National Bank of Poland

Monetary Policy Council

INFLATION REPORT

Third quarter 2001

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SUMMARY

The third quarter of 2001 brought a marked acceleration of the downward trend in inflation. The annualised Consumer Price Index, having held relatively steady since February at over 6%, then dropped from 6.2% in June to 4.3% in September, hitting its lowest level since the process of systemic transition began. This was primarily the result of a major slowdown in food price growth over this period. In addition, however, price growth in other categories of consumer goods and services had also been ebbing systematically since the beginning of the year.

Further, the third quarter also saw a major decrease in all the measures of core inflation on a twelve-month basis. This confirms that the fall in inflation affected most categories of consumer goods and services, and was not solely transient in nature.

In each of the particular months of the third quarter, the CPI growth expected by consumers in the course of the year ahead was lower than the current rate of inflation. The inflation expectations of bank analysts came down as well, with the annualised inflation they projected at year end below the lower bound of the annual inflation target for 2001.

From mid-2001 onwards, a systematic downward trend was also observable in annualised indices of industrial producer price growth. In the third quarter, however, this downtrend slowed due to the temporary weakening of the zloty. The sharpest decline, albeit less than in the second quarter, was reported in the section of manufacturing, where price growth fell from a negative 0.9% in June to a negative 1.4% in September. This was principally related to the higher zloty exchange rates than a year previously, to the persistence of dull domestic demand, and to low oil prices.

Initial estimates indicate that domestic demand was lower in the third quarter of 2001 than it had been a year before, as was also the case in the two preceding quarters. At the same time, there was a further reduction in external demand growth. As a result, GDP growth was similar to that recorded in the previous quarter, coming to around 0.8%. The fall in domestic demand is traceable to a decline in capital formation, since growth in consumption, particularly personal consumption, was slightly faster than in the previous quarter. The downward trend in output continued in both industry and construction.

Difficulties in obtaining central government receipts led the Government to revise the Budget, with the relevant amendments adopted by the Sejm on July 28. The revised Budget provided for 8.6bn zloty less in projected receipts, and increased the government deficit for 2001 by the same amount. At the end of the third quarter, the year-to-date deficit stood at 21.7bn zloty, representing 74.7% of the annual target as revised (or 105.7% of the original target).

Having held stable for a year, the deficit on the current account of Poland's balance of payments dropped by more than half in the third quarter of 2001, coming to US$ 1bn, the lowest level since the second quarter of 1998. This represented the combined effect of healthier balances on income (an improvement of US$ 0.5bn), on unclassified current transactions (US$ 0.4bn) and on current transfers (US$ 0.3bn). Meanwhile, the balance on trade in goods, despite 10.5% real effective zloty depreciation in the third quarter, remained basically unchanged compared to the previous quarter. The steadying of the balance of trade was accompanied by a slackening of both export and import growth, as the more sluggish economy abroad held back exports, with flagging demand on the domestic market curbing the growth of imports.

In relation to the preceding quarter, the third quarter of 2001 saw a further quickening of the decline in average monthly employment in the corporate sector. Unemployment rose from 15.8% in June to 16.3% in September. Against this background, the growth of nominal employee earnings was maintained, however, while the decline in inflation caused them to increase in real terms as well. Nonetheless, despite high growth in other incomes, the fall in employment meant that, overall, the period under review witnessed a further decrease in the growth of nominal gross household disposable incomes.

The positive trends in monetary conditions observed since the beginning of 2001 did not alter essentially in the third quarter: money supply growth remained under control, while the strong household propensity to save was sustained.

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As the above overview of the monetary policy environment indicates, the third quarter of 2001 brought a clear consolidation of the downward trend in inflation, coupled with a further reduction in inflation expectations. This was paralleled by the continuation of tendencies in both the real economy and the monetary sector that augur well for future inflation, although some of these tendencies also signify a deterioration in the outlook for economic growth:

- the level of business activity remained subdued; in the context of continued weak growth in industrial producer prices, mounting unemployment and low income growth, this suggested that there was little danger of inflationary impulses being set in motion in the immediate future,
- world growth forecasts worsened, particularly following the terrorist attacks in the USA, which substantially heightened uncertainty on international markets; this factor lessens the risk of inflationary impulses both on the demand side (from the export sector) and the supply side (associated with movements in world prices for oil and other commodities),
- the strong household propensity to save at the banks was maintained.

At the same time, however, the Monetary Policy Council (MPC) was greatly concerned by the uncertain situation within public finances, and particularly by the medium- and long-term implications of this. The swelling public sector financial deficit poses a threat to both macroeconomic stability and economic development.

The MPC considered July's revision of the Budget and increase in the government deficit for 2001 to be a stop-gap measure that failed to resolve the key problems facing public finances. August and September then saw the emergence of new areas of uncertainty related to the prospect of a major rise in the central government deficit in 2002. The Council's concern over this was partially alleviated by the Government decision to hold this deficit down to 40bn zloty in 2002 (a decision accepted prior to the general election by what was at that time the opposition). Nevertheless, the Council emphasised that achieving this goal would be very difficult without the institution of structural reforms within public finances (involving a streamlining of expenditure, rather than an increase in the burden of taxation) and within the economy as a whole. The Council also expressed the conviction that a markedly lower central government deficit would be preferable.

In these circumstances, the MPC concluded that a very judicious monetary policy was called for. In the event, it maintained its neutral policy stance in the third quarter, while carrying out one cut in base interest rates, in August, by one point. The determining consideration here was the continuation of the positive tendencies already mentioned as regards the inflation environment, which significantly increased the likelihood that by year end inflation would fall below the lower bound of the annual target range, set at 6%-8%, and also that the medium-term monetary policy target would be attained, i.e., that price growth would be lowered to less than 4% by the end of 2003.

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The decline in the CPI to 4.3% at the end of September meant that, were inflation to continue running low in the fourth quarter of 2001 as well, at year end it would be considerably below the target range for the year (6%-8%).

In the Monetary Policy Guidelines for the Year 2002, the MPC has set the inflation target for the end of 2002 at 5% consumer price growth relative to year end 2001, with a permissible bandwidth around this target of ±1 percentage point. The adoption of this inflation target implies that price growth at the end of 2002 will have steadied at the level recorded at the end of 2001. This would allow a lasting reduction in inflation expectations and would lay a sound basis for bringing inflation down further, and thus for achieving the inflation target established in the Medium-Term Monetary Policy Strategy for the Years 1999-2003, which provides for price growth of under 4% at the end of 2003.

The aggravation of crisis symptoms within the global economy following September's terrorist attack on the USA, the uncertainty as to the ultimate character of the economic policy to be pursued by the new Government, and also the large discrepancies between those basic economic indicators for Poland actually being reported and those forecast not too long ago – all these factors mean that any projections concerning the development of the economy are at present subject to an even greater margin of uncertainty than they were previously. Nonetheless, current information and forecasts do indicate that maintaining inflation at a level consistent with the inflation target for 2002 is highly probable, although it cannot be excluded that a temporary rise in the twelve-month rate of inflation might occur in the course of the year ahead. Performance of the inflation target for 2002 could be jeopardised by any loosening of fiscal policy relative to the draft Budget adopted by the Government in November. Such a scenario would substantially heighten the risk of a steep depreciation of the zloty.

The relatively high public sector financial deficit remains an impediment to the lowering and stabilisation of inflation in the long term. The resulting unfavourable macroeconomic policy mix, involving an overly lax fiscal policy and a tight monetary policy, which acts to curtail economic growth, is one that raises the costs of reducing inflation compared to other policy solutions.

Basic Macroeconomic Indicators

	1998	1999				1999	2000				2000	2001		
	Year	QI	Q2	Q3	Q4	Year	QI	Q2	Q3	Q4	Year	QI	Q2	Q3
							real growth							
GDP	**4.8**	1.6	3.0	5.0	6.2	**4.1**	5.9	5.0	3.1	2.4	**4.0**	2.3	0.9	0.8
Domestic demand	**6.4**	3.4	4.6	5.5	5.7	**4.8**	5.2	3.3	1.3	1.7	**2.8**	-1.3	-1.8	-2.0
Total consumption	**4.2**	4.0	4.4	4.8	5.0	**4.4**	4.1	2.6	1.2	1.6	**2.4**	1.2	1.3	1.8
Personal consumption	**4.8**	4.6	5.2	5.7	5.9	**5.2**	4.8	2.9	1.1	1.6	**2.6**	1.5	1.7	2.1
Gross capital formation	**13.8**	0.7	5.5	7.8	7.1	**6.1**	10.6	5.9	2.0	2.2	**4.2**	-13.1	-12.5	-14.2
Gross fixed investment	**14.2**	5.7	6.3	6.6	7.0	**6.8**	5.6	3.0	2.4	2.6	**3.1**	1.5	-8.4	-13.6
Households savings ratio (%)[1]	**13.2**	9.0	10.7	8.8	14.8	**10.9**	4.9	9.5	8.3	14.2	**9.3**			
Households financial savings														
ratio (%)[2]	**7.6**	10.8	2.9	2.8	5.1	**5.4**	5.5	7.5	1.4	4.3	**4.7**			
Unemployment (%)	**10.4**	12.0	11.6	12.1	13.0	**13.0**	14.0	13.6	14.0	15.1	**15.1**	16.1	15.9	16.3
Disposable income														
(corresponding period														
previous year = 100)	**105.5**	102.7	102.9	101.4	103.7	**102.7**	100.2	100.2	100.3	98.6	**99.8**			
Treasury debt														
(million zloty, nominal)[3]	**237 400.9**	259 037.3	255 583.4	261 317.4	264 370.3	**264 370.3**	270 144.9	279 507.8	287 584.3	267 653.4	**267 653.4**			
Central Government deficit														
(million zloty)[4]	**-13 192.6**	-8 719.2	-11 320.0	-11 270.0	-12 479.0	**-12 479.0**	-6 927.4	-10 650.2	-14 041.9	-15 391.0	**-15 391.0**	-14 992.5	-18 805.5	-21 813.1
Foreign debt (US$ million)		59 730.0	59 499.0	63 130.0	64 852.0	**64 852.0**	64 954.0	65 881.0	64 167.0	67 517.0	**67 517.0**			

[1] Household savings to gross disposable incomes. Savings represent that portion of gross disposable incomes not allocated to consumption.
[2] Household financial savings to gross disposable incomes. Financial savings represent the growth in household money stocks (the sum total of growth in bank deposits, notes & coin and investments in securities, less household borrowings).
[3] Period end.
[4] As of Q4 1998, this amount includes the item "due on failure to increase government sector wages".

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

Basic Monetary Indicators

	1998	1999				1999	2000				2000	2001		
	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3
						corresponding period previous year = 100								
Consumer prices[1]	**108,6**	106,2	106,5	108,0	109,8	**109,8**	110,3	110,2	110,3	108,5	**108,5**	106,2	106,2	104,3
Industrial producer prices[1]	**104,8**	104,7	105,2	106,2	108,1	**108,1**	107,3	108,9	108,3	105,6	**105,6**	103,8	100,9	100,6
						nominal growth, period end (corresponding period previous year = 100)								
M0	**126,8**	121,5	118,9	92,9	98,4	**98,4**	83,9	87,7	110,7	92,4	**92,4**	106,8	93,6	94,5
M1	**113,0**	121,8	119,3	119,1	122,0	**122,0**	105,1	108,1	99,6	94,3	**94,3**	100,8	95,1	105,7
M2	**125,2**	127,6	122,9	120,9	119,3	**119,3**	113,8	120,6	114,1	111,7	**111,7**	114,9	108,0	114,3
Due to persons and corporates	**127,8**	129,5	124,6	122,3	118,3	**118,3**	115,5	123,3	116,1	115,5	**115,5**	116,8	109,1	115,5
persons	**126,3**	127,5	123,4	120,8	115,2	**115,2**	114,2	118,5	117,3	120,9	**120,9**	120,1	116,3	117,5
corporates	**131,5**	135,0	128,0	126,2	125,5	**125,5**	119,1	136,0	113,0	103,7	**103,7**	108,3	92,5	110,3
Due from persons														
and corporates	**127,9**	129,5	127,6	127,8	127,1	**127,1**	123,9	130,6	122,0	117,3	**117,3**	114,6	105,0	110,7
persons	**130,0**	135,8	141,1	147,6	153,1	**153,1**	152,1	179,4	140,9	131,7	**131,7**	125,7	98,7	118,7
corporates	**127,5**	128,3	125,0	123,8	121,6	**121,6**	118,1	119,7	117,4	113,5	**113,5**	111,7	107,1	108,4
						real growth[3], period end (corresponding period previous year = 100)								
M0	**116,7**	114,4	111,6	86,0	89,7	**89,7**	76,0	79,6	100,4	85,1	**85,1**	100,6	88,2	90,6
M1	**104,0**	114,6	112,0	110,3	111,1	**111,1**	95,3	98,1	90,3	87,0	**87,0**	94,9	89,5	101,3
M2	**115,3**	120,2	115,4	111,9	108,7	**108,7**	103,2	109,4	103,4	103,0	**103,0**	108,2	101,7	109,6
Due to persons and corporates	**117,6**	121,9	117,0	113,2	107,7	**107,7**	104,7	111,9	105,3	106,5	**106,5**	110,0	102,8	110,8
persons	**116,3**	120,0	115,8	111,9	104,9	**104,9**	103,5	107,5	106,4	111,5	**111,5**	113,1	109,6	112,7
corporates	**121,0**	127,1	120,2	116,9	114,3	**114,3**	108,0	123,4	102,4	95,7	**95,7**	102,0	87,1	105,8
Due from persons														
and corporates	**117,8**	121,9	119,8	118,3	115,7	**115,7**	112,3	118,5	110,6	108,1	**108,1**	107,9	98,9	106,1
persons	**119,7**	127,9	132,5	136,6	139,4	**139,4**	137,9	162,8	127,7	121,4	**121,4**	118,4	93,0	113,8
corporates	**117,4**	120,8	117,3	114,6	110,8	**110,8**	107,1	108,6	106,5	104,6	**104,6**	105,2	100,8	103,9
Reference rate (minimum reverse repo rate) (%)[2]	**15,5**	13,0	13,0	14,0	16,5	**16,5**	17,5	17,5	19,0	19,0	**19,0**	17,0	15,5	14,5
Rediscount rate (%)[2]	**18,3**	15,5	15,5	15,5	19,0	**19,0**	20,0	20,0	21,5	21,5	**21,5**	19,5	18,0	17,0
Lombard rate (%)[2]	**20,0**	17,0	17,0	17,0	20,5	**20,5**	21,5	21,5	23,0	23,0	**23,0**	21,0	19,5	18,5

[1] Final month of quarter.
[2] Period end.
[3] Deflated by reference to CPI.

Source: GUS, NBP.

1. DOMESTIC DEMAND AND SUPPLY

1.1. General remarks

As in the two preceding quarters, domestic demand in the third quarter of 2001 shrank year-on-year (in real terms). At the same time, there was a further decrease in the growth of external demand, which in the first quarter had still been very high. As a result, GDP growth was lower than in the second quarter; preliminary estimates put it at 0.8%. As in the first half of the year, the fall in domestic demand stemmed from a decline in capital formation. By contrast, the growth of personal consumption was faster than in the previous quarter. The deepening slide in gross fixed investment played its part in the further reduction of construction output. It was also a factor restraining industrial output growth. In the third quarter of 2001, as in the preceding quarter, industrial output was lower than in the corresponding period of 2000.

Estimates of GDP and domestic demand growth are presented in Table 1.

Table 1
Quarterly growth in GDP & domestic demand

	2000					2001		
	Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	corresponding period previous year = 100							
Total value added	**103.7**	**105.7**	**104.8**	**102.9**	**102.2**	**102.1**	**100.8**	**100.6**
Industry	106.5	109.6	109.1	106.0	102.3	103.3	98.7	98.5
Construction	99.3	104.1	100.7	97.7	97.6	94.8	92.0	91.8
Commercial services	104.2	105.2	104.8	103.1	104.0	103.5	103.7	104.1
GDP	**104.0**	**105.9**	**105.0**	**103.1**	**102.3**	**102.3**	**100.9**	**100.8**
Capital formation	103.9	110.4	105.7	101.6	101.7	86.9	87.5	85.8
Gross fixed investment	102.7	105.4	102.8	102.0	102.1	101.5	91.6	86.4
Consumption	102.4	104.1	102.7	101.2	101.6	101.2	101.3	101.8
Personal consumption	102.6	104.8	103.0	101.1	101.6	101.5	101.6	102.1
Domestic demand	**102.8**	**105.2**	**103.3**	**101.3**	**101.7**	**98.7**	**98.2**	**98.0**

Source: GUS; NBP estimates.

The maintenance of the downward trend in output contributed to a further deterioration in corporate finances. Compared to the previous year, a decline took place in the growth of gross corporate disposable incomes (equivalent to corporate savings). The slackening of business activity had an adverse effect on the volume of government tax receipts and led to a reduction in the current expenditure of government institutions, which lowered growth in social consumption. Despite this, the adjusted central government deficit (the adjusted fiscal deficit) rose, and the negative gross savings of the general government sector increased. Due to the diminished growth of nominal gross disposable incomes, the growth of gross household savings was also slower. Gross national savings can be estimated to have been no greater than a year earlier. Nevertheless, the decrease in these savings was less than the fall in capital formation (i.e., investment on fixed and current assets). Poland's current balance improved once again.

1.2. Domestic demand

Initial estimates indicate that the third quarter of 2001 was the third successive quarter in which domestic demand was no higher than it had been in the same period of the previous year, although it was still running above the level of domestic supply (by some 4% in real terms, as against 6.2% a year before). While the decline in demand was similar to that registered in the first half of the year, personal consumption financed by incomes grew more rapidly, while the decrease in capital formation was sharper. The scaling down of central government expenditure was instrumental in the slower growth of social consumption.

1.2.1. Capital formation and investment expenditure

The fall in capital formation primarily stemmed from the low level of gross fixed investment, although investment in tangible current assets was also less than in the third quarter of 2000. At the end of the third quarter of 2001, the value of current asset stocks was higher than at year end 2000 (at mid-year it had been some 1.8bn zloty lower at current prices), yet the total increase in stocks recorded over the first three quarters of the year came to just around 5% of the increase seen in the corresponding period of 2000.

Gross fixed investment in the third quarter is estimated to have dropped 13.6% year-on-year. This decline is greater than that reported by GUS (the Central Statistical Office) for both the second quarter (8.4%) and the first half of the year as a whole (4.2%). Investment was down on the previous year in all institutional sectors. The slower growth of gross disposable incomes acted to curb the investment activity of households, while the difficulties in the performance of the national budget curtailed capital expenditure in the general government sector. The largest fall in investment was noted in the corporate sector. Over the first nine months of the year, investment expenditure at companies employing more than 49 staff was down 12.0% on the same period of 2000, while in the first half of the year the corresponding decrease had been 5.8%. On this basis, gross fixed investment in the third quarter of 2001 can be estimated to have been 20.7% lower than in the third quarter of 2000. Among the companies surveyed, investment in new machinery and equipment was down 11.2% in the third quarter at constant prices, while over the first three quarters taken together it was down 6.3%. The relevant decreases in purchases of new transport equipment came to 44.4% and 19.2%, respectively, while investment in buildings and structures was down 25.4% and 16.7%.

The downturn in investment activity was witnessed in all the basic sections of the corporate sector. The decline in construction became more pronounced (going from a fall of 14.5% at current prices in the first half of the year to one of 31.4% over the first three quarters), as it did in distribution and repairs (going from 16.3% to 24.4%, respectively). In industry, the scale of the retreat in investment remained unchanged, with both the first six and the first nine months of 2001 seeing a decline of 8.4% compared to the corresponding periods of 2000. However, this figure includes a steeper fall in manufacturing, and increases in mining and in power supply, these being smaller in the former and greater in the latter. Manufacturing investment has now gone down for the third consecutive year. Capital expenditure once again fell in the divisions that had previously experienced profound restructuring and asset modernisation, and which had driven the swift rise in manufacturing investment in the years 1994-98, a rise yielding substantial growth in both productivity and output (over the first three quarters of the year, investment was down 19.9% in motor vehicle manufacture, 24.9% in oil refining, 16.3% in chemicals, 35.9% in rubber and plastic products, 15.5% in mineral products, 44.1% in fabricated metal products, 29.8% in furniture and 10.3% in food manufacture). A major increase in investment was reported solely in wood products (up 22.9%) and pulp and paper (up 64.0%).

Figures on the number and cost-estimate value of new capital projects commenced during the first three quarters of 2001 indicate that the adverse tendencies within corporate investment cannot be expected to change in the near future. The cost-estimate value of new projects was down 33.4% on the first three quarters of the previous year, with declines of 21.4% in manufacturing, 33.2% in distribution and repairs, and 69.6% in transport.

1.2.2. Personal consumption

Preliminary estimates indicate that the third quarter of 2001 brought a mild reduction in the growth of nominal gross household disposable incomes. However, owing to slower consumer price growth, the purchasing power of incomes rose slightly faster than in the previous quarter. The end result was that, with gross savings accounting for a share of incomes similar to that observed in 2000, the growth of personal consumption was more rapid than in the preceding quarters of 2001.

The more subdued growth of nominal gross household disposable incomes is attributable to lower growth in incomes from employment and from self-employed non-farm business activity (mainly in industry and construction). It is estimated that the increase in crop production led to higher incomes for private farmers. Following June's large cost-of-living adjustments to average old-age and disability pensions[1], a major increase also occurred in incomes from social benefits.

[1] These stemmed from the underestimation in the Budget of consumer price growth in 2000.

Average monthly employee earnings at establishments included in quarterly statistical surveys were nominally 7.4% higher in the third quarter than they had been a year earlier, thus rising at a similar pace to that recorded in the second quarter (7.3%). However, due to the heavier fall in average employment (quickening from the previous 3.1% to over 4%, with the decline in the corporate sector going from 2.8% to 3.7%), nominal growth in total incomes from employment at the establishments surveyed stood at less than 3% (compared to some 4% in Q2). Given the weakening of economic activity, it is believed that the corresponding slowdown in the growth of incomes from employment was greater at other establishments. This lower growth in aggregate wages was not offset by third-quarter growth in incomes from social benefits, which came to over 13% compared to the third quarter of 2000. Gross household disposable incomes are estimated to have risen less than 6% in the third quarter compared to the same period of 2000 (this increase was around 10% in Q1, while in Q2 it was over 7%).

At the same time, growth in gross household savings was slower than in the second quarter (excluding movements in the net share of households in the reserves of pension funds). The decline in the growth of gross savings can be traced to a reduction in non-financial savings, while financial savings increased. Growth in personal bank deposits was more than one and half times faster than a year earlier and than in the second quarter, and personal cash stocks also rose more swiftly. These financial savings were lowered by the growth in personal borrowings, which was similar to a year previously and twice as fast as in the second quarter. The continuing drop in share prices resulted in a further decline in household investments outside the banking system.

In the circumstances outlined above, growth in consumer demand in the third quarter is estimated to have been stronger than in the previous quarter. Preliminary estimates indicate **personal consumption** was up 2.1% year-on-year in real terms (in Q2 growth had come to 1.6%). The acceleration of consumption growth was reflected in a 1.2% increase in the volume of retail sales at large and medium distributive firms (these sales were down 0.2% year-on-year in Q2 and 3.1% in Q1). Rapid sales growth was maintained at firms trading in furniture, and also audio-visual equipment and household appliances.

Sales of foodstuffs were up as well. After declining in the second quarter, sales rose at non-specialised outlets mainly retailing foodstuffs (supermarkets and hypermarkets). Following the steep decreases noted in the first months of 2001, sales in the motor vehicle trade were 1.2% higher than a year earlier.

1.2.3. The central government deficit

The **central government deficit** at the end of the third quarter stood at 21.8bn zloty, which represented 74.9% of the target written into the revised Budget for 2001 and 105.7% of the ceiling prior to the revision. This means that the deficit rose 3bn zloty in the course of the third quarter, which was less than in the previous one. Given the very difficult situation as regards government receipts, this relatively small increase in the deficit was made possible thanks to cuts in government spending.

Central government receipts totalled 35.1bn zloty in the third quarter, slightly down on the second, which had seen major non-tax revenues (one source of these being the transfer of profit from the NBP). Although tax revenues amounted to 30.8bn zloty in the third quarter and were significantly higher than in the previous quarters of 2001, they still remained low overall (constituting just 23.8% of the annual plan and running close to the 30.9bn zloty collected in Q3 2000). The problems in the performance of the revenue targets set in the Budget for 2001 were a product of the overly optimistic assumptions on which that document was based, including ones founded on a substantially overstated forecast of GDP in 2000 and others that projected an improvement in the collectibility of taxes and duties. In attempting to implement the Budget, the situation was aggravated even further by the slack economy. The weakening of domestic demand led to a considerable reduction in both economic growth and inflation, which then had an adverse impact on the level of tax revenues attained[2].

[2] At the end of October 2001, the Ministry of Finance estimated that total government receipts for the year would amount to some 141.5bn zloty, or 19.6bn less than targetted in the Budget (prior to its revision). Yet no later than in August, in presenting the draft budget guidelines for 2002, the Ministry had projected a shortfall in receipts of 17.3bn zloty, which at that point was considered a fairly pessimistic forecast.

Box 1
The revision of the 2001 Budget

On July 28, 2001, the Sejm adopted a Government bill amending the Budget for 2001. This bill provided for:

- lowering the projected amount of government receipts to 152.5bn zloty, a decrease of 8.6bn zloty, with a corresponding increase in the budget deficit,
- leaving government expenditure at the previous 181.6bn zloty, while at the same time allowing for this sum to be reduced, depending on the performance of receipts in the second half of the year.

It should be emphasised that, at the time the revision to the Budget was adopted, the Ministry of Finance was already estimating that government receipts in 2001 would amount to 143.8bn zloty. Revising the Budget did not resolve the problem of the shortfall in revenues, while the need for a parallel reduction in expenditure was solely intimated, although not ratified (an ordinance on consolidating spending items in 2001 was not introduced until October). The new Minister of Finance subsequently announced that, given the very large difficulties in the performance of government receipts in 2001, yet another revision to the Budget was to be expected, raising the deficit by some 4bn zloty.

In view of the low level of government receipts, it was resolved to increase the budget deficit by 8.6bn zloty (see Box 1) and scale back expenditure.

Nine months into the year, central government expenditure stood at 124.6bn zloty, equivalent to 68.6% of the spending target written into the Budget. Twelve months previously, performance against plan was higher, at 71.6% of annual expenditure. In the third quarter alone, expenditure amounted to 38.1bn zloty, or 3% more than in same period of 2000. However, spending restraint in the first three quarters of 2001 was accompanied by a growth in outstanding liabilities. One indication of this was the low level of subsidies to the Social Insurance Fund, which at the end of September stood at just 57.2% of the relevant annual provision in the Budget. Due to the reduction in subsidies to the Fund – or to be precise, in the portion of those subsidies assigned to open-ended pension funds – the year 2001 saw a further increase in public sector arrears to those funds. During the first three quarters of the year, the pension funds received just 6.7bn in pension contributions from the Social Insurance Board, which represented 47.5% of the annual amount planned prior to the revision of the Budget. The Budget had provided for 14.2bn zloty in contributions to be forwarded to open-ended pension funds in 2001. Yet under July's revision to the Budget, this sum was cut to 12.2bn zloty, while the draft Budget for 2002 presented by the departing Government projected that it

Table 2
Budget performance, first three quarters of 2001

	Nominal values (billion zloty)			Budget performance against plan (%)			
	Q1	**Q2**	**Q3**	**Q1**	**Q2**	**Q3**	**Total**
Receipts	**31.6**	**36.1**	**35.1**	**20.7**	**23.7**	**23.0**	**67.4**
Tax receipts	**26.9**	**27.2**	**30.8**	**20.8**	**21.1**	**23.8**	**65.7**
Indirect taxes	19.1	20.1	21.0	21.9	23.1	24.1	69.1
Personal income tax	3.1	2.3	3.6	18.8	14.0	22.0	54.8
Corporate income tax	4.7	4.8	6.2	18.3	18.7	24.1	61.2
Revenues of central government institutions							
of which:	4.5	3.6	3.5	27.7	22.1	21.5	71.3
customs revenues	1.0	1.1	0.9	20.8	22.9	18.9	62.5
UMTS licence fees	0.9	0.8	1.0	28.8	25.6	32.6	87.0
Other receipts							
of which:	0.3	5.3	0.8	4.2	74.8	10.8	89.8
transfer of NBP profit	0.0	4.9	0.0	0.0	99.9	0.0	99.9
Expenditure	**46.7**	**39.8**	**38.1**	**25.7**	**21.9**	**21.0**	**68.6**
Domestic debt service	4.8	4.1	2.6	28.9	24.8	15.5	69.1
Foreign debt service	0.7	1.4	1.1	12.5	26.6	18.8	56.3
Subsidy to Employment Fund	0.7	0.9	0.2	36.9	45.5	12.8	97.2
Subsidy to Farmers' Pension Fund	3.9	3.6	3.8	25.3	23.2	24.3	73.0
Subsidy to Social Insurance Fund	6.6	3.8	4.7	24.9	14.3	17.8	57.2
Local government support grant	9.8	7.6	6.6	34.4	26.6	23.2	84.3
Budget deficit	**15.1**	**3.7**	**3.0**	**51.8**	**12.7**	**10.3**	**74.9**

Source: Ministry of Finance.

would in fact shrink to 9.6bn zloty. These decisions signify a further exacerbation of the problem of arrears to open-ended pension funds.

The third quarter of 2001 did not bring any major privatisation receipts. Thus, the year's revenues from this source remained very low. At the end of September, these totalled 2.6bn zloty, equivalent to just 14.5% of the annual target. It was expected that by year end privatisation receipts could rise to 13bn zloty[3], as against a Budget projection of 18bn.

[3] Estimate given by Ministry of the Treasury.

With the government deficit climbing to 29.1bn zloty and privatisation receipts running low, the public sector borrowing requirement was very large in 2001. To finance this requirement, the issue of Treasury securities soared in the first three quarters of the year. Over this period, net revenues from the sale of Treasuries amounted to around 20.2bn zloty, compared to 10.8bn in the same period of 2000.

Nine months into the year, the adjusted fiscal deficit stood at 19.9bn zloty, or some 3.8% of GDP; this category represents the fiscal deficit supplemented by compensation payments to government sector employees, together with old-age and disability pensioners (2.1bn zloty), and by the proceeds from UMTS licence fees (2.7bn zloty), less insurance contributions transferred by the Social Insurance Board to open-ended pension funds (6.7bn zloty). At the same point in 2000, this deficit had come to around 2.3% of GDP, indicating that the year 2001 saw a major relaxation of fiscal policy.

1.3. Domestic supply

Initial estimates indicate that growth in value added came to 0.6% in the third quarter of 2001 (as against 0.8% in Q2). The decline in value added in industry increased from 1.3% to 1.5%, while in construction it rose from 8.0% to 8.2%. By contrast, faster growth was seen in commercial services (4.1%, as against 3.7%). Value added also increased in agriculture.

Industrial output (at large and medium undertakings) was down 1.2% in the third quarter compared to the same quarter of 2000 (in Q2 the decrease had been 0.9%). The decline in manufacturing output continued (standing at 1.4%, compared to 1.5% in Q2), mainly as a result of a steeper fall in production at companies manufacturing capital equipment (this decrease went from 3% in the first six months of the year to 5% for the first three quarters). Companies chiefly manufacturing production supplies increased their output by around 1% during the first three quarters, while those producing consumer goods raised production by some 3% (in the first half of the year, these increases had come to 2% and 3%, respectively).

The swifter growth of value added in commercial services is attributable to a rise in turnover at wholesale and retail firms, and also to increased sales of communication services and higher sales at companies involved in real estate and business activities. Sales of transport services dropped. Growth in value added in the section of financial intermediation and insurance is estimated to have been slower than in 2000.

The "preparatory crop estimate" indicates the grain harvest was 20.8% higher in 2001 than in 2000, with harvests also higher in the case of rape and turnips (up 12.0%), tree fruit (45.3%) and soft fruit (27.8%). On the other hand, smaller crops were reported of potatoes (down 15.6%), sugar beet (down 5%-10%) and field vegetables (down 5%). The size of these harvests points to an increase in gross crop production after two years of decline. The rise in fatstock prices made livestock farming more profitable and hastened the rebuilding of farm herds. As a result, although fatstock purchases declined, the level of livestock production in 2001 can be expected to have been similar to that recorded in 2000. All in all, an increase can be anticipated in both gross agricultural output and value added in agriculture.

