

## POLISH ECONOMIC OUTLOOK

TRENDS • ANALYSES • FORECASTS

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## Appendix 1. Components of aggregate demand, 1996–2003 (% change, yoy)

		GDP billion zlotys	GDP	Domestic demand	Consumption household	Consumption public	Investment	Exports	Imports
1996	1Q-4Q	387.8	6.0	9.7	8.7	2.1	19.7	12.0	28.0
1997	1Q-4Q	472.4	6.8	9.2	6.9	3.2	21.7	12.2	21.4
1998	1Q-4Q	553.6	4.8	6.4	4.8	1.6	14.2	14.3	18.5
1999	1Q-4Q	615.1	4.1	4.8	5.2	1.3	6.8	-2.6	1.0
2000	1Q-4Q	684.9	4.0	2.8	2.6	1.5	2.7	23.2	15.6
2001	1Q-4Qe1	724.9	1.1	-2.0	2.1	0.6	-10.2	9.3	-1.5
<b>Forecast</b>									
2002	1Q-4Q	770.7	1.9	0.3	2.2	0.2	-4.3	6.9	1.3
2003	1Q-4Q	829.8	3.2	3.0	2.3	0.4	6.6	11.0	9.0
1996	1Q	85.3	3.4	8.0	8.5	2.2	13.1	14.4	36.7
	2Q	92.9	5.4	6.7	6.5	-6.4	20.5	21.6	29.1
	3Q	98.5	7.2	10.6	8.3	1.2	26.8	25.3	42.2
	4Q	111.2	7.9	13.0	11.4	12.0	17.3	-12.5	7.9
1997	1Q	103.8	6.9	7.9	6.7	3.4	19.6	20.5	24.2
	2Q	113.0	7.4	9.0	7.1	3.5	21.0	29.9	36.1
	3Q	119.2	6.7	9.4	7.1	3.4	21.2	8.1	18.4
	4Q	136.4	6.4	10.4	6.6	2.4	23.2	-3.5	11.7
1998	1Q	123.7	6.5	7.3	6.3	2.2	17.3	18.8	20.2
	2Q	133.4	5.3	5.7	4.1	1.6	14.6	24.7	23.0
	3Q	140.0	4.9	6.1	4.4	1.5	14.2	18.9	20.6
	4Q	156.5	3.0	6.6	4.6	1.1	12.9	-1.9	11.6
1999	1Q	134.4	1.6	3.4	4.6	1.3	5.9	-9.9	-3.2
	2Q	147.0	2.9	4.6	5.1	1.2	6.5	-4.6	1.6
	3Q	155.3	5.0	5.5	5.6	1.4	6.8	2.0	4.0
	4Q	178.4	6.2	5.7	5.7	1.3	7.3	2.7	1.6
2000	1Q	152.3	5.9	5.2	4.8	1.3	5.4	20.8	15.6
	2Q	166.0	5.0	3.3	3.0	1.3	2.8	27.7	17.6
	3Q	171.0	3.1	1.3	1.1	1.6	2.0	22.5	12.7
	4Q	195.6	2.3	1.7	1.6	1.5	2.1	22.1	16.2
2001	1Qe1	165.6	2.3	-1.3	1.5	0.2	1.5	10.4	-1.5
	2Qe1	176.6	0.9	-1.8	1.6	0.3	-8.4	6.9	-2.1
	3Qe1	179.9	0.8	-2.0	2.1	0.4	-13.6	13.3	3.5
	4Qe2	202.8	0.5	-2.9	3.3	1.6	-14.1	6.3	-5.6
<b>Forecast</b>									
2002	1Q	173.4	0.9	-1.2	2.0	0.3	-15.0	4.6	-2.0
	2Q	186.7	1.2	-0.4	2.3	0.2	-8.4	5.8	0.3
	3Q	192.4	2.4	1.0	2.2	0.1	-1.6	8.1	3.2
2003	4Q	218.2	2.9	1.5	2.2	0.1	1.0	8.7	3.3
	1Q	185.9	2.8	2.2	2.2	0.6	3.9	10.3	7.0
	2Q	200.9	3.1	2.7	2.3	0.2	5.8	10.7	8.2
	3Q	206.7	3.1	3.1	2.3	0.3	7.1	11.3	10.0
	4Q	236.3	3.6	3.9	2.3	0.7	7.8	11.4	10.9

Source: Data and estimates (e1) – CSO; estimates (e2) and forecasts – CASE.

Notes: 1. Changes calculated in reference to the corresponding period of the previous year.

2. Domestic demand is defined as the sum of consumption of households and non-commercial institutions, public consumption and accumulation. This table does not provide separate indicators for the consumption of non-commercial institutions and accumulation of inventories.

3. Data is not seasonally adjusted.

4. Estimates at annual prices in the previous year, forecasts at average 2000 prices.

5. GDP in billions of zlotys at current prices.

6. Changes in dynamics in 2000 and in the first half of 2001 reflect corrections in the CSO's quarterly national accounts.

