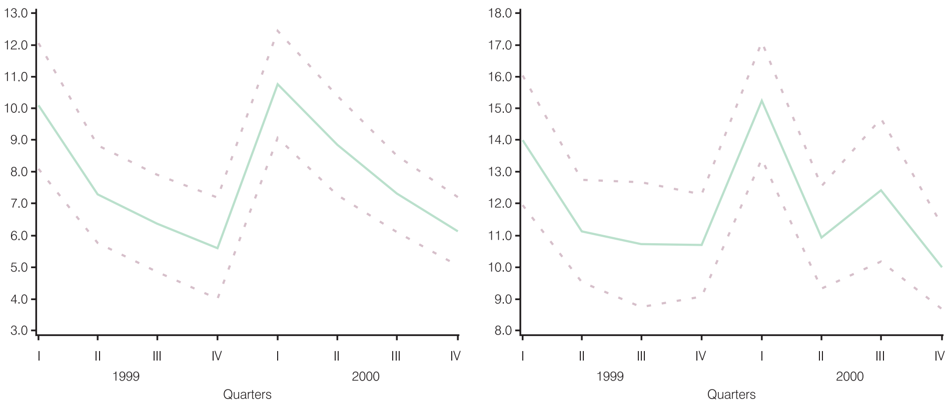
[37] Due to the timing of the Demoskop survey (the first ten days of each month), which means that it is carried out prior to the release of GUS figures on inflation in the preceding month, the current inflation rate is taken to be year-on-year CPI growth two months previously.
[38] A 6 point decrease was observed in the fraction of respondents expecting prices to rise faster than at present, with a parallel 6 point increase in those expecting prices to rise at the same rate and a 1 point increase in those anticipating that prices would rise more slowly (changes in the group of "don't knows" have been ignored).
[39] A 2 point decrease was observed in the fraction of respondents expecting prices to rise more slowly than at present, with a 1 point increase in those expecting prices to rise at the same rate and 1 point increase in those declaring that prices would go down.
[40] A 2 point increase was observed in the fraction of respondents expecting prices to rise faster than at present, with a 1 point decrease in those expecting prices to rise more slowly and a 1 point decrease in those declaring that prices would go down.

Figure 36
Expected producer price growth (left-hand chart) and expected consumer price growth (right-hand chart), 1999-2000



Dotted lines indicate boundaries of confidence interval.

Figure 37
Expected growth in price of companies' own products (left-hand chart) and expected growth in their input costs (right-hand chart), 1999-2000



Dotted lines indicate boundaries of confidence interval.

As regards the inflation "generated" by the companies surveyed, i.e., the price growth of their own products and services, this was expected to come to some 6.2% at year end. This figure is substantially lower than the input cost inflation they projected (10%). It is also worth underlining that in 2000 the companies surveyed had been steadily reducing the speed of price growth for their own products.

A comparison of the producer price inflation anticipated by corporates (8.7%) with the growth foreseen in the price of their own products (6.2%) might suggest that the final level of industrial producer price growth is affected by factors outside the direct scope of the pricing measures undertaken by the average firm. This supposition would seem to be borne out by two facts. The first, as indicated by the charts in Figure 37, is that companies are encountering markedly stronger growth in their input prices than in the price of their own products. This could imply that companies are facing a demand barrier that prevents them from automatically passing on higher costs in the prices they charge their own customers. In this case, the figure of 6.2% would correspond to an index of core inflation, understood as the rate of price growth that reflects the actual play of market supply and demand. Secondly, this interpretation is one that a large part of the companies surveyed are themselves inclined to accept; they expressly emphasise in the open section of the questionnaire that rising fuel and energy prices are currently of decisive importance in determining producer prices, and attribute a much lesser role to autonomous corporate pricing decisions, particularly those induced by growing demand.

From May to September 2000, the price growth expected by the banks within the coming year oscillated around 6.5%[41]. In both July and August, the minimum rate of inflation projected by the banks was 4.5%, while the maximum was 8.5%. The distribution properties of bank inflation expectations in July and August were very similar.

In September, the distribution of bank inflation expectations shifted towards higher inflation rates, with a minimum projection of 6% and a maximum of 10.9%. This rise in bank inflation expectations could have been linked to the soaring pace of current inflation (i.e., annualised inflation in July), and also to the Monetary Policy Council announcing their short-term inflation target for 2001, with a target range of 6%-8%. The mean of the distribution of bank inflation expectations in September was 7%, corresponding to the mid-point of the range set for the NBP monetary policy target in 2001.

The quantitative surveys employed by Reuters to analyse bank inflation expectations, while obviating the need for a quantification of forecast inflation rates, are also subject to constraints which hinder an interpreta-

[41] The inflation expectations of the banks are discussed on the basis of Reuters surveys.

Table 6
Distribution properties of bank inflation expectations, Q3 2000

	July	August	September
Minimum value	4.50	4.50	6.00
Maximum value	8.50	8.50	10.90
Mean	6.54	6.51	7.01
1st quartile	6.00	6.20	6.65
2nd quartile	6.40	6.50	6.80
3rd quartile	7.20	7.00	7.00
4th quartile	8.50	8.50	10.90
Standard deviation	0.90	0.72	1.02
Volatility coefficient (%)	13.80	10.98	14.61

Source: Reuters, NBP calculations.

tion of the results obtained. With reference to the surveys carried out in September, it is worth bearing in mind that the sample of banks polled has not been uniform over time; in the course of the last six months, the number of respondents has ranged from 19 to 25. In interpreting the most recent survey, which shows an increase in the inflation expectations of the commercial banks from 6.5% in August to 7% in September, it should be noted that a contributing factor in this increase was the lack of any reply from the bank which had previously reported the lowest projections[42].

The shape of the yield curve in the third quarter demonstrated that investors were maintaining their confidence in the effectiveness of the process of disinflation in Poland. However, uncertainty increased as to the point at which a major fall in inflation was likely. Investors revised their previous expectations in this regard, assuming that the point at which a slowdown in inflation would permit a substantial interest rate cut had now been put back.

The situation outlined above resulted in changes in the yield curve in the third quarter, with 10-year interest rates exhibiting considerable stability, thereby testifying to continued market confidence in the effectiveness of disinflationary policies, while yields rose on 2-

[42] The bank in question was JP Morgan. If this bank's response in August was left aside, the inflation expectations of the banks that month would have been 6.6%, not 6.5%.

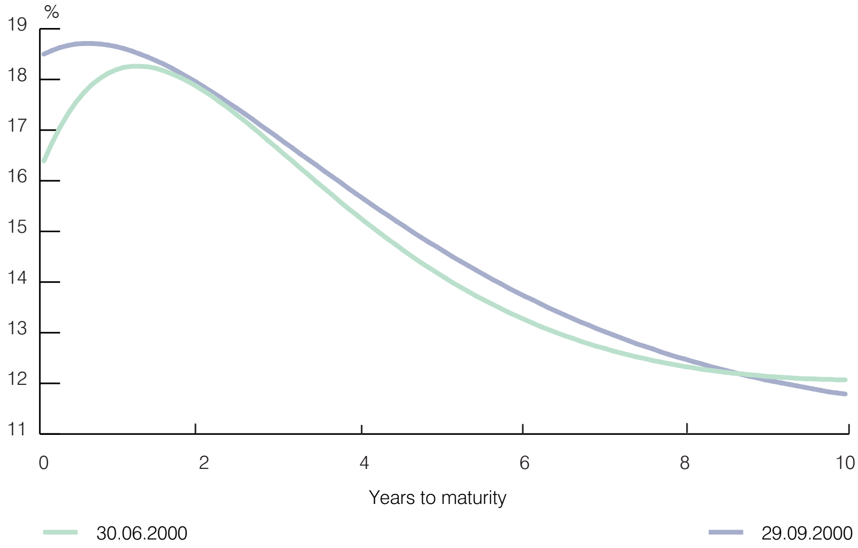
and 5-year bonds, reflecting investor fears that the fall in inflation and interest rates they expected was to be postponed (cf. Figure 38). These fears also found expression in the level of forward interest rates (cf. Figure 39).

The mounting uncertainty as to the development of Polish inflation and interest rates also impacted foreign investor demand for Polish bonds. In the final quarter of 1999 and first quarter of 2000, the volume of Polish bonds purchased by foreign investors increased significantly. These bonds were acquired in the belief that their price would rise fairly soon due to the expected decline in inflation and associated lowering of interest rates. Subsequently, however, the accumulation of Polish bonds in foreign investor portfolios slowed and was curbed by further information that induced investors to revise their assumptions concerning the time at which a substantial decrease in Polish interest rates would occur. In May 2000, information of this sort was forthcoming with the release of figures showing an unexpectedly large current account deficit in March. In August, a similar role was played by the news of unexpectedly high inflation in July. In September, this was compounded by fears that the zloty would weaken, since the completion of the privatisation of TP SA signified the end of expectations that the zloty would strengthen due to the government selling part of its foreign currency revenues from this transaction on the domestic forex.

The negative market reaction to the news that inflation had topped 11% in July was reflected in a rise in the zero-coupon yield curve, although this did not apply to the longest maturities, indicating that the market believed this increase in inflation would again prove temporary (cf. Fig. 40). Investors were still assuming that a drop in Polish price growth was near at hand. This is illustrated by the positive market response to the interest rate rise performed by the NBP on August 30, which triggered a rise in bond prices and a fall in long-term rates (cf. Fig. 41). This response demonstrated that investors considered that the rise in NBP rates would accelerate disinflation, and thereby hasten a general decrease in interest rates.

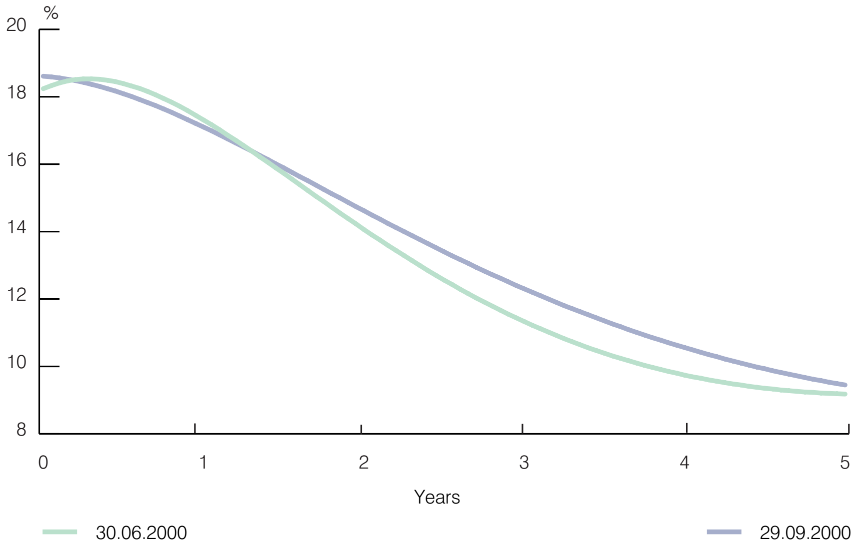
However, September then brought events which once again increased uncertainty as to the pace of disinflation in Poland. The factors which most contributed to this were the postponement of the date for submission of the Budget to Poland's Sejm and the weakening of the

Figure 38
Shift in yield curve, Q3



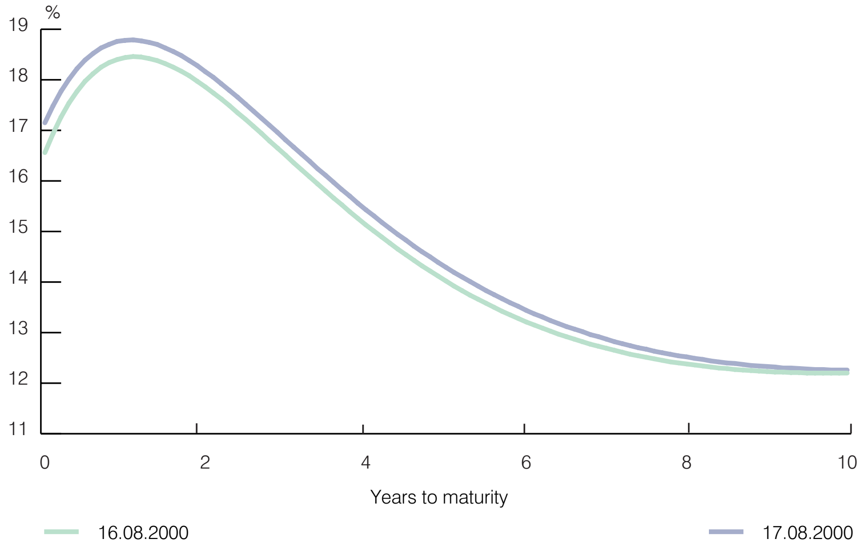
Source: Reuters, NBP calculations.

Figure 39
1-year interest rates expected in coming years



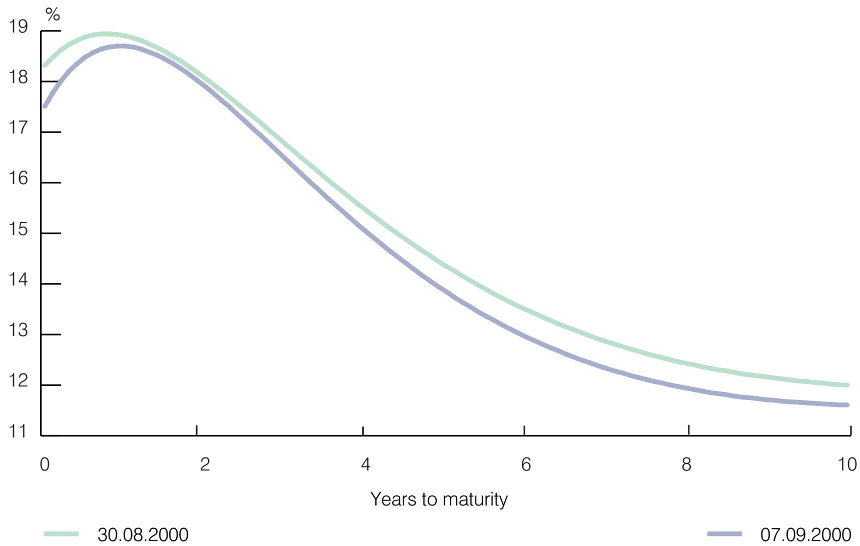
Source: Reuters, NBP calculations.

Figure 40
Yield curve response to news of July inflation



Source: Reuters, NBP calculations.

Figure 41
Yield curve response to NBP rate rise



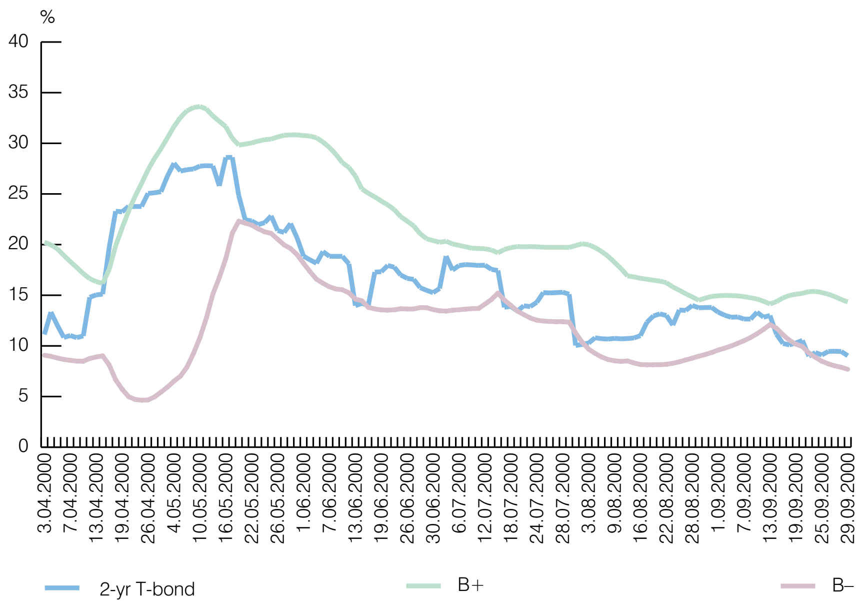
Source: Reuters, NBP calculations.

zloty, not only in relation to the dollar, but also against the euro. At the end of the third quarter, the downward price trend visible on the bond market was reinforced by a slump in the NASDAQ, causing portfolio investors to downsize their holdings of paper issued by countries included in the category of emerging markets.