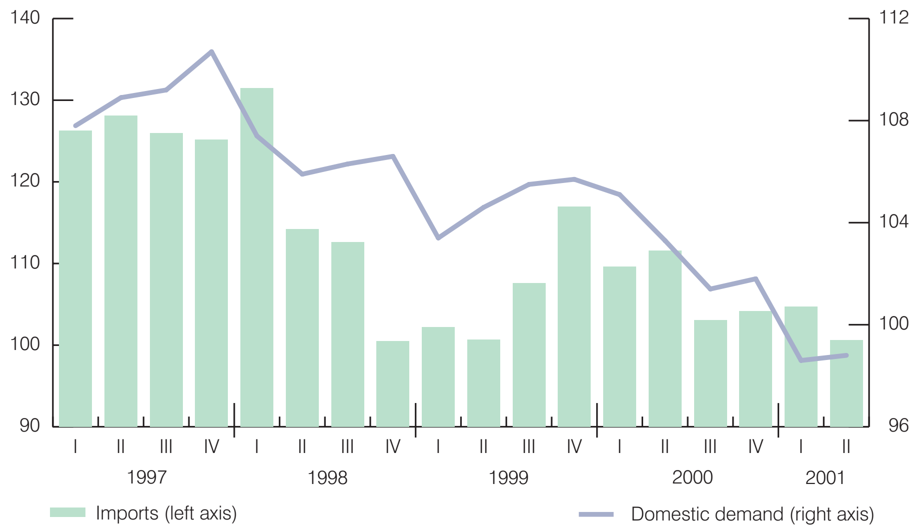
The third quarter saw an accentuation of the decrease in value added in construction. Low demand for capital construction projects, coupled with a shift in the pattern of this demand (an increase in the relative proportion of modernisation works and of spending on machinery and equipment), led to a decline of over 12% in the output of large and medium construction firms. Over the first three quarters of the year, sales of capital construction services dropped 11.1% compared to the same period of 2000, while those of repair and renovation services fell 8.2%. At constant prices, the value of construction works related to residential buildings was down 12.8% on the corresponding period of the previous year (31.8% in the case of single-family homes), with equivalent declines of 17.4% for industrial and storage facilities, and 18.5% for office buildings.

2. FOREIGN TRADE & THE BALANCE OF PAYMENTS

The third quarter of 2001 brought an intensification of the trend for both domestic demand (cf. Section 1) and foreign demand to weaken, a trend already visible in the first half of the year. This was accompanied by slower growth in Polish foreign trade (a decrease of 7.6 points in exports and 1.1 points in imports).

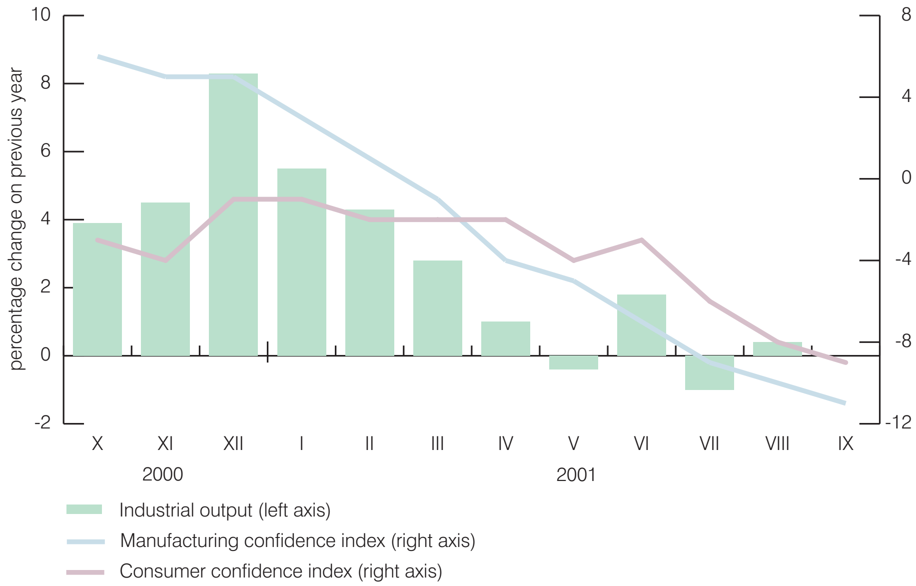
The deterioration of US and euro area business sentiment from the beginning of 2001 onwards found confirmation in the waning economic growth experienced in these regions. US GDP growth of virtually zero in the second quarter was followed by a 0.4% contraction in third-quarter GDP (quarter-on-quarter). September's terrorist attack on the United States drastically worsened confidence, above all US consumer confidence. In the euro area countries, too, GDP growth again eased in the

Figure 1
Import volumes & domestic demand
(corresponding period previous year = 100)



Source: GUS.

Figure 2
Euro area industrial output growth & confidence indices



Source: Eurostat, *Handelsblatt*.

second quarter[4], further reducing import growth in this region (cf. Table 3). Sagging second-quarter growth in value added in industry, together with the absolute fall reported in construction, had a particularly negative impact on imports of capital goods and production supplies. In the second quarter, for example, external imports to the European Union of machinery and transport equipment were down almost 9% on the corresponding period of 2000 (whereas Q1 had still witnessed growth in these imports, of 4.3%)[5]. The third quarter saw substantial gloomier views of the further

[4] *Euro-Indicators*, Eurostat News Release no. 105/2001, October 11, 2001.
[5] EU imports of "miscellaneous industrial goods" remained flat in Q2 compared to the same period of the previous year (Q1 had seen an increase of 3.2%). The fastest growth was registered in imports of chemical products, although even in this case the import growth recorded in Q2 (3.5%) was slower than in Q1 (8.8%). Chemical imports proved the least sensitive to the clear downturn in the EU countries. The tendency for chemical products to increase their share of foreign trade has been observed for a number of years in most developed countries. However, this is not reflected in Polish exports. Chemical products are of minor importance here (accounting for 6.4% in the first half of 2001), and growth in sales of these products has in recent years lagged behind that of exports overall.

Table 3
Selected economic indicators, euro area & Germany
(percentage change on corresponding period previous year, constant prices)

	Euro area				Germany			
	2000		2001		2000		2001	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gross domestic product	3.2	2.8	2.4	1.7	3.2	2.5	1.8	0.6
Domestic demand	2.7	2.3	1.6	1.0	2.1	2.1	1.0	-0.3
Investment	4.2	3.1	1.8	0.4	2.5	1.7	-0.7	-2.4
Imports	11.3	10.5	6.6	3.2	10.2	13.4	7.0	4.9
Value added, industry	4.5	4.3	3.5	1.3	6.6	5.5	4.9	0.6
Value added, construction	1.0	0.5	-1.2	-1.8	-4.3	-4.4	-8.0	-7.4

Source: Eurostat.

economic outlook for the euro area, both among consumers and manufacturers (cf. Fig. 2), one factor in this being the psychological effects of the attack on the USA. It is thus probable that, as in the case of the American economy, the euro area economy may have slipped into recession in the fourth quarter.

By contrast, the economies of Poland's eastern export markets presented a brighter picture. Russian GDP grew 5.4% in the first half of the year compared to the first half of 2000, while year-to-date imports, at current prices, were up 21.2% at mid-year (as against growth of 8% over the year 2000 as a whole)[6].

Poland's terms of trade improved in the first half of the year (cf. Section 4.2, "External prices"). Dollar transaction prices rose faster in exports than in imports (with export prices up 1.5% compared to the first half of 2000, and import prices up 0.3%). In the third quarter, the exchange rate environment for export transactions improved, since a reversal took place of the trend for the zloty to appreciate in both nominal and real terms, one which had been gathering momentum since the end of 2000 (cf. Fig. 3). The real effective exchange rate for the zloty, as adjusted by manufacturers' producer prices, was

[6] Source: Ministry of Economic Development of the Russian Federation.

subject to 6.4% depreciation in the third quarter, as against appreciation of 6.1% in the second and 3.5% in the first, and reverted to the level seen in the first quarter of the year. This weakening of the real effective exchange rate was primarily rooted in nominal zloty depreciation of 6.7%, which was considerably higher than the modest yet adverse movements in relative price levels. The slight increase seen in domestic prices (up 0.2% compared to Q2) and decrease in prices abroad (down 0.4%) acted to push up the real exchange rate, yet the nominal movements that occurred cancelled out the impact this had on competitiveness, and indeed themselves exerted a much greater impact in the opposite direction.

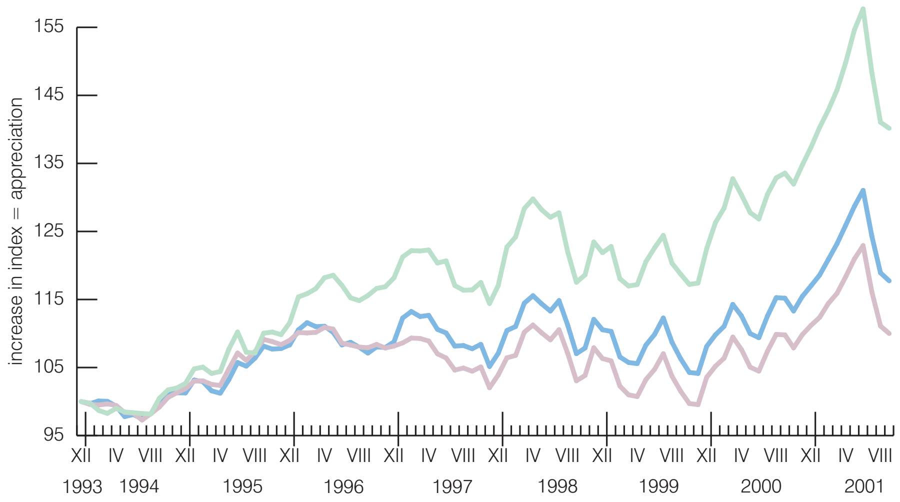
The third quarter saw a substantial improvement in performance on the current account of the balance of payments, both in relation to the second quarter of the year and to the corresponding period of 2000. Having previously held steady for a year, the current account deficit was slashed by over half in the third quarter, tumbling to US$ 1bn, the lowest level since the second quarter of 1998. As Figure 4 shows, the last improvement on a similar scale occurred in the second quarter of 2000, fuelled most strongly by a reduction in the deficit on trade in goods.

The narrowing of the current account gap in the third quarter was the result of better performance on the balances on income (an improvement of US$ 0.5bn), on unclassified current transactions (US$ 0.4bn) and on current transfers (US$ 0.3bn). In other words, it was not traceable to the most significant items of the current account, trade in goods and services, which maintained deficits akin to those in the second quarter.

Both balance of payments statistics and figures on physical trade volumes (adjusted for seasonal and irregular fluctuations) indicate that merchandise export growth had been ebbing since the beginning of 2001, accompanied by a mild weakening – as of the second quarter – in import growth (cf. Figs. 5 and 6). Exports were up 9.7% in September, compared to 15.4% in January, while import growth edged down from 2% in April to 1% in September[7]. The marked slowdown in

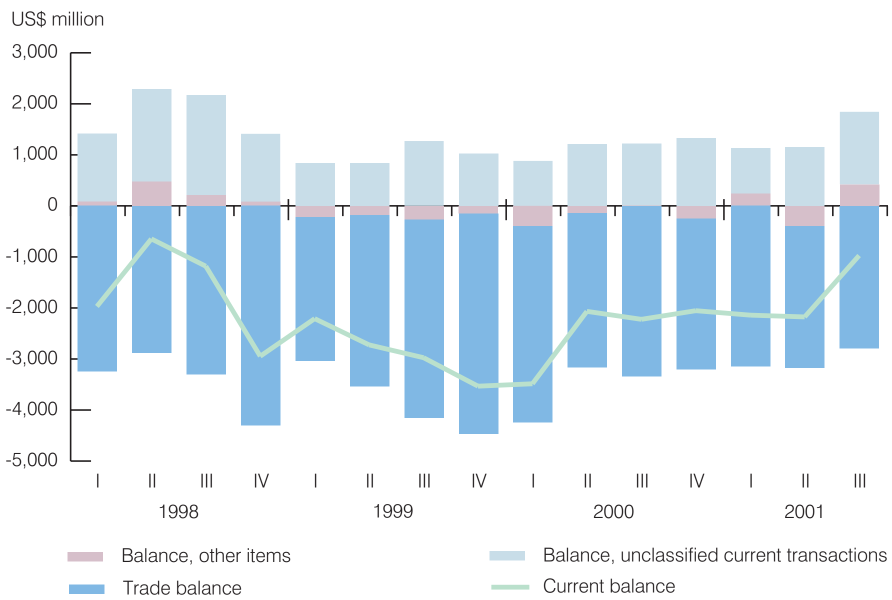
[7] NBP calculations based on GUS figures.

Figure 3
Real effective zloty exchange rates, 1994-2001
(December 1993 = 100)



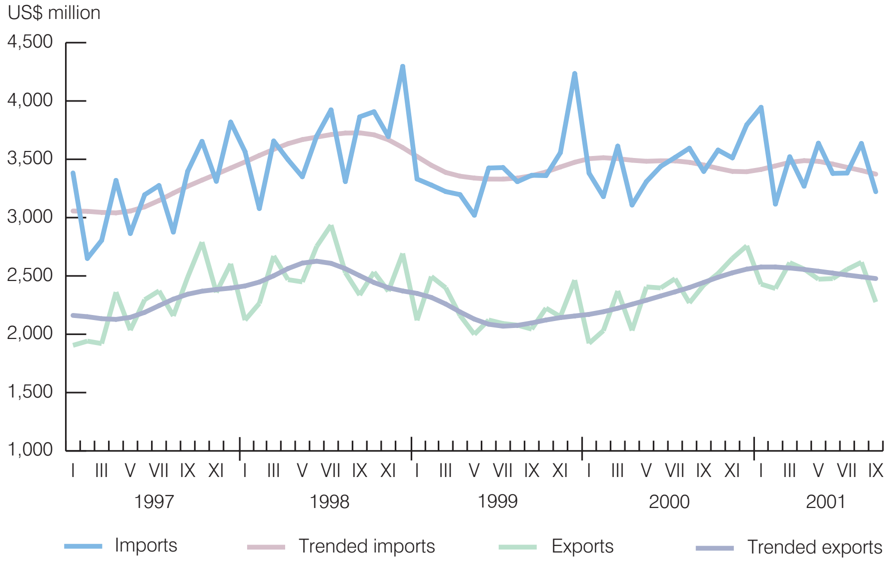
Source: NBP calculations.

Figure 4
Current balance
(quarterly figures)



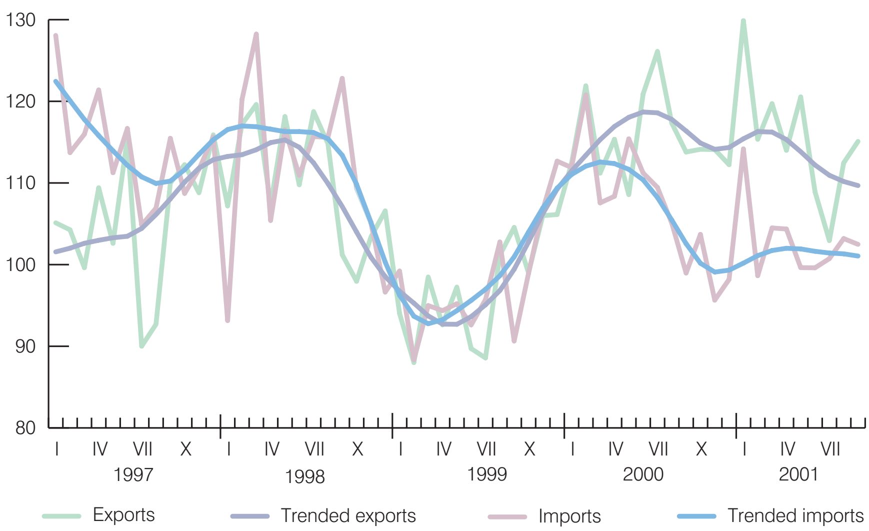
Source: NBP.

Figure 5
Foreign trade, cash basis
(monthly figures)



Source: NBP, GUS.

Figure 6
Export & import growth, US$
(corresponding period previous year = 100)



Source: NBP calculations based on GUS figures.

export growth was primarily the result of the increasing zloty appreciation seen from the third quarter of 2000 onwards, allied with the weakening of demand growth in the euro area economies as of the first quarter (cf. Table 3). The depreciation of the zloty that took place in the third quarter of 2001 could have slightly cushioned the downward trend in Polish foreign trade, as mirrored in GUS data for August and September.

An analysis of the changes in the commodity structure of Polish foreign trade in the first half of 2001 (cf. Table 4) indicates that in this period it was principally processed goods that proved vulnerable to the weakening of external demand. The greatest contribution to the slackening of export growth was made by the slower growth of sales of machinery and transport equipment, primarily motor vehicles and vehicle parts. In addition, growth in sales of "miscellaneous industrial goods" (which chiefly include labour- and material-intensive products) also trailed growth in exports overall. This stemmed from the absolute decline in exports of wood and wood products, and the small increase in sales of metallurgical products. The movements in exports of these items are associated with the reduction in imports of production supplies by the EU countries.

Table 4
***Contribution of particular product categories to movements in value of total Polish exports & imports** (change on previous year (%))*

	Exports				Imports			
	2000		2001		2000		2001	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
TOTAL	**18.8**	**13.5**	**21.2**	**12.2**	**4.3**	**-0.8**	**5.4**	**0.4**
Unprocessed commodities	**1.3**	**1.5**	**3.3**	**2.7**	**4.5**	**2.8**	**1.4**	**1.3**
Agricultural & food products	0.9	0.8	1.6	1.0	-0.2	-0.5	0.4	0.9
Raw materials	-0.4	0.1	0.0	-0.2	0.5	0.2	0.1	-0.1
Mineral fuels	0.9	0.6	1.7	1.9	4.2	3.0	1.0	0.6
Processed goods	**17.5**	**12.0**	**18.0**	**9.6**	**-0.2**	**-3.6**	**4.1**	**-1.0**
Chemical products	2.4	1.5	1.6	0.4	0.5	-1.2	1.1	0.3
Machinery & transport equipment	12.1	7.7	11.0	6.0	-0.8	-0.9	1.4	-2.0
Miscellaneous industrial goods	2.9	2.8	5.4	3.2	0.1	-1.5	1.7	0.8

Source: NBP calculations based on GUS figures.

The further slowdown of economic growth in Poland, which was accompanied by a weakening of domestic demand, found reflection in the lower growth of imports in the first half of 2001, in all the more important product categories. Imports of machinery and transport equipment declined, in large measure due to reduced imports of motor vehicle components for assembly as a result of a contraction in domestic production. The import of finished cars also rose at a considerably lower pace than in previous years. In terms of processed goods, the fastest growth was in imports of chemical products, primarily pharmaceuticals (up 16% on the previous year). Imports of mineral fuels, by value, showed markedly weaker growth than a year earlier, above all because of a fall in the value of oil deliveries (down 8% compared to the first half of 2000). The slide in world oil prices was compounded here by a decline in the volume of imports. The growth of fuel imports was propped up, however, by an increase in the value of natural gas purchases, the combined effect of higher prices and larger import volumes.

The current deficit recorded in the third quarter of 2001 was financed in full by the inflow of long-term foreign capital in the shape of incoming direct investment. The surplus on direct investment, at US$

Table 5
Selected early warning signs (%)

	2000	2001		
		Q1	Q2	Q3
Current balance/GDP	-6.2	-5.3	-5.2	-4.4
Trade balance/GDP	-8.3	-7.7	-7.2	-6.8
FDI/Current balance	95.2	56.5	63.6	132.0
Incoming equity capital*/Current balance	83.7	41.6	52.3	111.4
Current balance less FDI/GDP	-0.4	-2.3	-1.8	0.7
Current balance/Official reserve assets (yrs)	2.8	3.2	3.1	7.1
Foreign debt service/Exports	19.1	23.6	21.7	20.6
Official reserve assets as months of imports	8.0	7.9	7.9	8.3
Real effective exchange rate**	5.8	6.5	14.0	1.8

* Net inflow of capital invested in equity and additional contributions to share capital.
** Real effective zloty exchange rate as adjusted by manufacturers' producer prices; corresponding quarter previous year = 100; increase in index signifies appreciation.
Source: NBP calculations based on GUS & NBP figures.

1.3bn, was almost 50% greater than that registered in the third quarter of 2000. The balance on the remaining items of the financial account was flat, with a surplus on “other investment” of some US$ 0.3bn, a deficit on financial derivatives also amounting to around US$ 0.3bn, and a deficit on portfolio investment of US$ 30m.

As Table 5 shows, the third quarter of 2001 brought a significant improvement in the indicators of the external equilibrium of the Polish economy, principally thanks to a major reduction of the current deficit, an increased inflow of foreign direct investment, and the depreciation of the zloty.

3. THE LABOUR MARKET

The year-on-year decline in average employment within the Polish economy came to 3.8% in the third quarter of 2001, a sharper fall than in the same period of 2000, while in relation to the second quarter of 2001 the decrease was 1%. The third-quarter drop in employment was also greater than in the preceding two quarters of the year.

A distinct quickening of the decrease in corporate sector employment began in the second quarter, and this gained even more speed in the particular months of the third, reaching a pace unseen since the start of the 1990s. As a result, by September corporate sector employment was 4% lower than it had been a year before. However, the year-to-date decline was 0.4 points less than in the corresponding period of 2000, standing at 3%. A reduction in the workforce was reported in most divisions of manufacturing, in construction, and also in certain sections of commercial services (cf. Tables 6 and 7). Redundancies were also increasingly common at small firms (not included in GUS monthly reports). Further, GUS research showed an increase in the number of employers announcing redundancy plans.

Table 6
Corporate sector employment, by section

	Average employment, Jan.-Sept. 2001 (Jan.-Sept. 2000 = 100)	Average employment, Q3 2001 (Q2 2001 = 100)
Total, corporate sector	**97.0**	**99.6**
Total, industry	**95.0**	**99.3**
Coal & lignite mining	91.6	99.4
Manufacturing, of which:	95.1	99.3
– food & beverages	94.9	99.8
– basic metals	85.2	98.8
– machinery & equipment	91.9	97.5
– electricity, gas & water supply	97.1	99.6
Construction	**92.5**	**99.6**
Distribution & repairs	**98.8**	**99.9**
Hotels & restaurants	**102.3**	**101.2**
Transport, storage & communication	**95.9**	**99.6**
Real estate & business activities	**107.5**	**100.8**

Source: NBP calculations based on GUS figures.

Table 7
Average industrial employment & total unemployment rate, by voivodship

Voivodship	Average industrial employment		Unemployment rate (%)	
	Q3 2001 (previous quarter = 100)	Jan.-Sept. 2001 (Jan-Sept. 2000 = 100)	Sept. 30, 2000	Sept. 30, 2001
POLAND	**99.3**	**95.0**	**14.0**	**16.3**
Lower Silesia	99.5	95.6	17.0	19.7
Kujawy Pomerania	98.0	95.2	18.3	20.7
Lublin	100.0	95.1	13.2	14.6
Lubusz	98.5	93.6	19.3	22.6
Łódź	100.0	95.2	15.2	17.0
Małopolska	99.5	95.2	11.1	13.0
Mazovia	99.5	93.8	10.4	12.5
Opole	98.5	92.4	14.2	16.3
Podkarpacie	99.3	96.3	14.9	16.3
Podlasie	100.0	95.6	12.7	14.1
Pomerania	99.3	98.7	14.9	18.0
Silesia	99.0	93.0	12.0	14.8
Świętokrzyskie	100.0	94.8	15.6	17.3
Warmia & Mazuria	98.8	95.2	23.2	26.3
Wielkopolska	99.6	98.2	11.3	14.9
Western Pomerania	100.0	95.0	18.9	22.4

Source: GUS.

Surveys of the general business climate in industry conducted in the fourth quarter of 2001 revealed that a huge 38% of respondents were planning to cut staffing, which represents the highest percentage ever polled[8]. The direct reason given for redundancies is the need to lower production costs as a result of decreased demand.

An analysis of movements in employment within 48 divisions of economic activity (based on F-01 reports for the period 1999-2001) indicates a continuation of the shifts in capital-labour ratios. This process is related both to capital/labour substitution and to a reduction of overstaffing.

Changes in corporate staffing levels in the period reviewed were the result, firstly, of the decline in overall

[8] *Preliminary information on the condition of the corporate sector, with particular reference to business activity in the fourth quarter of 2001*, NBP Department of Statistics.

employment, which points to the shedding of surplus labour. Secondly, the fact that the contraction of employment in a given division was coupled with an increase in the number of companies conducting business signifies that newly-established firms are employing fewer staff than those that are being wound up. This is associated with businesses seeking to make optimum use of factors of production.

At the same time, the first nine months of 2001 (particularly Q3) brought a further slowdown in the restructuring under way in mining and metallurgy, which meant that, despite the swifter downsizing recorded in manufacturing and construction in particular, the scale of redundancies in the whole corporate sector over the first three quarters was smaller than in the corresponding period of 2000.

The weakening of business activity, sales difficulties, and deteriorating competitiveness and production efficiency all constituted powerful incentives for firms to cut production costs, including labour costs. The simplest and quickest way of reducing the latter is to trim staffing.

The framework regulations currently in force significantly increase the costs associated with maintaining staff. In the course of the last ten years, the introduction of provisions that raise payroll taxes have led to the non-wage labour costs borne by employers climbing from around 65%-67% of net employee earnings to over 90% (see Box 2). This has played a considerable role in the growth of unemployment.

A major barrier to employment growth in Poland is also the high and regionally differentiated minimum wage, i.e., the lowest permissible level of monthly earnings. This particularly restricts the possibility of employing youth and less qualified staff, as the market rate for their labour is frequently below the minimum wage. Up until 1999, the minimum wage was subject to several cost-of-living adjustments each year. It was only in 2000 and 2001 that these adjustments were performed on a once-yearly basis. From January 1995 to January 2001, the lowest monthly pay allowable almost trebled in nominal terms (it currently stands at 760 zloty, or nearly 40% of the average wage). This increase was slightly higher than that of average employee earnings in this period, even in the corporate sector. In real terms, the minimum wage went up around 52% from 1995 to the end of the third quarter of 2001, whereas average employee earnings rose some 44%.

Box 2
Growth in ancillary staff costs issuing from regulatory changes in the last decade

Over the last ten years, non-wage staff costs comprised the following:

1990:

– social insurance contributions and contributions to the Employment Fund and State Fund for the Rehabilitation of the Disabled, totalling some 45% of gross employee earnings less certain components thereof, these including performance bonuses and profit-sharing bonuses paid from corporate net profit or cooperative trading surplus, cost-of-living compensation, and remuneration under temporary service contracts;

– a payroll tax of 20%, not applicable to pay components excluded from social insurance contributions;

– a surtax on excessive payroll growth, calculated pursuant to detailed regulations.

In all: around 65%-67% of net employee earnings.

1991:

– the same costs as in 1990;

– in addition, social insurance contributions were extended to include remuneration from net profit, which increased total costs by another 1%.

In all: around 66%-68% of net employee earnings.

1992:

– personal income tax was introduced, payable by employees, in place of the previous payroll tax. In consequence, employee wages were raised by an amount that offset the effect of deducting tax. The result of this was that the amount of social insurance contributions and contributions to the Employment Fund rose by around 12%;

– as of March 1, social insurance contributions were increased to 45% of net employee earnings (as against 43% previously), and in conjunction with Employment Fund contributions now stood at 47% of net earnings.

In all, non-wage staff costs thus rose to around 80%-82% of net employee earnings.

1993:

As of January 1, Employment Fund contributions increased by one percentage point, to 3% of net wages, raising the total level of social insurance and Employment Fund contributions to 48% of net employee earnings.

In all, non-wage staff costs now represented 81%-83% of net employee earnings.

1999:

The social insurance reform was launched, with contributions now payable by both employer and employee. The cost to employers did not change as a result.

<u>Certain other alterations in the period concerned, the effects of which are difficult to estimate, yet which involve costs to employers:</u>

– a wage bargaining system was introduced in 1995, which from its very inception was essentially implemented contrary to the original intent and has led to excessive and unwarranted wage growth. In response to workforce pressure, wage rises have often been performed with no regard for the financial condition of the company in question;

– as of 1996, employers have been required to pay wages for periods of illness of up to 35 days in the year;

– the length of the working week has been gradually shortened, with no loss of pay, thereby automatically increasing hourly labour costs (the most recent change introduces a 40-hour, 5-day workweek as of January 1, 2003);

– paid holiday leave has been extended.

We estimate that the above alterations have increased non-wage staff costs by a further 10%-15%.

In all, total non-wage costs have thus risen to 90%-95% of net employee earnings.

Table 8
Decline in no. of state enterprises, by voivodship

Voivodship	State enterprises		
	at Sept. 30, 2000	Q3 2001	at Sept. 30, 2001
	(Sept. 30, 1999 = 100)	(previous quarter = 100)	(Sept. 30, 2000 = 100)
POLAND	**86.4**	**98.5**	**90.6**
Lower Silesia	75.0	96.9	84.4
Kujawy Pomerania	92.3	97.7	65.2
Lublin	91.3	99.1	96.5
Lubusz	84.1	97.1	95.7
Łódź	84.0	98.3	93.1
Małopolska	87.6	96.0	88.3
Mazovia	94.8	99.2	96.6
Opole	72.1	100.0	93.2
Podkarpacie	68.4	97.9	70.8
Podlasie	86.4	100.0	90.0
Pomerania	83.1	98.1	92.0
Silesia	86.2	99.7	94.6
Świętokrzyskie	88.7	98.8	89.4
Warmia & Mazuria	85.2	100.0	90.7
Wielkopolska	87.2	98.4	93.4
Western Pomerania	90.4	98.6	92.0

Source: GUS.

In the year to the end of September 2001, almost 220 state enterprises were wound up (cf. Table 8). While these enterprises then provided the foundation for the establishment of numerous commercial companies, the incorporation of the latter was accompanied by a reduction in their workforce (the result of overstaffing at the former state enterprises).

Apart from manufacturing and services, staff cuts are becoming increasingly frequent in banking (linked to privatisations) and in education (90,000 teachers are to lose their jobs by 2006 as school rolls slump by almost 1.5 million). In addition to miners, steelworkers, civil engineers and mechanical engineers, bank staff and teachers now also belong to the occupations most threatened with job loss.

As the figures presented in Table 9 show, the movements in Poland's employed labour force from September 2000 to September 2001 included both decreases and increases in particular sections of activity. Almost 70% of the decline in

Table 9
Employed labour force

Section of activity	Month end, September 2001			
	Persons employed, thousands	Sept. 2000 = 100	Change on Sept. 2000, thousands	Change in section as proportion of total change, %
TOTAL	**7 997**	**96.4**	**-294**	**100.0**
Agriculture, hunting & forestry	131	94.3	-8	-2.7
Industry	2 646	94.4	-157	-53.4
Construction	521	91.2	-50	-17.0
Distribution & repairs	861	98.5	-13	-4.4
Hotels & restaurants	107	100.0	-	-
Transport, storage & communication	577	94.3	-3.4	-11.6
Financial intermediation	237	82.4	-50	-17.0
Real estate & business activities; research	531	102.5	+11	+3.7
Public administration & defence; compulsory social & health insurance	521	118.7	+82	+27.9
Education	891	99.3	-5	-1.7
Health & social work	782	92.6	-58	-19.7

Source: GUS; these figures do not include private farming or general government institutions involved in national defence and public security.

the employed labour force in the period under examination is attributable to the reduction of the workforce in industry and construction. By contrast, the substantial changes in the employed labour force in the sections of "financial intermediation", "health and social work", and "public administration and defence; compulsory health and social insurance" were principally the result of the shifts between these sections ensuing from alterations to the Polish Classification of Economic Activity (among the institutions affected were the Social Insurance Board, the Farmers' Social Insurance Trust, and environmental health offices).

As employment has come down, the jobless total has gone up. In the third quarter of 2001, the registered jobless total rose over 71,000 compared to the end of June, to stand at 2,920,000, while the rate of unemployment moved up 0.4 points. At the end of September, the number of registered jobless was 391,600 higher than a year earlier, while the unemployment rate had risen 2.3 points to 16.3%.