7. Changes in foreign trade dynamics in 2000 and the first half of 2001 reflect modifications in the methodology to include the grey economy in foreign trade – until the end of 1999 grey foreign trade transactions were registered in balance form and added to exports. Since 2000, grey exports and imports have been registered separately on relevant accounts.

## Appendix 2. Value added in major sectors of the economy, 1996–2003 (% change, yoy)

		GDP	Gross value-added					
			total	agriculture and forestry	industry	construction	market services	non-market services
1996	1Q-4Q	6.0	5.3	2.5	7.6	2.8	5.3	2.6
1997	1Q-4Q	6.8	6.4	1.0	10.3	13.6	4.4	2.9
1998	1Q-4Q	4.8	4.7	5.7	4.3	9.3	4.8	2.3
1999	1Q-4Q	4.1	3.7	-0.1	3.0	3.5	6.0	-0.6
2000	1Q-4Q	4.0	3.7	-6.0	6.5	-0.7	4.2	2.2
2001	1Q-4Qe1	1.1	0.9	-4.8	-0.6	-7.6	3.9	0.0
<b>Forecast</b>								
2002	1Q-4Q	1.9	1.6	-1.1	1.0	-3.2	3.9	0.6
2003	1Q-4Q	3.2	2.9	2.0	3.5	4.7	4.0	0.3
1996	1Q	3.4	2.5	-2.0	6.1	-18.5	3.3	2.4
	2Q	5.4	4.4	2.2	6.9	-4.2	5.2	1.8
	3Q	7.2	6.5	2.7	9.8	5.0	6.1	2.9
	4Q	7.9	7.7	6.7	7.6	21.9	6.5	3.2
1997	1Q	6.9	6.4	-1.5	8.7	14.7	5.5	4.9
	2Q	7.4	6.7	1.7	11.5	15.6	4.5	1.3
	3Q	6.7	6.5	2.7	10.7	13.3	4.3	1.1
	4Q	6.4	6.2	0.3	10.2	12.2	3.5	3.8
1998	1Q	6.5	6.4	0.8	10.5	14.6	4.3	3.7
	2Q	5.3	5.2	4.3	5.3	10.8	5.6	0.2
	3Q	4.9	4.8	5.2	3.3	8.8	5.9	1.4
	4Q	3.0	2.9	12.8	-1.1	6.1	3.6	3.1
1999	1Q	1.6	1.3	0.2	-4.3	2.0	5.6	-0.6
	2Q	2.9	2.6	-0.9	-0.3	2.8	5.4	-0.5
	3Q	5.0	4.6	-0.1	5.9	3.2	6.2	-0.8
	4Q	6.2	5.9	0.4	9.7	4.9	6.6	-0.5
2000	1Q	5.9	5.7	-5.4	9.6	4.1	5.2	3.2
	2Q	5.0	4.8	-6.2	9.1	0.7	4.8	1.8
	3Q	3.1	2.9	-5.8	6.0	-2.3	3.1	2.1
	4Q	2.3	2.2	-6.3	2.3	-2.4	4.0	1.8
2001	1Qe1	2.3	2.1	-7.2	3.3	-5.2	3.5	0.2
	2Qe1	0.9	0.8	-4.6	-1.3	-8.0	3.7	0.4
	3Qe1	0.8	0.6	-4.3	-1.5	-8.2	4.1	0.7
	4Qe2	0.5	0.2	-4.0	-2.5	-7.9	4.2	-0.9
<b>Forecast</b>								
2002	1Q	0.9	0.7	2.0	-2.1	-10.5	3.8	0.5
	2Q	1.2	1.1	-2.8	0.9	-6.2	3.1	0.2
	3Q	2.4	2.1	-1.9	1.8	-0.9	4.2	0.5
	4Q	2.9	2.5	-0.3	2.8	0.0	4.3	1.0
2003	1Q	2.8	2.5	-3.2	3.2	2.7	4.0	0.4
	2Q	3.1	2.8	1.3	3.5	4.0	3.8	0.2
	3Q	3.1	2.9	2.6	3.7	4.9	3.7	0.3
	4Q	3.6	3.3	5.2	3.7	5.7	4.3	0.4

Source: Data and estimates (e1) – CSO; estimates (e2) and forecasts – CASE

Notes: 1. Changes calculated in reference to the corresponding period of the previous year.

2. Data is not seasonally adjusted.

3. Estimates at annual prices in the previous year, forecasts at average 2000 prices.

4. Changes in dynamics in 2000 and in the first half of 2001 reflect corrections in the CSO's quarterly national accounts.

