

Inflation Report

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Contents

Sl	JMMARY	4
1.	Domestic demand and supply	10
	1.1. Domestic demand	10
	1.1.1. Capital formation and investment expenditure	11
	1.1.2. Consumption	14
	1.1.3. The situation in public finances	15
	1.2. Domestic supply	17
	1.2.1. Output and GDP	17
	1.2.2. The labour market	18
	1.2.3. Privatisation processes	21
	1.2.4. PPI in industry and construction	21
2.	External factors	26
	2.1. Foreign trade and the balance of payments	26
	2.2. External prices	33
3.	Inflationary processes	37
	3.1. Consumer prices	37
	3.2. Core inflation	41
4.	Monetary policy and achieving the inflation target	45
	4.1. Monetary policy in 2003	45
	4.2. The money supply	50
	4.3. Monetary policy transmission mechanisms	54
	4.3.1. Interest rates	54
	4.3.2. Currency exchange rate	67
	4.3.3. Inflation expectations	69
	4.3.4. The wealth effect	73
5.	Inflation prospects	76
	NNEX A The voting of the Monetary Policy Council members on motions	
an	d resolutions adopted in 2003	77

SUMMARY

1. The year 2003 was the last year of the realisation of the *Medium-term monetary policy strategy for 1999–2003*. In accordance with that strategy, the 12-month Consumer Price Index (CPI) was reduced to a level below 4% in December 2003.

During the first four months of 2003 inflation showed a declining trend: from 0.8% in December 2002, it fell to its lowest historic level of 0.3% in April 2003. In subsequent months it started to rise, reaching an annualised rate of 1.7% in December – i.e. it stood at slightly below the short-term inflation target for 2003 (of 3.0% +/- 1 percentage point). A level of inflation of 0.3 percentage points lower than the lower limit of the annual inflation rate target band was achieved following the predicted acceleration in the growth of the prices of food and non-alcoholic drinks and a significantly lower than expected growth in officially controlled prices.

2. The annual growth rate in money supply, as measured by M3, was restrained during 2003 and in December amounted to 5.6%. The change in the level of M3 last year was caused by strong growth in deposits by business and the notes and coin in circulation, and a slight decline in the level of household deposits.

During 2003 the growth rate in lending throughout the economy was relatively low and, on an annualised basis, fluctuated between 4.9% and 8.7%. The fastest growth last year occurred in housing loans to households (which December to December grew by 47.5%). On the other hand, the growth rate of other loans to households and corporate loans remained weak at 3.7% and 2.6% respectively.

- **3**. During 2003 the situation in public finances deteriorated. The financial deficit in the public finance sector, which amounted to ca. 6.0% of GDP, and the economic deficit (ca. 5.1% of GDP) remained at close to 2002 levels. However, in conditions whereby the growth rate in the economy accelerated significantly last year, the structural deficit in public finances increased by ca. 0.3% to ca. 5.5% of GDP.
- 4. During 2003 the increase in the growth rate of GDP maintained the gradual acceleration which it had begun in Q1 2002. According to preliminary estimates from the Central Statistical Office (GUS), the growth in GDP during 2003 should amount to 3.7%.

Domestic demand during 2003 increased by 2.4% as against 0.8% in 2002. The acceleration in the growth of domestic demand was due to a reversal in the declining trend in capital formation, with consumption at a slightly lower level of total than in the previous year. Furthermore, for the fourth successive year, an improvement in net exports was recorded. Consequently its share in GDP growth increased to about 1.3 percentage points.

The growth in capital formation of 1.8% during 2003 was the result of an increase in tangible current assets in comparison with 2002, while fixed asset expenditure fell for the third successive year – in that the decline was lower than in the previous year and in Q3 a slight increase in expenditure (of 0.4% in comparison with the same period in the previous year) was recorded for the first time in nine quarters. A recovery in investment demand occurred in enterprise sector, especially in the processing industries.

Added value in industry grew fastest last year. The growth in added value in market services was also faster than in the previous year, while added value in construction continued to decline.

5. The recovery in the economy in 2003 did not result in an increase in employment in enterprise sector – just a slight slowdown in its decline. The growth in output last year, analysed in aggregate, occurred therefore, exclusively as a result of an increase in productivity. One of the substantial barriers to the creation of new jobs continues to be the high non-payroll labour costs (including taxes) and a tightening of the labour market. Although the number of registered unemployed fell, the unemployment rate in December 2003 remained unchanged in comparison to the previous year – i.e. 20% (after taking into consideration the GUS adjustments).

6. The current account deficit in 2003 fell, for the fourth successive time, in relation to GDP from 7.5% in 1999 to 1.9% in 2003. The improvement in the current account balance last year was mainly the result of a reduction in the deficit in commodity trading and a growth in the surplus in unclassified trading. On the other hand, the remaining items on the current account rather resulted in a deterioration of its balance – the negative balance of revenues and services deteriorated further and the positive balance of transfers declined.

* * *

In accordance with the *Monetary policy guidelines for the Year 2003* the Monetary Policy Council (MPC) established a short-term inflation target (as measured by a 12-month growth in consumer prices in December 2003) of 3%, with a tolerance of +/-1% percentage point. This target was of an interim nature in relation to the medium-term target determined in the *Medium-term monetary policy strategy for 1999–2003*, adopted in 1998, intended to reduce the rate of inflation to a level below 4% by the end of 2003.

From the point of view of the execution of the monetary policy, two separate periods were noticeable during 2003. During the first half of the year the MPC made six cautious cuts – of 0.25 percentage points each – in the NBP reference rate. On the other hand, during the second half, the parameters of monetary policy remained unchanged.

The MPC decisions to reduce interest rates in the first half of 2003 were, to a large extent, the result of an assessment of the prospects for growth in economic activity, as a factor affecting future inflation.

Despite the continuing weak prospects of economic growth in the euro area – above all in Germany – domestically the symptoms of an economic recovery became stronger (an increase in the sold industrial output, a high growth rate in exports, a slowdown in the decline in output in construction and an improvement in profits of enterprises). However, in the Council's opinion, the opening phase of the economic recovery had not yet – despite a weakening in the zloty exchange rate – caused an increase in inflationary pressures which could threaten the attainment of the inflation target in 2004.

The argument in favour of the reductions in interest rates during the first half of 2003 was the consolidation of a low level of inflation and the continuing existence of the factors restricting its growth – namely, strong wage discipline in enterprises and a continuing decline in investment expenditure.

However, in the first half of 2003 the MPC noticed factors which constituted potential sources of inflationary pressure – mainly the uncertain situation in the public finance sector. The uncertainty concerned the scale of the deficit in the public finance sector in 2003 and the shape of the fiscal policy in 2004 and subsequent years. Other factors which were considered to be an inflationary threat were the high, and increasing growth rate of the notes and coin in circulation and the high price of oil in the world markets, together with the possibility that they would rise further.

The changes which took place in the economic situation and the economic forecasts in **the** second half of 2003, called for – in the MPC's opinion – increased caution in monetary policy.

As expected, the annual consumer price indices rose gradually, which resulted in an increase in the indices of basic inflation and industrial output prices. The households' inflation expectations also rose, especially towards the end of the year.

The growth trends in the economy caused, to a large extent, by growth in exports which had been stimulated by the fall in the PLN exchange rate, gradually strengthened – despite the continuing low dynamics of external demand. The GDP growth rate in Q3 amounted to 4.0%, and in Q4 it came amounted to 4.7%. Consequently, the growth in GDP for the whole of 2003 came to 3.7%.

In the Council's assessment, the resulting gradual increase in inflationary pressure did not, in itself, constitute a threat to the achievement of the inflation target for 2004. Meanwhile, however, in the second half of 2003 the number of factors which could hamper the stabilisation of inflation at a low level – and which were already evident during Q1 and Q2 of 2003 – increased significantly. The most important of these was the continuing uncertainty concerning the current and future

INFLATION REPORT 2003 5

situation in public finances. The problems of liquidity in the budget and the increase in debt in relation to GDP – which created the possibility of the statutory precautionary threshold being breached – together with the uncertainty concerning the prospects of a rapid and effective improvement in public finances caused a further fall in the PLN exchange rate against the euro in the second half of the year. A material factor in the aggravation of this fall was the substantial strengthening of the euro against the US dollar during this period.

While taking the decision to leave interest rates unchanged in the second half of 2003, the MPC took into account the cuts made hitherto which, in time, should result in a gradual growth in domestic demand.

In December 2003 the annual rate of inflation amounted to 1.7%. Thus, it found itself in the range stipulated in the *Medium-term monetary policy strategy for 1999–2003* and, therefore, slightly below the short-term inflation target adopted for 2003. A level of inflation of 0.3 percentage points lower than the lower limit of the inflation target band was achieved in the light of the predicted acceleration in the growth of the prices of food and non-alcoholic drinks (2.1%) and a significantly lower than expected growth in officially controlled prices (2.3%).

* * *

The Polish economy is currently in a recovery phase which has been stimulated by rapidly growing exports. A revival in investment is already being observed in the export sectors. If the rate of growth in consumption is maintained at a level similar to that of 2003, a continuation in the growth trends in the economy can be expected over the next few years.

A gradual recovery in the world economy is also being observed. We expect this to continue over the next two years.

The growth trend in the Polish economy is dependent on an improvement in the growth rate in investments. However, the scale of their growth will largely depend on progress in the reform of the public finance sector. The establishment of the greatest possible scope of realisation of the public finances consolidation programme and its rapid implementation could have a positive influence on the investment process. However, the solutions being proposed in the programme are insufficient in order to completely counteract the threat of the second prudential threshold for public debt (55% of GDP) being breached. Uncertainty regarding the prospects for the public sector will remain and the high borrowing requirement will restrict the access by the private sector to finance. Thus, the condition of public finances will continue to be a factor in slowing down the rate of economic growth.

Despite this limitation we expect a faster rate of GDP growth in 2004 than in 2003 and that in 2005 it will be maintained a level similar to that of 2004.

However, a higher rate of economic growth will probably not bring a noticeable increase in employment, as this would require a reduction in labour costs for enterprises and the creation of more favourable conditions for new enterprises than hitherto. The production capacity in the economy will gradually increase. However, this will occur mainly through capital formation, increased labour productivity and efficiency of production.

Projection of inflation shows that in the event that the above scenario, of the external and internal conditions in the years 2004 and 2005, comes about – and on the assumption that NBP interest rates remain unchanged – inflation during 2004 and at the beginning of 2005 will gradually rise. In mid-2005 it will stabilise at the upper end of the inflation target band, with the possibility that it will periodically exceed the target limits.

The above projection is uncertain because of several factors. The most important of these is the situation in public finances. The fiscal impulse resulting from the growth in the deficit in the public finance sector in 2004 may lead to an increase in consumption and in inflationary pressures. Abandoning or significantly delaying fiscal reforms may result in an outflow of capital, the further weakening of the zloty and a consequent growth in inflation in 2004 and 2005. On the other hand, the success of the Hausner Plan and its positive effect on the foreign exchange markets could materially limit inflationary pressures.

The second important area of uncertainty is the prospects for economic recovery. Slower than expected growth in domestic demand would also be a factor weakening price growth. However, we believe that the more probable deviation from the assumptions in the projection is a stronger recovery and, also, the possibility of a greater than expected influence of the economic recovery on the number of those in employment, especially in 2005.

In the opinion of experts, the factors which could increase the risk of a faster rate of growth in inflation could also be a higher than earlier expected increase in food and oil prices.

Basic macroeconomic indicators

	٥٦	Q2	69	45	2001	4	Q2	63	04	2002	4	42	63	40	2003
		2001	5				2002	2				2003	м		
							Ä	Real growth							
GDP	2.2	6.0	0.8	0.3	1.0	9.0	6.0	1.8	2.2	1.4	2.3	3.9	4.0	4.7	3.7
Domestic demand	-1.0	-1.6	-1.4	-2.2	-1.6	-0.1	1.0	1:1	1.2	6.0	2.4	2.1	2.4	2.7	2.4
Total consumption	1.3	1.2	1.8	2.8	1.7	2.7	2.5	2.8	3.1	2.8	1.1	2.8	2.9	3.3	2.5
Personal consumption	1.5	1.5	2.1	3.2	2.1	3.6	3.0	3.2	3.6	3.3	1.4	3.8	3.5	3.9	3.1
Gross capital formation	-12.6	-12.2	-12.5	-13.0	-12.6	-17.5	-5.5	-5.7	-3.7	-6.8	12.7	-1.6	-0.3	6.0	1.8
Gross fixed investment	2.1	-8.0	-11.7	-12.0	8.8	-11.9	-7.0	-5.0	-2.7	-5.8	-3.6	-1.7	0.4	0.1	-0.9
Household savings rate (%)1					12.0					10.0					9.4
Household financial savings rate (%) ²					6.1					3.6					2.0
Unemployment rate at the end	17.8	17.7	181	19.4	19.4	20.1	19.4	19.5	20.0	20.0	20.6	19.7	19.4	20.0	20.0
Real growth in disposable income ⁴					1.4					6.0					2.4
State Treasury indebtedness															
(PLN million, nominal) ⁵	273,192.9	271,584.9	291,795.1	283,939.5 2	273,192.9 271,584.9 291,795.1 283,939.5 283,939.5 309,388.4	109,388.4	320,880.1	331,205.4	320,880.1 331,205.4 327,904.2 327,904.2 353,421.4	27,904.2		362,639.2 367,856.8 378,945.0 378,945.0	67,856.8	378,945.0 37	8,945.0
Central government deficit (in PLN millions) -14,992.5 -18,805.5) -14,992.5		-21,865.0	-32,358.3	-32,358.3 -32,358.3 -16,436.8	-16,436.8	-24,922.5	-24,922.5 -29,146.7	-39,112.5 -39,112.5 -15,495.5	39,112.5	-15,495.5	-23,818.4 -33,081.5		-36,516.9 -36,516.9	16,516.9
External indebtedness (in EUR millions)	80,839	83,558	80,263	81,380	81,380	84,642	808'08	81,696	80,502	80,502	82,065	80,754	79,936		

¹ Household savings to gross disposable income. Savings represent that portion of gross disposable income not allocated to consumption.

2 Household financial savings to gross disposable income. Financial savings represent the growth in household money stocks (the sum of growth in bank deposits, notes and coin and the value of investments in securities, less the growth in household

borrowings).

3 Values adjusted by GUS

4 CPI deflated

5 Position at the end of the period

5 Sources: GUS, Ministry of Financial savings rate, financial savings rate, disposable income).

Basic monetary indicators

	01	Q2	63	45	2001	٥٦	05	63	Q4	2002	٥	Q2	6)	Q4	2003
		2001	5				2002	7				2003	<u>α</u>		
						Correspo	Corresponding period in the previous year	od in the pr	evious year	= 100					
CPI	106.2	106.2	104.3	103.6	103.6	103.3	101.6	101.3	100.8	100.8	100.6	100.8	100.9	101.7	101.7
PPI¹	103.8	100.9	100.7	9.66	9.66	100.3	101.2	101.1	102.2	102.2	103.6	102.0	101.9	103.7	103.7
			IOU	minal grow	nominal growth rate in the position at the end of the period (corresponding period in the previous year $= 100$)	position at	the end of	the period (correspondir	ng period in	the previou	; year = 100	<u> </u>		
Money supply (M3)	114.7	107.8	112.6	109.2	109.2	103.2	102.5	98.5	0.86	98.0	100.5	101.3	103.1	105.6	105.6
Deposits and other liabilities	116.4	108.9	113.6	108.9	108.9	101.7	100.5	96.5	95.7	95.7	7.76	98.1	8.66	103.7	103.7
of which:															
Household deposits	119.9	115.9	117.0	106.7	106.7	103.3	100.1	95.2	96.1	96.1	94.2	93.2	93.8	0.86	98.0
Corporate deposits	105.4	8.66	105.3	116.4	116.4	104.9	113.7	110.8	101.4	101.4	111.2	116.0	121.1	124.1	124.1
Claims ²	114.1	104.8	111.4	109.3	109.3	107.0	109.4	105.1	105.2	105.2	108.7	106.1	105.5	107.9	107.9
of which:															
Claims on households	121.1	102.2	119.9	114.7	114.7	117.7	115.6	108.4	108.6	108.6	107.2	108.5	110.3	113.6	113.6
Claims on corporations	111.2	106.8	106.0	103.7	103.7	98.2	102.1	101.2	101.4	101.4	108.3	103.3	101.6	101.9	101.9
			2	eal growth	real growth rate 3 in the position at the end of the period (corresponding period in the previous year = 100)	osition at th	ne end of th	e period (co	rresponding	period in the	e previous	rear = 100)			
Money supply (M3)	108.0	101.5	108.0	105.4	105.4	6.66	100.9	97.3	97.1	97.1	6.66	100.5	102.1	103.8	103.8
Deposits and other liabilities	109.6	102.5	108.9	105.1	105.1	98.5	98.9	95.3	95.0	95.0	97.1	97.4	6.86	102.0	102.0
of which:															
Household deposits	112.9	1.09.1	112.2	103.0	103.0	100.0	98.5	94.0	95.4	95.4	93.6	92.4	93.0	96.4	96.4
Corporate deposits	101.6	0.66	104.6	116.9	116.9	104.6	112.4	109.6	99.2	99.2	107.4	113.6	118.8	119.7	119.7
Claims	107.5	98.6	106.8	105.5	105.5	103.6	107.6	103.8	104.4	104.4	108.1	105.2	104.6	106.1	106.1
of which:															
Claims on households	114.0	96.2	114.9	110.7	110.7	114.0	113.7	107.0	107.7	107.7	106.6	107.7	109.3	111.7	111.7
Claims on corporations	107.2	105.9	105.3	104.1	104.1	6.76	100.9	100.1	99.2	99.2	104.6	101.2	29.7	98.3	98.3
Reference rate (%) ⁴	17.00	15.50	14.50	11.50	11.50	10.00	8.50	7.50	6.75	6.75	00.9	5.25	5.25	5.25	5.25
Lombard rate (%) ⁴	21.00	19.50	18.50	15.50	15.50	13.50	11.50	10.00	8.75	8.75	7.75	6.75	6.75	6.75	6.75

In the last month of the quarter claims on: households, non-monetary financial institutions, corporates, non-commercial institutions acting for the benefit of households, local government institutions and social security funds. They include all categories of loans and advances, purchased debt, enforced guarantees and warranties, due and outstanding interest, claims on repurchase agreement transactions, debt securities, equities and other claims.

3 CPI deflated and PPI deflated corporate deposits and claims on corporations.

4 Period end

5 Cource: GUS and NBP figures.

1 Domestic demand and supply

1.1. Domestic demand¹

In 2003, according to GUS estimates, domestic demand increased by 2.4%, as against 0.8% in 2002. The acceleration in the growth of domestic demand was due to a reversal in the declining trend in capital formation, with a slightly lower level of total consumption. For the fourth successive year an improvement in net exports was recorded, while the rate of the reduction of its deficit was greater than in 2002. As a result, the GDP growth rate exceeded the growth rate in domestic demand by 1.3 percentage points.

The GDP growth rate, the domestic demand, and their relationship to each other, during the years 1996-2002, are shown in Table 1, while the share of the specific demand components in GDP growth are shown in Figure 1.

The growth in capital formation during 2003 resulted from the rebuilding of the levels of tangible current assets after their steep decline in 2002. Meanwhile fixed investment outlays fell for the third consecutive year. However, the extent of the decline was smaller than a year ago, and in Q3 a slight growth in outlays was noted for the first time in nine quarters. A clear revival in investment demand surfaced in the business sector, particularly in the processing industry.

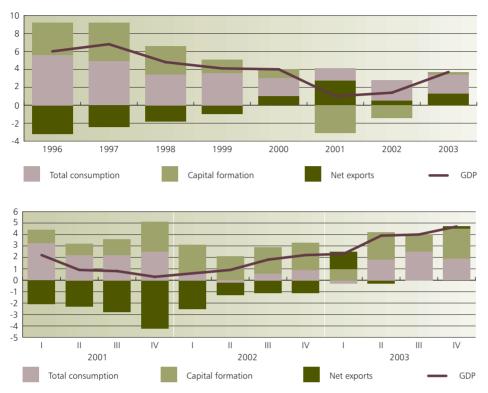
Table 1
GDP and domestic demand during the years 1996–2003

1996	1997	1998	1999	2000	2001	2002	2003
		Previou	ıs year =	100, fixed	d prices		
106.0	106.8	104.8	104.1	104.0	101.0	101.4	103.7
109.7	109.2	106.4	104.8	102.8	98.3	100.8	102.4
107.2	106.1	104.2	104.4	102.5	101.7	102.8	102.5
108.7	106.9	104.8	105.2	102.7	102.0	103.3	103.1
119.5	120.8	113.8	106.1	103.9	87.4	93.2	101.8
119.7	121.7	114.2	106.8	102.7	91.2	94.2	99.1
112.0	112.2	114.3	97.4	123.2	103.1	104.8	113.0
128.0	121.4	118.5	101.0	115.6	94.7	102.6	107.9
-3.2	-2.4	-1.8	-1.0	1.0	2.7	0.5	1.3
	l	n percent	ages of G	DP at cur	rent price	es	
101.5	104.0	104.9	106.0	106.5	103.7	103.3	102.5
81.0	81.0	80.3	81.1	81.9	82.9	84.5	83.7
20.5	23.0	24.6	24.9	24.7	20.7	18.9	18.8
-1.5	-4.0	-4.9	-6.0	-6.5	-3.7	-3.3	-2.5
	106.0 109.7 107.2 108.7 119.5 119.7 112.0 128.0 -3.2 101.5 81.0 20.5	106.0 106.8 109.7 109.2 107.2 106.1 108.7 106.9 119.5 120.8 119.7 121.7 112.0 112.2 128.0 121.4 -3.2 -2.4 101.5 104.0 81.0 81.0 20.5 23.0	106.0 106.8 104.8 109.7 109.2 106.4 107.2 106.1 104.2 108.7 106.9 104.8 119.5 120.8 113.8 119.7 121.7 114.2 112.0 112.2 114.3 128.0 121.4 118.5 -3.2 -2.4 -1.8 In percent 101.5 104.0 104.9 81.0 81.0 80.3 20.5 23.0 24.6	Previous year =	Previous year = 100, fixed 106.0	Previous year = 100, fixed prices 106.0 106.8 104.8 104.1 104.0 101.0 109.7 109.2 106.4 104.4 102.5 101.7 108.7 106.9 104.8 105.2 102.7 102.0 119.5 120.8 113.8 106.1 103.9 87.4 119.7 121.7 114.2 106.8 102.7 91.2 112.0 112.2 114.3 97.4 123.2 103.1 128.0 121.4 118.5 101.0 115.6 94.7 101.5 104.0 104.9 106.0 106.5 103.7 101.5 104.0 104.9 106.0 106.5 103.7 103.7 103.5 103.7 103.5 103.7 103.5 103.7 103.5 103.7 103.5 103.7 103.5 103.7 103.7 103.5 103.5 103.	106.0 106.8 104.8 104.1 104.0 101.0 101.4 109.7 109.2 106.4 104.8 102.8 98.3 100.8 107.2 106.1 104.2 104.4 102.5 101.7 102.8 108.7 106.9 104.8 105.2 102.7 102.0 103.3 119.5 120.8 113.8 106.1 103.9 87.4 93.2 119.7 121.7 114.2 106.8 102.7 91.2 94.2 112.0 112.2 114.3 97.4 123.2 103.1 104.8 128.0 121.4 118.5 101.0 115.6 94.7 102.6 -3.2 -2.4 -1.8 -1.0 1.0 2.7 0.5

Source: GUS figures.