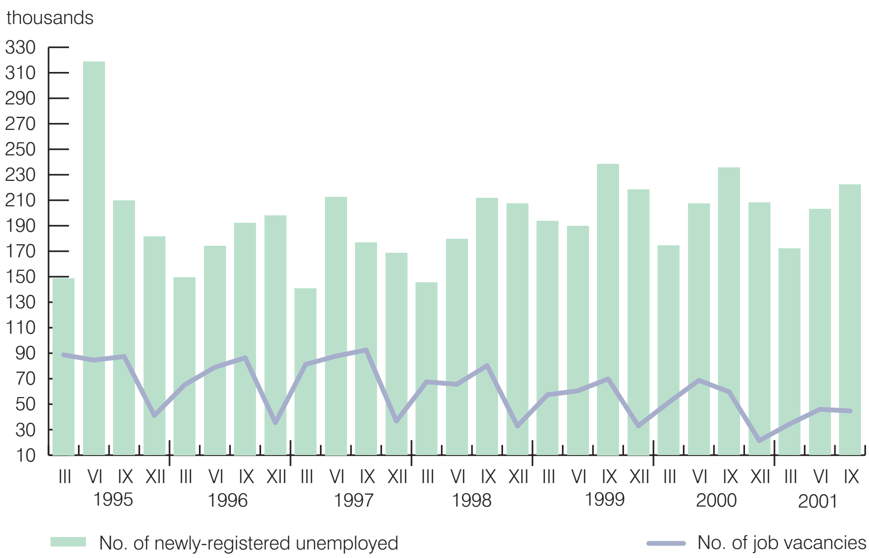
The situation on the labour market is additionally aggravated by the fall in the number of job vacancies at employment offices. Furthermore, the new jobs on offer differ substantially from those that have been done away with, in terms of both qualifications and location (the new ones require better education, and are chiefly in the services sector, in large cities). In the third quarter, nearly 1,500 fewer vacancies were referred to employment offices than in the previous quarter, and around 34,000 fewer than a year before (cf. Fig. 7).

From the beginning of 2001 to the end of the third quarter, the total number of vacancies received went down almost 118,000 relative to the corresponding period of 2000, and amounted to 372,800.

The length of unemployment, and thus also the level of unemployment in Poland, also depends to a certain degree on the pro-active behaviour of job-seekers themselves (see Box 3 and Fig. 8).

Greater deregulation of the labour market and a moderation of the degree of protection afforded to the unemployed could increase their involvement in seeking employment, and in retraining or gaining additional qualifications, and also encourage higher mobility (given the large geographical variations in unemployment in Poland); thus, it could help eliminate the passive stance of simply waiting for what employment offices might offer.

Figure 7
Newly-registered unemployed and job vacancies, by month



Source: GUS.

Box 3
The intensity of efforts to find employment

Applying a non-uniform recurrence method of estimation, an analysis was performed at the NBP of increases and decreases in the number of unemployed over the last five years. The findings of this analysis indicate that the level of unemployment is contingent not only on the pace of economic growth or on the regulations that affect the number of new jobs created, but also on the involvement of the jobless themselves in seeking employment.

Due to their weak efforts to find jobs, only 4% of those registering as out of work at employment offices find employment in the first month after registration. The largest proportion, almost 9%, enter employment in the fourth month, while from the fifth month onwards the chances of securing a job again begin to dwindle, falling to 4% in the twelfth month after registration.

In 1995, those remaining out of work for over two years represented some 18% of all registered jobless. By 2000, this percentage had risen to over 22%, and in Q2 2001 it reached almost 26%.

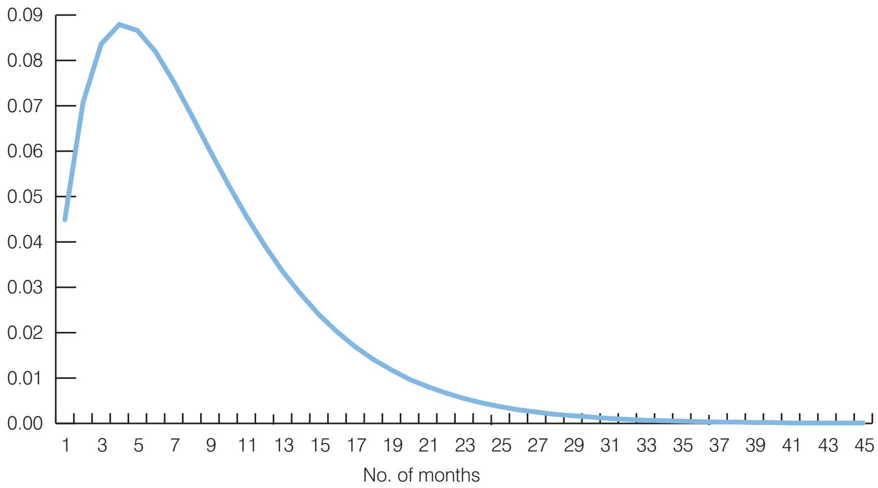
Were appropriate incentives offered to step up the search for a job from the time employment was lost (at least to make this search as effective as in the fourth month), the number of people obtaining jobs within four months of registering as unemployed could increase from 28 to 35 per 100. In these circumstances, the unemployment rate at mid-year 2001 could have been some 14.4% rather than 16%. The chances of finding a job 16 months after registration sink to 2% (i.e., 2 out of every 100 people find work). However, the small proportion of those leaving the ranks of the unemployed after this length of time is not solely the product of their poor efforts to find employment. It is also connected with the reluctance of employers to take on the long-term unemployed, whose suitability for employment is limited.

The involvement of those out of work in actively seeking employment depends on numerous factors. One of these is the system of economic incentives created under unemployment insurance and benefit schemes. In particular, the grant of benefit at a fixed level for a specified period of time has adverse consequences for the commitment to job seeking. This is because the degree of commitment displayed by job seekers is a function of the difference between their current income from benefit and the income they expect to gain from employment. The nearer the unemployed get to the end of their benefit, the greater the intensity of their efforts to find employment, since they are faced with the prospect of losing all forms of income (unemployment benefit, other welfare benefits, allowances, etc.). The conclusion to be drawn from the foregoing is that a certain reduction in unemployment could be achieved by lowering the level of unemployment benefit over time, which would encourage those out of work to intensify their efforts to find a job.

The losses to the economy as a whole arising from the neglect of labour market reform are illustrated by a simulation analysis that has been carried out[9]. This presupposes a thoroughgoing reform of the Polish labour market performed in 1993, one that brought this market close to the American model. On this assumption, then given the same rate of economic

[9] A.B. Czyżewski: *Szacunkowe koszty społeczne i gospodarcze odkładania reformy rynku pracy (na podstawie porównań międzynarodowych)* ["Estimated social and economic costs of postponing labour market reform (based on international comparisons)"], NBP internal publication.

Figure 8
Probability of finding employment



Source: NBP calculations based on GUS figures.

growth, the same process of privatisation, and analogous government receipts and expenditure (excluding those related to the labour market), the rate of unemployment in Poland today would probably be 7%, while the Treasury would be at least 27bn zloty richer (equivalent to 3.7% of GDP in 2001); the latter figure represents the discounted sum total of savings on unemployment benefit and higher personal income tax receipts flowing from the higher level of employment that would have resulted.

Assuming a limited reform of the labour market (yielding an elasticity of non-farm private-sector demand for labour "halfway" between that currently obtaining in Poland and that shown by the US labour market), the unemployment rate in 2001 would have been 12%, while the Treasury would have saved 10bn zloty (1.8% of GDP in 2001). A full account of the benefits lost due to refraining from labour market reform would give a considerably higher figure, since the analysis outlined above did not factor in the feedback effects to be gained (lower labour costs, higher competitiveness, faster GDP growth), nor the effects issuing from the acceleration of privatisation (held back by workforce fears of difficulties in finding new employment).

4. OTHER SUPPLY FACTORS

4.1. Structural factors

The rapid price growth that persisted in the third quarter of 2001 in the section of electricity, gas and water supply (cf. Section 5.3) indicates the significance of structural reform for a lasting reduction of inflation in Poland. In particular, this refers to the completion of privatisation in such areas as the power industry, gas, rail transport and mining, and the reinforcement of market mechanisms in telecommunications and on the markets for electricity and liquid fuels. It is therefore especially important to monitor the progress of reform in these areas.

The power industry

The restructuring of the power industry is behind schedule, delaying the prospect of introducing genuine competition onto the market for electricity. This prospect has also been put back by certain Government decisions, including the Ordinance of the Minister of the Economy issued at the beginning of 2001 regarding a "producer output fee", something that from the very beginning aroused reservations for both legal and economic reasons. This requires an additional payment to be made to electricity companies by power generating firms that meet over half of their own needs from their own energy sources.

The result has been that electricity prices have shot up (cf. Fig. 27). In the year 2001, these prices were raised twice, the last time being on July 1[10].

The restructuring under way in the power industry has led to three separate segments of the industry being distinguished: generation, comprising 17 power stations and 19 combined heat-and-power stations (CHP stations); transmission, which is the province of one nationwide corporation, the Polish Power Grid;

[10] In July 2001, producer prices in the section of electricity, gas and water supply rose 2.8% compared to June. This was related to an increase in charges sanctioned in mid-June by the President of the Energy Regulation Authority, caused by the rise in 2001 of the justifiable costs borne by power companies.

and distribution, which involves 33 electricity companies. The Government document entitled "Proposal for the privatisation of the electrical power sector, as amended by recommendation of the Council of Ministers, November 28, 2000", projected that the privatisation of the power industry would be completed by the end of 2002. The relevant timetable, updated in June 2001, provides for the privatisation first of the power stations and CHP stations, and only afterwards of the electricity companies. Under this timetable, the privatisation of the Zielona Góra SA and Tychy SA CHP stations was to have been performed in the third quarter of 2001, as was the privatisation of the Skawina SA network power station. The privatisation of the Zielona Góra SA CHP station was indeed completed, while that of Skawina SA is nearing finalisation, all that remains is to have the agreement signed. The privatisation of the Tychy SA CHP station has been postponed to 2002.

An important aspect of the restructuring of the power industry is resolving the issue of the long-term contracts that cover around 70% of all the electricity generated. In this regard, a crucial question is the development of exchange trading in electricity and the introduction by the Energy Regulation Authority of a system of compensation payments that neutralises the consequences of these long-term contracts. On September 1, 2001, the Polish Power Grid inaugurated a daily and hourly "residual market" in electricity, which will assist the development of exchange trading. The system of compensation payments, however, did not come into operation on July 1, as previously planned.

Performance of the scheduled privatisations in the power industry (particularly in 2002) may be jeopardised by grassroot initiatives towards consolidation undertaken by the electricity companies. The Ministry of the Treasury has received a letter of intent concerning the creation of a south-western power group (including the Turów power station, electricity companies from Legnica, Wałbrzych and Zielona Góra, and the Gorzów CHP station). There is also an initiative to set up a western group (including electricity companies from Poznań and Szczecin, and the Bełchatów power station). These proposals, which require Government approval, have raised serious reservations due to the possibility that they will impede privatisation in the industry.

A delay has taken place in the privatisation of the largest group of electricity companies in Poland, the "G-8" companies, located in northern Poland (in Gdańsk, Toruń, Słupsk, Płock, Elbląg, Olsztyn, Kalisz and Koszalin). The Treasury intended to sell a 25% equity interest in this group, the sole privatisation of distribution companies scheduled for 2001. In August, it gave Spain's Iberdrola corporation exclusive – yet limited – negotiating rights concerning the contract to purchase shares in the G-8. However, the ensuing negotiations ended in failure. A decision on the subsequent approach to the privatisation of this group of distribution companies is to be taken in the near future.

Coal mining

In the third quarter of 2001, prices in the section of mining and quarrying were up 4.6% year-on-year (a year previously, this increase had been 12.2%).

Eight months into 2001, hard coal mining reported positive income from sales of coal (382m zloty) and positive net earnings (156.5m zloty). The corresponding figures at year end 2000 and mid-year 2001 had been a negative 349.6m and negative 137.4m, respectively, for sales of coal, and a negative 640.8m and negative 286.9m in net earnings. Total liabilities at the end of August stood at 20.1bn zloty, as against 22.4bn at year end 2000 and 21.0bn at mid-year 2001.

The third quarter of 2001 saw a continuation of the financial restructuring of the mining industry. The mines concluded a 5.1bn zloty debt relief agreement with the Social Insurance Board, with 3.2bn zloty in unpaid contributions to be forgiven and 1.9bn to be repaid up to the year 2007.

The reform programme for hard coal mining has so far been implemented as planned. This is confirmed by the World Bank's decision in July to grant another loan for this purpose, of €112.8m (the previous €280m loan had been granted in 1999 and disbursed in two tranches in 1999 and 2000).

The reform of hard coal mining has to date made it possible to reduce overproduction, curb overstaffing, and improve the industry's earnings. However, it has not resulted in the privatisation of the mines and the full restructuring of the industry, which would have increased efficiency and allowed government subsidies to be cut back.

Rail transport

The basic stage of the structural reorganisation of Polish State Railways (PKP), instituted under the Act on the Commercialisation, Restructuring and Privatisation of Polish State Railways of September 8, 2000, was concluded in June 2001. This involved the hiving off from PKP of companies conducting key rail operations.

As of July 1, the following four companies commenced operations:

- PKP Szybka Kolej Miejska sp. z o.o. [PKP Rapid Municipal Railways Ltd] in the Gdańsk-Sopot-Gdynia conurbation,
- PKP Warszawska Kolej Dojazdowa sp. z o.o. [PKP Warsaw Commuter Railways Ltd],
- PKP Linia Hutnicza Szerokotorowa sp. z o.o. [PKP Broad-Gauge Steelworks Lines Ltd],
- CS Szkolenie i Doradztwo sp. z o.o. [CS Training and Consultancy Ltd].

On September 1, operations were begun by further companies split off from PKP SA, as follows:

- PKP Intercity sp. z o.o., with assets valued at 541m zloty, which received the franchise to operate passenger and goods services within Poland,
- FERPOL sp. z o.o., which is to conduct the wholesale and retail distribution of various materials, and is responsible for the storage, safekeeping, packaging and loading/unloading of those materials,
- Farmacja Kolejowa sp. z o.o., whose activity is to consist in the wholesale and retail distribution of pharmaceuticals, cosmetics, baby foods and dietary products,
- Five other companies to be involved in the repair and maintenance of the rail infrastructure.

PKP is to seek strategic investors for all of the companies thus demerged. At the same time, it is to abandon transport operations, focussing instead on servicing its debt and managing the reform as a whole.

The newly-established companies are to assume the assets that PKP currently holds, once the latter company has emerged from debt. In line with the restructuring plan, all of these companies are to be privatised by 2003. The advisor in the sale of these PKP subsidiaries is to be Arthur Andersen.

The one undertaking that is to remain a state enterprise is Polskie Linie Kolejowe (PKL, Polish

Railways). This will inherit the rail infrastructure, charging the private operators for its use.

The funds to finance the reform of PKP are to come from loans, including ones extended by the European Bank for Restructuring and Development and the World Bank, from the sale of PKP properties no longer needed, and from a planned bond issue. The reform is to cost a maximum of 3.9bn zloty; borrowings to this amount are secured by Treasury guarantees and written into the Act on the Commercialisation, Restructuring and Privatisation of PKP.

The cost of workforce restructuring at PKP is estimated at over 1,153m zloty. In 2001 alone, severance pay for 30,000 employees made redundant is to have totalled almost 600m zloty. A Railways Job Promotion Agency has been set up within PKP to provide assistance to those included in redundancies.

In August 2001, the outstanding debts of PKP customers on freight services amounted to 1.5bn zloty, with the majority of this owed by steelworks and coking plants. Given its own difficult financial situation (debt of 7.5bn zloty at mid-year 2001), PKP has ceased providing transport services to those debtors that have not settled their liabilities and not submitted payment guarantees for ongoing services.

The restructuring of PKP is proceeding on schedule. The process of splitting off subsidiary companies was to have been finalised by October 2001, thereby ending the basic stage of rail privatisation.

Liquid fuels

The privatisation measures that continued in the oil refining and distribution sector in the third quarter of 2001 primarily related to the most important companies here, the PKN Orlen SA Polish Oil Corporation and the Gdańsk Refinery SA, which together produce over 85% of the liquid fuel marketed in Poland.

The most important steps taken in this respect were the following:

- A foreign partner was chosen for PKN Orlen. The Hungarian fuel corporation MOL was given 90 days to conduct exclusive negotiations in order to hammer out the details of a share purchase agreement.
- The Ministry of the Treasury was involved in negotiations with a consortium (composed of PKN

Orlen and Anwil, its subsidiary) on the sale of shares in the Police Chemical Plant; the consortium was granted exclusive negotiating rights regarding the terms of the sale agreement from August 10 onwards. However, this transaction did not materialise due to the price offered by the consortium (30% less than book value).

- A final decision was not reached on the privatisation of the Gdańsk Refinery (involving the sale of a 75% interest). Polish Oil (Nafta Polska), a Treasury-owned firm established to privatise oil sector companies, set prospective buyer Rotch Energy additional conditions regarding financial guarantees for the equity purchase and subsequent investment.
- The Government adopted a strategic programme for the privatisation of Naftobaza sp. z o.o. (involved in the storage of petroleum products and handling of fuel cargoes), which provides for the sale of a 65% stake to an investor from the same industry. This means that companies in the business of liquid fuel storage will be invited to negotiations, while domestic liquid fuel producers will be excluded.
- No interest was shown in the privatisation of the Jaslo Refinery. Polish Oil received just one bid (the name of the party concerned was not disclosed), for the purchase of a 75% interest. PKN Orlen and the Gdańsk Refinery submitted proposals for the acquisition of selected parts of the company.

As privatisation in the oil sector drags out, this has resulted in the deterioration of the financial condition of the companies involved, and it will have negative consequences in negotiating the terms of future privatisation agreements. This situation also leads to the maintenance of the monopoly positions on this market held by existing companies.

Gas

In July, the Polish Gas and Oil Extraction Company (PGNiG) concluded a contract with the Danish company DONG for the purchase of 16 billion cu. m. of gas over a period of eight years. This is the first step towards the diversification of gas supplies. The relevant gas pipeline is to be brought on stream in September 2004, and this may initiate the linking up of several European energy transmission systems.

In August, the Energy Regulation Authority refused to approve new gas charges proposed by PGNiG. The reason for this was the failure of PGNiG to present a detailed explanation of the costs adopted in its price calculations, despite having been called on to do so. In addition, the charges put forward were not consistent with the regulations in force. By the end of the third quarter, new charges had still not been approved.

On September 3, PGNiG and representatives of Norwegian corporations concluded a trade contract for gas deliveries to Poland. This provides for the purchase by PGNiG of 74 billion cu. m. of gas over a period of 16 years. The value of the whole contract is some 50bn zloty, with deliveries scheduled to start in 2008.

Under the privatisation programme adopted in May for PGNiG, which holds a monopoly on the gas market, four distribution companies have been split off, together with one gas extraction company. These were to have begun operations in November. In September, PGNiG adopted a timetable for the work associated with these companies starting up. How responsibility is to be allocated for the debts of PGNiG, which stand at several billion zloty, is still unclear.

Implementation of the agreements with Denmark and Norway will diversify Poland's gas supplies, thus improving the security of the country's energy sources and instituting mechanisms of price competition on the gas market. The latter effect will also be aided by the restructuring begun, and subsequently by the privatisation of the PGNiG monopoly.

Telecommunications

In the third quarter of 2001, the following measures were taken in the telecommunications sector with a view to amending the provisions of the Telecommunications Act, removing the monopoly position of Telekomunikacja Polska SA (TP SA), and deregulating the market for telecommunications services:

- amendments to the Telecommunications Act were adopted, with these stipulating that the President of the Telecommunications Regulation Authority (URT), having sought the opinion of the Office for State Security and Ministry of National Defence, may refuse to issue permits for the provision of services to operators of international data transmission networks.

A 7% rate of VAT was also introduced for all Internet access services;
- the URT declared TP SA to be the dominant operator on the market for general telecommunications services. This ruling opens the way for the application of mechanisms that will allow free competition among various firms and will prevent discrimination against other companies;
- the URT instituted further proceedings to determine whether TP SA held a dominant position on the market for leased telecommunications lines;
- a 12.5% interest in TP SA was sold to a consortium of France Telecom and the firm of Kulczyk Holding. Following this sale, the consortium holds 47.5% of the equity in TP SA, while the Treasury has around 23%;
- the dispute continued between TP SA and NOM (the Independent Long-Distance Operator) concerning settlements for long-distance customer services provided by NOM via TP SA;
- local operators (Dialog, El-Net and Netia) filed petitions with the Office for Competition and Consumer Protection for the institution of proceedings regarding the monopoly practices which they claimed were involved in the "pilot programmes" available from TP SA, whereby the latter company varied its rental charges and offered cheaper trunk calls. The Dialog company also filed for proceedings to be instituted concerning settlements between operators.

The maintenance of the dominant position of TP SA in wireline telephone services stems from the licences and legal provisions currently in force. These constitute an obstacle to the introduction of market mechanisms and hinder competition on the telecommunications market between companies that have been granted licences. As a result, charges for telecommunications services in Poland are among the highest in Europe. Despite the sale of a further shareholding in TP SA, the Treasury still retains a substantial interest in the company, which obstructs efficient management (since certain decisions have to be taken by the Government).

Sugar

In the third quarter of 2001, the sugar market was subject to constant legal upsets related to the creation of the National Sugar Company (known as Polish Sugar) and the privatisation of Poland's sugar mills, which have attracted the interest of foreign buyers. This prevented the company being established as provided by the relevant legislation.

The legislation regulating the sugar market provides for Polish Sugar to be set up as a company incorporating all the sugar refiners privatised. The Government had decided that this company was to include 28 sugar mills. The share of the latter on the domestic market would have been around 41%. The relevant legislation took effect on August 23.

However, the inclusion in Polish Sugar of the 16 sugar mills belonging to the Silesian Sugar Company (which were to have been sold to the company of Saint Louis Sucre – a court case is pending on this) means that it now comprises 44 mills, i.e., over half of all those in Poland.

In this new configuration, Polish Sugar accounts for almost 58% of the domestic market. Given this, the Office for Competition and Consumer Protection undertook a study of the position occupied by this potential monopoly. In August, the President of the Office also instituted anti-monopoly proceedings against the remaining sugar mills, accused of price collusion.

The turmoil surrounding the creation of the National Sugar Company indicates that its establishment in line with the legislation will prove impossible, yet that legislation makes no provision for the company being set up in stages. This legislation will therefore need to be amended.

In August, the German corporation Pfeifer & Langen purchased a 51% holding in five sugar mills in the Wielkopolska region belonging to the Konin-Kalisz sugar refining group. As the owner of 11 mills in all, Pfeifer & Langen thus became the largest foreign shareholder in the Polish sugar industry (with some 16% of sugar production for the domestic market). The corporation assumed the debts of these mills, totalling around 235m zloty.

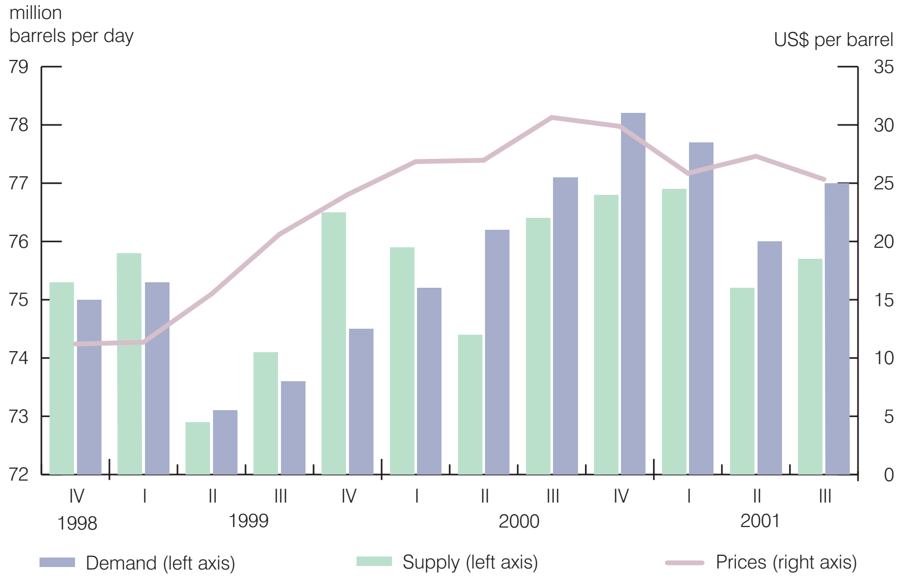
The legal claims filed by the foreign organisations that took part in the privatisation of the sugar industry are preventing the establishment of the National Sugar Company in its final form. It is thus not known whether the company that is to be set up will de facto hold a monopoly position on the Polish sugar market. Were this to be the case, this would act to constrain the operation of market mechanisms with respect to Polish sugar prices.

4.2. External prices

The third quarter of 2001 brought an acceleration of the downward trend in world prices for the most important commodities, a trend that had continued since mid-2000. The greatest contribution to this was made by the steep fall in oil prices. Average prices for Brent (US$ 25.3 per barrel) were down 17.3% on the third quarter of 2000 and 7.2% lower than in the second quarter of 2001[11]. This can be traced to declining demand, resulting in a further deepening of disequilibrium on the market for this commodity (cf. Fig. 9). Despite a short-lived surge in oil prices following the terrorist attacks in the USA, by the end of September oil prices had hit a two-year low. A major factor behind the weakening demand for oil after September 11 was the sharp reduction in world air traffic. By contrast, price levels remained virtually

[11] Source: Reuters.

Figure 9
Oil supply, demand & prices (Brent)



Source: *Monthly Oil Market Report*, International Energy Agency; Reuters.

impervious to the launch of military operations in Afghanistan, and also to the seasonal replenishment of US strategic reserves.

Prices of non-energy commodities also came down faster in the third quarter than they had in the second[12]. The most important factor in this was the significant drop in metal prices (down 18.8% on Q3 2000 and 10.4% on Q2 2001). This was the heaviest slump in metal prices seen since the end of 1998. On the other hand, the fall in food prices levelled off (cf. Figs. 10 and 11).

The downtrend in world commodity prices was the result of the further rapid deterioration in global economic indicators, in terms of both current activity and the future outlook (cf. Section 2). This is borne out by the continuing decline reported in October in prices for fuels and metals, the commodities most sensitive to swings in the business cycle.

Oil prices can be expected to have remained low up to year end, given the probable maintenance of excess market supply over demand[13]. This was also confirmed by the price of futures contracts (cf. Fig. 12). However, were military operations to be extended to regions of strategic significance for oil production and transport, more pronounced price growth cannot be excluded, as was the case in 1990.

The downward trend in world commodity prices played a part in reducing both producer and consumer price growth on Poland's largest export market, the euro area. In September, the annualised index of industrial producer price growth in the euro area fell to 0.7% (the highest point in the year had been 4.8% in January), while the Harmonised Index of Consumer Prices came down to 2.5% (the annual high had been 3.4% in May)[14].

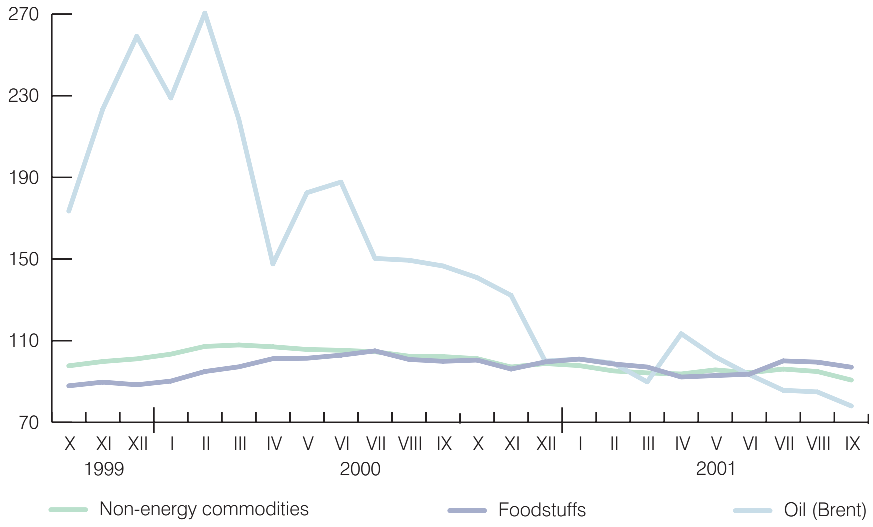
In the first half of 2001, the decrease in transaction prices in Polish foreign trade was driven by the fall in worldwide prices and by the appreciation of the zloty. With transaction prices slipping faster for imports than for exports, Poland's terms of trade improved, rising to

[12] *The Economist*.

[13] Forecasts from the International Energy Agency projected global demand for oil in Q4 at 76.2 million barrels per day, which is 900,000 barrels per day less than had been expected in July (*Oil Market Report*, International Energy Agency).

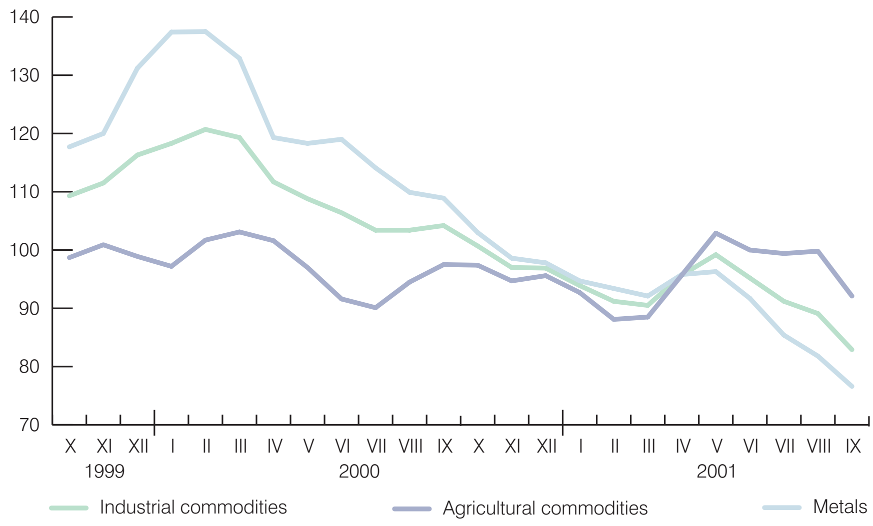
[14] *Euro-Indicators*, Eurostat News Release no. 108/2001, October 17, 2001.

Figure 10
World price indices, basic commodity categories
(corresponding period previous year = 100)



Source: *The Economist*.

Figure 11
World price indices, basic non-energy commodities
(corresponding period previous year = 100)

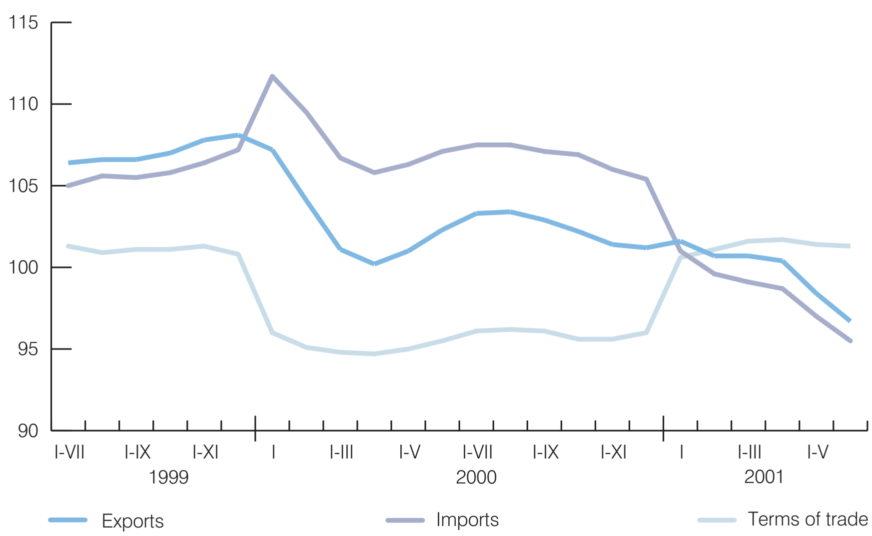


Source: *The Economist*.

Figure 12
Oil prices (Brent), 2000 & 2001

* at October 31, 2001
Source: Reuters.

Figure 13
Indices of transaction prices in Polish foreign trade
(corresponding period previous year = 100)



Source: GUS.

101.3%, compared to 95.5% in the corresponding period of 2000 (cf. Fig 13)[15].

Import transaction prices in zloty were 4.5% lower in the first half of 2001 than in the same period of 2000. The appreciation of the zloty in the first six months of 2001 pushed down zloty import prices by 11.8 points. The greatest role in lowering overall import prices was played by price decreases for machinery and transport equipment and in the category "Industrial goods classified by raw material". In the latter case, the decrease was linked to the fall in world metal prices. By contrast, there was practically no movement in the first half of 2001 in transaction prices for imports of mineral fuels (two opposed tendencies were at play here: a decline in oil prices of 9.6% and a rise in natural gas prices of almost 60%). A modest price increase was recorded in imports of foodstuffs and livestock.