### Appendix 3. Contributions to GDP growth, 1997–2003 (%)

	GDP	Domestic demand	Household consumption	Public consumption	Investment in fixed assets	Stock-building	Net exports	Exports	Imports
1997 1Q-4Q	6.8	9.4	4.3	0.6	4.5	0.1	-2.6	3.0	-5.5
1998 1Q-4Q	4.8	6.7	3.0	0.3	3.3	0.1	-1.9	3.7	-5.5
1999 1Q-4Q	4.1	5.1	3.3	0.2	1.7	-0.1	-1.0	-0.7	-0.3
2000 1Q-4Q	4.0	2.9	1.7	0.2	0.7	0.3	1.0	6.1	-5.1
2001 1Q-4Q	1.1	-2.1	1.4	0.1	-2.5	-1.1	3.2	2.7	0.6
<b>Forecast</b>									
2002 1Q-4Q	1.9	0.3	1.4	0.0	-1.1	0.0	1.6	2.0	-0.5
2003 1Q-4Q	3.2	3.2	1.5	0.1	1.6	0.1	-0.1	3.2	-3.3

Source: Data – CSO; forecasts – CASE.

Notes: 1. Contributions to GDP growth were calculated using the following formula:

(rate of growth of X) \* (share of X in GDP, calculated in average prices in the base period).

2. GDP growth and the sum of contributions to GDP may not add up due to approximations.

#### Appendix 4. Household disposable income, 1998–2003

		Disposable income		Real disposable income	Savings rate
		including :			
		Wages and salaries	Social benefits		%
		% change			%
1998	1Q-4Q	17.0	17.8	12.8	4.6
1999	1Q-4Q	9.5	9.9	12.2	2.1
2000	1Q-4Q	11.6	8.7	8.7	1.4
2001	1Q-4Q	6.7	4.1	11.2	1.1
<b>Forecast</b>					
2002	1Q-4Q	6.3	3.5	8.3	2.4
2003	1Q-4Q	6.7	5.1	5.5	2.1
1998	1Q	19.9	-	14.6	5.3
	2Q	16.2	-	14.1	2.7
	3Q	17.0	-	12.1	5.2
	4Q	15.3	-	12.8	5.6
1999	1Q	13.5	9.4	11.2	6.9
	2Q	7.5	9.6	10.3	1.0
	3Q	6.8	10.6	15.4	-0.4
	4Q	10.5	10.4	12.4	1.2
2000	1Q	8.6	11.2	12.2	-1.6
	2Q	14.8	8.4	10.2	4.3
	3Q	12.0	7.5	6.8	1.1
	4Q	11.1	7.6	6.3	1.7
2001	1Q	11.6	7.3	7.6	4.6
	2Q	4.8	4.9	8.7	-1.7
	3Q	6.1	4.5	13.9	1.1
	4Q	4.5	0.4	14.2	0.8
<b>Forecast</b>					
2002	1Q	5.0	1.6	11.2	1.2
	2Q	6.6	4.8	10.8	3.0
	3Q	6.3	3.2	6.0	2.5
	4Q	7.4	4.3	5.7	2.8
2003	1Q	6.7	4.9	6.0	1.7
	2Q	6.6	5.0	6.0	2.1
	3Q	6.5	5.2	5.0	2.0
	4Q	7.1	5.4	5.0	2.6

Source: Annual data – CSO, quarterly data and forecasts – CASE.

Note: 1. Changes calculated in reference to the corresponding period of the previous year.

2. The savings rate is shown as a percentage of nominal disposable income.

3. Social security benefits include: pensions, unemployment benefits and pre-retirement benefits.

4. Wages and salaries for the entire economy – according to the CSO definition (Table 14 in Statistical Bulletin).

### Appendix 5. Real sphere, 1998–2003 (% change, yoy)

		Output		Enterprise sector	
		industry	construction	average employment	real gross wages
1998	1Q-4Q	3.5	11.0	0.0	0.0
1999	1Q-4Q	3.6	9.4	-1.0	3.1
2000	1Q-4Q	6.8	1.4	-3.3	1.2
2001	1Q-4Q	-0.2	-9.9	-3.3	1.5
<b>Forecast</b>					
2002	1Q-4Q	0.6	-5.0	-1.2	1.8
2003	1Q-4Q	3.4	4.5	-0.6	2.4
1998	1Q	10.9	24.0	-	-
	2Q	6.0	10.2	-	-
	3Q	3.9	13.2	-	-
	4Q	-0.8	4.4	-	-
1999	1Q	-3.1	0.6	-	-
	2Q	1.2	4.0	-	-
	3Q	7.4	3.2	-	-
	4Q	11.7	6.4	-	-
2000	1Q	10.7	4.8	-3.6	5.3
	2Q	9.6	-1.4	-3.2	2.7
	3Q	6.7	-2.9	-2.9	-0.2
	4Q	2.6	-3.4	-2.8	-0.3
2001	1Q	4.1	-8.9	-2.5	1.7
	2Q	-0.9	-10.8	-3.0	-0.3
	3Q	-1.2	-11.7	-3.8	2.0
	4Q	-2.3	-10.0	-3.5	2.7
<b>Forecast</b>					
2002	1Q	-1.9	-11.7	-1.9	1.7
	2Q	1.1	-5.5	-1.2	2.8
	3Q	1.2	-2.1	-0.8	2.1
	4Q	1.9	-3.2	-0.7	0.4
2003	1Q	2.8	2.4	-0.4	2.6
	2Q	3.7	3.9	-0.5	2.6
	3Q	3.6	5.1	-0.7	2.4
	4Q	3.4	5.6	-0.7	2.0

Source: Data – CSO, forecasts – CASE.