¹ Unless stated otherwise, all the growth rate figures in this chapter are annualised, in real terms.

Figure 1
Share of the final demand components in GDP growth (in perc. points)



Source: GUS data.

The rate of growth in personal consumption during 2003 was slightly slower than a year ago and continued to be higher than the growth rate in the purchasing power of gross household disposable income. Despite a further deterioration in the situation on the labour market, real hired labour incomes were higher than a year ago. Social benefits also grew relatively more strongly. Apart from higher disposable income, the basic sources of finance for the growth in consumption last year were the growth in unregistered incomes and the continuing, although weaker than in 2002, decline in household savings. The growth in collective consumption was slower than a year ago.

In 2003 the growth rate in exports was high, despite continuing weak external demand. The acceleration in exports and the slowdown in the fall in investment was accompanied by a growth in imports. However, it was slower than the growth in exports and, as a result, the net export deficit declined last year. A further limitation of the external imbalance took place. Foreign savings, in relation to GDP, fell to ca. 2.1%, from 2.6% in 2002. The decline in the need for foreign savings was the result of an increase in the level of gross savings in the domestic economy as the result of savings in industry, against an unchanged estimated rate of capital formation.

1.1.1. Capital formation and investment expenditure

According to GUS estimates, gross capital formation in 2003 grew by 1.8%, against a fall of 6.8% in 2002. This was the result of a slowdown in the decline in fixed investment and the rebuilding of the level of tangible current assets in the economy.

The high growth in capital formation in Q1 2003 was the result of the so-called statistical base effect: a sharp fall in inventory in Q1 2002 and their slight growth a year later (see Figure 2). The significant difference in the growth in inventory levels between the two years reflected the gradual adaptation of current assets to the growing level of economic activity. To a great extent this was also the result of a later Easter than in 2002 and the growth in retailer inventories associated with it.

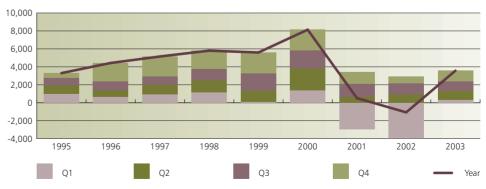
Table 2
GDP and domestic demand growth by quarter

	Year	Q1	Q2	Q3	Q4	Q1–4
		Correspond	ing period ir	the previou	s year = 100	
Total added value	2002	100.5	100.8	101.8	101.9	101.3
	2003	102.0	103.8	103.9	104.3	103.5
Industry	2002	96.7	97.9	101.7	102.8	99.8
	2003	104.1	108.1	108.0	109.7	107.6
Construction	2002	85.6	87.9	95.5	93.0	91.4
	2003	80.4	92.6	98.0	99.9	94.9
Market services	2002	104.5	103.9	103.9	103.6	104.0
	2003	103.4	104.6	104.2	104.2	104.1
GDP	2002	100.6	100.9	101.8	102.2	101.4
	2003	102.3	103.9	104.0	104.7	103.7
Domestic demand	2002	99.9	101.0	101.1	101.2	100.9
	2003	102.4	102.1	102.4	102.7	102.4
Total consumption	2002	102.7	102.5	102.8	103.1	102.8
	2003	101.1	102.8	102.9	103.3	102.5
Personal consumption	2002	103.6	103.0	103.2	103.6	103.3
	2003	101.4	103.8	103.5	103.9	103.1
Capital formation	2002	82.5	94.5	94.3	96.3	93.2
	2003	112.7	98.4	99.7	100.9	101.8
Gross fixed investment	2002	88.1	93.0	95.0	97.3	94.2
	2003	96.4	98.3	100.4	100.1	99.1

Source: GUS figures.

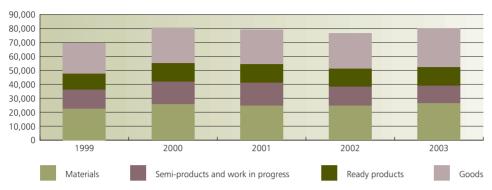
A recovery in investment demand occurred in the second half of 2003 and was concentrated on corporate sector (see Figure 4). The high growth in investment expenditure in certain areas was partly the result of low investment in previous years (its highest level in all processing was recorded in 1998). However, for example, in the automotive and radio and television equipment areas 2003 was the second successive year of high investment expenditure – which in the next few years should result in an increase in sold industrial output in these areas (Figure 5).

Figure 2
Growth in tangible current assets (PLN million, current prices)



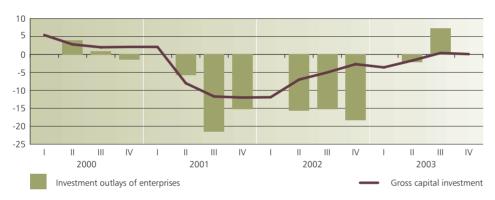
Source: GUS data.

Figure 3
Stocks held by enterprises (at the end of Q3, PLN million, current prices)



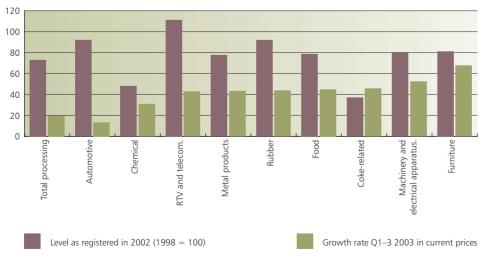
Source: GUS data.

Figure 4
Rate of change in capital expenditure
(in the corresponding quarter* of the previous year)



 $\mbox{\ensuremath{^{\star}}}$ for businesses, first half year and Q3 and Q4 Source: GUS data.

Figure 5
Capital expenditure in the processing industry



Source: GUS data.

The recovery in investment demand in the remaining sectors was delayed, which can be explained by the continuing recession in the world economy and the growth in domestic uncertainty as to the situation and plans regarding the reform of public finances. The strong growth, since the beginning of 2003, in the cost-estimate value of investment projects in progress in the energy, transport and trade sectors suggests a growth in expenditure in these areas. Furthermore, the possibility of a surge in expenditure in the coming quarters is supported by the improving profits of enterprises, the reduction in corporate income tax and the increasing level of the exploitation of production capacity, especially in the exporting sectors. Also favourable to investment activity will be the ongoing economic recovery in countries which are Poland's main trading partners and the expected inflow of foreign investment.

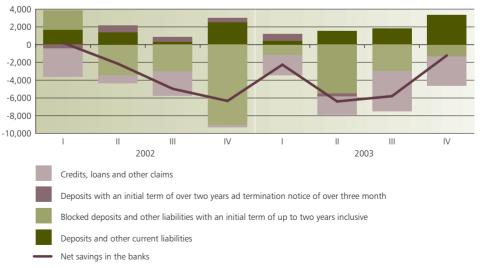
1.1.2. Consumption

In 2003 the rate of growth in consumption was slightly lower than in 2002, as the result of a weaker growth rate in both personal and collective consumption than was the case a year ago (see Table 2).

As in 2002, the growth rate in personal consumption exceeded the growth rate in registered gross household disposable income. It is estimated that, following a decline in the previous year, real income from hired labour rose in 2003. This was caused by a growth in the central government payroll and a lower decline in the payroll of the enterprise sector than in the previous year. Average employment in the enterprise sector fell by less than a year ago (by 3.8% as against 4.4% in 2002), and the growth in average remuneration was higher in real terms (by 2%, as against 1.5% in 2002). Strong growth in the payment of social benefits was maintained. In 2003 the old-age and disability pension fund grew by 3.9% in real terms, which was the result of an early indexation of old-age and disability pensions – despite the fact that the scale of the indexation was smaller. It is estimated that, in total, household disposable income was ca. 2.4% higher in 2003 than in 2002, in real terms.

Given a faster growth in personal consumption than in disposable income, it is estimated that household savings fell in 2003, although to a lesser degree than in 2002. For the second consecutive year net negative household savings at the banks were recorded (see Figure 6). The fall in total deposits amounted to ca. PLN 3.5 bn (against a fall of PLN 6.2 bn in 2002), and the level of loans grew more sharply than in 2002 (by ca. PLN 12.2 bn, as against PLN 7.1 bn in the previous year). Other household financial savings, including those in investment fund assets – whose value at the end of 2003 amounted to PLN 30.1 bn, as against PLN 20.3 bn at the end of 2002 – remained high.

Figure 6
Net household savings in banks and their structures (PLN mln)



Source: NBP data

1.1.3. The situation in public finances

During 2003 the situation in public finances deteriorated. The cash-based structural deficit in the public finance sector, which amounted to ca. 6.0% of GDP² and the economic deficit³ (ca. 5.1% of GDP) remained at levels close to those of 2002. However, in conditions where the growth rate in the economy accelerated significantly last year, the cash-based structural deficit in public finances increased by ca. 0.3% of GDP – i.e. to ca. 5.5% of GDP.

The budget deficit in 2003 fell to 4.5% of GDP from 5.1% in 2002 and was also lower than the limit stipulated in the Budget Act. This was mainly the result of restricted expenditure by the state budget, given that it was expected that the receipts planned in the budget would not be attained. The shortfall in the state budget receipts ultimately amounted to PLN 3.04 bn (2.0%) and was the result of lower than forecast inflation and a different level of economic growth to that which had been assumed. The largest shortfall (6.0%) involved receipts from personal income tax and was the result of somewhat optimistic assumptions as to the growth in wages and employment.

In 2003 expenditure from the state budget grew by PLN 6.3 bn (3.4%) in comparison with the previous year – i.e. by significantly less than in 2002. This was caused, inter alia, by a reduction in the subventions to the Old-Age and Disability Pension Fund, to local authorities and settlements with the banks. The costs of servicing the public debt, which had in previous years been characterised by a high growth rate, remained at the same level as in the previous year. Last year's budget expenditure was lower than planned (by PLN 5.3 bn – 2.7%). This was mainly the result of the lower than expected costs of servicing the public debt⁴, as well as unrealised conditional⁵ and property expenditure (mainly for investment purposes).

Primary budget expenditure – i.e. expenditure after deduction of public debt serviving costs – increased last year by 3.9% (3.1% in real terms), namely, faster than the total budget expenditure. This means that the detrimental tendency for increasing share of expenditure on consumption and benefits in total expenditure has been maintained. The maintenance of the costs of debt service at last year's levels allowed the primary deficit in the state budget to be reduced to PLN 12.5 bn (1.6% of GDP) as against ca. PLN 15.3 bn (2.0% of GDP) in 2002.

Last year the financing of the budget deficit took place in a different way to that provided for in the Budget Act. Given the substantially lower than expected receipts from privatisation an increase in the issue of Treasury securities was necessary. This resulted in higher yields on Treasury bills and bonds and a weakening in the zloty exchange rate. Furthermore, the uncertainty concerning the current and future state of public finances triggered a decline in interest in bonds with longer-term maturities on the part of investors. Consequently, from September 2003 the Ministry of Finance issued mainly short-term Treasury securities on the domestic market, which, given the need to refinance them, means larger issues in the future.

Another source of covering the needs of the budget was external funding. In 2003 the State Treasury's foreign indebtedness, from bonds and loans, increased by 5.8 bn USD - i.e. by 20.6%. Furthermore, last year part of the domestic debt was, in fact, obtained from foreign investors (they hold ca. PLN 41.1 bn of Treasury securities – i.e. 31% more than in 2002), which means an additional increase in the dependence of the economy on external capital. The sharp growth in indebtedness to foreign entities, as a result of the high state budget deficit, is becoming an ever-more important factor in the risk surrounding the macroeconomic stability of the country.

A significant influence on the increasing imbalance in the public finance sector during 2003 was exerted by the increase in the deficits of other segments of the public finance sector –

² NBP estimate

³ The economic deficit is the public finance cash-based deficit plus the compensation for the wages and old-age and disability pensions which were not increased at the turn of 1991/1992, and less the social security contributions which were transferred by ZUS to the open-ended pension funds; NBP estimate.

⁴ This was the result of a lower than envisaged in the budget for 2003 level of interest rates on the domestic and foreign markets

⁵ The absence of grounds for the conditional expenditure included in the 2003 *Budget Act* resulted from the fact that the actual receipts from excise and customs duties at the end of Q3 2003 were lower than the level at which the conditional expenditure could be activated.

Table 3
Performance of 2003 budget

	_20	002	Cuarrith vata 3	002/2002	
		003	Growth rate 2	003/2002	
	Budget		Execution**		Execution/plan
	Act*		nominal	real	
	ml	n zł		%	
RECEIPTS:	155,697.7	152,660.1	106.4	105.5	98.0
From taxes	138,611.6	135,773.0	105.5	104.6	98.0
– indirect taxes	96,861.2	95,942.9	107.1	106.2	99.1
– corporate income tax	14,394.7	14,110.5	94.0	93.3	98.0
– personal income tax	27,355.7	25,717.4	106.5	105.7	94.0
Other receipts	17,086.1	16,887.1	114.3	113.4	98.8
EXPENDITURE, of which:	194,431.7	189,176.9	103.4	102.6	97.3
Grants and subsidies	106,260.7	105,304.0	100.9	100.1	99.1
Benefits paid to individuals	16,018.6	15,744.1	104.3	103.5	98.3
Current expenditure of state					
budget entities	34,665.8	34,214.0	114.8	113.9	98.7
Asset investment	9,062.3	8,515.4	109.0	108.1	94.0
Settlements with banks	1,573.7	1,348.3	75.0	74.4	85.7
Public debt servicing	26,850.6	24,051.2	100.0	99.2	89.6
DEFICIT	-38,734.0	-36,516.9	92.7	92.0	94.3
Domestic debt	33,632.8	30,555.3	85.0	84.3	92.3
Treasury bonds	1,886.5	6,774.5	84.7	84.1	359.1
Bonds	27,443.6	27,564.8	97.2	96.4	100.4
Privatisation receipts	7,400.0	2,962.9	150.3	149.1	40.0
External funding	5,101.2	5,961.6	172.9	171.5	116,9

^{*} The 2003 Budget Act of 18 December 2002 and the plan following amendments.

mainly the funds and the agencies. According to the NBP's preliminary estimates, this deficit increase amounted to ca. 1.4% of GDP, against the planned 1.2% of GDP and 0.9% of GDP recorded in the previous year. Because of the shortfall of funds available to cover their costs, the Labour Fund and the Social Security Fund (FUS) were forced to take out bank loans, thereby increasing the level of the public debt. The health care sector – whose financial situation in 2003 deteriorated further - also contributed to the sharp rise in indebtedness.

The maintenance, for a successive year, of a high deficit in the public finance sector resulted – as is estimated – in the public debt exceeding the first prudential threshold stipulated in the Public Finances Act in 2003 and that at the end of 2003 it stood at ca. 51% of GDP (including the expected payments under guarantees and warranties).

The prospects for the condition of public finances in 2004 and subsequent years do not appear optimistic:

- in 2004 a further increase in the public finance deficit is assumed, together with a sharp increase in the borrowing requirement (by 25% gross in comparison to 2003 and by 47.6% net),
- there exists a considerable danger that the privatisation receipts earmarked for this year will not be achieved, and these receipts are essential if the public debt in 2004 is not to exceed the second prudential threshold i.e. 55% of GDP.

^{**} Operating report regarding the execution of the state budget during 2003, February 2004. Source: Ministry of Finance.

Box 1. Fiscal policy in 2004

On 23 January 2004 the Sejm completed work on the 2004 Budget Act. It assumes state budget receipts in the amount of PLN 154.6 bn, expenditure of PLN 199.9 bn and a deficit of PLN 45.3bn. Contrary to expectations the national budget deficit was reduced by the Sejm, in relation to that presented by the government, by only PLN 0.2 bn (by increasing budget receipts by PLN 1.8 bn and increasing the limit on expenditure by PLN 1.6 bn). This means an increase in the budget deficit to a level of 5.3% of GDP as against 4.5% of GDP last year. However, using the methodology applied in previous years (according to which the subventions to FUS for the contributions transferred to the open-ended pension funds constitute a state budget expense), the deficit in the state budget in 2004 would amount to PLN 56.6 bn – i.e. 6.6% of GDP.

Such a substantial rise in the state budget deficit – and consequently the deficit in the public finance sector – will have significant negative repercussions for the economy. The strong demand caused by it – additionally enhanced by the inflow of funds from the European Union to be spent outside the state budget – will increase inflationary pressures. Furthermore, the high budget deficit, the increasing borrowing needs on the part of the state and the unclear prospects for public finances may cause upheaval on the financial markets, resulting in a growth in the yields on Treasury securities and a weakened exchange rate of the zloty.

The high level of the budget deficit envisaged for this year also means that there exists a serious threat that public finances will exceed the II prudential threshold - i.e. 55% of GDP. This would imply the necessity to reduce the public finance deficit by more than 5% of GDP in 2007. The consequences of such a decision would probably be a significant limitation of expenditure on the state's basic functions and an increase in taxation.

Box 2. The programme for reforming public expenditure

The programme for reforming public expenditure, which was accepted by the Council of Ministers in January 2004, constitutes an important element in the improvement of the condition of the Polish public finance sector. It has correctly identified the main areas in which fiscal changes are necessary in order to reduce the fiscal imbalance during the years 2004–2007.

The plan suggests solutions leading to:

- a limit on expenditure on administration and the economy,
- a reduction in expenditure for social purposes,
- an increase in budget receipts.

The total financial effect of the suggested changes during the period 2004–2007 is estimated at ca. PLN 50 bn.

In accordance with the *Programme* the basic changes are to begin in 2005, although the condition of Polish public finances requires that decisive steps be taken in 2004. It is important that the level of the deficit in public finances be limited as quickly as possible, so that public debt does not exceed the II prudential threshold – i.e. 55% of GDP. The solutions proposed in the *Programme* are insufficient to completely avert the risk and to prevent upheaval on the financial markets.

- there remains considerable uncertainty as to the ultimate shape of *The programme for reforming public expenditure*. Meanwhile every change to the programme which reduces the scale of the savings in the budget will result in an increase in yields on Treasury securities and a depreciation of the zloty.
- the maintenance of the significant imbalance in the public finance sector and, effectively, the growing public debt will support an increase in inflationary expectations, which will make keeping inflation at a low and stable level difficult.

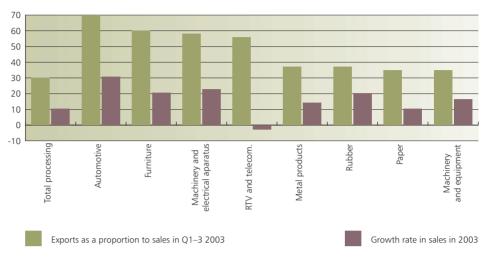
1.2. Domestic supply

1.2.1. Output and GDP6

Gross added value, according to GUS estimates, grew in 2003 by 3.5%, as against 1.3% in 2002. During the year the gradual acceleration in the rate of GDP growth, which began in Q1 2002, persisted. Changes in the structure of final demand were reflected in the structure of the

⁶ Unless stated otherwise, all the growth rates in this section are annualised, in real terms.

Figure 7
Growth in manufacturing sales in selected areas of industry with a large share of exports (%)



Source: GUS data.

added value by area. Last year added value grew fastest in industry. Also, growth in added value in market services was faster than a year ago. On the other hand, in conditions of low investment demand, the added value in construction continued to fall (see Table 2).

In 2003 industry was the main driver of the Polish economy. The largest growth in sales was recorded among large and medium-sized enterprises (by 8.7%), especially in processing (by 10.4%). The high growth rate of production in the processing industry was caused by sectors manufacturing mainly for export (see Figure 7). The share of the sectors and groups considered to be the drivers of technological progress in the value of sold industrial output increased last year from 12.4% to 13.7%.

The growth rate in sales in the service sector was relatively high last year. Sales of communication services grew by 5.8%. The volume of retail sales increased by ca. 4%, in that particularly strong growth was observed among large and medium-sized enterprises (7.9%). Large and medium-sized wholesalers increased their turnover by 3.6%, at current prices. According to preliminary information, the financial results of banks, insurance companies and other financial intermediaries improved, as did those of enterprises providing real estate and business services.

In construction, the value added fell during 2003 for the third successive year. In large and medium-sized enterprises, sales of refurbishment works fell more sharply (10%) than those of investment works (4.4%). The growth in output (56.4%) of entities preparing land for construction indicates the possibility that the downward trend in construction could be reversed.

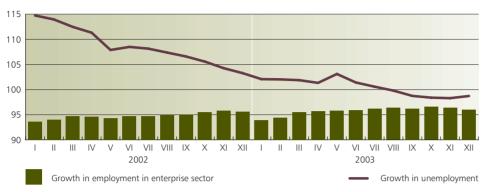
1.2.2. The labour market

GUS data indicates that the economic recovery in 2003 has not resulted in a growth in employment in enterprise sector, with only a slight slowdown in decrease of unemployment during successive quarters (Figure 8). The number of registered unemployed fell but the unemployment rate in December 2003 was the same as in the previous year - 20% (following GUS adjustments).

The weakening rate of decline in employment in enterprise sector during the first three quarters of 2003, started to increase again in Q4. The annual fall in employment noted, together with a growth in sold production, shows that enterprises improved their labour productivity last year (Figure 9). Enterprises were encouraged in this by the high non-payroll costs of labour which discouraged increased employment.

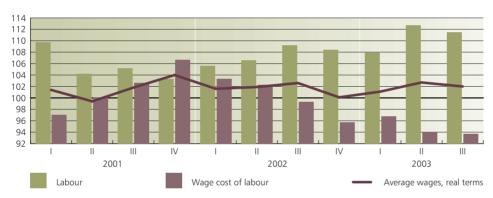
The largest fall in employment during 2003 occurred in the same areas as in the previous year – namely, construction, mining and quarrying, the manufacture of radio and telecommunications

Figure 8
Growth rate in employment and registered unemployment during 2002 and 2003 (corresponding month of the previous year = 100)



Source: GUS data, NBP calculations

Figure 9
Growth rate in the wage costs of labour and productivity (corresponding quarter of the previous year = 100)



Source: GUS data, NBP calculations.

equipment, clothing and fur products. Meanwhile a new phenomenon was the steep fall in employment in services – in the areas of trade and repairs and in hotels and restaurants. Also, a significantly greater fall than in the previous year took place in the areas of post and telecommunications. During the past two years the only growth in employment has taken place in the areas of real estate and corporate services and science (Table 4).

The unemployment rate in December 2003 stood at 18.0% - i.e. it was the same as in the previous year. However, at the beginning of 2004 GUS carried out an adjustment - on the basis of the national census of 2002 – of those employed in agriculture, and thereby an adjustment of the rate of registered unemployment. The adjusted rate in December 2003 came to 20.0%.(Box 1).

In 2003, for the first time since 1997, the number of people newly registered at labour offices was lower than those deregistered. However, of those who had been deregistered less than half had been deregistered because they had found work (Figure 11).

In assessing the extent of unemployment in conditions of falling employment, one cannot ignore the year-on-year growth in the numbers working in the grey economy. According to GUS estimates, in 2002 there were 910 000 people working in the grey economy, as against 895 000 in 2001. These people were mainly employed in construction, trade and repairs and hotels and restaurants – i.e. in areas where the greatest fall in employment occurred in 2003.