The zloty transaction prices obtained for Polish exports in the first half of the year were down 3.3% on the first half of 2000. The strengthening of the zloty in the first six months of 2001 shaved 12 points off zloty export prices. As in the case of import prices, the largest part was played by the decline in prices for machinery and transport equipment, and for "Industrial goods classified by raw material". Export prices went up solely for mineral fuels, chiefly due to higher coal prices.

Since there is a time lag in the response of domestic prices to movements in external prices and in exchange rates, the course of inflation in the third quarter was impacted by changes in these parameters that had taken place in the second quarter. In the second quarter, Polish import transaction prices, weighted by currency composition, were 1.3% higher than in the first. Factoring in the lagged response of domestic prices to changes in external prices, this 1.3% increase in the latter in the second quarter accounted for 0.1 points of CPI growth in the third. Conversely, the 6.9% rise in nominal effective zloty exchange rates recorded in the second quarter trimmed 0.69 points off the third-quarter CPI. The end result of these two factors was thus a reduction in the third-quarter CPI of around 0.5 points.

[15] Figures are currently available solely for the first half of 2001. Source: *Handel Zagraniczny Styczeń-Czerwiec 2001* ["Foreign Trade, January-June 2001"], GUS.

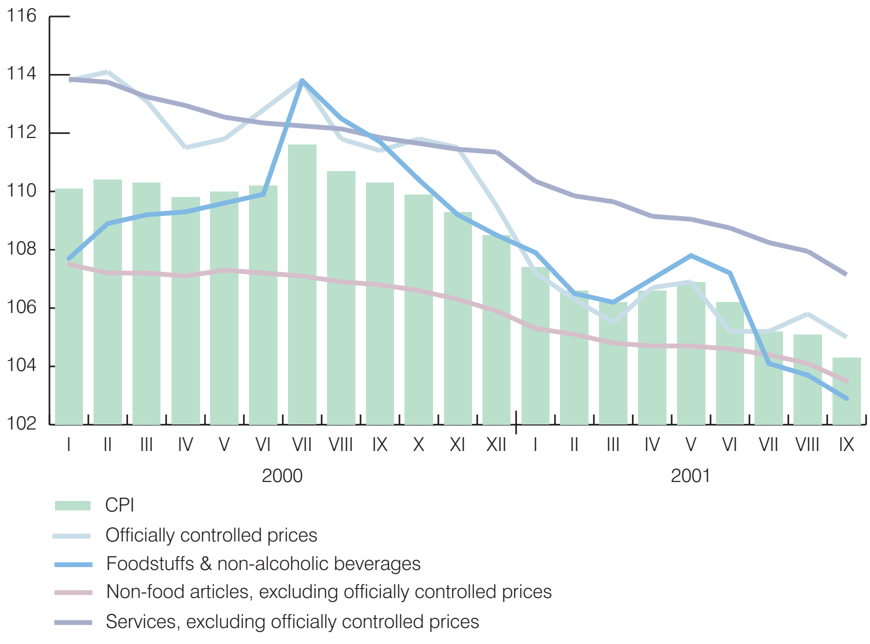
5. INFLATIONARY PROCESSES IN THE THIRD QUARTER OF 2001

5.1. Consumer prices

The annualised Consumer Price Index, which had held steady from February 2001 onwards at over 6%, fell in the course of the third quarter from 6.2% to 4.3%. A gradual slowing of annual growth in basic price categories, excluding foodstuffs, had been taking place since the beginning of the year. However, the downward trend in consumer price growth, in all basic categories, gathered clearer momentum in the third quarter, when annual growth in prices of foodstuffs and non-alcoholic beverages also began to ease.

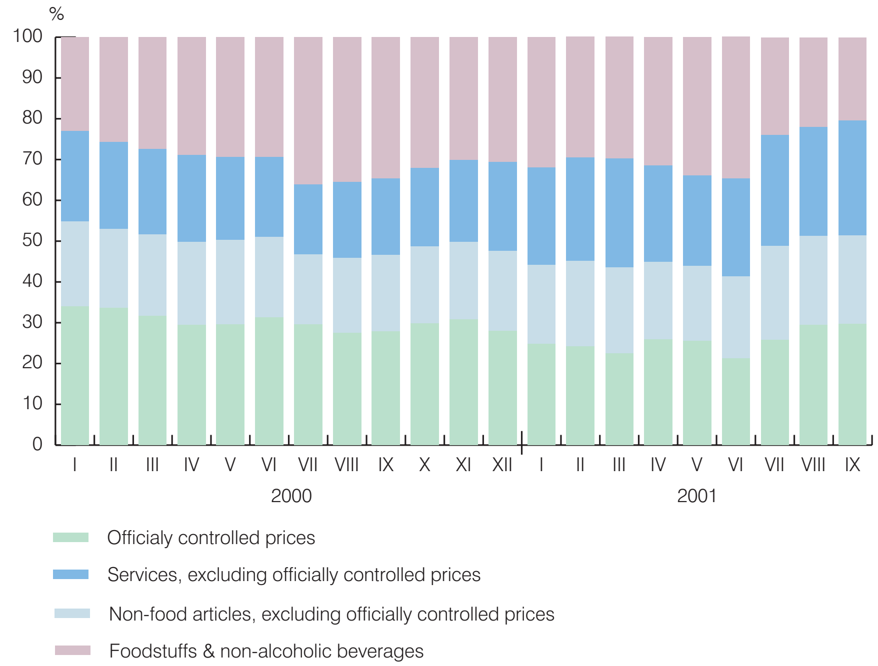
The fall in annualised CPI inflation during the third quarter was most greatly assisted by a decline of 4.3

Figure 14
Consumer price growth, including principal product categories
(corresponding month previous year = 100)



Source: NBP calculations based on GUS figures.

Figure 15
Contribution of particular product categories to overall CPI growth
(corresponding month previous year = 100)



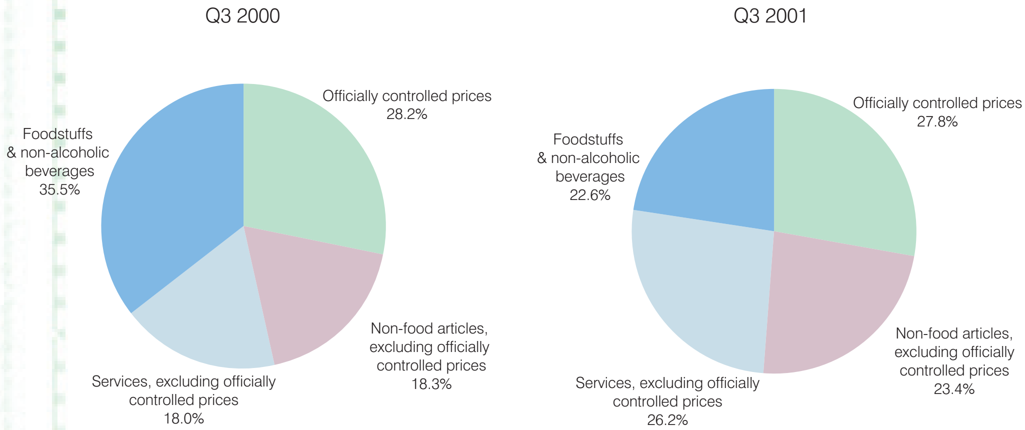
Source: NBP calculations based on GUS figures.

Table 10
Annualised CPI, including principal product categories
(corresponding month previous year = 100)

	2000					2001				
	weight	growth indices				weight	growth indices			
	%	VI	VII	VIII	IX	%	VI	VII	VIII	IX
CPI	**100.0**	**110.2**	**111.6**	**110.7**	**110.3**	**100.0**	**106.2**	**105.2**	**105.1**	**104.3**
Foodstuffs & non-alcoholic beverages	30.4	109.9	113.8	112.5	111.7	30.1	107.2	104.1	103.7	102.9
Officially controlled prices	25.1	112.8	113.8	111.8	111.4	25.7	105.2	105.2	105.8	105.0
of which: fuels	2.8	150.7	146.7	127.2	125.9	3.5	87.8	86.1	89.8	88.6
Non-food articles, excluding officially controlled prices	28.3	107.2	107.1	106.9	106.8	27.0	104.6	104.4	104.1	103.5
Services, excluding officially controlled prices	16.2	112.3	112.2	112.1	111.8	17.1	108.7	108.2	107.9	107.1

Source: NBP calculations based on GUS figures.

Figure 16
Contribution of particular product categories to overall CPI growth
(corresponding quarter previous year = 100)



Source: NBP calculations based on GUS figures.

points in food price growth (dipping from 7.2% in June to 2.9% in September). Annualised growth in service prices (excluding officially controlled prices) slipped 1.6 points in this period, while that of non-food articles (again, excluding officially controlled prices) came down 1.1 points (cf. Fig. 14).

By September, annualised consumer price growth was almost two and half times slower than it had been a year earlier. At the same time, a major change was apparent in the composition of price growth, with the contribution made by foodstuffs and non-alcoholic beverages dropping from 35% to 21%, while that of services, excluding those subject to officially controlled prices, rose from 18% to 28%. Meanwhile, the relative weight within CPI inflation of the remaining two price categories, i.e., officially controlled prices and those of non-food articles (excluding officially controlled prices) stayed at a similar level to that recorded twelve months before (cf. Fig. 15).

On a cumulative basis, consumer prices came down 0.4% from June to September (as against an increase of

Table 11
Monthly CPI, including principal product categories

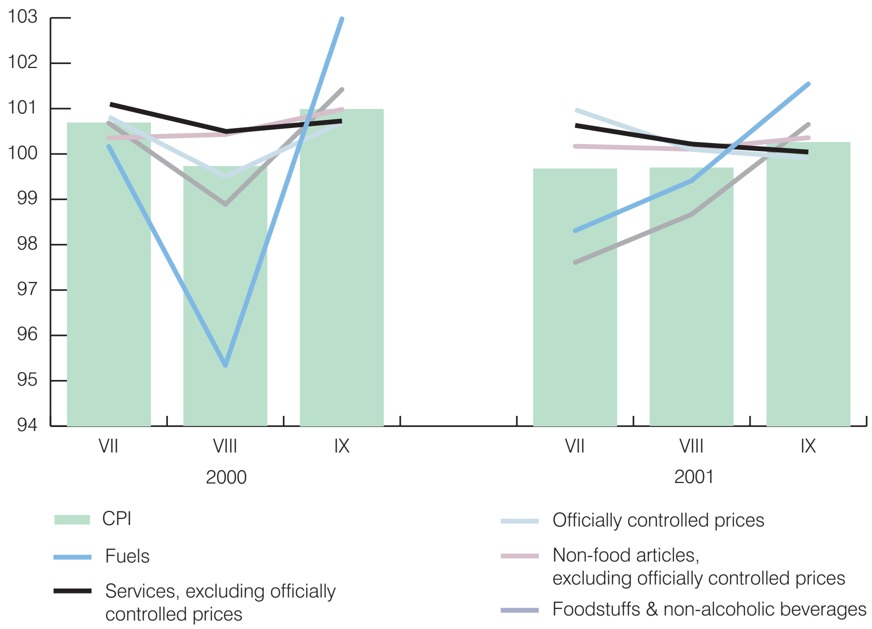
	2000					2001				
	growth indices				contri-bution to CPI	growth indices				contri-bution to CPI
	VII	VIII	IX	VII-IX		VII	VIII	IX	VII-IX	
	previous month = 100			VI 2000 = 100		previous month = 100			VI 2001 = 100	
CPI	**100.7**	**99.7**	**101.0**	**101.4**	**1.4**	**99.7**	**99.7**	**100.3**	**99.6**	**-0.4**
Foodstuffs & non-alcoholic beverages	100.7	98.9	101.4	101.0	0.3	97.6	98.7	100.7	96.9	-0.9
Officially controlled prices	100.8	99.5	100.7	101.0	0.3	101.0	100.1	99.9	101.0	0.3
of which: fuels	100.7	100.4	100.4	98.3	0.0	98.3	99.4	101.5	99.2	0.0
Non-food articles, excluding officially controlled prices	100.4	100.4	101.0	101.8	0.5	100.2	100.1	100.4	100.6	0.2
Services, excluding officially controlled prices	101.1	100.5	100.7	102.2	0.4	100.6	100.2	100.0	100.8	0.1

Source: NBP calculations based on GUS figures.

1.4% over the same period of 2000). A similar situation was only seen once before, in 1998, when falling food prices pushed the overall CPI down 0.2% in the third quarter. In 2001, the seasonal decline in prices was already visible in June, and the favourable supply situation on the markets for foodstuffs and fuels sustained this until August. In the case of non-food articles (excluding those subject to officially controlled prices), price growth was discouraged by weak domestic demand, with the result that these prices went up relatively little. Price movements within particular categories of goods and services in the respective months of the third quarters of 2000 and 2001 are presented in Figure 17 and Table 11.

As had been the case a year previously, the sharpest growth in the period from June to September was reported in **officially controlled prices** (up 1.0%) which outpaced CPI growth by 1.4 points. In 2001, however, the timing of this price growth differed from 2000. The fastest increase in the

Figure 17
Consumer price growth, including principal product categories, Q3 2000 & 2001
(previous month = 100)

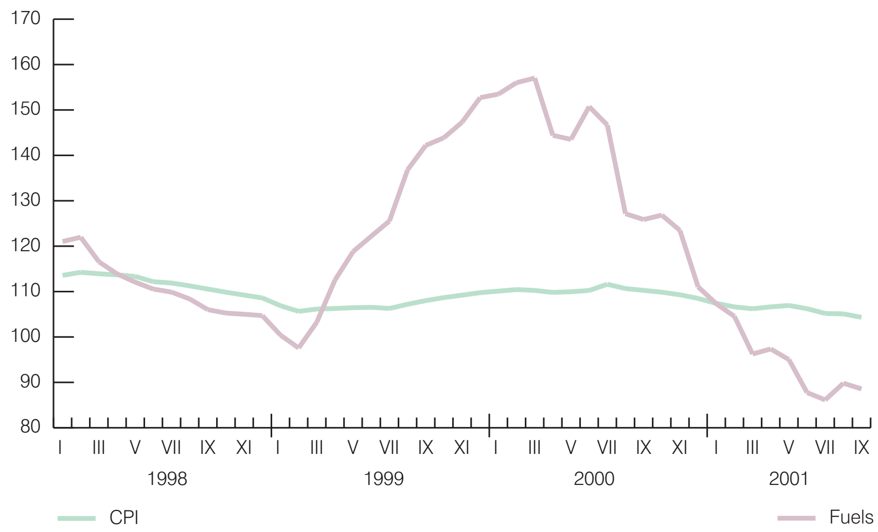


Source: NBP calculations based on GUS figures.

third quarter was in energy prices, which was associated with new charges being approved for various types of energy (electricity went up 6.5% in price, while district heating went up 2.5%). In the corresponding period of 2000, the growth of these prices was appreciably weaker. The third quarter of 2001 also saw a rise in the prices of certain basic articles subject to excise duty, including alcoholic beverages and tobacco products, which rose 1.4% in price altogether (compared to just 0.4% a year earlier). By contrast, a temporary decrease was recorded in gas prices (down 0.7%) and telecommunications charges (down 3.7%). Twelve months previously, both of these had gone up, with a particularly large rise in telecommunications charges.

A special role within the category of officially controlled prices is played by **fuel prices**; in recent years, the high volatility of these has acutely

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



Source: GUS.

dislocated overall price growth. Over the third quarter of 2001, fuel prices decreased 0.8% (as against a fall of 1.8% a year previously), thereby contributing to the decline in the CPI as a whole. In September, fuel prices were running 11.4% lower than they had been a year before (cf. Fig. 18).

The strong volatility of fuel prices on the domestic market stems both from the effect of external events and from the domestic factors conditioning the operation of this market. In the third quarter of 2000, the principal factors impacting fuel prices were increases in rates of excise duty, the lifting of customs duty on fuels, and movements in world prices, whereas in the third quarter of 2001 fuel prices were most notably affected by the import price (the world price times the dollar/zloty exchange rate) and sales margins. Despite the decrease in world oil prices, the simultaneous strengthening of the dollar against the zloty in the third quarter acted to push up domestic fuel prices. At the same time, however, domestic factors were working in the opposite direction, and to

Table 12
Selected factors affecting movements in retail prices for EU 95 petrol, Q3 2001 (%)

Period	World price	Dollar exchange rate	Import price	Contribution of import price to retail price, pct. points	Domestic factors	Contribution of domestic factors to retail price, pct. points
July	-14.4	4.1	-10.9	**-2.8**	6.3	**0.8**
August	5.5	3.0	8.7	**2.1**	-17.7	**-2.5**
September	6.4	-0.5	5.8	**1.5**	-0.4	**0.0**
Q3	-3.9	6.6	2.5	**0.6**	-12.8	**-1.6**

Source: NBP calculations based on figures from Nafta Polska SA (Polish Oil SA).

markedly greater effect; this primarily refers to the lowering of sales margins by producers and distribution companies (rates of excise duty were held flat). In these circumstances, notwithstanding the upward tendency in petrol import prices, the third quarter brought a decline in domestic fuel prices (cf. Table 12; the retail price structure outlined was developed on the basis of figures from Polish Oil).

In the course of the third quarter, **prices of non-food articles, excluding officially controlled prices** (i.e., those not subject to regulations of an administrative character), went up 0.6%, which represented just 1/3 of the growth in these prices twelve months before. In line with the typical seasonal pattern, the largest growth in these prices during the quarter, albeit less than a year previously, was seen in September (0.4%, compared to 1.0% in September 2000). As is the case each year, the beginning of the autumn and winter season witnessed an increase in prices of heating fuel (up 4.5% in Q3 as a whole, as against 5.5% a year earlier), while the start of the school year brought higher prices for school items, including textbooks (up 2.8%) and writing articles (up 1.2%).

Weak consumer demand, however, coupled with strong competition from imported goods, firmly contained price growth within the category of non-food articles as a whole. This was particularly visible in the case of those goods not marked by rigid demand. The prices of these either dropped, or rose substantially more slowly than a year before. The prices thus affected included those for clothing and footwear (down 0.5%, as against an increase of 0.7% a year earlier), furniture and furnishings (up 0.3%, as against 1.1%), household appliances (up 0.2%, as against 0.7%), and audio-visual and photographic equipment (down 1.1%, as against an increase of 0.2%).

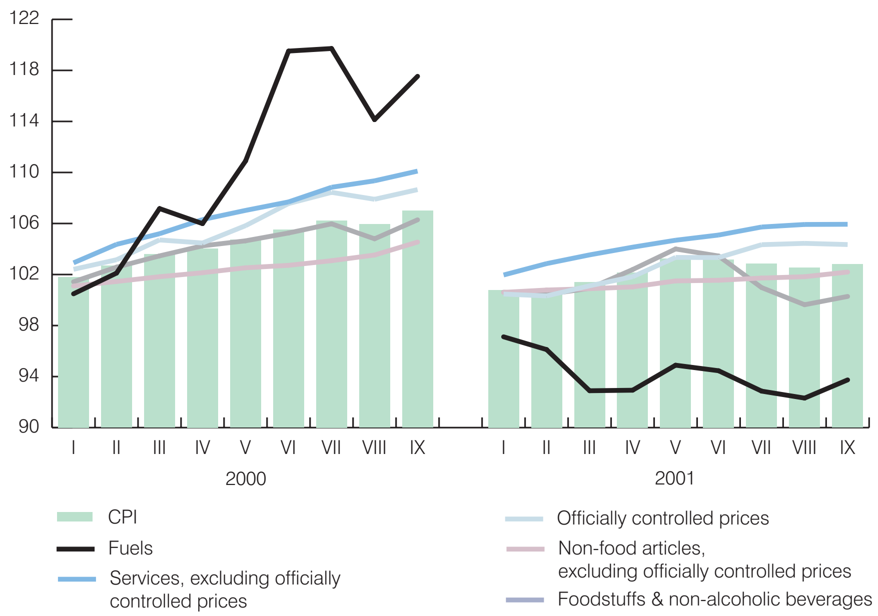
Service prices (excluding officially controlled prices) climbed faster than the overall CPI in the period from June to September, as they had a year before. Nonetheless, this price growth was almost three times smaller than in the same period of 2000. Despite a distinct downward tendency, growth in service prices in the third quarter was still considerably higher than that of non-food articles. Increases in service prices in this period were not attributable (directly) to movements in fuel prices. However, it appears that these increases could have been fed by the lower productivity gains recorded in the service sector than in industry, allied with the mounting demand for services (the "Balassa-Samuelson effect").

The steepest price growth in this category of prices was registered in social protection (up 2.6%) and education (up 1.3%). Price growth was below average for the category as a whole in such areas as housing occupancy (growth of 0.7%), restaurants and hotels (0.7%) and personal care (0.9%).

Prices of foodstuffs and non-alcoholic beverages slid 3.1% over the third quarter of 2001, as against an increase of 1.0% in the corresponding period of 2000. This stemmed from a more profound seasonal fall in food prices than that seen a year earlier. In the period under review, prices dropped most for vegetables (down 26.9%), fruit (18.6%), poultry (2.2%), milled cereal products (1.6%), and milk, cheese and eggs (1.1%). Some foodstuffs rose in price, including bread and bakery products (up 0.2%), fish (0.9%), animal fats (1.0%),and meat (1.4%, with beef up 2.2%, pork up 2.8% and processed meats up 2.0%), and also tropical and citrus fruit (6.5%), and mushrooms (up 17.4%). The movements in food prices reflected the moderately positive situation on the market for agricultural produce in 2001.

Grain prices were relatively stable in the third quarter due to increased supplies. From July onwards, the market began receiving deliveries from the current harvest. Demand was not great, however, which is why grain prices trended downwards for the first two months of the quarter. It was not until September that they began to rally slightly. These price movements were determined by the intervention purchases of grain carried out by the Agricultural Market Agency. Farmers received higher prices for their grain at the Agency's procurement centres than on the open market. However, to be accepted at those centres, the grain had to fulfil high quality specifications. As in previous years, the Agency purchased grain on the basis of a minimum price and direct producer subsidies. To spread grain purchases out evenly during the harvest season, an incremental scale of subsidies was applied over time. In addition, as had been the case in the first and second quarters of the year, 0.1 million tonnes of food wheat was imported from the European Union under a zero tariff.

Figure 19
Consumer price growth, including principal product categories, January-September 2000 & 2001
(December previous year = 100)



Source: NBP calculations based on GUS figures.

Table 13
CPI, including principal product categories
(December previous year = 100)

	2000			2001		
	weight	**growth index**	**contribution**	**weight**	**growth index**	**contribution**
	%	**I - IX**		**%**	**I - IX**	
CPI	**100.0**	**107.0**	**7.0**	**100.0**	**102.8**	**2.8**
Foodstuffs & non-alcoholic beverages	30.4	106.3	1.9	30.1	100.3	0.1
Officially controlled prices	25.1	108.7	2.2	25.7	104.3	1.1
of which: fuels	2.8	117.5	0.5	3.5	93.7	-0.2
Non-food articles, excluding officially controlled prices	28.3	104.5	1.3	27.0	102.2	0.6
Services, excluding officially controlled prices	16.2	110.0	1.6	17.1	105.8	1.0

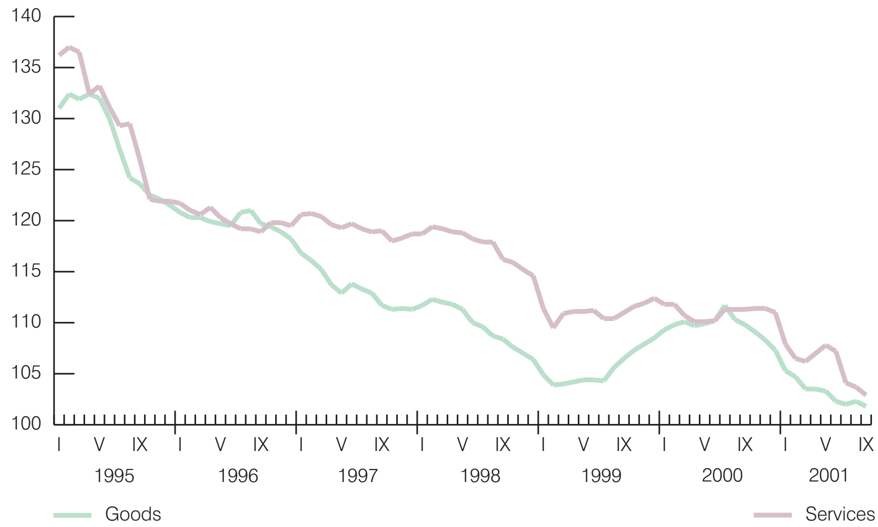
Source: NBP calculations based on GUS figures.

Meat prices exhibited a rising trend in the third quarter. This was related to the small supply of fat pigs, the result of the trough in the “hog cycle”, which was compounded by the “procurement trough” typical of the time when farmwork concentrates on the harvest. Prices for fat cattle behaved in similar fashion, although staying at a lower level. Demand for poultry meat remained strong, leading to a small increase in prices, with the exception of September, when prices came down.

In terms of **dairy prices**, a fall in purchase prices for milk was observed until August. It was only in September that prices rose, as a seasonal decline was noted in milk deliveries to procurement centres.

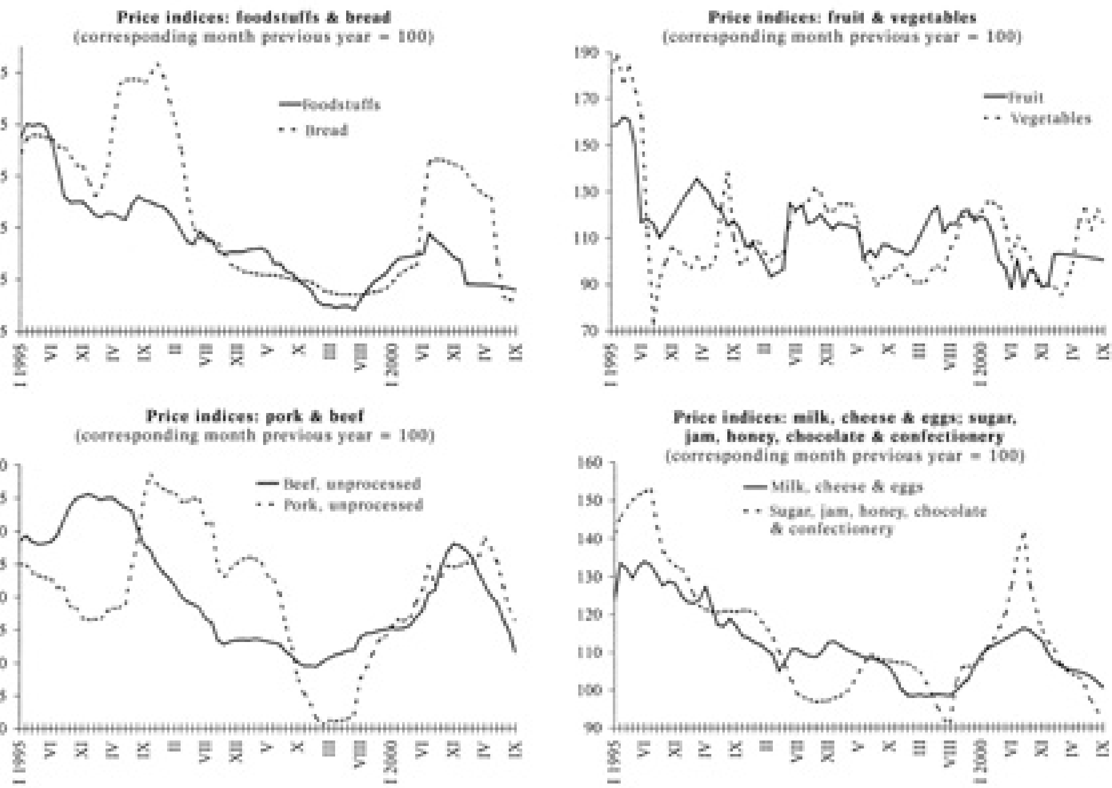
At the end of September, the cumulative increase in the CPI since December 2000 stood at 2.8%, whereas the same period a year before had witnessed a rise of 7.0%. The growth in officially controlled prices and in service prices (excluding officially controlled prices) was swifter than that of the overall CPI during this period, while lower growth was seen in prices for foodstuffs and non-alcoholic beverages, and for non-food articles (excluding officially controlled prices), and also in fuel prices (cf. Fig. 19).

Figure 20
Price indices, consumer goods & services
(corresponding month previous year = 100)

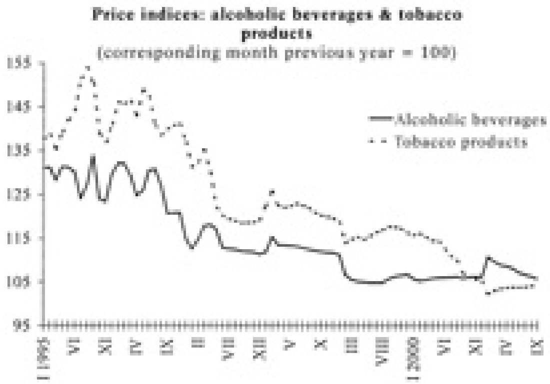


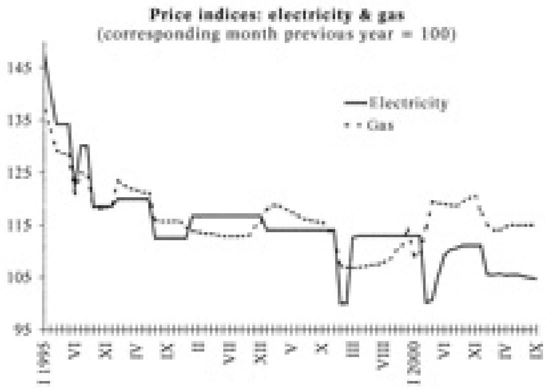
Source: NBP calculations based on GUS figures.

