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# Inflation Report

## Third Quarter 2002

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**Layout and print:**  
NBP Printshop

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

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ISSN 1640 - 0755

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## OVERVIEW

1. In Q3 2002 the year-on-year CPI, having dropped in July 0.3% percentage point, steadied at the level of 1.2-1.3%, i.e. the lowest since the beginning of Poland's systemic transition.

This resulted from factors both on the supply and demand side. Under a continued low growth of household disposable income and moderate growth rate of consumer demand there was no major demand pressure for consumer price growth. Recovery symptoms which occurred in Q3 2002 in some areas of the economy did not stimulate price growth.

At the same time inflation was kept lower by a persisting since May decline in food prices in connection with the emergence of surpluses of basic agricultural raw materials. What also continued to fall was the growth rate of non-food articles and certain services. The scale of disinflation, on the other hand, was constrained by a slight acceleration in the growth rate of officially controlled prices.

The Q3 2002 decline of the CPI was accompanied by a drop of all measures of core inflation, persisting since May last year, which pointed to the sustainability of disinflation trends in the economy. But the scale of this decline was smaller than in previous quarters.

12-month PPIs showed in Q3 2002 a falling trend, after a slightly rising one, which persisted for two quarters. In September 2002 producer prices were 1% higher than the year before.

2. Q3 2002 (as shown by statistics on a cash basis) saw a strengthening of the growth trend in Polish exports, which commenced in the previous quarter. Growth in export revenues in this period was accompanied by a drop in import payments. Consequently, the negative trade balance narrowed once again. On a y/y basis it has been systematically going down since Q3 2000.

The positive balance of unclassified current transactions stayed in Q3 2002 at a similar level as the year before. But the remaining components of the current account contributed to the deepening of its deficit: the negative balances of income and services were bigger than the year before, while surpluses of transfers – lower.

As a result of all these changes the current account deficit declined and its ratio to the GDP stayed at a similar level as in the previous quarter, namely about 3.7%.

3. The growth rate of the GDP in Q3 2002, according initial NBP estimates, stood at 1.9%, up from 0.8% in the previous quarter. It was hoisted by growing domestic demand and improvement in net exports. The high growth rate of personal consumption was maintained. On the other hand, a falling trend in fixed investment persisted, although the rate of its drop is estimated to have declined on previous quarters.

Q3 2002 acceleration in economic growth resulted from overcoming a five quarter long falling trend of added value in industry. Moreover, the decline rate of added value in construction decreased. What has, however, persisted was the high growth rate of added value in commercial services.

4. The situation in the labour market did not see any major change in Q3 2002. Employment in the enterprise sector was still declining, although the rate of its decline was weaker in the 1<sup>st</sup> HY 2002. The September unemployment rate grew to 17.6% (from 17.4% in June). In the October business sentiment survey entrepreneurs predicted further employment shedding.

In these circumstances the rise in average nominal wages in the enterprise sector in Q3 2002 (like in the previous quarter) was much lower than the year before. But the average growth rate of real wages approximated last year's due to the lower Q3 2002 inflation rate compared to the one recorded the year before.

On the basis of data on nominal growth in wages and social benefits it is estimated that in Q3 2002 the growth rate of household registered disposable income grew at a slightly lower level than the one recorded in the 1<sup>st</sup> HY 2002. On the other hand, income derived outside the formal economy continued to be high.

5. In Q3 2002 (as was also the case in the corresponding period of previous years) a relatively slight growth of the central government budget deficit was recorded. Combined with eurobond issues conducted in this quarter on foreign markets this made it possible to decrease the issue of T-bonds and bills on the domestic market (the net cash value of T-securities issued in this period was 32% lower than the year before).

After three quarters of 2002 the central government budget deficit (increased by the payout of compensation for budget sector employees, pensioners and decreased by insurance premiums transferred to open-ended pension funds) expanded to the level of 4.5% of the GDP (PLN 24.1 billion) compared to 3.8% of the GDP (PLN 19.9 billion) in the corresponding period of the previous year. If we also take into consideration the growing debt of special purpose funds and forecasted high deficit of local government budgets, we can expect an increase in the economic deficit of the public finance sector at the end of this year to the level of 5.5%-5.8% of the GDP, compared to 4.8% of the GDP, as planned by the government at the beginning of the year.

6. The y/y growth rate of the M3 money supply, which has shown a systematic fall since June 2002, has been negative since August.

At the same time there was a weakening of the high in Q2 2002 expansion of notes and coin in circulation; its y/y growth steadied in August and lowered in September.

The persisting since Q3 2002 decline in the y/y growth rate of non-financial sector deposits, including first of all household deposits, was exacerbated in Q3 2002 and the level of those deposits reduced. The Q3 2002 drop in household deposits was contributed to by a continued low growth rate of household registered disposable income in the period under analysis. Moreover, this trend reflects a declining propensity to save in banks caused by a waning appeal of bank deposits (resulting from the fall in interest rates, additionally exacerbated by capital gains tax). Some funds were reallocated from bank deposits to the purchase of bonds, T-bills and units in investment funds, whose yield exceeded the interest rates offered by banks.

\* \* \*

In Q3 2002 the Monetary Policy Council on two occasions reduced NBP interest rates – in August and September. In total, they were reduced 50-150 basis points, of which the NBP reference rate (critical to the assessment of the degree of monetary policy tightening) 100 basis points.

In total, starting from February 2001 the Monetary Policy Council reduced rates on twelve occasions. The NBP's reference rate fell during the period from 19% to 7.5%, i.e. in real terms (using the current CPI as the deflator) from 11.6% to 6.1%.

The interest rate cut decisions in Q3 2002 were taken by the Council in conditions of an increasingly sustainable low level of inflation and strengthening of factors limiting future growth of inflation pressure. From June to September the y/y CPI decreased from the level of 1.6% to 1.3%. It was accompanied by a further drop of most core inflation measures. These conditions helped stabilise the low inflation expectations both of consumers and bank analysts.

The Q3 2002 growth rate of M3 money supply was healthy for inflation prospects. The growth rate of loans in the period under analysis was low too.

Under a continued high level of unemployment the wage movements in Q3 2002 did not pose a threat of reigniting inflation pressure.

Moreover, the MPC interest rate cut decisions of Q3 2002 took into account the assessment of economic activity as a factor impacting future inflation. Despite a non-uniform picture of the macroeconomic situation the Council estimated that there ought to be a gradual economic recovery. Its expected moderate pace in Q3 2002 did not pose, in view of the MPC, any threat to the implementation of the year 2002 and 2003 inflation target, which warranted the making of interest rate cuts.

But the Council was also inclined to trim NBP rates carefully by the following factors, which might undermine inflation stability at a low level:

- a decline, deepening in Q3 2002, of the growth rate and level of non-financial sector deposits, mainly household deposits. It followed from the maintenance of a low growth rate of registered disposable household income and falling household propensity to save at the banks (effect of falling interest rates, additionally exacerbated by capital gains tax);
- the high y/y growth rate of notes and coin in circulation. In August the y/y growth rate of notes and coin nevertheless steadied, and in September clearly declined;
- uncertainty as to the situation of public finances in 2003. In the opinion of the MPC the draft *2003 Budget Act* did not contain (despite the earlier government declarations) systemic solution proposals required to limit the growth rate of budget spending and alter its structure. On the contrary, in the face of the year 2003 projected faster economic growth the draft envisaged the maintenance of a high public sector deficit relative to the GDP, which would be tantamount to a further loosening of fiscal policy;
- uncertainty as to the evolution of fuel prices connected with the threat of a military conflict in Iraq;
- realisation that the full effects of earlier interest rate cuts had not yet made themselves felt and their forecasting was subject to much uncertainty.

The value of the Monetary Conditions Index with a constant base period, calculated at the NBP, after an uninterrupted decline since December 2001, edged up slightly in Q3 2002. But the corresponding index with a variable base period continued to show a decline.

\* \* \*

The inflation target adopted by the MPC for 2002, having been revised in June 2002, is now 3% +/- 1 percentage point. At the end of September the y/y CPI stood at 1.3%, thus it was below the lower bound of the target. The current inflation forecasts show that despite a small temporary growth, the y/y inflation rate at the end of this year will approximate its current level. This means that year-end 2002 inflation will be below the lower bound of the inflation target adopted for this year.

The weakening of inflationary trends in the 2nd HY is induced both by demand and supply factors. On the one hand, under a postponed (both domestically and abroad) recovery and persistently low growth rate of household disposable income, there is a lack of any major pressure for consumer price growth. On its part an exceptionally steep drop of food prices in Q2 2002, which the MPC back then estimated as temporary, continued in Q3 2002. A continuation of the falling trend in food prices can also be expected in the last quarter of 2002.

In the 2003 Monetary Policy Guidelines the Council established the year end 2003 inflation target at the level of 3% +/- 1 percentage point. This allowed to fine-tune the strategic target, as adopted in the *Medium-term strategy for 1999-2003*, which was to bring by year end 2003 the inflation rate below 4%. The adoption of the target at the level of 3% with a tolerance band of +/- 1 pp is tantamount to proceeding from the phase of lowering inflation to a phase of its stabilisation at a low level.

It follows from current world economy development forecasts that in 2003 the improvement of the external outlook will be sluggish. The forecasts can nevertheless be subject to a considerable error and the Polish economy will not sense the effects of the increased external demand before the 2<sup>nd</sup> HY 2003. As a result, under emerging prospects of a slow growth in internal demand, the Council estimates that the rate of GDP growth in Poland will be 2-3% next year.

There is also much uncertainty in forecasting the year 2003 food prices which in the context of the Polish economy have a major impact on the level of inflation, as well as oil prices. The implementation of the inflation target next year can thus be undermined by possible supply shocks.

A threat to monetary policy implementation next year is also the prospect of maintaining a high public finance deficit as a share of the GDP, which under the forecasted faster economic growth in 2003 would mean a further loosening of fiscal policy.

## Basic macroeconomic indicators

	2000				2001				2002			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Real growth											
GDP	5.9	5.0	3.1	2.4	4.0	2.3	0.9	0.8	0.2	1.0	0.5	0.8
Domestic demand	5.1	3.3	1.4	1.7	2.8	-1.3	-1.8	-1.7	-2.8	-1.9	0.0	1.0
Total consumption	4.1	2.6	1.2	1.6	2.4	1.2	1.3	1.8	2.8	1.8	3.2	2.7
Personal consumption	4.8	2.9	1.1	1.7	2.7	1.5	1.6	2.2	3.3	2.1	3.5	2.9
Gross accumulation	10.4	5.7	1.6	1.7	3.9	-13.1	-12.5	-14.2	-14.5	-13.8	-18.4	-6.0
Gross fixed investments	5.4	2.8	2.0	2.1	2.7	1.2	-8.5	-12.5	-13.5	-9.8	-13.3	-8.4
Household savings rate (%) <sup>1</sup>	9.2	10.2	10.4	14.7	11.2	10.8	10.6	9.8	13.8	11.3	8.2	8.2
Household financial savings rate (%) <sup>2</sup>	5.5	3.6	4.3	8.5	5.5	7.6	4.9	4.3	8.4	6.3	5.2	2.8
Unemployment rate (%)	14.0	13.6	14.0	15.1	15.1	16.1	15.9	16.3	17.5	17.5	18.2	17.4
Disposable income (corresponding period previous year = 100)	101.3	100.6	100.0	103.6	101.4	102.9	101.1	101.3	102.5	101.9	100.4	100.0
State Treasury indebtedness (PLN million, nominal) <sup>3</sup>	270,144.9	279,507.8	287,984.3	266,816.8	273,192.9	271,584.9	291,795.1	283,939.5	283,937.5	309,388.4	320,880.1	
Government deficit (PLN million) <sup>3</sup>	-6,927.4	-10,650.2	-14,041.9	-15,391.0	-15,391.0	-14,992.5	-18,805.5	-21,865.0	-32,358.3	-32,358.3	-24,922.5	-29,146.7
Foreign debt (USD million) <sup>3</sup>	65,661	66,759	65,505	69,465	69,465	71,081	70,510	73,030	71,048	71,048	72,596	78,367

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

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

<sup>3</sup> Period end.

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

## Basic monetary indicators

	2000				2001				2002			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	corresponding period previous year = 100											
CPI <sup>1</sup>	110.3	110.2	110.3	108.5	108.5	106.2	106.2	104.3	103.6	103.3	101.6	101.3
PPI <sup>1</sup>	107.3	108.9	108.3	105.6	105.6	103.8	100.9	100.7	99.6	100.3	101.2	101.0
	Nominal growth rate of end-of-period figures (corresponding period previous year = 100)											
Money supply (M3)	114.0	120.3	114.7	111.9	111.9	114.7	107.8	112.6	109.0	103.2	102.5	99.7
Total money supply <sup>2</sup>	113.8	120.6	114.1	111.7	111.7	114.9	108.0	114.3	113.7	108.6	107.5	102.6
Deposits and other liabilities	115.6	122.9	116.7	115.5	115.5	116.4	108.9	113.6	108.9	101.7	100.5	97.8
of which:												
Household deposits	113.8	118.1	116.8	120.0	120.0	119.9	115.9	117.0	106.7	103.3	100.1	96.7
Corporate deposits	117.5	121.4	110.0	98.5	98.5	105.1	99.8	105.3	116.4	104.9	112.9	111.5
Claims	125.3	132.0	123.7	116.9	116.9	114.1	104.8	111.4	109.3	107.0	109.4	105.1
of which:												
Claims on households	136.5	152.7	130.8	125.7	125.7	121.1	102.2	119.9	114.7	117.7	115.6	106.6
Claims on corporates	115.1	117.4	114.5	112.0	112.0	111.2	106.8	106.0	103.7	103.7	102.1	101.2
	Real growth rate <sup>3</sup> of end-of-period figures (corresponding period previous year = 100)											
Money supply (M3)	103.3	109.2	104.0	103.1	103.1	108.0	101.5	108.0	105.4	105.4	100.9	98.4
Total money supply <sup>2</sup>	103.2	109.4	103.4	103.0	103.0	108.2	101.7	109.6	109.8	105.1	105.8	101.3
Deposits and other liabilities	104.8	111.5	105.8	106.4	106.4	109.6	102.5	108.9	105.1	98.5	98.9	96.5
of which:												
Household deposits	103.2	107.1	105.9	110.6	110.6	112.9	109.1	112.2	103.0	100.0	98.5	95.4
Corporate deposits	106.5	110.1	99.7	90.8	90.8	99.0	94.0	101.0	112.4	101.6	111.1	110.0
Claims	113.6	119.8	112.1	107.8	107.8	107.5	98.6	106.8	105.5	103.6	107.6	103.8
of which:												
Claims on households	123.7	138.6	118.6	115.8	115.8	114.0	96.2	114.9	110.7	114.0	113.7	105.2
Claims on corporates	104.3	106.6	103.8	103.2	103.2	104.7	100.6	101.6	100.1	100.1	100.5	99.9
Reference rate (%) <sup>4</sup>	17.5	17.5	19.0	19.0	19.0	17.0	15.5	14.5	11.5	10.0	8.5	7.5
Rediscount rate (%) <sup>4</sup>	20.0	20.0	21.5	21.5	21.5	19.5	18.0	17.0	14.0	12.0	10.0	8.5
Lombard rate (%) <sup>4</sup>	21.5	21.5	23.0	23.0	23.0	21.0	19.5	18.5	15.5	13.5	11.5	10.0

<sup>1</sup> In the last month of the quarter.<sup>2</sup> Total money supply (M2) acc. to the definition in force by 30<sup>th</sup> March 2002.<sup>3</sup> CPI deflated.<sup>4</sup> As of the period end.

Source: GUS, NBP figures.



## 1

Domestic demand and supply<sup>1</sup>

1

According to initial NBP estimates the Q3 2002 growth rate of the GDP gained pace in the wake of domestic demand growth and improvement in net exports and stood at 1.9%, up from 0.8% in the previous quarter. The acceleration of economic growth resulted from overcoming a five quarter long declining trend of added value in industry. Moreover, down went the pace of decline of added value in construction. What has, on the other hand, been maintained, is the high growth rate of added value in commercial services.

The growth of retail sales demonstrates that under a relatively low nominal growth of disposable household income a high growth rate of personal consumption persisted, as did decline in demand for fixed assets, the latter though at a lower level than in previous quarters. The rates of GDP growth and domestic demand are presented in table 1.

**Table 1**  
**Growth rate of GDP and domestic demand**

	2001					2002		
	2001	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Corresponding period previous year = 100								
<b>Total added value</b>	<b>100.8</b>	<b>102.1</b>	<b>100.8</b>	<b>100.6</b>	<b>100.1</b>	<b>100.6</b>	<b>100.9</b>	<b>101.8</b>
Industry	99.4	103.3	98.7	98.5	97.5	98.0	99.1	103.3
Construction	92.4	94.8	92.0	91.8	92.0	87.1	89.7	93.5
Commercial services	103.9	103.5	103.7	104.1	104.2	104.0	103.5	103.3
<b>GDP</b>	<b>101.1</b>	<b>102.3</b>	<b>100.9</b>	<b>100.8</b>	<b>100.2</b>	<b>100.5</b>	<b>100.8</b>	<b>101.9</b>
Fixed investment	89.8	101.2	91.5	87.5	86.5	86.7	91.6	96.5
Personal consumption	102.1	101.5	101.6	102.1	103.3	103.5	102.9	103.0
<b>Domestic demand</b>	<b>98.1</b>	<b>98.7</b>	<b>98.2</b>	<b>98.3</b>	<b>97.2</b>	<b>100.0</b>	<b>101.0</b>	<b>101.7</b>

Source: GUS (Central Statistical Office), own estimates.

### 1.1. Domestic demand

Based on data on the nominal rise in salaries and social benefits it is estimated that in Q3 2002 the growth rate of household **gross disposable income** evolved at a level slightly lower than the one recorded in 1<sup>st</sup> HY 2002. On the other hand, income earned outside the formal economy continued to be high.

The average gross monthly salary in the economy rose 2.4% compared to Q3 2001 (3.6% in the enterprise sector). Due to a 3% drop in average employment the income from hired labour was nominally 0.5% lower than in the corresponding period of the previous year (of which 1.0% lower in the enterprise sector).

<sup>1</sup> Unless otherwise indicated, all growth rates in this chapter, are in real terms and y/y.

In Q3 2002 the growth rate of average pensions, high in previous periods, subsided. Income from social insurance benefits rose 1.4% from Q3 2002. Despite the caps adopted in the Budget social insurance benefits exceeded the values recorded last year. In total, social benefits went up nominally over 2%.

The worsening of the price relations in agriculture contributed to a renewed decline in farmers' nominal income. At the same time the speeding up of the growth rate stimulated improvement in the rate of income from registered non-agricultural business "for own account" and income from property.

In total, nominal gross disposable income rose about 1.5% from Q3 2001. Given a drop in the quarterly CPI to 1.3% the purchasing power of households' disposable income was about 0.4% higher than in Q3 2001.

In Q3 2002 bank deposits of households declined PLN 2.2 billion, of which deposits with original maturities of up to 2 years by PLN 3 billion. At the same time there was a reduction of the very high in Q2 2002 growth of notes and coin in circulation (to PLN 0.7 billion, down from PLN 2.4 billion in the previous quarter). Much higher than in Q2 2002 was the increment of household loans (PLN 2.7 billion, compared to PLN 0.9 billion). Consequently, net household monetary savings decreased in Q3 2002 by PLN 4.3 billion (in Q2 2002 having gone up PLN 0.3 billion, in Q1 2002 - PLN 0.8 billion). Compared to Q3 2001 financial savings outside the banking system almost tripled, but total financial savings declined over 40%. Non-financial savings were about 5% lower, and total **household gross savings** were about 20% lower than the year before.

In these circumstances the growth of **personal consumption** continued to be considerably higher than the growth of the purchasing power of household income. The relatively high consumption growth was maintained thanks to (apart from the drop in savings) a continued relatively high growth of income earned outside the formal economy and a further lengthening of the period from earning an income to its spending (up went the share of consumption funded by income earned in previous quarters). Personal consumption in Q3 2002 was about 3% higher than the year before. The maintaining of the consumption rate is also illustrated by growth in retail sales at medium-sized and large trade enterprises (to 3.9%, as opposed to 0.8% in Q2 2002).

Based on data about construction sector output and supply of investment goods it is estimated that the scale of decline in **fixed investments** has shrunk. The level of completed new construction (investment) projects in medium-sized and large enterprises in the period of Q1-Q3 2002 was 11.9% lower than the year before, and in the 1<sup>st</sup> HY 2002 - 15.5% lower. The drop in production sold of industrial enterprises manufacturing mainly investment goods went down from 6% to 3% (respectively). The growth of investment imports in total imports increased.

### *Situation of public finances*

Q3 2002 witnessed, just as in the corresponding period of previous years, a relatively low expansion in the government budget deficit. Its ratio to the GDP stood at about 2.3%, as opposed to 1.7% in the corresponding period of the previous year. However, deficit performance compared to plan for the whole year was much higher at the end of September 2002 than the year before.

Central government budget revenues in Q3 2002 definitely outperformed the revenues earned in the corresponding period of the previous year. This largely resulted from the fact that the NBP out-of-profit payment (usually credited to the Budget in June) this time was made in the first days of July.

Moreover, total tax income in Q3 2002 was 7.7% higher than in the corresponding period of the previous year. However, its growth rate was lower than in the previous quarters of 2002. This was primarily rooted in lower indirect tax revenues and also (to a lower extent though) corporate income tax revenues. The performance of indirect tax revenues after three quarters of this year approximated last year's, although in nominal terms the revenues were PLN 6.2 billion higher. The

Table 2

## Central government budget performance

	Q1-Q3			Q3 2002	Completion	
	2001	2002		Q3 2001 = 100	2001 completion	2002 plan
	PLN					
			%			
REVENUES, of which:	102,775.5	104,392.2	101.6	112.1	73.1	71.9
Tax revenues	84,740.1	92,636.7	109.3	107.7	71.1	70.3
– indirect taxes	60,093.5	66,339.1	110.4	107.6	72.9	72.6
– corporate income tax	8,991.7	10,114.1	112.5	108.2	68.0	73.1
– personal income tax	15,642.1	16,186.1	103.5	107.8	66.7	61.0
Non-tax revenues	18,035.4	11,755.5	65.2	145.4	84.2	87.7
EXPENDITURES, of which:	124,640.5	133,538.9	107.1	114.2	72.1	72.1
Debt service	14,624.4	16,832.9	115.1	124.4	70.0	65.5
Grant for the Labour Fund	1,843.3	2,828.7	153.5	411.3	69.6	77.8
Grant for the Social Insurance Fund	15,105.0	19,524.0	129.3	157.3	70.2	71.6
DEFICIT	-21,865.0	-29,146.7	133.3	138.1	67.6	72.9
Domestic financing	23,441.1	25,901.0	110.5	48.4	53.7	66.7
Treasury bills	6,632.1	9,494.7	143.2	-120.3	61.5	162.3
Bonds	13,616.7	21,802.1	160.1	93.2	50.8	81.9
Privatisation revenues	2,606.8	995.0	38.2	49.9	40.2	15.1
Foreign financing	-1,576.1	3,245.7	*	*	13.9	275.1

Source: Ministry of Finance.

VAT tax revenues obtained during the first three quarters of this year, of PLN 42.7 billion, allowed to release the funds earmarked in the Budget on a contingent basis<sup>2</sup>. The main item among those was the amount of PLN 350 million earmarked for rises in teachers' salaries, whose implementation indeed started in October 2002.

Higher than the year before were also Q3 2002 PIT revenues. However, after three quarters of this year the performance of revenues on this account compared to plan continued to be low, which was connected with the low growth rate of disposable income and lower than assumed in the 2002 Budget revenues from Lump-Sum Tax on some Monetary Capital Gains.

Central budget spending in Q3 2002 was 14.2% higher than in the corresponding period of the previous year, i.e. it showed the highest growth of the three quarters of this year. The growth rate of primary spending, i.e. budget spending net of the cost of public debt servicing stood in Q3 2002 at 113.1%, in real terms –110.6%. It consisted among others of high grants for the Labour Fund and Social Insurance Fund. Relative to the GDP primary spending stood in Q3 2002 at 21.1%, while the year before it amounted to 19.2%, which implies increased central government budget share in creating domestic demand.

<sup>2</sup> Art. 47 of the Year 2002 Budget Act authorises the specific budget reserve to be released in support of implementing the third phase of education reform, for increasing the ARR (Agency for Agricultural Markets) grant and monies for financing national roads and motorways, provided that by the end of Q3 2002 an additional amount of PLN 625 mln is raised from VAT, over and above the amount of PLN 41.7 billion.

### Box 1. Draft 2003 Budget Act

On September 30 2002 (i.e. within the statutory deadline) the government presented to the Sejm of the Republic of Poland the *Draft Budget Act for the year 2003*.

The 2003 Budget is based on two fundamental premises:

- 2.3% year average CPI growth
- 3.5% GDP growth.

The government draft estimates central government budget revenues at PLN 154.8 billion, expenditures: PLN 193.5 billion and deficit PLN 38.7 billion, thus corresponding to 4.9% of the GDP estimated for 2003.

The growth of budget revenues envisaged for 2003 – 6.7% in nominal terms and 4.3% in real terms – is to result among others from of the next year's GDP growth, estimated higher than this year's, expected one-off revenues from the restructuring charge and "tax abolition", expected improvement of tax collection and higher NBP out-of-profit payment. Higher budget revenues are also to be facilitated by higher tax burdens through retaining unchanged tax brackets for the PIT and the government's withdrawal from the preannounced reduction of the corporate income tax rate to the level of 24% (the rate will ultimately be reduced from the current level of 28% to 27%).

The next year's budget spending compared to this year's will be nominally 4.5% higher (2.2% in real terms). This is tantamount to a departure from the principle (as adopted by the previous Minister of Finance) of limiting an annual growth of spending to 1% in real terms. In 2003 it is assumed that the share of statutorily rigid expenditures in total spending will go up to 67.8%, while in 2002 this share may be 66.3% (65.2% in 2001).

In view of the assumed in the draft budget acceleration of the 2003 growth rate the reduction of the central government budget deficit planned for 2003 to 4.9% of the GDP from 5.4% this year constitutes insufficient progress in restoring budget equilibrium.

On its part the next year's economic deficit of the public finance sector is to be 4.7% of the GDP compared to this year's level of 5.5% of the GDP\*, as projected by the Ministry of Finance. Maintaining so high a deficit for another year will result in a further expansion of central government public debt, which by year end 2003 is to achieve 50.4% of the GDP compared to 42% of the GDP in 2001. Additionally, a further increase of the central government public debt (by 2.1% of the GDP to 52.5% of the GDP) will result from guarantees and warranties issued by the state.

In sum, the picture of fiscal policy which emerges from the 2003 draft budget act can hardly be regarded as conducive to sustainable economic growth.

\* The Ministry of Finance modified the procedure for calculating the economic deficit of the public finance sector. According to the present methodology the institutional scope of the sector was expanded by certain governmental agencies. Moreover, certain additional deficit-modifying factors have been taken into account, namely revenues from the restructuring charge on receivables from unpaid contributions to funds and costs of debt servicing paid to Open-ended Pension Funds in connection with their investment in Treasury securities.

It should be emphasised that central government spending, on the rise since early this year, is accompanied by adverse changes in its structure. An increasing role is played by social expenditures. From January to September 2002 the central government budget transferred 15.1% more grants to special purpose funds and benefits for natural persons than in the corresponding period last year. Fixed investments of the Budget in this period went up merely 4.5%. In consequence, the share of social spending in total spending rose by the end of September 2002 to 34.8% (32.4% the year before), with a simultaneous drop in the share of fixed investment allocations to 2.6% in 2002 (from 2.7% in the previous year).

A slower (compared to the 1st HY 2002) growth of the Budget deficit in Q3 2002 enabled to cut down on the issue of T-bills and bonds on the domestic market. The net cash value of Treasuries issued in the period was 32% lower than the year before. Foreign sources played an important role in the coverage of central budget obligations. In July and September 2002 the Budget received an additional injection of about USD 1.4 billion from the sale of USD-denominated bonds on foreign markets. However, by the end of September 2002, in view of low privatisation revenues, central government borrowing requirements were still much higher (by almost 55%) than in the same period last year.

After three quarters of this year the central budget deficit plus payouts of compensation to budget sector employees and pensioners and less insurance contributions to open-ended pension funds burgeoned to 4.5% of the GDP (PLN 24.1 billion) compared to 3.8% GDP (PLN 19.9 billion) in the corresponding period of the previous year.

An adverse situation has also been noted this year in other than the central government budget segments of the public finance sector, mainly special purpose funds. Due to low remittances of insurance contributions the Social Insurance Fund has already used up the approved borrowing limit, but its arrears with respect to Open-ended Pension Funds were also going up. Despite a much higher central budget grant than last year the indebtedness of the Labour Fund to the banking system was going up, as did its commitments to employers. A shortage of funds for disbursement was also displayed by the Guaranteed Employee Benefit Fund, which had been given statutory authorisation to draw bank loans<sup>3</sup>, thus becoming a new source of public finance sector debt. Moreover, the Agency of Agricultural Markets has also been affected by financial problems this year and its expenses (given insufficient revenues) have been largely funded by bank credit.

Combined with a high forecasted deficit of budget units of local governments this demonstrates that the economic deficit of the public finance sector<sup>4</sup> can by year end expand to 5.5 - 5.8% of the GDP compared to 4.8% of the GDP, which was planned at the beginning of the year.

## 1.2. Domestic supply

According to initial estimates, in Q3 2002 added value climbed 1.8%. After five quarters of decline added value in industry went up 3.3%. The decline of added value in construction went down to 6.5% from 10.3% in the previous quarter. The growth of added value in commercial services (3.3%) evolved at a level approximating the one noted in Q2.

Industrial output sold (in large and medium-sized enterprises) in Q3 2002 was 3.3% higher than in the corresponding period of the previous year (in Q4 last year its decline was 2.6%, in Q1 2002 1.6% and in Q2 0.4%). The output of the manufacturing sector was 4.3% higher than in Q3 last year. The growth of industrial output followed from acceleration in the growth of domestic demand and still high growth of exports. The scale of decline in investment demand was reduced. On the other hand the growth of consumer demand stayed at a similar level as in the 1<sup>st</sup> HY 2002. The decline in the output of enterprises manufacturing mainly investment goods slipped in Q3 2002 to about 3% from about 6% in Q1 2002 and 5% in the 1st HY 2002. The rise in the output of enterprises manufacturing consumer goods was about 3% (in Q1 also about 3% and in the 1st HY – about 2%).

The growth rate of sale in divisions of the commercial services sector was high. The sale of transport services increased compared to Q3 last year by over 9%, and communication – by over 10%. Retail sales in large and medium-sized enterprises increased 3.9%. Wholesale trade sales went up (in current prices) over 12%. According to initial information the situation of insurance companies improved, but the situation of other financial intermediation, property and business services deteriorated.