Table 4
Changes in employment in selected areas which have a significant share in employment in enterprise sector as a whole

	Change	in employment
Area		ous year =100)
	2002	2003
Total enterprise sector	-4.4	-3.8
Total industry	-5.6	-2.9
Mining and quarrying	-5.6	-5.7
Industrial processing, of which:	-6.2	-2.6
Manufacture of clothing and fur products	-11.4	-9.7
Metal production	-12.1	-8.1
Manufacture of metal products	-0.7	2.4
Production of machinery and equipment	-9.1	-6.7
Production of machinery and electrical apparatus	-6.9	3.0
Production of radio, television and telecommunications		
equipment	-14.3	-13.6
Other transport equipment	-2.3	-7.4
Construction	-12.3	-16.1
Trade and repairs	0.0	-2.9
Incl. wholesale and commission	-2.3	-6.4
Hotels and restaurants	3.8	-10.1
Transport, storage and communications	-6.5	-3.2
Incl. post and telecommunications	-4.1	-8.3
Real estate and corporate services, science	2.0	2.3

Source: GUS data

Box 3. Adjustment of the rate of unemployment

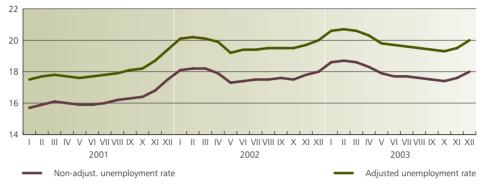
As of January 2004 GUS will be providing the rate of unemployment taking into account the adjustment of the number of employed, which was made on the basis of the National Census (NSP) of 2002. This adjustment mainly concerned the number of people working in agriculture, which, it transpired, was about 2 m lower than had been hitherto assumed on the basis of the agricultural census of 1996. This means that the unemployment rate in December 2003, which had been calculated on the basis of the old data and showed 18.0%, according to the data incorporating the results of the NSP came through at 20.0%. The adjusted data for previous years is shown in (Figure 10).

GUS justified such a substantial adjustment as follows:

- ullet a reduction in the population forming households which cultivate agricultural property,
- an increase in the number of household members cultivating agricultural property and at the same time working outside agriculture,
- a change in attitudes, whereby in 2002 people more willingly, than in 1996, declared that they were unemployed or that they were economically inactive, instead of declaring that they worked in agriculture.

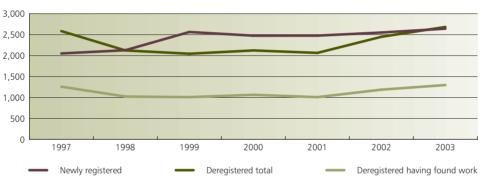
The adjustment made by GUS confirms that the actual indicators in the labour market (including the rate of unemployment) were similar in Poland to those calculated on the basis of the data from BAEL (Research regarding the Economic Activity of the Population). The percentage of people working in agriculture is ca. 17%, and not, as has hitherto been assumed in the calculation of the rate of registered unemployment, ca. 27 %. Given the slight change in the number of people working outside agriculture this means that the majority of people hitherto considered to be working in agriculture are, in fact, unemployed or (more frequently) economically inactive. This data confirms the low scale of economic activity among agricultural communities.

Figure 10
The rate of registered unemployment before and after adjustment



Source: GUS data.

Figure 11
Annual changes in registered unemployment (in thous. of persons)



Source: GUS data

1.2.3. Privatisation processes

2003 was the third successive year in which lower receipts from privatisation were recorded than those earmarked in the Budget Act (Figure 12). This contributed to the increased borrowing requirement and public debt.

In 2003 gross revenues from privatisation amounted to PLN 4.1 bn, of which PLN 3.0 bn constitutes budget receipts from privatisation. At the beginning of the year budget receipts from privatisation were planned to be PLN 7.4 bn, and following the plan adjustment they were to amount to PLN 3.55 bn. Thus, the initial plan was achieved to the extent of 40%, and the adjusted plan to the extent of 83%.

During the years 2001-2003 the contribution of privatisation receipts to the financing of the budget deficit fell significantly in comparison with previous years (Figure 13) and in 2003 it stabilised at 8%. During that same period public debt increased from 40% to over 50% of GDP.

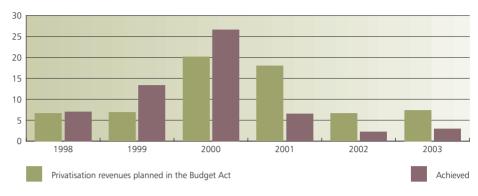
1.2.4. PPI in industry and construction

In 2003 the average annual production price index (PPI) increased by 2.6% in comparison with the previous year. In industrial processing the growth in prices was greater than a year ago; in mining and quarrying it was similar to that a year ago and in electricity production and supply it was lower (see Table 5).

In each of the quarters of 2003, the greatest influence on the PPI was played by the changes in prices in industrial processing (see Figure 14). The growth in prices in industry was

INFLATION REPORT 2003 21

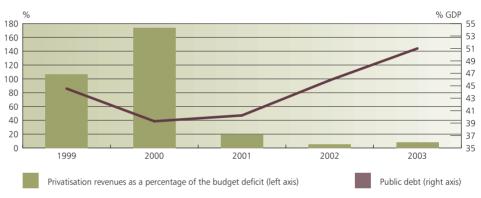
Figure 12
Planned and achieved budget receipts from privatisation during the years1998-2003 (PLN bn)



Source: Ministry of Finance.

Figure 13

Public debt and privatisation receipts as a percentage of the budget deficit during the years 1999–2003



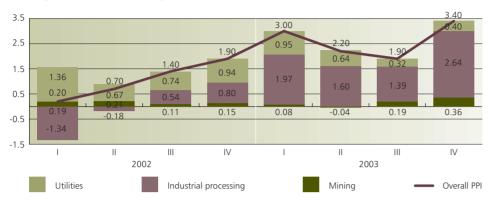
Sources: Ministry of Finance and GUS.

Table 5 Indices of production prices in industry and construction

			2002					2003		
	Q1	Q2	Q3	Q4	Annual	Q1	Q2	Q3	Q4	Annual
	Co	orrespon	ding qua	rter	average	Co	orrespon	ding qua	rter	average
	0	f previou	ıs year =	100		of	previou	s year =	100	
INDUSTRY (PPI)										
of which:	100.2	100.7	101.4	101.9	101.0	103.0	102.2	101.9	103.4	102.6
Mining										
and quarrying	103.6	103.9	101.9	102.8	103.0	101.7	99.2	103.7	107.1	103.0
Industrial										
processing	98.4	99.6	100.4	101.0	99.9	102.7	102.0	101.7	103.2	102.4
Electricity, gas and										
water production										
and supply	109.0	105.5	106.9	106.9	107.0	106.4	105.8	103.2	103.3	104.6
CONSTRUCTION	102.0	101.4	101.0	100.6	101.2	99.4	99.0	98.8	98.5	98.9

Figure 14

Contribution of the growth rate in production prices in various sectors of industry to the growth in PPI (annual growth rate)



Source: GUS data

Figure 15
PPIs in various sectors of industry
(corresponding month of the previous year =100)



Source: GUS data.

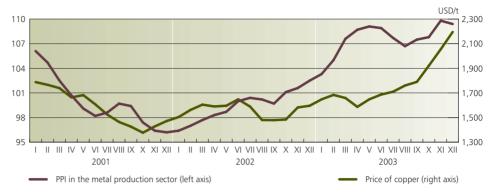
caused by cost factors - the growth in the dollar prices of industrial raw materials industrial (industrial metals and oil). It was also the result of the weakness of the zloty against the euro (an increase in export prices).

Last year the largest growth rate of prices in industrial processing was recorded in the metal production sector (a growth of ca. 9.4% in comparison to December 2002) (see Figure 16) and in coke production and oil refinery products (a growth of 7.9% respectively). This was mainly the result of the increased prices of industrial metals on the exchanges and the persisting high price of oil on world markets (see Figure 17).

In the mining and quarrying sector significant growth of prices was noted from the Q3 2003, particularly in metal ore mining. This was partly related to the growth in the prices of industrial metals on world exchanges. Copper prices increased last year by over 30%, reaching their highest levels for over 5 years. The increase in world metal prices was triggered by the worldwide economic recovery, especially by the growth in demand from China and the USA, as well as by the depreciation of the dollar. The growth rate of the price of coal on world markets – which had been observed since Q3 2003 – also contributed to the rise in prices in the mining and quarrying sector. This, combined with the concentration taking place on the Polish coal mining sector (the creation of Kompania Węglowa), resulted in an increase in domestic coal prices.

INFLATION REPORT 2003 23

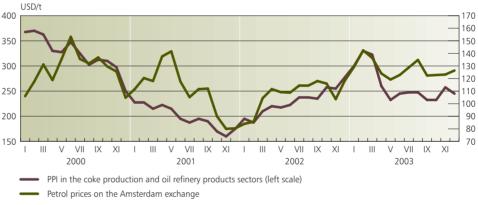
Figure 16
PPI in metal production (corresponding month in previous year =100) and world copper prices (USD/t)



Sources: GUS and NBP data

Figure 17

PPI in the coke production and oil refinery products sectors
(corresponding month in previous year =100) and petrol prices on the Amsterdam exchange
(USD/t)



Sources: GUS and Reuters data.

In "electricity, gas and water production and supply" section the annual rate of growth in prices was lower in 2003 than in 2002. This was the result of last year's significantly smaller price increases of energy carriers by the electricity distributors (in July 2003 the monthly price increase amounted to 1.6% against 4.3% in July 2002).

Output prices in construction showed a deflationary tendency in 2003 which had been continuing since the beginning of the year. Their average annual index fell by 1.1% in comparison with the previous year.

The annual PPI in euro area countries, following growth in Q1 2003, has been stable since May, at a level below 1.5%. The PPI in Germany changed in a similar fashion, and during the year amounted to about 2.0%. On the other hand, the PPI in the USA, following a sharp rise in March 2003 (the effect of the war in Iraq) and a fall in April 2003, showed an upward tendency during subsequent months, reaching 4.0% in December 2003 (see Figure 18).

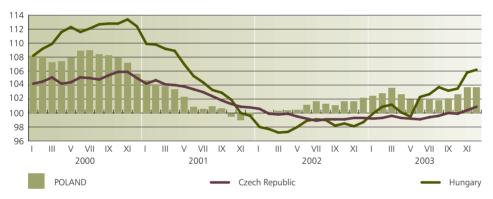
In the Czech Republic the annual PPI was falling in successive months during 2003, and it was only towards the end of the year that a slight growth was recorded. On the other hand, in Hungary the PPI rose sharply from mid-2003 – mainly as the result of the depreciation of the forint (see Figure 19).

Figure 18
PPI in Germany, the euro zone, the USA and Poland (corresponding month of the previous year = 100)



Source: Bloomberg data

Figure 19
PPI in the Czech Republic, Poland and Hungary (corresponding month of the previous year = 100)



Source: Bloomberg data.

As the latest survey of economic climate conducted by the NBP⁷ shows, there has been a slight increase in the expected growth rate in the PPI in Poland over the next 12 months, in comparison with the previous survey. The increased inflationary expectations are also confirmed by a survey of economic climate conducted by GUS⁸. The expected growth in prices concerns, inter alia, metal production, chemical products and the manufacture of machinery and electrical apparatus. However, because of the high reference base in 2003 (the growth in prices caused by the war in Iraq), the PPI in Q1 of this year should stabilise at a lower level than in the corresponding period in 2003. In construction, prices are expected to continue falling, although somewhat slowlier than forecast in the previous survey⁹.

INFLATION REPORT 2003 25

⁷ A summary assessment of the condition of enterprises, based on the result of quick monitoring and other public statistics. O1 2004.

⁸ GUS Economic market conditions, Industrial Processing, January 2004.

⁹ GUS Economic market conditions, Construction, January 2004.

2 External factors

2.1. Foreign trade and the balance of payments

2003 was the fourth successive year with a falling current account deficit. In 2003 that deficit amounted to EUR 3.5 bn – about EUR 3.7 bn lower than in 2002 and EUR 7.4 bn lower than in 1999. As a result, the current account deficit – as a percentage of GDP – fell during the last four years from 7.5% to 1.9%. The improvement in the current account deficit in 2003 resulted mainly from the reduction in the deficit in commodity trading and a growth of surplus from unclassified trading (Figure 20). On the other hand, the other items in the current account had a detrimental effect on its balance – the negative balance in incomes and services widened further and the positive balance of transfers fell.

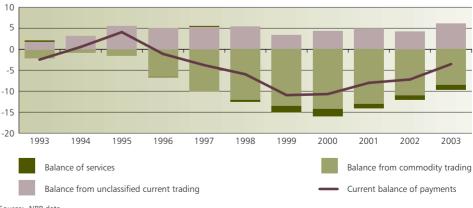
Last year's reduction in the commodity payment deficit (by EUR 2.4 bn) was, as in previous two years, the result of a higher growth rate in export receipts than in import expenditures (Figure 21).

The upward trend in foreign trade is also confirmed by customs statistics. During the period from January to November 2003 the deficit in trade fell by EUR 1.9 bn in comparison with the previous year. According to GUS data, the growth rate in trade, as denominated in euro, was slightly slower in 2003 than in 2002. This was the result of the appreciation of the euro against the US dollar as well as the zloty. If, however, we exclude the effects of price changes on the growth rate in trade, then the export growth was significantly stronger last year than in 2002; during the period January to October 2003 the volume of exports grew by 17.6% as against 6.7% in the corresponding period in 2002. The volume of imports also grew (by 6.7%), but its growth rate was somewhat slower than a year ago (7.0%).

The reduction in the trading deficit in 2003 could be traced to the improvement in price and cost competitiveness in Polish foreign trade and the growth in demand for Polish goods in Germany and in the Central and Eastern European region.

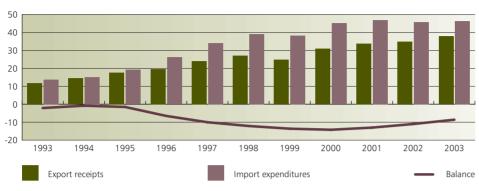
In 2003 the competitiveness of Polish manufacturers clearly improved as against their foreign partners (see Figure 22, Table 6 and Table 7). This was the result of the companies restructuring

Figure 20
Current balance of payments in the years 1993–2003 – annual data (in bn EUR)



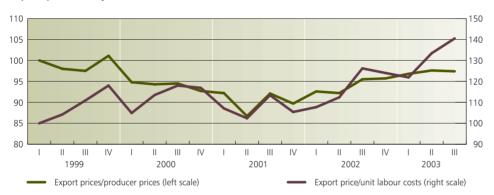
Source: NBP data

Figure 21
Export receipts and import expenditures in the years 1993–2003 – annual data (in bn EUR)



Source: NBP data.

Figure 22 Export profitability indices (Q1 1999 = 100)



Source: own calculations on the basis of NBP and GUS data

Table 6
Export profitability indices
(% change in comparison with the corresponding period in the previous year)

		2	002			2003	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Export prices/Producer prices	0.4	6.3	3.7	6.7	4.6	5.7	2.1
Export prices/Unit cost of labour*	0.5	9.7	11.3	17.6	13.2	18.7	11.4

^{*} The index of the unit cost of labour was calculated as the ratio of the growth rate in payroll-related labour costs attributable to one employee and the productivity growth rate – as measured by producer prices in industrial processing (volume) with respect to one employee in that sector.

Source: Own calculations on the basis of NBP and GUS data.

which had taken place over recent years, together with the sharp depreciation of the PLN against the euro. The unit cost of labour in the enterprise sector, denominated in PLN, fell by ca. 7.3% after the first three quarters of 2003, as against the same period in 2002. When combined with the weakening of the zloty (by 13.5%) against the euro during that period, it resulted in the fall in the unit cost of labour, as denominated in euro, by about 18.3%.

The increase in sales to Germany (Table 8) had the greatest influence on the growth rate in Polish exports during 2003. During the period January to November 2003 sales grew by 6.7% – considerably faster than in the same period in the previous year (Figure 23).

INFLATION REPORT 2003 27

Table 7
Import competitiveness indices
(% change in comparison with the corresponding period in the previous year)

		20	002			2003	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Import prices/Producer prices	-5.7	0.9	4.5	5.6	8.8	9.1	3.7

Source: Own calculations on the basis of NBP and GUS data

Table 8
Changes in exports according to the main country groups (in EUR)

		Structure	е	G	rowth ra	te	Eff	ect on to	otal
		(w %)		(% in c	ompariso	on with	g	rowth ra	te
				pr	evious ye	ar)	(in per	centage	points)
	2001	2002	2003	2001	2002	2003	2001	2002	2003
	I–XII	I–XII	I–XI	I–XII	I–XII	I–XI	I–XII	I–XII	I–XI
Total	100.0	100.0	100.0	17.4	8.2	6.8			
Developed countries	75.0	75.1	74.8	15.3	8.3	6.1	11.7	6.2	4.6
EU	69.2	68.8	68.7	16.3	7.5	6.5	11.4	5.2	4.5
Germany	34.4	32.3	32.5	15.8	1.8	6.7	5.5	0.6	2.2
France	5.4	6.0	6.1	22.2	20.6	8.1	1.2	1.1	0.5
United Kingdom	5.0	5.2	4.9	30.6	12.4	0.9	1.4	0.6	0.0
Italy	5.4	5.5	5.5	1.4	10.4	8.0	0.1	0.6	0.4
CEE countries	12.3	12.8	13.7	24.2	12.5	15.2	2.8	1.5	1.9
Commonwealth of									
Independent States	7.0	7.2	6.9	23.3	11.2	3.4	1.5	8.0	0.2
Russia	2.9	3.3	2.8	27.0	19.7	-7.1	0.7	0.6	-0.2
Developing countries	5.5	4.8	4.5	25.3	-5.2	0.1	1.3	-0.3	0.0

Source: Foreign Trade Information Centre (FTIC) data.

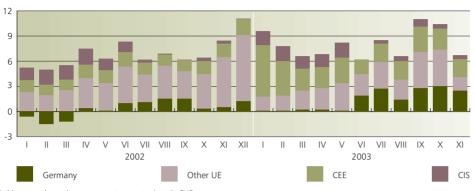
The acceleration in the growth rate of exports to Germany occurred despite a deterioration in the conditions in the German economy. According to estimates by the Federal Statistical Office, GDP in Germany fell by 0.1% during 2003, as against the previous year. In the period January to September 2003 the value of German imports from countries outside the EU increased by just 2.7%, in comparison with the previous year. This was accompanied by changes in their geographical structure, involving an increase in the share of countries offering cheaper products – i.e. China and CEE countries, including Poland. During this period imports from Poland rose by 9.4%. The higher growth rate in imports from Poland than in Germany's total imports from third countries led, in recent years, to an increase in Poland's share in Germany's imports (Figure 24). In 2003 Poland was the fifth largest supplier to the German market from outside the EU, even exceeding the value of imports from Japan¹⁰.

The weakening of market conditions in the European Union during 2003 was reflected in a decline in the growth rate of Polish exports to the other EU countries to 6.3% – a level which was almost half of that in the previous year.

The largest growth during 2003, as in 2002, was in sales to CEE countries. At the same time this was the only group of countries to which the growth of exports in euro was higher than in

¹⁰ Intra- and extra-EU trade, Monthly data, No 12/2003, Eurostat.

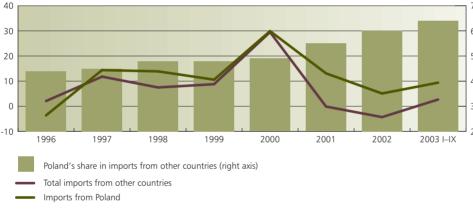
Figure 23 Share of the major partners in the growth rate of Polish exports* (%, compared with the corresponding period of the previous year)



* thiree month moving average, at current prices, in EUR

Source: FTICA data

Figure 24 German imports from other countries and from Poland (% change against the previous year) and Poland's share in Germany's imports (in %)



Source: FUROSTAT-Comext data

2002. The high growth of exports to CEE countries can be explained, on the one hand, by a much higher growth in import demand in those countries than in the EU and, on the other hand, by the changes taking place in the structure of the exports to that group of countries. This has involved an increase in the proportion of machinery parts, which was the result of the increasing role played by trade between the subsidiaries of large international concerns located in this part of Europe. The continuing high growth in exports to CEE countries had resulted in the share of these countries in Poland's exports increasing in 2003 to its highest level since the demise of Comecon.

On the other hand, the growth rate in sales to CIS countries clearly declined, as the result of the decline in exports to Russia – the most important recipient of Polish goods among this group of countries. This decline was only partially offset by a growth in sales to other countries in this group.

Changes in the structure of import demand by Poland's most important trading partners in 2003 - especially Germany - affected the Polish export commodity structure. This involved an increase in the share of goods processed to a lesser degree. Consequently, whereas in previous years the main component driving Polish export was the machinery and transport equipment industry (Table 9), in 2003 that role was assumed by the so-called "other processed goods" (especially furniture, iron and steel and wood products) as well as unprocessed goods (mainly agricultural produce) - Figure 25.

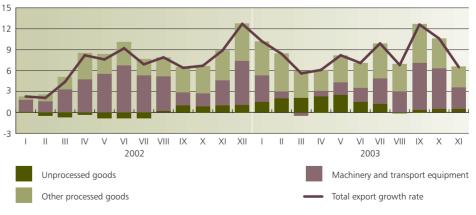
Table 9
Changes in exports according to the main SITC groups of goods (in EUR)

	:	Structure	è	G	rowth ra	te	Eff	ect on to	otal
		(in %)		(% in c	ompariso	on with	g	rowth ra	te
				pr	evious ye	ar)	(in per	centage	points)
	2001	2002	2003	2001	2002	2003	2001	2002	2003
	I–XII	I–XII	I–XI	I–XII	I–XII	I–XI	I–XII	I–XII	I–XI
Total	100.0	100.0	100.0	17.4	8.2	6.8			
Unprocessed goods	16.0	15.0	15.0	18.5	1.0	7.5	2.9	0.2	1.1
Foodstuffs	7.8	7.5	8.0	15.6	4.2	14.8	1.2	0.3	1.1
Raw materials	2.6	2.5	2.6	4.7	4.4	12.6	0.1	0.1	0.3
Fossil fuels	5.7	5.0	4.4	30.7	-5.1	-5.9	1.6	-0.3	-0.3
Processed goods	83.9	85.0	85.0	17.2	9.6	6.6	14.5	8.1	5.6
Chemical products	6.3	6.3	6.6	8.3	8.8	11.5	0.6	0.6	0.7
Machinery and transport									
equipment	36.2	37.6	37.0	24.5	12.5	5.2	8.3	4.5	1.9
Other industrial products	41.5	41.1	41.4	12.9	7.2	7.2	5.6	3.0	3.0

Source: FTIC data

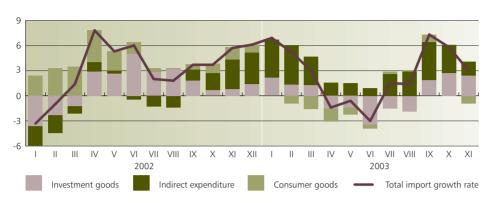
The reduction, in 2003, of the growth rate in the export of machinery and transport equipment, in comparison with the previous year, was clearly caused by the slowdown in the sales of ready machinery and the fall in the export of consumer durables. On the other hand, the sale of parts (a growth of 14%) showed a relatively high growth rate. Consequently, in 2003 parts and sub-assemblies constituted almost 2/3 of the value of exports in this group, while investment and consumer goods constituted 17% each. The growth in the share of the machinery exports held by parts at the expense of ready goods caused a fall in the unit price of the goods in this group and resulted in a fall in the growth rate of its exports. It may, however, be expected that, together with the expected improvement in market conditions on the most important export markets, the share of machinery and equipment in our exports will once again increase.

Figure 25
Share of the major product groups in the growth rate of Polish exports*
(%, compared with the corresponding period of the previous year)



 $[\]mbox{\scriptsize *}$ Three month moving average , at current prices, in EUR. Source: FTICA data.