Notes: 1. Changes calculated in reference to the corresponding period of the previous year.

2. Data on construction calculated from monthly data.

3. Annual data for industrial and construction output for the whole economy.

4. Data prior to 2000 are not comparable due to a change in the CSO's statistical population.

## Appendix 6. Selected indicators for enterprises, 2000–2001

	Profit on sales million zlotys	Gross profitability		1 <sup>st</sup> level liquidity		Average employment		Average wages		Investment	
		total public sector		private sector		public sector		private sector		public sector	
		%	%	%	%	%	%	%	%	%	%
2000	1-03	5445	2,1	3,3	1,5	16,3	-7,9	1,3	13,7	18,3	-
	1-06	13373	1,9	2,3	1,6	16,4	-7,6	0,9	12,3	16,3	-14,3
	1-09	22451	2,2	2,3	2,1	16,2	-7,2	0,7	11,5	15,0	-16,1
	1-12	26952	1,9	1,2	2,2	15,5	-6,6	0,2	12,0	13,3	-9,5
2001	1-03	5116	1,2	1,1	1,2	16,3	-8,3	2,1	12,0	8,0	-
	1-06	10479	1,3	0,5	1,6	16,1	-8,0	2,0	9,9	7,7	-26,5
	1-09	18335	1,4	0,4	1,8	16,5	-8,0	1,5	10,1	6,9	-24,4
											-5,7

Source: Data – CSO.

Notes: 1. Cumulative data from the beginning of each year.

2. Changes calculated in reference to the corresponding period of the previous year.

3. Indicators of changes are in line with changes in the CSO's statistical population – thus comparable.

4. The indicator of the 1<sup>st</sup> level liquidity is calculated as a ratio of cash and tradable equities to short-term liabilities according to their end-period volumes.

5. Gross profit on sales – for non-financial entities which employ over 49 people.

## Appendix 7. Labour market, 1996–2003

		Working population employment	Registered unemployment		LFS unemployment	
			('000)	('000)	('000)	%
1996	1Q-4Q	15021	8548	2360	13.2	1961
1997	1Q-4Q	15439	8648	1826	10.3	1737
1998	1Q-4Q	15800	8752	1831	10.4	1827
1999	1Q-4Q	15374	8702	2350	13.1	2825
2000	1Q-4Q	15018	8120	2703	15.1	2760
2001	1Q-4Q	14560	7841	3115	17.4	-
<b>Forecast</b>						
2002	1Q-4Q	14199	7738	3335	18.7	-
2003	1Q-4Q	14046	7719	3368	18.9	-
1996	1Q	14763	8487	2726	15.4	2349
	2Q	14977	8513	2508	14.3	2103
	3Q	14682	8522	2341	13.5	2018
	4Q	14932	8671	2360	13.2	1961
1997	1Q	15034	8567	2236	12.6	2176
	2Q	15394	8645	2040	11.6	1927
	3Q	15747	8675	1854	10.6	1853
	4Q	15579	8706	1826	10.3	1737
1998	1Q	15553	8717	1846	10.4	1896
	2Q	15809	8759	1688	9.6	1753
	3Q	16060	8714	1677	9.6	1786
	4Q	15779	8816	1831	10.4	1827
1999	1Q	15255	8747	2170	12.0	2141
	2Q	15600	8717	2074	11.6	-
	3Q	15338	8649	2178	12.1	-
	4Q	15302	8695	2350	13.1	2641
2000	1Q	14803	8139	2532	14.0	2880
	2Q	15009	8106	2437	13.6	2825
	3Q	15225	8083	2529	14.0	2675
	4Q	15032	8152	2703	15.1	2760
2001	1Q	14364	7896	2899	16.1	3158
	2Q	14579	7852	2849	15.9	3208
	3Q	14743	7791	2920	16.3	3127
	4Q	14555	7824	3115	17.4	-
<b>Forecast</b>						
2002	1Q	13939	7727	3208	18.0	-
	2Q	14149	7739	3155	17.7	-
	3Q	14422	7721	3257	18.1	-
	4Q	14288	7766	3335	18.7	-
2003	1Q	13711	7693	3368	18.9	-
	2Q	13994	7717	3279	18.4	-
	3Q	14285	7705	3297	18.4	-
	4Q	14194	7763	3368	18.9	-

Source: Data – CSO; quarterly data of the working population and forecasts – CASE.

Notes: 1. Employment according to CSO data from the Statistical Bulletin.

2. Employment concerns entities in the national economy employing more than 5 people to end-1999 and 9 people from 2000.

3. In 2Q99 and 3Q99 there was a break in the Labour Force Survey (LFS)

### Appendix 8. Basic price indicators, 1998–2003 (% change, yoy)

		CPI		PPI		Currency basket	GDP deflator
		period average	end of period	period average	end of period	period average	period average
1998	1Q-4Q	11.8	8.6	7.3	4.8	6.0	11.8
1999	1Q-4Q	7.3	9.8	5.7	8.1	11.7	6.8
2000	1Q-4Q	10.1	8.5	7.8	5.6	-0.8	7.1
2001	1Q-4Q	5.5	3.6	1.6	-0.3	-9.3	4.7
<b>Forecast</b>							
2002	1Q-4Q	3.9	4.8	0.6	2.0	5.3	4.3
2003	1Q-4Q	4.5	4.3	3.3	3.9	5.4	4.4
1998	1Q	13.9	13.9	9.2	9.2	12.3	11.9
	2Q	13.1	12.2	8.1	7.7	6.3	12.1
	3Q	11.2	10.6	6.7	6.4	4.1	12.0
	4Q	9.2	8.6	5.2	4.8	2.1	11.4
1999	1Q	6.2	6.2	4.1	4.7	9.0	7.0
	2Q	6.4	6.5	5.1	5.2	13.9	7.1
	3Q	7.2	8.0	5.8	6.2	9.4	5.6
	4Q	9.2	9.8	7.5	8.1	14.4	7.4
2000	1Q	10.3	10.3	7.9	7.3	4.1	7.0
	2Q	10.0	10.2	8.1	8.9	3.1	7.6
	3Q	10.8	10.3	8.5	8.3	-2.9	6.8
	4Q	9.2	8.5	6.9	5.6	-7.2	7.1
2001	1Q	6.7	6.2	4.2	3.8	-9.5	6.2
	2Q	6.6	6.2	2.2	0.9	-16.1	5.3
	3Q	4.9	4.3	0.8	0.7	-4.8	4.4
	4Q	3.7	3.6	-0.6	-0.3	-6.5	3.2
<b>Forecast</b>							
2002	1Q	3.8	3.8	0.2	0.2	1.4	3.8
	2Q	3.5	3.6	0.3	0.9	9.7	4.5
	3Q	3.8	3.9	0.4	0.0	3.4	4.4
	4Q	4.4	4.8	1.4	2.0	7.0	4.6
2003	1Q	4.8	4.8	2.5	2.7	5.4	4.3
	2Q	4.4	4.3	3.1	3.1	5.0	4.4
	3Q	4.5	4.6	3.5	3.7	5.8	4.2
	4Q	4.4	4.3	3.9	3.9	5.5	4.5

Source: Data – CSO (currency basket – NBP); forecasts – CASE.

Notes: Currency basket consists of: euro – 60% and US\$ – 40%.

### Appendix 9. Basic exchange rates, 1998–2003 (in zlotys)

		US\$		Euro		Real effective exchange rate
		period average	end of period	period average	end of period	
1998	1Q-4Q	3.49	3.49	-	-	151.10
1999	1Q-4Q	3.97	4.17	4.23	4.22	145.70
2000	1Q-4Q	4.35	4.31	4.01	3.88	158.60
2001	1Q-4Q	4.09	4.01	3.67	3.58	174.10
<b>Forecast</b>						
2002	1Q-4Q	4.14	4.25	3.76	3.97	-
2003	1Q-4Q	4.30	4.33	4.08	4.22	-
1998	1Q	3.51	3.46	-	-	151.67
	2Q	3.44	3.48	-	-	153.79
	3Q	3.55	3.61	-	-	148.67
	4Q	3.48	3.49	-	-	145.49
1999	1Q	3.76	3.94	4.22	4.29	142.43
	2Q	3.96	3.94	4.19	4.10	146.07
	3Q	3.97	4.08	4.17	4.29	150.13
	4Q	4.18	4.17	4.34	4.22	146.63
2000	1Q	4.11	4.09	4.07	3.95	158.10
	2Q	4.38	4.40	4.08	4.17	159.20
	3Q	4.39	4.49	3.98	3.92	161.47
	4Q	4.50	4.31	3.92	3.88	163.90
2001	1Q	4.09	4.06	3.78	3.70	169.80
	2Q	3.99	3.97	3.49	3.39	181.90
	3Q	4.22	4.22	3.76	3.85	169.90
	4Q	4.08	4.01	3.65	3.58	174.90
<b>Forecast</b>						
2002	1Q	4.06	4.06	3.63	3.65	-
	2Q	4.09	4.11	3.68	3.72	-
	3Q	4.16	4.18	3.79	3.83	-
	4Q	4.23	4.25	3.93	3.97	-
2003	1Q	4.26	4.26	3.99	4.01	-
	2Q	4.29	4.30	4.03	4.06	-
	3Q	4.31	4.31	4.09	4.12	-
	4Q	4.34	4.33	4.20	4.22	-

Source: Data – NBP, real effective exchange rate – JP Morgan, forecasts – CASE.

Notes: 1. Average exchange rates.

2. Real effective exchange rate, 1990=100 (an increase in the indicator's level means appreciation).

## Appendix 10. Balance of payments, 1998–2003 (US\$ billion)

	Balance on current account						Balance on capital and financial account			Gross reserve assets	
	% of GDP	merchandise trade	exports	imports	unclassified current transactions				net direct investment	net portfolio investment	
1998 1Q	-6.86	-4.33	-13.72	30.12	43.84	6.00	11.67	4.97	1.33	28.28	
1999 1Q	-11.57	-7.48	-14.38	26.35	40.73	3.64	8.25	6.35	1.45	27.31	
2000 1Q	-9.98	-6.34	-13.17	28.26	41.42	3.99	7.75	8.17	2.77	27.46	
2001 1Q	-7.01	-3.96	-11.66	30.31	41.97	4.39	3.12	6.50	2.00	26.73	
<b>Forecast</b>											
2002 1Q	-7.37	-3.96	-11.69	31.18	42.87	4.53	5.99	4.29	0.78	27.26	
2003 1Q	-7.78	-4.04	-12.19	33.06	45.25	4.73	6.55	4.93	0.86	27.80	
1998 2Q	-2.00	-3.30	-3.24	7.06	10.30	1.16	3.24	1.00	0.21	24.40	
2Q	-0.67	-2.87	-2.88	7.67	10.55	1.72	2.19	1.26	0.36	27.12	
3Q	-1.22	-2.98	-3.30	7.80	11.10	1.87	3.54	1.68	-0.86	28.10	
4Q	-2.98	-4.33	-4.31	7.60	11.90	1.25	2.70	1.02	1.61	28.28	
1999 1Q	-2.24	-4.47	-2.82	7.01	9.83	0.80	1.85	1.13	-0.29	28.61	
2Q	-2.76	-5.85	-3.36	6.28	9.64	0.79	1.29	1.04	0.03	27.38	
3Q	-3.01	-7.00	-3.89	6.21	10.10	1.15	2.06	2.47	-0.09	27.89	
4Q	-3.56	-7.48	-4.31	6.84	11.15	0.90	3.05	1.71	1.80	27.31	
2000 1Q	-3.52	-8.23	-3.85	6.32	10.17	0.73	2.08	1.55	2.44	26.24	
2Q	-2.12	-7.79	-3.02	6.84	9.86	1.06	1.19	1.12	0.21	25.99	
3Q	-2.25	-7.31	-3.34	7.17	10.51	1.08	1.42	0.90	-0.08	25.42	
4Q	-2.09	-6.34	-2.96	7.93	10.89	1.12	3.05	4.59	0.19	27.46	
2001 1Q	-2.14	-5.35	-3.13	7.46	10.59	0.73	2.29	1.21	2.38	28.00	
2Q	-2.21	-5.20	-2.78	7.51	10.29	0.97	1.02	1.46	-0.95	27.11	
3Q	-0.94	-4.32	-2.73	7.46	10.19	1.37	1.40	1.31	-0.02	28.30	
4Q	-1.72	-3.96	-3.02	7.88	10.90	1.32	-1.59	2.52	0.59	26.73	
<b>Forecast</b>											
2002 1Q	-1.95	-3.80	-2.75	7.30	10.05	0.92	1.68	1.00	0.38	26.85	
2Q	-1.84	-3.57	-2.85	7.59	10.44	1.05	1.34	0.99	0.10	26.99	
3Q	-1.63	-3.87	-2.90	7.70	10.60	1.35	1.49	1.15	0.20	27.12	
4Q	-1.96	-3.96	-3.19	8.59	11.78	1.21	1.48	1.15	0.10	27.26	
2003 1Q	-2.24	-4.09	-2.97	7.68	10.65	0.97	1.97	1.08	0.46	27.39	
2Q	-1.63	-3.96	-2.70	8.03	10.73	1.09	1.21	1.10	0.10	27.52	
3Q	-1.81	-4.02	-3.17	8.19	11.36	1.40	1.52	1.32	0.10	27.67	
4Q	-2.10	-4.04	-3.35	9.16	12.51	1.27	1.85	1.43	0.20	27.80	

Source: Data – NBP; forecasts – CASE.  
Notes: 4Q01 data – preliminary.

**Appendix 11. Selected items of the state budget, 1998–2003 (in billions of zlotys)**

		Revenues		Expenditures	Budget deficit	
		total	of which tax revenues		zloty billion	% of GDP
1998	1Q-4Q	126.6	120.0	139.8	-13.2	-2.4
1999	1Q-4Q	125.9	118.3	138.4	-12.5	-2.0
2000	1Q-4Q	135.7	124.7	151.1	-15.4	-2.2
2001	1Q-4Q	140.3	123.1	172.9	-32.6	-4.5
<b>Forecast</b>						
2002	1Q-4Q	139.4	129.9	184.0	-44.6	-5.8
2003	1Q-4Q	149.7	139.6	194.1	-44.4	-5.3
1998	1Q	28.7	27.0	32.3	-3.5	-2.9
	2Q	29.3	27.7	35.1	-5.8	-4.4
	3Q	33.1	31.4	34.1	-1.1	-0.8
	4Q	35.5	33.8	38.3	-2.8	-1.8
1999	1Q	27.7	25.9	36.5	-8.7	-6.5
	2Q	28.8	26.6	31.4	-2.6	-1.8
	3Q	32.4	30.9	32.4	0.0	0.0
	4Q	37.0	34.9	38.2	-1.2	-0.7
2000	1Q	30.9	28.8	37.9	-6.9	-4.5
	2Q	33.3	28.1	37.0	-3.7	-2.2
	3Q	33.6	32.9	37.0	-3.4	-2.0
	4Q	37.8	35.0	39.1	-1.3	-0.7
2001	1Q	31.6	27.7	46.6	-15.0	-9.1
	2Q	36.1	27.2	39.9	-3.8	-2.2
	3Q	35.0	32.8	38.1	-3.1	-1.7
	4Q	37.5	35.4	48.2	-10.7	-5.3
<b>Forecast</b>						
2002	1Q	31.1	28.8	49.6	-18.5	-10.7
	2Q	31.0	28.6	42.5	-11.5	-6.2
	3Q	37.1	34.7	40.5	-3.5	-1.8
	4Q	40.2	37.8	51.3	-11.2	-5.1
2003	1Q	33.3	30.8	52.3	-19.0	-10.2
	2Q	33.2	30.7	44.8	-11.6	-5.8
	3Q	39.8	37.3	42.8	-2.9	-1.4
	4Q	43.3	40.8	54.2	-10.9	-4.6

Source: Data – Ministry of Finance; forecasts – CASE.

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**Appendix 12. Public sector balance, 1999–2003 (% of GDP)**

	1999	2000	2001	2002 <i>Budget project</i>	2002 <i>CASE</i>
<b>State budget</b>	-2.0	-2.2	-4.5	-5.2	-5.8
Local government	-0.2	-0.5	-0.7	-0.6	-0.6
Funds and other items	-0.9	-0.1	-0.3	-0.1	-0.1
Health Funds	-0.1	0.1	0.0	0.0	0.0
<b>General budget</b>	-3.2	-2.6	-5.5	-5.9	-6.5
Compensations	-	-0.5	-0.3	-0.4	-0.4
II pillar in the pension system	0.5	1.1	1.3	1.5	1.5
Expenditures financed by revenues from UMTS licenses	-	-	-0.4	-	-
<b>Total effect on domestic savings (i.e. economic deficit)</b>	<b>-2.7</b>	<b>-2.0</b>	<b>-5.0</b>	<b>-4.8</b>	<b>-5.4</b>

Source: Data – Ministry of Finance; forecasts – CASE.

Notes: Preliminary estimates for execution of the 2001 budget.

### Appendix 13. Interest rates, 1998–2003

		Rediscount rate	Lombard rate	3-month WIBOR	28-day repo rate
1998	1Q	24.5	27.0	25.1	23.0
	2Q	23.5	26.0	22.1	21.5
	3Q	21.5	24.0	18.8	18.0
	4Q	18.3	20.0	15.9	15.5
1999	1Q	15.5	17.0	13.2	13.0
	2Q	15.5	17.0	13.3	13.0
	3Q	15.5	17.0	14.3	14.0
	4Q	19.0	20.5	19.3	16.5
2000	1Q	20.0	21.5	18.4	17.5
	2Q	20.0	21.5	18.5	17.5
	3Q	21.5	23.0	19.6	19.0
	4Q	21.5	23.0	19.6	19.0
2001	1Q	19.5	21.0	18.0	17.0
	2Q	18.0	19.5	16.9	15.5
	3Q	17.0	18.5	14.7	14.5
	4Q	14.0	15.5	12.3	11.5
<b>Forecast</b>					
2002	1Q	12.0	13.5	10.4	9.5
	2Q	11.0	12.5	10.1	8.5
	3Q	11.0	12.5	9.9	8.5
	4Q	10.0	11.5	9.8	7.5
2003	1Q	10.0	11.5	9.6	7.5
	2Q	10.0	11.5	9.5	7.5
	3Q	10.0	11.5	9.3	7.5
	4Q	9.0	10.5	9.0	6.5

Source: Data – NBP; forecasts – CASE.

Notes: End-period data; WIBOR average for the last month of each quarter.