Over the third quarter as a whole, the decline in bond prices was similar in course and speed to the fall in the value of the zloty relative to the dollar. Where the zloty gained more against the euro than it lost to the dollar (a situation taken by the market to indicate a danger that the competitiveness of Polish exports might be undercut and imports might increase, entailing potentially negative consequences for the current balance), a rise took place in the risk premium embedded in T-bond yields. This was a clearcut sign of persisting uncertainty concerning the course of economic developments in Poland in the near future.

The relative deterioration of conditions for investing in Poland associated with the postponement of the fall in inflation and interest rates previously expected, a fall that would bring capital gains for portfolio investors, did not come as a huge surprise to those investors. They had been

Figure 42
Volatility of 2-year T-bond yields & Bollinger band*



* Volatility measured as moving 20-day standard deviation of daily log rates of return, on an annualised basis

Source: Reuters, NBP calculations.

reckoning with an adverse impact on the Polish economy of the protracted rise in oil prices and the uninterrupted downslide of the euro. The decreasing volatility of long-term interest rates seen in the third quarter (cf. Fig. 42) reaffirms the hypothesis that the drop in Polish bond prices was no bolt from the blue for investors.

All in all, the situation on the bond market outlined above demonstrates that the continuous increase in long-term rates in the third quarter of 2000 did not reflect a loss of investor confidence in the effectiveness of Polish disinflation, but rather heightening uncertainty as to how this process would develop in the immediate future.

The securities channel (the "asset price effect")

The value of the financial assets held by households was relatively small at the beginning of the period under review (at mid-2000). Table 7 presents the structure of household capital investments.

As Table 7 indicates, the second quarter brought an increase in household share portfolios, while holdings of Treasury securities remained unchanged. The figures in the above table attest to households displaying modest interest in securities. Between October 1999 and October 2000, only some 5% of households carried out transactions involving shares or bonds[43].

The third quarter witnessed a major fall in share valuations on the Warsaw Stock Exchange. Basic figures on the importance of this institution within the national economy and share price trends in the period under examination are set out in Table 8.

A major development for the financial markets was the increase in central bank interest rates at the end of August. Market players had thought a rate rise of 150 bps most likely, which indeed corresponded to the rise performed, and had factored an increase of this size into their investment decisions. The initial reaction of the market to the NBP putting up its rates was positive. Over the first three days' trading following the rate rise, the Warsaw Stock Exchange Index (WIG) moved as follows: August 31 – up 1.10%, September 1 – up 1.05%. September 4 – up 0.9%. This to some extent reaffirmed

[43] Survey by the Public Research Unit (PBS), Sopot, performed October 14-15, 2000, on a representative sample of 1,023 Polish adults.

Table 7

Direct & indirect forms of personal capital market investment, Q1-Q2 2000

Type of capital investment	Balance at end Q1 2000 (billion zloty)	Balance at end Q2 2000 (billion zloty)
1. Direct portfolio investment		
– securities held on personal accounts (total)	**17.7**	**20.6**
Shares	12.6	15.6
Bonds	2.8	2.7
T-bills	2.3	2.3
2. Indirect portfolio investment (total)	**8.0**	**9.5**
Investment funds (net assets)*	3.9	3.7
Pension funds (net assets)	4.1	5.8
Total (1 & 2)	**25.7**	**30.1**
Above investments (total) as proportion of bank liabilities to persons, in zloty & foreign currency (%)	16.5	17.2

*GUS estimates that some 10% of holdings in investment funds belong to parties other than households.

Source: GUS, NBP, The Agency for the Supervision of Pension Funds (UNFE).

the proposition that, in a period of systemic transition, economic stability is more important to investors than fiscal and monetary decisions that are theoretically detrimental to the market. Nonetheless, this factor was incapable of sustaining market valuations at a stable level in the longer term. Falling prices on foreign stock exchanges and internal political and macroeconomic tensions caused share prices to drop in September. Over the month, the WIG lost more than 8%.

The effect of the above was to reduce the market value of household investment portfolios. The situation on the

Table 8

Warsaw Stock Exchange, selected indicators, Q3 2000

Month	No. of companies listed	Market capitalisation (billion zloty)	Warsaw Stock Exchange Index (WIG), month end
June 2000	209	136.5	19 642.7
July 2000	209	136.3	18 991.0
August 2000	210	128.2	18 420.3
September 2000	209	117.1	16 882.6

Source: Materials from Warsaw Stock Exchange SA.

market affected the investment preferences of households. Asked about possible future investments on the financial markets, only 2%-3% of respondents referred to capital market instruments and investment plans[44].

Previous experience indicates that further growth in household portfolio investment on the capital market will chiefly be contingent on:

- An increase in the personal wealth of the population. Studies show that a relatively small percentage of society generates savings, with the remaining part allocating their incomes to current consumption.
- A reversal in the present trend for interest-bearing instruments to yield relatively higher returns. Market players and observers point to the substantially lower returns of equity instruments compared to interest-bearing ones.
- The popularisation of the stock market as an investment vehicle for households.

The fulfilment of the above conditions will allow the capital market to expand faster and increase its impact on the financial situation of households.

Impact of external prices on inflation

The third quarter of 2000 saw the pace of commodity price growth weaken on world markets relative to the second. This was true of both oil prices and the prices of non-energy commodities.

Oil prices (Brent and WTI) were up 11% on average in the third quarter compared to the second[45], and up almost 47% on the third quarter of 1999. Price movements were marked by a clearly larger amplitude of fluctuation than in the previous quarter, with oil trading at a maximum of USD 36.31 per barrel (September 7) and a minimum of USD 26.39 (31 July; Fig. 43). Petrol prices fell by an average of 7% in the third quarter compared to the second, yet remained 48% higher than a year previously[46]. The highest price for petrol in this period was USD 362 per tonne, while the lowest was USD 282 (cf. Fig. 44).

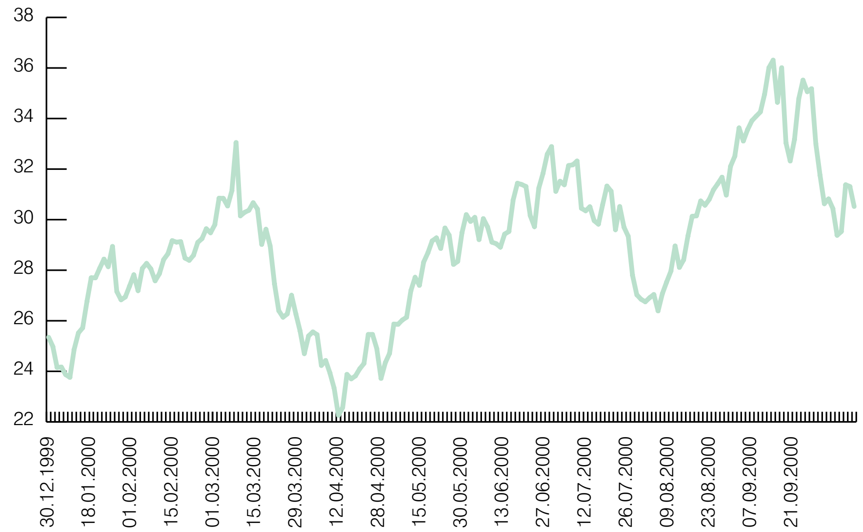
The upward trend in oil prices that has persisted since the beginning of 2000 has caused an acceleration

[44] Ibid.

[45] In the second quarter of 2000, these prices had risen 26% on the first.

[46] Weekly prices for 95-octane unleaded Premium petrol, ARA (Amsterdam - Rotterdam - Antwerp).

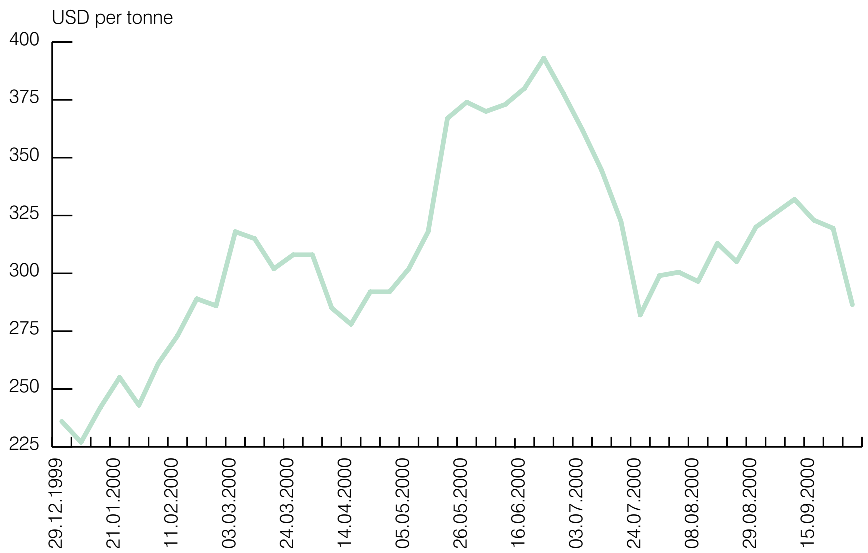
Figure 43
Oil prices*



* Average price for Brent (North Sea) and WTI (USA), USD per barrel

Source: Reuters.

Figure 44
Weekly prices (FOB), 95-octane unleaded Premium petrol ARA*



* Amsterdam - Rotterdam - Antwerp.

Source: Reuters.

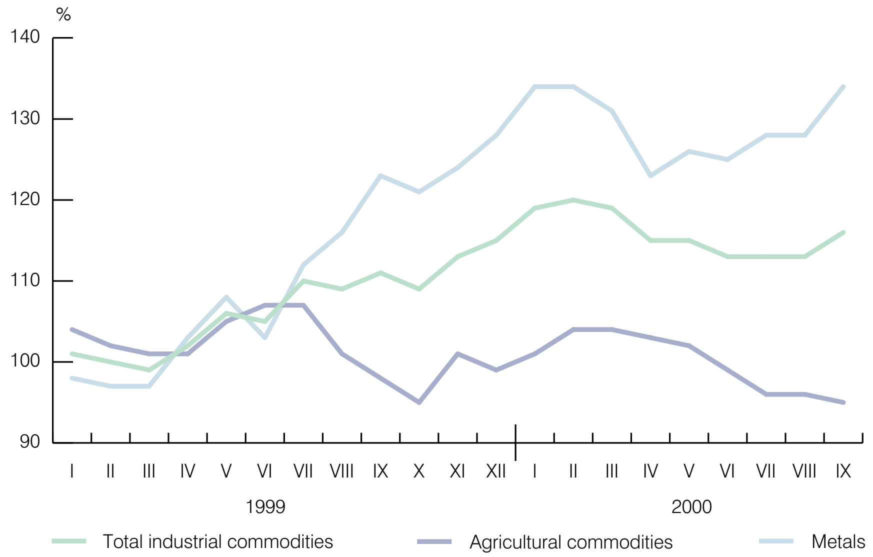
of inflation in oil-importing economies and a deterioration of their current balances, thus leading to the depreciation of their currencies. From January to September, prices for UK Brent rose almost 90% compared to the average for the corresponding period of the previous year[47], despite supply going up 3% from 74.0m b/d to 76.2m b/d, while demand rose 1.1m b/d, or 1.5%. Prices continued to run high in October, although OPEC increased production by 800,000 barrels as of October 1, and 30m barrels were released from the US strategic oil reserves on September 25. In addition, it was announced that a further increase of 500,000 barrels in OPEC output would take effect as of November 1.

An analysis of supply and demand for this commodity gives no rational grounds for oil prices continuing to run at over USD 30 per barrel. Only the political instability in the Middle East and in Nigeria represents a significant factor increasing market uncertainty and pushing up oil prices. In the next quarters, it may therefore turn out that an output level on the verge of full capacity is too high in relation to the current requirements of the world economy.

Over the first three quarters of 2000, world prices for non-energy commodities rose 5.1% compared to the corresponding period of the previous year (cf. Figs. 45 & 46)[48], with industrial commodity prices going up 10.7% and foodstuff prices coming down 1.3%. The fast growth of industrial commodity prices was on the one hand the result of metal prices climbing 21.5%, and on the other of agricultural commodities used in industry coming down in price 3.0%. These industrial commodity price indices constitute a reflection of the upswing in all the OECD countries under way since the third quarter of 1999; however, industrial output growth has been waning in the US since the second quarter of 2000, and since the third – in the European Union as well. In consequence, in the third quarter of 2000 industrial commodity prices slipped 0.2% compared to the previous quarter, with prices for agricultural commodities used in industry coming down 6.0%. Metal prices

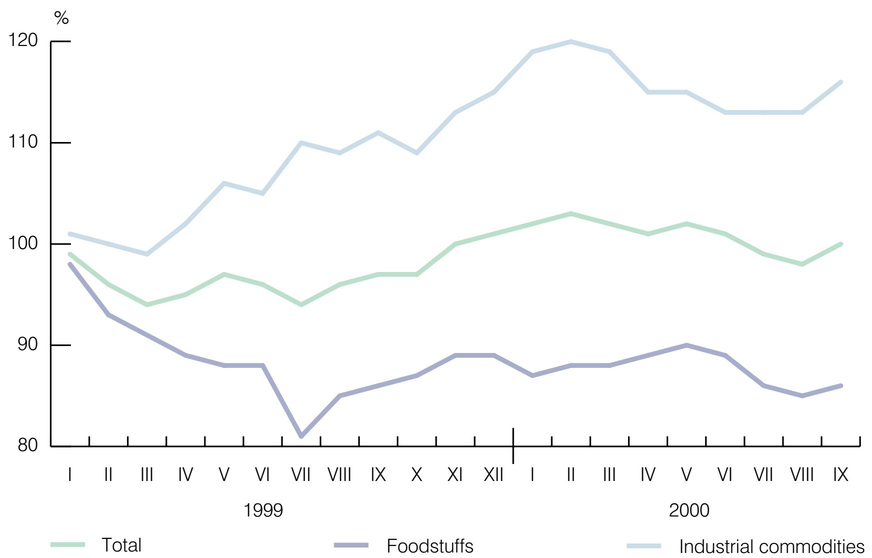
[47] *International Financial Statistic*s, IMF, June 2000; "Oil & Gas Journal", October 16, 2000.
[48] "The Economist", issues from January to November 2000.

Figure 45
Basic commodity prices on world markets
(December 1998 = 100)



Source: "The Economist", 1998, 1999, 2000.

Figure 46
Basic commodity prices on world markets
(December 1998 = 100)



Source: "The Economist", 1998, 1999, 2000.

rose 4.2%, yet were down 2.3% on the first quarter of the year.

Movements in transaction prices in Poland's foreign trade were most impacted in 2000 by the rise in world oil prices. In the first half of 2000, zloty import transaction prices rose 11.6% year-on-year, while export prices went up 2.8%[49]. This resulted in a distinct worsening of Poland's terms of trade, which stood at 92.1 for the first six months of 2000, compared to 102.4 for the same period of 1999.

Figures 47 and 48 present a breakdown of the overall index of Polish import transaction prices in the first half of 2000.

The **11.6%** growth seen in import transaction prices breaks down as follows:

- mineral fuels, lubricants and derivative products contributed **10.1** points of the overall increase;
- chemicals and related products, machinery and equipment, transport equipment and raw materials excepting fuels accounted for **1.7** points of growth;
- industrial goods classified by raw material, miscellaneous other industrial goods and foodstuffs lowered the increase by **0.2** points.