The rising procurement of livestock and milk and high headcount of pigs do confirm earlier projections that the growth of livestock production would be maintained in 2002. But according to the so-called pre-earnings estimate of September 2002, this year's main crops will however be lower than last year, as will be crop production. In total, it is estimated that in 2002 the growth of global and added value in agriculture will be maintained, although it will be more sluggish than in 2001.

<sup>3</sup> The possibility of drawing bank loans by the Guaranteed Employee Benefit Fund was introduced in July 2002 under the *Employee Claims Protection under Employer Insolvency Act* of 29<sup>th</sup> December 1993.

<sup>4</sup> Cash deficit of the public finance sector adjusted by: payout of compensation for budget sector employees and pensioners, insurance premiums remitted to open-ended pension funds and to the Demographic Reserve Fund.

Q3 2002 witnessed a drop of added value in construction. While in Q1 2002 the output of medium-sized and large construction enterprises was 15.6% lower than in the corresponding period last year, in the 1st HY it was 13.4% lower, and after three quarters 9.8% lower. New construction in Q1-Q3 2002 was 11.9% lower and refurbishment 3.9% lower than in the corresponding period last year. The lower drop in demand for refurbishment work, which is largely carried out by small enterprises, has resulted in a lower drop of total construction output than the one recorded for large and medium-sized enterprises.

## 2

## Foreign trade, balance of payments

In Q3 2002 the current account deficit of the balance of payments slipped below 1 billion euros (fig. 1). Compared to the corresponding quarter of the previous year the negative current account balance narrowed almost 150 million euros, compared to an almost 760 million euro drop in Q2 this year. The improvement of the current account balance once again resulted from a narrowing of the trade deficit, which has been going down y/y since Q3 2000. The remaining components of the current account (except unclassified current transactions, whose balance was maintained at a similar level as for Q3 2001) were, on the other hand, conducive to the widening of the current account deficit, namely: the negative balance of income and services increased, while the positive balance of transfers decreased.

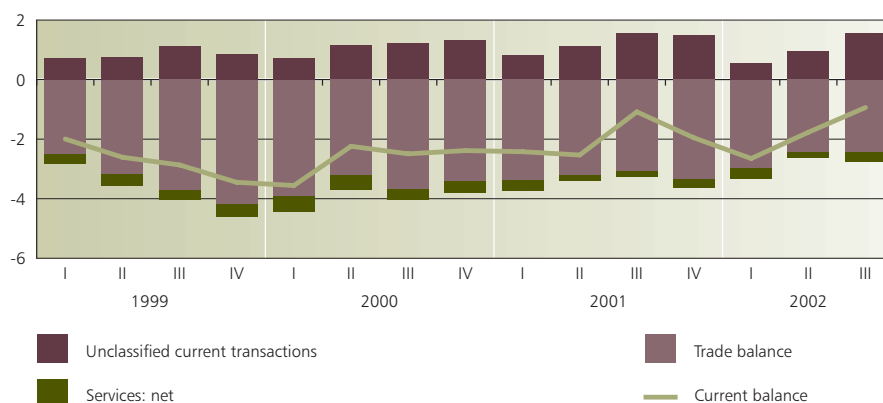
The ratio of current account deficit to GDP in Q3 2002 remained on a similar level as in the previous quarter and stood at around 3.7%.

Statistics on a cash basis testify to a Q3 2002 strengthening of the growth trend in Polish exports started in the previous quarter (figure 2). In the period from July to September 2002 the value of export revenues increased 5.5% on the corresponding period of the previous year, while in Q2 2002 – only 1% respectively. Growth in export revenues was accompanied by a 1.5% drop of import payments. This was thus the fifth quarter in turn in which the value of import payments went down. In Q3 2002 the trade deficit decreased almost 630 million euros (and almost 1.8 billion euros since the beginning of 2002).

GUS data (fig. 3) on the other hand point to a Q3 2002 weakening of the growth rate in exports. Their value in the period from July to September 2002 went up merely 2% on the corresponding period of the previous year (while in Q2 2002 it increased 8.7%). There was also a similar trend in imports, whose value increased merely 1% (Q2 2002 saw its 5.8% growth).

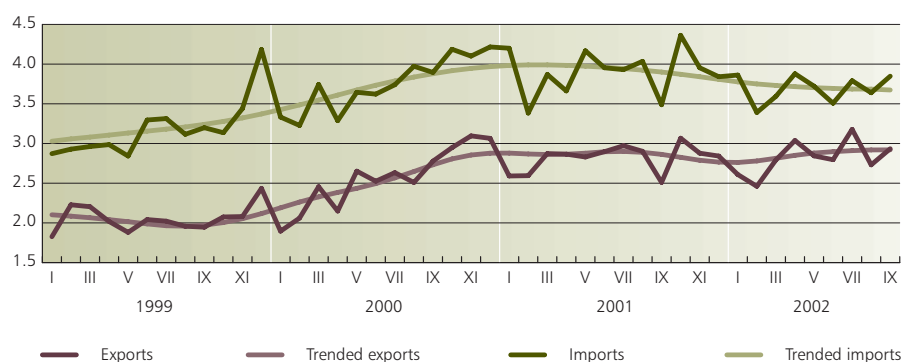
In the Eurozone economy, particularly in Germany (Poland's biggest trade partner) there were no clear symptoms of an improved outlook in the 1st HY (table 3). Under a further contraction of domestic demand, in particular a continued steep decline of investments in Germany<sup>5</sup>, the sale of

**Figure 1**  
**Current balance 1998–2002 (quarterly figures, billion EUR)**

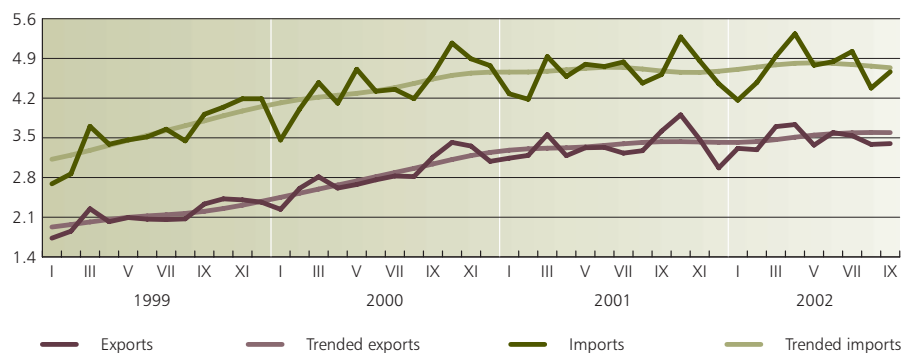


Source: NBP data.

<sup>5</sup> Investments in Germany have been going down since Q1 2001, i.e. over six successive quarters. This is the longest and at the same time the deepest drop of this component of domestic demand since reunification.

**Figure 2****Foreign trade, cash basis (monthly figures, billion euros)**

Source: NBP data.

**Figure 3****Foreign trade, customs statistics (monthly figures, billion euros)**

Source: GUS data.

**Table 3****Selected economic indicators, Eurozone and Germany**  
(percentage change on corresponding period previous year, constant prices)

	Eurozone				Germany			
	2001		2002		2001		2002	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Gross domestic product	1.3	0.4	0.3	0.7	0.4	0.1	-0.2	0.1
Domestic demand	0.7	-0.2	-0.2	-0.3	-1.4	-1.6	-2.1	-1.9
Personal consumption	1.8	1.6	0.6	0.3	1.5	1.6	-0.5	-1.1
Social consumption	2.2	1.5	2.1	2.1	1.3	-0.1	1.1	0.9
Gross fixed investments	-1.6	-2.5	-2.8	-3.1	-6.7	-7.0	-5.5	-6.4
Movements in inventory*	-0.3	-0.5	-0.3	-0.2	-1.2	-0.9	-1.3	-0.5
Exports	1.4	-2.6	-2.8	0.1	5.2	-0.5	0.2	1.8
Imports	-0.3	-4.4	-4.5	-2.6	-0.3	-5.6	-5.4	-3.9
Added value in industry	0.8	-1.8	-2.1	-0.6	-0.9	-2.4	-3.0	-0.9
Added value in construction	-0.7	-0.6	-0.8	-1.2	-5.8	-4.9	-2.8	-4.8

\* % PKB

Source: Eurostat.



**Figure 4**

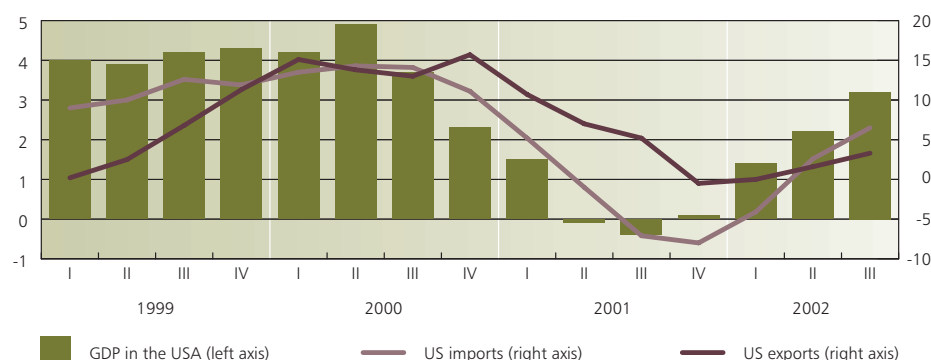
**Polish exports to Germany vs. Germany's foreign trade**  
(% change on corresponding period previous year, EUR)



Source: CIHZ and Statistisches Bundesamt data.

**Figure 5**

**GDP and import demand in the USA and German exports**  
(% change on corresponding period previous year, constant prices)



Source: Bloomberg and Eurostat data.

Polish goods to that country decreased 0.5% after the first nine months this year compared to last year (in the corresponding period of the previous year – it increased 20.3%.) It is noteworthy though that Polish exports to Germany were decreasing over the nine months of this year much slower than German total imports (cf. fig. 4). This followed from a considerable share of producer imports in German imports from Poland.

Due to a definitely export oriented character of the German economy, the growth of exports recorded in Germany in Q2 2002 (table 3) was construed as an important symptom of business cycle improvement. A further acceleration of the growth rate of German exports should be expected in Q3 and Q4 2002 – in conjunction with a growth of US import demand<sup>6</sup> (fig. 5). Up to now, the growth of German exports resulted from sales to Russia and China. A pickup in German exports, due to its large share of producer imports, may trigger a growth of import to that country, including also from Poland.

Adverse trends for Polish foreign trade occurred in Eastern markets. Q3 2002 saw a profound decline in the growth rate of Russia's import demand, which was influenced by the strengthening

<sup>6</sup> In Q3 2002 US import demand increased 6.5% on the previous year (while in Q2 2002 its growth was merely 2.6% and in Q1 2002 it decreased 4.1%.) It can prove an important growth impulse for the German and European economy.

of the real exchange rate of the ruble. The value of Russian imports (from outside the Commonwealth of Independent States) went up in July-August this year by less than 5%, while in the 1<sup>st</sup> HY 2002 it rose almost 20%. The (already pointed to) „oversensitivity”<sup>7</sup> of Poland’s Russian exports to movements in that market caused the Q3 2002 Poland’s Russian exports to remain at an unchanged level compared to the previous year (while in the 1<sup>st</sup> HY 2002 they increased almost 40%). The growth rate of Polish exports to the Ukraine has also clearly decreased.

Physical statistics data show that a small drop of exports in Q3 2002 (just like the acceleration of its growth rate in Q2 this year) resulted primarily from an increase in the sale of ships. In the period from July to August 2002 the value of ship exports went up 2/3 on the corresponding period of the previous year (in Q2 2002 – by over 50%). The large growth of imports (almost three times), which accompanied the growth of the exports, probably means that selling ships abroad was first of all realised through repair contracts<sup>8</sup>. The scale of this phenomenon is portrayed by the Q3 2002 increase in the share of ships in Polish exports to nearly 8% (up from 5.8% in the corresponding period of the previous year) and to 4.5% in imports (up from 2.4% respectively). If, however, the ship trade is left out due to its specificity (resulting from the fact that ship repairs are not connected with the current world economy outlook), the value of Polish Q3 exports will turn out to have declined 1% (instead of growing 1.2%), while imports will have declined 4% (instead of a 1.6% drop)<sup>9</sup>.

In most of the remaining groups of exports, including machinery and transport equipment, there were adverse changes in the period under analysis. Whereas these exports increased 12% in the 1<sup>st</sup> HY 2002, Q3 2002 saw their 3.3% drop. In the groups of goods which at year end 2001 and in 1<sup>st</sup> HY of 2002 displayed a relatively high growth rate of sales, a drop was recorded in the value of exports (TV-sets) or pronounced slowdown in their growth (combustion engines, car parts). Stagnation in the European car market continued to exacerbate adverse trends in motor car exports. Car export sales in Q3 2002 decreased over 1/3 compared to the corresponding period of the previous year.

The value of exports for the remaining groups of processed goods and unprocessed products remained at a similar level as last year. However, in the case of iron and steel and clothing there were considerable drops in export value. The value of furniture sales also continued to drop, additionally depressed in Q3 2002 by a drop in import demand in Eastern markets. A further drop in the value of coal exports in the analysed quarter of 2002 was compensated for by growing sales of refined petroleum products.

A high degree of correlation between the growth rate of Polish exports and imports (fig. 6) is the effect of the Polish economy’s integration with the world economy. This process is leading to a gradual uniformity of the structure of Poland’s imports and exports. This is demonstrated by a growing share of industry internal trade in Poland’s foreign trade (fig. 7) consisting in a simultaneous export and import of the same groups of products. In periods of economic recovery of our major trade partners this enables an acceleration of the growth rate of exports and, consequently, our economic growth rate. On the other hand in periods of lower business cycles in those countries this creates a recession contagion threat to the Polish economy. A drop in external demand thus leads not only to the lowering of the growth rate of exports, but also to a weakening of the growth rate of imports, due to the fact that a large part of imports are producer imports.

These correlations are strongest in the case of manufacturing, and especially in the group of machinery and transport equipment. For example, a drop in car exports, and recently also in TV-sets, contributed to a drop in the importation of their parts. A similar situation occurred also in other groups. In total, the value of imported machinery and transport equipment (except ships) went down

<sup>7</sup> The oversensitivity in question consists in the fact that Polish exports to Russia in the latter’s periods of import demand growth rise faster than total Russian imports, while in periods of lower demand – they decrease faster than it would follow from the weakening of the growth rate of Russian imports. Most likely this follows from the business structure of Polish exports, dominated by medium-sized and small enterprises.

<sup>8</sup> The classification of almost 60% of such exports under the item “Other ships, including warships” means that the exports were carried out by the Navy Shipyard in Gdynia.

<sup>9</sup> If a similar adjustment is also made for Q2 2002 earnings, then it turns out that after the elimination of the growth of trade in ships exports would increase in that period by 6.4% (instead of 8.6%), while imports would go up 2.4% (instead of 5.8%).

Table 4

## Export growth by major commodity groups

(in EUR, percentage change on corresponding period previous year)

	2001			2002			2002		
	Q2	Q3	Q4	Q1	Q2	Q3	VII	VIII	IX
<b>Total</b>	<b>22.7</b>	<b>15.4</b>	<b>5.5</b>	<b>4.2</b>	<b>8.7</b>	<b>2.0</b>	<b>9.5</b>	<b>3.4</b>	<b>-6.1</b>
<b>Unprocessed</b>	<b>26.6</b>	<b>14.6</b>	<b>7.6</b>	<b>-4.8</b>	<b>-5.5</b>	<b>2.9</b>	<b>3.5</b>	<b>2.7</b>	<b>2.6</b>
Foodstuffs and agriculture	22.7	11.1	5.4	-0.4	0.7	-1.0	9.1	-6.3	-6.1
Raw materials	2.2	10.9	-0.1	-5.5	-0.4	5.4	13.9	10.9	-7.0
Mineral fuels	47.3	22.9	15.5	-9.9	-14.8	8.0	-9.0	13.0	22.5
<b>Processed</b>	<b>22.0</b>	<b>15.5</b>	<b>5.1</b>	<b>5.8</b>	<b>11.5</b>	<b>1.8</b>	<b>10.8</b>	<b>3.6</b>	<b>-7.6</b>
Chemicals	17.4	-1.8	-6.6	-4.9	5.0	10.6	7.8	7.7	16.7
Machinery and transport									
equipment	29.9	23.3	8.1	8.9	18.0	-1.4	14.4	5.2	-18.2
Other industrial	16.6	12.2	4.6	4.9	6.9	3.2	8.4	1.7	-0.2

Source: CIHZ data.

Table 5

## Import growth by major commodity groups

(in EUR, percentage change on corresponding period previous year)

	2001			2002			2002		
	Q2	Q3	Q4	Q1	Q2	Q3	VII	VIII	IX
<b>Total</b>	<b>7.6</b>	<b>5.8</b>	<b>-1.6</b>	<b>1.4</b>	<b>5.8</b>	<b>1.0</b>	<b>3.8</b>	<b>-2.0</b>	<b>1.0</b>
<b>Unprocessed</b>	<b>15.6</b>	<b>-5.1</b>	<b>-11.3</b>	<b>-3.5</b>	<b>-12.0</b>	<b>-2.9</b>	<b>-12.0</b>	<b>-5.7</b>	<b>9.9</b>
Foodstuffs and agriculture	24.4	-4.6	8.9	9.8	-14.1	2.1	-10.8	0.0	19.1
Raw materials	3.1	-6.8	-4.6	-3.9	-2.1	2.9	7.2	-6.5	8.4
Mineral fuels	15.4	-4.8	-23.0	-10.9	-13.9	-7.4	-18.6	-8.2	5.7
<b>Processed</b>	<b>5.7</b>	<b>8.7</b>	<b>0.9</b>	<b>2.7</b>	<b>10.4</b>	<b>2.0</b>	<b>7.5</b>	<b>-1.0</b>	<b>-0.9</b>
Chemicals	8.7	8.3	8.2	7.4	6.1	2.6	6.6	-0.1	1.0
Machinery and transport									
equipment	1.1	9.6	-3.1	-1.2	16.7	2.7	10.7	0.3	-3.3
Other industrial	10.4	7.8	3.0	5.2	4.8	0.9	4.1	-3.0	1.3

Source: CIHZ data.

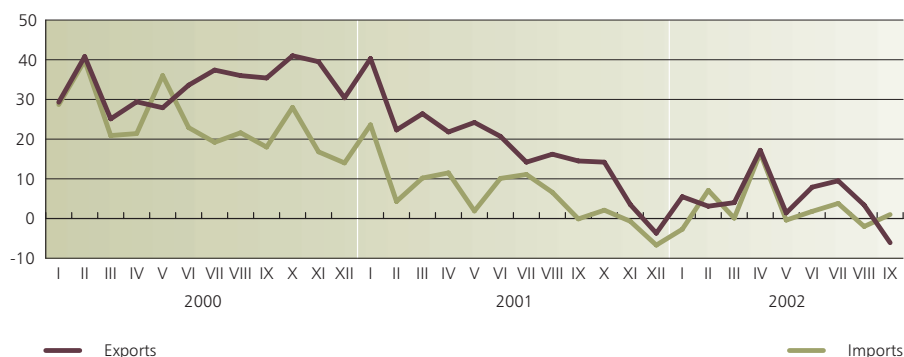
in Q3 2002 by 4% with respect to the corresponding period of 2001. Considerable drops have also been recorded in the import of computers, telecommunication equipment and cars, which can be indicative of a further weakening of both investment demand and producer demand.

The slowdown of the growth rate of imports in Q3 2002 was also contributed to by a drop in the value of imported pharmaceuticals and mineral fuels – oil (connected mainly with a drop of its import volume) and natural gas (connected with its falling prices).

Poland's terms of trade in Q3 2002 were still improving (fig. 6 and 7 and table 6). The depreciation of the real effective zloty rate clearly deepened compared to Q1 and Q2 this year.

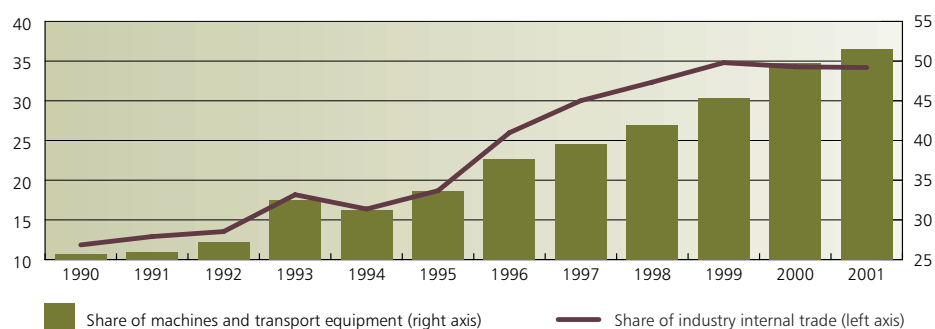
The definitely better than last year terms of price and cost competitiveness resulted from the following factors:

**Figure 6**  
**Growth rate of Polish exports and imports**  
 (percentage change on corresponding period previous year)



Source: GUS data.

**Figure 7**  
**Share of machines and transport equipment (SITC7) in exports and industry internal trade**  
**in Poland's EU trade in 1990–2001**  
 (as % of total trade with EU)



Source: own calculations on the basis of Eurostat data.

**Figure 8**  
**Zloty real effective exchange rate 1993–2002 (quarterly figures, 1993 = 100)**



Source: NPB data.

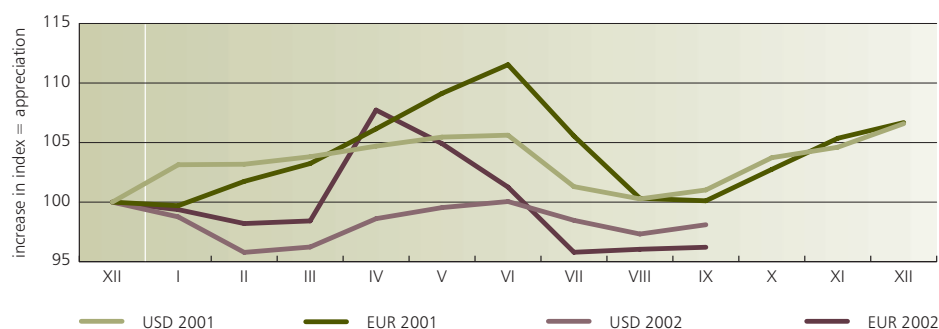
**Table 6****Zloty effective exchange rates in 2001-2002 (percentage change on previous quarter)**

Zloty rate index	2001				2002		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Nominal	5.6	6.9	-6.7	2.7	0.3	-1.5	-7.8
PPI deflated	3.8	6.0	-6.3	2.9	-0.1	-1.5	-7.1
Unit labour cost deflated	9.0	4.4	-10.9	9.5	-2.6	-3.9	b.d.
Export price deflated	3.1	0.2	-1.1	-1.1	2.8	-1.9	b.d.

„+” – equals zloty rate appreciation,

„b. d.” – data not available.

Source: NBP data.

**Figure 9****Zloty REER\* against the currencies of our main commercial partners in 2001–2002 (December previous year = 100)**

\* PPI deflated

Source: NBP data.

- nominal depreciation of the zloty exchange rate (stronger vis a vis the euro than vis a vis the dollar),
- continuation of disinflation trends in the domestic market,
- faster growth of labour productivity compared to the growth of wages in the economy.

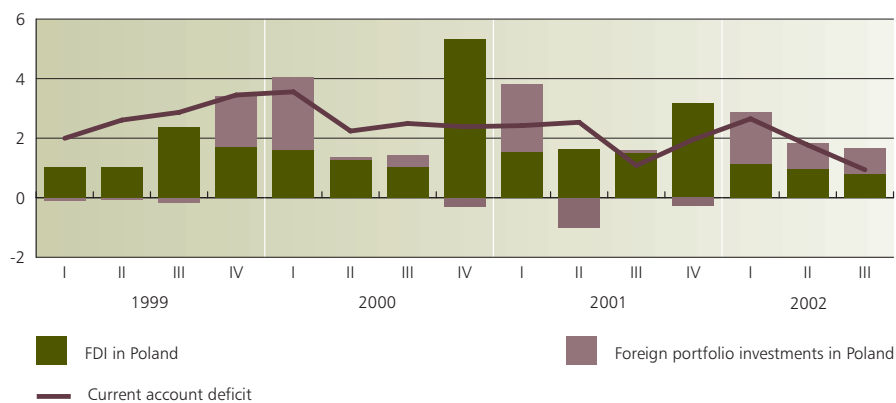
The improvement of competitiveness should go some way towards mitigating the negative impact of the recession in the world economy on Poland's foreign trade in the 2nd HY 2002 and next year.

The structure of current account deficit financing improved in Q3 2002. The deficit was financed in 65% by an inflow of long-term foreign capital in the shape of FDI equal to EUR 0.6 billion (compared to 54% in Q2 2002 and 43% in Q1 2001)<sup>10</sup>. However, the rise in the share of current account deficit financing by means of capital inflows resulted from a significant narrowing down in that period of the current account deficit, with a continued drop in FDI capital. However, these investments had a more healthy structure in Q3 2002 due to a drop in the share of loans in this category of capital to 7.0% from 24.9% in Q2 2002 and 16.7% in the corresponding period of the previous year.

Also, the importance of net portfolio investments as a source of funding for the current account deficit increased in Q3 2002. The reason was a high (compared to the previous quarter 2002 and Q3 2001) inflow of foreign capital invested in Treasuries. On a net basis it amounted to EUR 591 million compared to the inflow of EUR 399 million in the previous quarter and outflow of EUR 11 million in Q3 last year.

<sup>10</sup> In Q3 2001 this index stood at 136%.

**Figure 10**  
**Current account deficit and inflow of foreign investments**  
**in 1999–2002 (quarterly figures billion USD)**



Source: NBP data.

**Table 7**  
**Selected safety ratios**

Safety ratio	2001		2002		
	Q3	Q4	Q1	Q2	Q3
Current balance/GDP (%)	-4.4	-4.1	-4.1	-3.7	-3.7
Trade balance/GDP (%)	-6.8	-6.6	-6.3	-6.0	-5.7
FDI/Current balance (%)	136.2	160.8	43.1	53.6	64.5
(Current balance less FDI)/GDP (%)	0.8	2.2	-3.2	-1.7	-0.7
Foreign debt service/exports (%)	40.6	79.1	42.2	41.4	-
Official reserve assets – in import months	7.4	8.0	8.0	8.0	7.9

Based on an analysis of selected safety ratios an assessment of the current external disequilibrium status was conducted (table 7). All the ratios, apart from official reserve assets in import months, are better than in the previous quarter. The ratio of official reserve assets in import months, despite deterioration, is still fairly high.

### 3

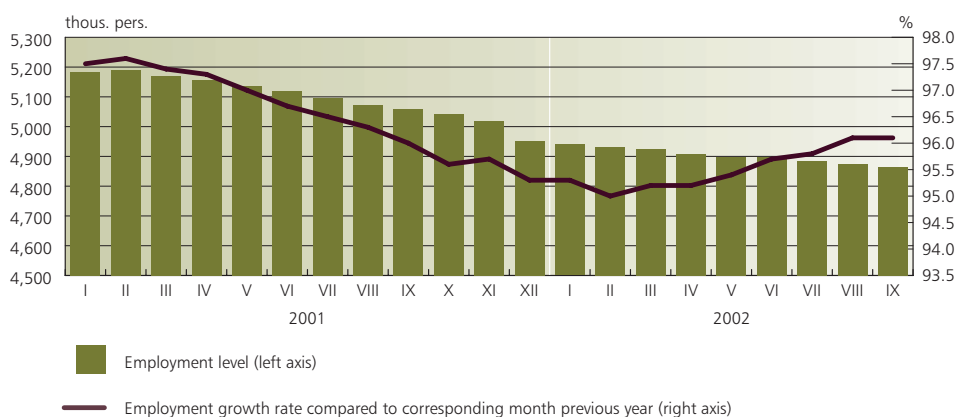
## Labour market

The situation in the labour market slightly improved in Q3 2002 compared to the 1<sup>st</sup> HY 2002. Employment in the enterprise sector may have been still declining, but the pace of its drop slightly subsided compared to the 1<sup>st</sup> HY. In Q3 2002 average employment in the enterprise sector fell 4.4% y/y, while in the 1<sup>st</sup> HY it fell 4.8%. In the period from January to September 2002 more unemployed were registered than the year before, but at the same time much more unemployed were deregistered, including in connection with returning to work.

The waning rate of employment shedding is also portrayed by much lower than the year before monthly drops of employment, recorded in successive months of 2002 (fig. 12).

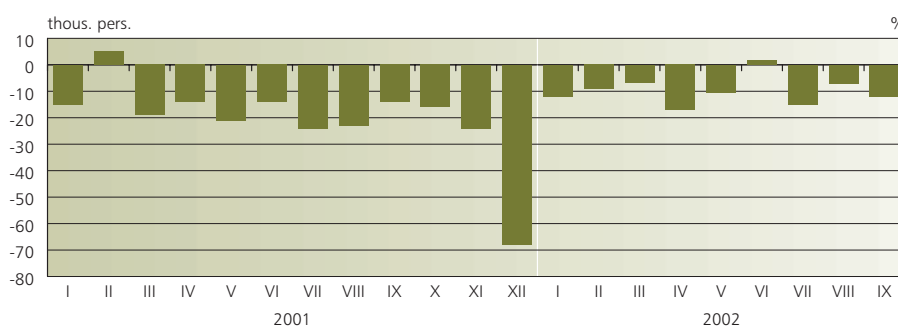
Employment reduction was accompanied by growth in the number of unemployed. Over a year, i.e. from September 2001 till September 2002 average employment in the enterprise sector decreased 196 thousand and the number of unemployed increased by almost as much (192.2 thousand).

**Figure 11**  
Average employment in the enterprise sector

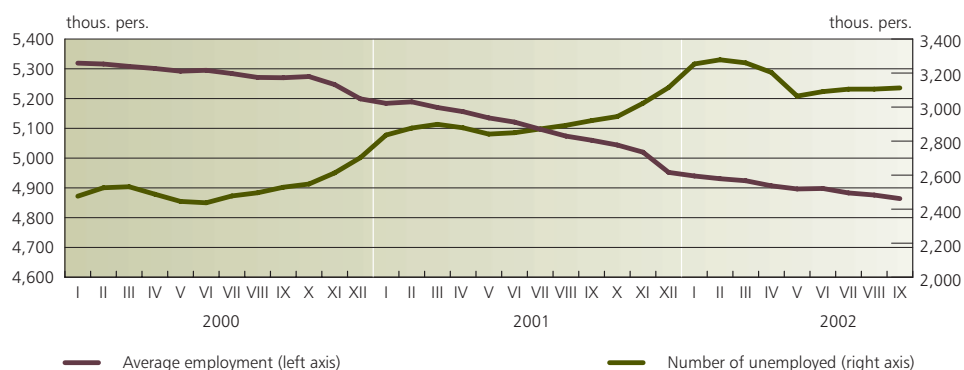


Source: GUS data, NBP calculations.

**Figure 12**  
Changes in employment compared to previous month



Source: GUS data, NBP calculations.

**Figure 13****Average unemployment in the enterprise sector and number of unemployed**

Source: GUS data, NBP calculations.

**Table 8****Changes in average employment in the enterprise sector and registered unemployment (thousand persons)**

Period	III-VI			VI-IX		
	2000	2001	2002	2000	2001	2002
Change in average employment	-13.0	-49.0	-26.0	-25.0	-71.0	-34.0
Change in number of unemployed	-94.3	-49.5	-169.0	+ 91.4	+71.2	+21.7

Source: GUS data, NBP calculations.

**Table 9****Migration of population and the unemployment rate in selected EU countries and in Poland**

Country	Balance of migration in 1999 in persons	Unemployment rate in July
	Balance	2002 – percentage
Austria	4,500	4.1
Belgium	11,606	6.9
Finland	4,451	9.3
France	18,703	8.9
Greece	12,478	x
Spain	42,316	11.3
Ireland	18,703	4.5
Germany	46,980	8.3
Portugal	15,244	4.5
Sweden	10,940	4.9
Italy	103,240	8.7
<b>Poland</b>	<b>-14,000</b>	<b>17.5</b>
European Union	x	7.7

Source: K. Głębicka: *Polityka społeczna w UE [in Polish: Social policy in the EU]*, Warsaw 2001; Demographic Yearbook 2001; Eurostat.

It appears from table 8 that compared to the situation the year before both in Q2 and Q3 2002 layoffs were smaller. Lower was also the rise in registered unemployment. On the other hand, bigger layoffs and higher rise in the number of unemployed in Q3 than Q2 in all the years presented in the table is a seasonal phenomenon.



Table 10

## Employment rate in EU and accession countries in 1999–2001

Country	Employment rate (%)		
	1999	2000	2001
Belgium	58.9	60.9	59.7
Denmark	76.5	76.4	75.9
Germany	64.8	65.3	65.7
Greece	55.4	55.9	55.6
Spain	53.6	56.0	57.5
France	60.4	61.7	62.7
Ireland	62.5	64.5	65.1
Italy	52.0	53.4	54.3
Luxembourg	61.6	62.7	63.0
Holland	70.9	72.9	74.1
Austria	68.2	67.9	67.8
Portugal	67.4	68.1	68.8
Finland	67.4	68.1	69.1
Sweden	70.6	71.1	n/a
United Kingdom	70.6	71.2	71.6
<b>Poland</b>	<b>57.5</b>	<b>55.1</b>	<b>53.8</b>
Bulgaria	b.d.	51.5	50.7
Cyprus	64.2	65.5	67.9
Czech Republic	65.6	64.9	65.0
Estonia	62.0	60.6	61.1
Hungary	55.4	55.9	56.3
Lithuania	65.0	60.1	58.6
Latvia	59.4	57.7	58.9
Romania	65.0	64.2	63.3
Slovenia	62.5	62.7	63.6
Slovakia	58.0	56.3	56.7

Source: Eurostat.

The number of state-owned enterprises over the three quarters of 2002 was reduced by 61 (drop by 3% compared to 7.4% the year before), but at the same time 16 495 commercial companies were created (9.3% growth compared to 8.1% the year before).

Initial results of the business sentiment survey in industry, construction and trade/distribution carried out by GUS in October 2002 demonstrate that entrepreneurs declared slightly less further employment shedding than the month before. At the end of September this year 1.8 thousand enterprises declared laying off in the near future of 58.3 thousand employees (2.4 thousand enterprises and 87.7 thousand employees the year before), of which 28.3% from the public sector (31% last year).

The unemployment rate at the end of Q3 2002 stood at 17.6% and was 0.2 pp lower than at the end of Q3 last year and 0.6 pp lower than at the end of Q1 this year.

The situation of Poland in terms of unemployment and employment compared to EU and accession countries is illustrated by tables 8 and 9.

### Box 2 Assessment of the impact of changes in the amended Labour Code on the EPL index\*

The most important changes introduced in the Labour Code include:

- simplifications concerning the reemployment of an employee after each contract termination or expiry (employers have been made exempt e.g. from the obligation of: issuing labour certificates to a person employed on the next contract, from conducting in such case preliminary medical examination and work safety training, if the employee in question is reemployed on the same post immediately after the termination of the previous contract,
- simplifications for small employers (among others exemption from the obligation of introducing work byelaws for employers with fewer than 20 employees, exemption from the obligation of creating a work safety service for those employing fewer than 100 persons and work safety commission for those employing fewer than 250 persons),
- changes in payment for sick leaves,
- changes in the organisation of worktime and principles of overtime payment,
- new labour contracts for replacements of absent employees,
- new principles of performing group layoffs and determining the entitlements to severance payments for employees affected by such changes (including a.o. the exemption of employers who employ fewer than 20 employees from the obligation of using the group employee layoff procedure in cases of dismissal for reasons on the side of the employer),
- limiting trade union privileges and limiting protection of union activists from being fired,
- more employer friendly principles of setting up an Enterprise Social Benefit Fund.

It follows from the Polish Labour Market Regulation Study conducted by the OECD that the Labour Code in force in 2000/2001 yielded an EPL of 2.0. To compare – the Czech Republic had an EPL of 2.1, Estonia 2.6, Hungary 1.7, Slovakia 2.4, Slovenia prior to the change of the Labour Code 3.5, after the change 2.3, Germany 2.5, France 3.0, UK 0.5, USA 0.2.

On the basis of detailed criteria of the degree of labour market regulation in Poland for particular regulation categories defining the EPL ratio an attempt was made to estimate to what extent the changes introduced in the new Labour Code created more flexibility in labour relations in Poland. The results of the assessment are as follows:

- changes in the Labour Code with respect to recurrent contracts will cause EPL reduction by about 3.5%,
- changes with respect to group layoffs will reduce the EPL index by about 12.5%.

In total, the EPL will thus lower around 16%.

This means that changes in the Labour Code may lead to reducing the degree of labour market regulation in Poland, as measured by the EPL rate, by 0.2-0.3 point to the level of 1.7-1.8.

\* The EPL (Employment Protection Level) index is calculated and published by the OECD for all OECD countries. Its values vary from 0 (liberal labour market) to 6 (fully regulated labour market). The higher the index value, the more restrictive labour market regulations are.

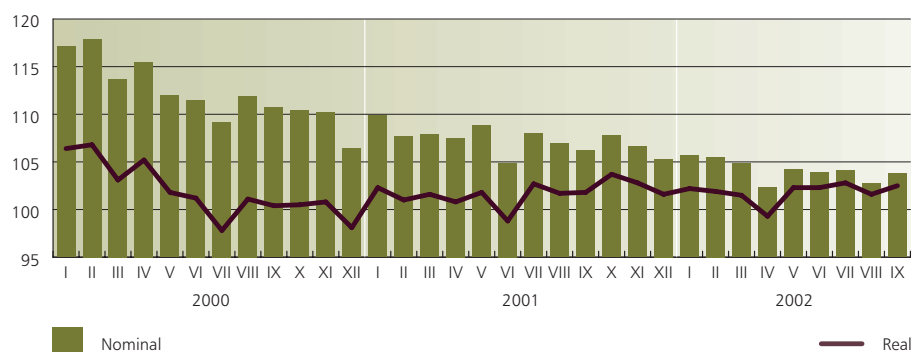
In Q3 2002 the Labour Code was amended<sup>11</sup>. New solutions will be phased in gradually (some of them only from 2003 on). They will contribute to making the labour market more flexible, which in the medium-term will help ease inflation pressure. The analysis of the impact of main changes in the Labour Code on the extent of labour market regulation in Poland is contained in Box 2.

In Q3 this year (like in the previous one) the rise in average nominal wages in the enterprise sector was much lower than the year before. However, the average growth rate of real wages was during the period similar to last year's due to a slowdown in the decline rate of inflation in Q3 2002 compared to the one recorded the year before.

However, compared to the 1st HY 2001 real wages in Q3 2002 were slightly higher (fig. 14) and the unemployment rate over 2 pp higher.

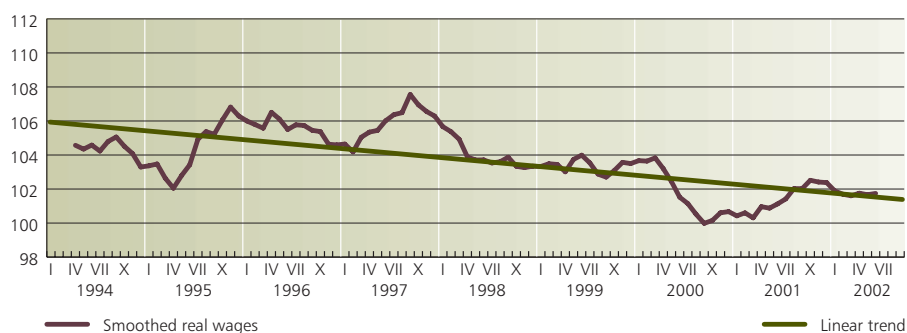
<sup>11</sup> Act on Amending the Labour Code and Some Other Acts, Journal of Laws no 135 of August 28 2002, p 1146).

**Figure 14**  
**Growth rate of wages in nominal and real terms**  
**(corresponding month previous year)**



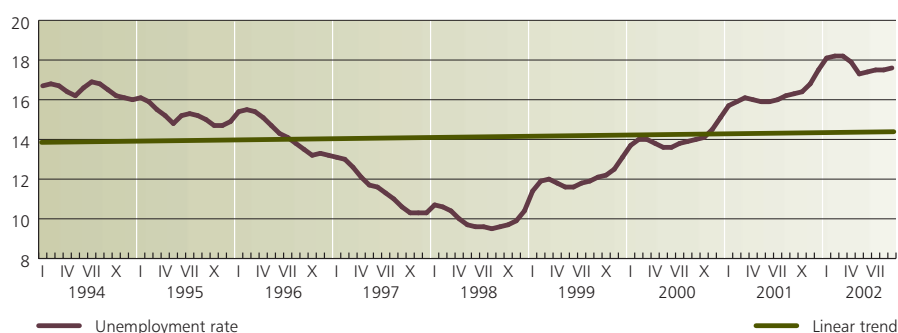
Source: GUS data, NBP calculations

**Figure 15**  
**Growth rate of real wages in the enterprise sector**



Source: GUS data, NBP calculations

**Figure 16**  
**Unemployment rate**



Source: GUS data, NBP calculations

At the NBP an attempt was undertaken to examine wage sensitivity to changes in the unemployment level. To this end the evolution of the growth rate of wages and the unemployment rate were analysed for the period from 1994 until the end of Q3 this year (figs 15 and 16).

The results demonstrate that from 1994 till about mid-1996, when the unemployment rate was above the trend, the growth rate of real wages was on average about 5% below the trend. From the 2nd HY of 1996 till 2000-2001, i.e. in the period of decline in the unemployment rate, real wages were growing on average at a rate of about 3% higher than the trend. However, from 2001 till September 2002, under growing unemployment, real wages underperformed the trend on average by 1%.

If years of high unemployment (above the trend) are treated as a single period (1994 – mid-1996 and January 2001-September 2002), and years in which the unemployment rate was below the trend (mid-96 to year-end 2000) as another period, it turns out that in both periods there was almost a proportional correlation between the deviations of the unemployment rate and real wages from the trend. The deviation of the unemployment rate by 1 pp both above and below the trend caused respectively a decline or increase in the growth rate of real wages with respect to the trend – in both cases by about 1.5%.

But if we narrow down the sample to the years 1997-2002, the results will be altered. Wage pressure still remains negatively correlated with the unemployment rate, but the impact of the unemployment rate's extent of deviation from the trend is becoming asymmetric. The deviation of the unemployment rate by 1 pp below the trend causes an acceleration in the pace of real wage growth by 1.4% above the trend. However, the deviation of the unemployment rate by 1 pp below the trend causes a slowdown in the growth rate of real wages only by 0.5% below the trend. It thus follows that real wage sensitivity to a fall in unemployment is higher than to its rise.

The reasons for the relatively weaker response of real wages (in terms of a slowdown in the growth rate of income) to a growth of unemployment in the last two years can be among others traced back to:

- unexpectedly fast drop of inflation,
- insufficiently fast growth of labour productivity (there is still room for increasing it) compared to the growth of wages,
- old habits and employee expectations of wage rises much in excess of price growth,
- procedure for determining guaranteed wage growth (by way of collective bargaining at the national level, in practice by-passing the actual possibilities of a given entrepreneur).

## 4 Other supply factors

### 4.1. Structural factors

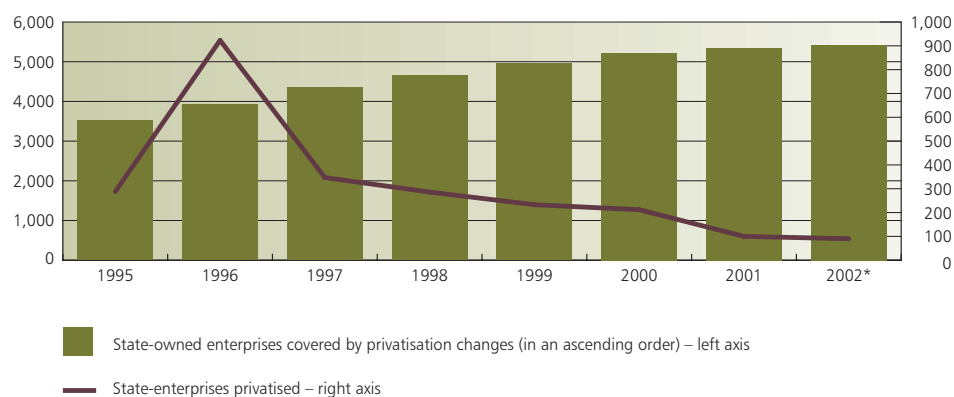
In Q3 2002 the following legal regulations can be considered most important to structural changes in the Polish economy:

1. amendment of the Labour Code (thus increasing labour market flexibility),
2. amendment of VAT tax (thus decreasing the real taxation rate),
3. draft act on the implementation of national road-building investments (growth of investments),
4. order of the Minister of Finance on the reimbursement of excise tax (decreasing the real taxation rate),
5. governmental programme „Capital for the Enterprising People” (stimulation of investment and employment growth),
6. adoption of the principle of corporate governance by the Warsaw Stock Exchange (improvement of management efficiency),
7. decision of the Constitutional Tribunal to lift caps on rent rises (growth of investments and making real estate prices more realistic).

Government decisions and plans in terms of sectoral politics, undertaken in Q3 2002 (table 11) demonstrate the continued sticking to the principle of making privatisation contingent on earlier restructuring and consolidation (see: power sector). This policy contributes to a considerable delaying of privatisation processes.

The initiated in the early nineties privatisation has caused a continuous growth in the number of enterprises covered by ownership changes. In the last two years this number stabilised at the level of about 5400. At the same time the number of annually privatised state-owned entities showing a falling trend since 1997 is steadying at a low level; until the end of Q3 2002 90 enterprises were privatised (fig. 17).

**Figure 17**  
**Number of enterprises privatised and covered by privatisation changes**



\*Q1-Q3

Source: data of the Ministry of State Treasury

Table 11

## Government decisions and plans for structural changes announced in Q3 2002

Sector	General description
power sector	<p>The Minister for State Treasury suspended the process of privatising the G-8 group (comprising eight power plants: from Gdańsk, Słupsk, Plock, Toruń, Olsztyn, Elbląg, Koszalin and Kalisz), which holds a 17% share in the domestic power distribution market. Plans were announced for the consolidation of companies of the Poznań group which associates power distribution enterprises from Poznań, Szczecin, Gorzów, Zielona Góra and Bydgoszcz.</p> <p>Consolidation is also to take place among power generators. The creation of three strong producer groups is envisaged: 1) one based on the Bełchatów Power Station and Opole and Turów power stations attached to it 2) Southern Power Corporation (PKE), which currently has a 17% share in domestic power generation. PKE is 85% State Treasury owned. 3) PAK (complex of power stations Pątnów, Adamów, Konin), in which the State Treasury still holds a 50% share.</p> <p>Only after the capital integration of distribution enterprises their privatisation is planned. The shares of the Polish Power Grid and the Bełchatów–Opole–Turów power plant group, which is to constitute the so-called strategic resource, are to remain longest under State Treasury ownership. A partial privatisation of these companies is only envisaged only after 2005.</p>
gas sector	<p>In August the Council of Ministers approved a plan for the restructuring and privatisation of the Polish gas sector. The national monopolist – Polish Oil and Gas (PGNiG) is to be privatised through Stock Exchange floatation. The State Treasury wants to retain a majority shareholding, Polish Oil and Gas employees will receive up to 15% of the shares. It is planned to hive off six companies from Polish Oil and Gas which will deal with gas distribution. Distribution companies are to start their operations on January 1 2002. In 2004 a mining company is to be hived off for gas exploration and production.</p>
fuels	<p>In September the Council of Ministers approved a document of the Ministry of State Treasury entitled "Strategy for Oil Industry in Poland", which contains a programme for the restructuring and privatisation of the oil sector.</p>
hard coal mining	
Iron and steel production	<p>Programs for the restructuring and privatisation of the steel sector must be formulated in the context of EU negotiation talks. Subject to current negotiations is the issue of the production capacity and size of investments in Polish steel plants. According to EU Commission requirements Polish steel plants are to become profitable by 2006</p> <p>By the end of 2003 the issue of the strategic investor for Polish Steel Plants (PHS), which concentrate over 70% of Polish steel production, is to be resolved.</p>
heavy chemicals	
railway transport	Draft Railway Transport Act

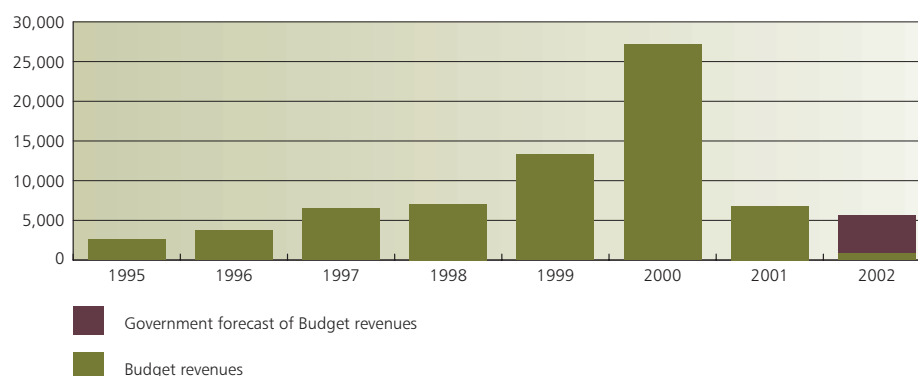
selected plans  
of government  
activities in other  
sectors of the  
economy than the  
"sensitive ones"

- Draft Act on Setting up "Pro Polonia", Export Promotion and Foreign Investment Agency
- Anticorruption Strategy
- Strategy for the pharmaceutical industry until 2005.
- Draft amendments in the Employment and Counteracting Unemployment Act.
- Draft Act on the Organisation of Agriculture in Poland and Amending Certain Acts.
- E-Poland-2006. Plan of Activities for the Development of Information Society in Poland.
- Programme for expanding a system of loan and guarantee funds for SMEs in 2002-2006. "Capital for Enterprising People"
- Self-amendment II to the Tourism Development Strategy
- Pre-accession economic programme.
- Implementation Schedule for the Government Plan of Anticrisis Activities to Protect the Labour Market and Jobs.
- Draft Act on Amending the Road Transport Act and Some Other Acts.
- Draft Act Amending the VAT and Excise Tax Act.

The falling dynamics of privatisation processes is also confirmed by declining budget revenues from privatisation. After a record-breaking year 2000 those revenues have clearly fallen, and in Q3 2002 they stood at merely PLN 170 million (in total from the beginning of the year until end of September – PLN 995 million), as opposed to the planned PLN 6.8 billion in all of 2002 (fig 18). Those were mainly receipts from the sale of minority share packages in several State Treasury companies.

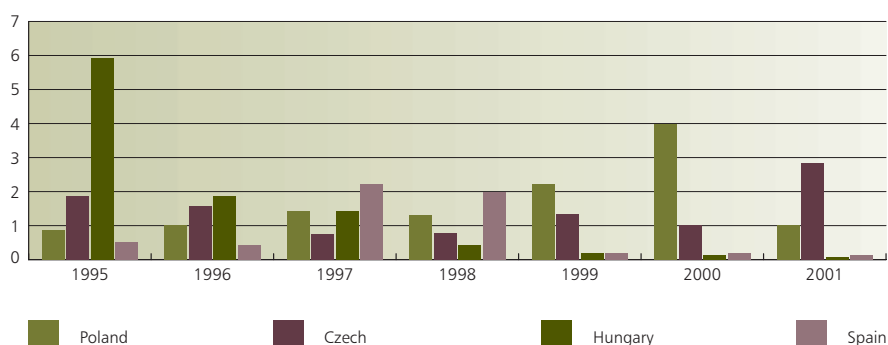
A comparison of privatisation revenues in Poland and the Czech Republic, Hungary and Spain in 1995-2001 is illustrated by figure 19. Of these countries in 2001 only the Czech Republic recorded rising revenues. In Hungary privatisation revenues have already been negligible for four years due to a high rate of advancement of privatisation processes. What is striking is a high volatility of receipts in particular years and different distribution of maximum receipts over the years (Hungary – 1995, Spain – 1997, Poland – 2000, Czech Republic – 2001). A comparison of periods of the highest privatisation revenues for all OECD countries points to a concentration of receipts in 1997–1999 and a clear drop in later periods. The instability of privatisation revenues may give rise to concerns about the position of the public finance deficit. It entails extra economic cost and impacts interest rates, which affect inflation processes.

**Figure 18**  
**Budget privatisation revenues (PLN million)**



Source: Ministry of Finance data.

**Figure 19**  
**Privatisation revenues (in % GDP)**



Source: OECD data.

## 4.2. External prices

In Q3 2002 prices of all the principal groups of raw materials, except metals, were higher compared to the corresponding period of the previous year (table 12). The rise in non-energy raw material prices came mainly from rises in food prices. This resulted mainly from growing wheat prices; moreover, a period of falling prices was followed by rising prices in the world coffee market. Although metal prices have been uninterruptedly declining for eight quarters, their drop in Q3 2002 was definitely lower than in previous periods. It is noteworthy that prices for basic metals (especially for copper and aluminum) show a clear connection with the world economy outlook (fig. 20). Due to a much slower than expected economic recovery worldwide the Q3 2002 metal prices remained at a relatively low level.

Q3 2002 saw a continuation of the growth trend in oil prices. The average price of Brent oil in this period was USD 27/b, i.e. it was almost USD2 higher than in Q2 2002. From January to September 2002 oil prices went up USD10 (fig. 21).

Such a sharp surge in prices, definitely higher than envisaged even as late as in the 1st HY 2002, was first of all impacted by the political situation around Iraq. According to analysts in September 2002 the risk connected with the outbreak of war in the region pushed up prices by at least USD 5/b.

The maintenance of high oil prices was also fuelled by OPEC supply policy. Despite earlier expectations and protests from some member countries in September 2002 the cartel maintained its hitherto production limits. Thus the lowest in ten years quotas adopted early this year are still in force. However in Q3 2002 the production of oil in member countries exceeded the cartel limits by 2 billion b/d. Despite production being increased by countries from outside OPEC, especially by Russia and Iraq, the Q3 2002 world oil supply decreased 700 thousand b/d on the corresponding period of the previous year (fig. 22).

What however failed to materialise was the expected in Q3 2002 demand pressure for a rise in oil prices. Compared to Q3 2001 world demand for oil increased merely 0.5 billion b/d, which was definitely less than predicted by the spring forecasts of the International Energy Agency. Despite a weaker growth rate of industrial output in most large developed economies a gradual depletion of fuel stocks took place. This was caused by seasonal and one-off factors<sup>12</sup> (figure 23).

<sup>12</sup> Rising demand for petrol first caused by summer vacations and then onset of the heating season had the following result in the United States: the increasing until the end of June oil stocks started to diminish in Q3 this year. Their considerable depletion happened in the second half of September, when in connection with a hurricane in the Gulf of Mexico region several drilling platforms were evacuated and main fuel terminals in Mexican ports closed. The oil stocks were then reduced to the lowest level since 1991, which additionally stoked up oil price rises.



Table 12

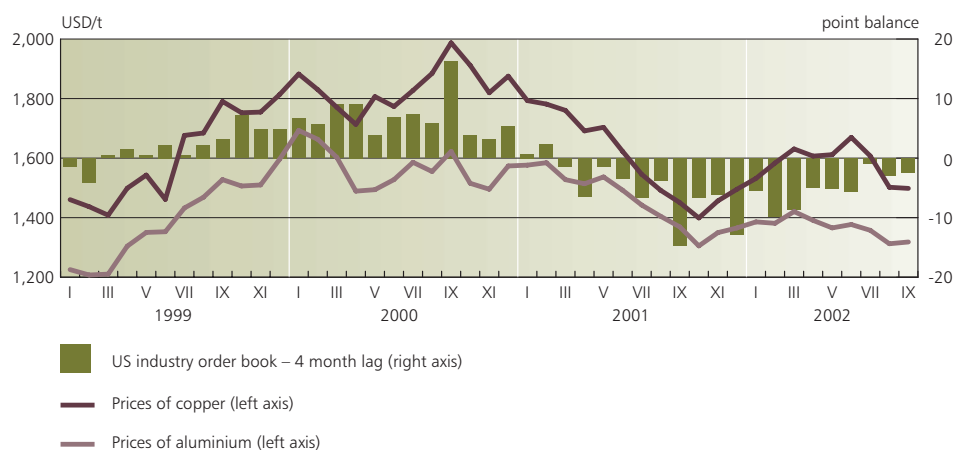
## Changes in prices for basic raw materials (w %)

	Compared to corresponding quarter previous year				Compared to previous quarter			
	2001		2002		2001		2002	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>Non-energy raw materials</b>	<b>-10.6</b>	<b>-4.4</b>	<b>-0.8</b>	<b>8.4</b>	<b>-5.2</b>	<b>6.0</b>	<b>1.6</b>	<b>6.1</b>
of which:								
foodstuffs	-5.9	-2.2	2.9	12.3	-3.2	3.4	0.7	11.4
industrial raw materials	-16.9	-7.2	-5.5	3.0	-8.0	10.1	2.9	-1.2
of which:								
agricultural commodities for industry	-14.5	0.2	-3.0	6.8	-12.9	14.5	5.7	1.3
metals	-18.6	-12.6	-7.5	-0.6	-3.9	6.7	0.6	-3.7
<b>Oil (Brent)</b>	<b>-35.2</b>	<b>-18.1</b>	<b>-8.1</b>	<b>6.4</b>	<b>-23.5</b>	<b>9.2</b>	<b>18.6</b>	<b>7.5</b>

Source: "The Economist" and Reuters data.

Figure 20

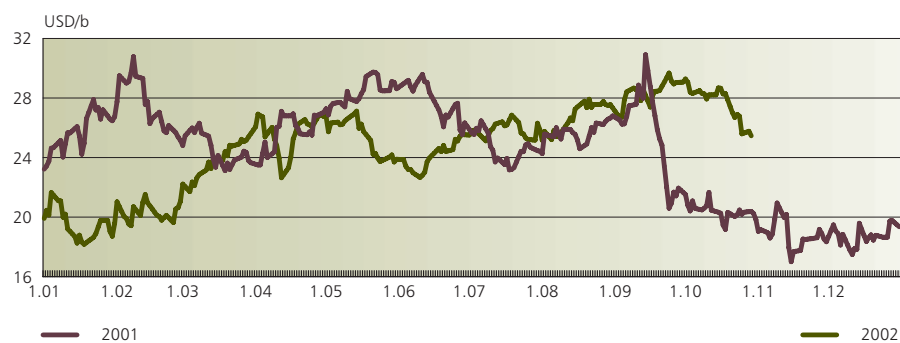
## Prices of copper and aluminium and the US industry order book



Source: Bloomberg data.

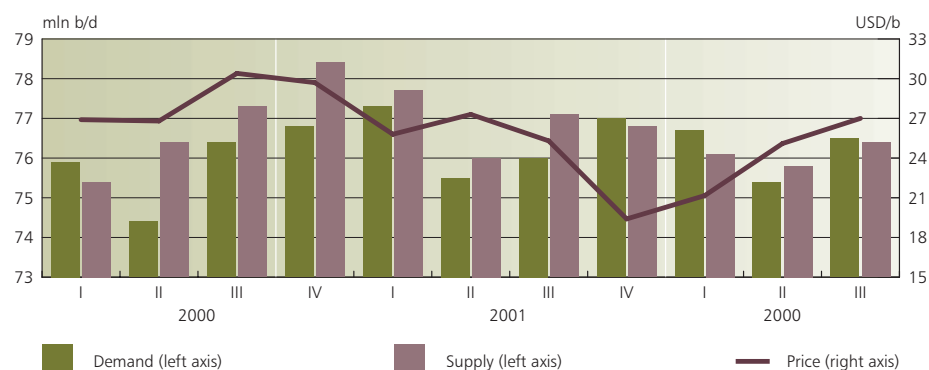
Figure 21

## Oil prices (Brent) 2001 &amp; 2002 (daily quotes)



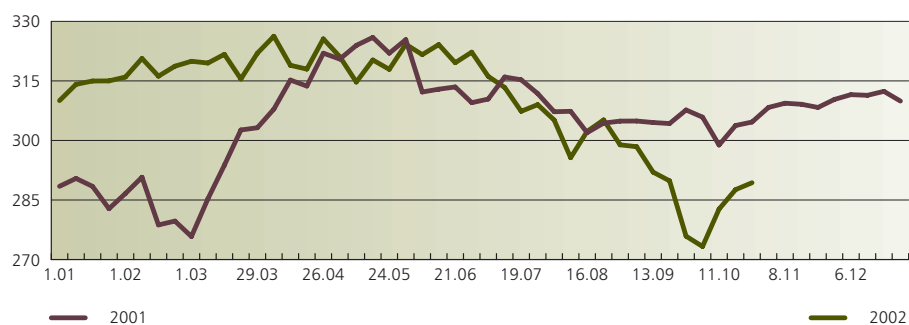
Source: Reuters data.