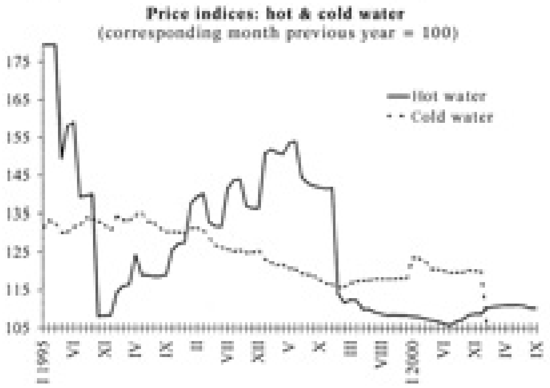
Price indices, foodstuffs

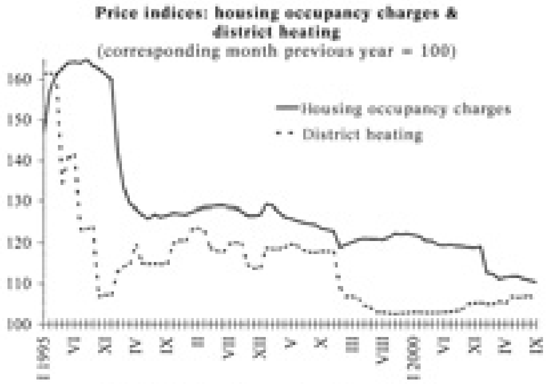


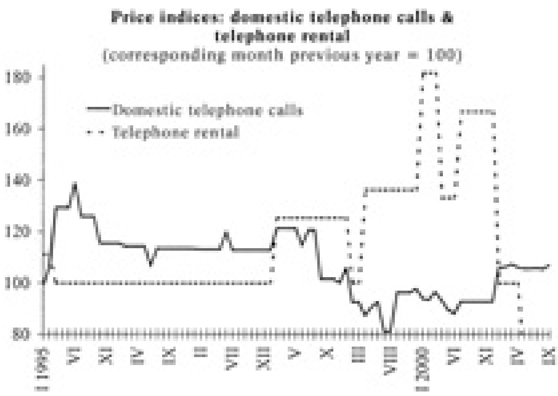
Price indices, officially controlled prices

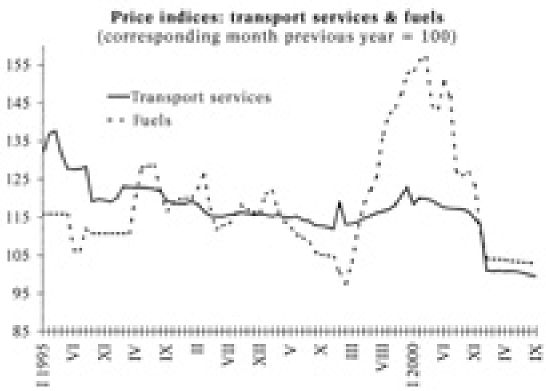




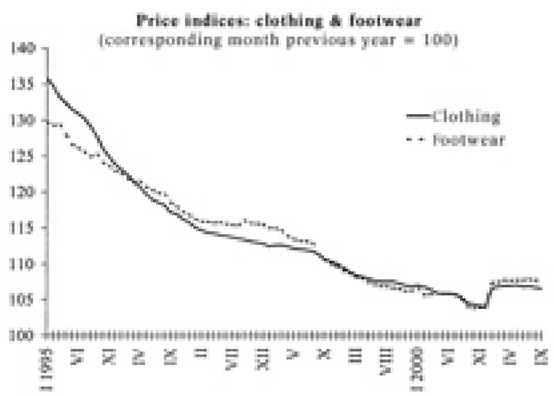


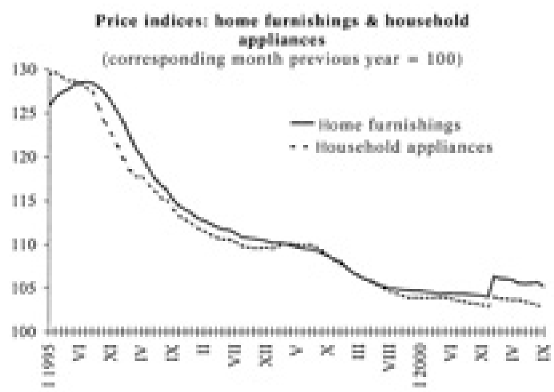


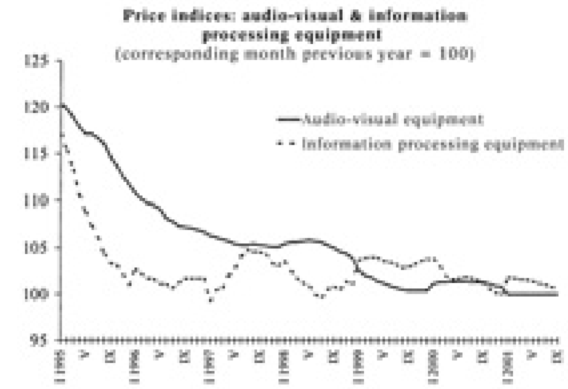


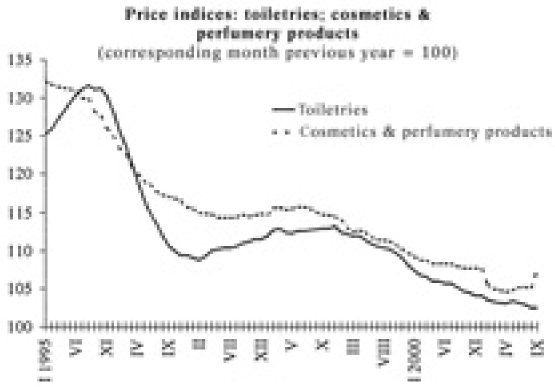


Price indices, non-food articles

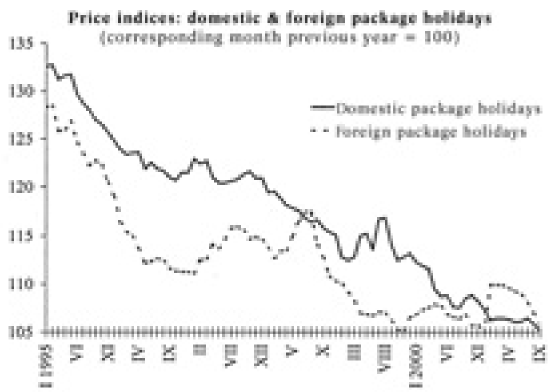








Price indices, services



5.2. Core inflation

In the third quarter of 2001, all of the twelve-month indices of core inflation that are tracked showed a sharp downward trend, one that had been sustained since June. Three of the indices in question held very close to the CPI, namely, core inflation excluding officially controlled prices, core inflation excluding the most volatile prices and fuel prices, and the “15% trimmed mean”. By contrast, the remaining measures of core inflation clearly diverged from the headline index, with core inflation excluding the most volatile prices running 0.7 points lower than the CPI on average, and “net” inflation (ex-food & fuels) some 1.5 points higher.

The annualised index of **core inflation excluding officially controlled prices** ran slightly below the CPI in the third quarter (cf. Fig. 21). This is attributable to the exclusion of the following products that rose faster in price than the CPI: spirits, electricity, gas, hot water,

Table 14
Movements in various measures of core inflation

	1999	2000	2001								
	I - XII		I	II	III	IV	V	VI	VII	VIII	IX
	change on corresponding month previous year										
CPI	**7.3**	**10.1**	**7.4**	**6.6**	**6.2**	**6.6**	**6.9**	**6.2**	**5.2**	**5.1**	**4.3**
Core inflation excluding:											
officially controlled prices	6.3	9.4	7.5	6.8	6.5	6.6	7.0	6.6	5.2	4.8	4.1
most volatile prices	7.2	10.0	7.8	7.2	6.7	6.8	6.5	5.3	4.5	4.2	3.6
most volatile prices & fuels	6.7	9.1	7.8	7.3	7.1	7.2	7.0	6.2	5.4	4.9	4.3
food & fuels ("net" inflation)	9.3	9.0	7.2	6.8	6.7	7.0	7.2	6.8	6.7	6.5	5.8
15% trimmed mean	6.9	8.4	7.4	7.1	6.8	6.8	6.5	6.0	5.5	5.0	4.6

Source: NBP calculations based on GUS figures.

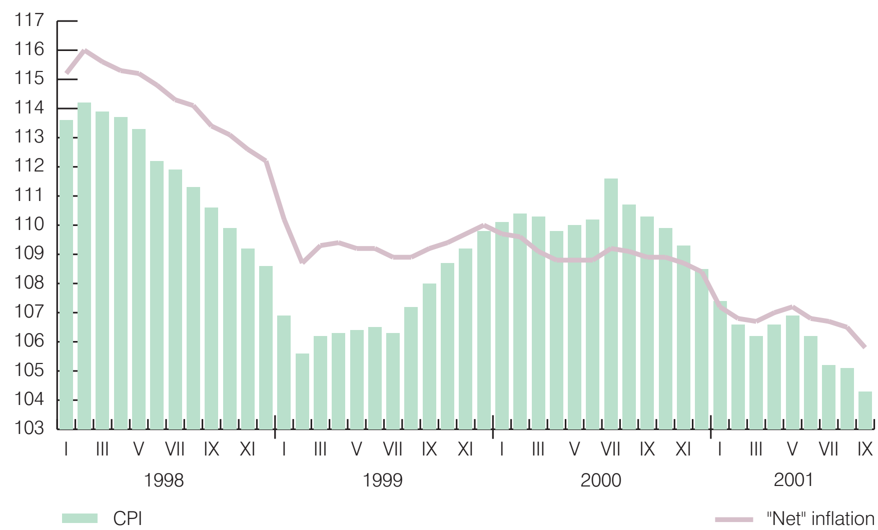
district heating, and telephone rental. On the other hand, of the prices that are included in this measure of core inflation, the swiftest growth was displayed by those for certain foodstuffs, such as unprocessed pork, processed meats, fish and certain fruit. Substantial increases were also reported for some service prices (housing occupancy costs and costs related to housing, primarily charges for cold water supply and sewage disposal), and also for the prices of some non-food articles (hard coal, medicines, and newspapers and periodicals).

The annualised index of **"net" inflation**, as obtained by stripping the CPI of food and fuel prices, showed the strongest growth of all the measures of core inflation under examination, throughout the whole of the third quarter, running around 1.5 points above the CPI (cf. Fig. 22). In September, this index was 5.8% higher than it had been in September 2000. This is traceable to the relatively modest growth of the prices that are excluded from this index, or indeed the fall in those prices (this particularly applies to fuel and sugar prices, which in September were 11.4% and 19% lower, respectively, than twelve months before, together paring 0.6 points off the CPI for this period). The fastest third-quarter price growth of the products included in "net" inflation was shown by spirits and services related to housing, and also by energy (gas, hard coal, coke, district heating, hot water), medicines, and newspapers and periodicals. In addition, the rise in "net" inflation also stemmed from the fact that it is the sole measure of core

Figure 21
Core inflation, excluding officially controlled prices
(corresponding month previous year = 100)

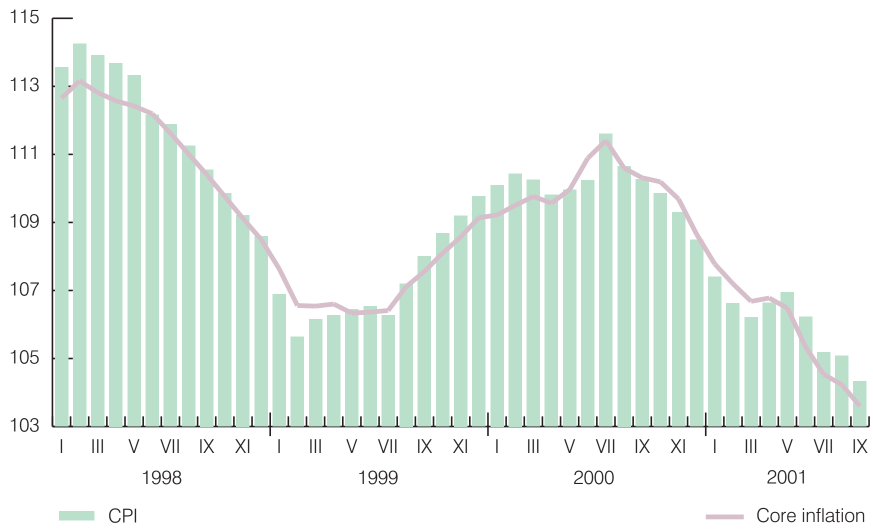
Source: NBP calculations based on GUS figures.

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



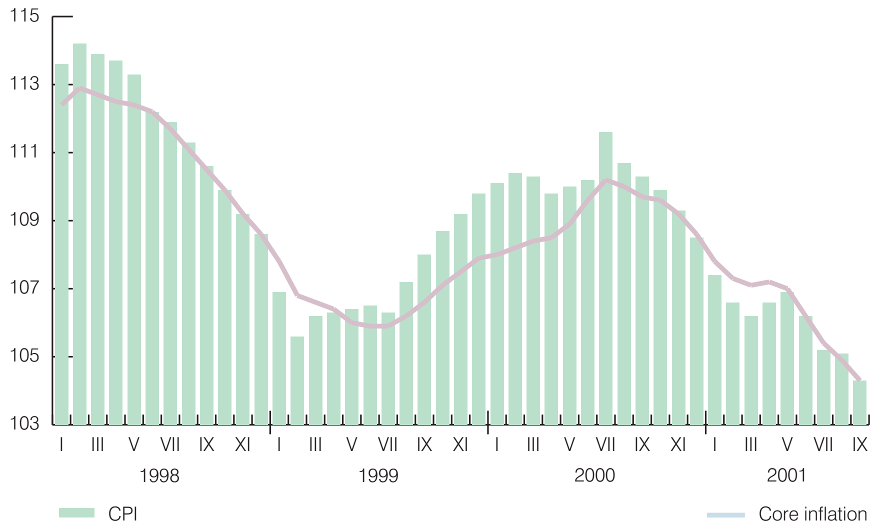
Source: NBP calculations based on GUS figures.

Figure 23
Core inflation, excluding most volatile prices
(corresponding month previous year = 100)



Source: NBP calculations based on GUS figures.

Figure 24
Core inflation, excluding most volatile prices & fuel prices
(corresponding month previous year = 100)

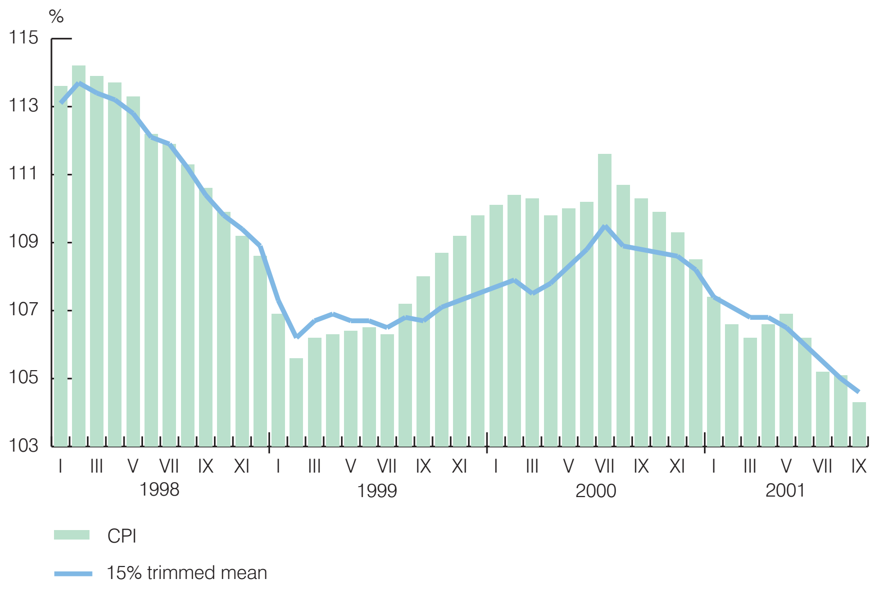


Source: NBP calculations based on GUS figures.

inflation to include electricity and telephone rental charges, which between them contributed 1.0 points to the annualised CPI at the end of September.

In the third quarter, the annualised index of **core inflation excluding the most volatile prices** was the lowest of all the indices of core inflation under discussion, ranging between 0.6 and 0.9 points below the CPI (cf. Fig. 23). Of those items that go to make up this index, the highest price growth was for the following products: unprocessed pork, processed meats, fish, spirits, services related to housing (sewage disposal, cold water, gas, district heating, hard coal, coke), medicines, and newspapers and periodicals. By contrast, the sharpest price increases among the products excluded from this measure were those for fruit, housing occupancy, electricity, hot water and telephone rental. This index was much lower in the third quarter than the **index additionally excluding fuel prices** (cf. Fig. 24), which testifies to the downward trend in the fuel prices thus eliminated, and therefore to the restraining influence of these on CPI growth in this period.

Figure 25
Core inflation: 15% trimmed mean
(corresponding month previous year = 100)



Source: NBP calculations based on GUS figures.

In September 2001, the annualised index of core inflation obtained by deriving a **15% trimmed mean** stood at 4.6% ("trimming" involves stripping away the outlying 15% of prices subject to the greatest and smallest change in the given period). Although this index did not include many prices that went up rapidly (e.g., those for telephone rental, housing occupancy, electricity, gas, cold water, fruit, fish, and newspapers and periodicals), it still ran above the CPI. This can be explained by the considerable price growth affecting products which this index did include (e.g., hard coal, spirits, medicines, district heating, unprocessed pork and processed meats), coupled with the exclusion of all the prices that played a major role in holding down the CPI (primarily those for fuels, domestic telephone calls and sugar, which together took 1.0 points off the CPI at the end of September).

5.3. Producer prices in industry and construction

Quarterly **industrial producer price growth** was slightly higher in the third quarter of 2001 than it had been in the second. Particularly swift price growth was reported in the section of electricity, gas and water supply, and in the section of mining and quarrying. While this rapid price growth had been in evidence in the former section since the beginning of the year, in mining and quarrying the strong growth seen in the third quarter followed a decline in prices in the second. In manufacturing, on the other hand, although third-quarter producer price growth was modest, this came after two consecutive quarters of falling prices (cf. Table 15).

The change in the quarterly producer price growth recorded in the particular sections of industry in the third quarter of 2001 relative to the preceding quarter resulted in a significant shift in the contribution of these sections to the PPI. A comparison of the corresponding indices for previous years reveals a decrease in the relative weight of manufacturing price growth within the PPI as a whole; this plummeted from 90% in the third quarter of 1999 to 31% in the third quarter of 2001[16]. As a result, around

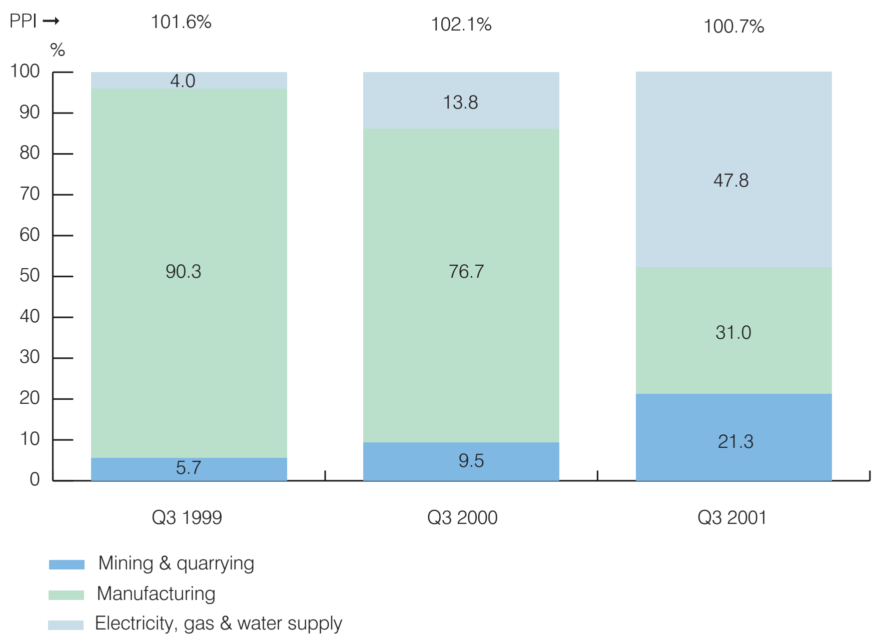
[16] This slump in the relative weight of manufacturing prices occurred despite the fact that this section accounted for an average of 83.8% of total industrial output in Q3 2001, just 2.5 points less than in Q3 1999.

Table 15
Producer price growth, industry & sections thereof, 1999-2001 (%)

	1999				2000				2001		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	previous quarter = 100										
Industry	101.3	101.9	101.6	102.5	101.6	102.1	102.1	100.9	99.1	100.1	100.7
of which:											
Mining & quarrying	100.7	101.3	101.6	104.4	101.9	102.0	103.3	103.3	100.0	98.7	102.6
Manufacturing	100.9	101.4	101.7	102.6	101.7	101.8	101.8	100.7	98.4	99.5	100.2
Electricity, gas & water supply	103 .7	105.9	100.8	100.3	101.0	104.3	103.3	101.0	102.4	104.5	103.1
	corresponding quarter previous year = 100										
Industry	104.1	105.1	105.8	107.5	107.9	108.1	108.5	106.9	104.2	102.2	100.8
of which:											
Mining & quarrying	102.2	104.3	105.4	108.1	109.4	110.3	112.2	111.0	108.9	105.3	104.6
Manufacturing	103.9	104.4	105.1	106.8	107.6	108.1	108.2	106.2	102.7	100.4	98.8
Electricity, gas & water supply	106.0	110.5	111.0	111.0	108.1	106.5	109.1	109.9	111.5	111.7	111.4

Source: *Biuletyn Statystyczny* GUS (GUS Statistical Bulletin).

Figure 26
Contribution to PPI of producer price movements in particular sections of industry
(previous quarter = 100)



Source: NBP calculations based on GUS figures.

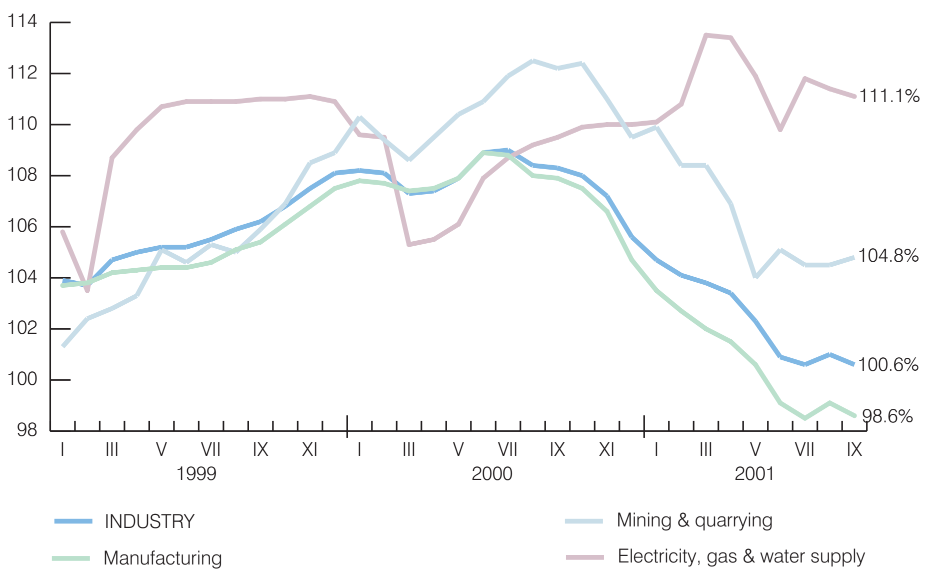
48% of the movement in the PPI in the third quarter is attributable to price growth in the section of electricity, gas and water supply, as against just 4% in 1999 (cf. Fig. 26).

Industrial producer prices in the third quarter of 2001 were only slightly higher than those registered in the same quarter of 2000. The drop in manufacturing prices in this period was accompanied by a sharp rise in the prices reported in electricity, gas and water supply.

As regards annualised industrial producer price indices, the following trends were observable from mid-- 2000 onwards (cf. Fig. 27):

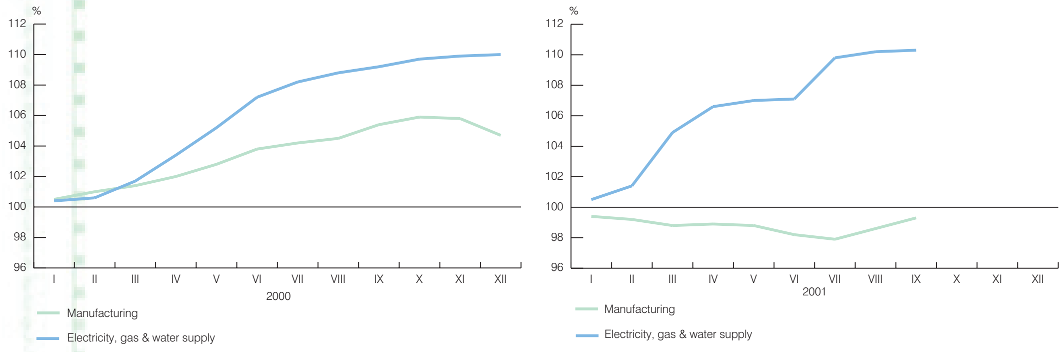
- a steady reduction in overall price growth, from one month to the next, sustained from July 2000 to September 2001, slashing this from 9% to 0.6%,
- a similar tendency within mining and quarrying from September 2000 to May 2001, followed by a stabilisation of price growth in the region of 4.5%-5.0% in the following months,
- a systematic fall in price growth from one month to the next in manufacturing, cutting this from 8.8% in

Figure 27
Industrial producer price growth, by section
(corresponding period previous year = 100)



Source: GUS.

Figure 28
Price indices, manufacturing and electricity, gas & water supply
(December previous year = 100)



Source: GUS.

July 2000 to 0.6% in May 2001, followed by an absolute fall in prices from June to September[17],

- the persistence of rapid price growth in electricity, gas and water supply, albeit slightly varying in particular months (running above 10% from November 2000 onwards).

A distinguishing feature of movements in industrial producer prices in 2001 was the radically different course taken by prices in two particular sections of industry, i.e., in manufacturing and in electricity, gas and water supply. The difference is especially striking when price levels are compared to December 2000 (cf. Fig. 28).

The section of manufacturing experienced an unprecedented fall in prices in the first three quarters of 2001, taking these below the level of year end 2000. In September 2001, manufacturing prices were 0.7% lower than they had been in December 2000. In previous years, year-to-date price growth had increased from one month to the next; in September 2000, for example, prices were 5.4% higher than in December 1999.

[17] The largest decreases in prices in September 2001 compared to September 2000 were reported in the following divisions: manufacture of coke, refined petroleum products and related products – down 15.5% (as against an increase of 34.7% a year earlier); manufacture of tobacco products – down 2.2% (as against an increase of 3.7%); and manufacture of rubber and plastic products – down 1.3% (as against an increase of 2.8%).

In the section of electricity, gas and water supply, on the other hand, the corresponding indices have always moved sharply upwards. A characteristic trait in this were surges in prices relative to the previous December that took place in the first quarter (in the years 1997-98) or in the second (1999-2001). In 2001, an additional leap in prices was also noted in the third quarter.

The low growth of manufacturing prices in the third quarter of 2001 was again associated with weak demand and strong market competition, including competition from imports. Despite this, manufacturing companies managed to improve their profit margins compared to the second quarter of the year, with pre-tax earnings soaring 70.3%[18]. In relation to the same quarter of 2000, however, pre-tax earnings were down 37.7%, although this can be ascribed to their statistical point of reference (Q3 2000 had seen an exceptionally favourable price environment for manufacturers that had allowed them to generate high profits; the annualised price index for manufacturing at that point hit its highest point not only in the year 2000, but over the last four years).

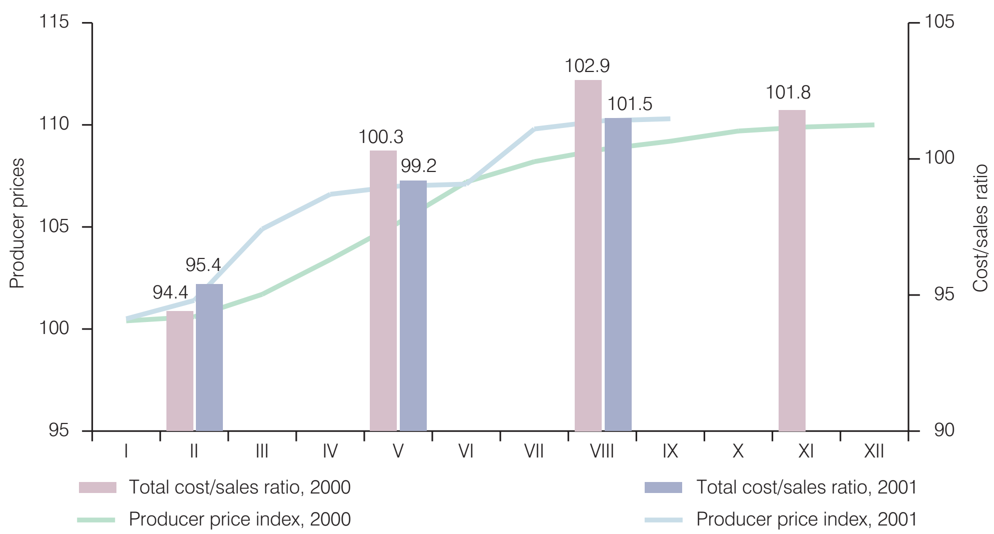
The healthier profitability registered in third quarter compared to the second was the result of corporate downsizing and restructuring of production costs. The key sources of cost savings in the third quarter relative to the second were material input costs and total labour costs (involving staffing cuts). To a lesser extent, companies also lowered the cost of the external services they purchased. These changes in the structure of corporate costs are even more visible when a comparison is drawn with the third quarter of 2000 (cf. Table 16). By contrast, the third quarter saw a continued rise in energy costs, in payments to the Treasury, and in depreciation charges. The third-quarter improvement in corporate efficiency within manufacturing is confirmed by the cost/sales ratio, which declined compared to the previous quarter (although deteriorating compared to Q3 2000) (cf. Fig. 29)[19].

[18] Data on corporates are taken from F-01 financial reports, and thus refer solely to large and medium enterprises.
[19] The cost/sales ratio consists in the ratio of total tax-deductible costs to total revenues.

Figure 29
Producer price index** (December previous year = 100) **& total cost/sales ratio** (by quarter)**, manufacturing

Source: GUS.

Figure 30
Producer price index** (December previous year = 100) **& total cost/sales ratio** (by quarter)**, electricity, gas & water supply



Source: GUS.

Third-quarter producer prices in the section of electricity, gas and water supply presented a different picture. Rises in energy prices generally only produce an interim reduction in cost/sales ratios in this section, providing temporary assistance in improving profitability. Yet the rapid growth of costs already recorded in the very next quarter following the price rise makes companies seek to raise prices once again (cf. Fig. 30). The ability to increase prices due to cost pressures reflects the privileged position of producers associated with the energy market,

Table 16
Structure of production costs and efficiency ratios, selected sections of industry

	Manufacturing			Electricity, gas & water supply		
	2000	2001		2000	2001	
	Q3	Q2	Q3	Q3	Q2	Q3
Growth in cost components (corresponding quarter previous year = 100)						
Total costs	123.0	97.3	94.9	118.3	105.9	114.1
– material inputs	132.0	94.5	90.1	116.5	101.6	110.7
– energy	118.1	103.0	111.0	91.9	134.5	116.7
– external services	119.6	100.9	96.5	161.0	116.4	127.0
– taxes & duties	106.0	102.5	105.6	93.6	183.5	199.7
– total labour costs	114.3	99.1	96.2	104.6	98.1	105.9
– depreciation charges	121.3	105.7	106.3	109.2	96.1	103.5
Structure of costs						
Total costs	100.0	100.0	100.0	100.0	100.0	100.0
– material inputs	55.2	53.0	52.5	27.9	29.6	27.1
– energy	2.4	2.7	2.8	4.3	5.1	4.4
– external services	11.5	11.6	11.7	25.6	23.6	28.5
– taxes & duties	8.5	9.0	9.5	1.9	4.0	3.3
– total labour costs	15.6	16.0	15.9	20.1	19.9	18.7
– depreciation charges	4.5	4.8	5.0	18.2	16.4	16.5
Ratios of costs to pre-tax earnings (zloty/zloty)						
Total costs/pre-tax earnings	23.12	60.82	35.22	-21.56	73.31	-38.04
– material inputs/pre-tax earnings	12.77	32.24	18.48	-6.02	21.68	-10.31
– energy/pre-tax earnings	0.55	1.62	0.98	-0.93	3.74	-1.68
– external services/pre-tax earnings	2.65	7.03	4.10	-5.51	17.30	-10.83
– taxes & duties/pre-tax earnings	1.98	5.50	3.35	-0.40	2.94	-1.24
– total labour costs/pre-tax earnings	3.62	9.76	5.59	-4.33	14.59	-7.10
– depreciation charges						
/pre-tax earnings	1.03	2.94	1.77	-3.93	12.02	-6.29

Source: F-01 reports; GUS.

since – in contrast to manufacturing companies – they enjoy monopoly conditions, with demand for electricity, gas and water remaining essentially constant. Thus, the squeeze on their profits did not lead firms in this section to seek to reduce costs.

All the cost components at companies within the section of electricity, gas and water supply displayed rapid growth in the third quarter. Compared to the previous quarter, the steepest increase was in the cost of external services (due to high charges for coal transport), while the lowest increases were in depreciation charges and total labour costs. In relation to the corresponding quarter of 2000, on the other hand, the fastest growth was in taxes and duties (cf. Table 16). Despite rising prices, companies in this section reported negative pre-tax earnings and very high cost/sales ratios.

To summarise, in the third quarter of 2001 manufacturing achieved a reduction on the quarter of over 42% in the ratio of costs to pre-tax earnings (cf. Table 16). By contrast, companies in the section of electricity, gas and water supply registered a pre-tax loss in this quarter, inducing them to raise prices, something made possible thanks to the market monopoly they enjoy.

The downward trend in **producer price growth in construction** observable since mid-2000 persisted in the third quarter of 2001, with prices up only 3.4% compared to the third quarter of 2000 (a year earlier, the corresponding increase had been 8.5%). Producer price growth in construction has been constrained by both the weakening of investment activity within the Polish economy and the mounting competition on the market for construction services.

Construction firms lowered their cost/sales ratios to 98.8% in the third quarter (down from 100.3% in the second) and generated positive pre-tax earnings (following negative earnings in the first two quarters of the year). Nevertheless, these earnings were still almost three times smaller than in the same quarter of 2000, while cost/sales ratios were 1.6 points higher. Compared to the second quarter of 2001, costs at construction companies rose 11% in the third quarter. During this period, the cost of external services increased 17%, while material input costs went up 14%. In terms of pre-tax earnings, the heaviest financial burden to construction companies in the third quarter were external service costs and total labour costs.

6. MONETARY POLICY AND PERFORMANCE OF THE INFLATION TARGET

6.1. Monetary policy in the third quarter of 2001

Performance of Poland's short-term (annual) inflation target represents one stage in attaining the medium-term target, which is to lower inflation to below 4% by year end 2003. The first half of 2001 saw a pronounced fall in inflation, which dropped from 8.5% in December 2000 to 6.2% in June 2001. In each of the first six months of the year, the CPI was within the target range set for 2001, i.e., 6%-8%. In the third quarter, inflation dipped appreciably below the lower bound of that target range. Each consecutive month of the third quarter brought deflation (in monthly terms), whereas in the corresponding period of 2000 a monthly decrease in prices had only taken place in August. By September, annualised inflation in Poland had reached a record low of 4.3%.