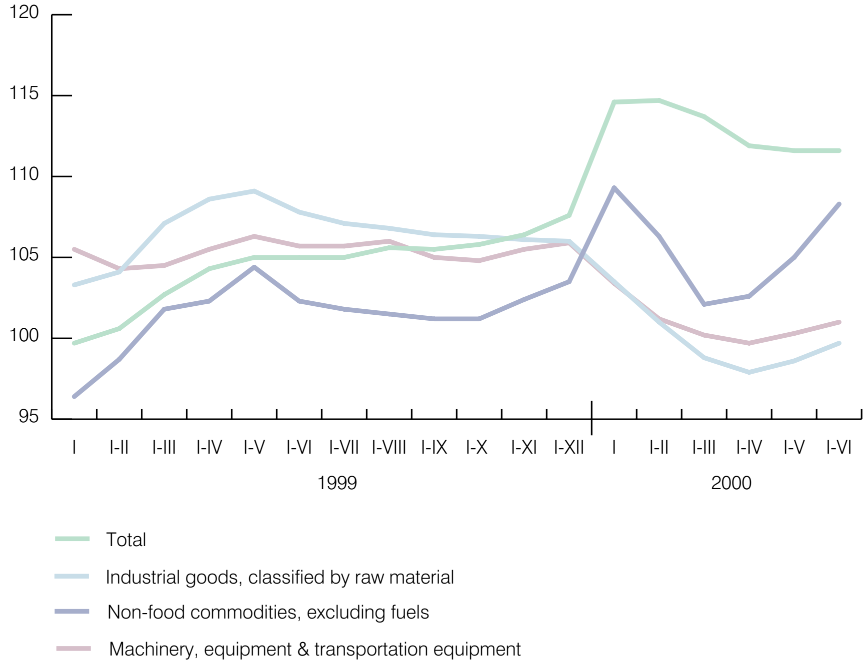
Estimates of the pass-through effect of movements in exchange rates and import transaction prices on the CPI indicate that the cumulative impact of zloty-dollar exchange rates and import transaction prices accounts for some 34% of CPI volatility and is similar to the import penetration ratio[50]. In the first half of 2000, the nominal zloty price for the dollar rose 9.8%, while import transaction prices expressed in dollars went up 1.6% (although the overall index compiled by GUS shows these prices falling 2.7%). The acceleration of CPI inflation compared to the corresponding period of 1999 came to 3.7 points, of which 1.2 points can be traced to the cumulative effect of exchange rates and import prices.

[49] 1. The present analysis refers solely to the first half of 2000, since data on transaction prices in the particular months of Q3 were not available at time of writing.

2. The indices of total export and import transaction prices presented in this Report were calculated using GUS trade figures by category of goods, classified in line with the SITC (figures taken from "Handel Zagraniczny" Styczeń-Czerwiec 2000 [Foreign Trade, January-June 2000]). The resulting growth in total import and export prices (11.6% and 2.8%, respectively) differs significantly from the growth indices reported by GUS (7.1% and 2.3%).

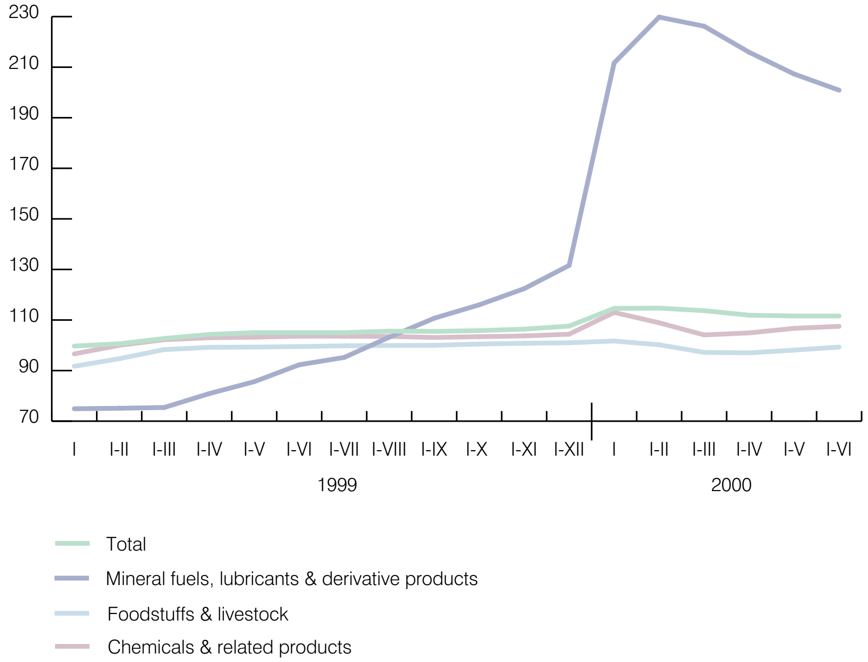
[50] The ratio of import penetration is expressed as imports /(GDP + imports – exports).

Figure 47
Cumulative indices of Polish import transaction prices
(corresponding period previous year = 100)



Source: GUS figures.

Figure 48
Cumulative indices of Polish import transaction prices
(corresponding period previous year = 100)



Source: GUS.

Aggregate supply and demand

In the third quarter of 2000, the volume of domestic demand continued to exceed supply; however, as in the second quarter, not only was demand growth lower than supply growth, but there was also a further reduction in the negative level of net exports. The slowdown in domestic demand growth stemmed from a more restrained increase in both consumption and fixed investment. This slacker growth in personal consumption was partnered by a slower increase in household disposable incomes and a more favourable level of savings than a year previously. The improvement in equilibrium was accompanied by a drop in the rate of economic growth. Third-quarter GDP growth was up 3.3% year-on-year, whereas growth had come to 5.2% in the second quarter and 6.0% in the first. Growth in value added diminished in all the basic sectors of the economy, with value added in agriculture and construction being lower in absolute terms than a year previously. Although falling compared to the first half of the year, relatively fast growth in value added was still evident in industry, which was related to the continuing rapid expansion of exports. In addition to strong export performance, the improvement reported in Poland's balance of trade was

Table 9
GDP & domestic demand growth

	1999					2000		
	Q1-4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	corresponding period previous year = 100							
Total value added	**103.9**	**101.4**	**102.8**	**104.8**	**106.1**	**105.8**	**105.0**	**103.1**
– Industry	103.0	95.7	99.8	106.0	109.7	110.2	109.4	106.5
– Construction	103.5	102.0	102.8	103.2	104.9	104.3	100.8	97.8
– Commercial services	106.3	105.8	105.8	106.5	106.8	105.5	105.3	103.5
GDP	**104.1**	**101.6**	**103.0**	**105.0**	**106.2**	**106.0**	**105.2**	**103.3**
Domestic demand	**104.9**	**103.4**	**104.6**	**105.5**	**105.7**	**105.1**	**103.3**	**101.3**
– Capital formation	105.9	100.7	105.5	107.8	107.1	111.5	106.8	102.6
Fixed investment	106.5	105.7	106.3	106.6	107.0	105.5	102.9	102.4
– Consumption	104.5	104.0	104.4	104.8	105.0	103.9	102.3	100.9
Personal consumption	105.4	104.6	105.2	105.7	105.9	104.6	102.6	100.8

Source: GUS.

also attributable to slower import growth than a year earlier, a consequence of lower growth in domestic demand. Growth in GDP and domestic demand is presented in Table 9.

Domestic demand

The third quarter of 2000 brought a further decline in the pace of domestic demand growth. Year-on-year, domestic demand rose 1.3%, as opposed to 3.3% in the second quarter and 5.1% in the first. Consumption growth slowed to 0.9%, while capital formation came to 2.6%. Growth in gross fixed investment was slower than capital formation, while the growth in working capital and reserves was similar to that seen in the second quarter. The decline in consumption growth overall was related to a further reduction in the rate of personal consumption growth, with growth in social consumption similar to that reported in the previous quarters.

The slowdown in consumption growth was influenced by the more subdued increase in household incomes. Growth was slower in all the basic components of disposable incomes. Given the maintenance of strong industrial output growth, it can be surmised that in relative terms growth in incomes from non-farming operating surplus declined the least. The purchasing power of incomes from employment and from social benefits was lower than twelve months previously. No material change was noted in the poor state of incomes in private farmer households.

The explicit curbing of growth in **personal consumption** observed in 2000 signified a change of trend in the shape of the consumption curve. Following a period of accelerated growth in consumer demand in the second, third and fourth quarters of 1999, mainly stimulated by an increase in household borrowings, personal consumption had begun to rise at a distinctly slower pace from the first quarter of 2000 onwards. A major slowdown in personal consumption growth was particularly apparent in the second and third quarters of 2000. From the fourth quarter of 1999 onwards, personal consumption grew at a rather considerably slower rate than GDP.

In the third quarter of 2000, average employee earnings in the corporate sector (gross) were 0.5% lower in real terms than a year before. The purchasing power of incomes from employment in the corporate sector was down 4.3 points year-on-year. Average employment was down 3.1%. The decline reported in employment was slightly weaker than in the first and second quarters. In view of inflation running higher than provided for in the Budget, a decrease in real incomes from employment in the third quarter can also be expected in the general government sector. With the purchasing power of average employee earnings coming down in the corporate and general government sectors on a year-on-year basis, and wage pressure being curtailed by the high level of unemployment, it can be assumed that growth in incomes from employment slowed.

Preliminary estimates indicate declining growth in household incomes from social insurance benefits. This decline stems from a 4.8% fall in the purchasing power of average old-age and disability pensions and a 0.7% decrease in the average number of pensioners compared to the third quarter of 1999.

By contrast, a positive development in each of the particular quarters of 2000 was an improvement in the level of household savings. Households invested an increasing proportion of their disposable incomes in the form of bank deposits. From January 2000 onwards, a surplus was again noted in monthly growth in total deposits compared to growth in household liabilities.

In the particular quarters of 2000, the faster increase in household zloty deposits and slower growth in loan outstandings gave rise to more substantial growth in net household financial savings (taken as the growth in household bank deposits, notes & coin in circulation excluding vault cash and company cash, and other investments in securities, less the growth in household borrowings).

The halting of the downward trend in the propensity to save among households can be seen as the result of the considerable tightening of monetary policy. On the other hand, however, the lowering of household disposable incomes may have prompted greater caution and a change in behaviour, causing households to cut back their consumption.

The falling growth in personal consumption was reflected in the growth of retail sales volumes.

In the third quarter of 2000, the volume of retail sales[51], comprising sales of foodstuffs and non-food arti-

[51] At distribution companies employing more than nine people.

cles purchased by households, dropped 0.7% compared to the corresponding period of 1999. The decrease in retail sales in the respective quarters of 2000 was rooted in lower sales of motor vehicles, motorcycles and spare parts (down 20.9 points); and in solid, liquid and gas fuels, foodstuffs, alcoholic and non-alcoholic beverages, and tobacco at specialist retailers (down 15.6 points).

A further reduction in growth in **fixed investment** was related to difficulties in funding such investment and to negative appraisals of the sales prospects for new investment output. Fixed investment growth slowed to some 2.4% (as against 5.5% in Q1 and 2.9% in Q2). Construction output in the second quarter was down around 3% year-on-year, with a major decline in the volume of repair and maintenance works, and slightly more activity in capital construction and modernisation. Industrial companies chiefly manufacturing capital equipment maintained relatively high output growth (up 14% in Q1, 16% in the first half of the year, and 13% in the first three quarters), although surveys of business activity indicate that this was connected not just with domestic purchases of machinery and equipment, but also with an increase in exports.

The cutback in investment demand is most strongly connected with a fall in corporate capital expenditure, due among other things to the worsening financial condition of companies in the years 1998-99. The growth in capital spending by "large business organisations"[52], which was over 20% in the years 1995-98, came to 4% in the first half of 2000 (compared to 7.3% in the first half of 1999). In terms of future opportunities for output growth, a deterioration was seen in the pattern of investment by division of activity. At current prices, investment in industry was down 2.2% on the first half of 1999, with investment in manufacturing falling 6.2%. A reduction took place in the value of investment in industries that had shown high investment levels and growth rates in previous years, e.g., investment was down 14.2% in manufacture of food products and 14.9% in "manufacture of other non-metallic mineral products". The fall in investment at construction companies (which had run high until 1998) accentuated, coming down 22% com-

[52] Until 1999, these constituted industrial companies employing over 50 people and companies in other sectors employing over 20; as of 2000, they constitute all business organisations with a staff of over 49.

pared to the first half of 1999. In manufacture of motor vehicles, trailers and semi-trailers, capital expenditure rose 11.3%, yet the cost-estimate value of investment projects begun in the first half of 2000 was a mere 7% of that a year earlier. High capex growth was sustained in wholesale and retail trade (up 30.6% in the first half of 2000), although this division also witnessed a major decrease in the value of new projects.

The **fiscal deficit** rose 3.4bn zloty in the third quarter, to stand at 14bn zloty at the end of September. This represents utilisation of 91.2% of the target amount written into the Budget for 2000.

The high level of deficit performance against plan nine months into 2000 was primarily the result of low government receipts, with expenditure continuing to run high. Government receipts grew 33.6bn zloty in the period under review, to come to 97.9bn zloty at the end of September, equivalent to 69.5% of the annual target. Low performance was recorded on the basic sources of revenue, i.e., indirect taxes and personal income tax. Performance here stood at 67.7% and 61.0%, respectively, of the annual target. These lower than projected tax revenues were partially offset by high receipts from customs duty, dividends and profit transfers from companies and financial institutions, and revenues from central government organisations. At the end of the third quarter of 2000, non-tax receipts stood at 85.6% of the annual Budget target, whereas tax revenues were just 67.7% of those projected (a year previously, the corresponding figures had been 77.6% and 67.9%, respectively). However, it should be noted that all the sources of non-tax receipts (including customs duty) together account for just 9.9% of the total revenue target, which is why the fact that these receipts are ahead of plan cannot compensate for the poorer collectibility of VAT and excise duty, or personal income tax. The lower revenues from indirect taxation reflect slower growth in domestic demand and confirm the role of exports (involving VAT refunds) in accelerating economic expansion.

Government expenditure rose 37.0bn zloty in the course of the third quarter, to total 111.9bn zloty at the end of September, i.e., 71.6% of the amount targetted for 2000 as a whole. The fastest increase was registered in subsidies to the Employment Fund, in the cost of servicing the domestic debt, and in the local government support grant. The fact that subsidies to the Employment Fund already represented 84.1% of the annual amount projected was linked to an increase in payments of statutory benefit caused by unemployment running higher than was forecast in drawing up the national budget. As a result of the maintenance of high market interest rates and the large central government funding requirements in the third quarter, the cost of servicing the domestic debt rose to 75.4% of the annual target. Meanwhile, payments to the creditors of the Paris Club performed in September, as is traditional, led to a large increase in the cost of servicing the foreign debt. This went up from 37.9% of the annual target at the end of June to 64.8% at the end of the third quarter[53].

The proportion of annual subsidies paid to the Social Insurance Fund was lower than in 1999, standing at 72.5% of the planned amount compared to 83.8% twelve months previously. However, it should be pointed out that the Budget provision to this Fund in 2000 was 68.5% higher than it had been in 1999. In 1999, ZUS (the Social Insurance Board) built up bank debt of 3bn zloty, while at the end of September 2000 it had already borrowed 0.5bn from central government. From the beginning of the year, ZUS had been transferring social insurance contributions to the second pillar of the pension system, although these amounted to only 70% of the sum due. This increased its outstanding debt to open-ended pension funds.

The third quarter saw a high central government requirement for capital market funding, one reason being the delay in the receipt of the proceeds from the sale of equity in TP SA. High real interest rates on Treasury securities attracted investment from abroad. This produced a rise of 14% in outstanding government indebtedness to foreign investors. These investors accounted for 64.1% of non-bank funding in the third quarter, as against 32.8% in the second and 32.4% in the first.

In assessing the impact of the fiscal deficit on domestic demand in 2000, the deficit should be adjusted for:

[53] Payments to the creditors of the Paris Club constituted a central government expenditure item in September (when the funds in zloty were released), yet were registered in the balance of payments in October (when the foreign currency payments were actually performed).

- compensation payments to government sector employees and old-age and disability pensioners for non-payment of cost-of-living adjustments in the past; this compensation is classed as a repayment of prior period debt, although it actually represents a central government expenditure,
- the social insurance contributions transferred by ZUS to the second pillar of the pension system, which are included in central government expenditure, but in fact constitute savings.