**Figure 22**  
Oil demand, supply and prices (Brent)



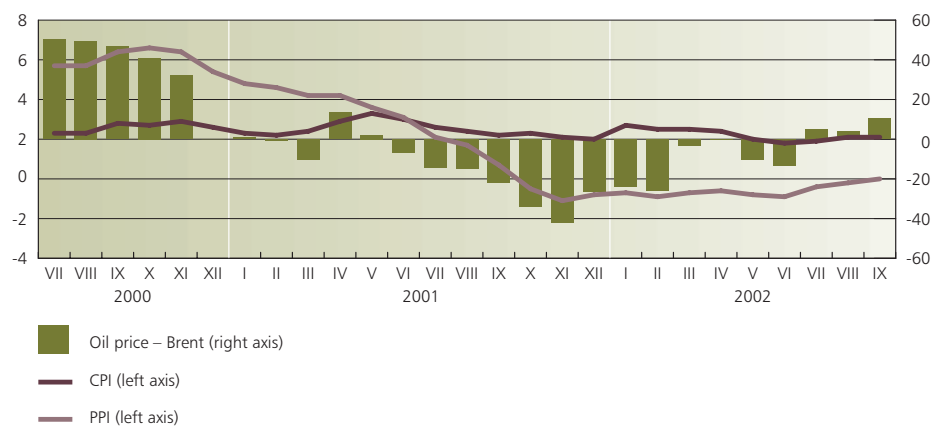
Source: data of the International Energy Agency.

**Figure 23**  
US oil stocks in 2001 and 2002 (million barrels)



Source: data of the American Petroleum Institute.

**Figure 24**  
Eurozone CPI & PPI vs. oil prices  
(percentage change on corresponding period previous year)



Source: Eurostat and Reuters data.

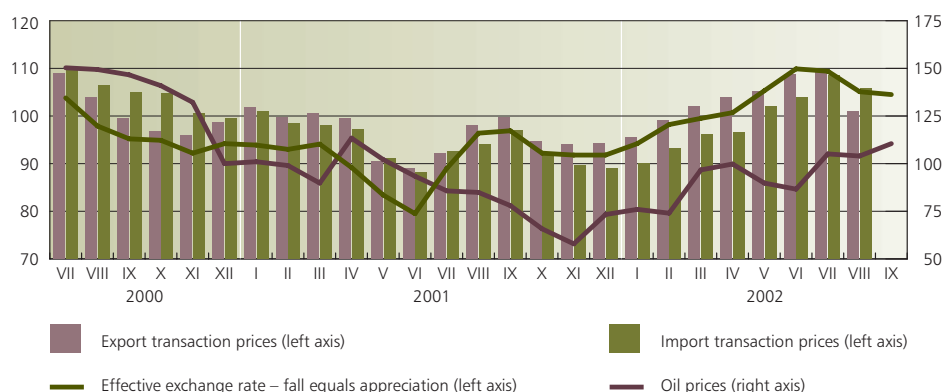
Higher oil prices have only slightly influenced the 2002 rise in the PPI and CPI of our main commercial partners – in the Eurozone. A falling trend in the y/y rate of the PPI in the Eurozone was halted (the PPI having gone up from –0.9% in June to 0% in September 2002). At the same time the harmonised consumer price index in the region increased from 1.8% in June to 2.1% in September 2002 (fig. 24).

After a falling trend in zloty transaction prices in Polish imports, which lasted through all of 2001 and Q1 2002, the prices went up slightly in Q2 2002 (by 0.8%). However, at the beginning of Q3 2002 the growing prices of oil, in tandem with zloty depreciation, contributed to a clear acceleration of import transaction prices (in July 2002 they went up 8.7% on the previous period – figure 25). In July 2002 a growing trend in Polish export prices, observable since March this year, was also maintained.

A faster growth of zloty transaction prices in export than in import impacted a further improvement in Poland's terms of trade. From January to August 2002 terms of trade stood at 103.6 compared to 101.5 in the corresponding period last year.

**Figure 25**

**Movements in transaction price index of Poland's foreign trade and nominal effective exchange rate and oil prices**  
(percentage change on corresponding period previous year)



Source: GUS, NBP and Reuters data.

## 5

### Trends in inflationary processes

#### 5.1. Consumer prices

Over Q3 2002 the disinflation process in the Polish economy continued. The y/y CPI decreased from 1.6% in June 2002 to 1.3% in July 2002 and stayed at a similar level in successive months of the quarter. The inflation rate touched its lowest level since transition started.

The weakening of inflationary trends proceeded in conditions of a marked slowdown in the pace of economic growth observable for several quarters. It was accompanied by a low growth of household disposable income and moderate growth rate of consumer prices. In this situation there was no major demand pressure for CPI growth. The symptoms of recovery which occurred in Q3 2002 in some fields of the economy did not stimulate price growth. An additional inflation dampening factor was the drop of food prices caused by a surplus of basic agricultural inputs. Moreover, the period under analysis showed no negative external supply shocks.

The low level of the annual CPI in Q3 2002 was caused by a slowdown in the growth rate of the majority of basic price groups. From May this year prices of food and non-alcoholic beverages were slowly falling down. Moreover, the rate of price growth in non-food articles and services was still falling, those being most sensitive to the operation of market price mechanisms. The scale of disinflation was constrained, on the other hand, by a slight acceleration of the rate of price growth in officially controlled goods and services, whose price changes are impacted by administrative decisions<sup>13</sup>.

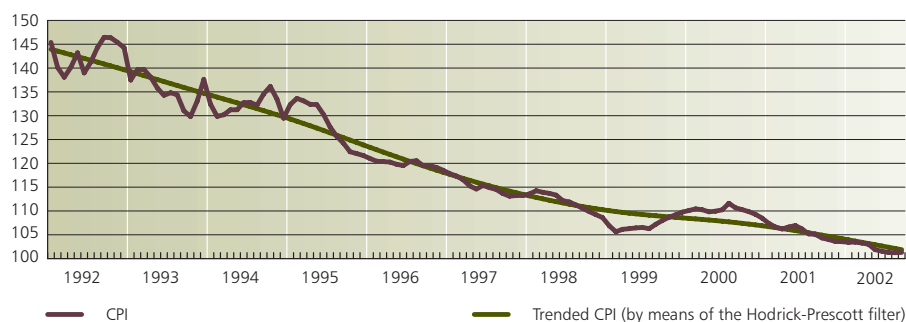
In consequence of all these factors the y/y CPI in Q3 2002 still remained below the trend line (fig. 26).

The Q3 2002 monthly rate of inflation was considerably varied, although the trends of price changes conformed to their seasonal distribution. Seasonal deflation, usually occurring in the period of July-August, caused by typical movements in food prices, was deeper this year than the year before, while a characteristic for September acceleration of the price growth rate occurred in the same scale as the year before. Cumulatively, from June to September 2002 inflation fell 0.5%, i.e. similar as the year before (0.4%) (table 13).

The y/y growth rate of the CPI in Q3 2002 was much weaker than the year before. The pronounced slowdown of the y/y CPI in this period was largely contributed to by a decline in food prices – on average by over 2% y/y (compared to a 3-4% growth in the corresponding period of the previous year) and weakening (unequal though) of the growth rate of the remaining basic groups of consumer prices (fig. 27, 28 and table 14). The y/y rise in non-food prices ex officially controlled prices was on average 2.5 pp lower than the year before, while prices of services after the exclusion of officially controlled prices – on average 3.5 pp lower. Officially controlled prices showed an average growth by over 2 pp weaker than the year before.

*Prices of food and non-alcoholic beverages* in Q3 2002 fell y/y 2.1-2.2% contributing in that period about 0.7 pp to the lowering of the CPI. The year before the Q3 3-4% rise in these prices constituted a factor which stimulated a 1.1 pp rise in inflation. The drop of food and non-alcoholic

<sup>13</sup> The further analysis of the evolution of the growth rate of consumer prices will be conducted in view of the above breakdown into the principal price groups.

**Figure 26****CPI and trended CPI in 1992–2002 (corresponding month previous year = 100)**

Source: GUS data, NBP calculations.

**Table 13****Monthly growth of particular categories of consumer prices (previous month = 100)**

Items	2001					2002						
	Rates				contribution to CPI growth – pp	Rates				contribution to CPI growth – pp		
	VII	VIII	IX	VII-IX		VII	VIII	IX	VII-IX			
Total, of which	99.7	99.7	100.3	99.6	-0.4	99.5	99.6	100.3	99.5	-0.5		
Food and non-alcoholic												
beverages	97.6	98.7	100.7	96.9	-0.9	97.1	98.6	100.8	96.4	-1.1		
Officially controlled prices	101.0	100.1	99.9	101.0	0.3	101.1	100.2	100.4	101.6	0.4		
of which: fuels	98.3	99.4	101.5	99.2	0.0	100.8	100.8	102.2	103.9	0.1		
Non-food articles (excluding												
officially controlled prices)	100.2	100.1	100.4	100.6	0.2	100.0	99.9	100.1	100.1	0.03		
Services (excluding officially												
controlled prices)	100.6	100.2	100.0	100.8	0.1	100.3	100.1	99.9	100.3	0.05		

Source: GUS data, NBP calculations.

beverage prices, which occurred in Q3 2002, was steeper than in the previous quarter and had a relatively stronger impact on the general reduction of the rate of inflation.

The further reduction of food prices in Q3 2002 resulted from a high current supply of food, both of plant and animal origin, with a simultaneously fairly stable consumption. Consequently, prices for all basic agricultural raw materials were systematically going down. In Q3 2002 the agricultural market showed a prevalence of falling trends in prices both in procurement and in food markets. Average procurement prices for all animal related food, especially for pork and poultry livestock, as well as milk evolved much below the previous year's level. Procurement prices for plant-related products were also at much lower level than the year before.

Steep falls in prices for many agricultural raw materials contributed to a drop in prices of food and non-alcoholic beverages. In Q3 2002 y/y meat prices lowered over 5%, vegetables over 4%, milk around 3%, while cereal-related products remained unchanged.

Figure 27

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



Source: GUS data, NBP calculations.

Figure 28

Contribution of particular price categories to CPI growth, 2000–2002 (corresponding month previous year = 100)



Source: GUS data, NBP calculations.

Q3 2002 also saw a decline in the y/y growth rate in **officially controlled prices** – to almost 3% from the average level above 5% the year before. Despite which the rise in prices for the groups of goods and services included in officially controlled prices was in that period twice as strong as the CPI (only by 1/5 the year before).

Higher than average in the group under discussion was the growth rate of energy prices, urban transport and postal service charges. In Q3 2002 the growth of electric energy prices was over 6% y/y. A high growth rate of prices was supported by electricity price rises (connected with the Energy Regulator approved as from July 2002 new power tariffs and with the imposition of excise tax on power). A high (about 8% y/y) rise of hot water as well as district heating charges (by about 5%) was also maintained. Although these rises were introduced in a

Table 14

**Y/y growth rates of CPI and its principal price categories**  
(corresponding month previous year = 100)

	2001					2002				
	Weight in % CPI	Growth rates			Share in CPI	Weight in % CPI	Growth rates			Share in CPI
		VII	VIII	IX			VII	VIII	IX	
<b>Total, of which</b>	100.0	105.2	105.1	104.3	4.3	100.0	101.3	101.2	101.3	1.3
Food and non-alcoholic										
beverages	30.1	104.1	103.7	102.9	0.9	29.7	97.9	97.8	97.8	-0.7
Officially controlled prices	25.7	105.2	105.8	105.0	1.3	27.1	102.6	102.7	103.3	0.9
of which: fuels	3.5	86.1	89.8	88.6	-0.4	3.7	99.3	100.7	101.4	0.1
Non-food articles (excluding										
officially controlled prices)	27.0	104.4	104.1	103.5	0.9	26.1	101.7	101.5	101.3	0.3
Services (excluding										
officially controlled prices)	17.1	108.2	107.9	107.1	1.2	17.1	104.4	104.3	104.1	0.7

Source: GUS data and NBP calculations.

single move (the regulations allow tariffs to be adjusted once a year by an energy generation and supply entity), due to a considerable decentralisation of district heating enterprises, their impact on the CPI is spread over many months in a year. A high price growth has also been shown by railway transport, where as a result of ticket fare rises, introduced in July 2002, the y/y price rise was almost 6%.

The above-mentioned rise in officially controlled prices was accompanied in Q3 2002 by an about 4% drop, and by the end of the period stabilisation of prices for telecommunication services.

**Fuel prices** grew in particular months of Q3 2002 (table 15), which contributed to the August turning around of the falling trend of the y/y growth rate of such prices. From June to September this year fuel prices went up 3.9% (in the corresponding period the year before those slipped 0.8%) and were 4.4 pp higher than the CPI and 4.7 pp higher than the year before (fig. 29).

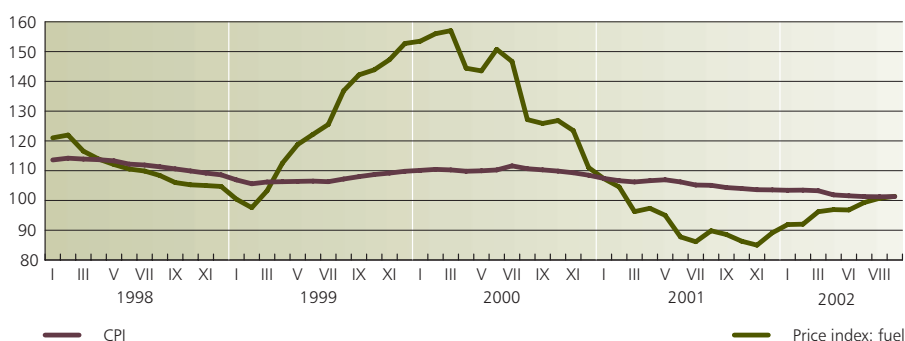
The rise of fuel prices in Q3 2002 was influenced first of all by an increase in the import price of fuels (constituting the product of the world price and dollar/zloty exchange rate). At the same time fuel prices were pulled down by domestic factors, i.e. mainly a 14.8% drop in the trade margin (calculated as the difference between the retail and producer price). Excise tax rates remained unchanged. The impact of these factors on the price of fuels in particular months of Q3 2002 is presented in table 15.

The growth rate of **prices of non-food articles excluding officially controlled prices** in Q3 2002 most closely approximated headline inflation. Although these prices rose 1.7–1.3% y/y in particular months, nevertheless the rise was much weaker than the year before. It is noteworthy that in subsequent months of 2002 the growth rate of nonfood articles (most sensitive to demand fluctuations) showed a falling trend, which pointed to a lack of demand pressure for their growth.

A drop of prices in absolute terms, on average by over 1% y/y, was displayed by the group of clothing and footwear prices, despite their small growth the year before (it did not exceed 1% y/y). Prices of audiovisual equipment fell over 4% (compared to last year's drop by 2-3%). Prices of household appliances showed a slight drop on the previous year (the year before their growth oscillated around 1.5%) and prices of furniture and home furnishings went up almost 1% (compared to their over 3% growth the year before).

Figure 29

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



Source: GUS data.

Table 15

Contribution of selected factors to movements in retail prices for EU 95 petrol in Q3 2002 (%)

	World price	USD exchange rate	Import price	Impact of import price on retail price (percentage points)	Domestic factors	Impact of domestic factors on retail price (percentage points)
July	2.7	-0.1	2.6	0.6	-6.4	-0.8
August	5.7	3.5	9.4	2.3	-6.3	-0.7
September	4.0	-0.2	3.8	1.0	0.7	0.1
Q3	12.9	3.2	16.5	4.3	-11.7	-1.2

Source: Nafta Polska S.A. data, NBP calculations.

Much higher than the group average (though lower than the year before) was the growth of consumable articles, demand for which is fairly rigid, e.g. detergents, e.g. washing and cleaning agents, medical and pharmaceutical articles, etc. Their Q3 2002 price growth was 4-5% compared to 7-8% the year before.

Growth in *service prices excluding officially controlled prices* peaked in Q3 2002 – on average above 4%. But compared to their growth the year before by 7–8% this also meant a clearly falling trend. This group of prices most strongly boosted headline inflation in Q3 2002.

The group under analysis includes categories of services whose prices are sensitive to the operation of market mechanisms (although subject to less international competition than commodities, especially non-food ones). This group covers both services demand for which is fairly inelastic, or indeed rigid, and services strongly reacting to changes in demand, e.g. tourism, catering, and hospitality services.

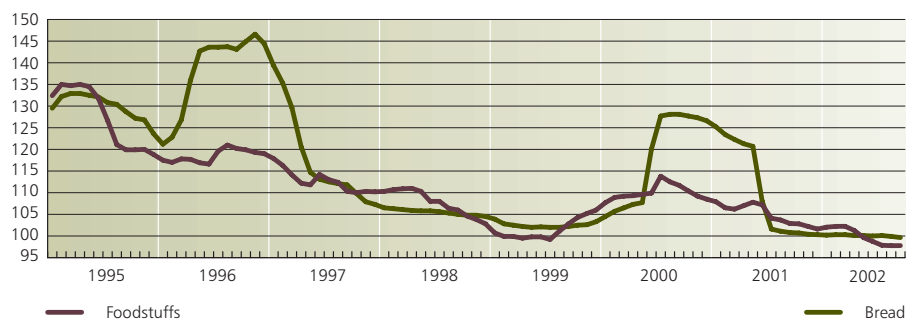
Of the first type of services in Q3 2002 occupancy charges soared most – by about 5% y/y – along with water supply – by about 14% (compared to 11% and 14% the year before). Those were the sharpest rises in the whole group of services after the exclusion of officially controlled prices. The continued high growth of prices for these types of services may indicate that the process of price adjustment to the level of justified costs of providing services in these fields is still going on.

In the case of services whose prices display high demand elasticity their growth was generally lower. Prices in restaurants and hotels increased in Q3 2002 by an average of over 2%, i.e. two times less than the year before (when they went up over 5%), prices for domestic and foreign tourist services fell about 1% compared to the year before (when they went up 1-3%), while prices for medical services increased 2% (the year before over 4%).



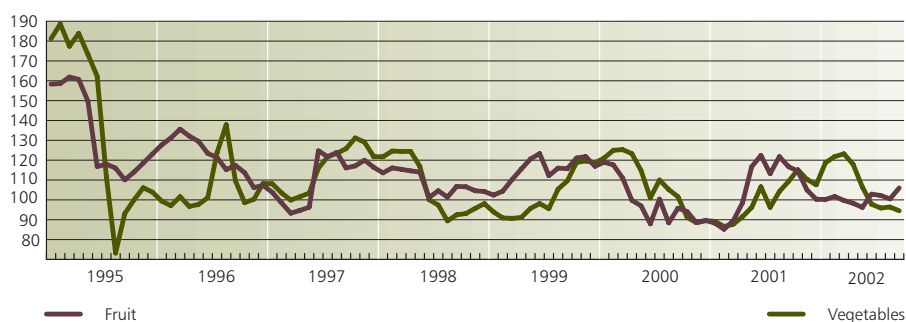
**Figure 30.1**  
Price indices, foodstuffs (corresponding month previous year = 100)

**a) Price indices: foodstuffs & bread**



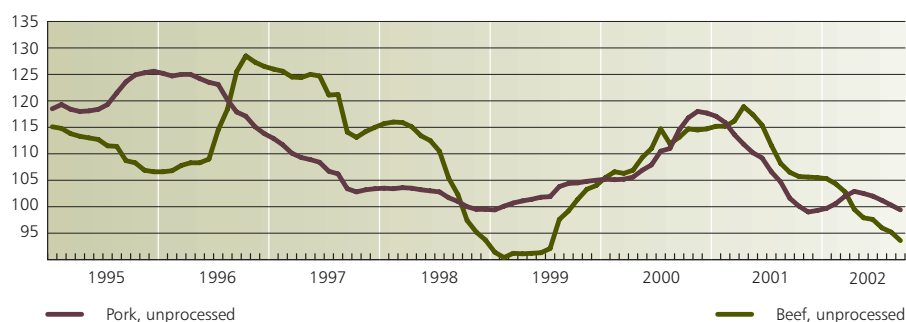
Source: GUS data.

**b) Price indices: fruit & vegetables**



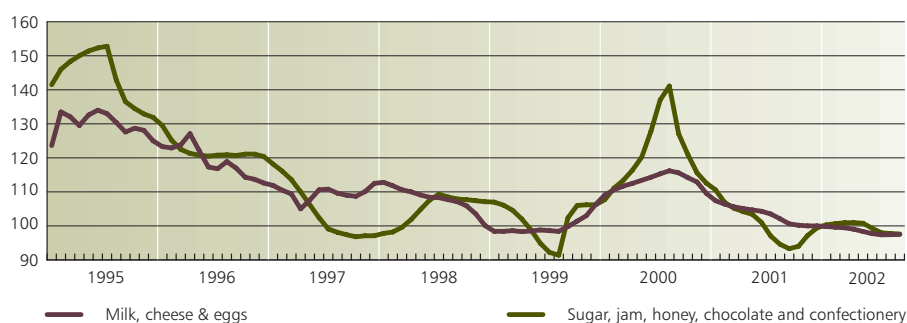
Source: GUS data.

**c) Price indices: pork & beef**



Source: GUS data.

d) Price indices: milk, cheese & eggs; sugar, jam, honey, chocolate and confectionery

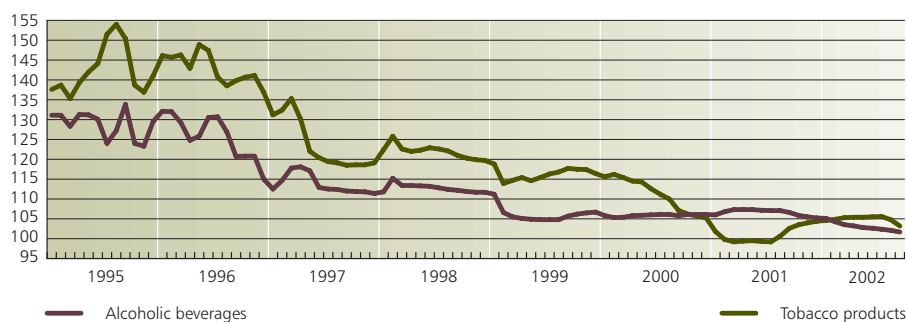


Source: GUS data.

Figure 30.2

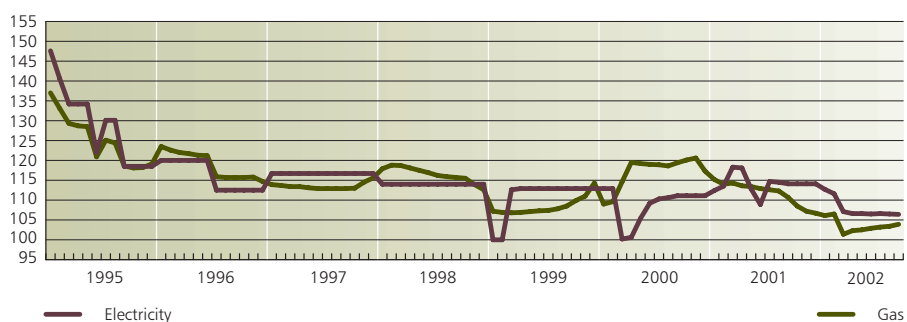
Price indices, officially controlled prices  
(corresponding month previous year = 100)

a) Price indices: alcoholic beverages & tobacco products



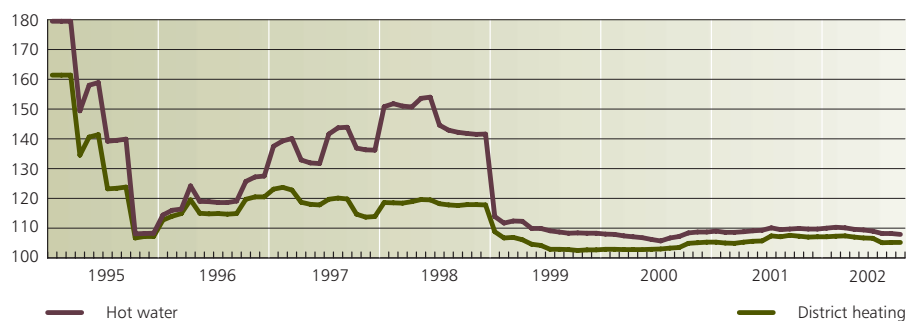
Source: GUS data.

b) Price indices: electricity & gas



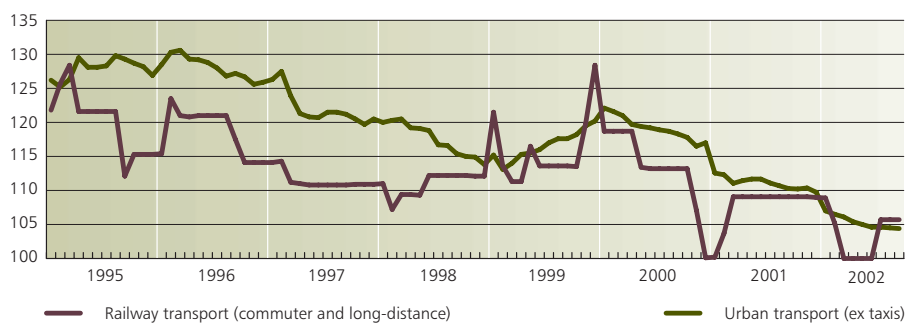
Source: GUS data.

## c) Price indices: hot water &amp; district heating



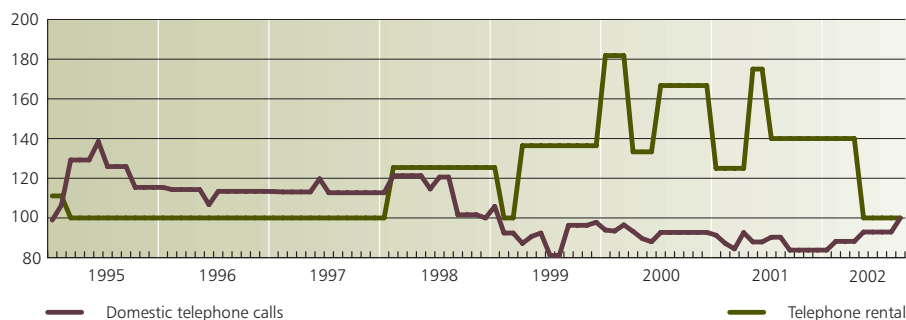
Source: GUS data.

## d) Prices of urban and railway transport



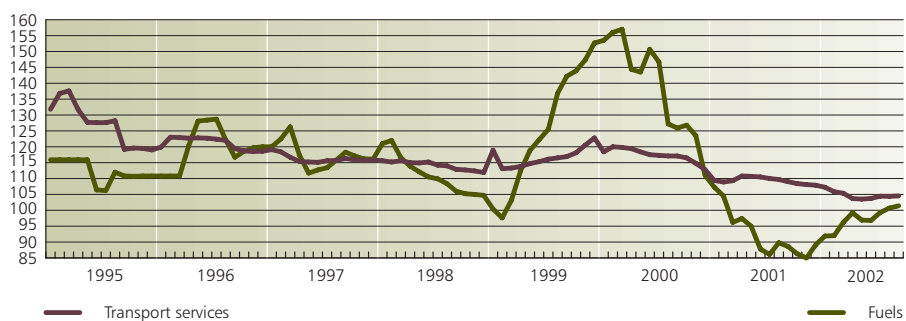
Source: GUS data.

## e) Price indices: domestic telephone calls &amp; telephone rental



Source: GUS data.

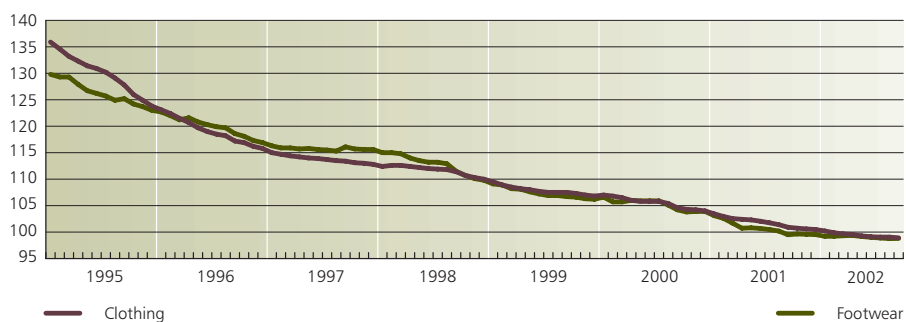
## f) Price indices: transport services and fuels



Source: GUS data.

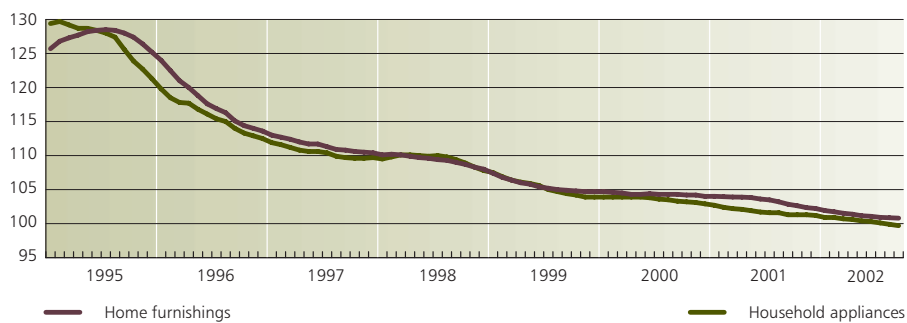
**Figure 30.2**  
**Price indices, non-food articles**  
 (corresponding month previous year = 100)

## a) Price indices: clothing and footwear appliances



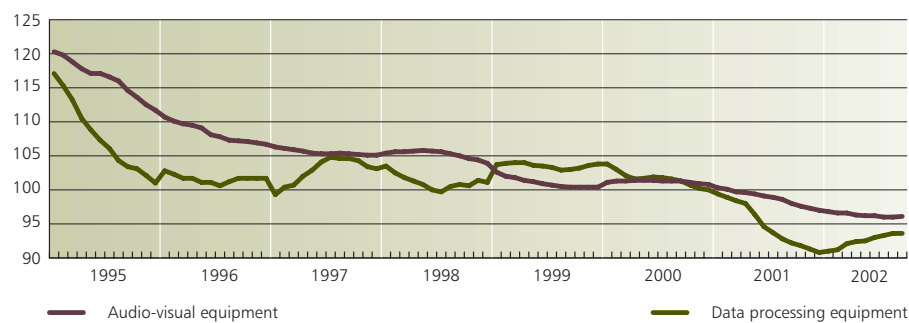
Source: GUS data.

## b) Price indices: home furnishings and household



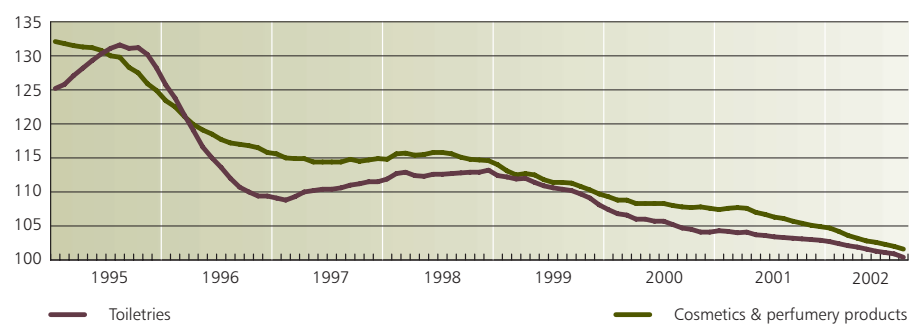
Source: GUS data.

## c) Price indices audio-visual and information processing equipment



Source: GUS data.

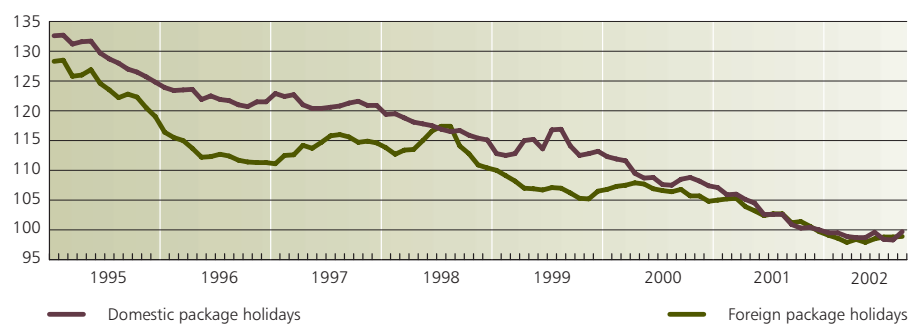
## d) Price indices: toiletries; cosmetics &amp; perfumery products



Source: GUS data.

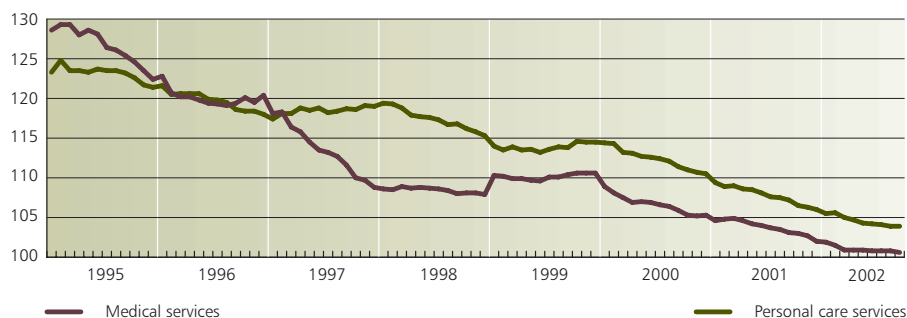
**Figure 30.3**  
**Price indices, services**  
 (corresponding month previous year = 100)

## a) Price indices: domestic and foreign package holidays



Source: GUS data.

## b) Price indices: medical & personal care service



Source: GUS data.

## 5.2. Core inflation

In Q3 2002 the y/y growth rate of most core inflation measures continued to display a falling trend. However, the scale of such drop was clearly lower than in previous quarters: in the quarter under analysis the y/y CPI shrunk 0.3 pp (from 1.6% to 1.3%), while core inflation measures decreased 0.3%-0.9% pp. In September 2002 the y/y CPI and "net" inflation measure edged up slightly.

The persisting since May last year uninterrupted decline of most core inflation measures shows that disinflation trends in the economy are lasting and not merely result from temporary phenomena. It also proves that the disinflation process has been largely contributed to by the lack of demand pressure. On the other hand a slowdown in the pace of core inflation measures and also a slight rise in the CPI (from 1.2% to 1.3%) and „net“ inflation (from 2.75% to 2.82%) in September 2002 point to a weakening in the disinflation trend.

In September 2002 only *core inflation after the exclusion of officially controlled prices* was below the CPI. This means that the pace of officially controlled consumer prices was higher in Q3 2002 than headline price growth.

*Core inflation after the exclusion from the CPI of the most volatile prices*, and also core inflation *after the exclusion of the most volatile prices and fuels* in the period from June to September 2002 evolved at a very similar level. Consequently, prices for fuels, which could differentiate the two rates, virtually hardly moved in the period under analysis. Pruning the CPI of the most volatile prices did not cause a visible reduction in the growth rate of both core inflation measures, not even compared to the CPI, because the excluded groups comprised ones which boosted inflation (occupancy charges, electricity), as well as ones slowing down its growth (poultry, fruits, vegetables, national telephone calls). As a result, both measures of core inflation landed at a level very much approximating the CPI. In September 2002 both measures, just like the CPI, went up 1.3%.

*„Net“ inflation*, is the measure created by stripping the CPI out of prices of food and fuels, which for over a year have particularly strongly slowed inflation down. In Q3 2002 it still evolved at the highest level of all core inflation measures (the trend has been in force since May last year). Additionally, starting from February last year the net inflation measures have been considerably outperforming the CPI. In Q3 2002 they were dynamised by the growth of occupancy charges (rise in prices for cold water, electricity, gas, district heating, hot water) and rise in pharmaceutical prices.

*Core inflation, the so-called 15% trimmed mean*, lowered 0.4 pp over Q3 2002. This represents a confirmation that a clear trend subsists towards constraining the rate of price growth in groups displaying a relatively low price amplitude. This measure is characterised by very low volatility, which follows directly from its construction (cutting off both 15% groups whose prices were subject to the biggest or smallest change on the previous period). Thus obtained core inflation fell in September 2002 to 1.5%.

**Table 16**  
**Measures of core inflation in 2001**

	2001											
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
	changes on corresponding month previous year											
<b>CPI</b>	<b>7.4</b>	<b>6.6</b>	<b>6.2</b>	<b>6.6</b>	<b>6.9</b>	<b>6.2</b>	<b>5.2</b>	<b>5.1</b>	<b>4.3</b>	<b>4.0</b>	<b>3.6</b>	<b>3.6</b>
<b>Core inflation measures after exclusion of:</b>												
Officially controlled prices	7.5	6.8	6.5	6.6	7.0	6.6	5.2	4.8	4.1	3.9	3.5	3.2
Most volatile prices	7.8	7.2	6.7	6.8	6.5	5.3	4.5	4.2	3.6	3.2	3.0	3.1
Most volatile prices & fuels	7.8	7.3	7.1	7.2	7.0	6.2	5.4	4.9	4.3	4.0	3.8	3.7
Food & fuels ("net" inflation)	7.2	6.8	6.7	7.0	7.2	6.8	6.7	6.5	5.8	5.5	5.3	5.1
15% trimmed mean	7.4	7.1	6.8	6.8	6.5	6.0	5.5	5.0	4.6	4.2	3.9	3.7

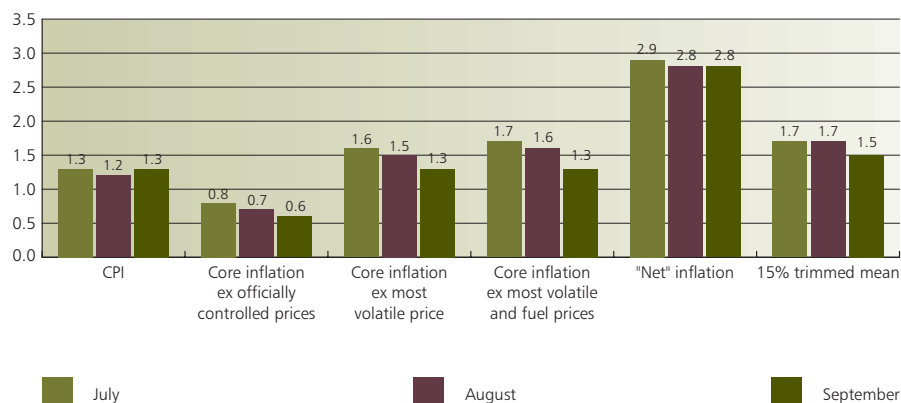
Source: GUS data, NBP calculations.

**Table 17**  
**Measures of core inflation in 2002**

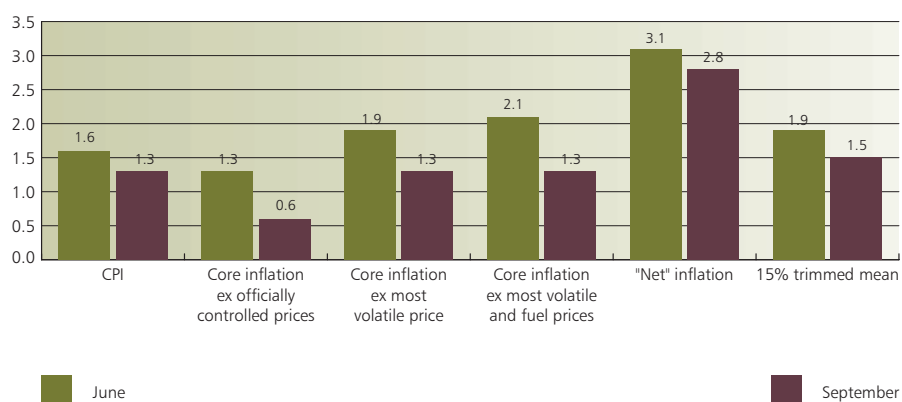
	2002								
	I	II	III	IV	V	VI	VII	VIII	IX
	changes on corresponding month previous year								
<b>CPI</b>	<b>3.4</b>	<b>3.5</b>	<b>3.3</b>	<b>3.0</b>	<b>1.9</b>	<b>1.6</b>	<b>1.3</b>	<b>1.2</b>	<b>1.3</b>
<b>Core inflation measures after exclusion of:</b>									
Officially controlled prices	3.2	3.1	3.0	2.6	1.7	1.3	0.8	0.7	0.6
Most volatile prices	2.9	2.8	2.6	2.5	2.1	1.9	1.6	1.5	1.3
Most volatile prices & fuels	3.4	3.3	2.9	2.7	2.4	2.1	1.7	1.6	1.3
Food & fuels ("net" inflation)	4.7	4.7	4.1	4.0	3.2	3.1	2.9	2.8	2.8
15% trimmed mean	3.5	3.2	2.9	2.6	2.0	1.9	1.7	1.7	1.5

Source: GUS data, NBP calculations.

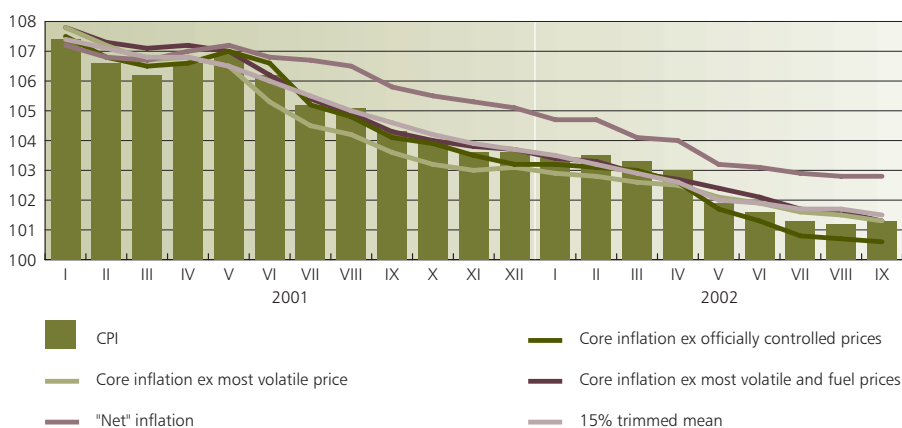
**Figure 31**  
**CPI and core inflation in Q3 2002**  
**(changes on corresponding month previous year)**



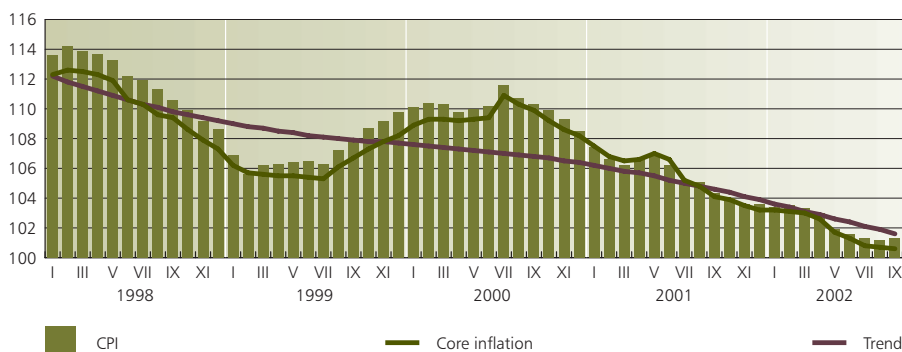
Source: GUS data, NBP calculations.

**Figure 32****CPI and core inflation (changes on corresponding month previous year)**

Source: GUS data, NBP calculations.

**Figure 33****CPI and inflation measures**

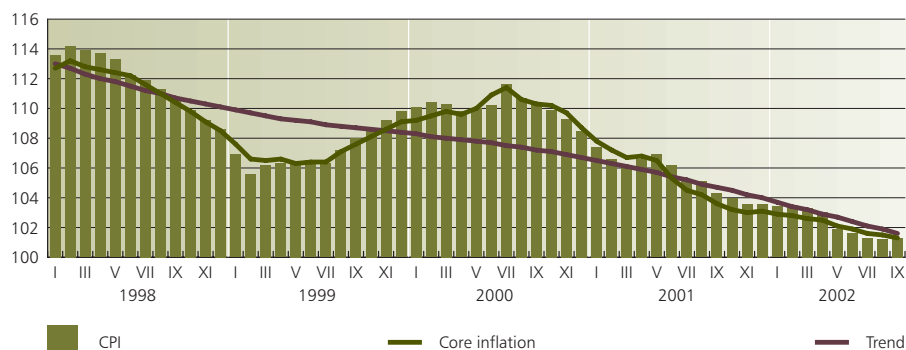
Source: GUS data, NBP calculations.

**Figure 34****Measures of core inflation ex officially controlled prices  
(corresponding month previous year = 100)**

Source: GUS data, NBP calculations.

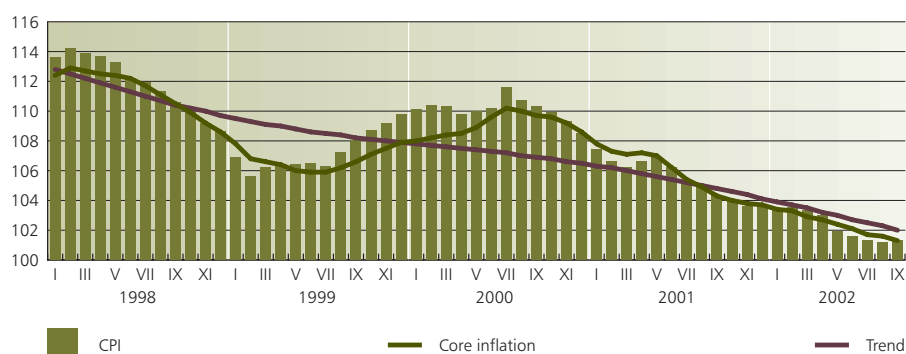


**Figure 35**  
**Measures of core inflation ex most volatile prices**  
 (corresponding month previous year = 100)



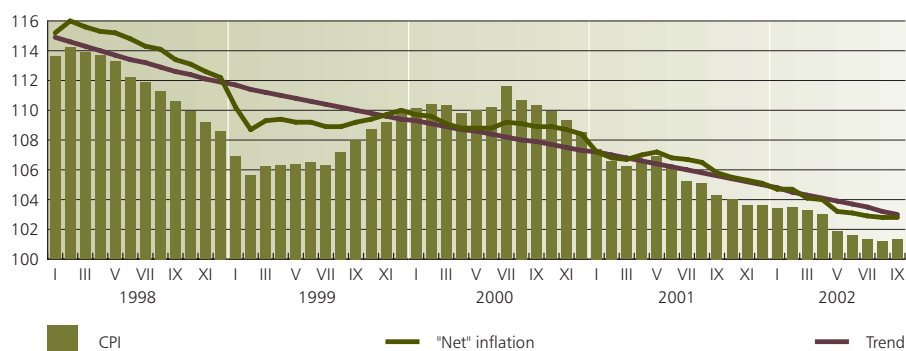
Source: GUS data, NBP calculations.

**Figure 36**  
**Measures of core inflation ex most volatile and fuel prices**  
 (corresponding month previous year = 100)



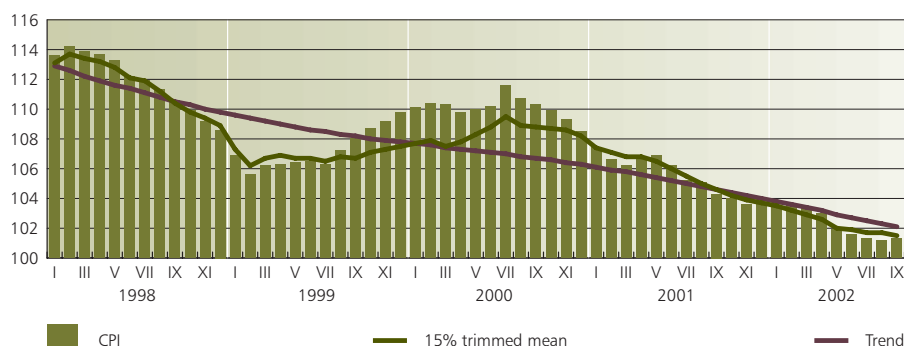
Source: GUS data, NBP calculations.

**Figure 37**  
**Measures of "net" inflation ex prices of food and fuels**  
 (corresponding month previous year = 100)



Source: GUS data, NBP calculations.

**Figure 38**  
**Measures of core inflation – 15% trimmed mean**  
**(corresponding month previous year = 100)**



Source: GUS data, NBP calculations.

The low rate of inflation in Q3 2002 was first of all the result of exceptionally favourable price trends in the food market (drop in the prices of poultry, fruits and vegetables) and fuels. Both groups considerably impact the path of inflation (their total share in the CPI basket is 33.4%). However, this creates the risk of reversal in the falling inflation trend, should the positive impulses in the two areas disappear.

### 5.3. Producer prices in industry and construction

In Q3 2002 the following changes were noted in the growth rate of *producer prices in industry (PPI)* and its sections compared to the previous quarter:

- further acceleration of the PPI,
- rebound of price growth in the manufacturing section,
- maintaining of the price growth in the section of manufacturing and production and distribution of power, gas and water at the highest level in the division,
- slowdown of the price growth rate in the mining and quarrying section (table 18).

Compared to the corresponding quarter of the previous year the PPI rate in 2002 rose 1.3%. This resulted from a turnaround of deflationary trends in the manufacturing section. On the other hand, the price growth rates in the mining and quarrying section and production and distribution of power, gas and water continued to be clearly lower compared to the corresponding quarter of the two previous years (figure 39).

The y/y PPIs in particular months of Q3 2002 showed a falling trend, after a two quarter long rising trend (fig. 41). However, in September 2002 producer prices continued to be 1.0% higher than in September 2001.

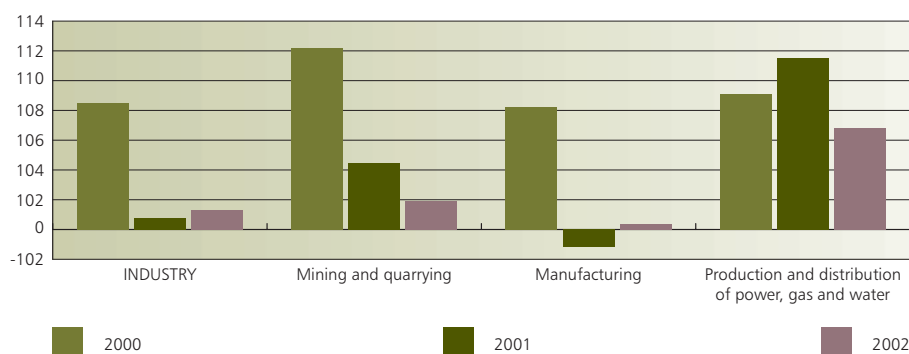
In contrast to the situation in Q3 of the previous year when PPI growth was clearly dominated by the growth of prices in the section of production and distribution of power, gas and water (with a lower share of growth in mining and quarrying and drop of manufacturing prices), in Q3 2002 PPI growth was contributed to by all the three sections of industry (figure 40).

The y/y price index in the manufacturing section reached zero in September 2002 (after 3 months of declining). A fading growth rate of prices was also recorded in the mining and quarrying section, whose y/y price index declined from 3.7% in July to 0.6% in September. On the other hand the corresponding index in the section of production and distribution of power, gas and water steadied at a high level of about 7% (figure 41), which followed from a high monopolisation of this section of the economy, relatively rigid demand for its production and administratively controlled prices.

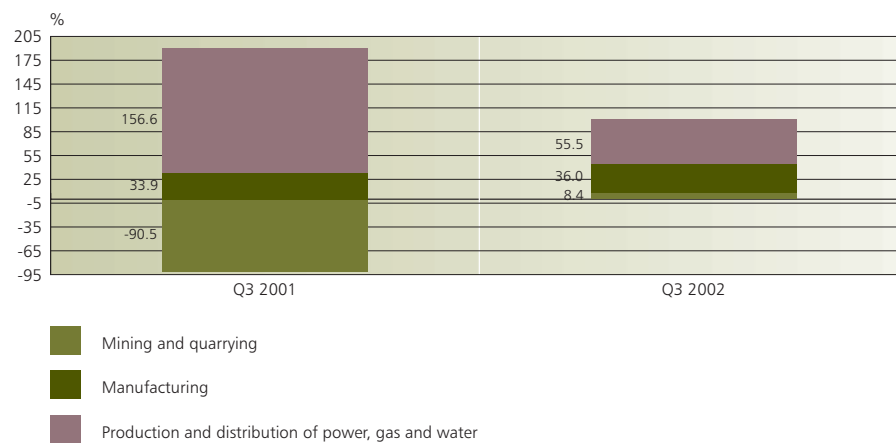
**Table 18****PPI in industry and construction**

	2001			2002			2001	2002
	Q1	Q2	Q3	Q1	Q2	Q3	Q3	
	corresponding quarter previous year = 100						previous	quarter=100
INDUSTRY of which:	104.2	102.2	100.8	100.2	100.7	101.3	100.7	101.3
– mining and quarrying	108.9	105.3	104.5	103.4	103.9	101.9	102.5	100.5
– manufacturing	102.7	100.4	98.8	98.4	99.6	100.4	100.2	101.0
– production and distribution of power, gas and water	111.5	111.7	110.8	109.0	105.4	106.8	103.1	104.5
CONSTRUCTION	106.3	104.4	103.4	102.0	101.4	101.0	100.5	100.2

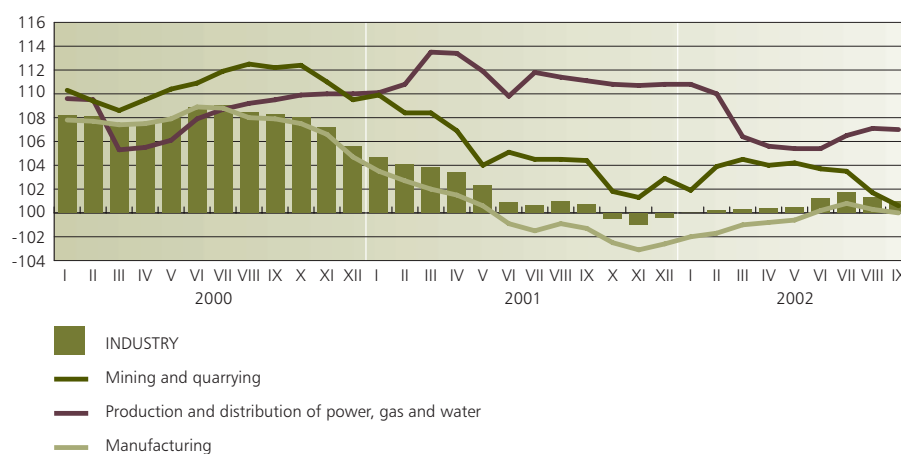
Source: GUS data.

**Figure 39****PPI in industry and its three sections in Q3 2000–2002  
(corresponding quarter previous year = 100)**

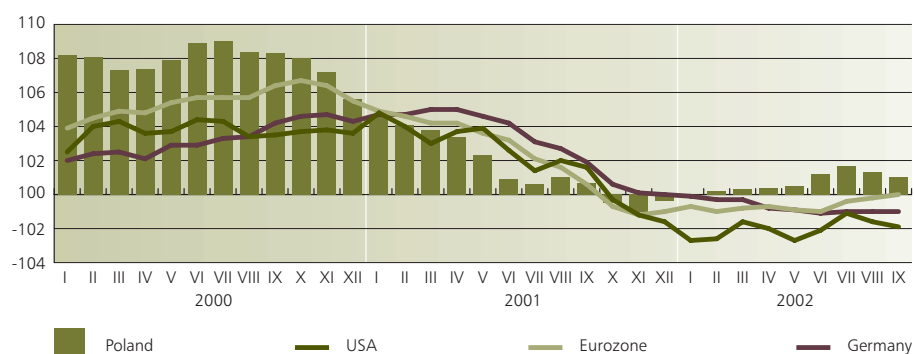
Source: GUS data.

**Figure 40****Contribution of growth rates of particular sections of industry to PPI growth  
(corresponding quarter previous year – 100)**

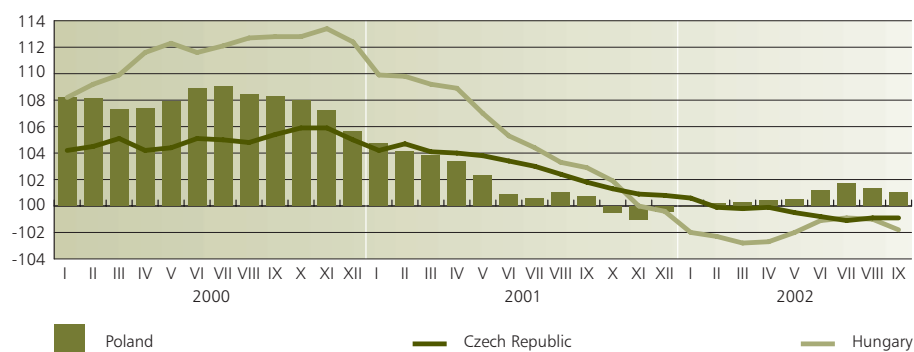
Source: GUS data.

**Figure 41****PPI in industry and its three sections (corresponding month previous year = 100)**

Source: GUS data.

**Figure 42****PPI in Germany, Eurozone, USA and Poland (corresponding month previous year = 100)**

Source: Bloomberg.

**Figure 43****PPI in Czech Republic, Hungary and Poland (corresponding month previous year = 100)**

Source: Bloomberg.

It should also be noted in this context that in most divisions of the manufacturing sector the y/y price indices in particular months of Q3 2002 were going up. There was a characteristically high price growth in the division: manufacture of coke and refined petroleum products, which in particular months of the analysed quarter stood at 5.1%, 4.85 i 3.3%. This resulted from the Q2 and Q3 2002 petroleum price growth on world markets and a high exchange rate of the dollar in Q3 2002. Drops of y/y price indexes were however recorded in the analysed quarter in such divisions as: manufacture of food products, manufacture of textiles, manufacture of other non-metallic mineral products, manufacture of basic metals, manufacture of medical instruments.

The evolution of the PPI in Poland in the first three quarters of 2002 significantly deviated from the trends observable at the same time in many other countries – our trade partners (figs 42 and 43).

In Germany, Eurozone, USA, as well as in the Hungary and Czech Republic a decline in the PPI persisted. However, in Poland the falling producer prices recorded in Q4 last year were overcome at the beginning of the current year and up to now the prices have been showing a rising trend. However, their growth rate is fading and in September this year it was merely 1% up on the corresponding period of the previous year.

But it should be added in this context that the rising PPI in Poland this year was caused mainly by a growth of prices in sections strongly monopolised, in which prices are administratively controlled (production and distribution of power, gas and water), and in the division: manufacture of coke and refined petroleum products, whose prices largely depend on world oil prices.

The fact that the September PPI in the Eurozone persisted at an analogous level to the previous year demonstrates that the deflationary trend has been halted there.

The correlation co-efficient of the Polish PPI with the Eurozone PPI stands at 0.89. The PPIs of the Czech Republic and Hungary are more strongly correlated with the PPI in the Eurozone. For the Czech Republic such correlation is 0.96 and for Hungary 0.98. A slightly weaker correlation (0.9) subsists between the PPIs of the Czech Republic and Germany<sup>14</sup>. Let us note at this juncture that in particular months of Q3 2002 PPIs in both economies evolved at almost identical levels. This resulted from mature mutual trade and, consequently, high degree of integration between the economies.

Q3 2002 saw the persistence of a falling trend, observable since mid-2000, in the growth rate of *construction prices*. In September 2002 those prices were 0.9% higher than in September last year, when the corresponding rate stood at 3.2%. So weak a growth rate in the sector is connected with the crisis in construction<sup>15</sup>.

<sup>14</sup> All correlation co-efficients calculated on the basis of a sample for the period from January 2000 to September 2002.

<sup>15</sup> The value of construction sales in September 2002 constituted 93.9% of September 2001 sales.

## 6

## Monetary policy and inflation target implementation

## 6.1. Monetary policy in Q3 2002

In Q3 2002 the Monetary Policy Council on two occasions reduced NBP interest rates – in August and September (table 19). Cumulatively, the minimum yield on 28-day open market operations was reduced 100 bp (basis points), rediscount rate 150 bp, lombard rate 150 bp and deposit rate 50 bp.

Table 19

Most important decisions of the Monetary Policy Council taken in the 1<sup>st</sup> HY 2002

Date <sup>a</sup>	Decision
January 30	Minimum 28-day reverse repo rate lowered from 11.5% per annum to 10% per annum
	Rediscount rate lowered from 14% to 12%
	Lombard rate lowered from z 15.5% to 13.5%
	Deposit rate lowered from 7.5% to 6.5%
April 25	Minimum 28-day reverse repo rate lowered from 10% per annum to 9.5% per annum
	Rediscount rate lowered from 12% to 11%
	Lombard rate lowered from z 13.5% to 12.5%
May 29	Minimum 28-day reverse repo rate lowered from 9.5% per annum to 9% per annum
	Rediscount rate lowered from 11% to 10.5%
	Lombard rate lowered from z 12.5% to 12%
	Deposit rate lowered from 6.5% to 6%
June 26	Minimum 28-day reverse repo rate lowered from 9% per annum to 8.5% per annum
	Rediscount rate lowered from 10.5% to 10%
	Lombard rate lowered from z 12% to 11.5%
	Deposit rate lowered from 6% to 5.5%
	2002 inflation target lowered to 3% with a tolerance band of +/-1 percentage point
August 28	Minimum 28-day reverse repo rate lowered from 8.5% per annum to 8.0% per annum
	Rediscount rate lowered from 10% do 9.0%
	Lombard rate lowered from 11.5% to 10.5%
	Deposit rate left unchanged at 5.5%
September 25	Minimum 28-day reverse repo rate lowered from 8.0% per annum to 7.5% per annum
	Rediscount rate lowered from 9.0% do 8.5%
	Lombard rate lowered from z 10.5% do 10.0%
	Deposit rate lowered from 5.5% do 5.0%
	Approval of the 2003 Monetary Policy Guidelines

<sup>a</sup> Date decision taken.

In total, starting from February 2001 the Monetary Policy Council reduced rates on twelve occasions. The NBP's reference rate, key to the degree of monetary policy restrictiveness, fell during the period from 19% to 7.5%, in real terms (using the current CPI as the deflator) from 11.6% to 6.1%.

The MPC interest rate cuts in Q3 2002 were made by the Council in conditions of a more and more sustainably low level of inflation and strengthening of factors constraining any future resurgence of inflation pressure.

In the period from June to September the y/y CPI fell from 1.6% to 1.3%. This was accompanied by a further drop of all core inflation measures. These conditions strengthened low inflation expectations of both consumers and bank analysts. In the case of consumers the y/y inflation expected by them in a twelve month horizon fell from 2.3% in June to 1% in September, while the same measure expected by bank analysts in an 11 month horizon fell respectively from 3.6% to 2.9%.

The Q3 growth rate of M3 money supply was also good for inflation prospects. Its low y/y rate showed a systematic decline since June 2002, to assume a negative value in August.

The growth rate of loans in the period under analysis was also low. In the case of corporate loans the increase of their y/y growth rate recorded in June and July (after three months of their negative dynamics) was halted in August. However, the y/y growth rate of household loans continued to show a falling trend.

Q3 2002 wage movements did not carry threats of inflation pressures, because under a persisting high unemployment level the nominal growth rate of wages in the enterprise sector was moderate and waning. Moreover, the Monetary Policy Council recognised that a partial liberalisation of the Labour Code conducted in that period towards a bigger labour market flexibility would be conducive to low inflation.

MPC Q3 2002 interest rate cuts also took into account the assessment of economic activity growth prospects as a factor impacting future inflation.

The worsening from month to month indicators of the current and expected outlook in Eurozone economies (especially in Germany) and in the USA gradually postponed the prospect of a stimulating impact of world economy recovery on a pickup in Poland. This was additionally compounded by the continued risk of war on Iraq and, consequently, risk of further oil price hikes.

In turn, signals from the domestic economy were not uniform. On the one hand, there were symptoms of activity growth in the real economy: the stagnation trend in industry has been overcome, retail sales rose, the cost estimate value of new construction increased. Those factors demonstrated that the rate of economic growth in the coming quarters would be going up.

But on the other hand this found little confirmation in expectations as to the evolution of demand factors, for the situation in the labour market showed that in the coming months one should not expect any major growth of income from hired labour. Combined with a low, expected growth of social benefit income this suggested the persistence of a low dynamics of domestic demand.

In sum, despite the non-uniform picture of the macroeconomic situation the Council recognised that a gradual economic recovery should be taking place. Its expected moderate rate in Q3 2002 did not pose, in the opinion of the MPC, a threat to inflation target implementation in 2002 and 2003. This encouraged interest rate cuts.

In turn, the Council was cautioned to be prudent in its NBP interest rate cuts by the awareness of a simultaneous occurrence of several factors which might jeopardise inflation stabilisation at a low level.

One of them was the deepening in Q3 2002 drop in the flow and stock of non-financial sector deposits, in particular household deposits.

The drop of households' deposits in Q3 2002 was contributed to by the low nominal growth rate of their registered disposable income in the period under analysis. It can also be expected that the shrinking of the stock of banking deposits in the case of part of the people who ran a business activity (the household sector also includes individual businessmen who employ up to 9 persons) was connected with their activity in informal economy. The reduction of the propensity to save in banks was also strengthened by a fading appeal of bank deposits (resulting from the fall in interest rates, additionally exacerbated by capital gains tax), discouraging from investing unregistered income in banks. Part of the bank deposits was converted into bonds, T-bills and units in investment funds whose yield exceeded the interest offered by banks.

An additional risk factor for future inflation was the high y/y growth rate of notes and coin in circulation persisting in Q3 2002. That was particularly disquieting in connection with the simultaneous decline in household deposits. However, in August the y/y growth rate of notes and coin in circulation steadied, in order to clearly decline in September.

An important constraint on monetary policy in the period under analysis was uncertainty as to the situation of the 2003 public finances. In the opinion of the MPC the draft *Budget Act for 2003* did not contain (despite earlier government declarations) proposals of systemic solutions necessary to curb the growth rate of public spending and change its structure. Under the faster economic growth projected for 2003 it envisaged, on the other hand, the maintaining of a high deficit of the public sector relative to the GDP, which would be tantamount to a further relaxation of financial policy.

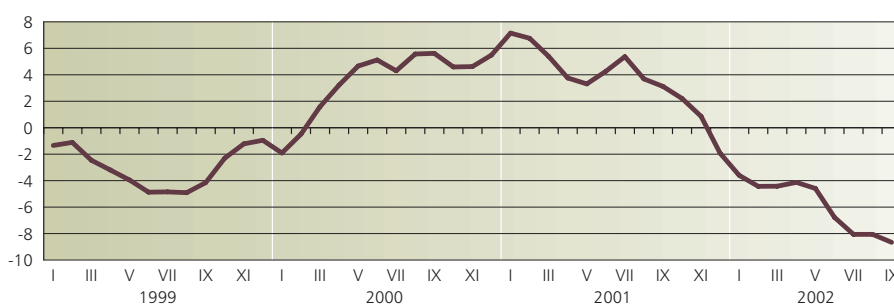
An additional source of uncertainty in the public finance sector was also constituted, according to the Council, by the government plans of supporting deficit-making enterprises which did not settle their tax arrears.

**Figure 44**  
**Monetary Conditions Index (base period = December 1994)**



Source: NBP data.

**Figure 45**  
**Monetary Conditions Index (base period = corresponding month previous year)**



Source: NBP data.



The MPC was also encouraged to be prudent in its Q3 2002 monetary policy by considerable uncertainty persisting at the time concerning the evolution of fuel prices, because due to the threat of a military conflict in Iraq not only world oil prices were going up, but also their forecasts.

In July 2002 one of the factors which dissuaded the Council from interest rate cuts was a considerable weakening of the zloty exchange rate and concomitant growth of uncertainty as to its future evolution. The drop of the zloty rate followed mainly from euro appreciation in the world market. However, in August the trend towards zloty depreciation was largely averted, while in September the zloty rate strengthened a little.

In Q3 2002, as was also the case in previous quarters, the prudence which the Council showed in its successive interest rate cut decisions followed also from the realisation that the full effects of the previous cuts had not yet made themselves felt and their forecasts were subject to much uncertainty.

The value of the Monetary Conditions Index with a constant base period calculated at the NBP, after an uninterrupted drop since December 2001, went slightly up in Q3 2002 (fig. 44). However, the corresponding index with a variable base period (fig. 45) continued to show a decline.

## 6.2. The M3 money supply

Changes in the M3 money supply over Q3 2002 point to a strengthening of trends observable in previous quarters of 2002. The y/y nominal M3 growth rate in particular months of the quarter has been systematically going down. In August its value fell slightly below 100%, and by the end of September it fell already to 98.5%. The real y/y (CPI deflated) growth rate of this aggregate despite the shrinking growth rate of the CPI in 2002, also fell below 100% by the end of Q3 2002.

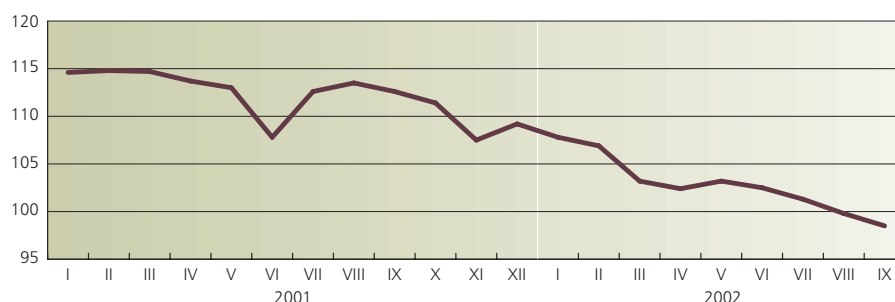
By the end of September 2002 the M3 money supply stood at PLN 320.9 billion. In nominal terms the value of this aggregate decreased in Q3 2002 PLN 1.6 billion, i.e. 0.5%. The quarterly drop of the M3 supply was amortised by zloty depreciation versus the euro and the dollar, which happened at the time. Having been adjusted for the impact of exchange rate differences the amount of narrow money was smaller compared to the end of June 2002 by PLN 2.7 billion, i.e. 0.8%.

The nominal y/y growth rate of the narrow M1 aggregate decelerated in Q3 2002. In 1<sup>st</sup> HY 2002 the growth rate increased 9.4 pp and by the end of June this year stood at 120.5%. In the subsequent three months the value of the index was systematically going down to fall to 115.3% by the end of September.

The direction of changes in the M3 aggregate in Q3 2002 was largely determined by the shrinking of the stock of household deposits, whose share in broad money stood at 63.2% in September this year. The amount of funds deposited with the banks by the household sector fell in that period PLN 2.8 billion, i.e. 1.3%. The y/y nominal household deposit growth rate decreased in

**Figure 46**

**Nominal growth rate of M3 (corresponding period previous year = 100)**



Source: NBP data.

**Table 20**  
**Money supply in Q3 2002**

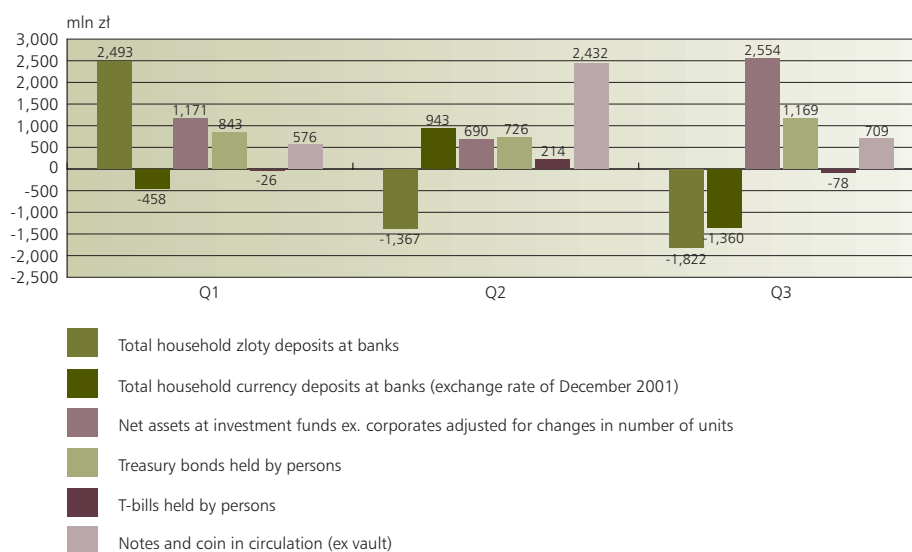
	As of 30 <sup>th</sup> of September 2002	Change on 30 <sup>th</sup> September 2001		Change on 30 <sup>th</sup> of September 2002	
	PLN bn	PLN bn	%	PLN bn	%
I. M1 money supply	127.4	16.9	15.3	1.3	1.0
II. M3 money supply	320.9	-4.8	-1.5	-1.6	-0.5
1. Total notes and coin in circulation	41.9	5.6	14.6	0.7	1.7
2. Deposits and other liabilities	278.8	-10.0	-3.5	-2.0	-0.7
2.1. Households	202.9	-10.2	-4.8	-2.8	-1.3
2.2. Non-monetary financial institutions	5.6	-2.5	-30.9	-1.0	-15.5
2.3. Corporates	50.2	4.9	10.8	1.6	3.4
2.4. Non-monetary institutions					
servicing households	8.3	-1.6	-16.3	0.0	0.3
2.5. Self-government institutions	9.8	0.7	8.2	0.3	3.7
2.6. Social insurance funds	1.9	-1.3	-40.4	-0.2	-9.1
3. Other components of M3	0.2	-0.1	-44.3	-0.3	-67.5

Source: NBP data.

Q3 2002 below 100% and was going down in its particular months. By the end of September it stood at 95.2%. The y/y growth rate of household deposits persisted since Q3 2001.

Within the household sector decisions taken by private individuals had a decisive influence on changes in the amount of funds entrusted to banks. In 2002 deposits of those persons represented over 95% (by value) of deposits and other bank liabilities to households. The systematically declining 2002 growth rate of personal deposits should be traced back to the low growth rate of registered disposable income of persons and to the falling returns on bank deposits, exacerbated by capital gains tax.

**Figure 47**  
**Quarterly value movements in financial categories attributed to households (2002)**



Source: data of the NBP, Ministry of Finance, companies of investment funds.

**Table 21****Personal deposits by original maturities**

	Change in Q2 2002				Change in Q3 2002			
	zloty		currency		zloty		currency	
	deposits		deposits		deposits		deposits	
	PLN bn	%	PLN bn	%	PLN bn	%	PLN bn	%
Current deposits	1,344.0	4.4	75.2	3.7	123.6	0.4	-91.9	-4.4
Deposits up to 1 month (incl.)	633.7	3.5	90.0	11.4	-16.4	-0.1	-12.5	-1.4
Deposits above 1 month to 3 months (incl.)	-404.4	-0.9	21.6	1.2	-2,092.5	-4.8	-50.5	-2.8
Deposits above 3 month to 6 months (incl.)	-2,663.6	-8.3	-27.4	-2.0	299.4	1.0	-48.9	-3.6
Deposits above 6 month to 1 year (incl.)	-185.0	-0.6	48.8	1.9	-918.3	-3.0	-119.4	-4.6
Deposits above 1 month to 2 years (incl.)	-161.2	-2.8	16.0	6.8	-29.6	-0.5	-6.6	-2.6
Blocked deposits	-152.1	-31.4	-43.4	-54.6	51.9	15.6	10.0	27.9
Total deposits	-1,588.6	-1.0	180.8	2.0	-2,581.8	-1.6	-319.8	-3.5

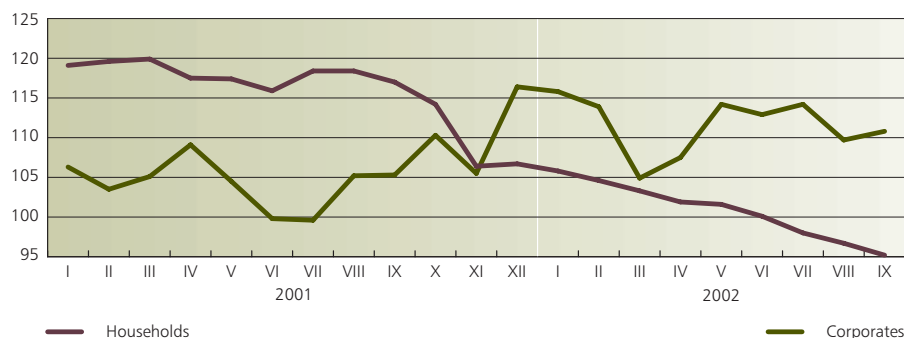
Source: NBP data.

The importance of this second factor found confirmation in an expansion, as recorded in 2002, of more profitable investment vehicles alternative to bank deposits (fig. 47).

The falling propensity to save observable in 2002 was also confirmed by changes in the maturity ladder of personal deposits at the banks (table 21).

The declining popularity of keeping money in the banking system was reflected in changes in the amount of (non-vault) notes and coin in circulation. The y/y nominal growth rate calculated for this category reached in the first two months of the quarter the highest level this year – over 118%. By the end of September the growth rate of notes and coin in circulation slowed down to 114.6%

Deposits and other liabilities to corporates (whose share in the value of the M3 aggregate at the end of September this year stood at 15.6%) rose in Q3 2002 by PLN 1.6 billion, i.e. 3.4%. The comparison of y/y seasonally adjusted nominal growth rates of deposits and other liabilities to corporates and households demonstrates that recently a gradual “transfer” of funds from the household sector to the enterprise sector was taking place in connection with the households’ increasing allocation of their disposable, most liquid financial assets to day to day consumption.

**Figure 48**
**Seasonally adjusted nominal growth rate of deposits and other liabilities**  
**(corresponding period previous year = 100)**


Source: NBP data.

### *Counterparts to changes in money supply<sup>16</sup>*

In Q3 2002 claims were the main driver of M3 money creation<sup>17</sup>. Net foreign assets also increased in the period under analysis. But one should stress that the increment of this category was only in zloty terms, i.e. it directly ensued from zloty depreciation against foreign currencies in the period. Fixed assets of banks also contributed to the money supply in Q3 2002. However, changes of the value in the remaining counterparts to changes in money supply contributed to the Q3 decline of the broad aggregate supply.

### *Claims*

The growth of claims recorded in Q3 2002 largely followed from zloty depreciation. If there had been no exchange rate fluctuations and the currency structure stayed unchanged, then the growth of claims would have been PLN 1.3 billion lower, namely PLN 6 billion, i.e. 2.4%.

In Q3 2002 70% of the total growth of claims represented claims on households and corporates. The increase in claims on households in the period was influenced by the growth (PLN 3.2 billion) of loans and advances and other claims on persons<sup>18</sup>. About 48% of the growth in claims on persons was represented in Q3 by the increment of housing loans and advances. The same share was accounted for by the growth of consumer loans and advances. However, in the previous quarter the proportions were 69% and 27% respectively.

For the enterprise sector Q3 2002 showed over a half lower nominal growth of claims compared to the movements recorded in the previous quarter. The declining share of bank credit in the funding of activities of enterprises pertained both to current operations and investments.

### *Net foreign assets*

Zloty denominated net foreign assets in Q3 2002 went up 1 billion zloties, i.e. 2.3% – exclusively as a result of a falling zloty exchange rate versus foreign currencies (first of all versus the dollar – by almost 11 groszy and almost 7 groszy to the euro). Under a stable zloty exchange rate those assets would have decreased PLN 2.2 billion.

In dollar terms net foreign assets fell USD 0.6 billion, largely on account of a USD 1.9 billion decline in currency assets at commercial banks. Foreign currency assets at the NBP increased USD 1 billion. On the side of liabilities in the banking system (commercial banks and NBP together) a slight drop of liabilities to nonresidents was recorded, of almost USD 0.2 billion.

### *Fixed assets at the banks*

The value of fixed at the banks<sup>19</sup> increased in Q3 2002 by almost PLN 1 billion, i.e. by 3.6%. This has been the biggest quarterly growth this year. In the corresponding period of the previous year the growth rate of this category stood at 3%.

<sup>16</sup> Counterparts to M3 money supply in this *Inflation report* have been collected and described according to the presentation format published in the NBP Information Bulletin and on the NBP Website in the section Statistics – Time Series. The format is adjusted to the presentation format contained in publications of the European Central Bank. In this connection the balance on “other items (net)” has been pruned of *long-term financial obligations* and *fixed assets*. In *Inflation Reports for Q1 and Q2 2002* those categories were constituent elements of the balance on “other items (net)”.

<sup>17</sup> Claims consist of claims on households, non-monetary financial institutions, corporates, noncommercial institutions servicing households, local government institutions, social insurance funds. They comprise all types of loans and money advances, purchased debt, realised guarantees and warranties (Burgschaften), earned but unpaid interest, claims on purchased repo securities, debt securities, equities and other claims.

<sup>18</sup> The household sector comprises persons (private individuals), individual farmers and individual businessmen employing up to 9 persons.

<sup>19</sup> Fixed assets are defined as the total of physical fixed assets, intangible assets, assets to be disposed of, physical fixed assets let for use under agreements, receivables from fixed assets let for use under agreements, outlays for intangible assets.

Table 22

## Counterparts to changes in money stocks

	2001		2002	
	change in Q3	share in change	change in Q3	share in change
	PLN bn	%	PLN bn	%
<b>Total money supply M3</b>	<b>11.1</b>	<b>100.0</b>	<b>-1.6</b>	<b>100.0</b>
Net foreign assets	11.9	107.3	1.0	-65.7
Claims on persons and corporates	15.1	137	7.3	-459.4
Net central government indebtedness	0.5	4.9	-5.9	374.1
Long-term liabilities	-3.4	-30.6	-2.0	126.6
Fixed assets	0.7	6.6	1.0	-62.1
Balance on "other items (net)"	-13.8	-125.2	-2.9	186.6

Source: NBP data.

Table 23

## Structure of claims by sectors

	As of 30 <sup>th</sup>	Change on 30 <sup>th</sup>		Change on 30 <sup>th</sup>	
	September 2002	September 2001		June 2002	
	PLN bn	PLN bn	%	PLN bn	%
<b>Total claims</b>	<b>253.1</b>	<b>11.9</b>	<b>4.9</b>	<b>7.3</b>	<b>3.0</b>
Households	89.5	6.9	8.4	2.7	3.1
Non-monetary financial institutions	15.5	0.4	2.4	1.0	6.7
Corporates	134.8	1.2	0.9	2.4	1.8
Non-commercial institutions					
servicing households	0.8	-0.7	-45.6	0.1	7.4
Local government institutions	9.9	3.4	51.6	0.7	7.9
Social insurance funds	2.6	0.6	33.1	0.4	18.3

Source: NBP data.

Table 24

## Claims on corporates

	Changes in Q2 2002		Changes in Q3 2002	
	million PLN	%	million PLN	%
<b>Claims on corporates</b>	<b>5,464.3</b>	<b>4.3</b>	<b>2,376.7</b>	<b>1.8</b>
Overdrafts	2,356.7	13.1	123.9	0.6
Export loans	-387.2	-15.5	-401.7	-19.1
Working capital loans	225.3	0.5	410.2	1.0
Investment loans	2,383.9	7.0	1,783.7	4.9
Other loans, advances				
and other claims	1,320.9	5.1	645.9	2.4
Debt securities	-339.3	-14.9	91.4	4.7
Equities	-95.8	-4.0	-276.7	-11.9

Source: NBP data.

### ***Net central government indebtedness***

In Q3 2002 net central government debt fell PLN 5.9 billion, i.e. 9% compared to Q2 2002, in which the category rose PLN 3.4 billion. The drop in net indebtedness resulted primarily from:

- drop in bank claims on central government on account of debt securities by PLN 1.5 billion, i.e. 1.2%,
- increase in government deposits by PLN 4.6 billion, i.e. 20.6%, representing almost fully the central budget accounts kept by the NBP.

The decrease of the government securities debt portfolio in the banking system in Q3 2002 pertained mainly to T-securities, whose value fell PLN 1.1 billion, i.e. 4.2%. The amount of Treasuries held by the banks stood at the end of September at PLN 25 billion.

The balance of the bank portfolio of long-term governmental debt securities, i.e. bonds, went down at the same time by PLN 0.4 billion to close by the end of September at PLN 60.2 billion.

In Q3 2002 the central government budget redeemed from the NBP its bonds (about PLN 2 billion) transferred to the central bank in Q2 2002 in connection with the retirement of the state debt to Brazil. The stock of the remaining government bonds held by the NBP declined PLN 1.9 billion and the prevailing part of these bonds, valued at PLN 1.7 billion, was sold to commercial banks in an outright sale. Moreover in the period under discussion commercial banks increased their government bond exposure by PLN 1.6 billion.

In Q3 2002 government Eurobonds totaling USD 1.4 billion were issued intended for foreign markets. Thus obtained funds were partly utilised for the redemption of the government's current liabilities to non-residents. The remaining part of the funds credited the currency account of the government at the NBP which, after zloty translation, showed a Q3 2002 rise of PLN 2.4 billion.

Zloty deposits of central government institutions placed in the Polish banking system climbed in Q3 2002 almost PLN 2.2 billion to reach by the end of September 2002 along with other bank liabilities to the sector the value PLN 23.2 billion, of which the funds held on the NBP account stood at PLN 13.6 billion.

### ***Long-term financial liabilities***

Long-term financial liabilities<sup>20</sup> of the banks rose PLN 2 billion (i.e. 2.1%) in Q3 2002 reaching the level of PLN 20.2 billion. The biggest share in the increment of this category represented capitals and reserves, which increased PLN 1.6 billion. The growth of deposits (an item of long-term liabilities) was PLN 0.4 billion, of which the funds placed at the banks by private individuals for a period above 2 years rose PLN 0.5 billion. Their value at the end of September stood at PLN 16.5 billion.

### ***Balance on „other items (net)”***

Over Q3 2002 the negative balance on „other items (net)” rose PLN 3 billion, i.e. 5%, and stood at the end of September at PLN 63 billion. Just like in previous quarters the scale and direction of changes in that category in the period under analysis were determined by *other items (net) at the NBP*. Over Q3 2002 they rose PLN 1.7 billion, i.e. 4.9% and stood at PLN 35.7 billion at year end September 2002. Such growth was caused primarily by an increase of the „foreign currency translation reserve” in connection with zloty depreciation. The balance sheet items which contributed to the growth of the negative balance on other items (net) in Q3 2002 were moreover: bank earnings, prepayments and accruals, interbranch and interbank settlements, unearned interest and other net assets at commercial banks. The total value of movements on the above positions stood at PLN 2.4 billion.

On the other hand the reduction of the negative balance on „other items (net)” by PLN 1.2 billion was contributed to in Q3 2002 by: funds pending allocation to appropriate client accounts,

<sup>20</sup> This item covers: deposits, cash collateral liabilities, borrowings whose original maturity does not exceed two years and deposits with maturities in excess of 3 months, debt securities for periods in excess of 2 years. Capitals and reserves are included in this item.

balances on accounts of securities issued by monetary financial institutions and settlements of accounts on trade in foreign securities and derivatives.

### 6.3. Monetary policy transmission

#### 6.3.1. Interest rates

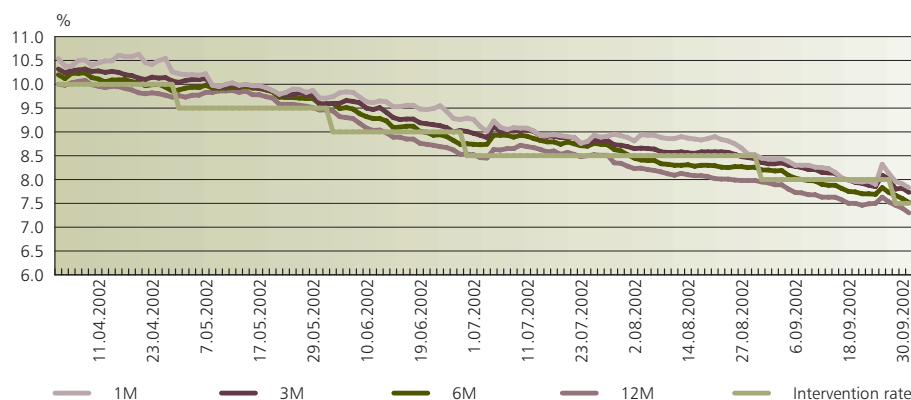
##### *Monetary policy vs interest rates in the interbank market*

In Q3 2002 interest rates on the interbank market were still declining. The fall in interest rates on short interbank deposits resulted from the central bank interest cuts in August and September 2002. On the other hand the decrease of interest rates on longer interbank deposits reflected not only the NBP interest cuts, but also continued market expectations of further reference rate cuts (fig. 49 and 50).

Continued expectations of further NBP interest rate cuts were reflected in a parallel lowering of the whole money market yield curve. The interest rate on the shortest transactions went down about

**Figure 49**

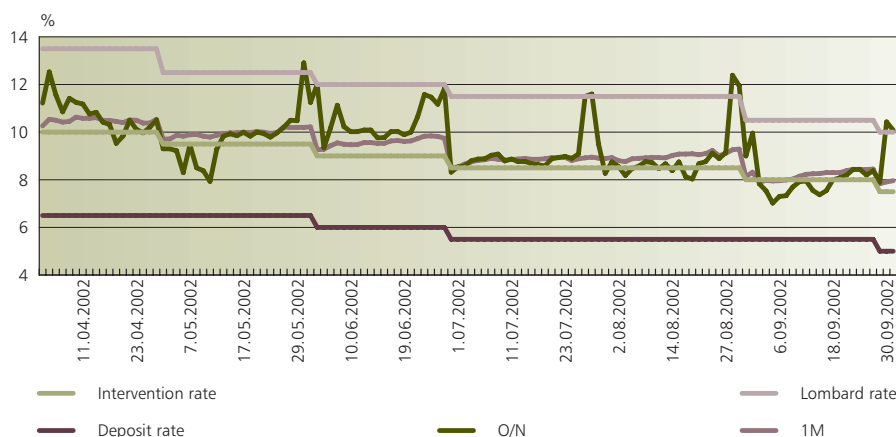
**Intervention rate and interest on interbank deposits: 1M, 3M, 6M, 12M**



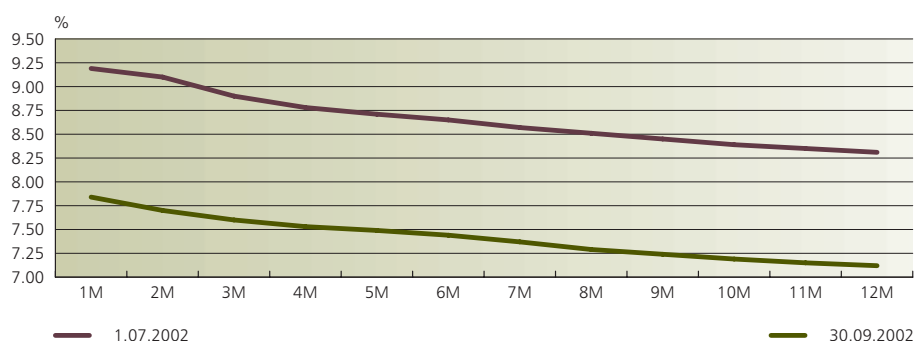
Source: Reuters and NBP data.

**Figure 50**

**NBP interest rates and O/N and 1M interest rates on interbank deposits**



Source: Reuters and NBP data.

**Figure 51****Shift of Q3 2002 yield curve based on currency swaps\***

\* The curve of short-term interest rates reflects the situation on the currency swap market, this being the most liquid segment of the interbank market on which zloties can be invested or borrowed from.  
Source: Reuters and NBP data.

135 basis points, while the long end of the curve descended about 120 basis points. In the space of Q2 2002 the difference between the interest rate on 1- and 12-month currency swaps decreased merely about 10 basis points. This means that despite the two NBP interest rate cuts, the expectations of reference rate cuts were in Q3 2002 as intense as in the previous quarter (figure 51).

The temporary rise in short-term interest rates in July 2002 resulted from uncertainty triggered in the market by an unexpected replacement of the Minister of Finance and consequent possibility of revising the exchange rate regime. In the first days of July the increase of short-term interest rates resulted from a relatively high outflow of portfolio capital, mainly from the bonds market. Short-term interest rates rose, because domestic banks borrowed zloties on the money market to purchase currencies for foreign investors pulling out of Poland. In the first two weeks of July – despite the capital outflow being halted – interest rates did not return to the June level. This followed from persisting uncertainty as to the direction of fiscal and exchange rate policy.

#### *Reaction of banks to central bank policy*

In Q3 2002 the MPC made two prime NBP interest rate cuts (lombard and rediscount rates by 150 basis points and intervention rate 100 basis points). In reaction to these cuts the banks adjusted their interest rates on deposits and loans<sup>21</sup>. In July and September 2002 interest rates on deposit products changed most. However, in August 2002 interest rate cuts on corporate loans prevailed.

In Q3 2002 the banks under analysis, just like in previous quarters, first adjusted to the NBP interest rate changes their interest rates on deposits only to be followed by interest rates on loans. Also, there were more sweeping cuts in interest rates on longer deposits and corporate loans.

The unequal cuts in interest rates on loans to persons and corporates contribute to maintaining considerable interest rate disparities. In September 2002 the interest rate on consumer loans to persons was higher than the interest rate on corporate loans by 627 bp, while in March this year the difference was lower, at 504 bp (fig 52). The most important reasons for maintaining such disparity include a weaker sensitivity of private persons than corporates to credit terms offered by banks. This follows from the fact that banks are the main supplier of monetary funds to the private individual in need of them. Another reason is the necessity to incorporate in credit interest a higher risk margin in connection with a fast increment of irregular personal loans. The risk margin<sup>22</sup> on consumer loans in September this year stood at 9.54 bp and corporate loans 3.27 bp.

<sup>21</sup> Analysis of interest rate movements was conducted based on the interest rate data reported to the NBP by 11 biggest banks.

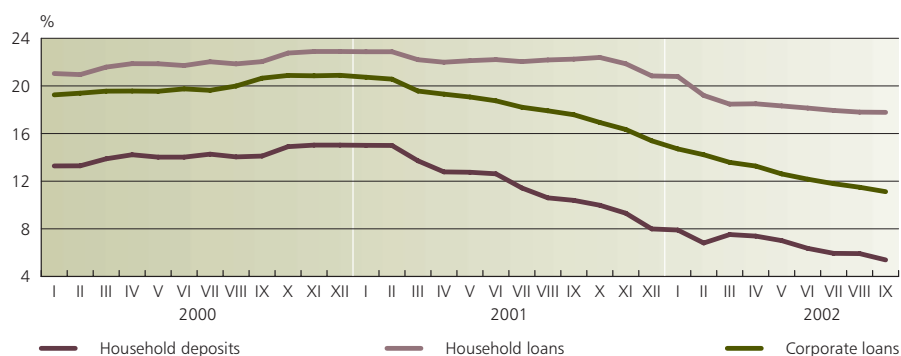
<sup>22</sup> Risk margin was defined in the following manner: interest on a loan less interest on risk-free claims (weighted average yield on 52-week T-bonds) less inflation expectations for the coming year.



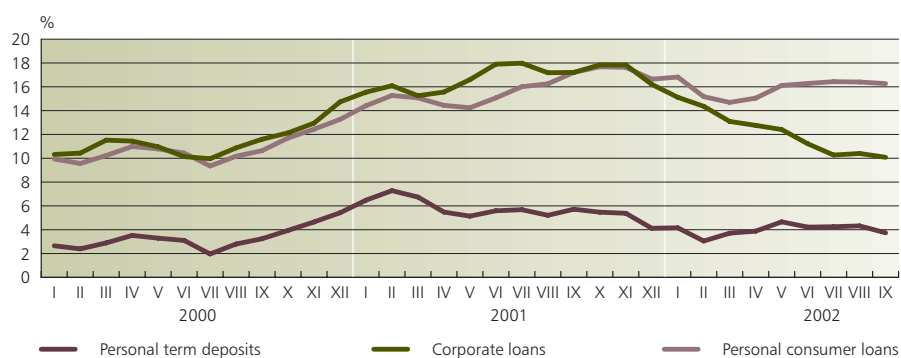
**Table 25****Changes in average\* nominal interest on deposits and loans until September 2002 (in pp)**

	December 2001 rates	June 2002 rates	September 2002 rates	Change since December 2001	Change since June 2002
3-month personal zloty deposit	7.36	5.55	4.47	-2.89	-1.08
6-month personal zloty deposit	7.53	5.83	4.92	-2.61	-0.91
12-month personal zloty deposit	7.99	6.36	4.39	-3.60	-1.97
Total personal term deposits	7.87	5.89	5.09	-2.78	-0.80
1-year corporate zloty loan	15.39	12.17	11.12	-4.27	-1.05
3-year corporate zloty loan	15.56	12.92	11.93	-3.63	-0.99
5-year corporate zloty loan	15.63	12.78	11.83	-3.80	-0.95
Consumer loan	20.84	18.14	17.78	-3.06	-0.36
Total loans to persons and corporates	16.77	13.55	12.65	-4.12	-0.90

\* Weighted average deposit and loan interest rates are calculated on the basis of data reported to the NBP by 11 biggest commercial banks. The weights are shares of the banks in the deposit or credit market.  
Source: NBP.

**Figure 52****Weighted average nominal interest rates on 1-year corporate and household deposits and loans**

Source: NBP.

**Figure 53****Weighted average real interest rates on personal deposits and loans**

PLEASE NOTE: Before March 31 consumer (cash) loans, now called in Polish "kredyty konsumpcyjne (gotówkowe)" were included in the category "kredyty konsumenckie".  
Source: NBP.

Interest rate disparities between household loans and corporate loans exist in other countries too. In EU countries interest on household loans in August 2002 was higher than the interest on corporate loans by an average of 400 bp. The biggest differences existed in Germany and Portugal (4.3 – 4.6 bp), while the smallest in Belgium and Austria (1 – 1.5 bp). There is also a similar trend in the USA, where the difference is about 300 bp.

In September this year real interest rates on deposits and loans<sup>23</sup> were further depreciated, which was caused mainly by changes in nominal interest rates. Just like in the case of nominal rates the biggest drop in real interest rates in Q3 2002 took place in the case of corporate loans (by 114 bp) and the lowest in the case of consumer loans (1 bp).

The average weighted real interest rate on personal term deposits was in September 2002 about 3.7%, on corporate loans it was 10.1% and on consumer loans 16.3% (fig. 53).

### *Interest rates and demand for loans*

After a short-lived Q2 2002 rise the growth rate of bank lending returned in Q3 2002 to a falling trend. The real y/y growth rate of claims on the non-financial sector<sup>24</sup> decelerated in Q3 2002 to 2.4%<sup>25</sup> from the level of 4.9% in the previous quarter. Such considerable drop represents first of all the lowering of the real y/y growth rate of claims on households from 13.9% in Q2 to 7.1% in Q3 2002. The real y/y growth rate of claims on corporates also weakened to achieve by the end of Q3 2002 the level of 0.2% (fig. 54). But it should be noted in this context that the share of claims on households in total claims on the non-financial sector has now for three quarters fluctuated around the 40% level (it was 40.1% at the end of Q3 2002).

The decrease of the real y/y growth rate of claims on households can be traced back to the level of real interest rates on consumer loans to households at commercial banks. The average real interest rate on consumer loans to households, after a drop to the level of 14.9% in Q1 2002, in subsequent quarters showed a growing trend to reach by the end of Q3 2002<sup>26</sup> the level of 16.6%. But the real y/y growth rate of claims on households, after a temporary growth in the 1st HY 2002, returned to a falling trend in Q3 (fig. 55).

Currency claims on the non-financial sector decreased in Q3 2002 by PLN 1.3 billion, while currency claims on households grew PLN 0.84 billion. The share of currency claims on households in total claims on households grew from November last year and stood at the end of Q3 2002 at 22.5%.

The growth of currency claims on households primarily resulted from a growth of claims on personal real estate loans, which at the end of Q3 2002 stood at PLN 11.0 billion compared to PLN 10.3 billion at the end of the previous quarter. But the y/y nominal growth rate of personal real estate loans went down in Q3 2002 and stood at 90.3% (compared to 163.4% in the previous quarter). The growth of zloty personal real estate loans in Q3 2002 was PLN 0.84 billion and (for the first time since Q2 2000) exceeded the growth of currency loans for the same purpose, of PLN 0.72 billion. The main cause of faltering demand for currency personal real estate loans was the reduction in the disparity between the interest rate on zloty loans and currency loans resulting from the drop in Poland's interest rates. The average nominal interest rate on housing loans was 9.7% at the end of Q3 2002 compared to 10.2% at the end of the previous quarter.

The increase of the growth rate of claims on corporates in June and July this year, back then interpreted as a sign of approaching recovery, was not sustained till the end of the quarter. The

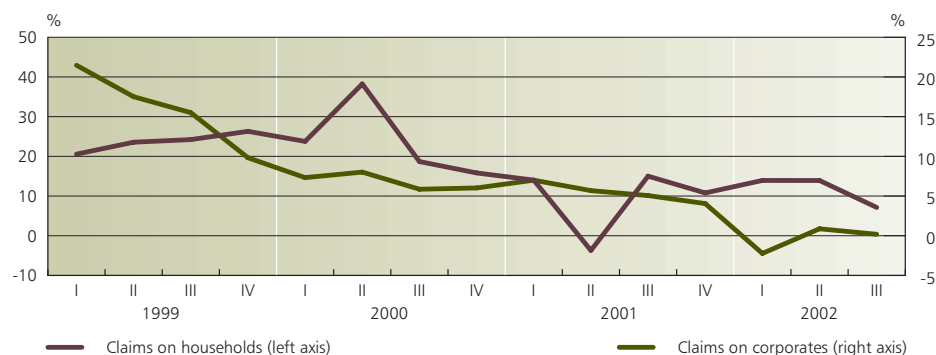
<sup>23</sup> Nominal interest rates on personal deposits and loans were deflated by the y/y CPI rate, while nominal interest rates for corporate loans – by the y/y PPI rate.

<sup>24</sup> According to a new definition of money supply introduced by the NBP as from March 2002 the non-financial sector includes households, corporates and non-commercial institutions which service households.

<sup>25</sup> The average weighted level of CPI and PPI was used as the deflator; the weights being claims on households and corporates, respectively, in total claims on the non-financial sector.

<sup>26</sup> Real interest on household consumer loans is construed as average nominal interest on such loans, deflated by inflation expectations of households quoted by Demoskop.

**Figure 54**  
**Real growth rate of claims on households and corporates**  
**(compared to the corresponding quarter previous year)**



Source: NBP data.

**Figure 55**  
**Real interest rates on consumer loans to households and average real growth rate**  
**of claims on households**



Source: NBP data.

average real interest on corporate loans shrunk at the end of Q3 to the level of 10.4%, but the drop did not translate into a higher growth rate of lending.

Based on a business sentiment survey conducted by the NBP among enterprises<sup>27</sup> it can be said that enterprises acknowledged a drop in interest rates on loans at commercial banks and the low demand for loans on their part in Q3 2002 was connected with a lack of clear symptoms of economic growth acceleration in Poland, the deterioration of the outlook and growth prospects abroad and less than full productive capacity utilisation. The level of interest rates, which in Q4 last year was mentioned by enterprises as second among the factors constraining their activity, starting from Q2 2002 definitely lost importance. In Q3 2002 it was mentioned ninth in the ranking of bottlenecks to the operation of enterprises (of the 14 items taken into consideration). The level of interest rates on loans constituted an important barrier only for 7% of enterprises surveyed.

<sup>27</sup> Wstępna informacja o kondycji sektora przedsiębiorstw ze szczególnym uwzględnieniem stanu koniunktury w IV kwartale 2002 r. [Preliminary information of the condition of the enterprise sector with particular emphasis on the Q4 2002 outlook]. Department of Statistics NBP, October 2002

In turn, in the estimation of banks many enterprises fall short of borrowing capacity.

Enterprises have alternative to bank loans sources of external funding: issue of debt paper and foreign loans. By the end of Q3 2002 the value of corporate indebtedness on the issue of debt securities stood at PLN 11.6 billion and was 5.7% lower than at the end of Q2 2002. However, corporate debt on bonds with maturities over 1 year stood at PLN 3.1 billion and was 24.9% higher on the previous quarter. The ratio of corporate debt on the total issue of debt securities to debt in the banking system stood at 11.2% at the end of September 2002. But it needs to be borne in mind that part of debt securities issued by corporate are held by commercial banks and treated as claims on the non-financial sector.

Foreign corporate indebtedness continues to be on the rise. In Q2 2002 such debt on loans and advances went up about PLN 7 billion<sup>28</sup>.

In contracting currency obligations non-financial sector entities must be mindful of the risk of exchange rate movements. Their lower interest rate relative to zloty loans remains to be the basic reason for drawing currency loans. Moreover, enterprises await stabilisation of the zloty rate in connection with Poland's EU and later ERM2 accession prospects. Just like in previous quarters the hedging of enterprises against currency risk relies on export revenues and purchase of forward contracts. Households, in turn, which take currency loans can use the currency redenomination option, should the zloty weaken.

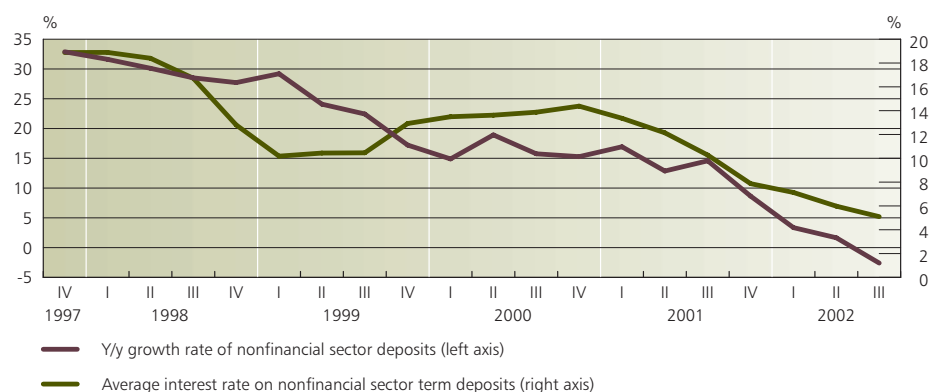
### *Impact of interest rates on deposits*

The y/y nominal growth rate of non-financial sector deposits, which are part of the M3 broad monetary aggregate (i.e. with maturities of up to 2 years), decreased since last quarter 2001. In Q3 2002 it became negative for the first time (-2.6%). On their part, bank deposits of the non-financial sector decreased in this quarter again, by PLN 1.08 billion this time. Just like in the previous quarter this resulted from a drop in the value of household deposits, by as much in Q3 2002 as PLN 2.8 billion. The remaining deposit categories rose during the period.

The drop in household deposits was contributed to by a continued low growth of registered household disposable income in the period under analysis. The reduction of the y/y growth rate of bank deposits from the total non-financial sector also resulted from their falling interest rates (fig. 56). At the end of Q3 2002 the average nominal interest rate on term deposits, both from households and corporates, descended to the level of 5.1%. In the case of households the effect of falling interest rates was exacerbated by capital gains tax.

**Figure 56**

**Y/y nominal growth rate of nonfinancial sector deposits\*  
and average interest rates on nonfinancial sector term deposits**



\*included in M3.  
Source: NBP data.

<sup>28</sup> Q3 figures are not yet known.

The collapse of the growth rate of deposits from the non-financial sector, which are part of M3, contrasts with the growth of assets in investment funds, T-securities held by households and deposits with maturities of over 2 years, which are not part of M3. In Q3 2002 the value of bonds and T-securities and units in investment funds held by the households went up about PLN 3.6 billion<sup>29</sup>, while deposits from the non-financial sector with maturities of over 2 years increased PLN 0.56 billion. Given that the yield of investments in T-securities and investment funds is higher than interest rates on term deposits with banks the above allocation of financial assets demonstrates that the nonfinancial sector is shopping around for the highest possible rates of return. As an improved competitiveness of bank deposits is not very likely, the process of substituting investments in T-securities and investment fund units for bank savings can be expected to continue.

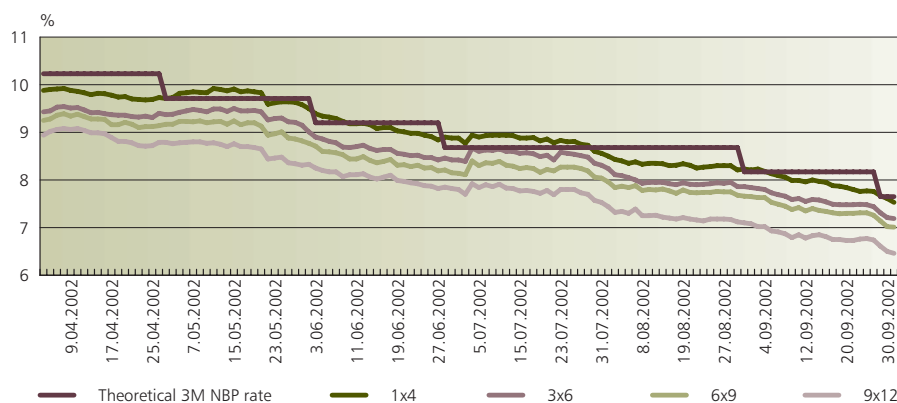
Since mid-last year the escalating drop of interest on non-financial sector deposits was accompanied by the speeding up of the growth rate of the narrow monetary aggregate M1<sup>30</sup>.

### Expected interest rates

#### Short-term expectations

Q3 2002 saw a continuation of expectations of further interest rate cuts. Markets assumed that the current round of NBP interest rate cuts, started at the beginning of 2001, had not yet come to a halt. The intensity of expectations of further NBP rate cuts increased in connection with the speeding up of the disinflation process in the summer months and lack of clear symptoms of internal and external demand recovery, which led to a drop in inflation expectations (fig. 57).

**Figure 57**  
**Interest rates on 3M WIBOR FRAs**



FRA contracts (1x4, 2x5, 3x6, etc.) are 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), two months from that date (2\*5) or 3 months from that date (3\*6). Source: Reuters and NBP data.

Expectations of further central bank rate cuts were temporarily refuted by the resignation of the Minister of Finance M. Belka and consequent investor apprehension as to the whether the budget policy and exchange rate targets, as adopted before, would be maintained. Only the declaration of the new Minister G. Kołodko that the hitherto budget policy would be continued as well as publication of low June inflation figures (1.6% y/y) became the factors which rekindled the expectations of further NBP reference rate cuts.

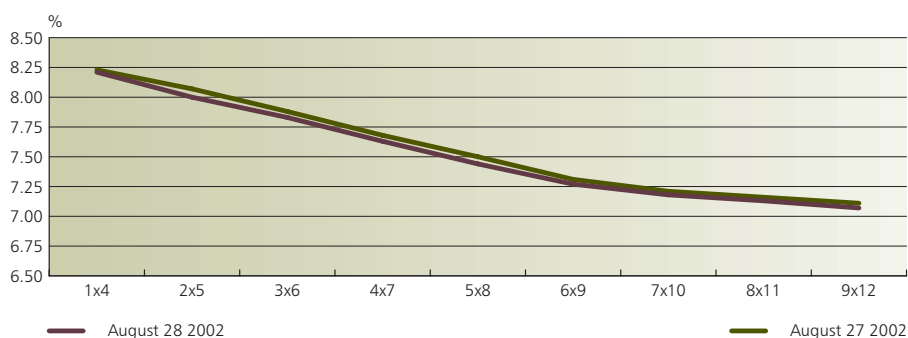
<sup>29</sup> See fig. 47.

<sup>30</sup> Cf. item 6.2 "M3 money supply".

The second event which took the financial markets by surprise in Q3 2002 (to a much smaller extent though than M. Belka's resignation) was the September NBP interest rate cut by 50 bp. A reflection on the lack of definite market expectations of September interest rate cuts was the downward shift (already after the NBP decision) of the forward rate curve on average by 10 bp. That meant that the NBP decision, relatively underanticipated by the market, adjusted earlier market expectations as to the future level of interest rates (fig. 58 and 59).

**Figure 58**

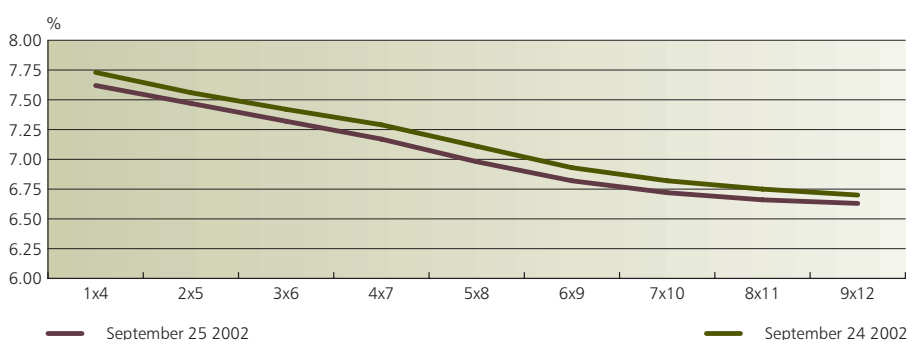
**Shift of 3-month forward yield curve after MPC meeting in August 2002**



Source: Reuters and NBP data.

**Figure 59**

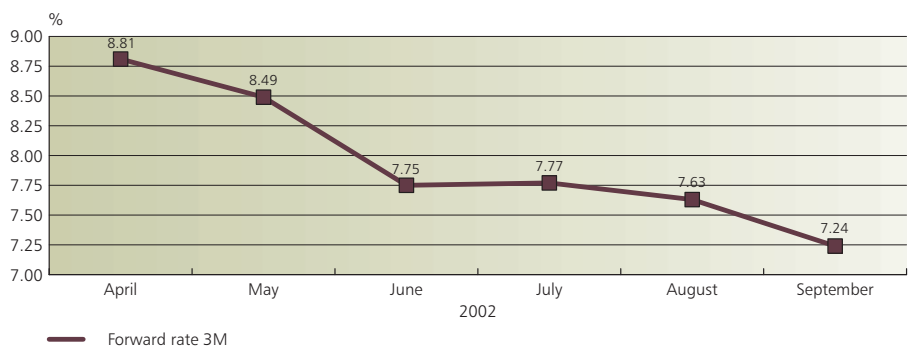
**Shift of 3-month forward yield curve after MPC meeting in September 2002**



Source: Reuters and NBP data.

**Figure 60**

**3-month forward rate based on contracts maturing at the end of December 2002**



Source: Reuters and NBP data.

The low inflation level and lack of clear symptoms of economic recovery made the scale of NBP interest rate cuts expected until the end of the year go up in Q3 2002 by 50 bp (fig. 60)

### Long-term expectations

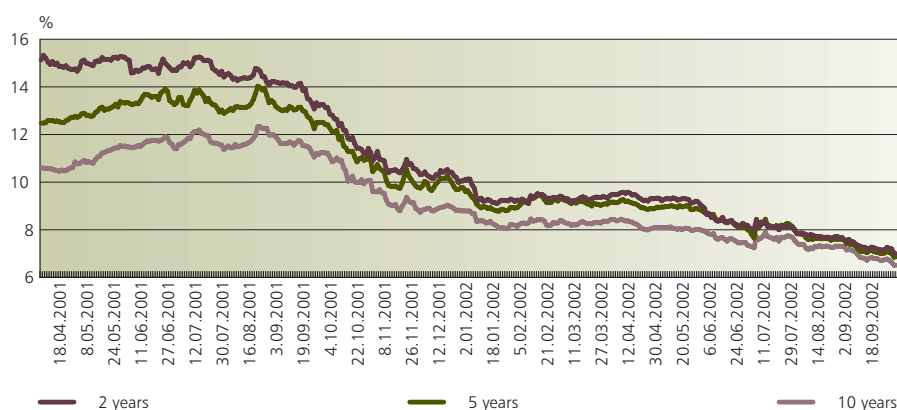
In Q3 2002 the general economic situation was critical to expectations as to the level of long-term interest rates.

Data on a further month to month drop in the rate of inflation made investors confident that in the foreseeable future there was no risk of its renewed rise to any major extent. The results of Reuters surveys demonstrate that in view of market analysts until 2003 the rate of inflation will be at a low level within the inflation target band adopted for 2003. In view of the low, expected inflation and weak growth rate of demand, as well as the improving balance of the current account, analysts expected further interest rate cuts by the NBP.

The increasing probability of such cuts leading to lowered costs of holding assets in the bank portfolio contributed to a steady decrease of the level of long-term interest rates. In September this year the yields of 2-, 5- and 10-year bonds had their lowest points in history (fig. 61, 62)

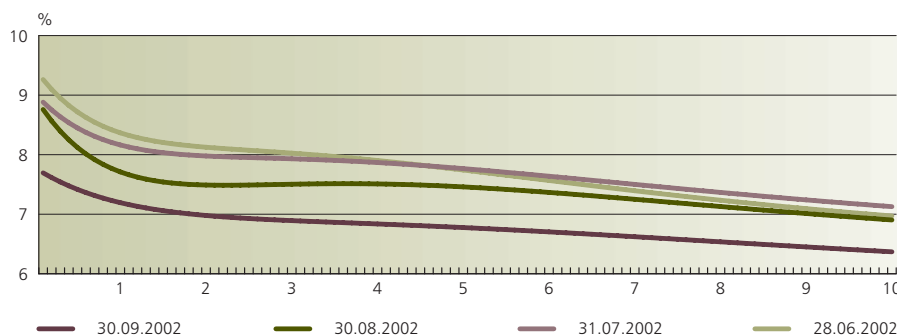
A temporary rise in the yield of bonds at the beginning of July 2002 was, like in the case of short-term rates, the effect of market jitters in connection with the change on the post of the

**Figure 61**  
T-bond yield rates

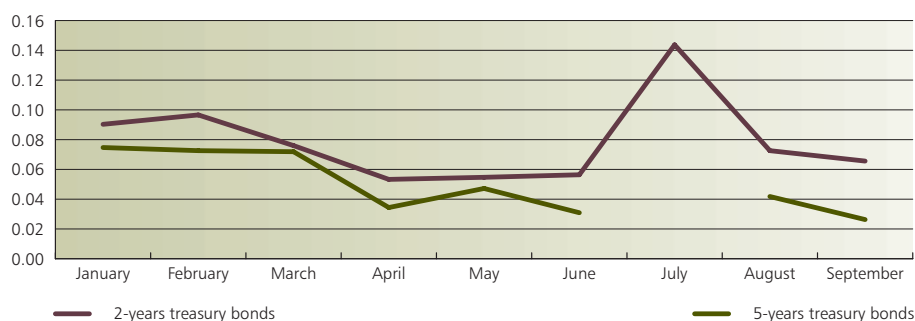


Source: Reuters and NBP data.

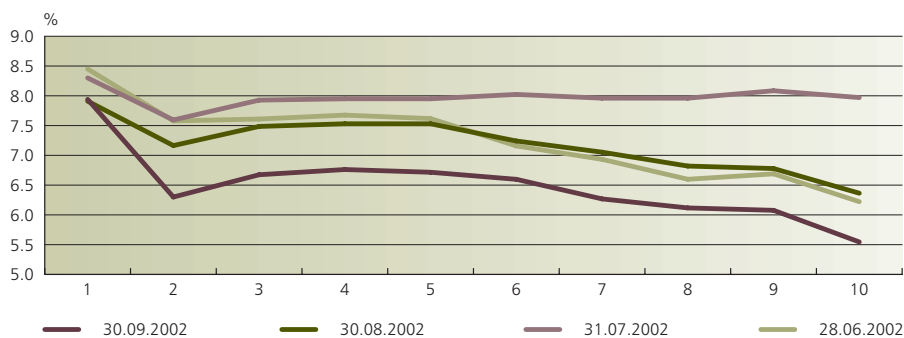
**Figure 62**  
Zerocoupon curve in Q3 2002



Source: Reuters and NBP data.

**Figure 63****Slope of the auction demand curve at T-bond tenders**

Source: Reuters and NBP data.

**Figure 64****1 year forward yield curve based on IRS contracts**

Source: Reuters and NBP data.

Minister of Finance and resulting from a capital portfolio outflow. The sellout of part of bonds out of foreign investor portfolios caused prices and yields of T-bonds to plummet. Such investor uncertainty was confirmed by the results of the 2-year bond tender of July 5 2002, on which the slope of the auction demand curve increased (the demand curve measures the degree of investor uncertainty<sup>31</sup> (figure 63)).

The calming down of sentiments after the new Minister of Finance speech in the Sejm on 26th July 2002 induced foreign investors to rebuild their bond portfolios by the end of August 2002. The increased demand of investors, domestic and foreign alike, for Polish Treasures resulted in soaring bond prices and return of the falling trend in their yield.

The August cuts in NBP interest rates were expected, so investors did not revise downwards their earlier expectations as to the scale and sequence of future interest rate cuts. The scaling down of earlier investor expectations manifested itself only in September, through aggressive drops in the yield of 5-year and longer securities, which fell then, on average, 80 bp from Q2 2002.

However, what still persisted was the positive slope of the middle segment of the 1-year forward curve (fig. 64). This pointed to persisting investor fears as to the trend of monetary policy in the future, after the passage to the growth phase of the business cycle, or perhaps adjusting to the shape of the yield curve in the Eurozone.

<sup>31</sup> The slope of an auction demand curve is the slope of a linear auction demand curve. Can be interpreted as an uncertainty index on the primary market as to the further evolution of interest rates (see Inflation Report 1999, p. 50).

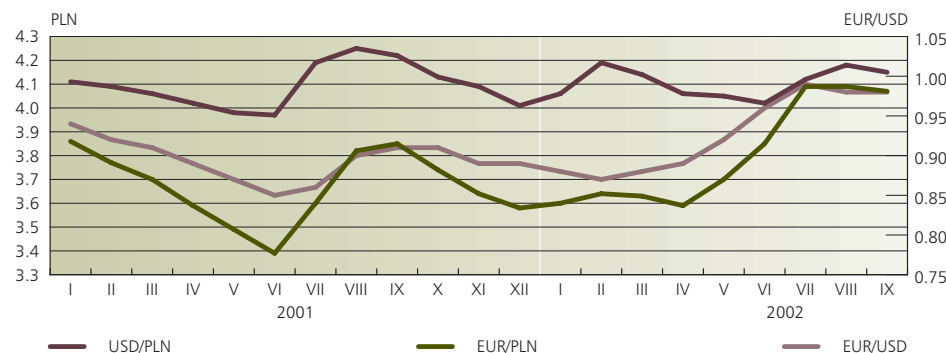


### 6.3.2. Exchange rate

Q3 2002 witnessed a pronounced trend towards a deeper nominal and real depreciation of Polish currency. The zloty lost ground both to the euro and the dollar. However, due to a continued growth trend of the euro to the dollar in the world market, the scale of zloty depreciation with respect to the common European currency was much bigger (it was almost 10%, compared to 2.7% vis a vis the dollar, fig. 65).

**Figure 65**

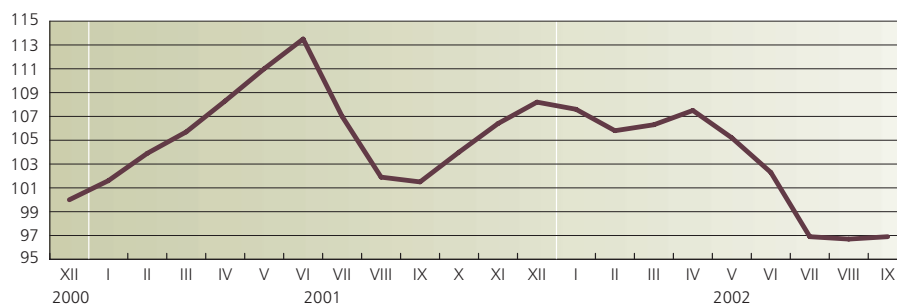
**Zloty exchange rates versus USD and EUR and EUR/USD relation (month average)**



Source: NBP data.

**Figure 66**

**Zloty nominal effective exchange rate in 2001–2002 (monthly data, December 2000 = 100)**



Source: NBP data.

The nominal effective zloty rate with respect to the basket of Poland's most important trade partner currencies weakened in Q3 2002 on average by 8% on Q2 (in which its depreciation was 1.5% (fig 66)).

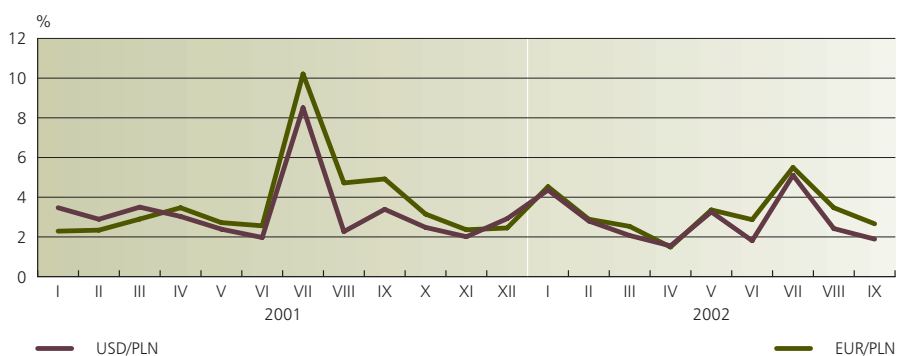
In the quarter under analysis, particularly in July, the volatility of the zloty rate increased (fig. 67).

The main factors determining the zloty rate of exchange in Q3 2002 did not undergo any major changes compared to the previous quarter. The zloty was weakened by:

- further strengthening of the euro/dollar rate in the world market (especially pronounced in July), which was particularly reflected in a steep decline of the zloty with respect to the European currency;
- temporary rise in domestic and foreign political risk<sup>32</sup>;

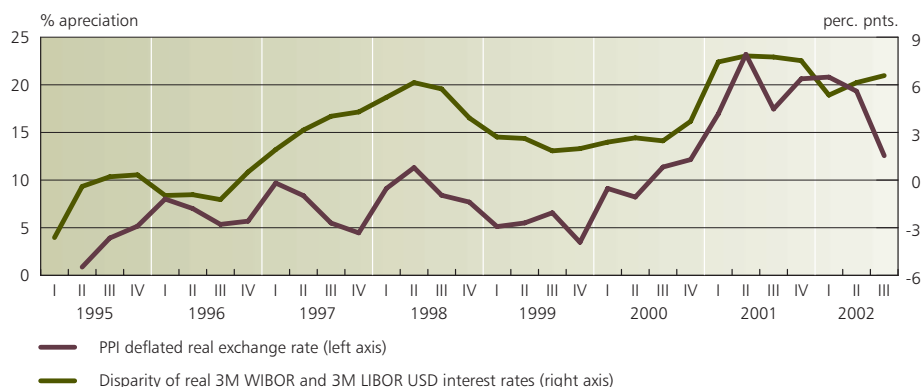
<sup>32</sup> In Poland it included such events as the unexpected change on the post of Minister of Finance, statements of politicians on Poland's exchange rate strategy in the run-up to EU accession and membership, and abroad: increased risk in emerging economies due to the situation in Brazil.

**Figure 67**  
Volatility of zloty exchange rate versus USD and EUR



Source: NBP data.

**Figure 68**  
Producer price deflated real exchange rate and real interest rate disparity



Source: Reuters and NBP data.

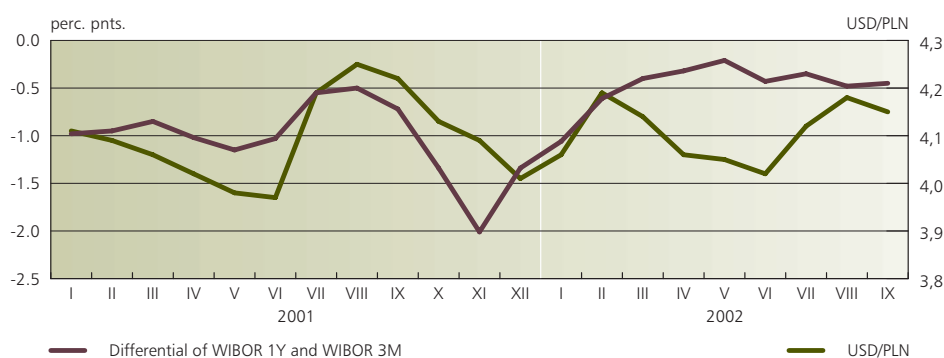
- visible since the end of last year decrease in Polish and foreign interest rate disparities causing a relative lessening in the appeal of Polish securities with respect to the situation the year before (fig. 68);
- relative (compared to the 2001 situation) weakening of the market expectations of further MPC interest rate cuts (see fig. 69). However, in view of the incoming data on falling inflation rates, narrowing of the current account deficit and poor signs of recovery in the Polish economy – these expectations still persisted, which constrained zloty depreciation;
- market expectations regarding an uncertain outcome of the referendum in Ireland (end of Q3).

The zloty was being strengthened, on the other hand, just like in previous quarters, by growing central government borrowing requirements (fig. 70). This was accompanied by growing foreign investor demand for Polish Treasuries<sup>33</sup>.

Changes in the rate of exchange in response to movements in interest rate disparities, maturity ladder of domestic interest rates and risk premium in impacting the level of domestic currency denominated prices of imported goods do also influence changes in the CPI, both directly

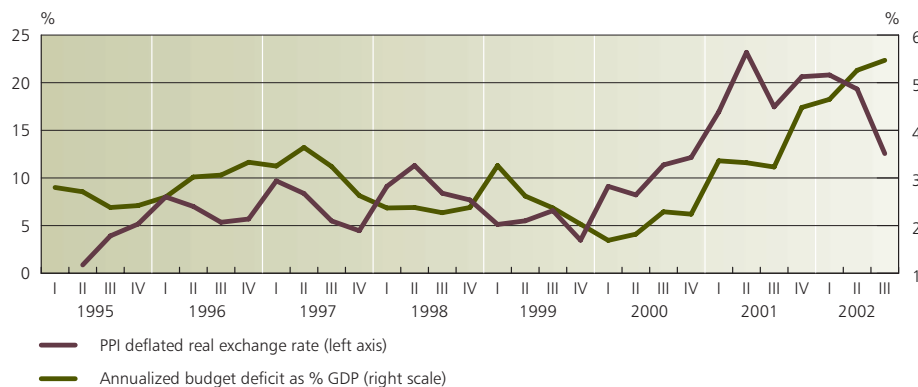
<sup>33</sup> It should be noted that Q3 2002 brought a considerable intensification of risk in world politics and economy. This manifested itself in a considerable recovery of global investors' demand for government bonds.

**Figure 69**  
Interest rate cut expectations and nominal exchange rate



Source: NBP calculations.

**Figure 70**  
PPI deflated real exchange rate and annualized budget deficit



Source: NBP calculations.

(through prices of consumer imports) and indirectly – through changes in the PPI caused by producer import price fluctuations. In turn, internal price fluctuations generated by exchange rate movements do impact the GDP by changing the relationships between the potential and real product. Changes in the demand gap are directly translated into the CPI growth pace.

Changes in external prices impact the CPI analogously, but irrespective of exchange rate fluctuations.

The cumulative effect of transferring changes in external factors to the CPI, which encapsulates changes in external prices (supply shocks), as well as exchange rates (exchange rate shock) and demand gap (demand shock), is known in the economic literature as the *pass-through* co-efficient.

The analysis of the pass-through effect conducted by the NBP allowed to track the impact of the supply, demand and exchange rate shock on, one by one, import prices, producer prices and consumer goods.

In the case of import transaction prices the short-term *pass-through* effect (defined as a transfer on import prices in the space of two quarters of the impact of changes in external prices and exchange rate) is 0.51. But the long-term co-efficient (understood as a cumulated effect of external prices and the exchange rate) stands at 0.79. The two co-efficients do not diverge from the results calculated for OECD countries, which are 0.6 and 0.75 respectively (e.g. 0.6 and 0.8 for Germany). The speed of reaction of import prices to changes in the exchange rate does not differ

from the OECD average either – about 65% for the cumulated pass-through effect happens between the first and the second quarter from the occurrence of the shocks, and 87% in the period of up to four quarters. The impulse completely expires after 7-8 quarters.

For producer prices in the manufacturing sector the long term *pass-through* is 0.59 and approximates the share of producer imports in Poland's total imports (60.8% in 2001). The short-term co-efficient is 0.26 and the strongest reaction on the side of the PPI should be expected between the second and the fourth quarter from the occurrence of the shocks.

The long-term *pass-through* co-efficient for consumer prices stood at 0.42. Moreover, 41% of the total pass-through effect cumulated in the first two quarters, and 85% in the first year.

Whereas the reaction of Polish import transaction prices is typical for an open economy, the force of further transmission of demand and exchange rate shocks – to the PPI and CPI – is definitely bigger in Poland than in developed economies. For instance for the USA, France, Switzerland the long-term *pass-through* co-efficient is 0.1, for Germany 0.15, but for Holland and Belgium 0.35 and for the Republic of South Africa 0.54.

In view of the level of the *pass-through* co-efficient and time structure of the reactions of internal prices to movements in the exchange rate and external prices it can be estimated that over the three quarters of 2002 consumer prices rose 0.3 pp on account of exchange rate movements and fell 2.1 pp on account of external price changes. The strongest deflationary effect occurred in Q2 2002 – a 1.3 pp fall (CPI growth by 0.06 pp on account of exchange rate fluctuations and CPI drop by 1.38 pp on account of external price changes). In Q3 2002 the pass-through effect was CPI neutral – the 0.16 pp drop on account of exchange rate fluctuations was accompanied by a 0.14 pp inflation rise on account of external price rises.

### 6.3.3. Inflation expectations

In Q3 2002 the inflation expectations of consumers and bank analysts were further reduced, thus creating propitious conditions for carrying out of the NBP's statutory objective, i.e. maintaining price stability.

#### *Inflation expectations of consumers*

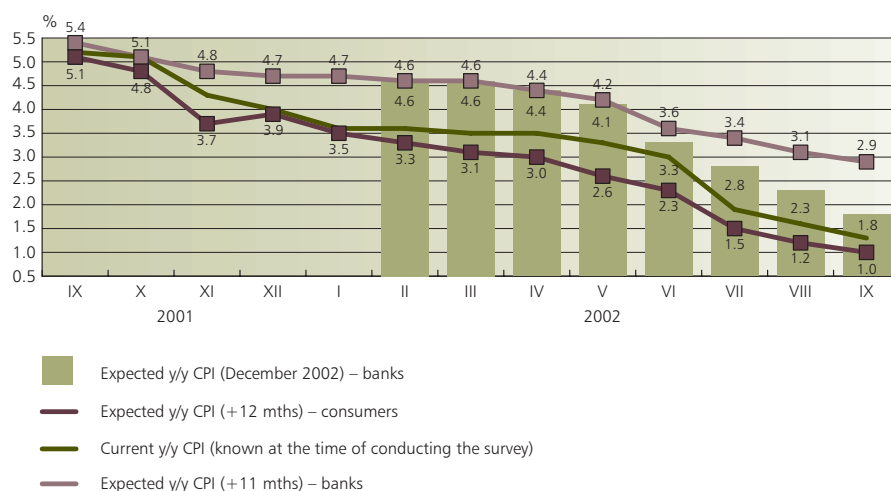
In Q3 2002 the objectified measure of inflation expectations of consumers formulated with respect to y/y inflation in the corresponding month of the following year declined by a total of 1.3 pp from June 2002. In September 2002 it stood at 1.0%.

The objectified measure of inflation expectations of consumers is quantified using a probabilistic method based on qualitative data coming every month from an Ipsos-Demoskop survey<sup>34</sup>. Due to the very construction of the survey question, the quantification method takes into account both the pattern of responses to the survey question and the current inflation rate to which the respondents relate their predictions<sup>35</sup>. The quantification results are an objectified measure of the price growth rate expected by consumers over the coming 12 months in the sense that the quantification procedure takes the official GUS-published inflation measure as the current inflation rate perceived by the respondents, known at the time of responding to the survey question. As the Ipsos Demoskop survey is conducted in the first half of a month, i.e. before the GUS publishes the inflation rates for the previous month, the y/y inflation two months previously is taken to be the current rate of inflation.

<sup>34</sup> The adjusted Carlson and Parkin (1975) method is employed. Its description is presented in: T. Łyziak (2000), *Badanie oczekiwań inflacyjnych podmiotów indywidualnych na podstawie ankiet jakościowych*. {Investigating consumer inflation expectations using qualitative surveys} "Bank i Kredyt" no 6. Current information on consumer inflation expectations can be found on NBP website [www.nbp.pl](http://www.nbp.pl), in the section: Statistics/Time series.

<sup>35</sup> The question posed by Ipsos-Demoskop 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 the present level. (5) go down, (6) difficult to say".

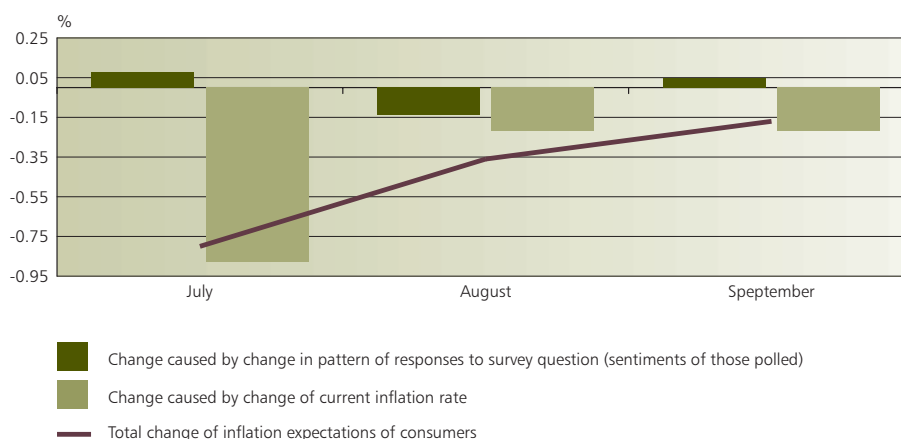
**Figure 71**  
Inflation expectations of consumers and bank analysts in Q3 2002



Consumer inflation expectations and those of bank analysts are not fully comparable due to their different time horizons: bank analysts declare their predictions for the month which precedes the corresponding month of the following year, while consumers – for the corresponding month of the following year. Besides, it should be borne in mind that consumer inflation expectations are objectified, i.e. quantified under the assumption that those polled see the evolution of prices coloured by official inflation statistics (for more see *Inflation Report 2001*). Source: Reuters and GUS data, own calculations based on Ipsos-Demoskop data.

In Q2 2002 the reduction of inflation expectations of consumers followed to an equal extent from changes in the manner of formulating inflation expectations (as reflected in the shifts in the structure of responses to the survey question) and from a drop in current inflation. However, in Q3 2002 a drop in inflation expectations for this group of entities was almost fully caused by a drop in the rate of current inflation and only slightly followed from changes in the manner of formulating inflation expectations. Figure 72 presents the results of a decomposition of monthly movements in the quantified measure of inflation expectations of consumers into the distinguished components. In July and September this year the effects of changes in the structure of responses to the survey question and changes in the current inflation rate impacted the quantification result in opposite directions: the manner of formulating inflation expectations slightly deteriorated in those months, but was nevertheless accompanied by a drop in current inflation. On the other hand the drop in

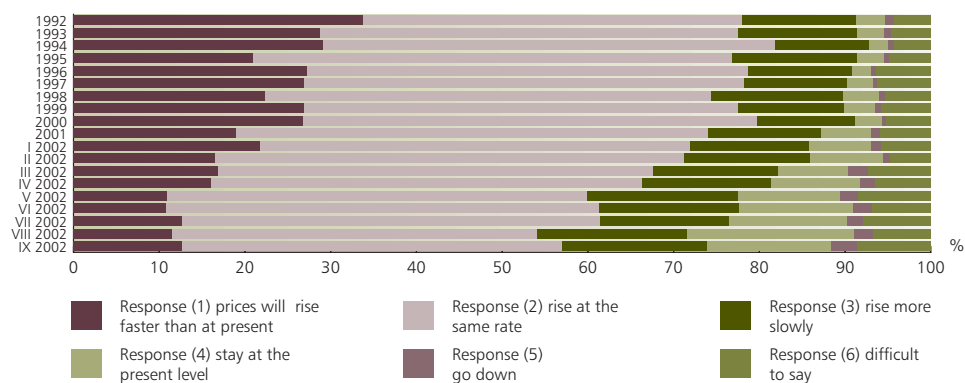
**Figure 72**  
Decomposition of changes in the level of inflation expectations of consumers in Q3 2002



Source: own calculations based on GUS data, IPSOS-Demoskop.

**Figure 73**

**Pattern of responses to Ipsos-Demoskop question in 1992-2001 (year averages)  
and in the period of January to September 2002**



The question posed by Ipsos-Demoskop 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 the present level. (5) go down, (6) difficult to say".

Source: Ipsos-Demoskop, own calculations.

the expected growth rate of prices recorded in August 2002 followed in about 60% from a drop in current inflation and in about 40% from the favourable changes which occurred in the structure of responses to the survey question.

In contrast to the situation in Q2 2002 in which the pattern of responses to the Ipsos-Demoskop survey was transformed, pointing to a clear improvement in the manner of formulating inflation expectations by consumers, in Q3 2002 this structure remained fairly stable (figure 73). On the one hand there was a slight growth in the share of the most pessimistic respondents who maintained that over the coming year prices would grow faster than up to then, on the other hand the share of optimists went up too predicting that in a year prices would be the same or lower than currently. In August this year almost every fifth respondent declared that over the coming 12 years prices would remain unchanged. This should be considered an exceptional development in the light of the observations so far. In September 2002, in turn, the share of consumers envisaging that in a year prices would be lower was the highest (at 3%) in the history of the Ipsos-Demoskop survey.

#### *Inflation expectations of bank analysts*

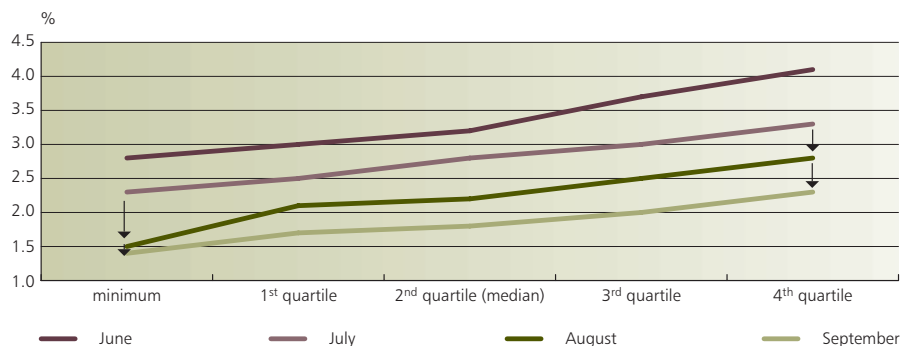
Q3 2002 saw a further reduction of inflation expectations by bank analysts and shift of the distribution of this group's expectations towards lower inflation rates. This was true both of the expectations declared with respect to y/y inflation in December 2002 and y/y inflation in the month preceding the corresponding month of the next year.

Changes in y/y inflation expected for the end of this year by bank analysts in Q3 2002 demonstrate the scale of uncertainty as to inflation projections in the Polish economy even in a relatively short time horizon. Whereas the results of the first survey, in which the question was asked about the expected growth rate of prices in December 2002 (i.e. February 2002 survey), demonstrated that in the opinion of bank analysts the growth rate of prices at the end of 2002 would average 4.6%, in June 2002 the expectations of this group were at the level of 3.3%, to descend by the end of Q3 2002 below the lower bound of the short-term inflation target of the NBP for 2002, namely to the level of 1.8%.

Bank analysts have also made adjustments for the expected by them price growth in the month preceding the corresponding month of the next year. In June 2002 it stood at 3.6% and at the end of Q3 2002 it went down to 2.9%. It is noteworthy that this time horizon saw an important groundswell of uncertainty manifesting itself a.o. in an increase of the difference between the

**Figure 74**

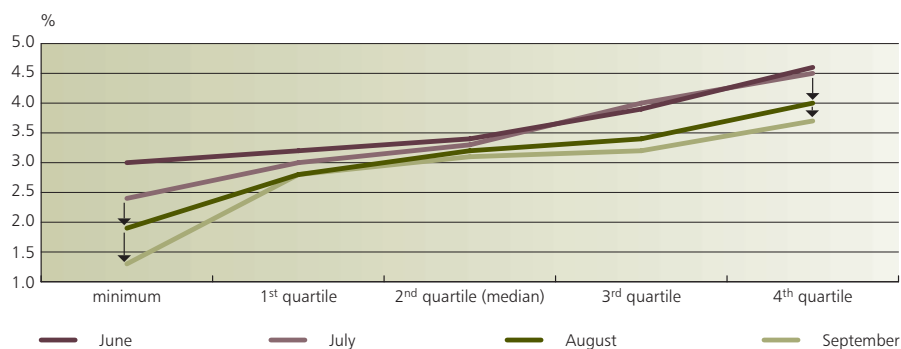
**Distribution properties of bank analyst inflation expectations as to inflation rate in December 2002**



Source: Reuters data, NBP calculations.

**Figure 75**

**Distribution properties of bank analyst expectations as to y/y rate of inflation in the month preceding the corresponding month of the next year**



Source: Reuters data, NBP calculations.

maximum and minimum declarations (in June 2002 it stood at 1.6 pp and in September 2002 2.4 pp) and growth of volatility of inflation expectations (from 13.9% in June this year to 20.4% in September this year).

#### 6.3.4. Wealth effect

The amount and structure of financial assets held by the household sector directly or indirectly and disposed of by individual investors at the end of Q2 2002<sup>36</sup> are presented in table 26.

The main Q2 2002 change in the structure of household financial assets was their reallocation from bank deposits to direct and indirect portfolio investments. At the same time household exposure to shares decreased, funds from equities having been moved to Treasuries. Also monies invested in pension and investment funds increased.

In Q3 2002 net assets at pension funds were gradually going up; their value at the end of this period reached the level of PLN 27.5 billion. There was also a surge in financial assets under management of investment funds, whose assets reached the level of PLN 17.5 billion.

<sup>36</sup> Data on the valuation of shares on personal accounts in brokerage houses and offices are available with a quarterly lag.

**Table 23****Direct and indirect forms of personal capital market investment**

Type of capital investment	Personal assets in 2002 (PLN billion)	
	Q1	Q2
<b>1. DIRECT PORTFOLIO INVESTMENT – SECURITIES</b>		
HELD ON PERSONAL ACCOUNTS (TOTAL)	22.6	22.7
Shares	9.8	8.1
Treasuries (total)	12.8	14.6
a) market bonds	3.4	4.1
b) savings bonds	6.6	7.0
c) T-bills*	2.8	3.5
<b>2. INDIRECT PORTFOLIO INVESTMENTS (TOTAL)</b>	36.2	40.1
Pension funds (net assets)	22.8	25.0
Open-ended investment funds (net assets)**	13.4	15.1
<b>Total (1 + 2)</b>	58.8	62.8
<b>Above investments (total) as proportion of household zloty and currency deposits in the banking system (%)</b>	28.3	25.0

\* as reported by banks;

\*\* in this table the total assets of investment funds are taken as representing personal savings; from time to time, however, a significant part of the assets placed at these funds may in fact belong to legal persons.

Source: MF, NBP, GUS, open-ended pension funds, investment fund companies.

This was first of all the result of these institutions extensively using capital gains tax avoidance instruments. This factor strengthened the yield competitiveness of mutual investments compared to banking system deposits.

Adverse influence on Q3 2002 portfolio investment development came from:

- external economic and political situation negatively affecting domestic and international capital markets,
- poor financial performance of companies translating into their market valuations,
- drop in interest rates discouraging from saving with banks,
- low growth rate of disposable household income constraining the amount of funding which could be involved in the capital market by natural persons.

In a situation like this individual investors and institutions managing their financial resources focused mainly on debt instruments protecting against the loss of capital, at the same time scaling down the size of their share portfolios.



## 7

### Prospects for inflation

In Q3 2002 the y/y CPI, having declined in July 0.3 pp, steadied at the level of 1.2-1.3%, i.e. the lowest since transition started.

The inflation target adopted by the MPC for this year, having been revised in June 2002, is 3% +/- 1. Inflation is thus currently below the lower bound of this target. Current inflation forecasts demonstrate that despite a slight temporary growth, the y/y inflation rate at the end of this year will approximate its current level. This would mean that year end 2002 inflation would be lower than the lower bound of the inflation target adopted for this year.

The weakening of inflation trends in the 2<sup>nd</sup> HY 2002 is the result of the operation of both the demand and supply factors. On the one hand, in conditions of a delayed (both abroad and domestically) economic recovery and low growth rate of disposable household income, there is a lack of any stronger demand pressure for CPI growth. On the other hand an exceptionally large drop of food prices in Q2 2002 (which the MPC treated back then as a temporary phenomenon) persisted in Q3 2002. A continuation of the falling trend in food prices can also be expected in the last quarter of this year.

In the 2003 Monetary Policy Guidelines the Council established the year end 2003 inflation target at the level of 3% +/- 1 percentage point. This allowed to fine-tune the strategic trend, as adopted in the *Medium-term strategy for 1999-2003*, which was to reduce by year end 2003 the inflation rate below 4%.

The adoption of the target at the level of 3% with a tolerance band of +/- 1 pp is tantamount to proceeding from the phase of lowering inflation to a phase of its stabilisation at a low level. The maintaining of low inflation would allow to petrify low inflation expectations and would be conducive to a further gradual reduction of interest rates and bridging the gap between their level in Poland and EU countries.

The current projections of world economic growth demonstrate that in 2003 the improvement of the external economic outlook will be sluggish. The growth rate in the Eurozone is currently estimated at 1.4-2.2%, more specifically 0.9%-1.8% in Germany (our main trade partner) and 2.1-3.0% in the USA. But because these forecasts have been regularly scaled down since July 2002, their revisiting cannot be ruled out. Moreover, a possible military conflict in Iraq and associated risk of oil price rises is a factor which could additionally weaken world economy growth and simultaneously increase inflation pressure.

In sum, forecasts pertaining to Poland's economic environment may thus be subject to a considerable error and the effects of a rise in external demand on the Polish economy can thus be expected no earlier than in the 2<sup>nd</sup> HY 2003. As a result under the emerging prospects of a slow growth of internal demand, the Council estimates that the rate of GDP growth in Poland will be 2-3% next year.

The forecasting of food prices, which in conditions of the Polish economy have much impact on the inflation level, is also subject to much uncertainty. Experts expect that the next year's cereal, vegetable and fruit crops will be lower than this year's, while the prices of meat will remain relatively stable. As a result the MPC expects a low (up to about 2% per annum) speeding up of the growth rate of food prices in 2003. However, there is a risk of a considerable deviation of real food prices up or down from forecast.

Projections of year average 2003 petroleum prices admittedly envisage their stabilisation, but (as has already been mentioned) are also subject to a risk of considerable increase. All in all, potential supply shocks may thwart the implementation of the inflation target.

The prospect of maintaining a high deficit of the public finance sector to GDP ratio is also a threat to the prospect of monetary policy implementation next year. Under forecasted continued economic growth in 2003 such ratio would mean continued fiscal policy loosening.

## Annex A

### Voting of Monetary Policy Council members on resolutions taken in Q3 2002\*

Date	Subject of motion or resolution	Decision taken by MPC	Voting of Council members	
19.07.2002	lowering all interest rates by 0.5 point	motion failed to receive a majority of votes	<b>For:</b>	J. Krzyżewski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
			<b>Against:</b>	L. Balcerowicz
				M. Dąbrowski
				B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
28.08.2002	lowering the reference rate 0.75 percentage points and lombard rate one percentage point and leaving the NBP deposit rate unchanged	motion failed to receive a majority of votes	<b>For:</b>	G. Wójtowicz
				W. Ziółkowska
			<b>Against:</b>	L. Balcerowicz
				M. Dąbrowski
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
			<b>Absent:</b>	D. Rosati
28.08.2002	rediscount rate, reference rate, refinance rate and NBP deposit rate	to lower the reference rate 0.5 percentage point, rediscount and refinance rate 1 percentage point and leave the NBP deposit rate unchanged	<b>For:</b>	L. Balcerowicz
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				M. Dąbrowski
				J. Pruski
				G. Wójtowicz
				W. Ziółkowska
			<b>Absent:</b>	D. Rosati

25.09.2002	establishing 2003 monetary policy guidelines		<b>For:</b>	L. Balcerowicz
				M. Dąbrowski
				B. Grabowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				G. Wójtowicz
				W. Ziółkowska
			<b>Absent:</b>	D. Rosati
25.09.2002	rediscount rate,	To lower all interest rates	<b>For:</b>	L. Balcerowicz
	reference rate,	0.5 percentage point		C. Józefiak
	refinance rate and			J. Krzyżewski
	NBP deposit rate			W. Łączkowski
				G. Wójtowicz
				W. Ziółkowska
			<b>Against:</b>	M. Dąbrowski
				B. Grabowski
				J. Pruski
			<b>Absent:</b>	D. Rosati

\* except the resolution of September 24 2002 on the establishment of the upper limit for liabilities on NBP loans and advances from international financial institutions in 2003.