The NBP cut interest rates three times in the first half of the year – in February, March and June – by a total of three and a half points. These rate cuts were made possible by numerous developments that had a favourable impact on conditions for performance of the inflation target in 2001. In the third quarter, these positive tendencies as regards the inflation environment were maintained. This allowed another reduction in official interest rates. Meeting on August 22, the Monetary Policy Council cut one point off the reference rate (minimum reverse repo rate), the rediscount rate and the lombard rate, bringing these down to 14.5%, 17% and 18.5%, respectively.

This cut in official interest rates was made possible by a significant increase in the probability of inflation falling below the lower bound of the target range for 2001. The likelihood of the medium-term monetary policy target being achieved also rose. This situation stemmed from the favourable development of supply factors, demand factors and inflation expectations.

Domestic supply factors were conducive to a decline in inflation. Food and fuel prices played a major part in containing price growth in the third quarter. In each of the months of that quarter, price growth was negative for both food and fuels. However, whether this trend would prove lasting remained uncertain, since the third-quarter fall in inflation was partly a reflection of the exceptionally lower price growth witnessed in the summer. In 2000, August was the only month to bring deflation, whereas in 2001 this occurred throughout the third quarter. In these circumstances, annualised inflation dropped more sharply than the monthly trend would have indicated.

The third quarter saw an improvement in the inflation expectations of both consumers and market analysts. As the CPI has steadily come down, the role of inertia in conditioning inflation expectations has diminished, which will have a positive impact on these in the future.

The positive tendencies visible with respect to domestic demand (in terms of their effect on inflation) were also maintained. The situation within the real economy did not suggest a danger of any excessive inflationary impulse being triggered. Slow industrial producer price growth also confirmed the lack of demand-pull pressure on prices

The conditions prevailing on the labour market (rising unemployment) helped curb pressure for wage growth. The sole small threat of inflationary pressure that remained here was related to cost-of-living adjustments to old-age and disability pensions, and other compensation payments (for the previous lack of such adjustments and for forced labour during World War II).

The household propensity to save was sustained, with household deposit growth accelerating. Money supply growth remained under control.

The external environment in the third quarter also contributed to the systematic easing of inflationary pressure. The clear signs of a slowdown in the US and euro area economies indicated that global growth would be markedly weaker than in the previous year. This trend was exacerbated by the terrorist attacks in the USA, which substantially heightened uncertainty on world markets. This could lead to declining demand for Polish exports, helping to lessen pressure for price growth even further, and to bring down inflation expectations.

The prime source of the uncertainty that gradually mounted in the third quarter as to the duration of the disinflationary trend was the condition of public sector finances. The MPC considered the revision of the

Budget in July and the increase in the government deficit for 2001 to be a stop-gap measure that failed to resolve the key problems facing public finances. This revision increased the adjusted fiscal deficit for 2001 to 4% of GDP. Further, August and September saw the emergence of uncertainty concerning the contents of the Budget for 2002. This uncertainty was partially alleviated by the Government decision to hold that year's central government deficit down to 40bn zloty. Although the brunt of the effort required to achieve this deficit target is to be borne by government receipts, the principles that are to govern taxation policies were not spelled out clearly. Nor was sufficient attention given to the issue of streamlining expenditure.

6.2. The money supply

The key monetary trends observable since the beginning of 2001 remained basically unchanged in the third quarter.

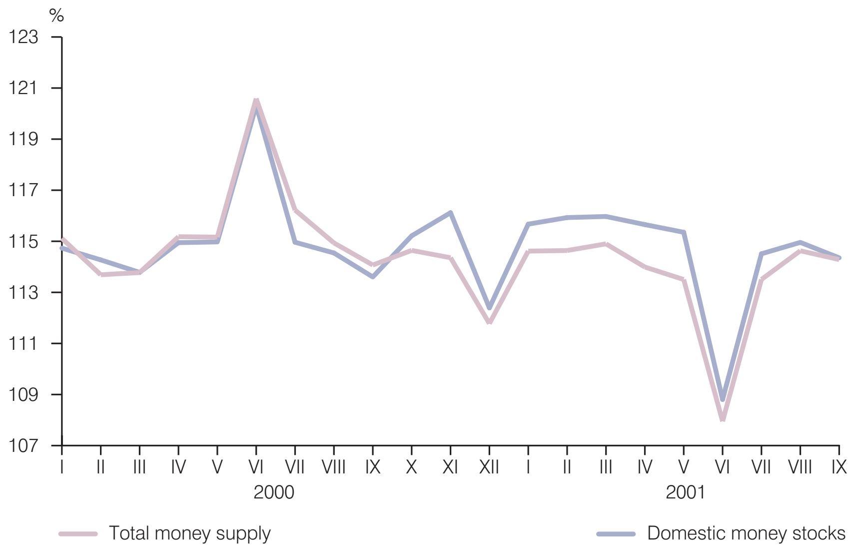
The total money supply, as measured by M2[20], stood at 320.7bn zloty at the end of September, having thus risen 13.1bn zloty on the end of the second quarter. Annual nominal growth in the total money supply averaged 14.1% in the third quarter, as against 11.8% in the second and 14.7% in the first (the slower growth in total money stocks in Q2 was principally caused by the exceptionally high level of those stocks in June 2000[21]). In real terms, average annual growth in M2 also rose in the third quarter, going up to 8.8% from some 4.9% in the particular months of the preceding quarter.

As in the previous quarter, the expansion of the total money supply in the third quarter of 2001 was chiefly the result of growth in zloty deposits taken from the non-financial sector (particularly household zloty deposits), and also in household foreign currency deposits.

[20] The total money supply (M2) 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).

[21] The high level of total money stocks reported in June 2000 was connected with the wave of subscriptions for shares in the PKN Orlen SA Polish Oil Corporation. A detailed discussion of the impact of this factor on the level and growth of M2 is given in the *Inflation Report* for Q2 2000 (p. 28), and also in the *Inflation Report* for Q2 2001 (p. 46).

Figure 31
Total money supply & domestic money stocks, nominal growth
(corresponding period previous year = 100)



Source: NBP.

The rapid increase in personal zloty deposits, in both nominal and real terms, was maintained in all the months of the quarter. As a result, personal savings within the banking sector rose to 171.8bn zloty in the third quarter, an increase of 2.1% compared to the end of the second. Meanwhile, the annual growth in personal zloty deposits in the third quarter averaged around 19.7% in nominal terms and 14.2% in real terms, with the latter being similar to that recorded in the first quarter of the year. A comparison with the corresponding period of 2000, when personal zloty balances went up a nominal 18.2% and 6.6% in real terms, indicates the continuation of a high propensity to save at the banks.

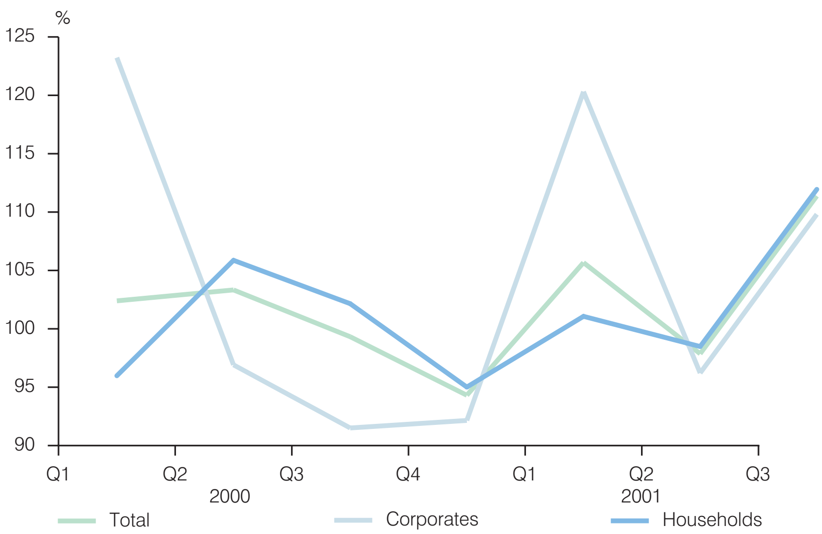
The third quarter also witnessed quarterly growth in corporate zloty deposits. Over this period as a whole, these deposits rose 2.8bn zloty, giving nominal growth of 4.8% and real growth of 4.9%. As a result, corporate zloty balances at the end of September totalled 60.4bn zloty.

The aggregate amount of zloty deposits from non-financial customers held within the banking sector climbed 6.3bn zloty in the third quarter of 2001, to stand at 233.0bn zloty at the end of September. This represented nominal growth in non-financial sector zloty deposits of 2.8%, and real growth of 2.9%. Twelve-month growth in these balances held relatively stable throughout this period, in both nominal and real terms, coming to an average of 16.7% and 11.2%, respectively.

At the end of September, the foreign currency deposits taken by the banks from non-financial customers totalled US$ 12.1bn. These deposits went up US$ 571m during the quarter, mainly as a result of growth in the foreign currency balances held by persons (up US$ 471m). Corporate foreign currency deposits went up US$ 100m during this period.

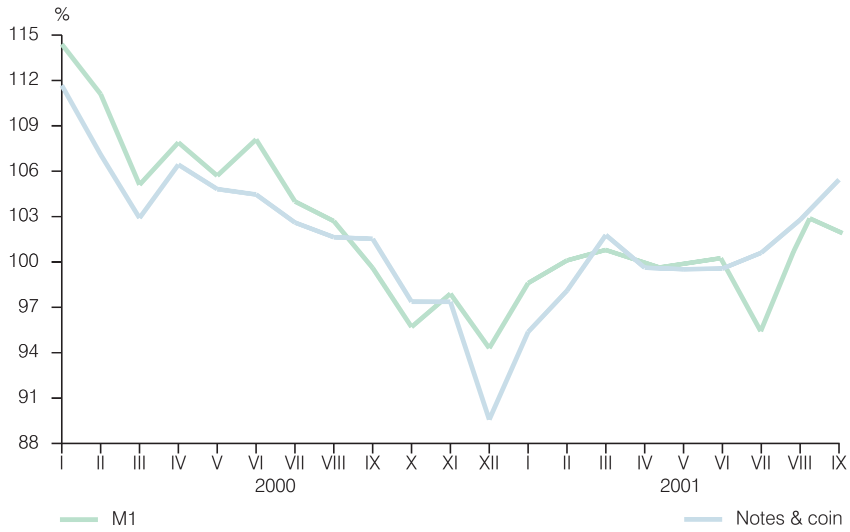
The foreign currency deposits of non-financial customers amounted to the equivalent of 51.1bn zloty at the end of September, signifying that – in contrast to the preceding quarter – the third quarter had seen a zloty increase in these deposits of 5.2bn (in Q2, non-financial sector foreign currency deposits, as expressed in

Figure 32
Non-financial sector foreign currency deposits, nominal growth
(previous quarter end = 100)



Source: NBP.

Figure 33
Notes & coin and M1, nominal growth
(corresponding period previous year = 100)



Source: NBP.

zloty, dropped by around 0.2bn). Compared to mid-year 2001, the growth in the foreign currency deposits of non-financial customers, as expressed in zloty, stood at a nominal 11.3% at the end of September, and 11.4% in real terms. This was primarily related to the depreciation of the zloty, which lost 6.3% against the US dollar in the course of the third quarter. In this period, exchange rate movements accounted for some 2.2bn of the zloty growth in foreign currency deposits.

The third-quarter increase, in zloty terms, in the foreign currency balances held by non-financial customers can primarily be attributed to a substantial growth in personal balances compared to the previous quarter. At the end of September, the amount due in foreign currency from the banks to persons came to the zloty equivalent of 37.6bn, representing an increase over the quarter of some 4.0bn zloty[22] (in Q2, this amount

[22] In Q3, the exchange rate effect led to a 2.1bn increase in the zloty value of personal foreign currency deposits.

Table 17
Money supply growth, Q3 2001

	Growth	Previous month = 100			Previous quarter = 100	Corresponding period previous year = 100		
		VII	VIII	IX	Q3	VII	VIII	IX
Total money supply	nominal	102.3	101.3	100.9	104.5	113.5	114.6	114.5
	real	102.6	101.6	100.6	104.6	107.9	109.1	109.8
Notes & coin	nominal	101.0	100.6	103.0	104.6	100.6	102.8	105.4
	real	101.3	100.9	102.7	104.7	95.6	97.8	101.1
Zloty deposits	nominal	101.6	101.0	100.3	103.0	117.0	117.1	116.1
	real	101.9	101.3	100.0	103.1	111.2	111.4	111.4
Personal zloty deposits	nominal	101.0	100.6	100.7	102.4	120.2	119.9	119.3
	real	101.3	100.9	100.4	102.5	114.3	114.1	114.4
Corporate zloty deposits	nominal	103.4	102.3	99.2	105.0	108.6	109.8	108.0
	real	103.8	102.6	98.9	105.1	103.3	104.4	103.6
Foreign currency deposits	nominal	106.5	102.8	102.1	111.7	108.3	112.9	114.4
(zloty equivalent)	real	106.8	103.1	101.8	111.8	103.0	107.4	109.7
Personal foreign currency deposits	nominal	107.8	102.7	101.3	112.2	111.7	113.5	111.4
	real	108.2	103.0	101.0	112.3	106.2	108.0	106.8
Corporate foreign currency deposits	nominal	102.8	102.9	104.3	110.4	99.8	111.2	123.6
	real	103.1	103.2	104.0	110.5	94.8	105.8	118.5

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

had been similar to that reported at the end of Q1). Nominal third-quarter growth in personal foreign currency balances relative to the previous quarter was thus 11.8%, while real growth stood at 11.9%.

The third quarter also brought an increase in corporate foreign currency deposits, as expressed in zloty, of around 1.2bn, taking these deposits to a total of 13.5bn zloty. Compared to the end of the second quarter, this gave nominal growth of some 9.7% and real growth of 9.8%.

The volume of notes and coin in circulation went up in each of the months of the third quarter, producing an increase over the quarter as a whole of 1.6bn zloty (0.2bn more than in Q2), equivalent to quarterly growth of 4.6% in nominal terms and 4.7% in real terms. At the end of September, total currency in circulation stood at 36.6bn zloty. This growth in cash stocks seen in the third quarter was primarily a result of the payment of war compensation, compensation for the lack of government sector wage increases in previous years, cost-of-living adjustments to old-age and disability pensions, and wage rises in the government sector. The growth in the volume of cash stocks observed since the beginning of 2001 signifies a reversal of the downward trend in these stocks that prevailed in 2000, and the inauguration of another upward trend, as happened in 1999.

Counterparts to changes in money stocks

The principal counterpart to changes in money stocks in the third quarter of 2000 was the growth in claims on persons and corporates (primarily in outstanding bank loans)[23] and in net foreign assets. The increase in the net indebtedness of the general government sector had a relatively weak impact on money supply growth. The effect of "other items (net)", on the other hand, was to reduce money creation.

Table 18
Counterparts to changes in money stocks *(billion zloty)*

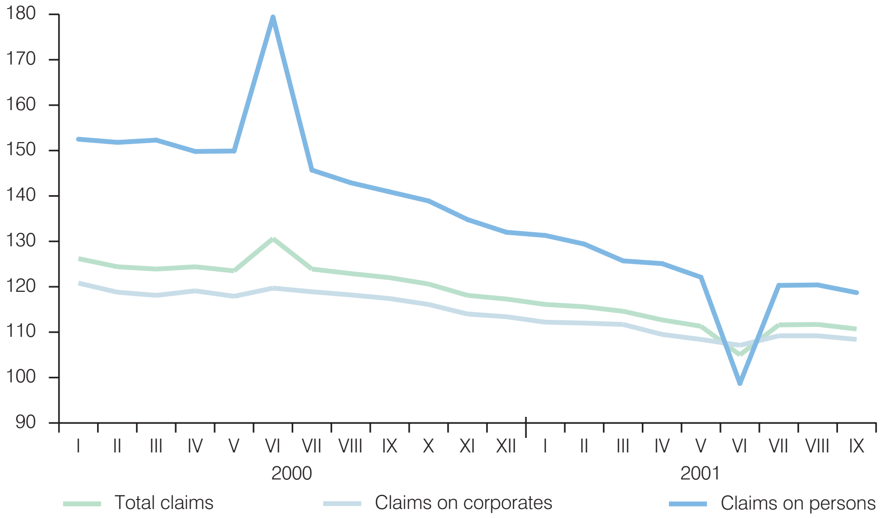
	Growth, Q1	Growth, Q2	Growth, Q3
Total money supply	**6.6**	**6.5**	**13.1**
Net foreign assets	5.0	-8.9	11.9
Claims on persons & corporates	4.6	2.6	12.4
General government net debt	-5.4	4.0	4.1
Other items (net)	2.4	8.8	-15.3

Source: NBP (Banking System Statistics).

At the end of September 2001, outstanding **claims on persons and corporates** were 10.7% higher than in September 2000. Growth in these claims was similar in July and August, declining in September. Taking into

[23] Claims on persons and corporates 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.

Figure 34
Claims on persons and corporates
(corresponding month previous year = 100)



Source: NBP (Banking System Statistics).

consideration the current state of the economy and the interest rate cuts that have been performed, growth in borrowings at the banks can be expected to wane in the months ahead. At the end of September, corporate outstandings were up 8.4% year-on-year, while claims on persons were up 18.7% (cf. Fig. 34).

In real terms[24], claims on persons and corporates were 6.1.% higher at the end of September 2001 than twelve months previously.

Bank lending to corporates rose 8.4bn zloty in the course of the third quarter, while loans to persons went up 3.9bn zloty. The largest increase in customer borrowings was seen in July, the result of zloty depreciation and the effect this had on the translation of foreign currency loans.

[24] As adjusted by annualised consumer price growth of 4.3%.

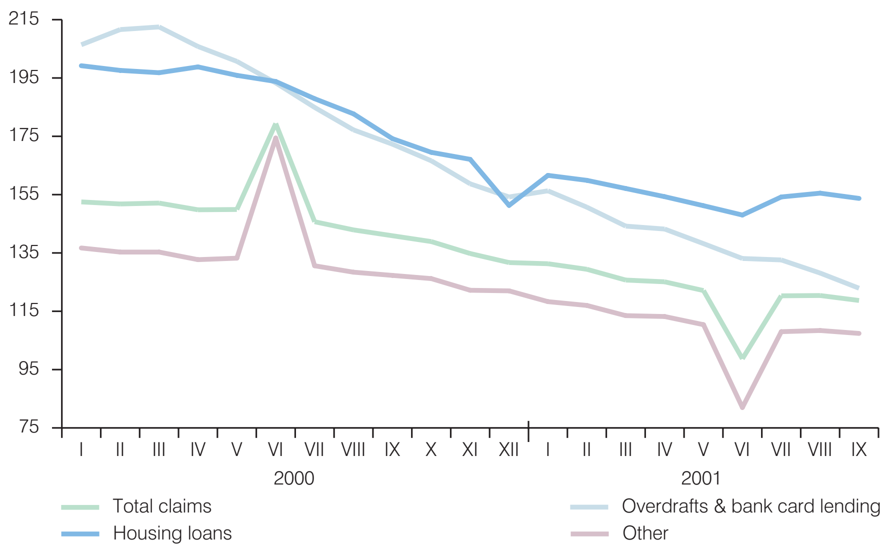
Table 19
Claims on persons, growth & structure

	Growth, Q3		Structure of claims, month end	
	2000	2001	IX 2000	IX 2001
	billion zloty		%	
Total bank claims on persons	**-5.2***	**3.9**	**100.0**	**100.0**
of which:				
Overdrafts & bank card lending	1.0	0.5	17.8	18.4
Housing loans	1.1	2.0	18.5	24.0
Other***	-7.2**	1.4	63.7	57.6

* Taking into account the repayment, in July 2000, of borrowings for the purchase of shares in PKN Orlen SA, the growth in claims amounted to 3.9bn zloty.
** Taking into account the repayment, in July 2000, of borrowings for the purchase of shares in PKN Orlen SA, the growth in claims amounted to 1.8bn zloty.
*** 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 unpaid interest.

Source: NBP (Banking System Statistics)

Figure 35
Claims on persons
(corresponding month previous year = 100)



Source: NBP (Banking System Statistics).

Growth in personal consumer loans slowed in the third quarter of 2001 compared to the third quarter of 2000, while growth in housing loans gathered speed (mainly due to a swift rise in the first two months of the quarter) (cf. Table 19 and Fig. 35).

Demand for housing loans increased as a result of market house prices remaining low and the extensive range of housing being offered by developers. While the difficult economic conditions did not produce a deterioration in repayment performance by personal borrowers, the problems encountered in selling new homes meant that developers were increasingly compelled to enter into negotiations with the banks to reschedule their own loans.

The third quarter brought increased demand for foreign currency loans, particularly for housing loans denominated in foreign currencies, priced at interest rates that were attractive compared to zloty finance. At the end of September, claims in foreign currencies accounted for 25.3% of total claims, as against 21.1% at the end of 2000.

The **net foreign assets** of the banking system grew 9.3% in the course of the third quarter, to stand at 140.1bn zloty, or US$ 33.1bn, while within this category the corresponding assets held by the NBP rose 10.3% to 118.4bn zloty, the equivalent of US$ 28.0bn[25].

The official reserve assets, the main component of the net foreign assets held by the NBP, went up 10.9% in zloty terms during the third quarter, to total 119.9bn zloty, the equivalent of US$ 28.3bn (an increase of US$ 1.2bn). This increase was mainly the effect of exchange rate gains (US$ 973.5m), revaluation gains on gold and securities (US$ 93.6m), and the balance on transactions (US$ 120.0m), which is composed of the balances on the Bank's income and on transactions performed on behalf of the government sector.

The proportion of the net foreign assets of the banking system attributable to the commercial banks

[25] The net foreign assets of the banking system comprise the foreign assets administered by the NBP (the official reserve assets and other assets denominated in foreign currencies), together with the foreign assets held by the commercial banks, less the liabilities of the NBP and the commercial banks to non-residents, whether denominated in foreign currencies or in zloty.

declined at the end of the third quarter to 15.5% (down from 16.3% at the end of Q2 and 17.1% at the end of Q1). During this period, the absolute value of the net foreign assets held by the commercial banks rose 3.8% to 21.7bn zloty.

Net general government indebtedness within the banking system came to 53.6bn zloty at the end of September, giving an increase over the quarter of 4.1bn zloty, or 8.6%. This stemmed from an 8.4bn zloty increase in general government liabilities to the banking system, which was 4.3bn zloty greater than the rise in government balances at the banks. The year-to-date growth in the net debt of the general government sector came to 2.8bn zloty, as against a decline of 6.7bn zloty in the corresponding period of 2000.

The increase in the net indebtedness of general government in the third quarter was a function of the current financial condition of the particular components of this sector and the volume of funds available to finance the sector's borrowing requirements.

In contrast to the previous quarters of 2001 and to the year 2000, the largest impact on this counterpart to changes in money stocks was exerted by the financial situation of local government and special-purpose funds. The net debt of these segments of the government sector climbed 3.6bn zloty in the third quarter, whereas in the first half of the year this debt had fallen 1.9bn zloty. On the one hand, this constituted the effect of an increase in the liabilities of local government and special-purpose funds to the

Table 20
General government net debt, first three quarters of 2001 (billion zloty)

		Change				
	Dec. 31, 2000	**Q1**	**Q2**	**Q3**	**Q1-Q3**	**Sept 30, 2001**
General government net debt						
of which:	**50.8**	**-5.4**	**4.0**	**4.1**	**2.8**	**53.6**
– central government	55.5	-2.4	2.9	0.5	1.1	56.6
– special-purpose funds	-2.6	-0.9	0.5	2.2	1.8	-0.8
– local government	-2.1	-2.1	0.6	1.4	-0.1	-2.2

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

banks (up 3.0bn zloty), while on the other it also stemmed from a decrease in their balances at the banks (down 0.6bn); this reflects the more difficult situation these institutions experienced in 2001.

The net indebtedness of central government rose 0.5bn zloty in the third quarter, which represents only a slight increase on the second (however, in Q3 2000 this debt had gone down 0.5bn zloty). Nonetheless, an examination of the combined figures for all of the first three quarters of 2001 yields a less encouraging picture of central government finances. The net debt of central government grew 1.1bn zloty over those three quarters, while in the same period of 2000 it had declined 5.3bn zloty. This growth was the consequence of a much higher central government borrowing requirement than in 2000 (due to a high budget deficit coupled with a smaller inflow of non-bank funding for that deficit, chiefly as a result of lower privatisation receipts). The ensuing strain on the finances of central government led it to draw more heavily on the balances it held at the banks.

In both the third quarter itself and the entire first nine months of 2001, the growth in the net indebtedness of the general government sector was markedly higher than in the corresponding periods of 2000, and the expansion of the money supply from this source thus increased substantially.

The third quarter brought a rise of 15.3bn zloty, or 15.5%, in the negative balance on "**other items (net)**", giving a deficit on this of 98.9bn zloty at the end of September. The most important element in this, which determined the scale and direction of the movements observed, were *other assets (net) at the NBP*. In the course of the third quarter, the liability balance on these assets went up 11.3bn zloty, or 32.9%. This was chiefly due to an increase in the "currency translation reserve" caused by the effect of zloty depreciation on translation gains, stated in zloty, arising on the revaluation of foreign currency assets and liabilities.

The movements in other components of "other items (net)" within the aggregate balance sheet of the banking system, as shown by the figures for the end of June and September 2001, had no material effect on the final total of these items, nor on the total money supply.

6.3. Monetary policy transmission mechanisms

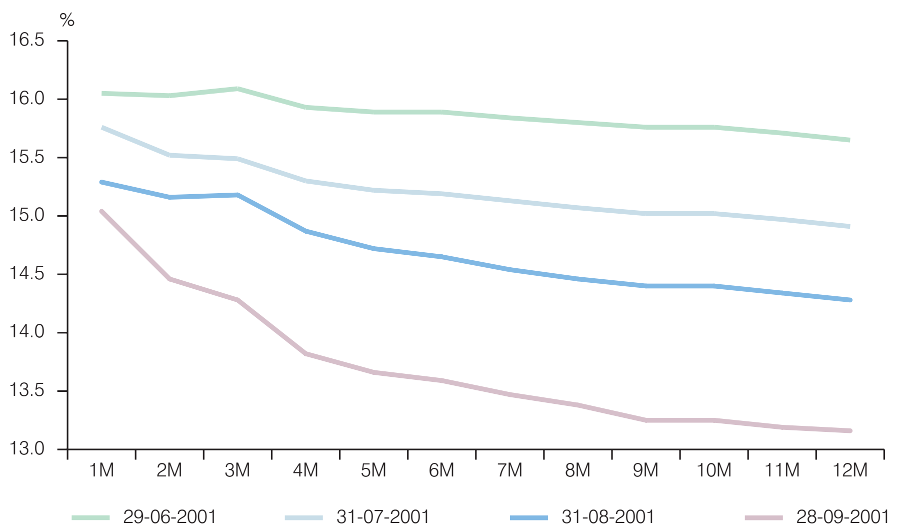
6.3.1. Interest rates

Monetary policy and interbank rates

The third quarter of 2001 brought a non-parallel downward shift in the money market yield curve. 1-month rates slipped 100 bps, which corresponded to the cut in official rates performed at September's meeting of the Monetary Policy Council. The reduction in rates on money market instruments at the long end of the yield curve (12-month rates) was considerably sharper, coming to around 250 bps (cf. Fig. 36). This non-parallel fall in the money market yield curve attests to expectations that rates will be lowered further.

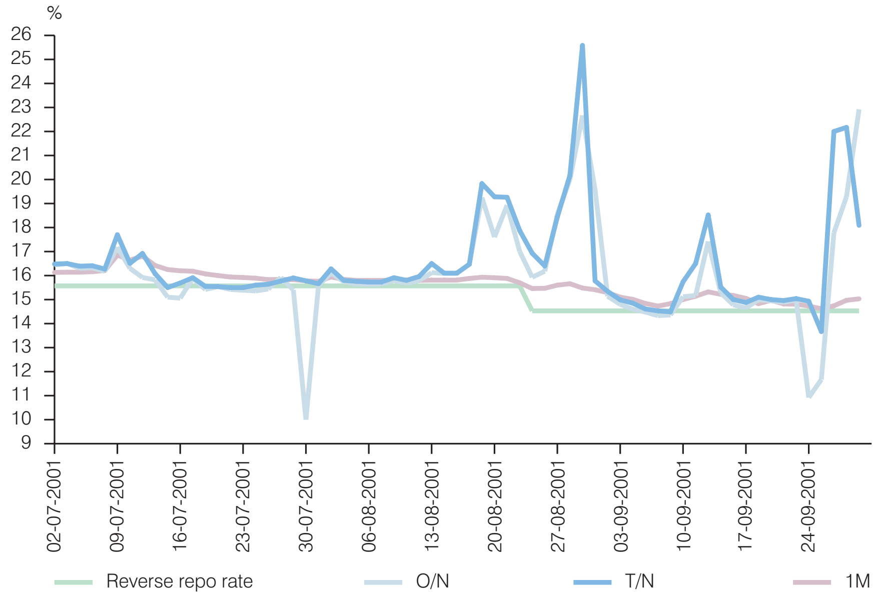
The third quarter saw three events that triggered market shocks: the steep depreciation of the zloty between July 6 and 11, the public disclosure in August of the unexpectedly large shortfall projected in future

Figure 36
Yield curve for synthetic interbank deposits (FX swaps), Q3 2001



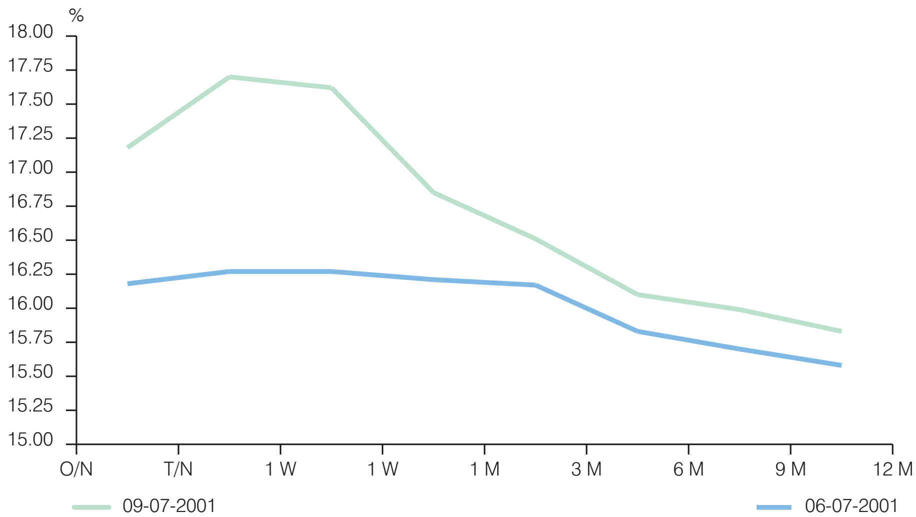
Source: Reuters, NBP.

Figure 37
Short-term money market rates



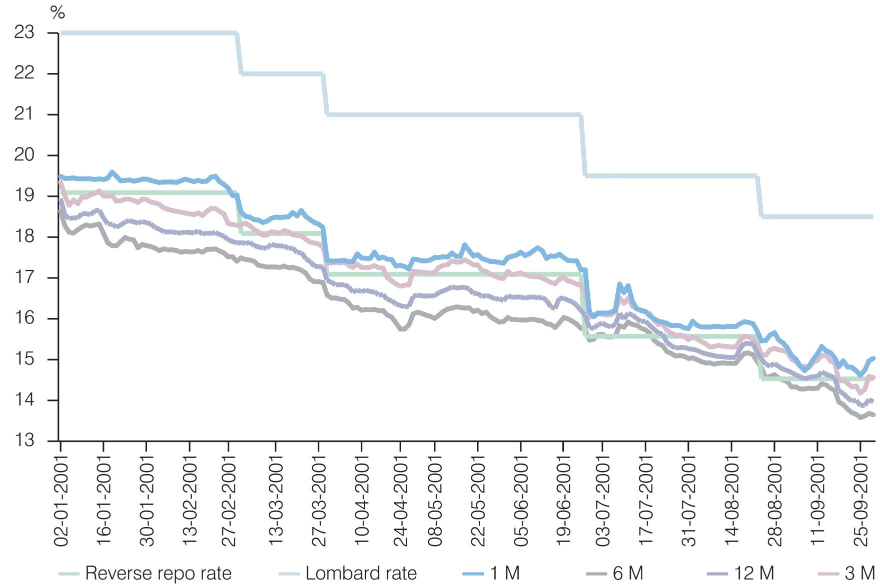
Source: Reuters.