**Appendix 14. Money aggregates, 1998–2003 (in billions of złotys)**

	M0	M2	Cash	Zloty deposits		Foreign currency deposits	Credits		Net liabilities of the government sector			
				total			total	individual corporate				
				total	corporate							
1998	10-40	53.6	220.8	30.2	156.9	109.6	47.3	33.6	138.5	23.9	114.6	61.3
1999	1Q-4Q	52.8	263.4	38.1	185.7	124.1	61.6	39.7	175.9	36.6	139.3	64.7
2000	1Q-4Q	48.8	294.5	34.1	217.4	154.0	63.3	43.0	206.3	48.2	158.2	50.9
2001	1Q-4Q	59.7	334.5	38.2	243.0	172.1	70.9	53.3	221.3	55.2	166.1	67.7
<i>Forecast</i>	2002 1Q-4Q	53.4	345.9	38.9	255.4	180.3	75.1	51.6	249.6	63.7	186.0	71.2
	2003 1Q-4Q	57.2	362.7	40.4	267.6	185.9	81.7	54.7	276.1	70.5	205.6	72.1
1998	10	44.4	180.4	27.3	123.3	88.9	34.4	29.8	114.7	18.6	96.1	50.3
	2Q	49.7	192.3	29.7	132.9	95.1	37.8	29.7	122.1	20.1	102.0	50.7
	3Q	49.7	203.5	30.3	142.3	101.8	40.5	30.9	131.0	21.9	109.0	56.8
1999	1Q	44.4	180.4	27.3	123.3	88.9	34.4	29.8	114.7	18.6	96.1	50.3
	2Q	49.7	192.3	29.7	132.9	95.1	37.8	29.7	122.1	20.1	102.0	50.7
	3Q	49.7	203.5	30.3	142.3	101.8	40.5	30.9	131.0	21.9	109.0	56.8
2000	1Q	53.6	220.8	30.2	156.9	109.6	47.3	33.6	138.5	23.9	114.6	61.3
	2Q	59.1	230.3	32.0	161.2	116.5	44.6	37.1	148.6	25.3	123.3	63.9
	3Q	46.2	246.0	34.2	173.3	122.4	51.0	36.4	155.8	28.3	127.5	65.2
2001	1Q	52.8	263.4	38.1	185.7	124.1	61.6	39.7	175.9	36.6	139.3	64.7
	2Q	51.8	284.9	35.1	205.3	141.6	63.7	44.4	203.4	50.8	152.6	55.1
	3Q	51.1	280.6	34.7	201.1	145.1	56.0	44.8	204.1	45.6	158.5	58.5
	4Q	48.8	294.5	34.1	217.4	154.0	63.3	43.0	206.3	48.2	158.2	57.9
<i>Forecast</i>	2002 1Q	49.1	324.9	36.9	238.9	173.3	65.6	49.2	230.4	56.8	173.6	59.1
	2Q	54.1	328.8	38.5	241.6	173.2	68.4	48.7	234.9	59.0	175.9	62.4
	3Q	51.8	334.9	38.6	246.1	176.7	69.4	50.2	243.0	61.0	182.1	64.1
2003	4Q	53.4	345.9	38.9	255.4	180.3	75.1	51.6	249.6	63.7	186.0	71.2
	1Q	53.0	346.8	38.4	256.1	183.9	72.2	52.3	255.7	64.9	190.9	65.8
	2Q	57.9	351.9	40.0	260.1	185.1	75.0	51.7	261.5	66.7	194.8	67.7
	3Q	55.6	354.4	40.1	261.1	185.1	76.0	53.3	269.1	68.2	200.8	64.3
	4Q	57.2	362.7	40.4	267.6	185.9	81.7	54.7	276.1	70.5	205.6	72.1

Source: Data – NBP; forecasts – CASE.

## Appendix 15. Public debt and foreign debt of banks and enterprises, 1999–2001

	Public debt			Foreign debt			
	(PLN billion)			(US\$ billion)			
	State	Other	Local	Government sector	Corporate sector	Banking sector	Corporate sector
1999	1Q-4Q	263.54	3.65	6.19	32.12	24.88	1.97
2000	1Q-4Q	265.89	5.21	9.38	32.98	29.96	0.58
1999	1Q	259.04	0.73	4.47	32.55	20.15	2.36
	2Q	255.52	1.26	4.81	32.17	20.61	1.90
	3Q	260.78	3.51	5.13	32.31	22.98	2.08
	4Q	263.54	3.65	6.19	32.12	24.88	1.97
2000	1Q	269.37	2.77	6.24	33.41	25.48	0.87
	2Q	278.76	2.90	6.48	33.31	26.83	0.53
	3Q	287.31	3.23	6.95	32.38	26.65	0.54
	4Q	265.89	5.21	9.38	32.98	29.96	0.58
2001	1Q	272.88	4.92	5.78	33.53	30.81	0.49
	2Q	271.15	6.95	7.62	32.14	30.92	0.42
	3Q				32.78	31.79	0.61
							2.65
							5.57

Source: Public Debt Department at the Ministry of Finance, NBP.

Notes: 1. Cumulative data from the beginning of each year.

2. Other debts include those of the Social Security Fund (ZUS), public health funds, governmental agencies, other budget funds, universities and medical centres.

3. Foreign debts classified according to debtor's residence criterion.

4. Foreign debts in the public sector include central and local governments (since the 4Q99).

5. Data consolidated (after exclusion of cash flows between entities of a given sector).