Figure 26
Share of the major product groups in the growth rate of Polish imports*
(%, compared with the corresponding period of the previous year)



 $[\]mbox{\scriptsize {\tt *}}$ Three month moving average , at current prices, in EUR. Source: FTICA data.

The growth in Polish exports during 2003 was assisted by the growth in sales in the automotive sector. The continuing high growth rate in the sale of automotive parts accompanied a 21% growth in the exports of private cars (following a 10% decline in the previous year). This was the result of a revival on the European automotive market and the introduction of new models into the Polish export range. On the other hand, weak demand in EU countries contributed to the significant fall in the sale of heavy goods vehicles.

Table 10
Changes in the structure of imported goods, according to the BEC classification (in EUR)

	Structure (in %)			Growth rate (% in comparison with			Effect on total growth rate		
				previous year)			(in percentage points)		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
	I–XII	I–XII	I–XI	I–XII	I–XII	I–XI	I–XII	I–XII	I–XI
Total	100,0	100,0	100,0	5,6	4,4	1,6			
Investment goods	18.2	19.2	18.6	2.9	9.8	-0.2	0.5	1.8	0.0
Investment goods except									
vehicles	15.1	14.2	13.5	2.1	-1.9	-2.3	0.3	-0.3	-0.3
Industrial transport	3.1	4.9	5.1	7.0	66.5	5.6	0.2	2.1	0.3
Indirect wear and tear	60.7	59.1	60.7	4.0	1.6	4.0	2.5	1.0	2.3
Indirect wear and tear excl.									
fuel	50.8	50.1	51.5	5.2	3.0	4.0	2.7	1.5	2.0
Fuels and lubricants	10.0	9.0	9.1	-1.8	-5.7	3.6	-0.2	-0.6	0.3
Consumer goods	20.8	21.5	20.6	13.5	7.8	-3.1	2.6	1.6	-0.7
Foodstuffs and drinks	3.8	3.6	3.3	14.8	-1.0	-7.6	0.5	0.0	-0.3
Personal motor cars	4.0	4.6	5.0	21.2	20.6	7.5	0.7	0.8	0.4
Durable goods	2.8	2.7	2.4	-2.1	0.0	-10.0	-0.1	0.0	-0.3
Semi-durable goods	3.7	4.0	3.8	14.0	12.8	-4.8	0.5	0.5	-0.2
Non-durable goods	6.4	6.5	6.0	16.2	5.6	-5.1	0.9	0.4	-0.3

Source: FTIC data.

The decline in the growth rate in Polish imports during 2003 was caused, above all, by a fall in the value of the import of consumer goods (in all groups except for private cars), and a slight decline in the import of investment goods (Table 10). It should, however, be pointed out that during the second half of last year an acceleration in the growth of imports occurred (whereas in the first half of 2003 it was by 0.2% was lower than in the corresponding period of the previous year, during July to November 2003 it grew by 3.6%). The recovery in the import of investment goods had a material influence on this change (Figure 26).

The only group of goods which showed an increase in the value of imports during the January to November 2003 period was distributive goods. In the first half of 2003 this was mainly due to the rise in fuel prices. In the case of the other distributive goods, the acceleration in imports did not occur until the second half of 2003. On the whole, however, the growth in the import of distributive goods was small in 2003, especially in comparison with the relatively high growth rate of sold industrial output and export during this period. It would appear that this is the result of the aforementioned changes in the structure of exports (the reduction in the proportion of final products in favour of parts).

The slight fall in the value of the imports of investment goods during 2003 occurred despite an earlier growth in its volume and was the result of a reduction in the unit prices of the goods classified in this group¹¹. This was the result of the replacement, in conditions of reduced internal demand, of imports from developed countries with those from developing countries – mainly China. In 2003 the value of investment imports from China grew by 24% in comparison with the previous year, while the value of imports from developed countries fell by 4%. As a result China became the third largest supplier of investment goods to Poland and the fifth largest supplier overall.

The fall in the import of consumer goods during 2003 was caused by the modest growth in domestic consumer demand and the deepening depreciation of the zloty. The import of durable goods and food (especially processed) fell most.

In 2003 the structure of the financing of the current account deficit improved. About 92% of it was financed through the inflow of long-term foreign capital, in the form of direct investments, amounting to EUR 3.2 bn (against almost 55% in 2002). The growth in the ratio of financing the current account deficit with capital inflows is the result of a material reduction in the current account deficit (larger than the simultaneous reduction in the inflow of foreign capital in the form of direct investments). At the same time net portfolio investments increased as a source of the financing of the current account deficit. The reason was a high inflow of foreign capital into debt securities. During 2003, the net capital inflows in the form of portfolio investments amounted to EUR 2.2 bn as against EUR 1.9 bn in 2002.

Using selected prudential ratios (Table 11) an assessment of the external imbalance in 2003 was carried out. Ratios referring to current transactions – i.e. the ratio of the current account balance and the commodity trading balance to GDP, and the degree to which the current account deficit was financed by the inflow from direct capital investments – were more advantageous than in the previous year, as was the relationship between that part of the current account deficit not financed by direct investment and GDP. On the other hand, the ratio defining the value of foreign currency reserves expressed in months of import of goods and services deteriorated in comparison with 2002, although it continued to be at a safe level.

An increase in the current account deficit is expected in 2004, primarily as the result of an increase in the commodity trading balance which has been caused by exports growing faster than imports. Payments resulting from the increase in the costs of servicing foreign indebtedness will also increase. Nevertheless the current account deficit will continue at a safe level. Given the expected increase in the inflow of foreign capital in the form of direct investments, it can be assumed that it will continue to be financed safely.

¹¹ The volume of imported investment goods during the January to September 2003 period increased by 5.6%, and the unit price in this group, in EUR, fell by 7.5% in comparison with the corresponding period in the previous year.

Table 11
Selected prudential ratios*

Prudential ratio	2001	2002	2003
Current account balance/GDP (%)	-3.9	-3.6	-1.9
Current trading balance/GDP (%)	-6.4	-5.5	-4.6
Direct investment/ current account balance (%)	96.9	54.9	92.1
(Current account balance, less direct investment)/GDP (%)	-0.1	-1.6	-0.2
Foreign debt service/exports of goods and services (%)	47.3	43.1	-
Official reserves expressed in terms of monthly imports of goods and services	7.7	7.5	7.0

^{*} Calculated on the basis of the balance of payments based on payments made.

2.2. External prices

During 2003 the growth trend in the dollar prices on the world raw materials markets continued. The growth in non-energy raw material prices was over twice as fast in 2003 as in 2002 (see Table 12). It visibly accelerated in Q4 2003. This was linked not only to the sharp depreciation of the dollar but also to the acceleration in economic growth in the USA and in Asia, which was reflected in the steep rise in metal prices (see Figure 27). At the end of the year copper prices reached their highest levels for 6 years. On the other hand, the growth in food prices was caused by a severe drought in Europe – according to FAO estimates the grain harvests in the region were the lowest for 60 years.

Oil prices also rose faster in 2003 than in the previous year¹². Political factors had the greatest influence on this. Uncertainties as to the timing and the scale of the war in Iraq, which could have caused considerable upheaval in the supply of oil from the Middle East, resulted in a rise in oil prices to 31.4 USD/barrel in Q1 2003 – i.e. to the highest level since 1990 (the time of the first war in the Persian Gulf). The rapid course of the war and the relatively small destruction of the oil infrastructure in Iraq resulted in a temporary, but significant, fall in oil prices. However, after the war, the continuing unstable internal situation in the country and the consequent significant delays to the return of Iraqi oil onto world markets caused another rise in oil prices. By the end of last year oil production in Iraq had not returned to its pre-was levels and, consequently, throughout 2003 it

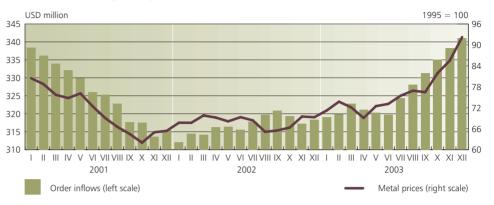
Table 12
Changes in basic raw material prices (in USD, in %, as against the previous year)

	2000	2001	2002			2003		
	I–IV	I–IV	I–IV	I–IV	- 1	Ш	Ш	IV
Non-energy raw materials	3.5	-6.6	4.9	11.2	13.4	10.2	6.8	14.7
of which:								
Food	-1.0	-3.8	8.0	8.7	14.8	12.3	0.7	8.0
Industrial raw materials	7.1	-10.1	0.8	15.0	11.3	7.3	16.0	24.8
of which:								
Agricultural raw materials	-3.2	-7.0	6.8	17.4	18.3	11.1	17.3	22.8
Metals	15.0	-12.4	-4.0	12.8	5.7	3.9	14.9	26.6
Brent oil	59.6	-14.1	2.3	15.4	48.5	4.0	5.4	9.6

Source: "The Economist" and Bloomberg data

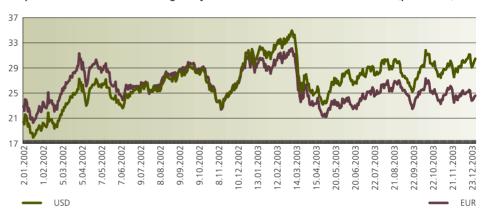
¹² The average price of Brent oil in 2003 amounted to USD 28.9 per barrel, while in the previous year it had been 25.0 USD/b.

Figure 27
Order inflow to the processing industry in the USA and metal price movements (three month moving average)



Source: Bloomberg and The Economist data.

Figure 28
Oil prices in USD and EUR during the years 2002 and 2003 extraction limits (per barrel)



Source: Bloomberg data.

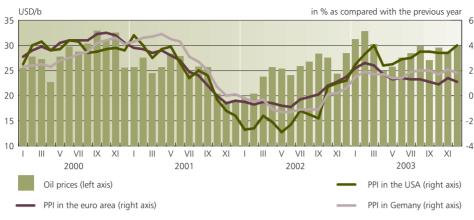
was, on average, 700 000 b/d lower than in 2002, which resulted in a fall in oil stocks in the industrialised countries¹³.

Oil production by the OPEC countries was also volatile during 2003. On two occasions the cartel increased production (in January and February 2003) and on two others it reduced it (in June and November 2003). At the beginning of last year these moves reduced the pressure for further sharp rises in oil prices but in the second half of 2003 they resulted in persisting high levels of prices.

According to estimates by the US Department of Energy, world demand for oil increased by 1.4m b/d in 2003 – by 300 000 b/d less than in the previous year. However, in industrialised countries this increased by 800 000 b/d, – the largest increase since 2000. Demand for oil rose fastest in Q1 2003, which was influenced by the cold winter in the North Eastern USA and the replacement of other energy sources with oil (gas in the USA and nuclear energy in Japan). Meanwhile the weaker demand in the developing countries was the result of a temporary weakening in economic activity in South Eastern Asia caused by the SARS epidemic. However, in the second half of 2003 demand for oil in this part of the world rose significantly again – primarily because of the accelerating economic growth in China.

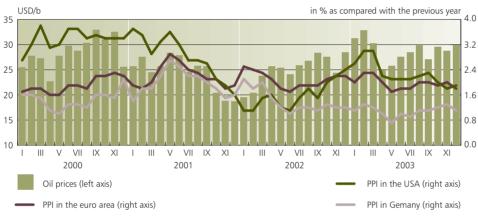
¹³ Especially on the level of stocks in the USA. According to data from the US Department of Energy, at the end of 2003 they fell below 270 million barrels, (the lowest level since records began). On average, in comparison to 2002, they fell by 25 million barrels. The low levels of stocks also contributed to the high volatility in oil prices.

Figure 29
Oil prices and PPI in the USA, euro zone and Germany



Source: Bloomberg data.

Figure 30
Oil prices and CPI in the USA, euro zone and Germany



Source: Bloomberg data.

Beginning in Q2 2003 the sharp decline in the US dollar against the main currencies became an important factor in the growth of oil prices (see Figure 28)¹⁴.

The growth in the price of oil and industrial raw materials significantly affected the growth of production prices in the USA, where the average annual PPI rose from -1.3% in 2002 to 3.2% in 2003 (see Figure 29). Meanwhile output prices in the euro zone grew, respectively, from -0.1% to 1.5%. On the other hand, the effect of higher raw material prices on consumer prices in the aforementioned countries was smaller (see Figure 30). The average annual CPI in the USA increased from 1.6% to 2.3%, and the harmonised CPI in the euro area fell from 2.1% to 2.0%.

According to GUS data, deterioration took place in the prices in Polish foreign trade during the period January to September 2003 (see Figure 31). This was the result of a faster growth in zloty import transaction prices during the period (by 9.6% in comparison to the corresponding period in the previous year) than in export transaction prices (which rose by 5.7%). As a consequence the *terms of trade* during the January to September 2003 period fell to 96.3% from 103.3% in the corresponding period a year earlier.

INFLATION REPORT 2003 35

¹⁴ While oil prices denominated in USD clearly increased, those denominated in EUR fell from 26.5 in 2002 to 25.7.

Figure 31
Transaction price index (in PLN) in Polish foreign trade during the years 2001–2003



Source: GUS data.

The lower growth in export transaction prices, when compared with the same period in the previous year, was influenced by a fall in prices in the machinery and transport equipment group (by 0.3%). This was the result of a change in the structure of the products classified in this group in favour of a greater share by parts and sub-assemblies. Meanwhile, the surge in import prices was mainly caused by the growth in raw material prices.

It is expected that in 2004 the upward trend in the price of non-energy raw materials will continue. To a large extent this will be caused by further growth in metal prices resulting from the continuing improvement in world market conditions. On the other hand, oil prices should gradually fall. Stabilisation of the internal situation and a growth in oil production in Iraq may, thus, lead to an increase in the stocks of oil in industrialised countries. At the same time economic recovery in OECD countries should increase demand for oil to a greater extent than in 2003. According to US Department of Energy estimates, the demand for oil during 2004 will rise to the same degree as the supply of oil in countries outside OPEC. In such conditions, the cartel's policies will be of key importance to ultimate oil price levels. In wishing to maintain oil prices at relatively high levels OPEC will probably aim to reduce oil extraction.

3 Inflationary processes

3.1. Consumer prices

The implementation of the *Medium-term monetary policy strategy for 1999–2003* led to permanent disinflation. In December 2003 the 12-month CPI stood at 1.7%.

From the point of view of the course of the inflationary processes during 2003 two subperiods can be distinguished. During the first four months the declining trend in the 12-month CPI continued – from 0.8% in December 2002 it fell to its lowest historic level of 0.3% in April 2003. Meanwhile, in the subsequent months of 2003 inflation started to rise and by December it stood slightly below the short-term inflation target set for 2003.

In August 2002, when the monetary policy guidelines for 2003 were being determined and the short-term inflation target was being formulated, as an interim element in relation to the medium-term target, it was assumed that 2003 would be a period of the stabilisation of inflation at a low level. Macroeconomic projections indicated that in conditions where the economic recovery among the main trading partners was weaker than it had been anticipated, and in the light of the prospects for growth in internal demand, the growth rate of GDP in Poland could be between 2 and 3% in 2003.

It was then assumed that during 2003 a slight acceleration in the growth rate in food prices would occur as the result of, inter alia, lower grain, fruit and vegetable harvests. An expected shortage in the supply of products of animal origin was supposed to result in a rise in meat prices.

Pursuant to the assumption to the Budget Act, it was accepted that in 2003 the process of adapting indirect tax rates to the levels prevailing the European Union would be continued. It was also assumed, on the basis of information received from the Energy Regulatory Office, that further increases in energy utilities would take place. Despite the expected stabilisation in fuel prices, the possibility was taken into account of their significant increase following an armed conflict in Iraq.

The inflation expectations of consumers and bank analysts in 2002 gradually fell. As the Demoskop survey shows, in August 2002 consumers expected that the 12-month rise in prices would amount to 1.2%. On the other hand, in August 2002 bank analysts expected (11 months in advance) that the rate of inflation in July 2003 would amount to 3.1%.

In these circumstances, the assumption of an inflation target for the end of 2003 at a level of 3 +/- 1% percentage point was justified.

During the first four months of 2003 inflation fell. The continuing fall in food prices, on an annualised basis, was caused by the continuing high supply of the main agricultural products – both of crop and animal origin. The growth rate in the prices of the remaining consumer goods and services groups continued to fall. On the other hand, the rate of growth in officially controlled prices continued to be relatively high.

Subsequent months confirmed the earlier assumption for the later part of 2003, of a weakening in the rate of growth in the supply of agricultural produce on the food market. The grain harvest in 2003 was smaller than in the previous year. Also, a reduction in the scale of animal production occurred. At the same time the consumption of foodstuffs increased modestly. As a result of these factors, the fall in food prices during the summer months was slower than a year previously and in later months the prices rose.

As regards officially controlled prices, it transpired that the tariff increases assumed in the previous year's projections were introduced at lower levels than had previously been expected. Also weaker than expected was the growth in the prices of those groups of goods and services which are regulated at a local level. Despite this, throughout 2003, the indices of the growth in officially controlled prices stood at relatively high levels, significantly in excess of the rise in the CPI.

During the last three quarters of 2003 the annual growth rate in the prices of consumer goods and services increased. The largest growth occurred in Q4, together with the acceleration in the growth rate of food prices and of the officially controlled prices (Table 13, Figure 32 and Figure 33).

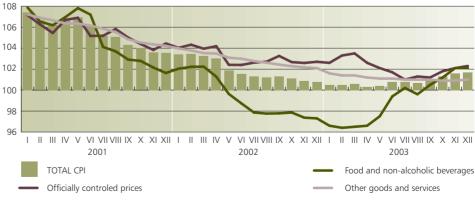
During 2003, the strongest growth trend occurred in the food and non-alcoholic beverages group. In December 2003, on an annualised basis, they were 2.1% higher than a year earlier. The largest growth in food prices occurred as of the beginning of September 2003. This was the result of the situation on the agricultural market. A harvest smaller than a year earlier – mainly of grains – and declining animal production led, in the light of a modest growth in consumption, to a rise in the prices of the basic agricultural products and, as a consequence, to a growth in the retail prices for food.

Table 13
Price growth in the basic groups of consumer goods and services

	2001	2002	2003	2001	2002			2003		
	Weigh	iting str	ucture	XII	XII	Ш	VI	IX	XII	I–XII
		%		Co	rrespor	nding pe	eriod pr	evious y	/ear = 1	00
Total, of which	100.0	100.0	100.0	103.6	100.8	100.6	100.8	100.9	101.7	100.8
Food and non-alcoholic										
beverages	30.1	29.7	28.2	101.6	97.3	96.5	99.4	100.5	102.1	99.0
Officially controlled prices	25.7	27.1	27.2	104.5	102.7	103.5	101.7	101.2	102.3	102.1
Incl. fuel	3.5	3.7	3.7	89.1	107.6	117.4	105.5	105.1	104.4	107.9
Other goods and services,										
of which	44.2	43.2	44.6	104.2	102.1	101.4	101.1	101.0	101.0	101.1
Non-food goods	27.1	26.1	26.7	103.0	101.0	100.5	100.1	99.9	99.9	100.1
Services	17.1	17.1	17.9	106.3	103.8	102.7	102.6	102.6	102.6	102.7

Source: GUS data and NBP calculations.

Figure 32
CPI indices and the major price categories during 2001–2003 (corresponding month of the previous year = 100)



Source: GUS data and NBP calculations.

Figure 33

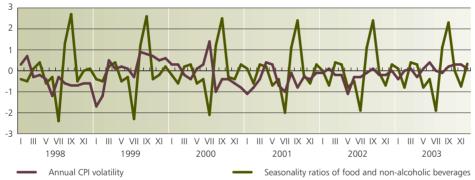
CPI breakdown for the years 2001 – 2003 (corresponding month of the previous year = 100)



Sources: GUS data and NBP calculations.

Figure 34

Annual CPI volatility and seasonality ratios of food and non-alcoholic beverage prices 1998–2003 (in perc. point)



Sources: GUS data and NBP calculations.

During 2003 acceleration in the growth rate of retail prices of all the basic groups of foodstuffs – with the exception of fish, sugar, honey and chocolate products – was recorded. The prices of bread, grain products, milk, cheese, eggs, oils and fruit rose most steeply.

In 2004, given the lower supply of grains, the demand pressures on the milk market and the diminishing growth in animal production (mainly pork) it is expected that the growth trends in food prices will be maintained.

In December 2003 the 12-month growth rate in *officially controlled prices*¹⁵ amounted to 2.3%. Among the main price groups with a dominant share in officially controlled prices (including energy carriers and goods and services subject to excise duty) with a growth rate above the average for the group and significantly above the overall inflation index, were those of tobacco products, gas, electricity and hot water.

¹⁵ Officially controlled prices include the prices of those goods and services on which market influences are limited because of various types of administrative intervention in the process of establishing their prices. The category of officially controlled prices, which has been separated out for analytical purposes, includes the prices which are:

⁻ regulated indirectly through excise duty rates; and concerning that group of goods and services where the proportion of excise duty in the retail price is significant (alcoholic beverages, tobacco products, fuels, electricity),

[–] subject to supervision and approval by the authorised offices, primarily by the Energy Regulatory Office (electricity, gas, district heating, hot water),

⁻ uniform throughout the country (postal services, rail transport, radio and television subscription fee),

regulated by local authorities (municipal transport).

⁻ determined by the government (court services, public administration services).

Figure 35
CPI and index of fuel prices 1998–2003
(corresponding month of the previous year = 100)



Sources: GUS data and NBP calculations.

The increase in the price of tobacco products (by 5.2%) was the result of a further increase in excise duty, which was introduced as part of a convergence with the levels prevailing in the European Union. Gas prices rose by 4.2%, those of electricity by 3.9%, and of hot water by 3.8% following increases in the prevailing tariffs.

On the other hand, the prices of alcoholic beverages remained at last year's levels, as did the prices of telecommunications services and state administration services.

Fuel prices, which are included among officially controlled prices, last year rose by 4.4% on an annualised basis. Their largest increase took place in Q1 2003, during the war in Iraq. In subsequent months the rate of growth in fuel prices, on an annualised basis, weakened. As revealed by Nafta Polska data concerning the structure of fuel prices on the basis of EU 95 petrol, the main reason for the growth in domestic fuel prices in Q1 2003 was an increase in their import prices (as a result of an increase in oil prices on world markets), and the effect of the January rise in excise duty on this was only slight.

In 2004 Poland's accession to the EU will have a large influence on the level of officially controlled prices. As regards energy utilities, restructuring of the tariffs will be necessary. This may result in an increase in the price of energy utilities for households and a reduction for large users. On the other hand, the adaptation of excise duty rates to EU standards has practically come to an end. As regards the majority of fuels, wine, beer and spirits the rates are currently higher in Poland than those required by the EU. However, further increases in excise duty on tobacco products will be required.

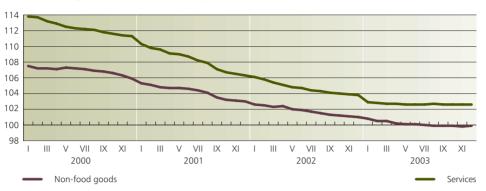
The prices of other consumer goods and services increased in 2003 at an annualised rate of 1.0% - i.e. less than the CPI. The growth in prices in this group, thus, remained at a level half of that achieved in 2002, with a tendency to a further small slowdown during the year. The prices of non-food goods affected the decline in the general growth rate in the group of other prices relatively more strongly (Figure 36).