Figure 38
Shift in position of interbank deposit yield curve following FX market disruption on July 6, 2001



Source: Reuters.

Figure 39
Money market rates, first three quarters of 2001



Source: Reuters, NBP.

government receipts, and the terrorist attacks in the USA on September 11. The impact of all of these on the money market proved to be short-lived. It was limited to a temporary, albeit steep, increase in rates on 1-day deposits (cf. Fig. 37).

In relative terms, the strongest impact was exerted by July's fall in zloty exchange rates. On July 9, a rise took place in all money market rates. However, the average upward shift in the money market yield curve amounted to a mere 35 bps (cf. Figs. 38 and 39).

Commercial bank reactions to central bank policies

In the third quarter of 2001, the commercial banks altered their deposit and lending rates in response to the cuts in official interest rates that took place towards the end of June and in August. Since the beginning of the year, the banks had been very quick to react to adjustments in official rates, with the first changes in commercial rates being carried out within a week of the relevant NBP decision. The lowering of central bank rates announced on June 27 prompted some of the banks to respond before the month was out, while the remainder amended their rates in July. A similar situation was seen following the NBP rate cut in August, with certain banks bringing down their own rates in the final week of that month, while the rest did so in September.

In response to the NBP cutting rates in June by 150 bps, the banks lowered *rates on personal time deposits* by an average of 120 bps. The largest and smallest reductions were made in deposits that do not play a significant role within total personal zloty balances. The lowest change was in rates on 36-month deposits, while the greatest was on 24-month deposits. Rates on the remaining deposits came down 120-130 bps.

The next rate cut, one of 100 bps in August, caused the banks to shave an average of 90 bps off their household deposit rates, thereby reacting slightly more forcefully than before in relation to the size of the NBP rate adjustment. The pattern of rate reductions performed was similar, however, with the lowest decrease being for 36-month deposits (down 60 bps), while rates on deposits for other maturities slipped 80-100 bps.

The changes in *personal lending rates* made in response to both cuts in central bank rates was modest; a significant fact would appear to be that, following the second cut, the banks lowered their mortgage rates, yet at the same time raised their rates on consumer loans. In all, this led to an increase in weighted average rates on loans to persons.

In the wake of the first NBP rate cut, the decline in weighted average *rates on corporate time deposits* came to 120 bps. This was identical to the decrease in deposit rates for households. As in the case of household deposit facilities, the largest and smallest reductions were carried out in rates on deposits with long maturities (36 and 24 months, respectively). However, these do not account for a significant proportion of total corporate balances. The lion's share of corporate deposits have original maturities of 1-3 months, and rates on these fell 110-120 bps.

Following the second cut in official rates, weighted average rates on corporate time deposits went down 80 bps, i.e., slightly less than those on household deposits. Considering the scale of the National Bank's rate reduction, the ensuing adjustment in average corporate deposit rates was in relative terms the same as that following the first cut. However, a slight change took place in the structure of

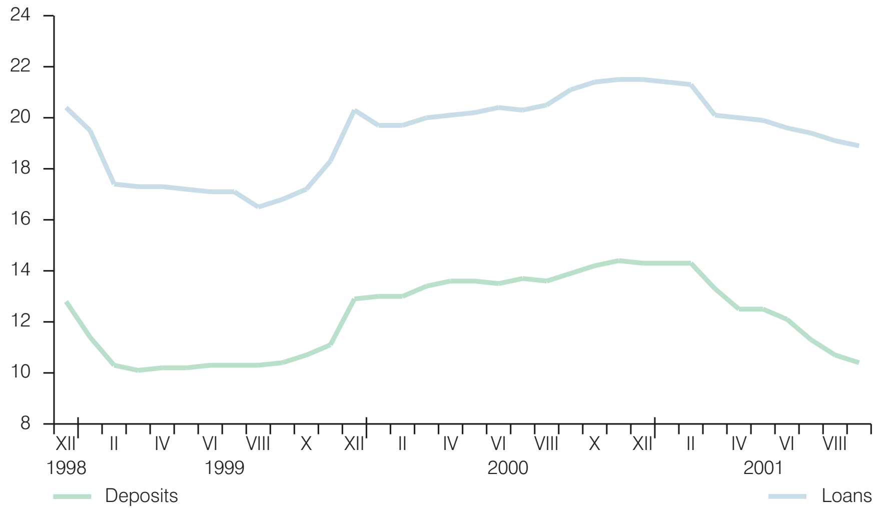
Table 21
NBP base rate adjustments and movements in commercial bank deposit & lending rates

			Mar. 1 & 29			**June 28**		**Aug. 28**		**Total change**
Size of NBP rate change (pct. points, relative to previous rates)			**-2,0**			**-1,5**		**-1,0**		**-4,5**
	Monthly movement in weighted average deposit & lending rates (pct. points)									**year-to-date**
	31.01	**28.02**	**31.03**	**30.04**	**31.05**	**30.06**	**31.07**	**31.08**	**30.09**	
	2001									
Personal zloty deposits										
Demand			-0.3	-1.1	0.3	-0.4	-0.9	-1.1		-3.4
1M			-0.7	-0.8	-0.1	-0.4	-0.8	-0.7	-0.2	-3.7
3M			-1.0	-1.0	-0.1	-0.3	-0.9	-0.4	-0.4	-4.0
6M			-1.0	-0.9		-0.2	-1.1	-0.7	-0.3	-4.3
12M			-1.3	-0.9		-0.1	-1.2	-0.8	-0.2	-4.6
24M	-0.1		-0.8	-1.1		-1.0	-0.7	-0.7	-0.2	-4.5
36M			-1.2	-0.8	0.1	-0.2	-0.6	-0.5	-0.1	-3.3
average time deposits			-1.0	-0.9	-0.1	-0.2	-1.0	-0.6	-0.3	-4.1
Corporate zloty deposits										
Demand			-0.7		0.4	-0.9	-1.3	-0.3	-0.3	-3.1
1M	-0.1	-0.2	-1.0			-1.1	-0.1	-0.6	-0.2	-3.2
3M		-0.1	-0.7	-0.6		-0.3	-0.9	-0.4	-0.3	-3.2
6M	0.1		-0.7	-0.9	-0.1	-0.3	-1.0	-0.5	-0.5	-3.8
12M	-0.2		-0.6	-0.8	-0.1	-0.2	-1.0	-0.7	-0.6	-4.2
24M	-0.8	-0.3	0.7	-1.2		-0.3	-1.8	0.1	-0.7	-4.2
36M			-0.1	-1.0			-0.5	-0.1	-0.5	-2.2
average time deposits	-0.1	-0.1	-0.9	-0.2		-0.9	-0.3	-0.5	-0.3	-3.3
Total personal & corporate deposits			**-1.0**	**-0.8**	**0.0**	**-0.4**	**-0.8**	**-0.6**	**-0.3**	**-3.9**
Corporate zloty loans										
1-yr	-0.2	-0.2	-1.0	-0.3	-0.2	-0.3	-0.5	-0.3	-0.3	-3.3
2-yr	-0.2	-0.1	-1.1	-0.2		-0.2	-0.2	-0.3	-0.4	-2.8
3-yr	-0.2	-0.1	-1.3	-0.3		-0.3	-0.1	-0.4	-0.4	-3.1
5-yr	-0.2	-0.1	-1.5	-0.2	-0.1	-0.3	-0.2	-0.3	-0.4	-3.3
over 5 yrs	-0.1	-0.1	-1.4	0.1	-0.3	-0.3		-0.4	-0.3	-2.9
average	-0.2	-0.1	-1.2	-0.1	-0.2	-0.3	-0.3	-0.3	-0.4	-3.2
Personal zloty loans			**-0.7**	**-0.2**	**0.1**	**0.1**	**-0.2**	**0.2**	**0.1**	**-0.6**
Total personal & corporate loans	**-0.1**	**-0.1**	**-1.1**	**-0.2**	**-0.1**	**-0.2**	**-0.2**	**-0.3**	**-0.2**	**-2.6**

Source: NBP.

this adjustment; while rates on 36-month deposits again showed the smallest decline, this time the largest decrease was in rates on 12-month deposits. Rates on 1- and 3-month funds dropped by 80 and 70 bps, respectively.

Figure 40
Weighted average time deposit & lending rates



Source: NBP.

The decline in *corporate lending rates* following the first NBP rate cut was much smaller that that in deposit rates, while the fall after the second cut was of a similar scale. The changes in these lending rates amounted to 60 bps after the first cut, and 70 bps following the second. The banks responded to the first NBP rate adjustment primarily by lowering rates on the shortest loans, maturing within one year. After the second cut, the banks reduced rates to a similar degree on all loans.

A noteworthy aspect of the third-quarter movements in interest rates outlined above is that personal lending rates remained unchanged. Several factors were involved in this. One was the rise in credit risk observed during this period, the result of the weakening of the economy and the associated difficulty in assessing the credit standing of potential loan customers. In these circumstances, banks tend not to lower interest rates, to avoid encouraging loan applications from would-be borrowers of the highest risk. A second factor, partly connected with the first, was the rapid growth of problem loan portfolios at the banks, particularly since loans to persons were going bad much faster than those to corporates. Figures from the General Inspectorate of

Banking Supervision indicate that the deterioration in personal loan quality was driven by consumer loans, especially instalment loans. This could explain the increase in rates on these loans that was seen in September, despite the National Bank cutting official rates. For the banks, a swift growth of problem loans on the one hand entails greater specific provisioning expense, while on the other it depresses “effective interest rates”, i.e., the ratio of interest income received by the banks to the volume of loans outstanding. Another factor that undoubtedly influenced the pricing policies of the banks concerning personal and corporate loans was the maintenance of strong personal loan demand.

Interest rates and loan demand

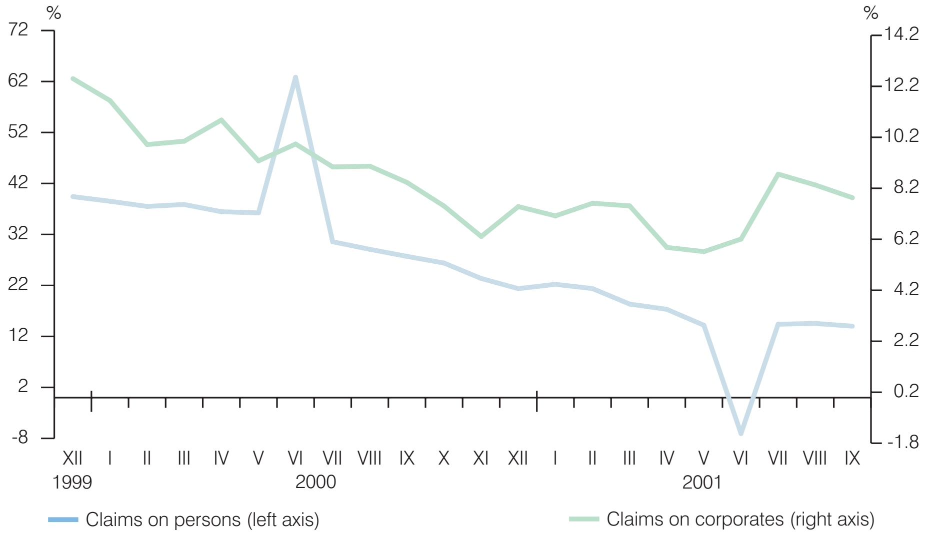
In the third quarter of 2001, growth in bank claims on persons and corporates gained speed in real terms (cf. Fig. 41)[26]. This was primarily due to the real increase in corporate borrowings, as personal borrowings remained stable. The real increase in borrowings was to a substantial extent associated with the depreciation of the zloty that took place in July and August. Given that foreign currency loans constitute around 25% of all the claims held by banks, zloty depreciation can have a strong impact on the volume of claims outstanding. Since the period of sharp depreciation was relatively short (two months) and occurred in the context of a slackening of business activity, it did not fuel inflationary pressure, which would have decreased real growth in claims.

Despite the lowering of nominal corporate lending rates, these rates were still running high in real terms, which in conjunction with the dull economy meant that loan demand rose rather slowly. Assuming that the economy did not deteriorate further, corporate loan demand can be expected to have picked up gradually in the fourth quarter. This conjecture would seem to be

[26] Claims on persons consist of loans and advances, purchased debt, funds disbursed under guarantees, and outstanding unpaid interest. In Q3 2001, around 98% of these claims were made up of loans and advances. Claims on corporates comprise the items mentioned above together with debt securities, repurchase transactions and “other items”. In Q3 2001, loans and advances represented some 92% of claims on corporates. Claims on persons have been adjusted for inflation by reference to the CPI, claims on corporates by reference to the PPI in industry.

Figure 41

Growth in claims on persons & corporates *(real growth on corresponding month previous year)*



Source: NBP calculations based on GUS & NBP figures.

borne out by the findings of business surveys conducted by the NBP[27]. These indicate that in the third quarter companies considered the level of interest rates to be fifth in order of importance among the obstacles they encountered in their business operations (those viewed as more important included low demand, difficulties in collecting receivables and high exchange rates).

As in the previous quarters of 2001, the third quarter brought a rapid increase in housing loans as a proportion of total household borrowings. Due to the large positive differential between rates on loans in zloty and in foreign currencies, household demand was principally focussed on foreign currency finance. Foreign currency housing loans represented 62.7% of total foreign currency lending in September (as against 58.4% in June), and 10.9% of claims on persons (as against 7.9%). The share of foreign currency loans and advances in all outstanding loans and advances to persons rose from 13.6% in June

[27] These surveys involved 437 selected firms from throughout Poland. The sample used is not fully representative and mainly reflects the situation of large domestic companies.

to 17.4% in September (in December 2000, this had been 9.9%). It should be borne in mind, however, that a major impact on the volume and composition of bank claims in the third quarter was exerted by zloty depreciation. As in the previous quarter, the rise in the proportion of housing loans in total claims on households reflected the increasing role within those claims played by long-term loans (maturing in over 5 years). The reluctance of banks to extend instalment loans, already mentioned above, was confirmed by the declining weight of these in total household borrowings.

The structure of claims on corporates by type of borrower being financed altered slightly in relation to the previous quarter. A mild decline was recorded in claims on state-owned enterprises and companies, while claims on sole traders increased.

In addition to loan finance obtained on the domestic market, sources of external corporate funding also included the issuance of securities at home and abroad, and foreign borrowings. As the present *Inflation Report* was going to press, the most recent figures available on foreign indebtedness were those for the second quarter of 2001. The indebtedness of the non-government and non-banking sector in the second quarter totalled US$ 29,891m, which represents a minimal decrease on the preceding quarter. No greater shifts were apparent in the composition of this debt. However, a fact of some significance here is the major appreciation of the zloty against the US dollar and euro that was taking place at that time. This meant that companies could borrow less in foreign currencies to access the same amount of zloty finance. It can therefore be inferred that the growth in foreign indebtedness was halted by two factors: a decline in corporate investment demand, and zloty appreciation. However, a precise judgement on the relative weight of these factors would be difficult.

The debt outstanding on issues of short-term securities stood at 12.0bn zloty at the end of the third quarter, which signifies slightly faster growth during the quarter than in corporate borrowings at the banks (a difference of 1.1 points). Meanwhile, long-term securities issued and outstanding totalled 8.1bn zloty (an increase of 0.9m zloty on the end of Q2). In September, outstanding corporate issues of both short- and long-term securities represented the equivalent of 8.9% of their debt to the banks, a proportion only slightly higher than in June. It

Figure 42
***External indebtedness, non-government & non-banking sector** (mn US$)*

Source: NBP.

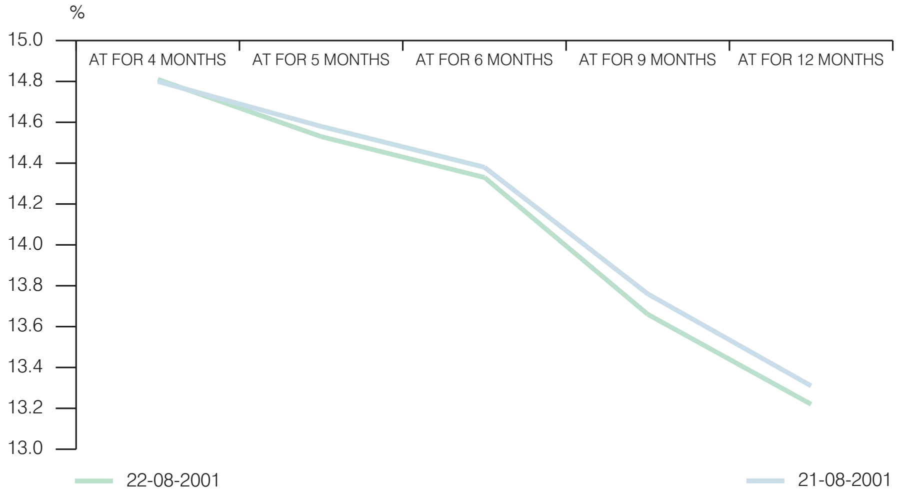
should be emphasised, however, that part of the debt securities issued by corporates are held by commercial banks (NBP figures indicate this to be around 20%-30%), i.e., these constitute a component of the banks' claims on non-financial customers.

Interest rate expectations

Short-term expectations

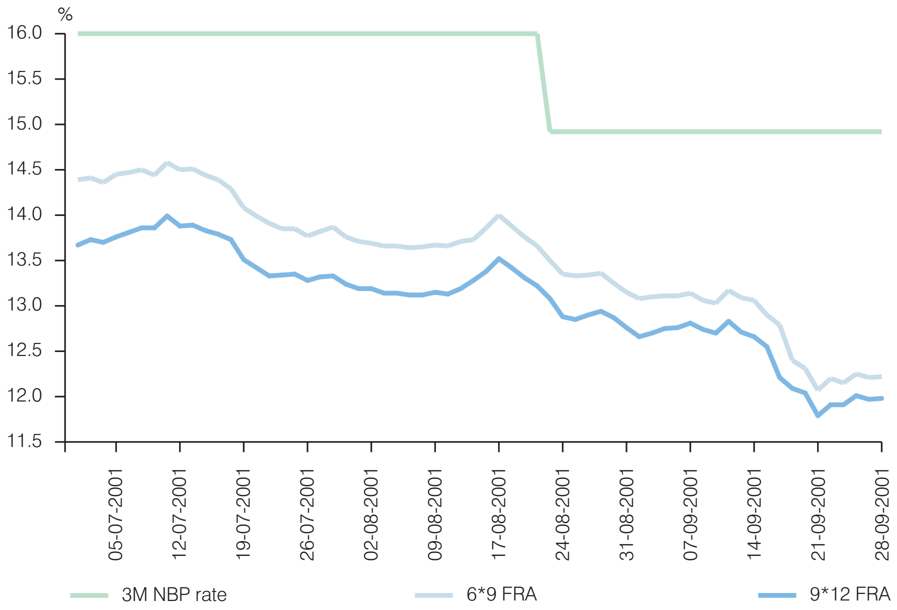
The third quarter brought a reassessment of earlier market expectations concerning the timing and scale of interest rate cuts. At the beginning of July, the rates quoted on forward rate agreements (3*6 FRAs) testified to market expectations that 3-month WIBOR rates (Warsaw Interbank Offered Rates) would be running at around 15% at the end of December. Towards the end of September, however – i.e., three months later – the rates on 1*4 FRAs indicated that the market was now projecting 3-month rates in

Figure 43
3-month forward yield curve before & after MPC August meeting



Source: Reuters, NBP.

Figure 44
3-month WIBOR FRAs



Source: Reuters, NBP.

January 2002 of 13.5%[28]. This means that in the course of the third quarter expectations emerged of a significant NBP rate cut at the beginning of 2002.

The interest rate cut performed by the NBP in August came as no surprise to the market, as is demonstrated by the shift in the yield curve of just 6 bps following the announcement of the cut (cf. Fig. 43). On the other hand, market expectations of a rate cut were in evidence prior to each meeting of the MPC throughout the whole of the third quarter. That rate cuts would be forthcoming was considered a certainty, with the sole uncertainty related to the timing of these by the central bank. The maintenance of constant expectations of a rate reduction was linked to sinking inflation and the easing of economic growth. From September onwards, following the terrorist attacks in the USA, this sentiment was reinforced by the anticipation that the NBP would chime in with the rate cuts being carried out by other central banks (cf. Fig. 44).

Long-term expectations

Investor expectations of future interest rate movements are reflected in the slope of the Treasury yield curve. This slope and movements in this over a given period can be determined by analysing implied forward yield curves.

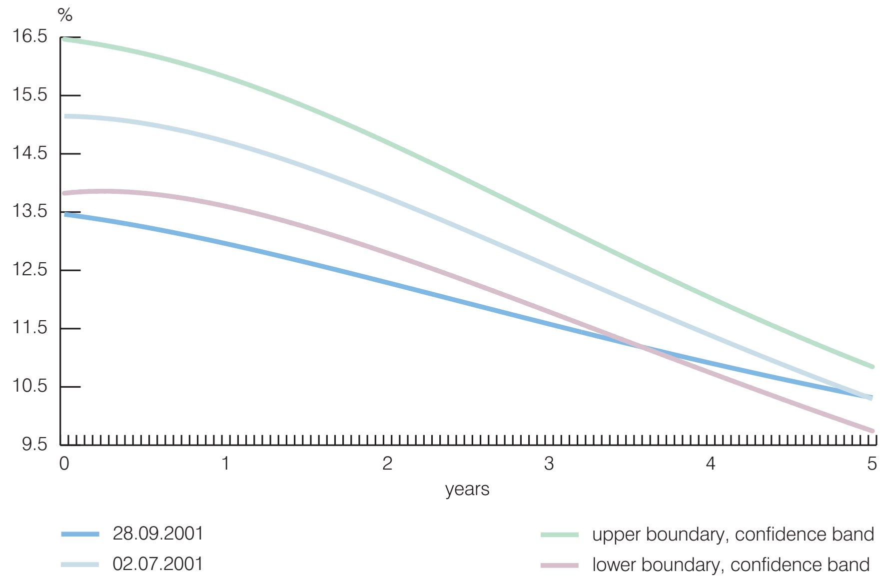
The third quarter of 2001 saw a continuation of the flattening of the implied 12-month forward yield curve[29]. A statistically significant movement was the downward shift in the section of the curve out to around 3.5 years; beyond this point, movement in the curve was not statistically significant[30].

[28] 1*4 and 3*6 FRAs constitute forward contracts written with a reference rate of 3M WIBOR, where the settlement date for interest payments is set one month from conclusion of the contract (1*4), or 3 months from that date (3*6).

[29] The implied 12-month forward yield curve portrays the level of implied 12-month interest rates in the time band from 0 to 5 years (e.g., the implied 12-month forward rate at 1 year represents the level of 12-month rates in 1 year's time derived from the zero-coupon yield curve). The 12-month rate at 0 years is identical to the 12-month spot rate. The forward curve is mapped on the basis of the zero-coupon yield curve.

[30] The statistical significance of movements in the forward curve is established on the basis of the position of the curve at the end of a given period relative to a confidence interval determined by reference to the volatility of the curve in that period. In other words, the absence of a statistically significant movement in the curve signifies that in 95 cases out of 100 the confidence interval developed on the basis of historical data on the evolution of the curve in the given period contains the curve estimated for the end of the period. By contrast, a statistically significant movement in the curve (where a = 5.0%) means that the number of cases where the confidence interval contains the curve estimated for period end is less than 95 per 100.

Figure 45
Implied 12-month forward rates, confidence band

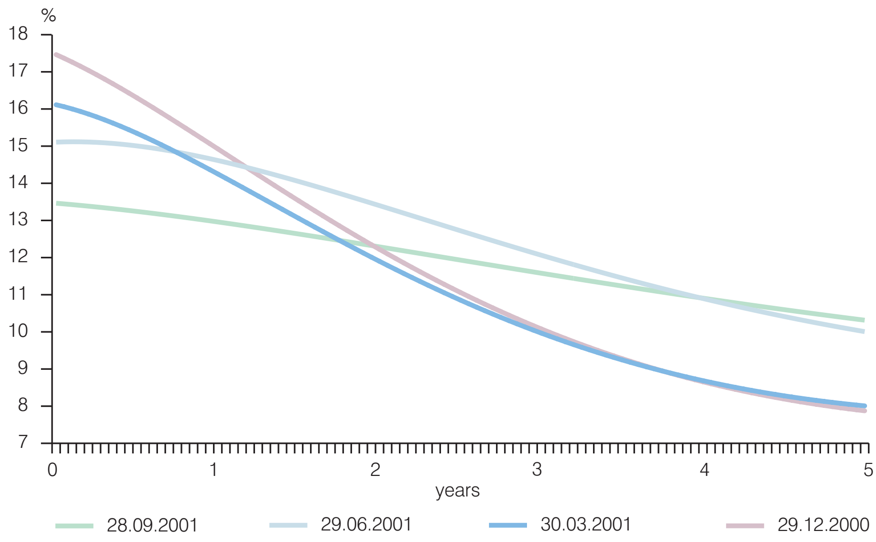


Source: NBP, Reuters.

This flattening of the yield curve had been under way since the beginning of 2001. From January to the end of September, 12-month forward rates out to and including 2 years went down by an average of 197 bps, while those in the band from 2 to 5 years went up by an average of 174 bps. The most significant moves in the curve, as the chart indicates, took place during the second quarter (particularly the upward shift in the section beyond 1 year). A characteristic feature of the third quarter, on the other hand, was the substantial lowering of 12-month rates in the band to two years (by an average of 156 bps), combined with the relative steadying of these rates from 3 to 5 years forward.

The flattening of the yield curve observed in recent months could have pointed to a large reduction in the downward pace of 12-month interest rates expected by investors in subsequent years. In reality, however, the changes in investor expectations were smaller than the movements in forward rates might suggest. The latter should be viewed only partly as resulting from alterations in long-term investor expectations. The

Figure 46
Implied 12-month forward rates



Source: NBP, Reuters.

underlying cause of the non-parallel shift in the yield curve in the third quarter was in fact an increase in the risk premiums required on the bond market[31].

The rise in risk premiums and ensuing flattening of the zero-coupon yield curve were mainly due to investor uncertainty regarding the size and structure of additional bond issues needed to finance the increased government deficit in the second half of 2001 (cf. Section 1.2.3, "The central government deficit"). This heightened uncertainty was reflected in a change in the pattern of demand on the bond market. Investors systematically shortened the (weighted) average

[31] Supply and demand adjustments on the bond market, together with the factors that determine the risk premiums demanded by investors, are the key elements governing movements in the shape and position of the zero-coupon yield curve. They thereby also indirectly condition the evolution of the implied 12-month forward curve. This is because, simplifying things greatly, forward curves are calculated as derivatives (mathematically speaking) of the zero-coupon curve. An interpretation of movements in the implied 12-month forward yield curve solely in terms of changes in investor expectations is thus erroneous.

Table 22
*Expectations of reductions in 12-month interest rates, 1-5 yrs (percentage points)**

	1 year	2 years	3 years	4 years	5 years
Sept. 28, 2001	50	117	188	256	315
June 29, 2001	49	171	304	421	510
March 3, 2001	186	422	615	743	811
Dec. 29, 2000	254	524	739	881	959

* Derived from difference between 12-month spot rate and implied 12-month forward rate for given time horizon.
Source: NBP.

maturity of their bond portfolios, which further reinforced the tendency for the yield curve to flatten.

Thus, taking into consideration all the factors that affected the yield curve, the conclusion to be drawn is that movements in the position of the curve, and therefore in the level of forward interest rates, were more the result of mounting investor uncertainty than of changes in long-term investor expectations[32].

Two shock events took place in the third quarter, i.e., the steep depreciation of the zloty between July 6 and 11, and the terrorist attacks in the United States on September 11. The response of players on the Treasury market proved to be short-lived in both cases, with domestic factors soon coming to the fore in the pricing of Treasury securities.

6.3.2. Exchange rates

The third quarter of 2001 witnessed a reversal of the trend for the zloty to appreciate in both nominal and real terms, one that had been gathering impetus from the fourth quarter of 2000 onwards[33]; instead, the zloty was subject to depreciation. This depreciation was clearly greater in relation to the euro than to the dollar (cf. Fig. 47). Initially, however, between July 6 and 11,

[32] Indeed, the two factors previously cited as determining movements in the yield curve (the increase in the risk premiums required and the shift in investor demand towards the short end of the curve) can both be traced to the same cause, namely, rising market uncertainty.
[33] Movements in real zloty exchange rates are discussed in Section 2.

the zloty slipped to a similar extent against both currencies (by around 10%). Against the US currency, it then steadied at some 4.23 to the dollar. Altogether, the zloty softened some 5.7%.against the dollar in the third quarter compared to the second.

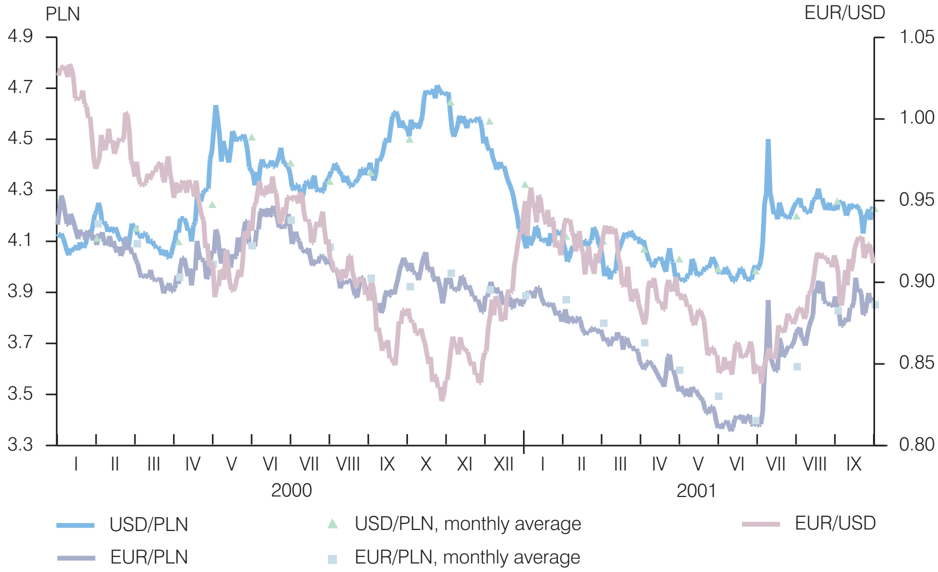
Relative to the euro, on the other hand, the zloty continued on a gradually steepening downward path, which was accompanied by the pronounced strengthening of the single currency against the dollar on world markets. In all, the zloty lost 7.6% against the euro in the third quarter (compared to Q2), which followed zloty appreciation against that currency of almost 13% in the first half of the year. As Figure 47 shows, the third quarter also saw a continuation of the tendency previously visible in 2001 for zloty/euro exchange rates to be powerfully impacted by euro/dollar cross rates: the correlation coefficient here stood at 89%, compared to 93% in the second quarter (for zloty/dollar rates, this coefficient came to 31% and 26%, respectively).

Nominal effective zloty exchange rates came down 6.7% in the course of the third quarter, as against 6.9% in the second and 5.8% in the third quarter of 2000 (cf. Fig. 48).

The influence of external factors on zloty trading was much more obvious in the third quarter than it had been in the first half of the year. The third quarter brought a temporary escalation of local financial crises on certain emerging markets, and then a major increase in global investment risk in the aftermath of the terrorist attack on the USA. As the American economy slid into recession, this acted to weaken the dollar and accelerated the process of interest rates being eased in Poland's external environment.

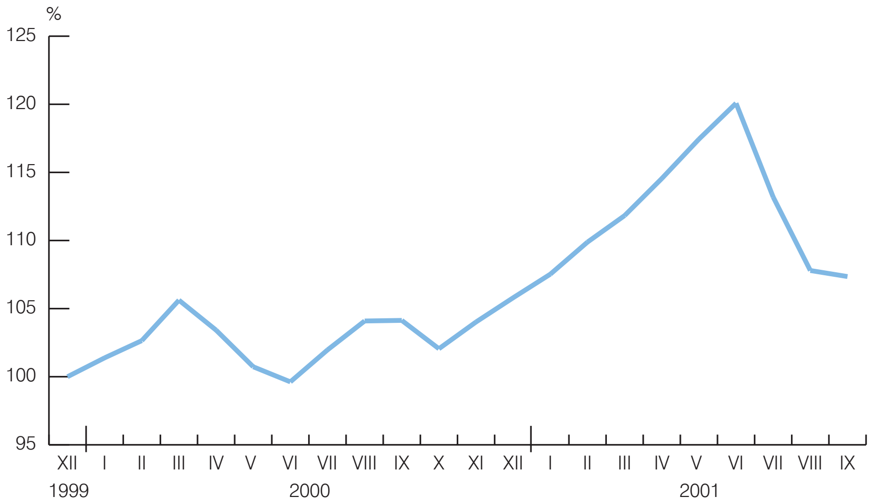
The surge in zloty exchange rate volatility and plunge in the value of the currency that occurred on July 6-11 (cf. Fig. 49) can principally be traced to a contagion effect triggered by events in Argentina and Turkey (and to a lesser degree in Brazil and South Africa). The impact of external factors was markedly aggravated by the previous speculative trading of investors on the domestic money market (via FX swaps) in response to the growing expectations in the second quarter that the zloty was about to depreciate (see the *Inflation Report* for Q2 2001). July's downward correction in the value of the Polish currency lowered the exchange rate risk of investing in zloty assets, which

Figure 47
Zloty exchange rates against US dollar & euro; euro/dollar rates



Source: NBP.