The adjusted economic deficit of central government at the end of September, i.e., the fiscal deficit plus compensation payments amounting to 2.7bn zloty, less social insurance contributions of 5.6bn zloty passed on from ZUS to open-ended pension funds, stood at some 11.1bn zloty. This represents a similar level to that reported at the same point a year earlier. The adjusted deficit was equivalent to 2.3% of GDP, as against 2.6% twelve months previously. This means that the part played by this segment of public sector finances in generating domestic demand was slightly reduced.

Since figures are not yet available on the financial performance of the remaining components of public finances, it is impossible to determine whether the period under examination brought any significant tightening of fiscal policy. According to the Minister of Finance, the adjusted public sector economic deficit in 2000 is to rise to 2.5% of GDP, as against the 2% projected no later than in July, and the 2.7% recorded in 1999. The increase in the deficit in 2000 is associated with higher local authority spending on education and the borrowing powers granted during the year to the Employment Fund. It should be added that a continuing threat to attaining the deficit targetted is the financial condition of ZUS, despite a certain improvement in the first half of the year, and also the expenditure of the Health Trusts, which has been higher than planned, one reason being the sums spent on refunding the cost of medicines. An increase in the size of the public sector financial deficit would not help reinforce the credibility of the policy of curbing inflation. It could stimulate a rise in inflation expectations, and also undermine the faith of foreign investors in the feasibility of cutting Poland's current deficit.

External disequilibrium and inflationary threats

Poland's current account performance in the third quarter of 2000 continued to be positive. While the current deficit edged up compared to the second quarter (an increase of USD 125m), it was 25% lower than in the same period of 1999. On an annualised basis, the current deficit is estimated to have come to 7.3% of GDP in the third quarter, as against 7.7% in the second and 7.0% in the third quarter of 1999.

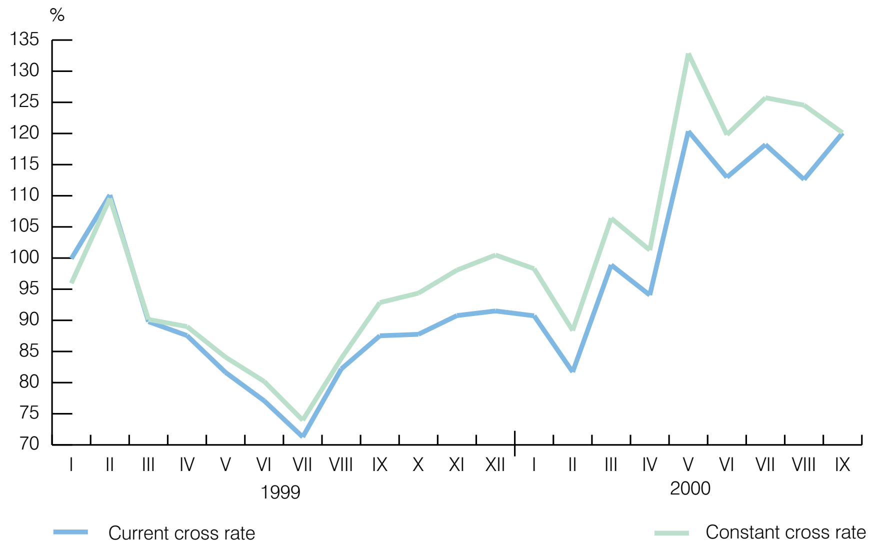
The deficit on trade in goods was down USD 557m compared to the third quarter of 1999, although up USD 308m on the second quarter. Growth in export receipts has been quickening since the second quarter of 2000; whereas first-quarter receipts were down 9.8% in dollar terms on the first quarter of 1999, export growth gradually picked up in the second and third quarters of the year, coming to 8.8% and 15.5%, respectively. Growth in import payments steadied during the first three quarters of 2000 at a low 2%-4%.

The export and import growth rates outlined above were recorded in the context of a 10.2% nominal depreciation of the zloty against the dollar and 2.8% appreciation in relation to the euro[54]. Had exports in the period January-September 2000 been carried on at the nominal exchange rates prevailing a year earlier, they would have been USD 1.65bn higher than they actually were. As regards imports, unchanged cross rates would have increased payments by USD 2.45bn (cf. Figs 49 & 50). The trade deficit would then have been USD 0.8bn greater than in fact recorded. On the same basis, the corresponding figures for the third quarter of 2000 would show exports up USD 590m, imports up USD 822m, and an increase of USD 232m in the trade deficit; these figures are similar to those for the second quarter (increases of USD 551m, USD 791m and USD 240m, respectively).

GUS data based on customs statistics show Polish exports, expressed in dollars, rising 15.2% over the first eight months of 2000 compared to the corresponding period of 1999, to stand at USD 20,019.4m, while imports

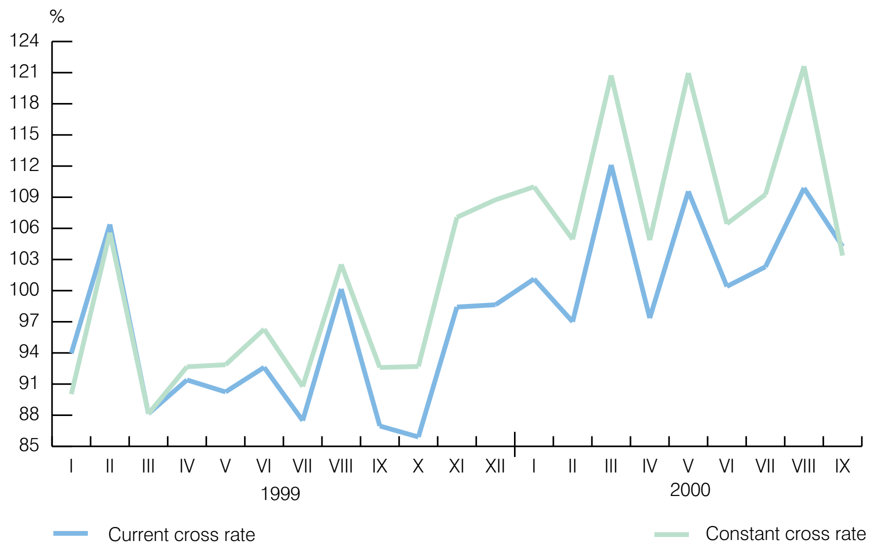
[54] The US dollar is used to settle 35.9% of Polish exports and 34.7% of imports. The euro and its component currencies account for 56.9% and 57.0%, respectively.

Figure 49
Exports *(corresponding month previous year = 100)*



Source: NBP.

Figure 50
Imports *(corresponding month previous year = 100)*



Source: NBP.

went up 10.8% to USD 31,869.9m[55]. The deficit on trade in goods thus amounted to USD 11,850.5m, and was USD 454.8m higher than in the first eight months of 1999. Compared to the first half of the year, export growth accelerated 3.3 points, while import growth was up 1.1 points.

The difference between export and import growth rates would have been 4 points greater, had it not been for a 78.5% increase in the dollar value of imported mineral fuels (primarily oil). From January to August 2000, the volume of oil imports increased 15.9% compared to the same period of 1999, while dollar prices for oil soared 80.6% (climbing from USD 103 to USD 186 per tonne[56]). If the volume of oil imports and average oil prices had remained flat at the level of the first three quarters of 1999, the value of imports from January to August 2000 would have been USD 1.1bn less, at USD 30.73bn, while import growth would have been reduced to 6.8%.

In addition to mineral fuels, high import growth was also recorded in industrial raw materials (up 14.3%), principally metal ores; in industrial goods classified by raw material (up 13.3%), principally aluminium products; and in chemicals and related products (up 10.3%), principally plastics, paints and varnishes, and pharmaceuticals.

In exports, growth was decisively dominated by sales of machinery, equipment and transport equipment, with increased dollar receipts of over 32% (including growth of over 38% in vehicle components and accessories), and also by chemicals and related products (particularly plastics and rubber products), with receipts up 25.6%.

The geographical pattern of Poland's exports did not change significantly in the first eight months of 2000 compared to that a year previously. A minor increase of 0.4 points was noted in the proportion of exports taken by Central and Eastern Europe, Russia included (see box **Trade with Russia**), at the expense of exports to OECD countries, including the EU.

[55] NBP calculations based on GUS "Biuletyn Statystyczny" (Statistical Bulletin) no. 9/2000.

[56] This average price for the first eight months of 2000 has two components: the price for the first six months, taken from the GUS publication "Handel Zagraniczny", Styczeń-Czerwiec 2000 (Foreign Trade, January-June 2000), and an estimate of prices in July and August based on those quoted for Russian oil, Urals and Siberian Light, and Brent from the North Sea. Imports from Russia currently account for 92.3% of all oil purchases abroad (as against 79% in 1998 and 88% in 1999). The increase in the proportion of Russian imports stems from the price difference, with Russian oil currently some USD 34 per tonne cheaper than Brent. In the first eight months of 2000, Poland imported a total of 11.72m tonnes.

The increasingly positive differential between export and import growth is a result of the slowdown in personal consumption growth in the second quarter of 2000 (to 2.6%), with small increases being maintained in subsequent months, and also of low growth in gross fixed investment (2.9%) (see **Domestic demand**), with a parallel surge in demand in the EU countries and Russia.

The first half of 2000 saw a continuation of the upturn in the euro area countries observed since the second half of 1999. Faster GDP growth was accompanied by an increase in import growth, which came to an annualised 10.1% in the first quarter and 12.3% in the second. In the third quarter, with oil prices continuing to rise and no prospect of this trend being reversed, and with euro depreciation becoming sharper, the business outlook in the euro area deteriorated[57]. This caused growth forecasts for this region in 2001 to be lowered. The Russian economy developed positively in the first half of 2000. First-half GDP

[57] "ECB Monthly Bulletin", October 2000.

Trade with Russia

From 1993 to the first half of 2000, a clear connection was discernible between the growth of Polish exports to Russia and changes in Russian import demand (cf. Fig. 51). The correlation coefficient between these two categories is 0.90. At the same time, a noticeable factor is the oversensitivity of exports to changes in demand up until 2000:

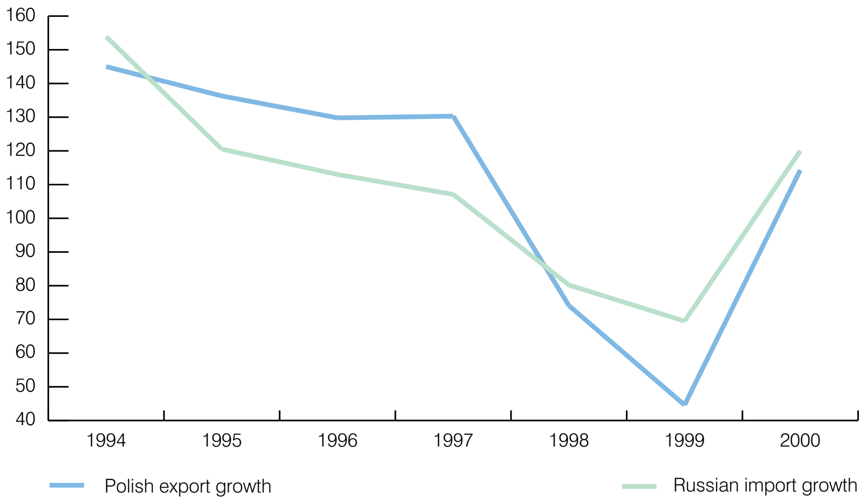
- in 1997, exports amounted to USD 2.15bn (35% annual growth in exports had been recorded since 1993, with Russian demand growing at an annual 24%),
- in 1998, exports fell to USD 1.59bn (down over 26%, while demand declined 20%), and in 1999 dropped to USD 0.71bn (a fall of two thirds compared to 1997, as against a 45% decrease in demand),
- in the first half of 2000, exports stood at USD 0.35bn (annualised growth of 14%, with demand rising 20%).

The exports most sensitive to changing demand are those of industrial goods, with chemicals and foodstuffs slightly less sensitive (cf. Fig. 52). However, Polish exporters might find it most difficult to regain their position on the Russian market for foodstuffs.

Leaving aside political considerations, there are two factors that lie behind the oversensitivity of Polish exports to changes in Russian import demand and the waning competitiveness of Polish goods, particularly foodstuffs:

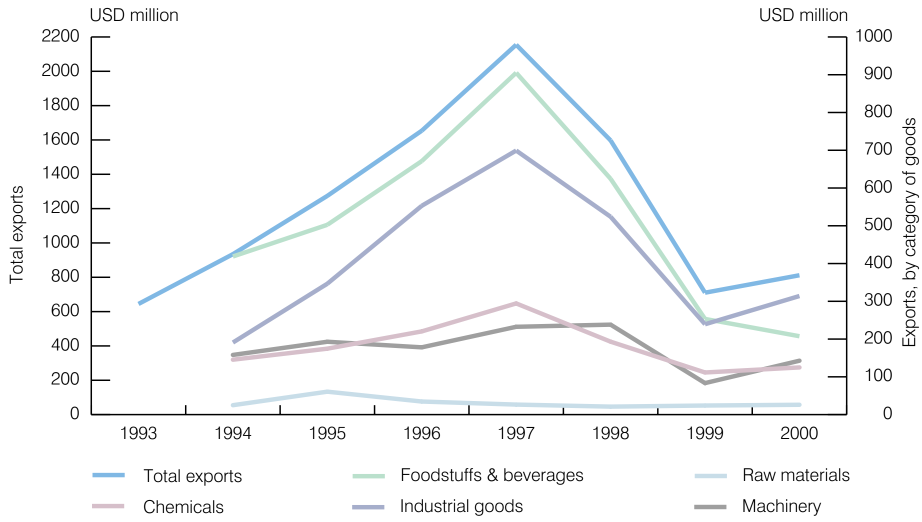
- lawful yet dubious competition from the EU countries, causing Polish foodstuffs to be crowded out from the Russian market in the years 1998-99 by cheaper imports from the EU (a process that is still continuing). The price differential involved is not so much a consequence of production costs, as of the EU system of direct production subsidies under the Common Agricultural Policy;
- the organisational framework for foreign trade (e.g., over 60% of EU contracts with Russia are insured, while in Poland the corresponding figure is less than 1%).

Figure 51
***Growth in Polish exports to Russia vs. total Russian import growth** (previous year = 100)*



Source: GUS.

Figure 52
Polish exports to Russia



Source: GUS.

growth is estimated at 7.5%. Growth here was based on investment in the production industries. This was accompanied by an increase in real incomes (an annualised 8.7%) and in industrial output (10%). This helped generate rising import demand on the Russian market[58].

The second quarter of 2000 brought an improvement in the cost competitiveness of Poland's foreign trade. Real effective zloty exchange rates, as adjusted by unit labour costs, came down 8.2% in comparison to the first quarter of the year (cf. Fig. 53). However, owing to the appreciation of nominal effective exchange rates, largely attributable to the strengthening of the zloty against the euro (see box **Impact of euro depreciation on Polish economic competitiveness**), real effective rates as adjusted by manufacturing producer prices went up 4.9% in the third quarter compared to the second, and climbed 5.1% compared to December 1999 (as opposed to a corresponding decrease of 3.1% and 4.5% in the same period of 1999)[59]. Real zloty exchange rates adjusted by consumer prices also rose, going up 4.8% on June 2000 and 8.4% in relation to December 1999, whereas a year previously they had come down 3.2% and 2.6%, respectively. The changes registered in indices of real effective zloty exchange rates in the third quarter signify a general deterioration in the price competitiveness of Polish producers of tradables (cf. Fig. 54).

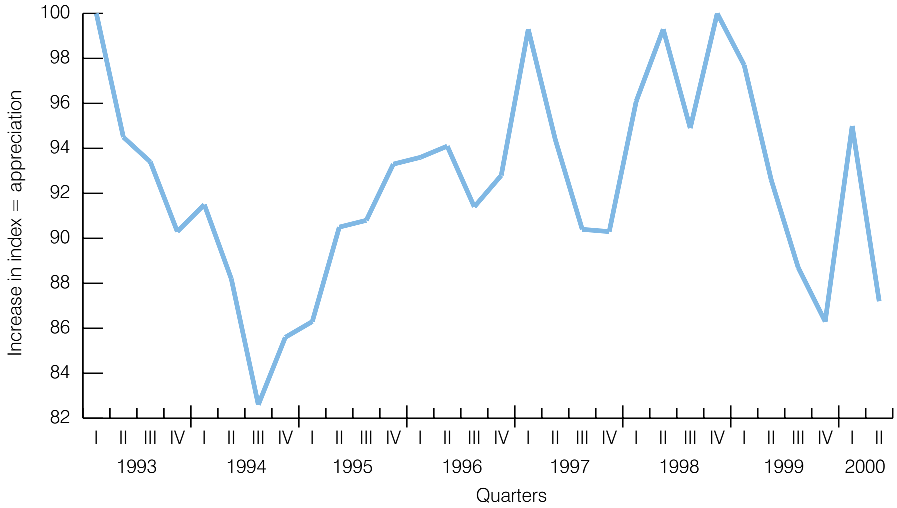
In the third quarter of 2000, a consistent improvement was visible in Polish performance on services and unclassified current transactions, with the improvement being largest in September. The deficit on services had already come down in the second quarter; in the third, it stood at USD 322m, as against USD 441m in the second and USD 548m in the first. This was the result of an increase in the surplus on transportation services, coupled with a reduction in the shortfall on "other commercial services". The third quarter also saw a continuation of growth in the positive balance on unclassified current transactions; having dropped sharply to USD 729m in the first quarter of 2000, the surplus on these transactions came to USD 1,059m in the second quarter and USD 1,079m in the third.

In the third quarter of 2000, the proportion of the current deficit funded by incoming foreign direct investment fell to 40%, as against 53% in the second quarter.

[58] *Emerging Markets – Economic & Market Analysis*, Schroder Salomon Smith Barney, September 7, 2000.

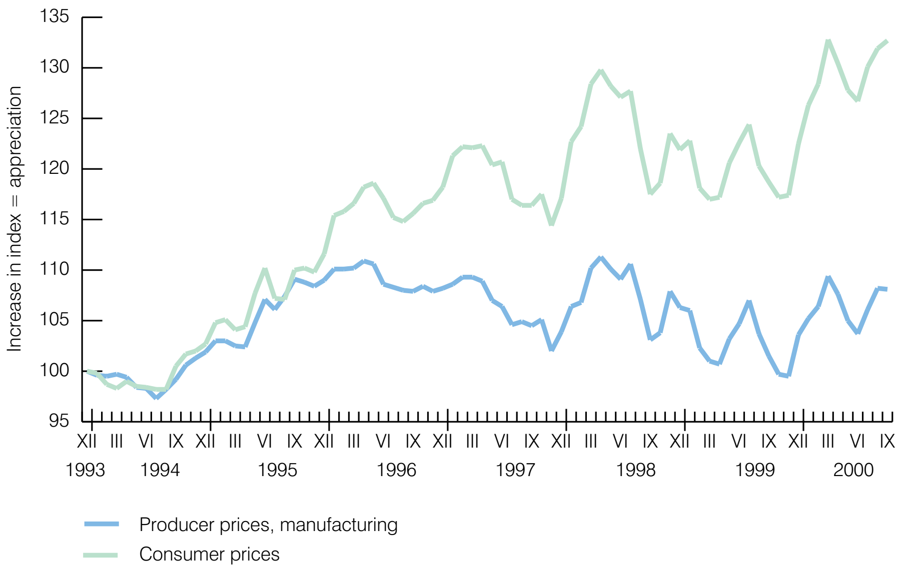
[59] Figures on Q3 2000 foreign inflation based on estimates.

Figure 53
Real effective zloty exchange rates, adjusted by unit labour costs, 1993-2000



Source: NBP calculations.

Figure 54
Real effective zloty exchange rates, 1994-2000 *(monthly figures, December 1993 = 100)*



Source: NBP calculations.

Impact of euro depreciation on Polish economic competitiveness

Given that the EU is Poland's largest trading partner, and that euro exchange rates have been trending down on world markets ever since the single currency was launched, a question that arises is what impact this has had on Poland's competitive position. Competitiveness is here taken to involve a change in relative prices or costs as expressed in the single currency. The indicator of the evolution of a given country's international competitiveness are its real exchange rates.

The European single currency has been subject to increasingly sharp depreciation in relation to the US dollar since its very inception; in January 1999, the euro was trading at USD 1.16, while in September 2000 it was valued at USD 0.87, which represents a 33% decline in the space of less than two years. The sources and causes of the weak euro were discussed in an earlier box **Reasons for euro depreciation**. Over the same period, the zloty gained 4.1% against the euro in nominal terms, while losing 23.1% to the dollar. The major movements in the exchange rate for these two currencies are therefore reflected in their exchange rates against the zloty.

A consequence of nominal zloty appreciation against the euro are similar movements in its real value. The real exchange rate for the zloty against the euro, as adjusted by manufacturing producer prices, was 8.9% higher in September 2000 than it had been in December 1999, whereas a year previously it had come down 0.2% in the corresponding period. By comparison, the same index for the zloty against the dollar shows a fall of 5.2% in the first nine months of 2000, and one of 12.6% in the first nine months of 1999 (cf. Fig. 55). In general, however, real zloty exchange rates softened systematically in relation to the dollar in 1999 and the first three quarters of 2000, while displaying the opposite tendency, albeit relatively milder, in terms of the euro.

A marked reduction in the real appreciation of the zloty against the single currency was caused by a substantial quickening of euro area price growth. Manufacturing producer prices in the EMU countries showed year-to-date annualised growth of 5.0% at the end of August (compared to 0.8% in August 1999) and eased the upward pressure flowing from the increase in domestic prices in Poland, which over the period in question stood at 8.0% in 2000 and 5.1% in 1999.

These movements in indices of real zloty exchange rates testify to a constant worsening of the price competitiveness of the Polish economy in relation to our major trading partners, the euro area countries. At the same time, Poland's competitive position has been improving with respect to the USA and other countries with which trade is settled in US dollars.

Similar conclusions can be drawn from an analysis of the indices of real zloty exchange rates that measure the relative profitability of the export sector*.

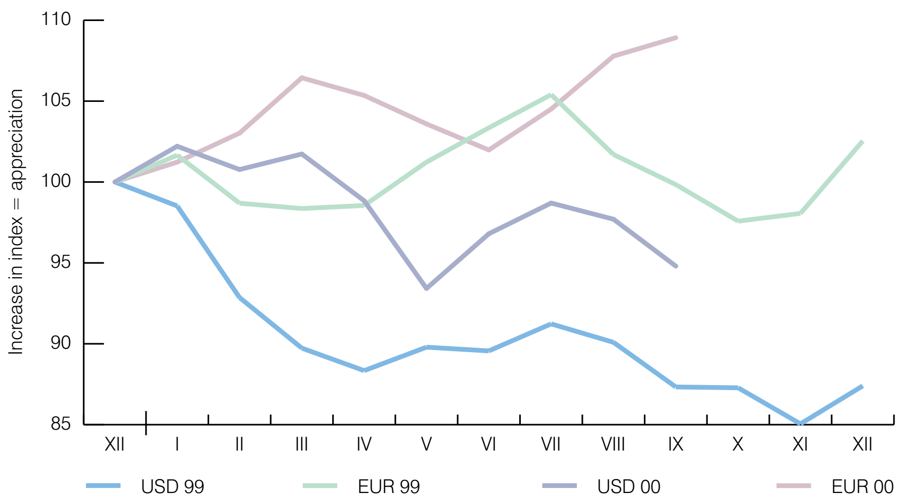
The direction of movement in the indices of the profitability of Polish exports in relation to the euro area countries and the US economy are similar, although from the first quarter of 1996, when the euro's predecessor, the ECU, began to weaken against the dollar on world markets, and the increase in the nominal zloty value of the euro therefore also began to weaken**, the two indices have forked apart (cf. Fig. 56). Thus, the profitability of Polish exports to the USA has tended to rise since the beginning of the period under examination, i.e., since 1993. The return earned on Polish exports to the European Union, on the other hand, has varied over this period, going down in the years 1995-98, to rally in 1999. Nonetheless, exports to the dollar zone retain a sizeable and growing profitability advantage over those to the euro zone. These conclusions signify a much faster increase in relative export transaction prices compared to relative costs in the case of the USA than in the case of the European Union. However, the present situation is considerably more favourable in terms of the profitability of trade with the EU countries than it was in 1998, when an absolute deterioration of profitability occurred in relation to the base period.

It needs to be stressed here that fluctuations in nominal zloty exchange rates currently have a stronger impact on real exchange rates than does the relationship between prices and costs at home and abroad. With growth in prices and costs tending to be faster in Poland than abroad, the nominal appreciation of the zloty aggravates the worsening of Poland's competitiveness, or limits any improvement in it. This effect can be seen in relation to the euro area countries, which represent the largest sales market for the Polish economy. A major part in this is played by the depreciation of the euro against the dollar.

* Relative profitability is here calculated as the relationship between real zloty exchange rates based on export prices and real zloty exchange rates as adjusted by unit labour costs. This measure is interpreted as expressing the degree of change in the ratio of export receipts to costs, with its reverse being the relationship between changes in the proportion of labour included in the value added in a country's export sector and the corresponding changes among its trading partners (cf. L. Lipschitz, D. McDonald, *Real Exchange Rates and Competitiveness*, Empirica - Austrian Economic Papers, 1992).

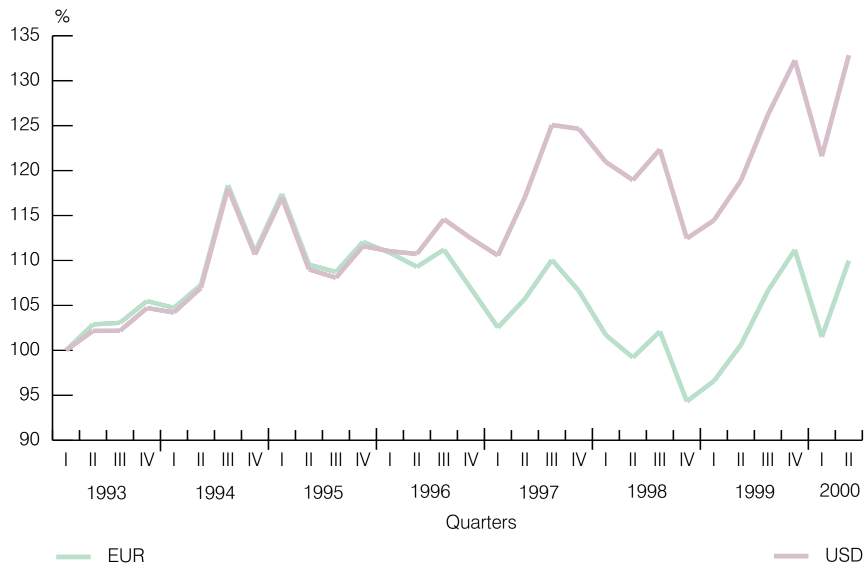
** Prior to 1999 - against the ECU.

Figure 55
Real zloty exchange rates against currencies of major trading partners, 1999-2000
(December previous year = 100)



Source: NBP calculations.

Figure 56
Relative profitability, 1993-2000



Source: NBP calculations.

Aggregate supply

Value added rose 3.1% year-on-year in the third quarter of 2000 (as against 5.8% in Q1 and 5.0% in Q2). This slower growth is attributable to the slacker growth in domestic demand. This particularly applies to construction and commercial services. The strongest growth was seen in industry, which was related to the further large increase in exports. The rise in value added was achieved with lower employment than twelve months previously. Productivity grew faster than output, especially in industry.

Third-quarter industrial output was up 6.6% year-on-year. As in the first half of the year, rapid growth was seen at companies selling their products on foreign markets. This applies both to firms producing capital equipment and to those producing production supplies, and to a certain extent also to those producing consumer goods. The upturn on foreign markets led to an increase in sales in such industries as metals, coke, the manufacture of radio, television and communication equipment and apparatus, and chemicals. Despite a deepening decline in sales of passenger cars, output growth was sustained in manufacture of motor vehicles, trailers and semi-trailers, mainly due to exports of vehicle components. Over the first three quarters of the year, output rose some 3% at companies chiefly producing consumer goods, 13% at those producing capital equipment, and 14% at those producing production supplies.

Preliminary estimates are that the growth of value added in commercial services declined from 5.6% in the first quarter and 5.3% in the second to 3.5% in the third. Slower growth here is primarily traceable to a significantly lower rise in sales and margins in retail distribution. For the first time since 1992, retail sales fell at large and medium distribution enterprises, coming down 0.7% (retail sales had risen 8.8% in Q1 and 3.9% in Q2). Despite the substantial increase in foreign trade, growth in wholesale decreased, which may be attributed to the faster growth of exports, largely carried out directly by industrial companies, with slower growth in imports, handled mainly by distributive firms. Sales of transport services declined further. Strong growth in value added was maintained in services and at financial and insurance institutions.

Value added in construction was down compared to the third quarter of 1999, the result of slower growth in capital construction and modernisation, together with a slump in repair and maintenance works. Output declined at companies involved in building installation and the building of complete constructions, while rising at those involved in site preparation and building completion.

The situation in agriculture failed to improve. A further fall was reported in livestock production. Procurement of fatstock and milk shrank. The livestock inventory carried out at the end of the first half-year showed a further contraction of the cattle herd and a decrease in the pig herd, which had been expected given the adverse economic conditions for pig breeding. Owing to exceptionally bad weather conditions for agriculture, crop production fell steeply. Although the most recent estimates of the yields and harvest of the major crops are more positive than initial appraisals, the decline in agricultural production in 2000 can be expected to have been greater than in 1999, and may come to around 10%.

Non-monetary inflation factors

The structural features of the Polish economy mean that monetary policy has a limited impact on the pace of price growth. Seen in these terms, issues that have demanded attention in the recent period include:

- the scope of protection from external competition afforded to the market,
- the degree of monopolisation of the economy,
- changes in the structure of corporate production costs,
- shifts in the pattern of indirect taxation,
- the costs involved in carrying out restructuring programmes.

The protection of the Polish market from imports, particularly those from the European Union, is being scaled down systematically. Some 77% of industrial imports to Poland currently come into the country duty-free. In 1999, the process of liberalising industrial imports from the EU and other areas included in free trade agreements was completed, with some small exceptions, as was the deregulation undertaken under the aegis of the WTO. Tariffs on steel products imported from the EU were lifted at the beginning of 2000. Previously, these imports had been subject to extended protection under a protection clause. Tariffs on imports of crude oil, petrol and diesel oil were abolished as of September 2000. An exception are tariffs on car imports, which are the subject of gradual liberalisation (to be completed by 2002). In trade with countries not covered by preferential tariffs with whom Poland has concluded bilateral free trade agreements, tariffs on the remaining industrial products (e.g., textiles and textile products) are to be dismantled at the beginning of 2002.

As regards those imports so far not exempt from customs tariffs, the Government resolved in 2000, as it had in 1999, to establish duty-free quotas for certain goods. These mainly comprised treaty quotas stemming from Poland's international commitments (e.g., the duty-free quota on cars imported from the EU, and a quota on certain products for the automotive industry). Economic quotas were also put in place, allowing tariffs to be lifted on raw materials and components for the manufacture of chemical products, electrical and electronic products, paper products, clothing and footwear, pharmaceuticals, and metals. Economic quotas are designed to cut costs, and thus improve the price competitiveness of Polish finished goods.

It is estimated that in 2000 the average duty payable on imports of industrial goods and raw materials from the EU (which accounts for some 66% of Polish imports) was around 1%, while on imports from other countries it came to around 4%. This means, on the one hand, that the protection of domestic industry from foreign competition has been reduced to a minimum, and that domestic prices largely moved in response to world prices, and on the other – that the cost of material inputs was swollen by customs tariffs to only a modest extent.

In contrast with industrial imports, only a small proportion of agricultural and food imports had been liberalised by 2000[60]. From 1999 onwards, the tariff protection of the market for agricultural produce has been increasing, representing a response to excessive imports and the negative consequences of these for the domestic market (this protection applies to such products as pork, sugar, butter and rapeseed). At the beginning of 2000, tariffs were raised on flour, malt, bran and oil meal, among other things. The stiff protection from external competition provided to the agricultural market means that it is poorly integrated with the world market. None of Poland's trad-

[60] In the first half of 2000, foodstuff imports represented 5.4% of the overall value of Polish imports; 49% of agricultural imports were from the European Union.

ing partners have completely liberalised their trade in agricultural produce. High tariffs on agricultural produce, currently estimated to average around 14.7%, on the one hand make it easier for domestic producers to survive, and on the other cause foodstuff price growth to be maintained in correspondence with rising costs and the official intervention conducted under the Government's ongoing agricultural policy. The system of official intervention on the grain market applied in 2000 represented a continuation of the programme of grain purchases introduced in 1999, involving producer subsidies from the Agricultural Market Agency[61]. The programme for 2000 projected subsidised purchases of over 20% more wheat than a year previously and 40% more rye. Direct subsidies to farmers selling wheat and rye were applied from August to October. A financial incentive for producers was also maintained by offering higher subsidies for grain delivered in September and October to avoid an excessive concentration of grain supplies to granaries in the first weeks of the harvest.

The liberalisation of industrial imports has heightened competition on the markets for most industrial goods. However, a situation close to monopoly still obtains with regard to certain goods and services. Monopolised markets can be said to exist in Poland for liquid fuels, telecommunications and postal services, land transport involving both passenger and freight traffic, electricity supply and district heating. The PKN ORLEN oil corporation has a dominant position on the market for liquid fuels, in both refining and distribution. The position of TP SA is protected from competition on the domestic market by its exclusive right to provide terrestrial phone services. The State Post Office and Polish State Railways, as the sole organisations on the domestic markets for postal services and rail transport, themselves set the terms and conditions of the services they provide. In the case of power stations and combined heat-and-power stations, these organisations hold monopolies on local markets (as the sole producers in a given region).

Figures taken from a data base on large and medium enterprises[62] confirm the above and indicate several

[61] Purchases of grain under direct Agency producer subsidies were carried out at prices no lower than a minimum set for 2000. In the case of wheat, this minimum price was 6.7% higher than in 1999, while the price for rye was 3.1% higher.

[62] These figures are taken from quarterly financial statements submitted on the F-01 form by all companies employing 50 or more employees, regardless of the business they conduct. At mid-year 2000, there were 17,095 of these companies.

other areas where companies enjoy dominant positions[63]. However, these are primarily areas of industry of lesser importance for the domestic market overall, or fields where the existence of one strong company is a natural consequence of the character of production involved. This chiefly applies to mining and raw material industries. At the end of September 2000, it was possible to identify 71 industrial companies of this kind. Half of these were the sole representative of their subclass of activity[64]. Some of the industrial companies occupying a dominant position in their subclass are presented in Table 10.

Some companies classified as belonging to the section of transport, storage and communication enjoy a privileged monopoly position within their field of activity. This section encompasses a very diverse range of activities, both passenger and freight traffic via land transport (including pipeline transport), water transport and air transport, and also supporting and auxiliary transport activities, i.e., the provision of services by stations, ports and airports involving traffic control and passenger, baggage and cargo handling services. In addition, this section also comprises the storage and warehousing of all types of goods, travel assistance services, including assistance in customs clearance and the activities of tour organisers and travel agencies, and finally – postal and telecommunications services.

Using the data base already mentioned, it was ascertained that companies occupying a dominant position existed in over half of the subclasses of the section of transport, storage and communication. Information on selected companies in this category is presented in Table 11.

In many cases, the dominant position enjoyed by the company concerned was one close to monopoly, since the company accounted for almost 100%, or even a full

[63] A company in a dominant position is taken to be one obtaining over 50% of the revenues of a given subclass of activity. In the relevant legislation, however, the term "dominant position" is construed as meaning the position of a business that has a "market share of over 40%" and "does not encounter significant competition on the domestic or local market" (cf. decree of the Prime Minister, May 31, 1999, promulgating the text as amended of the Act on Combatting Monopoly Practices and Consumer Protection, "Dziennik Ustaw RP" [Journal of Laws of the Republic of Poland, no. 52/1999, item 547]).

[64] In the Polish Classification of Economic Activity, a "subclass" is the fifth and lowest level in the system of categorising business establishments within the national economy; a subclass contains businesses producing roughly similar products (establishments are categorised by section, division, group, class and subclass).

Table 10
Selected industrial companies occupying dominant market positions, January-September 2000

Division	Subclass	No. of establishments in subclass	Share of dominant establishment in revenues of subclass (%)	Share of division in industrial output (%)
Division no. 10 – Mining of coal & lignite; extraction of peat				**3.8**
	Mining & agglomeration of hard coal	9	78.7	
	Mining of lignite	5	52.1	
	Extraction & agglomeration of peat	1	100	
Division no. 11 – Extraction of crude petroleum & natural gas; incidental service activities				**n.a.**
	Extraction of crude petroleum	1	100	
Division no. 13 – Mining of metal ores				**n.a.**
	Mining of copper ore	1	100	
	Mining of zinc & lead ores	1	100	
Division no. 14 – Other mining & quarrying				**n.a.**
	Mining of sulphur-bearing minerals	1	100	
Division no. 15 – Manufacture of food products & beverages				**19.5**
	Manufacture of homogenised food preparations & dietetic food	5	52.8	
	Manufacture of grape wine	6	69.1	
Division no. 17 – Manufacture of textiles				**1.7**
	Preparation & spinning of woollen fibres	12	65.5	
	Preparation & spinning of flax fibres	3	92.5	
Division no. 19 – Manufacture of leather & leather products				**0.7**
	Manufacture of sports footwear	2	90.2	
Division no. 21 – Manufacture of pulp, paper & paper products				**2.2**
	Manufacture of pulp	1	100	
Division no. 23 – Manufacture of coke & refined petroleum products				**5.6**
	Manufacture of coke oven products	1	100	
	Manufacture of refined petroleum products	1	100	
Division no. 24 – Manufacture of chemicals & chemical products				**5.9**
	Manufacture of synthetic rubber	1	100	
	Manufacture of medicaments & pharmaceuticals	1	100	
	Manufacture of cosmetics & toilet preparations	34	54.6	
Division no. 25 – Manufacture of rubber & plastic products				**3.7**
	Manufacture of industrial rubber products	2	88.2	
Division no. 27 – Manufacture of metals				**5.2**
	Manufacture of cast-iron tubes	1	100	
	Precious metals production	1	100	
	Copper production	6	63.4	

Division no. 29 – Manufacture of machinery & equipment not elsewhere classified				**4.3**
	Manufacture of engines & turbines	1	100	
	Manufacture of machinery			
	for paper production	6	65.8	
Division no. 30 – Manufacture of office machinery & computers				**n.a.**
	Manufacture of office machinery	3	58.7	
Division no. 34 – Manufacture of motor vehicles, trailers & semi-trailers				**7.2**
	Manufacture of goods vehicles	2	86.5	
Division no. 35 – Manufacture of other transport equipment				**2.1**
	Manufacture of motorcycles	1	100	

NB: In the period January-September 2000, the four divisions for which data are not available, together with two others, accounted for a mere 2.4% of total industrial output.

Source: GUS, NBP aggregation & calculations.

100%, of the revenues of the subclass in question. It is worth recalling that these figures refer solely to large and medium enterprises (employing a staff of over 49), which is the reason for the small number of companies included within certain subclasses. There can be no doubt, therefore, that something close to a monopoly

Table 11
Selected companies occupying dominant market positions in the section of transport, storage & communication, January-September 2000

Subclass	No. of establishments in subclass	Share of dominant establishment in revenues of subclass
Transport via railways	11	95.7
Transport via pipelines	1	100
Inland water transport	4	66.4
Scheduled air transport	1	100
Non-scheduled air transport	3	52.3
Airport activities	2	98.9
State post activities	1	100
Post activities by establishments other than state post office	4	71.1
Terrestrial telephone and telegraph communications	4	99.4
Data transmission and teleinformation services	2	88.2

NB: Figures refer solely to companies employing a staff of over 49.

Source: GUS, NBP aggregation & calculations.

position is held by companies involved in air and rail transport, by the state post office, and by companies in the field of telephone services and telecommunications.

Many areas of the Polish economy are in the course of internal restructuring, which is associated with modernising production, cutting costs and improving the competitiveness of their products, and also adjusting themselves to the standards and technological regimes in force in the European Union. The requirements involved apply both to industry and to all other fields of business activity and services, and give rise to particular needs for capital expenditure. This fact constitutes a potential threat to price stability in view of possible attempts to involve consumers in financing the development process. Moves of this sort are especially possible on markets that are not fully competitive (e.g., telecommunications services, liquid fuels, air transport). In certain cases, such as the raw material and extractive industries (e.g., mining and quarrying, the metal industry), or transport services (Polish State Railways), it is necessary to draw on government funding to finance restructuring programmes. These are generally areas of activity that generate a particularly large deficit, yet are of great importance to the efficient operation of the economy as a whole. This applies to the mining of coal and metal ores, to metal manufacture, and to the state railways. Programmes for the restructuring and privatisation of these industries have already been drawn up and are gradually being implemented. However, the performance of these programmes entails enormous costs, especially in employee protection (severance pay, early retirement, training and retraining schemes, etc.).

Confirmation of the above tendencies can be found in analysing data on subsidies to large and medium enterprises. The pattern of subsidies involving financial support to loss-making companies indicates that in the period January-September 2000 this type of assistance was primarily provided to public sector enterprises. In relative terms, the largest subsidies were to coal and lignite mining and to land transport, chiefly rail transport (cf. Table 12). It is worth underlining that there is a tendency for increasing use to be made of government support, particularly in the division of land transport.

At the end of September 2000, subsidies in the division "coal and lignite mining; extraction of peat" constituted 5.9% of revenues from total business operations, and in the division "land transport, transport via pipelines" they

Table 12
Pattern of subsidies, corporate sector *(year-to-date, %)*

	1999				2000		
	I-III	**I-VI**	**I-IX**	**I-XII**	**I-III**	**I-VI**	**I-IX**
Total corporates	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
of which:							
– public sector	93.0	91.4	90.6	89.6	93.2	90.3	90.3
– private sector	7.0	8.6	9.4	10.4	6.8	9.7	9.7
Mining & quarrying	23.78	26.05	25.02	25.16	27.11	30.45	28.85
of which:							
– mining of coal & lignite;							
extraction of peat	22.60	24.82	23.57	23.67	25.69	28.89	27.14
Manufacturing, of which:	6.47	8.33	9.57	10.11	6.57	7.29	7.53
– manufacture of food products & beverages	1.71	2.11	1.91	1.77	2.08	1.94	1.77
Electricity, gas & water supply	0.29	0.27	0.35	0.33	0.28	0.63	0.63
Construction	1.77	1.95	2.14	2.17	2.14	2.66	2.78
Transport, storage & communication, of which:	13.53	13.68	14.56	15.14	14.55	18.83	19.46
– land transport; transport via pipelines	13.31	13.43	14.31	14.92	14.26	18.50	19.13

Source: GUS, NBP aggregation & calculations.

represented 4.4%, while in the other divisions they were a fraction of one percent (0.01%-0.1%). Where these subsidies take the form of price support, as has been the case with coal mining, they directly feed inflation.

Recent years have brought a marked development of the service sector[65]. This stems from the continuing division of labour and the increasing specialisation in servicing the sector of direct production. This particularly involves the compilation and transfer of information. There is a constantly growing need for the application of computers, the Internet and telephone links, putting the firms that provide services of this sort in a privileged position. For this reason, monopoly practices in this area are a particular threat to the prices charged for these services. The market has seen the emergence of direct services to corporates in such fields as accounting, market and public opinion research, advertising, the organisa-

[65] The section comprising companies providing various services ("Real estate, renting, research & other business activities") saw its revenues from total operations go up 20.3% in the first half of 2000 compared to the first half of 1999, while the corresponding growth in industry was under 16%.

tion of exhibitions and trade fairs, legal support, tax and financial consultancy, security services, office and industrial cleaning, etc., and also services connected with corporate development, such as technical testing and analysis, design activities, or geological and exploration services. Another popular form of services is renting. Goods available for rent include specialised machinery and equipment (including agricultural, construction and office equipment), and vehicles. The possibility of renting machinery and equipment allows companies to avoid the need to acquire certain assets that are only required periodically in the production process, which in the final analysis is cheaper than purchasing those assets and holding them throughout the year. The overall tendency for outsourcing may flow from the search for economies in other cost components as well.

The development of services lies at the root of the changes in the structure of corporate production costs. Figures on the structure of costs in the sector of large and medium enterprises confirm the trend towards reducing payroll and depreciation costs, and sometimes the cost of material inputs as well, with a corresponding growth in the relative weight of external service costs (cf. Table 13).

Movements in industrial producer prices in the first nine months of 2000 were principally determined by producer price growth in five divisions of industry: manufacture of coke and refined petroleum products; manufacture of food products and beverages; electricity, gas, steam and hot water supply; manufacture of chemicals and chemical products; and manufacture of metals. Together, producer prices in these divisions accounted for some 74.4% of the movement in the PPI (cf. Fig. 57).

A noteworthy development is the systematic increase in the impact of prices in the division "electricity, gas, steam and hot water supply" on overall industrial producer price growth. Over the first nine months of 2000, the contribution made by price growth in this division to overall PPI growth is estimated to have more than doubled (up from 10.4% in 1999 to 22.8% in January-September 2000). In 2000, consumer protection against unjustified growth in electricity charges was maintained[66]. Tariffs

[66] Under the Energy Act of 1997, price controls were lifted on electricity and district heating charges. At the same time, however, the price tariffs established were made subject to approval by the President of the Energy Regulation Authority.

Table 13

Changes in structure of total costs at large & medium enterprises, selected sections & divisions

(year-to-date, percentage points)

	Change in share of cost component within total costs costs (Q1-3)			
	1999 vs. 2000[a]			
	External service costs	Total labour costs	Material input costs	Depreciation
Total, of which:	+0.45	–2.01	+2.43	+0.09
Industry, of which:	+0.63	–2.49	+3.24	–0.26
Mining & quarrying	+0.55	–1.71	+1.01	–0.01
Manufacturing	–0.10	–2.20	+3.50	–0.08
of which:				
– manufacture of coke & refined petroleum products	–0.35	–0.69	+9.22	–0.06
– manufacture of food products & beverages	–0.76	–0.87	+2.96	–0.17
– manufacture of chemicals & chemical products	–1.28	–1.84	+3.72	–0.25
– manufacture of metals	+0.87	–5.22	+5.10	–0.43
Electricity, gas & water supply	+6.50	–2.20	–1.08	–1.39
of which:				
– electricity, gas, steam and hot water supply	+7.10	–2.46	–1.32	–1.62
Construction	+1.82	–2.08	+0.73	+0.10
Transport, storage & communication	+1.32	–0.83	+0.12	+0.97

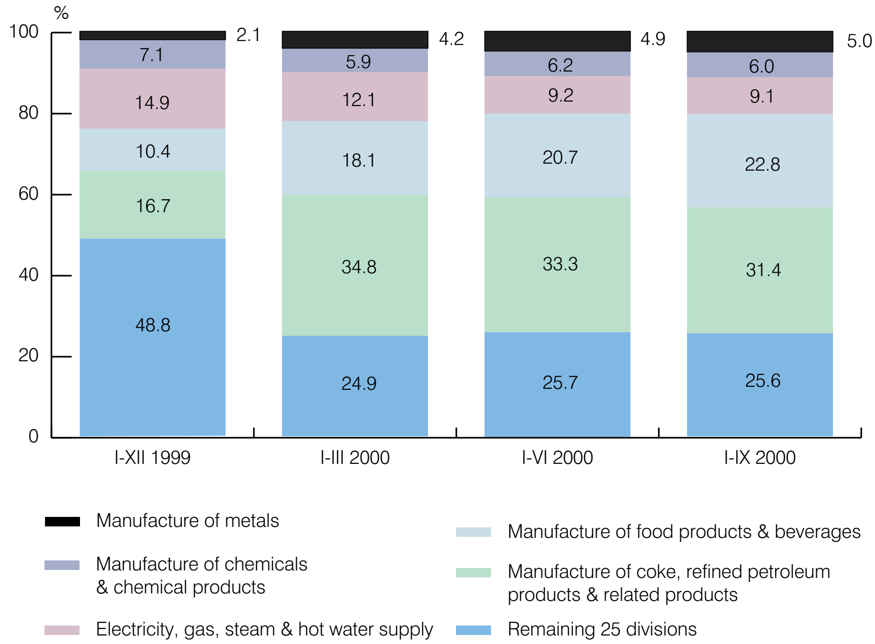
[a] Share of given cost component within total costs, January-September 2000, less corresponding share, January-September 1999.

Source: GUS, NBP aggregation & calculations.

continued to be subject to approval by the President of the Energy Regulation Authority, although approvals did not begin to be issued until March. Since there are no officially announced limits and timetables for energy price increases in 2000, increases were staggered out over time, occurring in the third quarter as well. The energy exchange, which commenced activity as of July 1, represents no more than some 1% of the market, and in practical terms has no influence at all on energy price levels as a whole. It is estimated that in 2001 the exchange should extend its operations to around 5%-7% of the market, which should already begin to impact price formation.

The structural changes observed over the last few quarters in corporate sector costs have primarily involved a reduction in the contribution made by

Figure 57
Contribution to PPI of producer price movements in selected divisions of industry, 1999-2000
(year-to-date, corresponding period previous year = 100)



Source: NBP calculations based on GUS figures.

total labour costs[67], and an increase in that of external service costs and material input costs. Energy costs are also playing an increasingly minor role in the cost structure of particular sections and divisions of activity.

External service costs are clearly gaining in importance in all sections of the economy, regardless of the extent to which the activity in question is productive in nature. This represents a certain law of development. Over the twelve months to the end of September 2000, the most rapid growth in external service costs as a proportion of total costs was seen in the section of electricity, gas and water supply, where these costs climbed 6.5 points to 21.4% of total costs, and in construction, where they rose 1.8 points to 39.5%.

A feature of industry is the high share of material input costs in total costs. In the period January-September 2000, this share stood at 53.1%. Certain

[67] These comprise employee earnings plus other employee benefits.

divisions of industry reported higher than average proportions of material input costs. This was true of manufacture of metals (67.3% of total costs), manufacture of food products and beverages (60.9%), and manufacture of coke and refined petroleum products (56.7%). The share of total costs represented by material inputs tends to alter sharply in response to movements in the price of raw materials and intermediates. This was visible in the first three quarters of 2000 in the division of manufacture of coke and refined petroleum products, where the cost of these inputs went up 9.2 points compared to the corresponding period of 1999, largely due to rising oil prices. The situation in this division reflects developments on international markets. The reliance on imports means that both producer prices and input costs in this division are affected by world price movements.

The problem of excise duty as an additional cost component applies to only six divisions of industry. In the first nine months of 2000, excise duty represented the highest proportion of costs in the divisions of manufacture of tobacco products (64.6%) and manufacture of coke and refined petroleum products (30.4%). A much lesser role was played by excise duty in the division of manufacture of food products and beverages (9.2% of total costs). This stems from a fiscal policy that targets certain product groups in particular for excise duty, i.e., cigarettes, alcoholic beverages and liquid fuels (cf. Table 14). As of September 1, excise duty was raised by around 4.5% on fuels and some 4% on rectified spirit used in the production of alcoholic beverages.

VAT is a price component that affects company costs only to a minimal degree. In the corporate sector, VAT payments in the first nine months of 2000 accounted for a mere 0.2% of total costs; this refers to cases where input tax is not eligible for refund or deduction.

The volume of VAT output tax, payable on sales, has recently been rising very swiftly, leaping 16.7% in the first half of 2000 compared to the same period of 1999; in the first three quarters of 2000, year-on-year growth came to 10.6%. On average, over 90% of this output tax was not taken to costs by the companies concerned, yet it constituted a major factor in the prices paid by the end users of the products in question, i.e., by consumers.

Over the first nine months of 2000, 4.5% of total corporate sales were exempt from VAT (in the corresponding period of 1999, 6.1% of sales were exempt). Almost 60%

Table 14
***Excise duty: growth & share in total costs** (year-to-date, %)*

	1999				2000			
	I-III	I-VI	I-IX	I-XII	I-III	I-VI	I-IX	I-IX
			total costs = 100					I-IX 1999 = 100
Manufacturing, of which:	**6.68**	**6.93**	**7.49**	**7.44**	**6.62**	**7.01**	**7.13**	**115.4**
– manufacture of food products								
& beverages	9.53	9.04	10.01	9.99	9.00	9.13	9.21	103.9
– manufacture of tobacco products	56.78	62.77	63.14	63.82	54.49	63.42	64.55	102.2
– manufacture of coke								
& refined petroleum products	40.78	37.99	38.23	35.07	30.92	31.01	30.35	130.5
– manufacture of chemicals								
& chemical products	0.17	0.15	0.15	0.14	0.17	0.16	0.15	115.9
– manufacture of rubber								
& plastic products	0.06	0.07	0.07	0.07	0.06	0.08	0.08	164.7
– manufacture of motor vehicles,								
trailers & semi-trailers	0.81	0.89	0.78	0.79	1.15	1.34	1.09	184.4

Source: GUS, NBP aggregation & calculations.

Table 15
VAT, corporate sector, January-September 2000
(year-to-date, corresponding period previous year = 100)

	Total corporate sector		Manufacture of coke & refined petroleum products		Manufacture of food products & beverages		Electricity, gas, steam and hot water supply	
	share	growth	share	growth	share	growth	share	growth
Sales, of which:	**100.0**	**118.6**	**100.00**	**159.2**	**100.00**	**113.2**	**100.00**	**106.9**
– exempt from VAT	4.5	88.8	0.32	124.8	11.44	106.0	0.36	62.0
– exports, taxable at 0%	13.1	133.6	5.41	215.8	6.52	123.8	0.92	98.2
– taxable at 7%	21.4	134.5	1.14	184.2	45.70	108.7	0.94	156.6
– taxable at 17%	2.8	34 times	0.17	.	5.94	194 times	0.01	226.2
– taxable at 22%	58.3	112.4	93.05	155.4	30.40	106.7	97.78	105.0
Total output VAT	.	110.6	.	164.3	.	107.5	.	100.6
– share of output VAT in sales	14.27	.	22.76	.	9.93	.	20.35	.
VAT deductible	.	103.2	.	167.6	.	109.4	.	97.1
– ratio of deductible VAT								
to output VAT	93.38	.	79.00	.	73.12	.	79.53	.

Source: GUS, NBP aggregation & calculations.

of sales were subject to a VAT rate of 22% (cf. Table 15). In most divisions of activity, this rate was predominant. In the divisions of manufacture of coke and refined petroleum products, and electricity, gas, steam and hot water supply, 22% VAT applied to 93% and 97.8%, respectively, of total sales. Thus, in these divisions total output VAT represented almost 22% of sales.

The Government's fiscal policy produced distinct changes in the pattern of VAT collected in the first nine months of 2000 compared to the same period of the previous year. The most important features of the taxation policy pursued over the last year, visible in the composition and growth rates of VAT receipts, are the Government's desire to:

- limit the scope of VAT-exempt sales (down from 6.1% for the total corporate sector in January-September 1999 to 4.5% in January-September 2000),
- achieve a substantial increase in the proportion of sales subject to 17% VAT (for the total corporate sector, this rose from 0.1% to 2.8%; in the case of the division of manufacture of chemicals and chemical products, the rise in this proportion was exceptionally sharp, from 0.2% to 7.4%, which was accomplished at the expense of reducing the share of sales taxable at the 22% rate),
- increase slightly the proportion of sales subject to 7% VAT in most divisions of activity,
- reduce slightly the proportion of sales subject to 22% VAT,
- hold virtually flat VAT receipts on sales in particular divisions of activity, despite changes in the structure of sales taxable at different rates (for the total corporate sector, the share of VAT in sales in the first nine months of 1999 had come to 15.6%, while in the corresponding period of 2000 it came to 14.3%; in the division of manufacture of food products and beverages, the corresponding ratios were 10.7% and 9.9%, and in the division of manufacture of metals – 12.2% and 11.8%),
- maintain varying shares of output VAT in sales revenues, depending on the kind of production involved (e.g., 10% in manufacture of food products and beverages in the first three quarters of 2000, as against 20.4% in electricity, gas, steam and hot water supply),
- grant preferential treatment to manufacture of food products and beverages, protecting this division from excessive taxation; an expression of this is the applica-

tion of the lowest, 7% VAT rate to the greatest single proportion of sales (a huge 45.7% in January-September 2000), with a large amount of production totally exempt from VAT (11.4%), and the 22% rate applicable to just 30% of sales in this division, which is half the average seen in the corporate sector as a whole,

- treat the divisions of manufacture of coke and refined petroleum products, and electricity, gas, steam and hot water supply, as the primary sources of VAT revenues; in the first nine months of 2000, these two divisions accounted for a hefty 18.4% of output VAT from the corporate sector as a whole, although they generated only 12.3% of corporate sector sales; it is worth noting that the overwhelming majority of sales in both divisions were and still are subject to the highest, 22% rate of VAT.

Raising VAT rates causes the price of the relevant products to increase. The evolution of VAT rates and the principles governing the application of this tax will be influenced by the standards in place in the European Union, which at present implies a higher level of this form of taxation.

In view of the acceleration of inflationary processes in the period January-July 2000, in September the Government took measures to monitor developments, including those on the markets for fuels, energy, communications and transport. In September, customs tariffs were lifted on imports of petrol and diesel fuel, although this move had originally not been scheduled until January 2001. A zero tariff was applied to fuels imported from those countries and regions with which Poland had concluded free trade agreements, i.e., the European Union, EFTA, CEFTA, Lithuania, Estonia, the Faeroes and Turkey. A reduction in tariffs was provided for under the EU association agreement, to take effect on January 1, 2001. In addition, it was resolved that tariffs would be abolished on fuel imports from countries outside the EU and CEFTA. The imports in question may be from Belarus, Lithuania, Ukraine and Russia. However, it is difficult to foresee the effects of the latter decision, given that an ordinance was issued in Russia limiting the export of fuels and raising the export duty on them to 25 euros per tonne as of September 15. This measure is intended to thwart a fuel crisis in Russia itself. This may undermine the effectiveness of the decision to liberalise the Polish fuel market.

It has been announced that an investigation is to be carried out of the monopoly practices of the PKN ORLEN oil corporation. Further, the President of the Office for Competition and Consumer Protection is refusing to consent to any takeover of the Gdańsk Refinery by PKN ORLEN, since this would represent a major restraint on competition, giving rise to the establishment of an organisation with a share of over 80% on the market for liquid fuels.

As regards communications, it is projected that the process of issuing franchises for the provision of telecommunications services will be speeded up, and a Telecommunications Regulation Authority created. Meanwhile, in the area of transport, the Management Board of Polish State Railways has been required to provide detailed information to the Minister of Transport and Maritime Industries on the dates and size of planned fare increases.

The anti-inflation measures instituted in this field in the third quarter of 2000 principally comprised ongoing monitoring and the lifting of fuel tariffs a quarter earlier than planned.

Labour market and incomes

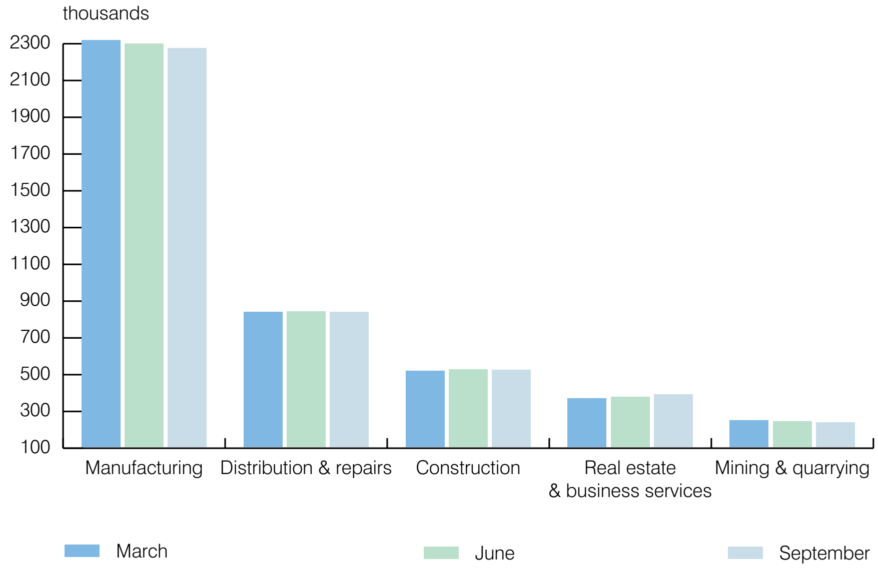
Employment and unemployment

In the third quarter of 2000, average employment declined slightly more slowly than in the preceding two quarters. Over the first three quarters of the year, average corporate sector employment was 0.1% higher than in the first half of the year, although dropping 3.4% compared to the first three quarters of 1999 (cf. Fig. 58).

In each of the first three quarters of 2000, the decrease in employment in mining and quarrying was less rapid than it had been in the same periods of 1999 (e.g., in Q3 2000, some 7,000 people left jobs in mining, while a year previously the figures had been 11,000). On the other hand, the scale of manufacturing redundancies increased. In some divisions (such as manufacture of machinery and equipment, clothing, textiles and metals), average employment over the first three quarters slumped 10%-20% year-on-year.

In construction as well, following a seasonal rise in employment in the second quarter of 2000 (albeit a much weaker one than in previous years), the partic-

Figure 58
Average corporate sector employment by section, 2000
(last month in quarter)



Source: GUS, NBP calculations.

Figure 59
Month-end unemployment figures & redundancies

Source: GUS, NBP calculations.

ular months of the third quarter brought another decline, despite the construction season still continuing. The year 2000 saw employment grow in the service sector, although this growth was several times smaller than in 1999. The increase in employment in services did not offset the fall in industry and construction.

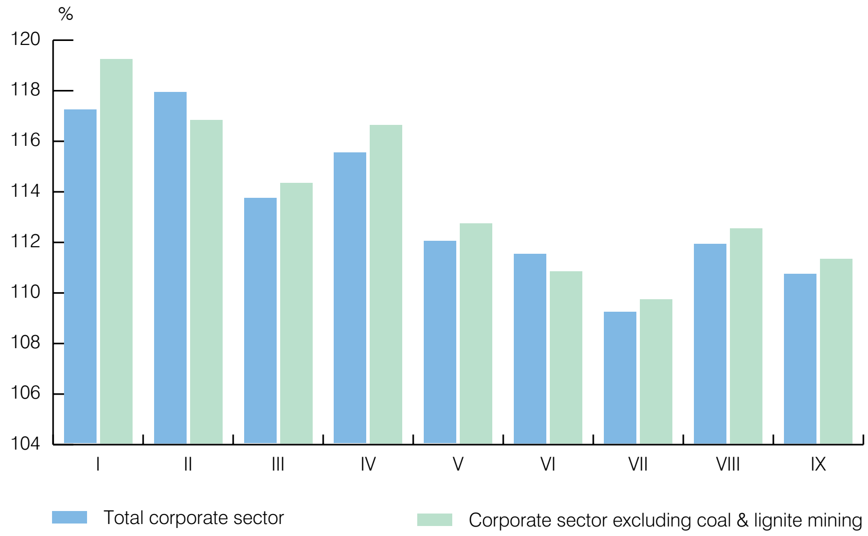
After having dropped in the second quarter, the number of registered jobless went up again in each of the months of the third quarter. At the end of September, the jobless total came to over 2.5 million (of which 75.5% had previously held jobs), and was up over 90,000 on the end of June (cf. Fig. 59). The unemployment rate rose again to the level witnessed in February and March, i.e., 14%, as against 12.1% a year earlier. Apart from February and March, the number of unemployed reported in September was the highest for four years. Moreover, such a large number of unemployed school leavers and college graduates had not been seen since 1996 (at the end of September 2000, this figure was 157,400).

The major increase in the level of unemployment has somewhat restrained wage claims, due to fears over job security in a situation where redundancies are increasingly common. However, businessmen have been pointing to the high costs associated with redundancies (in the form of severance pay), which are borne directly by employers, and also the large expense of recruiting new staff. This significantly constrains the flexibility of the Polish labour market.

Employee earnings

An analysis performed of the growth of average employee earnings in Poland in the years 1995-2000 in the particular sections of the national economy and divisions of the corporate sector indicates considerable elasticity between price and wage levels, both in the long and short terms. Empirical research confirms the hypothesis that inflationary impulses had previously translated fairly quickly into wage growth. However, a different situation was observed in the first three quarters of 2000. Despite the persistence of rising inflation since the third quarter of 1999, in 2000 the growth of nominal wages slowed from one quarter to the next.

Figure 60
Average employee earnings, corporate sector, 2000
(corresponding month previous year = 100)



Source: GUS.

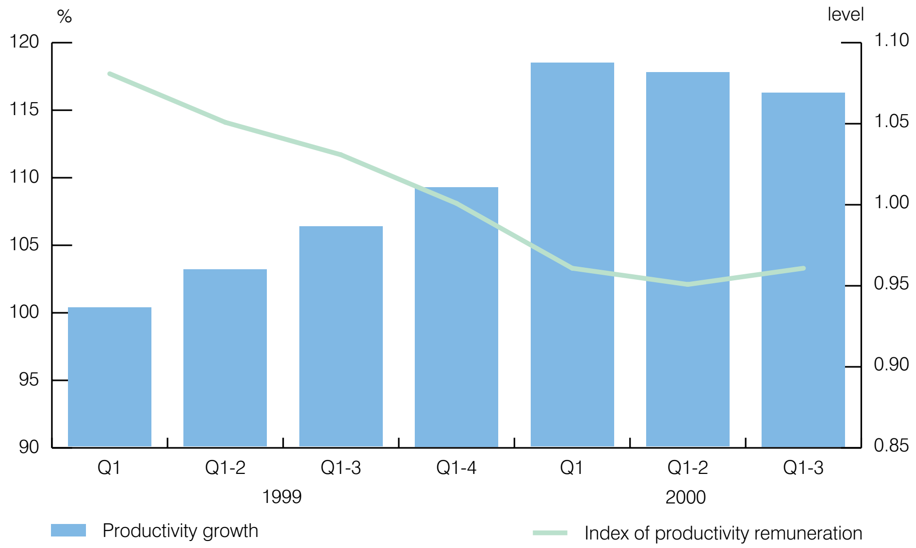
In the first three quarters of 2000, average corporate sector wages went up a nominal 12.7% year-on-year, while their purchasing power increased 2.1% (cf. Fig. 60); by contrast, real wage growth in the corresponding period of 1999 had come to 3.6%. The largest rise in average monthly wages (among those divisions of activity that make a significant contribution to employment) was in post and telecommunications, where nominal growth stood at 19.9% (8.6% in real terms, despite wages already being high), followed by distribution and repairs, with 16.2% growth, and real estate activities, with 14.5% growth. On the other hand, those industries reporting the lowest growth in gross average wages, running below inflation, included mining and quarrying (a nominal 9.6%), manufacture of wearing apparel; dressing and dyeing of fur (8.7%), and manufacture of wood and wood products (6.9%). The slower growth of average wages in mining and quarrying than in most divisions of industry and services, coupled with the substantial reduction in employment in this section, brought down growth in nominal average monthly wages in the entire corporate sector by 0.5 points. Were this section to be left aside, average corporate sector wage growth would come to over 13%.

The fact that movements in employee earnings were different from those seen in previous years is reaffirmed by an analysis of changes in the structure of corporate sector employment and wage funds. This analysis indicates that in most of the divisions of industry examined the decline in their share of total employment was accompanied by an even greater decline in their share of corporate wage funds. This implies that in 2000, in contrast to previous years, the funds saved through redundancies were not assigned to wage increases for the remaining employees. In services, on the other hand, e.g., in retail distribution and in real estate activities, where constant growth in employment has been recorded, the share of these divisions' wage funds in the total corporate sector wage fund rose more rapidly than their share of employment, signifying that newly recruited staff received higher wages than those previously employed (the service industries are 90%-95% privatised).

It is worth pointing out that in 2000 there were several payouts of high performance and profit-sharing bonuses in divisions accounting for a significant proportion of employment (mining, telecommunications), yet due to their non-recurring character these do not give rise to permanent changes in the level of basic pay. Further, the first three quarters of the year saw the continuation of very strong productivity gains, while at the same time remuneration for productivity growth declined (cf. Fig. 61).

The slower than usual response of nominal wages to movements in prices may be the result of several factors. The increasing number of job seekers weakens the bargaining position of the workforce, who fear for their jobs, yet – as already mentioned – the regulations in force make it difficult to replace staff quickly without incurring considerable costs. At the same time, the relatively poor financial condition so far experienced by most companies does not encourage wage growth. Rather, it induces employers to adopt a more rigid attitude to workforce pay claims and discourages them from indexing wages. Nonetheless, it seems likely that the turn of 2000/2001 could see a seasonal increase in employee earnings. As is the case every December, this will be related to payments of performance and profit-sharing bonuses.

Figure 61
Productivity gains & degree of productivity remuneration
(corresponding period previous year = 100)



Source: GUS, NBP calculations.

The maintenance of moderate wage growth in the year 2001 will primarily depend on the level of inflation expectations, on the financial health of companies, and on the situation on the labour market. As previously noted in the section on **Inflation expectations**, in September 2000 these expectations were the highest for several years. A consolidation of these expectations may cause increasing pressure on wages, and in consequence speed up the pace of nominal wage growth. Surveys of business activity by GUS indicate that producers are generally continuing to anticipate that demand will pick up, leading to an improvement in their financial situation. This may make producers more flexible towards workforce pay claims, with employees, for their part, no doubt not only wishing to offset inflation in 2001, but also to compensate for lower real wage growth in 2000. The Monetary Policy Council's rate increase in August was intended, among other things, to curb inflation expectations among businesses and avert the knock-on effects of inflationary impulses. On the other hand, a factor constraining wage demands may be the entry to the labour market of classes of school leavers from the years of the demographic high.

Social benefits

Owing to June's cost-of-living adjustments to old-age and disability pensions, average employee old-age and disability pensions in the third quarter of 2000 were around 1.7% higher in real terms than in the second quarter. Given that this indexation was too low, failing to take into account the actual level of wage growth in 2000, the purchasing power of old-age and disability pensions fell almost 4.5% compared to the third quarter of 1999. Over the period January-September, employee pensions were down 2% in real terms on the corresponding period of 1999, while farmer pensions were down nearly 2.5%.

Over the first three quarters of 2000, the value of basic unemployment benefit payments (excluding social contributions) was 32.9% higher than a year previously, while that of pre-retirement benefits and allowances was up 98.9%. In the first nine months of the year, the Employment Fund had already disbursed over 90% of the funding earmarked for benefit payments in 2000. This high performance of the expenditure plan for benefits was the result of a sharp increase in both the number of unemployed and in the numbers claiming pre-retirement benefit and allowances. In these circumstances, the funds available to the Employment Fund in 2000 proved insufficient. The shortfall (or overwhelming part thereof) was to be met by borrowings, with a certain part being made up by the Treasury, constituting an additional burden on central government finances in 2000.

In line with the timetable adopted, over 1bn zloty was paid out in the third quarter in compensation for the temporary failure to raise government sector salaries and provide adjustments or supplements to old-age and disability pensions in the years 1991-92. During the first three quarters of 2000, these payments totalled some 2.7bn zloty.

MONETARY POLICY IN THE THIRD QUARTER OF 2000 AND PERFORMANCE OF THE INFLATION TARGET

Performance of the monetary policy target

In July 2000, the acceleration of inflation begun in the third quarter of 1999 reached its zenith. In the first half of 2000, the annualised consumer price index had regularly exceeded 10% (April excepted), and in July climbed to 11.6%. This signified that meeting the inflation target for 2000 (5.4%-6.8%) had become impossible. At the same time, such a high rate of inflation called into question the feasibility of achieving a major reduction in price growth in 2001. In this situation, the Monetary Policy Council resolved at its August meeting to raise central bank base interest rates by 1.5 points.

The third quarter of 2000 brought a consolidation of more positive macroeconomic conditions in terms of the long-range development of inflationary processes. This is indicated by the narrowing gap between growth in outstanding lending and in household deposits, by moderate expansion of the money supply, and also by an improvement in the relationship between the growth of supply and demand in the real economy. As the analysis presented in

Table 16
Calendar of most important monetary policy decisions, January-September 2000

Date*	Decision
February 24	lombard rate raised from 20.5% to 21.5%
	rediscount rate raised from 19% to 20%
	minimum 28-day reverse repo rate raised from annual 16.5% to 17.5%
April 12	zloty exchange rates fully floated
August 31	lombard rate raised from 21.5% to 23%
	rediscount rate raised from 20% to 21.5%
	minimum 28-day reverse repo rate raised from annual 17.5% to 19%
September 20	monetary policy guidelines for 2001 adopted

* Date decision took effect
Source: NBP.

this *Inflation Report* demonstrates, the factors driving faster inflation in 2000 were directly linked to a series of shocks that affected the Polish economy in the recent period.

The persistence of high inflation stemmed from supply shocks. Chief among these were the rise in world prices for oil and oil derivative fuels, and the increase in foodstuff prices largely caused by the drought in 2000. Thus, the quickening of inflation was rooted in areas outside the influence of monetary policy. It was nevertheless essential to counter the possible consolidation of inflationary processes, particularly since a marked acceleration of inflation had already been experienced for over a year.

The increase in interest rates was primarily designed to avert secondary inflationary effects by limiting the scale and scope of adjustments by economic agents in response to the price growth engendered by supply impulses. A lowering of real interest rates would have resulted, on the one hand, in rising demand for bank credit, and on the other – in a slowdown in household bank deposits, which in Polish circumstances, in view of the lack of broadly developed alternative savings vehicles, could be interpreted as a decline in the propensity to save. Any accommodation to supply shocks would have led to household inflation expectations rising further and pay claims being stepped up. Preventing reactions of this sort is particularly important in an economy where indexation arrangements are widespread. It should be emphasised that a negative supply shock creates difficult decisions for the central bank. Tightening monetary policy does not impact prices for those categories of goods and services which were responsible for the initial inflationary impulse, although it does have the effect of restricting global demand within the economy, thereby generating pressure for slower growth in other prices. These measures thus contribute to containing inflation, although in terms of economic growth they may also involve certain costs.

A very important factor that was also taken into consideration in resolving to raise interest rates was the possible threat to achievement of the medium-term inflationary target, i.e., lowering inflation to less than 4% by the year 2003. The fact that this threat existed was indicated by forecasts developed by the National Bank. In addition, delaying the decision in question, and thereby allowing higher inflation to be built into economic behaviour, could have produced greater costs in the performance of the medium-term target (in the form of reduced GDP growth and employment).

The response of the Monetary Policy Council reaffirmed the anti-inflationary character of Polish monetary policy, indicating a determination to attain inflation targets. The development of inflation and monetary processes since August 2000 indicates that the maintenance of a restrictive policy stance is gradually yielding the results which the Council expected. Inflation, although still running high, is gradually trending downwards. The course being taken by monetary processes gives ground to believe that knock-on inflationary effects will not emerge. Nonetheless, the development of the macroeconomic situation confirms that the sole effective way of counteracting supply and structural inflationary factors is a pronounced acceleration of structural change within the economy. This primarily involves faster privatisation, the lifting of protectionist barriers, demonopolisation, and the development of competitive markets in such areas as the production and distribution of liquid fuels, electricity and district heating, telecommunications, and municipal services.

Monetary policy instruments

In view of the circumstances outlined above, the Monetary Policy Council decided to strengthen the restrictive character of monetary policy, by raising NBP interest rates on August 30, 2000, increasing the lombard rate from 21.5% to 23%, the rediscount rate from 20% to 21.5%, and the minimum reverse repo rate (the reference rate) from 17.5% to 19%.

In line with an announcement made by the Monetary Policy Council in March, in the third quarter of 2000 the NBP commenced outright sales of Treasury bonds acquired in 1999 under the conversion of non-negotiable government liabilities to the central bank. The bond portfolio held by the NBP comprised 3-, 4-, 5- and 10-year fixed-rate Treasury bonds to a face value of some 12.3bn zloty, converted on September 30, 1999, and 2-year zero-coupon Treasury bonds to a face value of 4.1bn zloty, converted on December 29, 1999. The total face value of these "conversion" bonds held by the central bank stood at 16.4bn zloty.

The outright sale of bonds from the National Bank's portfolio is an operation of a structural character, staggered out over time, which is not directly connected with the conduct of ongoing monetary policy. The purpose is to arrive at a shortage of operating liquidity within the banking system and enhance the effectiveness of interest rates as the basic instrument of monetary policy.

In a situation of surplus liquidity, central banks rates do not fulfil the role of determining the marginal cost of funds, merely representing the yield to the banks on an alternative investment vehicle. Thus, central bank rates have a weaker impact on the pricing behaviour of the commercial banks, since this behaviour is linked to an asset substitution effect, not to the need to access funding at a price set by the central bank. The transition to a shortfall in operating liquidity should result in a higher level of monetary policy restrictiveness (higher commercial bank lending and deposit rates) at a given level of the central bank reference rate, or the maintenance of the same level of monetary policy restrictiveness at a lower reference rate. This in turn would make it possible to limit undesirable secondary exchange rate effects stemming from the disparity of interest rates at home and abroad.

At each of the first two tenders, held on September 19 and 29, 2000, the NBP made available for sale bonds to a total face value of 500m zloty, representing 100m zloty in each type of bond held. Total demand came to 2,496m zloty, and bonds were sold to a face value of 618m zloty, at a purchase price of 485.2m zloty. The yields obtained by investors were slightly above than market yields.

The principal instrument employed in the central bank's open market operations on the Polish money market in the third quarter of 2000 continued to be the issue of NBP money market bills with 28-day maturities. In the second half of September, the Bank also issued bills with shorter maturities, including, on three occasions, 1-day bills. The shortening of the time frame for these operations was designed to limit the risk of disruption to the payment system in the period when settlement was being performed of the privatisation of TP SA. The zloty component of the privatisation receipts involved (over 8bn zloty) could have severely undercut the liquidity of the banks, since it would have entailed the transfer of funds from the banks' accounts to the Treasury account at the NBP. Given the scale of the transaction (equivalent to over 75% of the average level of total central bank currency), it was necessary to build up liquidity to allow payment to take place while avoiding perturbations on the interbank market and in the payment system. The final date for payment was put back to October, however, and the maturing bills were absorbed under 14-day operations.

PROSPECTS FOR INFLATION

In the year 2000, inflation peaked in July at 11.6%. It then trended downwards in subsequent months, coming to an annualised 10.7% in August, 10.3% in September and 9.9% in October.

The Monetary Policy Council projects a steady decline in annualised consumer price growth in the remaining months of 2000. The forecasting methods employed by the NBP indicate that at year end annualised consumer inflation should be running at around 9%. The weakening of domestic demand growth now being observed, accompanied by lowering lending growth, rising bank deposits and the maintenance of moderate money supply growth, indicates that the process of disinflation is set to continue. The greatest threats to the pace of disinflation, on the other hand, will continue to be related to inflationary inertia, fiscal sector disequilibrium and the possible persistence of supply shocks.

The medium-term monetary policy target remains a reduction in inflation to under 4% by year end 2003. Attaining this target demands that inflation in 2001 be held to a range of 6%-8%. In setting this inflation target, the Council is aware of the large uncertainty concerning the development in 2001 of a series of factors which condition achievement of this target, yet remain outside the control of monetary policy.