The downward trend, in an already small growth rate, in the prices of non-food goods continued in 2003. This was the result of low demand pressure for these goods. The greatest weakening in the growth rate in the group being analysed occurred last year with regard to consumer durables and clothing and footwear, the majority of which stood at the same levels as last year, or lower.

An absolute fall, or stabilisation, of the prices of certain goods in the non-food group at previous year's levels resulted in a increase in the total volume of the retail sales of these goods during 2003 – on average by 7.9% as against 1.6% in the previous year.

Last year, the growth in the prices of services was the highest and the most stable of all the basic groups of consumer goods and services. This group includes services for which demand is relatively inflexible – or even fixed – and services which react strongly to changes in demand.

Figure 36
Price indices of other consumer goods and services (corresponding month of the previous year = 100)



Sources: GUS data and NBP calculations.

During 2003, as was the case a year ago, among the prices of services which have a relatively fixed demand the prices of services associated with using residential property grew most – including the prices of public utility services (water supply, waste collection, sewerage services) and rents. On the other hand, there was a lower year-on-year increase in the prices of subsistence services – e.g. footwear, clothing and the repair of household equipment.

On the other hand, among the services which are sensitive to changes in demand, growth was generally lower. For example, on an annualised basis, restaurant and hotel prices during 2003 rose on average by half the rate of a year ago; the prices of domestic and overseas tourism services fell slightly in comparison with a year ago; and fully-paid medical services showed weaker growth than last year.

3.2 Core inflation

In Q1 2003 all the measures of core inflation as well as inflation measured by the CPI showed a downward trend but in subsequent months a turn round took place (Figure 37). The upward trend was maintained up to the end of 2003 and will probably not change at the beginning of 2004. The indices of core inflation in December 2003 grew by 1.1%–1.5% on an annualised basis (Table 14).

Table 14
CPI and core inflation indices 2003

						20	03					
	1	Ш	Ш	IV	٧	VI	VII	VIII	IX	Х	ΧI	XII
	Mov	/emen	ıts aga	inst t	he cor	respo	nding	montl	n of th	e pre	vious	/ear
СРІ	0.5	0.5	0.6	0.3	0.4	8.0	0.8	0.7	0.9	1.3	1.6	1.7
Core inflation indices after ex	cluding	g:										
Officially controlled prices	-0.3	-0.5	-0.6	-0.6	-0.3	0.4	0.7	0.5	0.8	1.0	1.4	1.5
The most volatile prices	0.5	0.5	0.5	0.0	-0.1	-0.1	0.0	0.1	0.3	0.7	1.0	1.1
The most volatile prices												
and fuel prices	0.1	-0.1	-0.2	-0.5	-0.5	-0.3	-0.3	-0.2	0.0	0.6	8.0	1.0
Food and fuel prices												
(net inflation)	1.6	1.5	1.4	1.2	1.2	1.1	0.8	0.8	0.9	1.2	1.3	1.3
15% trimmed mean	1.0	0.8	0.8	0.6	0.8	0.9	1.0	1.0	1.2	1.2	1.4	1.5

Source: GUS data, and NBP calculations.

The index of *core inflation excluding officially controlled prices* (Figure 38) was below CPI throughout 2003. During the first half of 2003 this measure of core inflation on an annualised basis, even showed a fall of 0.6%, which reflects the pro-inflationary nature of officially controlled prices. However, during the second half of 2003 the difference between that index and the CPI was gradually eroded following a rise in the core inflation index – revealing the smaller influence of officially controlled prices on the CPI. Of the excluded groups, those which had the greatest influence on the growth in the CPI during 2003 were: tobacco products, fuels, gas, electricity and district heating.

Both measures of *core inflation after excluding the most volatile prices from the CPI* (Figure 39, Figure 40) behaved similarly in 2003. During the year the differences between them were gradually eroded as the result of a slowdown in the rate of growth in fuel prices. Both measures were significantly below the CPI, and even moved into negative territory – which reflects the significance of the excluded items (eggs, fruit, residential charges, electricity and, in the case of one of the measures, even fuel prices) in the determination of the CPI.

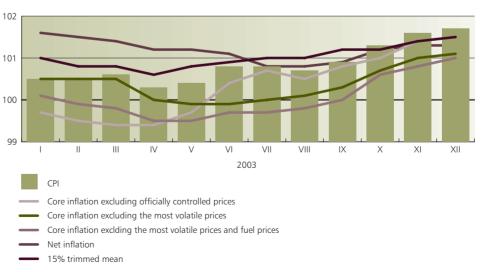
The *net inflation index* (Figure 41), which excludes food and fuels from the CPI, which constitute over 30% of the CPI, has exceeded the general inflation index by an average of 1.3% since August 2001. This reflects the strong anti-inflationary nature of the excluded groups (especially food). Only in the second half of 2003 did this index approach the level of the CPI, while in Q4 2003 – because of the acceleration in the growth rate in food prices – it fell below the level of the CPI.

The last measure of core inflation – the so-called *15% trimmed mean* (Figure 42), in contrast to the others, stood at above CPI for most of last year (only in Q4 did it fall slightly below). This measure is most noticeable for its even course, which is a direct result of its construction (it arises from a symmetrical trimming by 15% – on the left and on the right – of the price indicators with the highest and the lowest growth rates in comparison with the previous period). Following many months of uninterrupted decline (from August 2000 to April 2003) the 15% trimmed mean began to grow – thereby confirming the general inflationary trend.

During the second half of 2003 the continuing upward trend in core inflation, because of its leading nature, confirmed the acceleration in the growth of inflation during the next few months which is expected by many economists. However, a large jump in prices should not be expected.

Figure 37

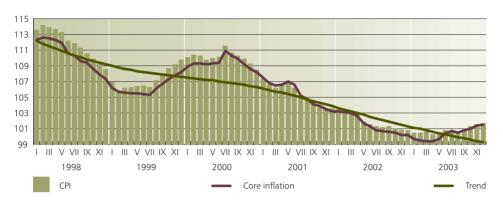
CPI and core inflation indices and core inflation trends (corresponding month of the previous year = 100)



Source: GUS data, NBP calculations.

Figure 38

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



Source: GUS data, NBP calculations.

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



Source: GUS data, NBP calculations.

Figure 40

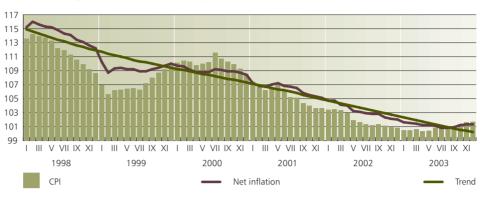
CPI and core inflation indices excluding the most volatile prices and fuel prices (corresponding month of the previous year = 100)



Source: GUS data, NBP calculations.

Figure 41

CPI and net inflation indices excluding foood and fuel prices (corresponding month of the previous year = 100)



Source: GUS data, NBP calculations.

Figure 42

CPI and core inflation inidices (15% trimmed mean)
(corresponding month of the previous year = 100)



Source: GUS data, NBP calculations.

After all, the growth rate in the core inflation indices is very small (in December 2003 the 12-month core inflation indices rose by 0.1–0.2 percentage points in comparison to November of the previous year). In addition, in December 2003 all the indices of core inflation stood at below the CPI (the CPI rose by 1.7%. and the core inflation indices by 1.0%–1.5% on an annualised basis) (Figure 37), indicating the possibility of a slowdown in the growth rate of inflation as measured by the CPI.

4 Monetary policy and achieving the inflation target

4.1. Monetary policy in 2003

In accordance with the *Monetary policy guidelines in 2003* the Monetary Policy Council (MPC) established a short-term inflation target (as measured by a 12-month growth in consumer prices in December) of 3%, with a tolerance of +/-1% percentage points. This target was of an interim nature in relation to the medium-term target determined in the *Medium-term monetary policy strategy for 1999–2003*. adopted in 1998, namely to reduce the rate of inflation to a level below 4% by the end of 2003¹⁶.

From the point of view of the execution of the monetary policy, two separate periods were noticeable during 2003. During the first half of the year the MPC made six cautious reductions – of 0.25 percentage points each – in the NBP reference rate. On the other hand, during the second half, the parameters of monetary policy remained unchanged (Table 15).

The MPC decision to reduce interest rates in the first half of 2003 was, to a large extent, the result of an assessment of the prospects for growth in economic activity, as a factor which could affect future inflation.

At the beginning of 2003 it was expected that any improvements in the conditions in the economies of the euro zone and the USA would proceed very slowly. Actually, it transpired that analysts forecasts were systematically being revised downwards during the year. Thus, the situation in Poland's economic environment was not favourable for an economic recovery in our country.

Meanwhile during Q2 2003 – and despite continuing weak prospects for economic growth in the euro zone and a fall in the German GDP – symptoms of an economic recovery began to strengthen in the country:

- The annual growth rate in industrial output during Q1 2003 amounted to 4.4% and 9.1% in Q2;
- Despite unfavourable external economic conditions the high growth rate in exports was maintained (according to payment statistics, the revenues from exports, denominated in euro, grew by 5.2% during the first half of 2003, in comparison with the corresponding period in the previous year);
- During Q2 2003 the situation in construction improved a slowdown in the fall in output was recorded (the added value in construction in Q2 2003 fell by 7.4% as against the same period in the previous year in Q1 the fall had been 19.5%) together with a gradual change in the structure of its activities, which indicated a possibility of growth in investment demand in the second half of the year (an increase in the output of enterprises involved in the preparation of land for construction and an acceleration in the growth of output by enterprisess engaged in fitting out works);
- The monthly surveys of market conditions conducted by GUS showed an improvement in the conditions in the processing and construction industries;

 $^{^{16}}$ In analysing the decisions taken in 2003 regarding monetary policy, it should, however, be remembered that because of the lag in the monetary transmission process, their effects on inflation will materialise primarily in 2004 and 2005. Thus, the MPC decisions should be considered from the point of view of the inflation target after 2003, which has been set at 2.5%, with a tolerance of \pm 1 percentage points.

Table 14
The most important decisions taken by the Monetary Policy Council in 2003

Datea	Decision
29 January 2003	To reduce the minimum yields on 14-day open market operations from 6.75%
	to 6.50% in annual terms
	To reduce the Lombard rate from 8.75% to 8.50%
	To reduce the rediscount rate from 7.50% to 7.25%
	To reduce the deposit rate from 4.75% to 4.50%
26 July 2003	To reduce the minimum yields on 14-day open market operations from 6.50%
	to 6.25% in annual terms
	To reduce the Lombard rate from 8.50% to 8.00%
	To reduce the rediscount rate from 7.25% to 6.75%
	To leave the deposit rate unchanged at 4.50%
26 March 2003	To reduce the minimum yields on 14-day open market operations from 6.25%
	to 6.00% in annual terms
	To reduce the Lombard rate from 8.00% to 7.75%
	To reduce the rediscount rate from 6.75% to 6.50%
	To reduce the deposit rate from 4.50% to 4.25%
24 April 2003	To reduce the minimum yields on 14-day open market operations from 6.00%
	to 5.75% in annual terms
	To reduce the Lombard rate from 7.75% to 7.25%
	To reduce the rediscount rate from 6.50% to 6.25%
	To leave the deposit rate unchanged at 4.25%
28 May 2003	To reduce the minimum yields on 14-day open market operations from 5.75%
	to 5.50% in annual terms
	To reduce the Lombard rate from 7.25% to 7.00%
	To reduce the rediscount rate from 6.25% to 6.00%
	To reduce the deposit rate from 4.25% to 4.00%
25 June 2003	To reduce the minimum yields on 14-day open market operations from 5.50%
	to 5.25% in annual terms
	To reduce the Lombard rate from 7.00% to 6.75%
	To reduce the rediscount rate from 6.00% to 5.75%
	To reduce the deposit rate from 4.00% to 3.25%

a Date decision taken.

• Also, the financial results of enterprises improved.

However, in the Council's assessment, the growth trends which were appearing in the economy were not generating a growth in inflationary pressures, despite the weakening of the PLN, which could threaten the achievement of the inflation target for 2004.

The arguments for reducing interest rates in the first half of 2003 were, in addition, the continuing low level of inflation and the continuation of factors which would restrict its growth in the future:

• The annual growth rate in the CPI remained at a low and relatively stable level, and the majority of the measures of core inflation showed a slight downward trend. Household inflation expectations remained at a low level;

- During the first half of 2003 enterprises maintained their strong wage discipline. During this period, the nominal growth rate in gross average monthly remuneration in the enterprise sector showed a downward trend and in June it amounted to 2.0%. Consequently, given a continuing fall in employment in this sector, incomes from hired employment were nominally lower than a year earlier;
- A further decline in investment outlays occurred in Q1 2003. The continuing fall in construction output was confirmation of the low investment demand. The low growth in investments was reflected by the low rate of growth in loans toenterprises.

In the first half of 2003, however, the MPC noted factors constituting potential sources of inflationary pressure:

- Continuing strong growth in social security benefit payments;
- In the first half of 2003 growth in personal consumption exceeded the growth rate in the purchasing power of registered gross household disposable income and amounted to 1.4% in Q1 and 3.8% in Q2 on an annualised basis;
- During the first half of 2003 household deposits continued to fall. This was the result of continuing low growth in registered household disposable income and the declining attraction of bank deposits in comparison to alternative forms of saving (investment funds and bonds). On the other hand, the annual growth in household loans came through at ca. 7–9%. Net household savings in the banks were negative.
- The uncertain situation continued in the public finance sector (the uncertainty concerned the scale of the 2003 economic deficit in the public finance sector and the shape of fiscal policy in 2004 and subsequent years).
- The growth rate in the the notes and coin in circulation was high, and growing (in annualised terms it grew from ca. 13% in January to ca. 15% in June).
- Oil prices on world markets were high and forecasts indicated the possibility of further growth.

Overall, however, the Council decided that in the first half of 2003 there was room to reduce interest rates – i.e. that they would not threaten the realisation of the medium-term monetary policy aim adopted for after 2003.

The changes which occurred in the second half of 2003 in the situation and in economic forecasts predicated, in the Council's opinion, increased caution in monetary policy.

In accordance with expectations, the consumer price indices gradually grew along with an increase in the annual core inflation indices and in industrial output prices. Also, household inflation expectations clearly rose towards the end of the year.

During the second half of 2003 a gradual recovery took place in the world economy. In particular the growth indicators in the USA improved. On the other hand, in the euro zone the indicators of current activity continued to show week domestic demand.

In Poland, despite the continuation of a weak growth rate in external demand, the trends for economic growth began to strengthen:

- During Q3 the growth rate in GDP amounted to 4.0%, while in Q4 it stood at 4.7%; as a result of which the growth in GDP for the whole of 2003 amounted to 3.7%;
- The annual overall rate of growth in overall industrial output during Q3 2003 reached 8.9%, and in Q4 it rose to 12.1%;
- During the second half of 2003 the high growth of revenues from exports continued; the growth in exports denominated in euro during 2003, in comparison with 2002, amounted to 8.7% (according to payment statistics).
- GUS surveys showed a further improvement in market conditions in the processing industry;
- Financial results of enterprises continued to improve.

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



Figure 44
Monetary Conditions Index (MCI) based on deviations from REER levels and interest rates (base: December 1994)

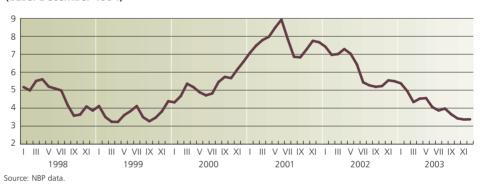
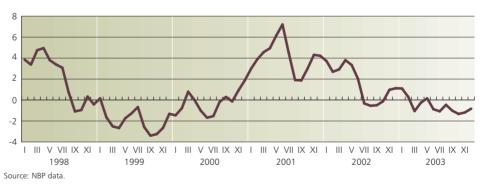


Figure 45
Monetary Conditions Index (MCI) based on deviations from REER trends and interest rates (base: December 1994)



The increasing growth trends in the economy gradually increased inflationary pressures. However, in the Council's opinion this did not, in itself, yet cause a threat to the achievement of the inflation target for 2004.

At the same time, in the second half of 2003 factors – which had already appeared in Q1 and Q2 – which could hinder the stabilisation of inflation at a low level grew significantly. The most important of these continued to be the uncertainty concerning the current and future situation in public finances. The problems of liquidity in the budget and the growing public debt in relation to GDP, which created the possibility of the statutory precautionary thresholds being exceeded, and the uncertainty concerning the prospect of a rapid and effective reform of public finances, caused a further decline in

the value of the PLN against the euro in the second half of the year. A significant factor in this fall was the substantial strengthening of the euro against the US dollar during this period.

An additional factor in inflationary pressure during the second half of 2003 was also the continuing high and growing rise in the the notes and coin in circulation (In December 2003 the annual growth of this aggregate amounted to 17.1%), together with the possibility of increases in oil prices on world markets. Towards the end of 2003 the MPC also pointed to the current forecasts of a possible increase in food prices in 2004.

In taking the decision to leave interest rates unchanged in the second half of 2003, the MPC also took into account the scale of the reductions made hitherto, which should – with a lag – affect the growth in domestic demand in the second half of 2003 and in 2004.

In December 2003 the annual rate of inflation amounted to 1.7%. Thus, it met the target adopted in the *Medium-term monetary policy strategy for 1999–2003* and was slightly lower than the inflation target adopted for 2003. A level of inflation 0.3 percentage points lower then the bottom limit of the inflation target was achieved through the expected acceleration in the growth rate in the prices of food and non-alcoholic beverages (2.1%) but with a substantially lower than expected increase in officially controlled prices (2.3%).

In mid-2002, when the monetary policy guidelines were being drawn up for 2003, it was assumed that officially controlled prices would rise by 3.6%–4.8%. This assumption was in accordance with the then available draft of the 2003 Budget Act. In reality the effects of the increases in excise duty on the final prices of goods were lower than had been forecast. Also, the growth in the prices of the basic energy carriers – electricity and heating – came through at less than had been expected.

The restrictive nature of the monetary policy is illustrated by the NBP indices which take into account changes both in real short-term interest rates and in the real effective PLN exchange rate (Figure 43, 44 and 45). They show the substantial decline in restrictive nature since 2001.

Monetary policy instruments in 2003

Interest rates was the fundamental instrument of NBP monetary policy in 2003. In influencing the level of nominal short-term interest rates, the MPC attempted to attain such a level of interest rates in the economy which would be compatible with the inflation target adopted. In order to appropriately set the short-term interest rates, the NBP used a set of instruments: open market operation, loan and deposit operations and required reserve.

Open market operations were a fundamental instrument enabling the central bank to eliminate fluctuations in interest rates on the market and to maintain them at the levels desirous in terms of monetary policy. Given the continuing over-liquidity the NBP conducted only operations absorbing liquidity. For this purpose it used issues of NBP monetary bills.

In order to improve liquidity management by the central and commercial banks and to achieve greater stability in market rates, as of January 2003 the maturity of the basic open market operations, in the form of the issue of NBP monetary bills, was cut from 28 days to 14 days. The minimum interest (the reference rate) on short-term open market operations absorbing liquidity indicated the current direction of monetary policy and influenced short-term interest rates on the interbank market.

The nominal value of money market bills fell, together with the gradual fall in liquidity, from 7.3 bn PLN at the end of 2002 to 6 bn PLN at the end of 2003. The basic operations were conducted regularly, on each Friday.

One of the factors towards reducing the extent of excess liquidity was the outright sales by the NBP of Treasury securities¹⁷. That operation was completed in April 2003, and these sales nominally amounted to PLN 1.2 bn (PLN 1.3 bn in cash terms).

¹⁷ Unconditional operations involving the purchase or sale of securities by the central bank. The purchase of a security by the central bank provides liquidity to the ranking sector, while a sale absorbs that liquidity. The absorption or provision of liquidity occurs for a term equal to the maturity of the securities.

In emergency situations (e.g. in the case of significant liquidity dislocations or threats to the operations of the payments system), the NBP could resort to fine tuning operations in the form of:

- The issue of NBP money market bills with a 1- to 7-day maturities.
- The purchase of Treasury securities from banks or the advance buy-out of NBP money market bills, in situations which require a significant injection of liquidity into the banking sector.

Fine tuning operations could, therefore, take the form of both supplying and absorpting operations and their date was to depend on the length of a given dislocation. During 2003 there was no need to apply a fine tuning operation.

One-day loan and deposit operations, used to smooth fluctuations in short-term interest rates on the interbank market, and conducted with the commercial banks at their initiative involved: providing lombard loans collateralised on Treasury securities and accepting overnight deposits to the end of the day (one day deposit facility for commercial banks at the NBP).

The rates applied in lending and deposit-taking operations function as a corridor for fluctuations in rates on the money market. It was symmetrical – i.e. the difference between the deposit rate and the reference rate equalled the difference between the lombard rate and the reference rate. The width of the corridor was concurrently gradually brought in line with the level of NBP interest rates and, in effect, the difference (spread) between the deposit rate and the Lombard rate was narrowed down from 4 percentage points at the beginning of 2003 to 3 percentage points as from 25 April 2003

The Lombard rate performed the function of an upper limit of the costs of money for the shortest term on the Interbank market. However, during certain periods the Interbank rates exceeded the Lombard rate. Obtaining a loan depended on the possession of the appropriate collateral.

The deposit rate constituted the price at which the central bank was willing to accept overnight deposits at the NBP from commercial banks.

The basic role of the required reserve was to custhion the impact of on-going movements in the liquidity of the banking system on interbank rates. This made it easier for the NBP to mainten market rates at the levels desired. During 2003 the value of the required reserve evolved, primarily, depending on the value of the funds accumulated which constituted the basis for the calculation of the required reserve and the rate of the required reserve.

On 31 October 2003 the reserve ratio was reduced by 1 percentage point to 3.5 %. As of 30 September 2003 the bank reduced the required reserve calculated by the equivalent of euro 500,000.

In order to facilitate the banks liquidity management every day figures are published on the amounts of the required reserve and on the balancesin the banks' current accounts at the NBP and on reserve accounts for the previous day.

In order to facilitate liquidity management and impart more flexibility to the Interbank settlement system, the commercial banks could refinance themselves through a technical loan. This technical loan was designed to smooth fluctuations in interest rates resulting from liquidity dislocation. The transfer to the NBP of title to Treasury securities is the collateral taken against this credit.

4.2. The money supply

Changes in monetary policy were one of the factors affecting money supply.

During 2003 the primary features of the monetary processes were:

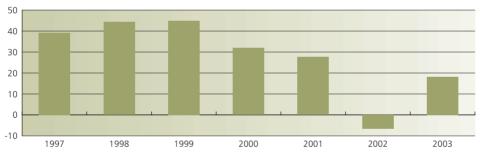
- A modest growth in M3 money supply.
- A significant growth of the currency in circulation.

Table 16 Money supply in 2003

	As at	Cha	inge	Cha	nge	
	31.12.2003	XII 2003	3/IX 2003	XII 2003	XII 2002	
	bn P	LN	%	bn PLN	%	
I. M1 money supply	158.1	6.3	4.2	21.5	15.7	
II. M3 money supply	340.1	9.2	2.8	18.1	5.6	
1. Notes and coin in circulation						
(excl. vault cash)	49.4	0.8	1.6	7.2	17.1	
2. Deposits and other liabilities	288.4	10.1	3.6	10.4	3.7	
2.1. Households	192.4	2.1	1.1	-3.9	-2.0	
2.2. Non-monetary financial institutions	8.9	1.4	18.2	1.7	23.3	
2.3. Enterprises	68.3	7.5	12.3	13.3	24.1	
2.4. Non-commercial institutions operat	ing					
for the benefit of the households	8.6	0.1	1.1	0.3	3.7	
2.5. Local government institutions	8.8	-0.9	-9.4	0.4	4.6	
2.6. Social security funds	1.4	0.0	-3.0	-1.4	-50.0	
3. Other M3 components	2.3	-1.7	-42.1	0.5	29.2	

Source: NBP data.

Figure 46
Annual growth in M3 money supply 1997–2003



Source: NBP data.

M3 money supply grew during 2003 by PLN 18.1 bn (in nominal terms by 5.6% and in real terms by 3.9%). This was the lowest annual growth in M3 (apart from the fall in M3 in 2002) during the last 7 years (see Figure 46).

The main reasons for the change in M3 during 2003 were: the significant growth of the currency in circulation; the strong growth in deposits by enterprises and the decline in household deposits¹⁸.

The modest growth in the broad M3 aggregate was accompanied in 2003 as in the previous year – by a steep rise in the M1 aggregate (Figure 47). The significant rise in this aggregate – which comprises the currency in circulation and current deposits in the banking system – was caused by the nearly 2-year trend of moving the supply of money in the term structure towards a growing share of more liquid components. The share of M1 money in the M3 aggregate increased in 2003 from 40.9% in January to 46.5% in December. However, to a large extent, this was the result of a change in the methodology of calculating the M1 aggregate, through the inclusion of tomnext and spotnext deposits in current deposits.

¹⁸ An analysis of the changes in household and business deposits is presented in the section entitled "Interest rates and interest on deposits".

Figure 47
Annual nominal growth in M3 and M1 (%)



Source: NBP data

Last year the growth in the notes and coin in circulation (outside vault cash) amounted to PLN 7.2 bn (17.1%) and was much higher than in previous years. The fundamental factor which influenced the high rise in cash during 2003 was the low interest on bank deposits, which reduced the alternative costs of keeping cash. The sharp rise in currency was also the result of a larger net purchase of foreign currencies by the banks from *bureaux de changes* and natural persons, to the value of USD 7.4 bn (against USD 4.6 bn in 2002). The increase in currency in circulation can also be linked to the high growth in the volume of retail sales during the year. The high growth in currency could also be the result of other factors whose documentation is difficult (e.g. the growth of the "grey economy"). The annual rate of growth in the currency in circulation remained high through the year and in December 2003 it amounted to 17.1%. The low rate of interest on deposits – some banks provided 0% interest on current deposits – could result in the growth rate in currency continuing at a high level.

Money creation factors

The factors creating money during 2003, and changes in them, are shown in Table 17. Similarly to last year, the main factor creating money was claims. Meanwhile, the net indebtedness of general government institutions, which in 2002 had been a significant source for the absorption of money, transformed itself into a factor increasing money supply.

Table 17
Money supply factors*

	As at Change against		ngainst	Change a	against	
	31.12.2003	Q3 20	003	Q4 2	Q4 2002	
	bn PLN	bn PLN	%	bn PLN	%	
M3 MONEY SUPPLY (1+2+3-4+5+6)	340.1	9.2	2.8	18.1	5.6	
Money supply factors:						
1. Net foreign assets	135.6	2.2	1.6	3.4	2.6	
2. Claims	270.4	4.2	1.6	19.8	7.9	
3. Net idebtedness of general central						
government	70.1	-4.3	-5.8	4.2	6.3	
4. Long-term financial liabilities	105.9	0.0	0.0	5.8	5.8	
5. Fixed assets (excl. financial assets)	30.5	0.6	2.0	1.3	4.5	
6. Other items net	-60.5	6.6	-9.8	-4.8	8.6	

^{*} Following the changes in methodology introduced in March 2002, included in the factors creating money are the long-term financial liabilities (negative) of the banking system (as negative) and the banks' fixed assets (excl. financial assets).

Source: NBP figures.

Claims

The increase in total claims on the banking system during 2003 was the result of an increase in the balance of credits, loans and other claims¹⁹ on other domestic sectors²⁰.

At the end of 2003 the share of claims in the broad M3 aggregate amounted to 79.5% as against 77.8% last year. Last year claims on households grew most. On the other hand, the growth in claims on enterprises was one of the lowest in recent years²¹.

Table 18
The structure of claims in 2003

	As at Change		_	Change Q4 2	-	
	31.12.2003 bn PLN	Q3 2 bn PLN	w %	bn PLN	%	
Total claims on:	270.4	4.2	1.6	19.8	7.9	
1. Households	102.0	3.3	3.3	12.2	13.6	
2. Non-monetary financial institutions	16.0	0.9	5.8	1.3	8.5	
3. Enterprises	133.9	-2.5	-1.9	2.5	1.9	
4. Non-commercial institutions operating for						
the benefit of households	0.8	-0.1	-15.1	-0.2	-17.6	
5. Local government institutions government	12.9	0.9	7.2	1.6	14.0	
6. Social security funds	4.9	1.8	61.0	2.4	99.8	

Source: NBP figures.

Net general government indebtedness

While in 2002 net general government indebtedness (GG) was a factor absorbing money, in 2003 this category was a factor in the creation of money. At the end of 2003 the net level of GG indebtedness amounted to PLN 70.1 bn - i.e. it had increased during the year by PLN 4.2 bn (6.3%). This increase was mainly influenced by the revenues and expenditure of the state budget, which is the largest entity in this sector. Given the much lower receipts from privatisation than had been assumed in the 2003 Budget Act, a significant source of financing the GG borrowing needs were funds generated from the sale of Treasury securities. The growth in the net general government indebtedness at the banking sector indicates the growing share of this sector in the financing of the state budget.

It is expected that in 2004 the state budget will, to a large extent, finance its expenditure with the receipts from the issue of Treasury securities. The bulk of these securities will be bought by the banking system, which will result in a rise in the net general government indebtedness which, as a result, will constitute an important money creating factor.

External assets net

At the end of December 2003 the banking system's external assets net reached a level of PLN 135.6 bn having increased by PLN 3.4 bn (2.6%) during the year (by USD 1.8 bn (5.3%)). The growth in external assets net in PLN was the result of exchange rate fluctuations. Exclusive of these, the level of this category would fall by about PLN 1.8 bn.

¹⁹ The category "other receivables" primarily includes: acquired debts, realised guarantees and warranties, conditional operations, and interest due.

²⁰ Other domestic sectors include: non-monetary financial institutions, non-financial entities, local authority institutions and social security funds .

²¹ An analysis to both types of receivables is included in the section entitled "Interest rates and the growth of the lending campaign".

4.3. Monetary policy transmission mechanisms

4.3.1. Interest rates

4.3.1.1. Monetary policy and interbank rates

During 2003 money market rates²², after falling in the first half of the year and then stabilising at around their historically lowest level, started to rise sharply in Q4. As a result the yield curve for spot interest rates changed its shape from a negative inclination to a positive one.

The reduction in interest on interbank deposits in the first half of 2003 occurred gradually and was linked with the market's expectations of another reduction in NBP rates. This was reflected by the negative inclination of the yield curve.

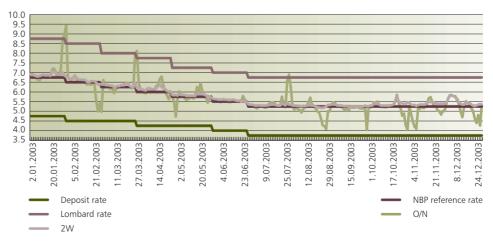
In the summer of 2003, when the expectation of further reductions in NBP rates had waned, the money market yield curve started to flatten. The last speculations regarding a reduction in NBP interest rates appeared just before the MPC meeting in August. In the second half of August the money market yield curve assumed its lowest level of the year. This coincided with the fall in WIBOR rates to their lowest level since the banks had started to quote them (Figure 50).

In the autumn of last year, when it transpired that the state budget could have problems even with financing its current needs; that in 2004 the borrowing requirement of the public finance sector could rise significantly; and that, in addition, Poland could go down in the credit rating, the rate of change in the yield curve towards a positive inclination gained strength. The growth in the yields on treasury bonds led to an increase in the interest rate on interbank deposits, especially those with longer maturities (Figure 52). In addition the growth in interest rates was also the result of dislocations on the Hungarian financial market which saw a steep rise in the yields on Hungarian treasury bonds. This was the result of a weakening of the Hungarian forint and by the National Bank of Hungary raising interest rates by 300 base points.

Towards the end of 2003 the situation on the money market stabilised. However, the positive inclination of the yield curve was maintained.

Figure 48

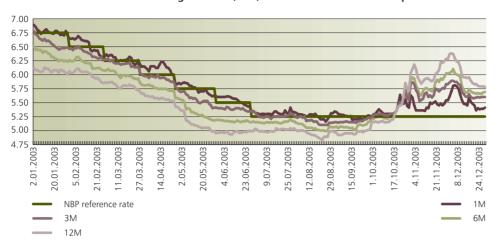
NBP rates and interest charged on O/N and 2W Interbank deposits



Sources: Reuters and NBP data.

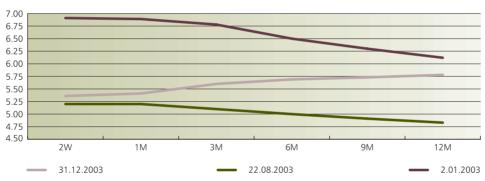
²² Money market rate is the interest on debt instruments (Interbank deposits, Treasury bills and currency swaps) with a maturity of up to one year.

Figure 49
Reference rate and interest charged on 1M, 3M, 6M and 12M Interbank deposits



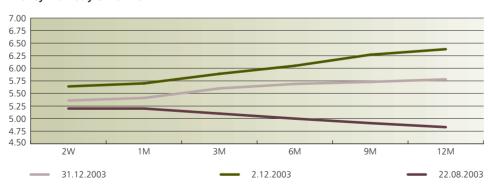
Sources: Reuters and NBP data.

Figure 50 Money market yield curves



Sources: Reuters and NBP data.

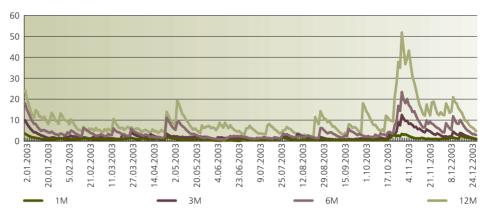
Figure 51
Money market yield curves



Sources: Reuters and NBP data.

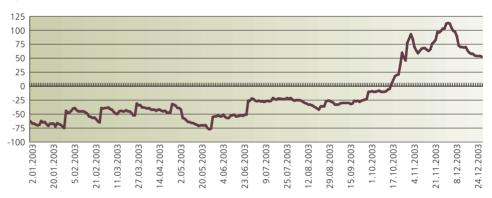
During 2004 the level of money market interest rates will depend, to a large extent, on the progress of the government's *Programme to regulate and limit public expenditure* and on market expectations regarding the possible direction of changes in NBP interest rates.

Figure 52 21-day volatility in 1M. 3M. 6M and 12M WIBOR rates



Sources: Reuters and NBP data

Figure 53
Spread between the 12M WIBOR rate and the NBP reference rate



Sources: Reuters and NBP data.

4.3.1.2. Commercial banks' reaction to central bank policies

During 2003, the changes in interest on deposits and loans offered by the banks to their clients reflected the changes in the NBP interest rates and the interbank rates during that period. However, in relation to the interbank rates, the changes to the interest rates on bank products in 2003 looked different to those in 2002 (see Table 19).

In 2003, in contrast to 2002, the interest on deposits declined relatively slowly in comparison to other products offered by the banks. This led, *inter alia*, to a reduction in the difference between the interest on deposits and that on loans. An important premise for the more competitive setting of interest rates during the year was the steady outflow of deposits from the banking system. The low, nominal interest rates encouraged many households to find alternative to banking deposits methods of investing their savings. This deprived the banks of part of the cheap sources of finance and encouraged them to reduce the difference between the interest on deposits and money market rates (1M WIBOR). The growth in the banks' interest in setting competitive interest rates on deposits also stemmed, it seems, from expectations of increase in lending in the near future related to the forecast acceleration in the growth of the economy.

The banks consider SMEs to be high risk borrowers. As empirical studies conducted in many countries show, the risks associated lending to small businesses depends to a greater extent on the changes in the cycle in market conditions than is the case with large businesses.

A steeper reduction in interest rates on loans to individual entrepreneurs²³ than to enterprises²⁴ indicates a greater willingness on the part of banks to finance smaller entities and provides evidence of the improvement, in their opinion of the macroeconomic risk. In 2003 the acceleration in GDP growth and the prospects for that tendency being maintained in the future – and, thus, a consequent reduction in credit risk – caused a reduction in credit margins overall in relation to interbank rates.

On the housing loan market, the increase in the volatility of the exchange rate in 2003 caused a transfer in the demand from loans denominated (or indexed to) in foreign currencies to zloty loans. As a consequence, the level of the interest rates on zloty housing loans began to be a decisive factor in the decisions of prospective borrowers.

The increasing competition between the banks constituted an additional factor which could have significantly affected the relative acceleration in the rate of the reduction of interest rates on loans total. As the surveys conducted by Ipsos show, one of the basis strategic aims of the Polish banks is to gain new clients. It would appear that housing loans are the area in

Table 19
The level and changes in the average1 nominal interest charged on deposits and loans (in pct points)

Rates in	Rates in	Change between	Change between
December	December	December 2002	March 2002** and
2002	2003	and December 2003	December 2002
3.86	2.54	-1.32	-2.87
4.07	2.74	-1.33	-3.05
4.56	3.37	-1.19	-2.96
4.21	2.89	-1.32	-2.91
9.94	8.14	-1.80	-3.15
11.70	9.84	-1.87	-2.09
10.89	8.98	-1.91	-2.89
12.21	9.77	-2.44	-2.24
12.64	9.14	-3.50	-2.51
12.19	9.22	-2.97	-1.7
17.46	15.61	-1.85	-1.01
8.84	8.12	-0.72	-1.47
8.92	7.99	-0.93	-1.53
6.98	5.41	-1.57	-3.6
6.75	5.25	-1.50	-3.25
	2002 3.86 4.07 4.56 4.21 9.94 11.70 10.89 12.21 12.64 12.19 17.46 8.84 8.92 6.98	December December 2002 2003 3.86 2.54 4.07 2.74 4.56 3.37 4.21 2.89 9.94 8.14 11.70 9.84 10.89 8.98 12.21 9.77 12.64 9.14 12.19 9.22 17.46 15.61 8.84 8.12 8.92 7.99 6.98 5.41	December December December 2002 2002 2003 and December 2003 3.86 2.54 -1.32 4.07 2.74 -1.33 4.56 3.37 -1.19 4.21 2.89 -1.32 9.94 8.14 -1.80 11.70 9.84 -1.87 10.89 8.98 -1.91 12.21 9.77 -2.44 12.64 9.14 -3.50 12.19 9.22 -2.97 17.46 15.61 -1.85 8.84 8.12 -0.72 8.92 7.99 -0.93 6.98 5.41 -1.57

^{* 1}The average weighted deposit and loan interest rates are calculated on the basis of data concerning the rates offered on representative products sent to the NBP by the 11 largest commercial banks. The weightings are the market shares of the banks in the deposit or loan markets. The interest rates quoted for clients with the best creditworthiness.

Source: NBP figures.

markets. The interest rates quoted for clients with the best creditworthiness.

** In March 2002 material changes were made to the reporting of interest rates. Consequently the rates before and after 31.03.2002 are not comparable.

²³ The "individual enterpreneurs" group includes self-employed individuals and businesses employing up to 9 people inclusive.

²⁴ The "enterprises" group includes "enterprises and state-owned companies", "businesses and private companies" and cooperatives.

WIBOR 1M (end of the month)

20 18 16 14 12 10 8 6 2 Ш VII VIII Total household term deposits Total corporate loans Total consumer credit Total housing loans

Figure 54
Selected interest rates since March 2002 (%)¹

Total loans to individual enterpreneurs

¹ In March 2002 material changes were made to the reporting of interest rates. Consequently the rates before and after 31.03.2002 are not comparable.

Source: NBP data.

which the competition is particularly heavy. This area of the loan market was developing exponentially even during the period of economic slowdown in 2001–2002. An increase in activities in this area carries little risk for the banks because of the possibility of obtaining good security for the claims.

The above analysis of the trends in the interest rates offered by the commercial banks during 2003 allows one to assume that the on-going economic recovery will result in a reduction by the banks of their estimate of the risk associated with lending and a further reduction in the banks' credit margin in relation to money market rates. Meanwhile, the attraction to households of alternative forms of saving growing for the same reasons, as well as the bank's need to refinance their growing lending campaign, may lead to a stabilisation in the interest being offered by the banks on deposits. These conditions will also favour the maintenance of the current tendency on the part of the banks to expand their range of products. These processes could lead to a further reduction in the differences between the interest on loans and that on deposits.

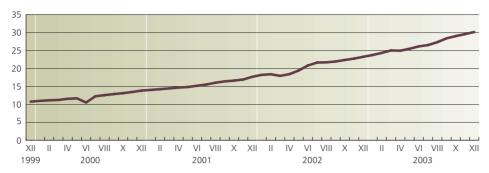
4.3.1.3. Interest rates and fluctuations in lending

During 2003, following reductions in NBP rates, the interest on loans granted by the commercial banks also declined. On average, the interest on loans for enterprises fell from 10.6% in December 2002 to 8.7% in December 2003, and the average interest on household consumer loans fell from 17.5% to 15.6%. Housing loans remained relatively the cheapest, and the average interest on them fell during the period under consideration from 9% to 7.5%. The low interest on housing loans was primarily the result of the good security on them and the stiff competition between the banks in this area.

The reduction in the interest on the loans was accompanied by a modest growth in their volume. The overall growth rate in loans during 2003, which was the resultant of a very rapid growth in housing loans, the slow rate of growth in household non-housing loans and those to enterprises, fluctuated in the range 4.9%–8.7%.

The value of housing loans to households increased in the period between December 2002 and December 2003 by PLN 9.5 bn (47.5%). Because of the high share of housing loans denominated in foreign currencies in overall housing loans (in December 2003 among households this share amounted to 63%), fluctuations in exchange rates may have a significant effect on nominal changes in the overall value of housing loans. However, in 2003 changes in the exchange rate of the zloty against the US dollar and against the euro took different directions, consequently their net effect on the level of housing loans was relatively small. Exclusive of the exchange rate

Figure 55
Housing loans as a percentage of total household loans (%)



Source: NBP data.

fluctuations²⁵ the growth in housing loans last year amounted to about PLN 8.7 bn. The high growth rate in housing loans was the result of many factors, of which the more important were: the fall in the interest rates on these loans, the prospect of increased fiscal burdens on housing and construction transactions as of 2004 and demographic factors. As a result of the on-going fall in interest rates on zloty loans and the consequent reduction in the difference between the costs of zloty and foreign currency loans, zloty loans gained in popularity in the second half of 2003. The share of household housing loans in overall household loans rose from 23.2% in December 2002 to 30.1% in December 2003 (Figure 55). It seems that following the introduction of the anticipated tax changes, the growth rate in housing loans may temporarily fall. However, in the longer term other factors, such as the low interest rates and the acceleration in the economic growth rate, the growth rate in the said category of loans should strengthen.

The value of the remaining loans granted to households – primarily consumer loans – increased by PLN 2.5 bn (3.7%) in 2003. In the first half of the year they showed a decline in absolute terms, while in the second half a reversal took place. Given the acceleration in the economic growth rate in 2003 and the prospects for even faster growth in 2004, the growth in other household loans recorded in recent months may prevail, despite the still high level of interest on them.

During 2003 the growth rate in loans to enterprises remained weak, although the interest on them was relatively low. The annual rate of growth in this category increased from 1.1% in December 2002 to 2.6% in December 2003. The higher values for the annual growth rate recorded in March, April and May 2003 were purely statistical and were the result of imprecision in the sector classification carried out by the commercial banks, following the change in the methodology of the monetary series in March 2002. Surveys conducted by the NBP²⁶ of market conditions in the enterprise sector confirm that in 2003 the level of interest rates did not constitute a material barrier for enterprises as regards the availability of credit. The results of these surveys also point to low demand for their products and services, payment bottlenecks currency fluctuations and unstable tax rules as considerably greater obstacles to the rapid growth of the lending in the enterprise sector. The enterprises surveyed expect a stabilisation in interest rates on loans. Similarly to the case of household loans, given the prospects for the anticipated acceleration in the rate of economic growth in 2004, it can be expected that the value of loans to enterprises will grow faster than in 2003.

4.3.1.4. Interest rates and movements in deposits

During the first half of 2003, the interest paid by commercial banks on deposits fell, along with the reduction in NBP interest rates. This trend was maintained in the second half of the year,

 $^{^{25}}$ An adjustment of the effect of exchange differences was made by converting the values of foreign currency loans into PLN at the exchange rate prevailing at the end of June 2003. Furthermore, it was assumed that the loans denominated in euro and dollars accounted for 50% of all foreign currency loans expressed in PLN terms.

²⁶ The survey conducted by the NBP was a survey based on a sample of 400 enterprises. A full analysis of the results of the survey can be found on the NBP web site www.nbp.pl/publikacje

although NBP interest rates remained unchanged. In December 2003 the average interest rates on term deposits by households and enterprises levelled out and amounted to 2.9%, against 4.2% and 4.3% respectively in December 2002. The interest on current accounts was substantially lower and in December 2003 amounted to 0.3% for households and 0.1% for enterprises (the year before it was 1.2% and 0.4% respectively). The change in interest rates on deposits was reflected in the changes in their volume and structure.

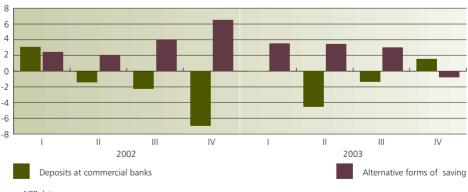
2003 brought the end to the downward trend in household deposits in the banking sector. Although over the whole of 2003 their value fell by PLN 4.3 bn but an analysis of the growth by particular quarters shows that the downward trend of Q2 2002 had been reversed in Q4 2003 (Figure 56). The annual growth rate of household bank deposits continued to be negative, although in December 2003 it was higher (-2.0%) than the year before (-3.5%). Among the main reasons for the revival of households's interest in bank deposits – after they had turned away from them towards alternative forms of saving – were the relatively low yield rates on the investment funds in the second half of the year (especially those investing in domestic bonds). During 2003 the surprise effect regarding the rapid decline in deposit interest rates in 2002 had worn off. The households accepted the fact that the interest on bank deposits was substantially lower than that to which they had become accustomed two-three years earlier. Given the fall in domestic bond prices, part of the savings invested outside the banking system began to return to it. Furthermore in Q4 2003 a number of anti-tax instruments – opened in 2001 for the purposes of dodging tax on interest income – matured. Part of the funds thus freed found their way to the banking sector.

The first three quarters of 2003 saw a steep growth in household financial assets in the form of investments providing an alternative to deposits. During this period the value of deposits in Cooperative Savings Banks and investment fund units, Treasury bonds and bills held by households increased by ca. PLN10.1 bn (23.4%). In Q4 2003 that trend changed – alternative savings fell by PLN 0.8 bn. The relationship of alternative financial assets against bank deposits to household bank deposits stood at ca. 24.6% at the end of the year and was slightly lower than in September, when it reached its maximum of ca. 25.1%. Exchange rates fluctuations during 2003 increased the value of household deposits. Exclusive of the exchange rate fluctuations²⁷ the fall in the value of bank deposits amounted to ca. PLN 5.2 bn (against PLN 4.3 bn in nominal terms).

Enterprises' deposits increased during 2003 by PLN 13.7 bn (24.6%). Exclusive of the exchange rate fluctuations, their growth amounted to ca. PLN 12.8 bn. Given that the value of enterprises' deposits fluctuated substantially in previous years, on that basis the last year's growth in this category should be considered as being very high. It would seem that this growth was the result of the acceleration in the economic growth rate. Furthermore, 2003 brought an

Figure 56

Quarterly growth in household and enterprises' bank deposits (in PLN bn)

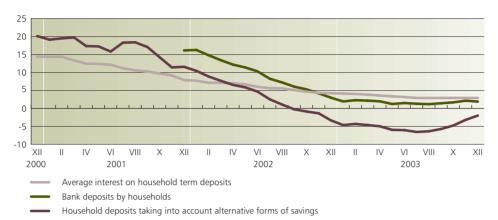


Source: NBP data.

²⁷ An adjustment of the effect of exchange differences was made by converting the values of foreign currency loans into PLN at the exchange rate prevailing at the end of June 2003.

Figure 57

Annual rate of growth in household deposits and average interest rates on household term deposit (%)



Note 1: The comparability of interest on household deposits before and after March 2002 is limited because of the changes in the methodology of interest rate statistics.

Note 2: Alternative forms of saving to bank deposits include: investment fund units. Treasury securities and deposits at Cooperative Savings Banks.

improvement in the financial results ofenterprises, although this was not reflected by a proportional growth in investment activity. During 2003 the annual growth rate in term deposits by enterprises gradually increased to reach a very high level of 30% by December (as against –13% the year before). The rapid growth in term deposits did not restrict the growth rate of current deposits, which remained high throughout the whole of last year (the lowest value was 16.1% in April 2003).

The falling interest rates on term deposits resulted in a reduction in the alternative costs of keeping cash and current deposits, for which the interest in many banks was zero. This was reflected in the changes in the structure of term deposits during 2003. In the household sector, a rapid growth in current deposits took place last year, together with a decline in term deposits. On the other hand, in the enterprise sector, term deposits declined only in Q1 2003 and grew sharply in the subsequent quarters. Overall, however, there was only a small growth in the share of term deposits in the total of deposits in this sector. In December 2003, the annual rate of growth in current deposits amounted to 11.4% and that of term deposits –0.7% (Figure 58).

In summary, during the first three quarters of 2003 the changes in the size and structure of deposits were a continuation of processes which started at the end of 2001. Falling interest on deposits, interest on alternative forms of saving which exceed them and the possibility of avoiding

Figure 58

Annual rate of growth in current and term deposits (%)



Source: NBP data.

tax on interest income resulted in a reallocation of financial assets in order to increase their liquidity and maximise their rate of return. Q4 brought a change to the earlier trend – given the fall in the prices of debt securities part of the funds invested in investment funds returned to the banking system. During Q4 there was also a visible increase in the rate of growth of term deposits by enterprises, although this did not materially change the structure of term deposits in that sector. The trends in the structure of household term deposits showed no change.

With the prospects of an acceleration in economic growth, the total of financial assets should increase. The fall in the share of bank deposits in total financial assets may slow down temporarily as a result of the deterioration of the results of the investment funds in 2003 and the limited possibilities offered by them of dodging taxation on interest income. However, in the longer term, the growth rate in alternative assets, as against that of bank deposits, should, once again, rise.

4.3.1.5. Interest rate expectations

Short-term expectations

The fall in the rate of inflation to its historically lowest level of 0.3%, year on year, in April 2003 and the absence of expectations of inflationary pressures in subsequent months, were the main factors which raised market expectations of further reductions in NBP interest rates in the first half of 2003.

Ever clearer signals of a recovery in the economy, a gradual rise in the rate of inflation as of June 2003 and increasing concerns regarding the condition of public finances meant that market expectations regarding reductions in NBP interest rates gradually dissipated (Figure 59).

Figure 59
3-month term rate on the basis of FRA contracts maturing on 31 January 2004

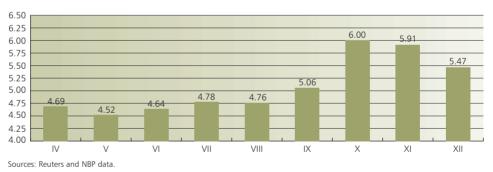
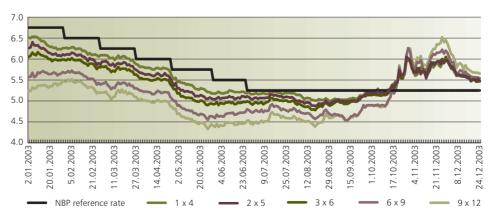
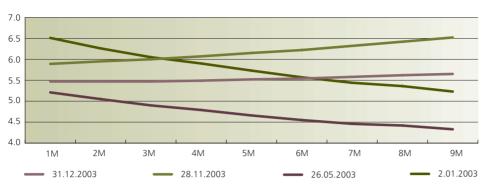


Figure 60
The NBP reference rate and the interest on FRA contracts on 3M WIBOR



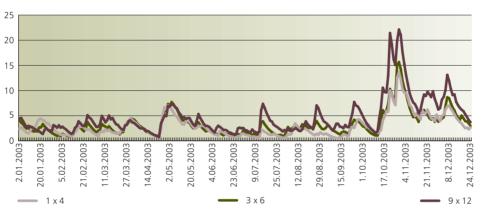
Sources: Reuters and NBP data.

Figure 61
3-month term interest rate curves



Sources: Reuters and NBP data.

Figure 62 21-day volatility of interest on FRA contracts on 3M WIBOR



Sources: Reuters and NBP data.

The end of market expectations of a reduction in NBP interest rates became obvious in the second half of 2003.

The first clear adjustment of investor expectations occurred in August 2003 when speculation concerning a further reduction in interest rates proved to be mistaken.

The ever-stronger signals of an economic recovery and increasing concerns regarding the state budget resulted in market participants ceasing to expect further cuts in interest rates in 2003. The yield curve of term interest rates moved upwards and changed its inclination from a negative one to a positive one.

The level of forward rates did not necessarily reflect the expectations of the market of an increase in NBP interest rates. Their increase reflected the end of the expectations of a fall in interest rates during 2003. The maintenance of the positively inclined yield curve was caused by the demand factor – as the result of expectations of a high borrowing needs of the state budget in 2004 yields on bonds grew substantially. This, in turn, affected market rates and those affected term rates.

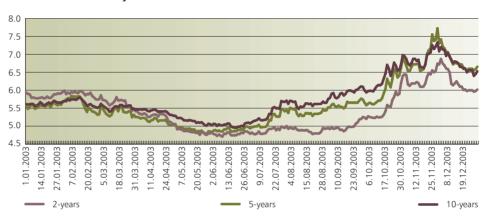
The importance of the demand factor was reflected by the reaction of forward rates to the reduction of tension on the Treasury securities market. After the situation on the spot rates market had stabilised, in the first half of December the 3-month curve for term rates fell and flattened. This process was also fuelled by the beginnings of market speculation regarding the effects of possible changes in the composition of the MPC on the direction of monetary policy.

Long-term expectations

Situation on the bond market

As in the case of the money market, interest rates also fell on the Treasury bond market during the first months of 2003. As of May bond yield rates started to grow. Initially, this was the result of a fall in bond prices on the international market. Overtime, domestic factors came into play. The recovery in the economy and, primarily, the growing concerns regarding the budget, caused bond prices steadily declining (Figure 63).

Figure 63 Yields rates on Treasury bonds in 2003



Source: Reuters and NBP data.

In October and November 2003 concerns regarding the ability of the government to control the rate of growth in the public debt caused dislocations on the bond market, as a result of which yield rates on long-term Treasury securities jumped to over 7%.

The factors which increased the scale of the fall in bond prices were the dislocationson the Hungarian financial market and the fall in bond prices on the world market.

The growth in bond prices during the last weeks of 2003 was the result of a surplus on the current account which resulted in a stabilisation of the PLN exchange rate and which encouraged investors to buy Polish bonds. Information from the Ministry of Finance regarding a reduction in the size of the planned issue of bonds in Q1 2004 also sent bond prices raising.

Changes in the yield curve

In the first half of 2003 a systematic downward movement in the yield curve took place as a result of the expectation of another reduction in NBP rates.

From mid-2003 the yield curve moved upwards and this was accompanied by an increase in the volatility of bond prices. (Figure 64)

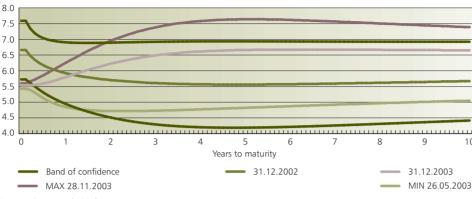
Movements in the zero-coupon yield curve²⁸ during Q4 2003 are shown in Figure 65.

Despite the fact that during the period under consideration there was no statistically significant upward movement in the yield curve²⁹ the width of the band of confidence reflects the

²⁸ The zero-coupon yield curve illustrates the relationship between the yields on zero-coupon bonds and their maturities. The basic model used at the NBP to estimate the zero-coupon yield curve is the Svenssona model (1994).

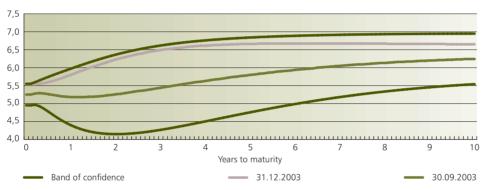
²⁹ The statistical significance of the movement of the curve in a given period determines its final position in relation to the range of confidence (95%) which has been constructed on the basis of data regarding the volatility of the curve. In particular, if a curve estimated at the end of a period is concluded in a specified range of confidence, this means that with a probability of 95% no material changes in the shape and position of the curve have taken place in relation to the beginning of the period.

Figure 64 Fluctuations in the zero-coupon curve in 2003



Sources: Reuters and NBP data:

Figure 65
Fluctuations in the zero-coupon curve in Q4 2003



Sources: Reuters and NBP data

high degree of volatility of Treasury bond prices. The largest increase in yield rates occurred in the 1–4 year segment, which was the market's reaction to the declining probability of the full realisation of the plan to reduce budget expenditure during 2004–2006.

The increase in profitability on long-term bonds in September 2003 was mainly the result of market concerns regarding the postponement of Poland's accession to the euro zone because of the current and future fiscal policies. In the view of market participants the contemplated widening in the budget deficit in 2004 materially reduced the chances of fulfilling the fiscal convergence criteria in time to enable Poland to enter the euro zone in 2007–2008. In October and November – following the deconvergence noted in September, as measured by the spread on Polish 10-year Treasury bonds against the corresponding German bonds, concerns arose regarding an increase in the supply of Treasury securities in 2005 together with information concerning the poor liquidity of the state budget.

The significant fall in domestic bond prices in October and November caused an increase in the difference between the yield rates on Polish and German Treasury bonds to 280 basis points. Only in December did that difference begin to shrink following an increase in bond prices.

The decline in the correlation between the profitability on Polish and German Treasury bonds reflects the considerable influence of domestic factors on the prices of Polish Treasury bonds.

The dislocation on the bond market during the last months of the year were, to a large extent, the side effect of a revision of investors' expectations as to anticipated interest rates. In June investors expected that the minimum annual interest rate (4.75%) would be achieved within three

Table 20
Movements in bond yield rates during the four quarters of 2003*
(at the end of a given quarter. compared to the end of the previous quarter)

		Maturity	
	2 years	5 years	10 years
Q12003	-51	-32	-28
Q2 2003	-59	-28	-30
Q3 2003	42	68	100
Q4 2003	77	92	44

^{*} The table shows absolute changes (in b.p) in yields on market bonds with a maturity of approx. 2. 5 and 10 years.

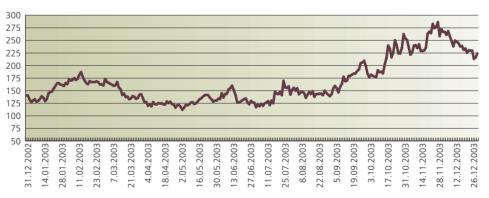
Figure 66 Yield rates correlation of 10-year German and Polish bonds



Note: Correlation coefficients calculated for daily absolute changes in yield rates (21 records). Critical levels are marked by horizontal lines, above which correlation coefficients deviate from zero at a given level of significance.

Sources: Reuters and Bloomberg data.

Figure 67
Difference in the yield rates on 10-year German and Polish bonds (in base points)

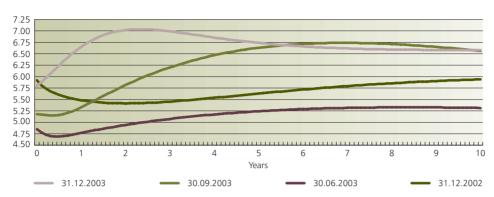


Źródło: dane Reuters, Bloomberg.

months (the level of the interest rate noted at the point of curvature of the yield curve). At the end of September investors expected that this level (amounting to 5.08%) would be achieved after 8 months. Meanwhile, at the end of December the market changed its expectations of a systematic growth in interest rates over the next two years to a level of 7% (beginning in January 2004).

The movement of the annual term yield curve during Q4 in the section above 2 years reflects the growth in the risk premium following dislocations on the cash bond market.

Figure 68
Annual output-term curves in 2003



Sources: Reuters and NBP data.

4.3.2. Currency exchange rate

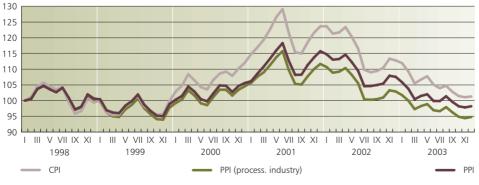
During 2003 the depreciation trend in the value of the PLN, which started in mid-2001, continued. In December 2003 the real, effective PLN exchange rate (CPI deflated) as against a basket of the currencies most important to the Polish economy, was 10.2% weaker than in December 2002 and 21.5% lower than in June 2001, when it had reached its maximum level. As a result of these changes the real PLN exchange rate returned to the level recorded towards the end of 1999 (Figure 69).

The main factors in the decline of the PLN in 2003 were:

- growing uncertainty regarding Poland's future fiscal policy
- changes in the EUR/USD³⁰ exchange rate (during the period 1999–2003 the linear correlation coefficient between the EUR/PLN and EUR/USD exchange rates stood at 87.3% see Figure 70).
- the unstable situation on the Hungarian currency market, which discouraged investors from investing capital on the Central European markets.

During 1998–2003 the PLN exchange rate, to a large extent, reflected changes in the structure of the capital flowing into Poland. During the period of zloty appreciation (1998–2000) the net capital was inflowing mainly in the form of direct foreign investments and during this period the balance of portfolio investments was positive, both as regards debt securities and

Figure 69
Real. effective PLN exchange rate deflated by CPI, PPI and the PPI in the processing industry (January 1998 = 100)



Source: NBP data.

³⁰ During 2003 the euro rose against the US dollar by more than 20%.

Figure 70 Nominal exchange rates



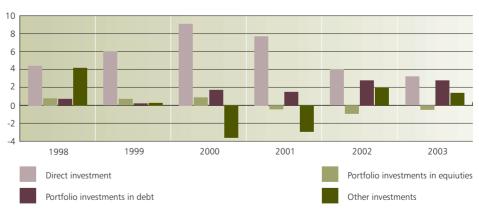
Source: NBP data.

equities³¹. On the other hand, during the period of the PLN's depreciation (2001–2003) fall in the net inflow of direct investment was accompanied by an outflow of portfolio investment in equities and a sudden growth in the inflow of portfolio investments in debt securities³² (Figure 69). These changes reflected spreading disequilibrium in public finances.

The increase in the price competitiveness of Polish products and the higher profitability achieved by exporters, which was caused by the depreciation of the PLN in 2003 led to a revival in exports and a reduction in the current account deficit. This factor, as well as other macroeconomic indicators of the Polish economy (an ever-higher rate of growth in the economy and low inflation) did not justify the continuation of a weak PLN exchange rate. This is reflected by the fact that the main reason for the decline in the PLN in 2003 was concerns regarding further developments in the situation in the public finance sector.

Because of Poland's accession to the European Union and, consequently, expectations of an increase in the inflow of foreign direct investments, a slight appreciation of the real, effective PLN exchange rate can be expected over the next few years. It should, however, be emphasised that this will, to a large extent, depend on the situation in public finances. In the event that the reforms needed in this sector are not made, it seems probable that the PLN exchange rate will weaken further.

Figure 71
Structure of net capital inflows (EUR bn)



Source: NBP data

³¹ According to balance of payments statistics based on payments, during 1998-2000 the balance of direct investments amounted to EUR/ECU 19.5 bn; the balance of portfolio investments in equities EUR/ECU 2.4 bn, and the balance of portfolio investment in debt securities EUR/ECU 2.5 bn.

³² During 2001-2003, according to balance of payments statistics based on payments, the balance of direct investments amounted to EUR 15.0 bn, the balance of portfolio investments in equities EU1.9 bn R, and the balance of portfolio investment in debt securities EUR 7.1 bn.

* * *

The long-term **pass-through coefficient** (transfer coefficient), which defines the effect of changing the nominal, effective PLN exchange rate on movements in consumer prices, and is estimated on the basis of monthly data during the period 1998–2003, amounts to 0.19 and is 0.09 lower than the coefficient estimated for the period 1998–2002. The time structure of the reaction of internal prices to movements in the exchange rate showed no change – i.e. 54% of the effects of the transfer cumulates within the first two quarters and 89% during the first year.

The pass-through coefficient, as adjusted for movements in inflation expectations and cyclical fluctuations in market conditions³³, fell from 0.19 in Q1 2003 to 0.15 in Q3 and 0.12 in Q4.

Taking into consideration the adjusted value of the pass-through coefficient and the time structure in the reaction of internal prices to movements in the exchange rate, it could be estimated that in Q4 2003 consumer prices (in comparison to the corresponding period the year before) increased by 0.23 percentage points as a result of exchange rate movements. This means that 15% of the rise in the CPI in Q4 2003 can be attributed to exchange rate movements.

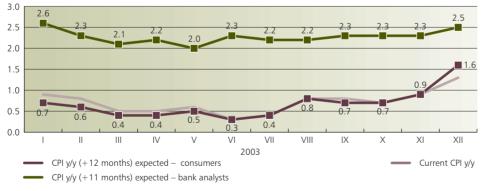
During 2003 movements in the exchange rate accounted for 21% of the movements in the CPI.

A fall in the pass-through coefficient stemmed from stable inflationary expectations and a relatively low growth rate in domestic demand, weakening price-creating force ofenterprises. The expected improvement in market conditions may cause an increase in the pass-through coefficient, and hence in increase in the sensitivity of inflation to movements in the PLN exchange rate. However, it is unlikely that the movements in the nominal, effective PLN exchange rate in any quarter of 2004 will be greater than those in Q3 and Q4 of 2003. Thus, after absorbing the effects of the movements in the exchange rate in the previous year in the first half of this year, the inflationary pressure from the exchange rate should be insignificant in the second half of 2004.

4.3.3. Inflation expectations

During 2003 household inflation expectations – after reaching the lowest level hitherto recorded in June 2003 (0.3%) – began to grow particularly strongly towards the end of the year.

Figure 72
Household inflation expectations and inflation forecasts by bank analysts 2003³⁴ (%)



Source: Reuters data. GUS and NBP calculations on the basis of data from Ipsos.

³³ An adjustment factor for the pass-through coefficient was introduced which compared the value of auto-regressive inflation models built for the following sub-periods: 1998-2000 – high rate of growth in internal demand and a relatively high an unstable inflation expectations, correlated with actual changes in prices; 2001 – March 2003 – falling growth in internal demand and falling inflation, correlated with lower - and stabilising at a low level – inflation expectations. The adjustment factor amounts to 0.68.

³⁴ The household inflation expectations and the forecasts of bank analysts are not completely comparable because of the different time frames – the bank analysts declare their forecasts for the month preceding the corresponding month of the following year, while the households do so for the corresponding month of the following year. In addition, it should be taken into account that the inflation expectations of households are "objectified" – i.e. they are quantified on the assumption that the respondents view price movements against the background of official inflation statistics (more on this subject is contained in the "Inflation Report" for 2001).

Inflation forecasts by bank analysts in 2003 changed in a similar manner: until May they were falling and in the second half of the year they started to slowly grow. Towards the end of 2003 the inflation expectations of both groups were, however, in the bottom half of the MPC inflation target band (Figure 72). It should, however, be pointed out that violent fluctuations in household inflation expectations are possible in the near future because of strong concerns on the part of this group as regards the effect of Poland's accession to the European Union on prices.

Consumer inflation expectations

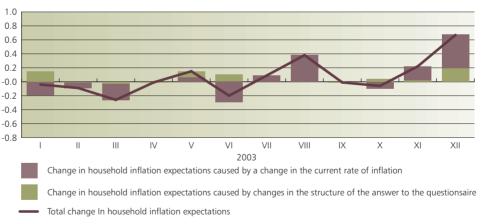
In 2003 the objectified measure of consumer inflation expectations – as calculated using the probability method in which the arguments are: the structure of the answers to the lpsos questionnaire (formerly: lpsos-Demoskop) and the current inflation rate (providing the respondents with a point of reference in predicting the rate of inflation)³⁵ – rose by 0.8 percentage points in relation to the level at the end of 2002 and in December 2003 it attained 1.6%. Thus, for the first time since March 2001 consumer inflation expectations were higher than the current rate of inflation.

Some 60% of the rise in consumer inflation expectations in 2003 could be attributed to the change in the method of formulating the inflation expectations through movements in the structure of the answers to the questionnaire, while the remaining share is due to the acceleration in price growth in the second half of 2003. Assuming the influence of the pattern of replies on the quantified, objectified measure of inflation expectations as a criterion of the assessment of its structure we can state that the distribution of the respondents' opinions among the particular alternative answers to the survey questions was worse in every month during 2003 than it was at the end of 2002. While in the first half of 2003 the falling rate of inflation caused a fall in inflation expectations, towards the end of the year the growth in inflation resulted in a rise in expectations (Figure 73 and 74).

The reasons for the clear deterioration in consumer inflation expectations³⁶ (Figure 75) can be found, above all, in the oncoming Poland's accession to the European Union. We have already drawn

Figure 73

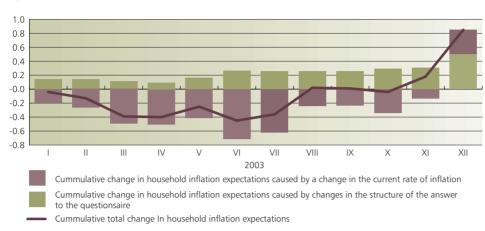
Breakdown of household inflation expectations in 2003 as against expectations in the previous month (perc. points)



Source: NBP calculations on the basis of GUS and Ipsos data.

³⁵ In order to calculate the quantitative indicators of household inflation expectations, a probability method is used (a detailed description of the method is available in: T. Łyziak (2000), Surveys of household inflation expectations on the basis of qualitative questionnaires, "Bank i Kredyt", No. 6, NBP). The quantification results are objectified in accordance with the households' expectations of the rate of growth in prices during the next 12 months in the sense that, during the calculation, the current rate of inflation perceived by the respondents is assumed to be the official GUS measure of inflation available at the time of the response to the questionnaire. Since the lpsos survey is conducted in the first half of the month – i.e. before the publication of the GUS inflation indicators for the previous month, the year on year inflation rate of two months ago is assumed. Current information regarding household inflation expectations can be found on the NBP web site: www.nbp.pl, in the Statistics section.

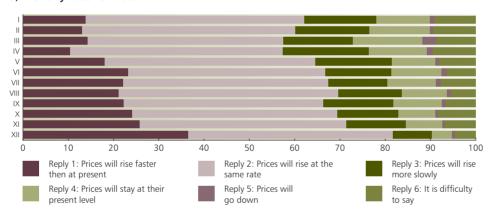
Figure 74
Breakdown of household inflation expectations in 2003
against inflation expectations at the end of 2002 (perc. point)



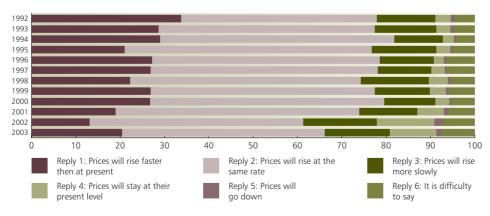
Source: NBP calculations on the basis of GUS and Ipsos data.

Figure 75
Structure of the answers to the Ipsos questions

a) monthly data for 2003



b) annual average during 1992-2003



lpsos survey question: "What do you think, given what is currently happening, will happen to prices during the next 12 months: (1) will they rise faster than at present; (2) will they rise at the same rate; (3) will they rise more slowly; (4) will they be the same as now; (5) will the be lower; (6) its hard to say".

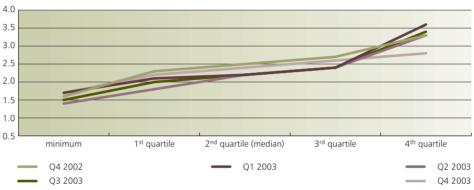
Source: NBP calculations on the basis of Ipsos data

attention to the significance of this factor to consumer expectations of inflation in the *Inflation Report* for Q2 2003 (pp. 69–70). In it we showed the results of a separate survey showing that concerns of increases in the prices of certain consumer goods and services are very strong. The latest survey, conducted by Ipsos in January 2004, shows that during the last year these concerns have grown as regards all the groups of goods and services³⁷. Thus, it seems that in the near future the imminent accession of Poland to the EU may exert significant influence on household expectations of inflation.

Inflation forecasts by bank analysts

During 2003 the forecast of bank analysts concerning the annual rate of inflation in the month preceding the corresponding month in the following year were relatively stable and were in

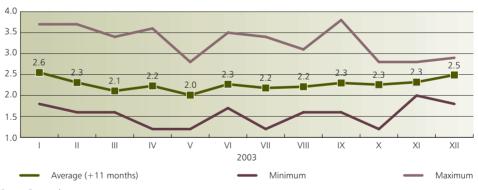
Figure 76
Distribution of bank analysts' inflation expectations formulated with reference to the annual rate of inflation in the month preceding the corresponding month in the next year (%)



Source: NBP calculations based on Reuters data.

Figure 77

Minimum, average and maximum declarations by bank analysts regarding the annual growth in prices in the month preceding the corresponding month in the next year monthly during 2003 (%)



Source: Reuters data

³⁶ Taking into account pattern of replies to the questionnaire in December 2003 and taking, as a point of reference, the distribution of the fraction of respondents from the end of 2003, it would appear that:

[•] the share of respondents with the pessimistic views – believing that during the next 12 months prices would rise faster than hitherto – increased by 26.8 percentage points;

[•] the number of respondents believing that prices would rise at the same rate rose by 1.3 percentage points;

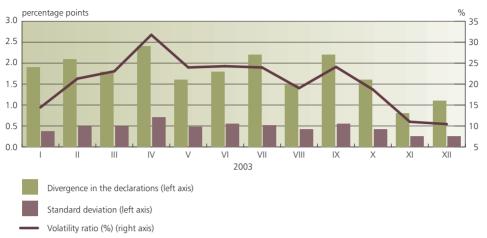
while the number of respondents believing that prices would rise more slowly than hitherto declined by 10.8
percentage points;

the share of households believing that prices would remain at the same level during the forthcoming year fell by 12.2
percentage points;

[•] and the share of respondents believing that prices would be lower in 12 months time fell by 1.3 percentage points.

³⁷ We will present the detailed results of this survey in the next *Inflation Report*.

Figure 78
Measures of the volatility of distribution of the bank analysts' inflation expectations in 2003



Source: NBP calculations based on Reuters data.

the range 2% to 2.6%. According to a Reuter opinion poll in December 2003 the forecast of price growth in the period analysed amounted to 2.5%.

Ignoring movements in the maximum values in the range of bank analysts' inflation forecasts, it should be noted that in the first half of the year the range of their forecasts was inclined towards a lower rate of price growth, while in the second half of the year the reverse occurred (Figure 76).

In the last two months of 2003 the spread in the bank analysts' forecasts narrowed. The growth in uninformity as regards future price movements was reflected by a reduction in the measurements of uncertainty such as standard deviations of volatility ratios (Figure 77 and Figure 78).

4.3.4. The wealth effect

Following weak market conditions on stock markets during Q1 2003 share prices rose globally. This was the result of a rapid end to the first phase of the war in Iraq and an improvement in the prospects of growth in the world economy. This, combined with strong signals of a recovery in the domestic economy – including a gradual improvement in the financial condition of enterprises – also resulted in a rise in prices on the Polish stock market. As a result the value of funds invested by households in this part of the financial market increased (Table 21).

During 2003 there was a distinct change in the proportions between the values of direct and indirect forms of saving by households. While at the beginning of 2003 direct investments stood at 43% in relation to indirect investments, at the end of Q3 2003 that relationship had fallen to 33%. Because of the constant inflow of significant funds into the indirect investment sector and the continuing uncertainty among households as to their financial position, it must be expected that this trend will continue. This is confirmed by surveys concerning the income expectations of households in 2004 (Table 22).

As the table above shows, concerns regarding the possibility of a fall in household incomes during 2004 continued in CEE countries. Many more households in those countries expected a fall in incomes rather than a stabilisation or increase. Meanwhile in the USA and Western Europe a decided majority of households expected an increase in (USA) or a stabilisation of incomes (Western Europe). If these expectations become reality, they will have a direct influence on the volume of funds invested on capital markets.

The above data show that households in CEE countries are more inclined towards defensive investments – i.e. safe, liquid but less profitable – than those in highly developed countries. These investments include bank deposits, life insurance and pension funds. This is a consequence of the

Table 21
Direct and indirect forms of investment by households on capital markets (at the end of the month, in bn PLN)

Type of involvement in capital investment	XII 2002	III 2003	VI 2003	IX 2003
1. Direct portfolio investments – securities (total) *	24.3	24.4	25.2	26.6
Equities	8.1	7.3	8.3	9.1
Treasury bills (total)	16.2	17.1	16.4	17.5
a) market bonds	5.9	7.0	7.2	8.3
b) savings bonds	7.7	7.5	7.2	6.7
c) Treasury bills	2.6	2.6	2.5	2.5
2. Indirect portfolio investment (total)	55.9	62.1	71.3	79.2
Open-ended investment funds (household investment assets)**	20.1	24.1	28.6	32.2
Open-ended pension funds (net assets)	31.6	33.6	37.8	41.6
Life insurance (investment of funds under life insurance. where				
the investment risk is borne by the insurer)	4.2	4.4	4.9	5.4
Total (1+2)	80.2	86.5	96.5	105.8
Proportion of the above forms of investment (total) of the				
deposits and other liabilities to households within				
the banking system (%)	37.7	40.5	46.1	50.9

^{*} Securities held on client investment accounts at stockbrokers.

Sources: Ministry of Finance, NBP, GUS and open-ended pension funds.

Table 22 Movements in the annual incomes expected by households in 2004 (as against the incomes received in the previous year, in %)

Expected change in income	European Union (12 krajów)	Central Europe (Czech Republic, Hungary and Poland)	USA
Growth	15	4	40
Fall	38	45	25
Without change	45	34	31
No response	2	17	4

Source: GkF Ad Hoc Research Worldwide, quoted from The Wall Street Europe, 16 December 2003. The survey was conducted in autumn 2003.

fact that society in those countries is just at the beginning of building the first elements of the socalled classic investment pyramid³⁸.

The low interest on the part of Polish households in investing in equities does not form a basis for the appearance of the so-called wealth effect - i.e. the exploitation by households of any increase in the value of their investments caused by increases in the value of the securities held in order to increase their levels of consumption.

^{**} Estimated NBP data; data regarding funds where it is known that they are only directed at institutional clients has not been taken into consideration.

³⁸ The classic investment pyramid comprises several levels, of which the lowest (fundamental) is directed towards safety, and subsequent levels are aimed at profitability and speculation. The foundations of the pyramid occupy the greatest area and its peak, made up of instruments of a speculative nature – hence carrying the greatest risk of a loss of the capital invested – occupies the smallest area. Such an investment structure guarantees the stability of household finances, which will not break down in the face of detrimental changes on the financial markets.

Table 23
Preferred household investments

Expected change in income	European Union (12 krajów)	Central Europe (Czech Republic, Hungary and Poland)	USA
Equities and equity investment funds	13	10	30
Other investment funds	5	2	6
Bonds	9	10	8
Short-term bank deposits	26	32	13
Life insurance and pension funds	13	16	13
Other investments	13	10	6
No investment preferences	21	20	23

Source: GkF Ad Hoc Research Worldwide, quoted from The Wall Street Europe, 16 December 2003. The survey was conducted in autumn 2003. The question asked was: "If you could invest 50 000 euro which financial instrument would you choose?"

5 Inflation prospects

The Polish economy is currently in a recovery phase which has been stimulated by dynamically growing exports. A recovery in investment is already being seen in the exporting sector. On the assumption that the rate of growth in consumption is maintained at 2003 levels a continuation of growth in the economy can be expected in the next few years.

A gradual recovery can also be seen in the world economy. We expect it to continue over the next two years. We expect an acceleration in economic growth in the USA and Japan, which should result in a modest recovery in the euro zone as a result of growth in external demand and the revival of investment.

The extent of the growth in investment in Poland will, to a large extent, be dependent on progress in the reform of public finances. The establishment of the greatest possible scope of the realisation of the public finance consolidation programme and its rapid implementation could positively influence the investment processes by reducing the uncertainty associated with business operations. However, the solutions proposed in the programme are insufficient to completely remove the risk of the second precautionary threshold for public debt (55% of GDP) being exceeded. The uncertainty regarding the prospects for the public sector will remain and the state's high borrowing needs will restrict the private sector's access to finance. Thus, the situation in public finances will continue to be a factor in slowing down the rate of economic growth.

Despite these limitations we expect faster GDP growth in 2004 than was the case in 2003, while in 2005 we expect it to continue at a level similar to that of 2004

The higher rate of economic growth probably will not, however, result in any material increase in employment, since this would require a reduction in labour costs for enterprises and the creation of more favourable conditions for new enterprises than hitherto. The production capacity in the economy will continue to grow, although this will mainly occur through capital formation, increased productivity and improved efficiency. The improvement in productivity will also partly be reflected in the rate of wage growth.

In the event that the above scenario of internal and external conditions during 2004–2005 comes about and on the assumption that NBP interest rates remain unchanged, projections of inflation indicate that during 2004 it will gradually grow. During 2005 inflation will stabilise and, in all probability, will remain close to the upper limits of the permanent inflation target established at 2.5% +/- 1 percentage point. Periodic breaches of the target limits are to be expected.

The above projection is subject to uncertainty resulting from several factors. The major of these is the situation regarding public finances. The fiscal impulse resulting from the spreading public sector deficit in 2004 may result in an increase in consumption and in inflationary pressures. The abandonment of, or a significant delay in, fiscal reform may result in an outflow of capital, the further weakening of the PLN and, as a consequence, a rise in inflation during 2004 and 2005. Uncertainties also revolve around the greater than expected influence of the economic recovery on the number of employed, especially in 2005

Other uncertainties relate to the possible deviation of food and oil prices from the hitherto assumed courses. It cannot be excluded that unfavourable weather conditions in agriculture will cause a temporary acceleration in the rate of growth in food prices, which would result in a rise in inflation. The possibility of an intensification of conflicts in the near east and the cuts in oil production forecast by OPEC mean that oil prices will rise and be subject to substantial fluctuations.

Appendix A

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

Date	Subject	The MPC decision	Result	s of the Council
	lub uchwały		Memb	ers' votes
29.01.2003	Motion to reduce all interest	The motion failed to obtain	In favour:	J. Krzyżewski
	rates by 0.5 of a percentage	a majority		D. Rosati
	point			G. Wójtowicz
				W. Ziółkowska
			Against:	L. Balcerowicz
				M. Dąbrowski
				B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
29.01.2003	A resolution in the matter	All interest rates were reduced	In favour:	L. Balcerowicz
	of the rediscount rate, the	by 0.25 of a percentage point		B. Grabowski
	reference rate, interest on			C. Józefiak
	refinancing loans and interest			J. Krzyżewski
	on term deposits at the NBP			W. Łączkowski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
			Against:	M. Dąbrowski
				J. Pruski
25.02.2003	Resolution in the matter		In favour:	L. Balcerowicz
	of "The strategy for monetary			B. Grabowski
	policy after 2003"			C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
			Against:	M. Dąbrowski
			Absent:	W. Ziółkowska

^{*} Except for the Resolution of September 30, 2003, setting the ceiling on liabilities resulting from the NBP taking out loans and credits in foreign banking and financial institutions.

26.02.2003	Motion to reduce the reference	The motion failed to obtain	In favour:	D. Rosati
20.02.2003	rate by 0.5 of a percentage	a majority	iii iuvoui.	G. Wójtowicz
	point, interest on refinancing	и тијотку	Against:	L. Balcerowicz
	loans by 1 percentage point		Aguilist.	M. Dąbrowski
	and to leave the interest			B. Grabowski
	on terms deposits at the			C. Józefiak
	NBP unchanged			J. Krzyżewski
	NDF unchanged			W. Łączkowski
				J. Pruski
			Absent:	W. Ziółkowska
			Absent.	VV. ZIOIKOVVSKa
26.02.2003	A resolution in the matter	A reduction in the reference	In favour:	L. Balcerowicz
20.02.2003	of the rediscount rate,		iii iavoui.	B. Grabowski
	the reference rate, interest on	rate by 0.25 of a percentage		
	·	point, the reference rate, and		J. Krzyżewski J. Pruski
	refinancing loans and interest	the interest on refinancing		
	on term deposits at the NBP	loans by 0.5 of a percentage		D. Rosati
		point and to leave the interest	A	G. Wójtowicz
		on term deposits at the NBP	Against:	M. Dąbrowski
		unchanged		C. Józefiak
				W. Łączkowski
			Absent:	W. Ziółkowska
26.03.2003	A resolution in the matter	All interest rates were reduced	In favour:	L. Balcerowicz
20.03.2003	of the rediscount rate, the	by 0.25 of a percentage point	iii iuvoui.	B. Grabowski
	reference rate, interest on	ay 0.25 of a percentage point		J. Krzyżewski
	refinancing loans and interest			W. Łączkowski
	on term deposits at the NBP			D. Rosati
	on term deposits at the NDI			G. Wójtowicz
				W. Ziółkowska
			Against:	M. Dąbrowski
			Agailist.	C. Józefiak
				J. Pruski
				J. FIUSKI
23.04.2003	Resolution in the matter		In favour:	L. Balcerowicz
25.04.2005	of approving the NBP financial		iii iavoui.	M. Dąbrowski
				C. Józefiak
	at 31 December 2002			
	at 31 December 2002			J. Krzyżewski
				W. Łączkowski J. Pruski
				D. Rosati
				G. Wójtowicz W. Ziółkowska
			Abcomt	
			Absent:	B. Grabowski

24.04.2003	Motion to reduce the reference	The motion failed to obtain	In favour:	D. Rosati
	rate by 0.5 of a percentage	a majority		G. Wójtowicz
	point			W. Ziółkowska
			Against:	L. Balcerowicz
				M. Dąbrowski
				C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
			Absent:	B. Grabowski
24.04.2003	Motion to reduce the reference	The motion failed to obtain	In favour:	L. Balcerowicz
	rate by 0.25 of a percentage	a majority		J. Krzyżewski
	point			G. Wójtowicz
			Against:	M. Dąbrowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
				D. Rosati
				W. Ziółkowska
			Absent:	B. Grabowski
24.04.2003	Motion to reduce the reference	The motion failed to obtain	In favour:	L. Balcerowicz
		a majority		J. Krzyżewski
	rate by 0.25 of a percentage	a majority		
	point, the interest on	a majom,		D. Rosati
		aajoy		D. Rosati G. Wójtowicz
	point, the interest on			
	point, the interest on refinancing loans by 0.5		Against:	G. Wójtowicz
	point, the interest on refinancing loans by 0.5 of a percentage point and		Against:	G. Wójtowicz W. Ziółkowska
	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term		Against:	G. Wójtowicz W. Ziółkowska M. Dąbrowski
	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term		Against:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak
	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term		Against:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski
	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term			G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term	A reduction in the reference		G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged		Absent:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter	A reduction in the reference	Absent:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter of the rediscount rate, the	A reduction in the reference rate by 0.25 of a percentage	Absent:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski L. Balcerowicz J. Krzyżewski
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter of the rediscount rate, the reference rate, interest on	A reduction in the reference rate by 0.25 of a percentage point, the reference rate by	Absent:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski L. Balcerowicz J. Krzyżewski D. Rosati
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter of the rediscount rate, the reference rate, interest on refinancing loans and interest	A reduction in the reference rate by 0.25 of a percentage point, the reference rate by 0.25 of a percentage point,	Absent:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter of the rediscount rate, the reference rate, interest on refinancing loans and interest	A reduction in the reference rate by 0.25 of a percentage point, the reference rate by 0.25 of a percentage point, the interest on refinancing	Absent: In favour:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz W. Ziółkowska
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter of the rediscount rate, the reference rate, interest on refinancing loans and interest	A reduction in the reference rate by 0.25 of a percentage point, the reference rate by 0.25 of a percentage point, the interest on refinancing loans by 0.5 of a percentage	Absent: In favour:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz W. Ziółkowska M. Dąbrowski
24.04.2003	point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest on term deposits with NBP unchanged A resolution in the matter of the rediscount rate, the reference rate, interest on refinancing loans and interest	A reduction in the reference rate by 0.25 of a percentage point, the reference rate by 0.25 of a percentage point, the interest on refinancing loans by 0.5 of a percentage point and to leave the interest	Absent: In favour:	G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak W. Łączkowski J. Pruski B. Grabowski L. Balcerowicz J. Krzyżewski D. Rosati G. Wójtowicz W. Ziółkowska M. Dąbrowski C. Józefiak

27.05.2003	Resolution in the matter		In favour:	L. Balcerowicz
	of approving the report on the			M. Dąbrowski
	realisation of the monetary			B. Grabowski
	policy assumptions in 2002			C. Józefiak
	h			J. Krzyżewski
				W. Łączkowski
				J. Pruski
				G. Wójtowicz
			Against:	D. Rosati
				W. Ziółkowska
27.05.2003	Resolution in the matter of		In favour:	L. Balcerowicz
	assessing the activities of the			M. Dąbrowski
	NBP Management Board as			B. Grabowski
	regards the realisation of the			C. Józefiak
	monetary policy assumptions			J. Krzyżewski
	in 2002			W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
27.05.2003	Resolution in the matter		In favour:	L. Balcerowicz
	of approving the report			M. Dąbrowski
	on the activities of the NBP			B. Grabowski
	during 2002			C. Józefiak
				J. Krzyżewski
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
28.05.2003	A resolution in the matter	All interest rates were reduced	In favour:	L. Balcerowicz
	of the rediscount rate, the	by 0.25 of a percentage point		J. Krzyżewski
	of the rediscount rate, the reference rate, interest on	by 0.25 of a percentage point		J. Krzyżewski D. Rosati
		by 0.25 of a percentage point		-
	reference rate, interest on	by 0.25 of a percentage point		D. Rosati
	reference rate, interest on refinancing loans and interest	by 0.25 of a percentage point	Against:	D. Rosati G. Wójtowicz
	reference rate, interest on refinancing loans and interest	by 0.25 of a percentage point	Against:	D. Rosati G. Wójtowicz W. Ziółkowska
	reference rate, interest on refinancing loans and interest	by 0.25 of a percentage point	Against:	D. Rosati G. Wójtowicz W. Ziółkowska M. Dąbrowski
	reference rate, interest on refinancing loans and interest	by 0.25 of a percentage point	Against:	D. Rosati G. Wójtowicz W. Ziółkowska M. Dąbrowski B. Grabowski

81

25.06.2003	Resolution in the matter of,	All interest rates were reduced	In favour:	L. Balcerowicz
	the reference rate, interest	by 0.25 of a percentage point		J. Krzyżewski
	on refinancing loans, interest			D. Rosati
	on term deposits, and the			G. Wójtowicz
	rediscount rate at the NBP			W. Ziółkowska
			Against:	M. Dąbrowski
				B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
27.08.2003	Motion to reduce all interest	The motion failed to obtain	In favour:	J. Czekaj
	rate by 0.25 of a percentage	a majority		D. Rosati
	point			G. Wójtowicz
				W. Ziółkowska
			Against:	L. Balcerowicz
				B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
			Absent:	M. Dąbrowski
30.09.2003	Resolution in the matter of		In favour:	L. Balcerowicz
	establishing the monetary			J. Czekaj
	policy assumption for 2004			B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
				G. Wójtowicz
				W. Ziółkowska
			Against:	M. Dąbrowski
			Absent:	D. Rosati
30.09.2003.	Resolution in the matter of the		In favour:	L. Balcerowicz
	rate of the required reserve			J. Czekaj
				M. Dąbrowski
				C. Józefiak
				W. Łączkowski
				G. Wójtowicz
				W. Ziółkowska
			Against:	B. Grabowski
				J. Pruski
			Absent:	D. Rosati
				55500

26.11.2003	Motion to changes the attitude	The motion failed to obtain	In favour:	M. Dąbrowski
	of monetary policy from neutral	a majority		B. Grabowski
	to restrictive			J. Pruski
			Against:	L. Balcerowicz
				J. Czekaj
				C. Józefiak
				W. Łączkowski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
16.12.2003	Resolution in the matter of		In favour:	L. Balcerowicz
	approving the NBP financial			J. Czekaj
	plan for 2004			M. Dąbrowski
				B. Grabowski
				C. Józefiak
				W. Łączkowski
				J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
16.12.2003	Resolution in the matter of		In favour:	L. Balcerowicz
	accounting policies, the			J. Czekaj
	structure of the assets and			B. Grabowski
	liabilities in the balance sheet			C. Józefiak
	and the profit and loss account			W. Łączkowski
	of the NBP			J. Pruski
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska
			Against:	M. Dąbrowski
16.12.2003	Resolution in the matter of		In favour:	L. Balcerowicz
	creating and unwinding			J. Czekaj
	provisions against the risk of			M. Dąbrowski
	I toll mixed			D C 1
	changes in the PLN exchange			B. Grabowski
	rate against foreign currencies			C. Józefiak
				C. Józefiak W. Łączkowski
	rate against foreign currencies			C. Józefiak W. Łączkowski J. Pruski
	rate against foreign currencies			C. Józefiak W. Łączkowski J. Pruski D. Rosati
	rate against foreign currencies			C. Józefiak W. Łączkowski J. Pruski

83

17.12.2003	Motion to changes the attitude	The MPC Chairman's vote	In favour:	M. Dąbrowski
	of monetary policy from neutral	decided that the motion would		B. Grabowski
	to restrictive	not be voted upon		C. Józefiak
				W. Łączkowski
				J. Pruski
			Against:	L. Balcerowicz
				J. Czekaj
				D. Rosati
				G. Wójtowicz
				W. Ziółkowska