Figure 48
Nominal effective zloty exchange rates, 2000-2001
(monthly figures; December 1999 = 100)



Source: NBP calculations.

indirectly reduced the sensitivity of Poland's financial markets to external upheavals. This is because the weakening of the zloty substantially decreased the extent to which it was overvalued. Calculations at the NBP indicate that the overappreciation of the zloty (as measured by the divergence from the long-term trend in real effective exchange rates, deflated by movements in manufacturers' producer prices) dropped to 0.3% in the third quarter of 2001, as against 12.2% in the second.

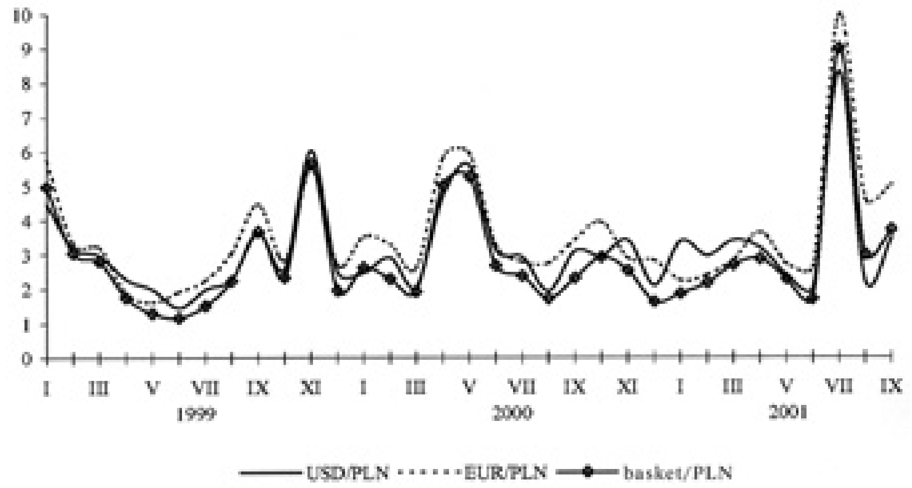
The direct impact on zloty exchange rates of the terrorist attacks in the USA was minor[34]. Indirectly, however, the events in the USA reinforced the Polish currency, although this did not become readily apparent until October. The swift interest rate cuts performed by the Fed and the ECB kindled market expectations that rates would also be reduced by Poland's monetary authorities. At the same time, foreign investors continued to view zloty-denominated assets as being safe, while also offering very high returns (cf. Fig. 50).

The strengthening of the zloty in the third quarter of 2001 was assisted by the persistence of market expectations – albeit of varying intensity – of impending rate cuts by Poland's central bank. These expectations were encouraged by the worsening growth figures for the Polish and world economies, by the sharp drop in domestic inflation, and by developments on Poland's current account, which investors continued to regard positively. In the third quarter, the clear deterioration in central government finances had still to yield any significant effects in terms of zloty depreciation. However, as in the second quarter, the latter factor fuelled investor uncertainty as to the scale of the increase in the supply of Treasury securities in the fourth quarter of the year. This concern was on the one hand reflected in the continuing large involvement of foreign investors on the FX swap market[35], while on the other it elicited a shift in the structure of Polish debt portfolios that increased the relative weight of short-term assets (T-bills) and more highly liquid ones (5-year bonds).

[34] This was limited to activity on the domestic FX market dying out for around four days. In addition, the rise of the euro against the dollar temporarily spurred the tendency for the zloty to depreciate against the single currency.

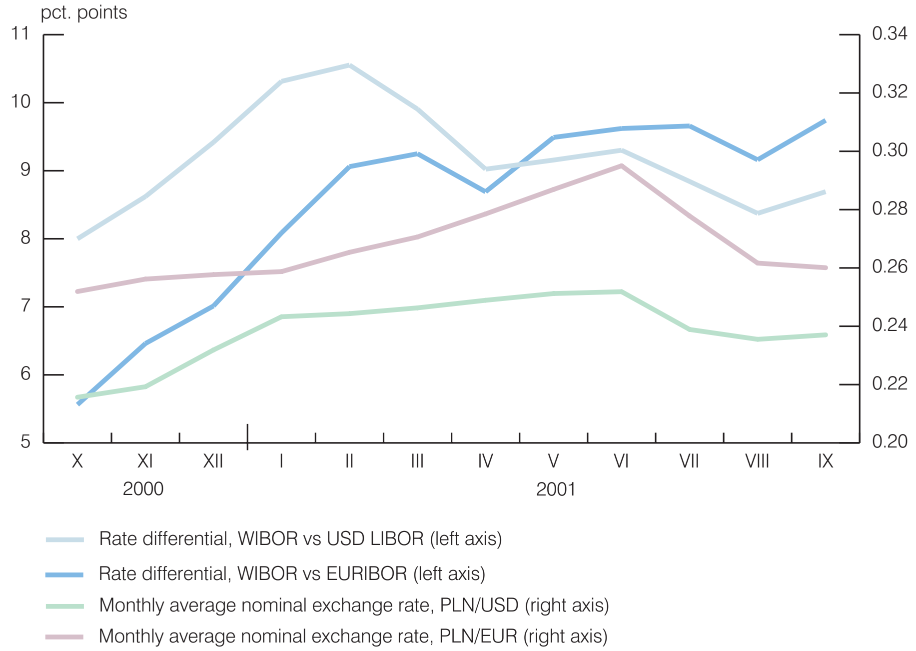
[35] This strategy stems from the high rates of return available on swaps, at relatively lower investment risk than bond market trading.

Figure 49
Volatility of zloty exchange rates against USD and USD & EUR basket



Source: NBP calculations.

Figure 50
Rate differentials, 3M WIBOR, USD LIBOR & EURIBOR, vs zloty appreciation



Source: Reuters, NBP.

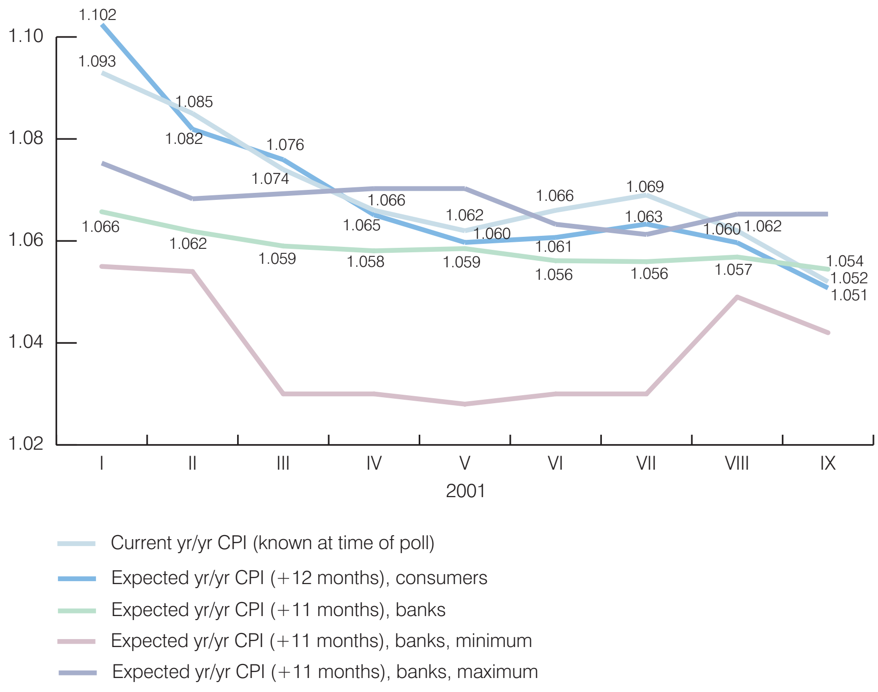
The subsequent rallying of the zloty in October can be ascribed to the diminished risk of investing in Polish assets following the depreciation of the zloty and the stabilisation of the political landscape after the general elections, coupled with the widening differentials between Polish and world interest rates, and the accompanying market expectation that the MPC would be lowering Polish rates.

Zloty exchange rates made a significant contribution to the ebbing of domestic inflation in the third quarter. Taking into account the delayed response of the CPI to exchange rate movements, it can be estimated that, had it not been for exchange rates, annualised consumer price growth at the end of September would have been 0.6 points higher.

6.3.3. Inflation expectations

An important role in conditioning price movements within the economy is played by psychological factors,

Figure 51
Inflation expectations of consumers & banks, January-September 2001



Source: NBP calculations based on Demoskop figures.

one of these being the inflation expectations of various economic agents (consumers, banks, corporates).

The development of inflation expectations over the first three quarters of 2001 suggests that the move to direct inflation targetting in Poland and the determination of the monetary authorities in their resolute pursuit of disinflation have not only affected the expectations of specialised market players, such as bank analysts, but are also producing a gradual change in the way consumer expectations are formed.

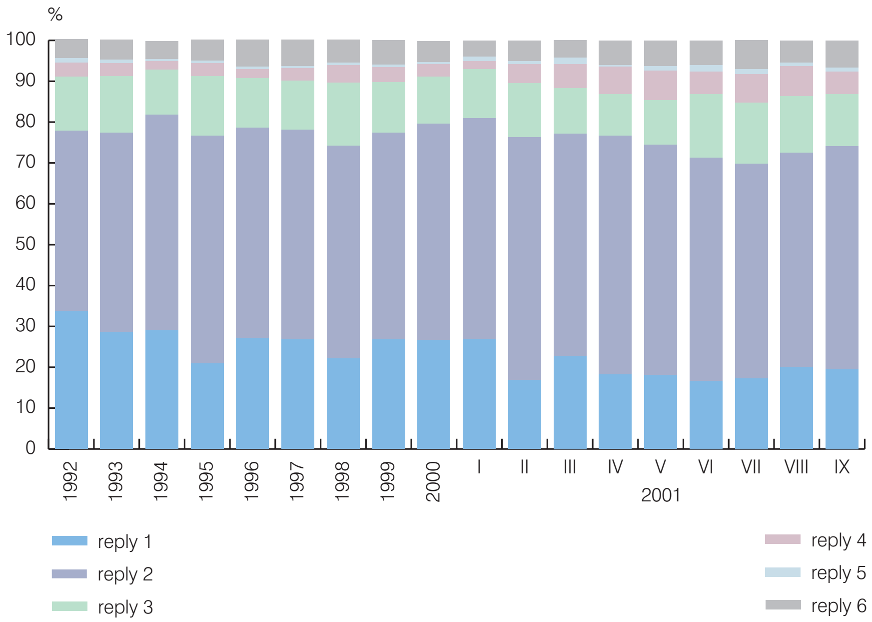
Consumer inflation expectations in the third quarter of 2001

The research into consumer inflation expectations conducted at the National Bank of Poland focusses on two aspects of this issue. The first is analysing the pattern of replies to the question posed in polls carried out by the Demoskop company; this pattern portrays the sentiment of the respondents. The second, which is closely connected with the first, involves quantifying the rates of inflation expected using the probabilistic method developed by Carlson and Parkin (1975)[36], adjusted to the structure of the Demoskop survey.

The question posed in the Demoskop poll is framed in the following manner: *"Given what is currently happening, do you believe that over the next 12 months prices will: (1) rise faster than at present, (2) rise at the same rate, (3) rise more slowly, (4) stay at their present level, (5) go down, (6) difficult to say"*. An analysis of the pattern of replies to that question from 1992 to 2000 reveals the following two tendencies: a decrease in the proportion of respondents declaring that prices will rise faster (down from some 34% in 1992 to around 27% in 2000), and an increase in the proportion believing prices will rise at the same rate (up from some 44% in 1992 to around 53% in 2000). The remaining percentages held relatively steady; the scale of the changes that did occur make it difficult to distinguish any clearcut tendencies.

[36] 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. 6/2000. A similar method of quantifying inflation expectations is applied at the Netherlands Bank; see J.M. Berk (1997), *Measuring inflation expectations: a survey data approach*, DNB Staff Reports, September.

Figure 52
Pattern of replies to Demoskop poll, 1992-2001



Source: Demoskop.

From January to July 2001, the shifts in the pattern of responses to the Demoskop poll gathered greater speed, attesting to a gradual revision by consumers of their previous backward-looking inflation expectations and a move towards an increasingly forward-looking approach. The proportion of respondents expecting prices to rise faster slumped abruptly. At the same time, in July 2001 the percentage of those polled expecting prices to rise at the same rate was similar to that seen in 2000 (yet in previous years, it was to this group that the most pessimistic respondents had chiefly "upgraded" as their view brightened). This was because the decline in the proportion of respondents stating that prices would rise faster was accompanied by a growth in the three most optimistic groups (replies 3, 4 and 5), which had stayed fairly stable in the period from 1992 to 2000.

The quantification of inflation expectations utilises the fact that in declaring their view of future inflation respondents make reference to the previous level of

Table 23
Pattern of replies to Demoskop poll, Q3 2001 (%)

	Reply 1	Reply 2	Reply 3	Reply 4	Reply 5	Reply 6
July 2001	**17.3**	**52.6**	**14.9**	**7.0**	**1.2**	**7.0**
Change on 1992	-16.5	8.4	1.7	3.5	0.2	2.3
Change on 2000	-9.5	-0.3	3.5	3.8	0.8	1.9
Change on June 2001	0.6	-2.0	-0.6	1.4	-0.3	0.9
August 2001	**20.2**	**52.3**	**13.8**	**7.4**	**0.8**	**5.5**
Change on June 2001	2.9	-0.3	-1.1	0.4	-0.4	-1.5
September 2001	**19.5**	**54.6**	**12.7**	**5.6**	**0.9**	**6.7**
Change on June 2001	-0.7	2.3	-1.1	-1.8	0.1	1.2

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

Source: Demoskop.

price growth, i.e., to "current inflation"[37]. Thus, an improvement in the pattern of replies to the questionnaire does not necessarily signify a decline in inflation expectations. A suitably strong increase in current inflation may lead to an increase in inflation expectations, even with a seemingly more optimistic pattern of replies to the question posed.

Although the pattern of replies to the Demoskop poll improved slightly in July 2001 compared to June[38], the current inflation rate to which these replies referred had gone up (from 6.6% in June to 6.9%). The quantification results indicate that in July the effect of the rise in current inflation was more powerful than the effect of changes in the pattern of replies to the poll, as a result of which the price growth expected over the coming 12 months moved up 0.2 points compared to expectations in June, to stand at 6.3%.

[37] The Demoskop poll is conducted in the first ten days of each month, and therefore precedes the publication by GUS of inflation figures for the previous month. For this reason, the quantification procedure assumes that "current inflation" is the annualised inflation rate obtaining two months previously, which is known to the respondents at the time the poll is taken.

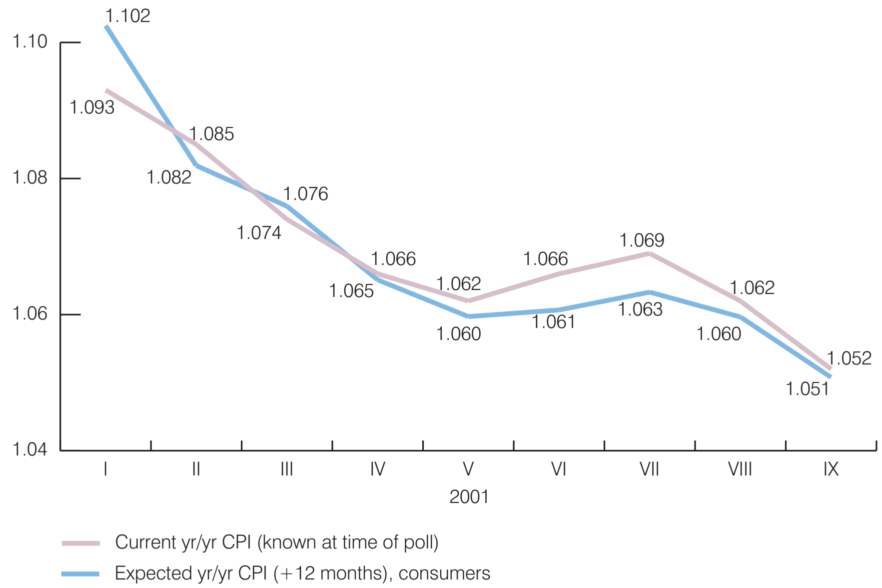
[38] Despite zloty exchange rates tumbling at the particular time consumers were polled (Jully 6-9).

Shifts in the pattern of responses to the Demoskop poll in August 2001 point to a slight deterioration in the sentiment of those polled. Had the current inflation rate in August remained at the same level as in July (6.9%), then the inflation anticipated over the following twelve months would have risen from 6.3% in July to 6.6% in August. As it was, however, current inflation fell 0.7 points in August compared to July, running at 6.2%. This relatively sharp decline in current inflation meant that, notwithstanding the adverse change in the inflation expectations of consumers, the annualised inflation which they projected for the corresponding month of the following year dropped from 6.3% in July to 6% in August.

On the basis of the changes in the pattern of replies to the Demoskop poll recorded in September, it is difficult to make a definitive judgement as to whether these reflect an improvement, a deterioration or a stabilisation of the views held by respondents concerning future price growth. The decrease in the proportion of respondents who were most pessimistic (reply 1) was coupled with a major increase in the relative number of those with a static perspective (reply 2), a reduction in the proportion of respondents who were more optimistic (replies 3 and 4), and a rise in the percentage with no clear opinion (reply 6). Nonetheless, the quantification procedure can be drawn on to determine the direction of movement in the perceptions of those polled[39]. Let us assume that the current inflation rate remained unchanged between August and September 2001, i.e., that it remained at 6.2%. Using the current

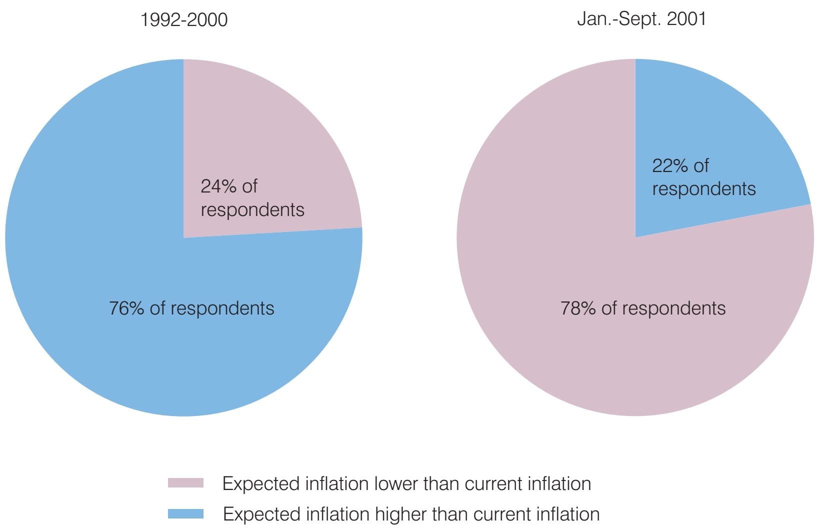
[39] The possibility of quantifying consumer inflation expectations not only allows an estimation of the level of those expectations, but also make it possible to verify whether the change observed in the pattern of replies to a poll signifies an improvement, a deterioration or a stabilisation of respondents' sentiment, and the way they arrive at their inflation expectations. Where a given survey allows for more extensive response options (more than the three variants of prices rising, falling or remaining flat), an unequivocal assessment of changes in the sentiment of respondents based on shifts in the pattern of responses is not always feasible. Such an assessment can be performed, however, by applying the quantification method employed, e.g., by assuming that the current inflation rate is constant at x, and on that basis then calculating, in line with that quantification method, a synthetic indicator that depicts the pattern of responses received. This indicator would answer the following question: "Given a current inflation rate of x, what would be the value of inflation expectations for the coming 12 months?" This procedure does not require subjective assumptions as to the rate of current inflation, and although it does not lead to a measurement of the level of inflation expected nor resolve the issue of whether inflation expectations have risen, fallen or remained unchanged, it does allow an explicit conclusion, for each pattern of responses to the poll, as to the direction taken by consumers in arriving at their inflation expectations.

Figure 53
Consumer inflation expectations, January-September 2001



Source: Demoskop.

Figure 54
Expected inflation vs current inflation



Source: NBP calculations based on Demoskop figures.

inflation rate in August to quantify the inflation rate expected on the basis of September's pattern of responses to the Demoskop poll, we obtain a quantified measure of consumer inflation expectations of 6%, i.e., exactly the same as in August 2001. This signifies that in September 2001 there was no significant change in the sentiment of those polled, as expressed in the pattern of their replies to the question posed.

However, current inflation in September did not hold steady at the same rate as in August, but went down 1 full point to 5.2%. Thus, despite the pattern of responses to the Demoskop poll staying neutral in its impact on inflation expectations, the inflation expected by consumers declined as a result of the fall in the current inflation rate. The price growth expected by consumers over the 12 months ahead stood at 5.1% in September, dropping 0.9 points relative to August.

To summarise, therefore, the expected future rate of inflation remained below the current rate of inflation in each month of the third quarter (as indeed it had in February, April, May and June). This represents a departure from previous years, when expectations of this kind were only a sporadic occurrence (cf. Fig. 54).

It is also worth noting that September 2001 was the first month to yield a quantified measure of consumer inflation expectations below the average expectations of bank analysts. It should be stressed, however, that the procedure utilised in quantifying consumer inflation expectations "translates" the subjective projections of respondents into the language of official inflation indices. The resultant findings, which primarily give an idea of the direction of change in the opinions of those polled and the level of their inflation expectations, are obtained on the assumption that price movements within the economy are perceived by respondents in terms of official statistics. Yet due to the fact that the inflation subjectively registered by respondents to the poll may differ from official price indices, the scope for comparing the inflation expectations of consumers and bank analysts is limited.

Inflation expectations of bank analysts in the third quarter of 2001

The investigation of the inflation expectations of bank analysts conducted at the National Bank of Poland is based on monthly surveys by Reuters. The information provided

Figure 55
Bank analyst inflation expectations, January-September 2001

Source: NBP calculations based on Reuters figures.

by these includes bank projections of year-on-year inflation in December of the year in question and in the month preceding the same month of the following year. In the third quarter of 2001, expectations of annual inflation at year end dropped 0.3 points, while those regarding the inflation rate in a year's time came down 0.2 points.

In July, the inflation expectations of bank analysts remained relatively stable compared to June. The rate of annual inflation projected at year end moved up 0.1 points, to 6%, while the annual rate expected in the month preceding the same month of the following year stayed flat at 5.6%. In August, the average forecast of annual inflation in December slipped back 0.1 points to 5.9%, while the rate expected in the month preceding the same month of the following year went up 0.1 points to 5.7%. Bank analysts then lowered their inflation expectations in September. The average annual rate anticipated at year end fell 0.3 points relative to projections in August, coming to 5.6%. The twelve-month inflation forecast for the month preceding the same month of the following year also dropped 0.3 points, to stand at 5.4%.

Table 24
Volatility measures for distributions of bank analyst inflation expectations

	2001			
	June	**July**	**August**	**September**
Range of bank responses	0.033	0.031	0.016	0.023
Standard deviation	0.008	0.007	0.004	0.006
Volatility coefficient (%)	14.1	13.1	7.7	11.2

Source: Reuters, NBP calculations.

Taking into account the expectations expressed by bank analysts concerning the annual inflation rate in the month preceding the same month of the following year, an analysis of volatility measures for the distributions obtained, such as the range between the minimum and maximum value declared, the standard deviation or the volatility coefficient, indicates that the uncertainty of the banks regarding future price movements declined in July, and especially in August, to rise again in September. However, fluctuations in these volatility measures can primarily be ascribed to the changing number of banks participating in the survey[40].

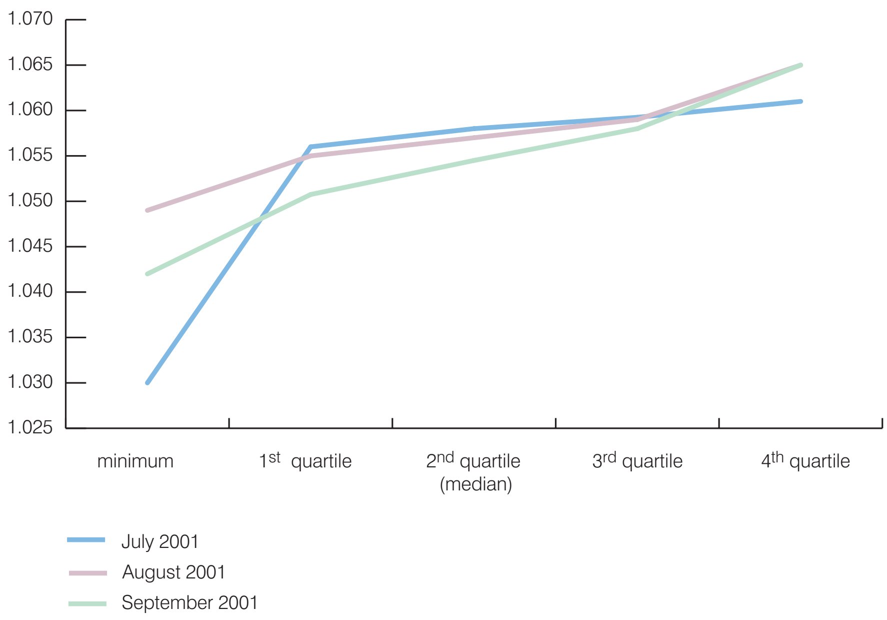
Quartile analysis demonstrates that the section of the distribution between the first and third quartiles shifted in the third quarter in the direction of lower rates of inflation, with the first quartile down 0.5 points, the second down 0.3 points and the third down 0.1 points. In the same period, the minimum value in the distribution went up 1.2 points[41], while the value of the fourth quartile, equivalent to the maximum value in the distribution of bank analyst inflation expectations, rose 0.4 points.

As seen from the standpoint of the central bank, the development of the inflation expectations of consumers

[40] The decrease in the volatility of the distribution of inflation expectations in August and subsequent increase in September can largely be traced to the bank that had been declaring the lowest rates of expected inflation (Credit Lyonnais). This bank did not take part in the Reuters survey in August, which reduced the volatility of the distribution of bank analyst inflation expectations. In September, on the other hand, this bank did take part, declaring the lowest expected rate of inflation (4.2%) and thereby raising the volatility of the distribution.

[41] The minimum annual inflation rate projected for the month preceding the same month of the following year rose from 3% in July to 4.2% in September.

Figure 56
Distribution properties of bank inflation expectations, Q3 2000



Source: Reuters, NBP calculations.

and bank analysts in the third quarter of 2001 should be considered favourable. These expectations were consistent with both the short- and medium-term targets of the National Bank's monetary policy.

6.3.4. The wealth effect

The third quarter of 2001 was marked by rapid change on financial markets, which had a major impact on the composition of the funds invested by persons on the securities market. Table 25 outlines the situation obtaining at the beginning of this period.

The principal factors affecting investment preferences in the third quarter were the following:

- indications from at home and abroad that economic growth was slowing,
- the effect of September 11, which altered views of the security afforded by various capital investments.

As a result, investors withdrew from the equity market, shifting into safe investments in debt securities. One of the prime measures of the importance of the

Table 25
Direct & indirect forms of personal capital market investment

Type of capital investment	**Balance at period end, Q2 2001 (billion zloty)**
1. Direct portfolio investment – securities held on personal accounts (total)	20.23
Shares *	10.47
Treasury securities (total)	9.76
a) market bonds *	3.25
b) savings bonds	3.35
c) T-bills **	3.16
2. Indirect portfolio investment (total)	18.83
Open-ended investment funds (net assets) ***	3.85
Open-ended pension funds (net assets)	13.71
Insurance institutions ****	1.27
Total (1+2)	**39.06**
Above investments (total) as proportion of bank liabilities to persons, in zloty & foreign currency (%)	19.27

* securities belonging to domestic persons;
** as reported by dealer banks;
*** excluding specialist funds used by corporates;
**** contributions to wedding endowments, children's endowments, investment-linked life assurance, disability insurance.

Source: Ministry of Finance, NBP, GUS.

equity market, market capitalisation as a percentage of GDP, fell from 14.3% at mid-year 2001 to 11.8% at the end of the third quarter.

Institutional inflows to open-ended pension funds raised the assets of these funds from 13.71bn zloty at mid-year to 15.43bn zloty at the end of the third quarter, with most of this new funding being invested on the Treasury market. Investment funds reported more muted growth.

To summarise, it can be concluded that market conditions led to an increasing volume of funds being invested in this period in "safe haven" vehicles, which in Poland comprise Treasury bonds and bank deposits.

7. PROSPECTS FOR INFLATION

In September 2001, inflation in Poland fell to 4.3%, its lowest point since systemic transition began. The probable maintenance of low inflation in the fourth quarter of the year means that consumer price growth at year end will have been markedly less than the target range set for 2001 (6%-8%).

The weakening of inflation trends is associated with a decline in domestic demand. The figures for the third quarter show that this period failed to usher in the expected upturn in economic activity. Furthermore, with domestic demand having now run low for over a year, the impact of inflationary factors such as the depreciation of the zloty in the previous quarter would appear to be more subdued than it once was. However, the rapid decrease in inflation in the second half of 2001 was also related to supply factors. The third quarter saw food prices drop significantly following a relatively good harvest (compared to previous years). The fall in inflation in Poland is additionally being assisted by the situation on the world fuel market. Moreover, our major trading partners have also witnessed an easing of price growth, accompanied by tendencies towards economic stagnation.

In its monetary policy guidelines for the coming year, the MPC has set the inflation target for the end of 2002 at 5% consumer price growth relative to year end 2001, with a permissible bandwidth around this target of ±1 percentage point. The adoption of this inflation target implies that price growth at the end of 2002 is likely to have steadied at the level recorded at the end of 2001. This would allow a lasting reduction in inflation expectations and would lay a sound basis for bringing inflation down further, and thus for achieving the inflation target established in the *Medium-Term Monetary Policy Strategy for the Years 1999-2003*, which provides for price growth of under 4% at the end of 2003.

The aggravation of crisis symptoms within the global economy following September's terrorist attack on the USA, the uncertainty as to the ultimate character of the economic policy to be pursued by the new Government, and also the large discrepancies between those basic economic indicators for Poland actually being reported and those forecast not too long ago – all these factors mean that any projections concerning the development of the economy are at present subject to a very great margin of uncertainty. Nonetheless, current information and forecasts do indicate that maintaining inflation at a level consistent with the inflation target for 2002 is feasible, although it cannot be excluded that a temporary rise in the twelve-month rate of inflation might occur in the course of the year ahead. Performance of the inflation target for 2002 could be jeopardised by any loosening of fiscal policy relative to the declarations currently being made. Such a scenario would substantially heighten the risk of a steep depreciation of the zloty.

The relatively large public sector financial deficit remains an impediment to the lowering and stabilisation of inflation in the long term. The resulting unfavourable macroeconomic policy mix, involving an overly lax fiscal policy and a tight monetary policy, is one that makes the costs of reducing inflation relatively high.

APPENDIX

Voting of Monetary Policy Council members in third quarter of 2001[1]

Date of resolution	Subject	Decision taken by MPC	Voting of Council members	
22.08.2001	the rediscount rate and refinance rate	to lower base interest rates by one percentage point	**For:**	L. Balcerowicz
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
			Against:	M. Dąbrowski
22.08.2001	procedures for the conduct of open market operations	to lower the reference rate (minimum reverse repo rate) by one percentage point	**For:**	L. Balcerowicz
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
			Against:	M. Dąbrowski

[1] Excluding the resolution establishing a ceiling on the liabilities due on NBP borrowings at international banking and financial institutions in 2002 (September 25,

Date of resolution	Subject	Decision taken by MPC	Voting of Council members	
26.09.2001	establishing monetary policy guidelines for 2001		**For:**	L. Balcerowicz
				M. Dąbrowski
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska