

## Summary

In 2Q00, the Polish economic situation improved in contrast with the previous quarters. We estimate that GDP grew 5.5% yoy whereas domestic demand increased 4.2% yoy. The growth of consumption demand was lower and investment demand higher qoq. Weaker domestic demand made it possible to improve the current account deficit. While in 1Q00, the deficit amounted to US\$3.5 billion, in 2Q00 it fell to US\$2.1 billion. This improvement was due to a significant rise in exports and slower import growth. The latter resulted from weaker domestic demand.

Favourable trends in Polish economy include increased economic efficiency reflected in the double-digit growth in labour productivity present since the second-half of 1999 as well as lower unit labour costs. These trends, if maintained, may lead to improved competitiveness of Polish enterprises, higher exports, and increased investment demand.

However, among the most worrying trends registered in 2Q00 were: stabilisation of inflation at a level of about 10% yoy and high unemployment. In our opinion, high inflation stemmed primarily from supply constraints, high global price of crude oil and rise in PPI. All this will make it impossible to achieve the NBP's inflation target, neither will it help to reduce base interest rates fairly quickly. We forecast a gradual weakening of inflationary pressures starting from July 2000, with the inflation rate likely to fall to 8% yoy in December 2000. We expect annual average CPI to increase to 9.8% and 6.7% in 2000 and 2001 respectively.

According to our estimates, relatively high GDP growth will be sustained in the future. In the period 2000–2001, it will increase 5.4% and 6.1% respectively. High growth is possible despite a much more restrictive economic policy in 2000. As a result, in the years 2000–2001, domestic demand growth is likely to be relatively low, reaching 4.6% and 6.2% respectively.

We also expect a gradual improvement in the current account balance. Nevertheless, the main preconditions of that are: curbing nominal appreciation of the zloty (for instance with help of the special government account in the NBP); and growth of exports. We forecast that the current account deficit will amount to US\$11.44 billion (7.0% GDP) in 2000 and US\$11.7 billion (6.3% GDP) in 2001. Contrary to 1999, inflows of foreign capital will make it possible to more than offset the current account deficit and increase the foreign currency reserves from the forecast value of US\$27.8 billion by end-2000 to US\$29.3 billion by end-2001.

*The Center for Social and Economic Research – Foundation (CASE) presents its sixth issue of Polish Economic Outlook (PEO) prepared by CASE economists.*

*In this issue, we analyse the economic situation in Poland in 2Q00. We present the key short and long-term threats as well as the most recent economic outlook for the period 2000–2001. We also comment on the draft Budget Act 2001 and stress the low probability of reaching the inflation target this year. For the first time, a CASE early warning indicator of currency crisis is presented.*

*All estimates and forecasts are derived from data available until end-July 2000. One should note that various data for previous years are updated in line with changes in official statistics.*

*We kindly remind our readers that the PEO is available in hard copy as well as in PDF file format – both in English and Polish.*

*For information about subscription please contact Michał Górzyński (pgtop@case.com.pl) or check our web site (www.case.com.pl).*

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# Contents

<b>Assessment of the economic situation in 2Q00</b>	2
<b>Determinants of Poland's economic development</b>	5
Trends in the world economy, 2000–2001	5
Forecast assumptions – domestic determinants	10
<b>Analysis of the economic situation and outlook for 2000–2001</b>	12
Domestic demand	12
Value-added	17
Labour market	21
Prices	25
Core inflation	27
Exchange rate	29
Foreign trade	32
Balance of payments	34
Public finances	36
Monetary policy	40
<b>Currency crisis indicators</b>	44
<b>Threats</b>	48
<b>Recommendations for economic policy</b>	48
<b>Appendix</b>	49

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# Assessment of the economic situation in 2Q00

The Polish economic situation in 2Q00 improved compared with that in 1Q00. The more restrictive economic policy made it possible to diminish the external imbalance (as measured by the current account balance) and to stabilise the internal imbalance (as measured by inflation). Other favourable trends include primarily:

- continued high economic growth (according to our estimates GDP increased 5.5% yoy),
- strong dynamics in exports to the EU and the CIS markets,
- improvement in the current account deficit,
- nearly double-digit (9.7%) growth of industrial production,
- high growth in labour productivity (17%) and lower unit labour costs,
- lower deficit in the consolidated budget and more restrictive budget policy compared to the previous year.

However, persistent unfavourable trends include primarily:

- maintenance of the high registered unemployment rate (up to 13.5% at end-June 2000),
- increase in CPI from 9.2% in 4Q99 to 10.3% in 2Q00 and 10.2% in June 2000,
- lower growth in real wages and social benefits,
- continued low general households' propensity to save,
- high nominal and real interest rates.

## Restrictive economic policy

The restrictive policy initiated at the turn of 1999–2000 continued in 2Q00. The rate of growth in real expenditure of the consolidated budget was lowered, and both the deficits in the government budget and general government budget were lower than those in the previous year. At the same time, the NBP maintained the high nominal and real main interest rates which made it possible to restrain growth in money supply.

## Lower growth in domestic demand

The more restrictive economic policy – in particular fiscal tightening – brought about a significant deceleration of domestic demand growth which, in turn, made it possible to reduce imports (as measured by customs data and the balance of payments). We estimate that GDP increased 5.5% in 2Q00, that is less than in 1Q00 (6.0%). Domestic demand grew at a rate of 4.2%. Thus, 2Q00 represented the third consecutive quarter in which the domestic demand growth rate was lower than that of GDP.

According to our estimates, 2Q00 witnessed significantly lower household consumption qoq which nevertheless increased 3.9% yoy. Weaker growth of household consumption is a result of lower growth in real incomes. On the other hand, households' propensity to save was lower than that in the previous year. It should be borne in mind, however, that the propensity was found to be exceptionally low in 1999.

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## **Industrial output powering ahead**

Like in 4Q99 and 1Q00, industrial production in 2Q00 continued to rise at nearly double-digit rates (9.7%). Growth in manufacturing was even higher, amounting to 10.2%. These results were achieved in a situation where employment in industry was considerably reduced (by nearly 6%) and, as a consequence, labour productivity increased significantly which enabled unit labour costs to be lowered. This indicates that firms' financial standing will improve on the back of higher growth in base prices in industrial production which may help to finance the predicted significant increase in investment – especially in the second-half of 2000.

## **Decline in construction sector**

Growth in the construction sector has considerably declined. This was consistent with low dynamics in investment outlays. According to the CSO, production by large construction firms in 2Q00 registered a 1.5% fall yoy.

## **Stabilisation of inflation**

Inflation, as measured by CPI, stabilised at a level of about 10% yoy. However, it should be pointed out that the CPI increase from 9.8% in April to 10.2% in June was caused by the higher increase in food prices and high crude oil prices. The PPI also proved stable, amounting to 7.9% yoy and 8.0% yoy in 1Q00 and 2Q00 respectively. What is worrying, however, is the significant PPI growth in June (8.8% yoy) that was mainly the result of higher prices of fuel and electricity.

## **The floating of the zloty**

On April 12, 2000, the exchange rate policy was modified: the central rate as well as the exchange rate fluctuation band and the monthly devaluation of the zloty were abandoned. This practically means floating of the currency.

After a period of a weaker zloty before and after the Easter Holidays, it was only in the second-half of June that the Polish zloty began to slowly strengthen on the back of the improved macroeconomic situation and the information on higher-than-expected proceeds from privatisation.

In June, the average value of the zloty against the US dollar (assuming 45% weight) and the euro (55%) was 6.5% lower than that in March 2000.

## **Lower money supply growth**

The pursuit of highly restrictive monetary policy continued in 2Q00. The minimal interest rates of the zloty-denominated credits in the main commercial banks increased 0.8% in May relative to 1Q00. On the other hand, interest rates on deposits in commercial banks did not change. The annual real interest rate remained at a level of roughly 7.5%.

The central bank has successfully continued to reduce the reserve money supply which decreased 1.8% in June compared with end-1999. The contribution of foreign net assets in the creation of the reserve money has also been falling due to small proceeds from privatisation (4.3 billion zlotys) and the absence of any significant short-term capital movements. High growth in domestic credits amounting to nearly 17 billion zlotys stemmed from continuing increases in net indebtedness of the budget sector throughout 2Q00.

## **Robust growth in exports**

The recent data indicate a long-awaited improvement in growth of exports. In 2Q00, merchandise exports, according to balance of payments data, amounted to US\$6.9 billion. Export volume growth on the basis of customs data also increased. In 1Q00, the volume of exports, according to the revised data from CSO, grew 24,7% yoy. 2Q00 saw, according to our own estimates, growth of approximately 22%. The upswing in exports is primarily the result of faster economic growth in the EU – Poland's main trading partner – but it is also due to the dollar-denominated prices maintained by Polish exporters at a relatively stable level which helped to compensate for the effects of an appreciation of the zloty.

## **Significant improvement in the current account deficit**

In 2Q00, the current account deficit was slightly over US\$2 billion which represents a significant improvement on the results of 1Q00 and 2Q99 respectively. At the same



time, the share of the deficit in GDP fell to 5.5%. This may be partly accounted for by the seasonal effect and by a considerably lower trade deficit of US\$3 billion, the lowest for more than a year.

## **High unemployment**

The downward trend in labour demand continued since 2Q99. According to the CSO, employment in enterprises fell 3.5%, including a 6.5% decline in the industrial sector. It was only due to the seasonal increase in labour demand in construction and in the services sector that the registered employment was reduced from 13.9% by end-March to 13.5% at end-June 2000. By way of comparison, last year's unemployment rate was as low as 11.6%.

After almost a year's break, GUS has again published the results of the Labour Force Survey (LFS). The average number of unemployed in 1Q00 turned out to be 2,880 thousand, i.e. 400,000 more than the number of those officially registered. In 1Q00, unemployment was as high as 16.7%, a much higher figure than in EU countries.

## **Low growth in household real incomes**

The increase in unemployment resulted in a lower growth of average real wages. In enterprises, wages edged up 13.2% yoy, that is 2.9% in real terms. In addition, real social benefits (average pensions and disability allowances) decreased by over 1%. On the other hand, higher econom-

ic growth led to a higher increase in real household incomes due to economic activity.

Households' propensity to save continued to be low in contrast to 1999. However, the lower propensity did not make it possible to offset the low rise in real incomes. As a result, the growth of household consumption was reduced.

## **Improvement in public finances**

1Q00, like the previous quarter, turned out to be favourable for the budget – especially for the general government budget. Faster economic growth and higher-than-expected inflation favoured an increase in tax revenues. In addition, the financial standing of the Social Insurance Company (ZUS) improved. Higher revenues were due to better collection of contributions and a higher economic growth whereas the establishment of a low nominal rise in social benefits helped to limit higher spending. After 2Q00, the results of the central government budget amounted to 70% of the total results planned for 2000.

Summing up, 2Q00 positive trends in the Polish economy prevailed. However, the level of external and internal imbalances continued to be high. Inflation and unemployment were on the rise. On the other hand, the strong export boost, if sustained in the coming quarters, will make it possible to pursue a less restrictive economic policy and to reduce both inflation and the current account deficit.



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# Determinants of Poland's economic development

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We have not changed our assumptions regarding the external environment compared to the previous issue of PEO (1/2000). However, with regard to domestic assumptions we take account for a slightly less restrictive budgetary policy in 2001 on the back of recently proposed draft of budget act by the ministry of finance. As in the previous issue, the forecast horizon extends up to the year 2001.

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## Trends in the world economy, 2000–2001<sup>1)</sup>

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- Moderation of world growth – except for the US (starting from 2Q00 well into 2001)
- Continued high oil prices behind recent hikes in inflation

The world economy still enjoys healthy growth but its pace is going to slow. Most experts believe that the slowing will be moderate. Despite the expected slowdown of the US economy, it is growing robustly. Some leading indicators in the EU point to a further boost. Ex-Japan Asian economies grow at a robust rate but significantly lower than that in 1Q00. The picture for Japan is getting clearer but is still far from satisfactory. In Latin America, growth is moderating though the situation is stable. Persistently high

oil prices added to inflation readings but the overall outlook remains positive. Tough competition and gains in labour productivity limit price increases. As core inflation remains fairly stable and growth is to slow, monetary tightening will be on hold. Developments in the US still remain our main concern though we are more optimistic about the soft landing scenario.

## Economic growth

### United States

Despite some early signs of growth moderation in the US (lower real consumer expenditure and retail sales as well as a slowdown in the construction sector), preliminary estimates of GDP case as a surprise. The annual rate of GDP growth amounted to 5.2%. Growth was primarily driven by investment. On the other hand, consumer expenditure grew only by 3% versus 7.6% in 1Q00. Up until now, only private consumption reacts to the Fed's monetary tightening pursued since June 1999 (in total 175 base points). High interest rates, the weakening of the 'wealth effect' from share prices, and increasing energy prices which diminish the purchasing power of consumers have contributed to lower household consumption. However, the external imbalance still persists. Despite the fall in imports, the trade deficit hit a new record high US\$31 billion in May. The situation in the labour market continues to be tight.

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<sup>1)</sup> Economic forecasts presented in this chapter constitute a consensus of leading forecasting centres (IMF, OECD, DIW, commercial investment banks, etc.).



The unemployment rate was fairly stable throughout 2Q00 and amounted to 4% in June. Continued high labour productivity – albeit not as high as in 1999 – offsets the rise in labour costs.

### European Union

The performance of the euro area economy continues to improve. GDP growth rose to 3.2% yoy in 1Q00 – the highest level in two-year period. 2Q00 is expected to bring even faster growth. Exports and investment have been the main driving forces of economic activity recently. Unemployment has fallen to 9.2% in May from 9.6% in December 1999. The recent trends of improved labour market conditions and upcoming tax reforms will boost domestic demand in 2001. Moreover, the recent increase in the household saving rate gives additional scope for higher consumer spending in the future. These factors are a promising sign since recent events suggest domestic demand and internal trade in the euro zone are far more important for GDP growth than external trade.

The economic situation in Germany looks extremely favourable. Industrial production is accelerating. This trend should continue well into 2001 on the back of improving domestic demand, a competitive currency, and a favourable external situation. The construction sector seems to lag behind. The May Ifo survey readings (102.0) reached their highest levels since the reunification boom,

but declined in June (100.4). Nonetheless, the Ifo survey, having risen above 100, indicates robust growth.

Economic growth in France continues to expand gradually (3.4% yoy in 1Q00). As in previous quarters, GDP is mainly driven by private consumption. The latter rose 2.8% yoy. This pattern of growth is expected to last throughout 2000 on the back of strong consumer confidence and robust retail sales.

Italian economic growth finally gathered steam. 1Q00 saw an impressive 4.0% growth rate (seasonally adjusted). The export boost from end-1999 is now shifting towards domestic demand. Expansionary fiscal policy should support the acceleration well into 2001. Consequently, most economists revised upward the GDP outlook for this year and next. One of the structural impediments to robust growth is the tough situation in the general government budget leaving no scope for reduction of the tax burden.

GDP growth in the UK came as a surprise in 2Q00. The stronger-than-expected rate of 3.1% yoy was driven mainly by services as in previous quarters – though all sectors of industry recorded growth. This may indicate that the economy is on the verge of overheating. A strong domestic economy made it possible to lower the unemployment rate down to 3.8%. This, coupled with healthy wage increases, will help to keep consumption at a high level.

**Table 1. GDP in selected countries, 1996–2001 (% change yoy)**

	1996	1997	1998	1999	2000f	2001f
Global	4.3	4.2	2.5	2.7	4.1	3.6
OECD	2.9	2.8	2.0	2.7	3.8	3.3
USA	2.4	3.8	3.9	4.1	4.8	3.3
Canada	1.5	3.8	3.1	4.2	4.4	3.2
Japan	3.5	0.8	-2.9	0.3	1.3	1.5
European Union	1.7	2.6	2.7	2.2	3.4	3.3
Germany	1.4	2.3	2.0	1.4	3.0	3.0
France	1.5	2.3	3.2	2.7	3.7	3.3
Italy	0.7	1.5	1.3	1.4	2.7	2.8
United Kingdom	2.3	3.1	2.1	2.1	3.0	2.6
Russia	-5.0	0.9	-4.9	3.2	4.9	4.0
China	9.6	8.8	7.8	7.1	8.0	7.0

Source: IMF and forecasts derived from the McFair model devised at Yale University.

Notes: f – forecasts.

## CIS

The recovery of the Russian economy is more pronounced. According to Goskomstat's proxy estimations, GDP increased 8% yoy in January-April. Investment and private consumption also edged up (13% and 8%, respectively). Growth of the latter was boosted by a rise in real income of 25% in January-April. 1Q00 saw a sizeable trade surplus of US\$14 billion (improvement of US\$8 billion yoy). This was possible due to the massive surge in exports (mainly of commodities – oil, gas, and metals) on the back of high commodity prices and continued depressed imports. Finally, a new comprehensive plan of economic reforms has been unveiled. It covers six key areas: social policy, investment climate, banking sector, tax reform, macroeconomic policy, and global integration. Its main goals are to improve the climate for private business and foreign investors as well as to overhaul the tax system (e.g. broaden revenue base, introduce flat 13% tax). Despite this very promising blueprint, the economic development in Russia will hinge on its timely and successful implementation.

## CEFTA

The Czech Republic experienced surprisingly strong GDP growth in 1Q00 amounting to 4.4% yoy. Net exports were the main driver. The volume of exports grew 22.9% yoy in 1Q00 – notwithstanding the appreciation of the koruna. This indicates that the Czech Republic has taken advantage of the upturn in the EU. The outlook remains positive but some moderation is very likely given structural problems.

Hungary powers ahead with growth fuelled by exports and domestic demand. The former is stimulated by the upswing in the EU and the latter by the favourable fiscal stance coupled with low real interest rates. This year, the Hungarian economy is expected to outperform other economies in the region significantly in terms of growth. Inflation continues to decline steadily. Sizeable inflows of FDI put pressure on the forint.

## Asia

The Asian economies continue to grow at a robust pace. 2Q00 is believed to bring slightly lower growth rate than in 1Q00. The driving force is shifting from exports to domestic demand. Investment in fixed assets following a period of stagnation is gaining momentum. Inflation is subdued despite high oil prices and rapid growth. Most economies still enjoy healthy trade surpluses that are expected to continue until year-end.

The Japanese economy gains momentum which is reflected, among other things, in the strong June Tankan survey results. The confirmed GDP figure points to 2.4% yoy growth in 1Q00. This was mainly driven by exports. Private consumption also contributed positively to growth and increased by 1% yoy. An improving situation in the labour market leads to higher household incomes. As a result, consumer confidence is strengthening. Thus, a boost to private consumption should take place soon. The declining deflationary pressures may lead to an investment boom.

China recorded 8.1% yoy growth in 1Q00 and 2Q00 may show a further acceleration. Domestic demand picked up with a continued surge in retail sales and moderate investment. Deflationary trends are easing. In May, CPI increased 0.1% yoy after two subsequent months of decline. An increase in both exports and imports caused the trade surplus to widen to an 8-month high in May. On the downside, FDI continues to decline.

## Latin America

2Q00 proved not as robust as 1Q00. Economic activity in most countries has slowed down. Manufacturing has cooled and consumer spending weakened on the back of diminished private sector confidence. High trade surpluses recorded at the beginning of the year reversed the trend. Capital inflows, mainly FDI, have remained fairly stable and have not been greatly affected by monetary tightening in the US and Europe.

## Commodity prices

In 2Q00, crude oil prices accelerated and hovered within the range of US\$28 and US\$32 a barrel. This was caused by lower US stocks representing roughly 20% of world demand and the absence of price intervention by the US Department of Energy. World oil reserves have also seen a decline which contributed to a wider gap between supply and demand. This effect was compounded by higher discipline among OPEC countries conforming to the oil production quotas from about 70% to a little more than 80%, and by OPEC members' failure to conform to the Vienna agreement signed in March 2000. This agreement provided for intervention should the average oil basket price exceed the range of US\$22–28 per barrel over 20 consecutive days. There has been no intervention, however, by OPEC when the prices extended beyond the permissible fluctuation

band. It was only in June that OPEC decided to start production of an additional 708,000 barrels a day from July 1 which has not had any effect given diminishing stocks. The market became stable only after Saudi Arabia declared that it would immediately step up production by 250,000 barrels and add another 250,000 barrels in early August 2000. Saudi Arabia is a leading oil producer that can, by itself, redress market imbalances.

We expect crude oil prices in the second-half of 2000 to fall to an average level of about US\$24–26 a barrel. This forecast is substantiated by the decisive action taken by Saudi Arabia and other key non-OPEC oil producers such as Mexico and Norway – the latter having made a decision to remove all limitations on oil production in July 2000. The above countries argue that high oil prices are detrimental to producers and in the event of oil shortages in the markets, they will redress market imbalances. On the other hand, it is a well-known fact that OPEC, at the meeting in Caracas in September, is expected to announce its decision to increase production, which should result in a long awaited stabilisation of the oil market. Even if such a decision is not made, which is unlikely under the present circumstances, Saudi Arabia will again consider increasing production. This would nevertheless be tantamount to the beginning of the end of OPEC, a most undesirable development in the eyes of any member state.

## **Inflation**

World prices have been shaped by two counteractive forces. On the one hand, continued high oil prices have fuelled inflation, while strong competition and rising labour productivity have contained prices. The latter factors limit the transmission of higher production costs to consumer prices. Continued high oil prices pose threats to price stability but even if prices do not drop considerably in the short term, their impact will be much lower due to a base effect. In general, emerging markets enjoy downward inflation trends, whereas developed countries experience increases in headline inflation. By and large, the world inflation outlook is still positive and prices should remain reasonably well contained.

High oil prices affected inflation the most in the euro zone. HIPC increased from 1.9% in April to 2.4% in June. The oil prices shock was aggravated by the weak euro. However, not only energy prices can be blamed for the

rise in inflation. Core inflation rose to 1.3% in June. So far, modest increases in labour costs have acted as a moderating factor. It may cease to work if workers demand higher wage increases to compensate for the drop in real incomes.

Although in June CPI in the US went up by 3.7% yoy (yielding a significant upsurge of 0.6% mom), core inflation remained fairly stable and amounted to 2.4% yoy. For the sake of comparison, core inflation stood at 1.9% in 1999. According to Fed chairman Alan Greenspan, the rise is an indirect effect of the hike in energy prices and should not be extrapolated given stable inflationary expectations.

All inflation measures in the UK went up in June. The headline inflation index reached a two-year high of 3.3%. High oil prices are largely to blame. Despite the increase, the rate of underlying inflation (2.2%) remained below the Bank of England's target of 2.5%. This was due to a slowing of unit labour costs, high competition compelling retailers to lower price margins, and an easing in the housing market.

## **Interest rates**

After having tightened monetary policy two times this year, the ECB announced another hike in interest rates to 4.25% on June 8. This amounted to 50 basis points and was higher-than-expected. The meeting brought also a change in the main refinancing operations. Starting from June 28 variable rate tenders have been introduced based on the multiple rate auction technique. The overshooting of the ECB's inflation target of 2% by 4 percentage points in June increases the chances of further hikes in interest rates during the next meeting.

The last tightening of monetary policy in the US came on May 16. Interest rates were increased by 50 base points and reached 6.5%. At the next meeting of the FOMC, rates were left on hold as generally anticipated by market participants. Further hikes are expected by year-end. If the Fed decides on further tightening, this will put pressure on other central banks to follow suit. However, currently markets expect the Fed to pause for a while. Chances of an increase at the next meeting (August 22) seem very low in the light of Alan Greenspan's recent well-balanced statement. On the other hand, higher-than-expected growth increases the chances of a subsequent hike.

**Table 2. GDP deflator in selected countries, 1996–2001 (% change yoy)**

	1996	1997	1998	1999e	2000f	2001f
<b>OECD</b>	1.5	1.4	1.0	1.0	1.4	1.8
USA	2.2	2.0	1.0	1.4	2.3	2.4
Canada	1.3	0.5	-0.6	1.7	3.0	2.6
Japan	-0.1	0.5	0.4	-0.9	-1.0	0.1
<b>European Union</b>	2.4	1.6	1.5	1.3	1.4	1.8
Germany	1.0	0.6	1.0	0.9	0.6	1.3
France	1.6	1.0	0.9	0.3	0.8	1.3
Italy	4.4	2.6	2.8	1.5	1.3	2.1
United Kingdom	3.1	2.2	2.5	2.9	2.3	2.5

Source: IMF and forecasts derived from the McFair model devised at Yale University.

Notes: e – estimates; f – forecasts.

**Table 3. CPI in selected countries, 1996–2001, (% change yoy)**

	1996	1997	1998	1999	2000f	2001f
<b>OECD</b>	2.0	2.0	1.1	1.4	2.0	1.7
USA	2.9	2.3	1.6	2.2	3.2	2.5
Canada	1.6	1.4	1.0	1.7	2.5	2.1
Japan	0.1	1.7	0.6	-0.3	-0.4	0.1
<b>European Union</b>	2.1	1.8	1.4	1.3	1.6	1.5
Germany	1.3	1.5	0.6	0.6	1.7	1.4
France	2.0	1.3	0.7	0.5	1.6	1.4
Italy	3.8	1.7	1.7	1.7	2.5	2.3
United Kingdom	2.4	2.8	2.7	2.2	2.6	3.5
Russia	47.7	14.8	27.7	85.8	21.0	16.0
China	8.3	2.8	-0.8	-1.3	0.5	1.0

Source: IMF and forecasts derived from the McFair model devised at Yale University.

Note: f – forecasts.

**Table 4. Long-term interest rates in selected countries, 1996–2001 (%)**

	1996	1997	1998	1999	2000f	2001f
USA	6.4	6.3	5.3	5.7	6.8	7.0
Canada	7.2	6.1	5.3	5.5	6.3	6.8
Japan	3.0	2.3	1.5	1.8	1.8	2.2
Euro area	6.2	5.7	4.7	4.6	5.5	6.0
United Kingdom	7.8	7.0	5.5	5.0	5.5	6.0
LIBOR (US\$/year)	5.6	5.9	4.8	5.4	6.5	6.6

Source: IMF and forecasts derived from the McFair model devised at Yale University.

Note: f – forecast.

July marks the fifth consecutive months of no changes in monetary policy in the UK. The Bank of England's Monetary Policy Council left interest rates on hold at its last meeting on July 6. The recent higher-than-expected GDP growth and rise in inflation may prompt MPC to rise interest rates in the near future due to concerns of over-heating.

## Exchange rates

The euro exchange rate against the US dollar was still below parity in 2Q00. From April until mid-May, it was losing ground, reaching a low of 0.888. A gradual appreciation then occurred with a slight decline in the third week of June. The rise in the euro's value stems from a change in investor sentiment on the back of the first signs of the US economy slowing down and rosier perspectives for the euro zone. In real terms, 2Q00 was yet another quarter of depreciation (however on a monthly basis the trend was reversed in June). The euro is still expected to appreciate by

year-end or early 2001. However, present forecasts are less up-beat than in previous quarters.

From April until the beginning of May, the yen lost against the US dollar. It climbed almost to a 110 level. Afterwards the yen appreciated reaching a low of 103.8. The yen should strengthen in the course of the year along with more robust and broad economic growth in Japan. In our assumptions, the average exchange rate will stay at 105 yen/US\$ in 2000.

## Forecast assumptions – domestic determinants

In the present forecast, we assume that a restrictive economic policy will continue up to year-end whereas economic policy in 2001 will combine monetary tightening with considerably less restrictive budgetary policies.

**Table 5. The volume of imports in selected countries, 1996–2001 (% change yoy)**

	1996	1997	1998	1999	2000f	2001f
Global	6.0	10.5	3.9	4.5	12.2	8.5
OECD	6.2	7.8	7.5	6.0	10.4	7.4
USA	6.4	14.3	10.6	11.7	12.8	8.5
Canada	5.1	12.6	5.8	9.7	11.0	8.0
Japan	10.3	2.1	-7.5	5.1	10.0	14.0
<b>European Union</b>	2.6	6.0	7.8	4.3	9.1	7.3
Germany	2.8	6.1	7.5	6.9	10.0	9.0
France	2.2	6.2	9.3	3.3	10.7	8.5
Italy	-2.0	3.6	6.1	3.4	9.0	10.4
United Kingdom	7.8	8.3	8.4	7.6	7.7	4.2
Russia	10.0	11.0	-16.0	-20.0	14.0	16.0
China	14.0	12.0	-3.8	8.0	14.0	11.0

Source: IMF and forecasts derived from the McFair model devised at Yale University.

Note: f – forecasts.

**Table 6. Dollar exchange rate vs. the euro and the yen, 1996–2001**

	1996	1997	1998	1999	2000f	2001f
Euro			1.11	1.07	0.96	1.04
Yen	109	121	131	114	105	98

Source: IMF and forecasts derived from the McFair model devised at Yale University.

Notes: 1. f – forecasts.

2. Annual averages.

We also assume that improvements in the effectiveness of economic performance, mainly reflected in a dramatic reduction in unit labour costs and the adaptation of Polish enterprises to the pattern of demand in EU countries, will cause the strong export boost experienced since September 1999 to persist until the second-half of 2001. We also expect that the dynamics of Polish exports to Russia and the Ukraine will significantly increase.

We assume that the government's short-term economic policy in 2000 will aim at reducing both the current account deficit and the deficit in the general government budget. Our forecast is based on three assumptions underlying economic policy:

- (i) The NBP may reduce its main interest rates in 4Q00.
- (ii) Budgetary policy will be aimed at restricting the general government budget deficit, in particular the deficit in the central government budget, and that of ZUS (state insurance company); in addition, we assume an effort will be made to achieve as low a possible a financing of the deficit by the domestic financial system.
- (iii) In 2000, despite the recently introduced floating exchange rate, our forecast cannot envisage a total liberalisation of capital flows in spite of Poland's earlier obligations towards the OECD. We expect that liberalisation will be implemented by early 2001.

In 2001, we expect that the budget policy will be less restrictive but a similar level of restrictive monetary policy tantamount to high real interest rates will be sustained.

We make the following specific assumptions:

1. The cost of compulsory debt servicing to the Paris Club and the London Club, as well as indebtedness of the private sector, will amount to US\$1.7 billion and US\$2.2 billion in 2000 and 2001 respectively.
2. The labour force will grow 0.4 and 0.5% respectively.
3. The number of old-age pensioners or those who receive disability allowance will be 0.7 and 0.5% respectively.
4. Transfers from the EU will amount to US\$0.6 billion in 2000 and US\$0.9 billion in 2001.
5. Foreign direct investment in terms of the balance of payments will reach US\$8.7 billion and US\$7.8 billion respectively.
6. We assume that "large scale" privatisation will accelerate and will be completed in 2001, with the proceeds amounting to 27 and 18 billion zlotys in 2000 and 2001 respectively.
7. The price indexation of social benefits will be maintained and thus nominal average social benefits will increase 6% in 2000 and 7.5% in 2001 – without taking into consideration compensations due in 2001.
8. In 2001, personal income taxes will be lowered 4 percentage points, whereas corporate income taxes will remain at their 2001 level and the VAT base will be extended.
9. Employment in the public sector will be stable; the increase in employment will range from 0 to 0.3%. We assume an employment decline in the education and health care sectors, accompanied by an increase in the broad administrative sector.
10. We assume that this year's wheat harvest due to dry weather (more than 60 days without rain in some parts of the country as well as some ground frost of about 10°C in the eastern part of Poland) is expected to be lower by 10% than that in 1999. In 2001 the harvest is expected to be at the average 1997–1999 levels.
11. We also assume that the Universal Enfranchisement Act (*powszechna uwłaszczenie*) will not go in force.



# Analysis of the economic situation and outlook for 2000–2001

## Domestic demand

- Low growth of domestic demand in 2000
- Forecast improvement of the investment climate in 2000–2001
- Less restrictive economic policy in 2001

According to our assessment, GDP increased 5.5% yoy in 2Q00. The 4.2% growth in domestic demand, as in previous two quarters, was slower than that of GDP. Detailed data on the growth of the main components of the aggregated demand are given in Table 7.

The gap between GDP and domestic demand growth was 0.6 percentage point in 4Q99, then widened to 0.9 percentage point in 1Q00. According to our estimates, in 2Q00 it was as high as 1.4 percentage point. The significant slowdown in domestic demand growth stemmed primarily from a more restrictive economic policy than that in the previous year. What we would like to point out here is that, as much as our assessment of GDP growth in 1Q00 – published in the previous issue of the PEO – turned out to be correct, domestic demand growth was overestimated considerably. We then assumed that the balance of payments data offered a better picture of the dynamics of exports. However, as we discuss later in the section on foreign trade, it turned out that for over a year the NBP data and those provided by the GUS (on the basis of customs declarations) on the results and dynamics of

exports were radically divergent. As a result, the negative foreign trade balance, and as a consequence domestic demand growth, overshot.

We estimate that, like in 1Q00, private consumption growth was lower. As a consequence of slower growth of real incomes and lower households' propensity to save (compared to the previous year), private consumption increased 3.9% yoy whereas in 1Q00 it was higher by 4.6% compared with our previously published estimate of 4.8%.

Like in 1999 and 1Q00, investment growth continued to be low. According to our estimates, investments rose 6.1% (in 1Q00 5.5% versus 11.7% according to our previous estimates). The growth of investment outlays on machinery and transport equipment was slightly higher, whereas those on houses and buildings continued to be low.

In 2Q00, the growth rate of public consumption, according to our estimations, was 1%, i.e. it remained at a level similar to that in the previous 6 quarters. The low growth was due to significant cuts in budgetary expenditures over that period. The latter constituted one of the factors that was instrumental in limiting domestic demand growth. The higher-than-expected rise in the goods and services purchased by the government sector also contributed to the continued low growth of public consumption.

As in the previous issue of PEO, we expect GDP to increase 5.4% in 2000. On the other hand, we need to

revise down our previously predicted GDP growth from 6.3% to 6.1% in 2001. Our forecast is still more optimistic than the figure of 5.2% assumed in the 2000 budget, and the mean values determined for Poland and published in July by *Consensus Forecasting* (5.0% and 5.1% for 2000 and 2001, respectively).

In our opinion, in the second-half of 2000 the high level of nominal and real interest rates, coupled with fiscal tight-

ening, will make it possible to sustain the low growth of domestic demand. In whole 2000, we expect domestic demand growth to amount to 4.6%. On the other hand, in 2001, as a result of less restrictive economic policy and higher household real incomes, domestic demand will be as high as 6.2%.

In the second-half of 2000, growth of consumption demand will turn out to be slower than that a year earlier

**Table 7. Components of aggregate demand, 1997–2001 (% change yoy)**

		GDP	Domestic demand	Household consumption	Public consumption	Investment in fixed assets	Exports	Imports
1997	1Q-4Q	6.8	9.2	6.9	3.2	21.7	12.2	21.4
1998	1Q-4Q	4.8	6.4	4.8	1.6	14.2	14.3	18.5
1999	1Q-4Q	4.1	4.8	5.1	1.1	6.9	-1.5	1.4
<i>forecast</i>								
2000	1Q-4Q	5.4	4.6	3.8	1.0	7.4	15.6	10.8
2001	1Q-4Q	6.1	6.2	4.7	2.1	12.0	12.3	11.6
1997	1Q	6.9	7.9	6.7	3.4	19.6	20.5	24.2
	2Q	7.4	9.0	7.1	3.5	21.0	29.9	36.1
	3Q	6.7	9.4	7.1	3.4	21.2	8.1	18.4
	4Q	6.4	10.4	6.6	2.4	23.2	-3.5	11.7
1998	1Q	6.5	7.3	6.3	2.2	17.3	18.8	20.2
	2Q	5.3	5.7	4.1	1.6	14.6	24.7	23.0
	3Q	4.9	6.1	4.4	1.5	14.2	18.9	20.6
	4Q	3.0	6.6	4.6	1.1	12.9	-1.9	11.6
1999e1	1Q	1.6	3.3	4.4	1.1	6.1	-8.9	-2.8
	2Q	3.1	4.5	4.9	1.0	6.8	-3.5	2.0
	3Q	5.0	5.5	5.4	1.2	7.0	2.9	4.5
	4Q	6.2	5.6	5.6	1.1	7.3	3.8	2.0
2000	1Qe1	6.0	5.1	4.6	1.0	5.5	18.0	12.7
	2Qe2	5.5	4.2	3.9	1.0	6.1	15.8	9.6
<i>forecast</i>								
2000	3Q	5.1	4.2	3.4	1.0	7.8	15.0	10.2
	4Q	5.2	4.8	3.2	1.0	8.6	14.1	10.9
2001	1Q	5.9	5.2	4.6	2.0	11.0	14.0	10.6
	2Q	6.2	6.0	4.7	2.2	12.2	12.5	10.8
	3Q	6.1	6.6	5.0	2.2	13.1	12.0	12.3
	4Q	6.1	6.8	4.7	2.0	11.5	11.0	12.5

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

Notes: 1. Estimates in average prices of a previous year.

2. Forecasts in 1999 prices.

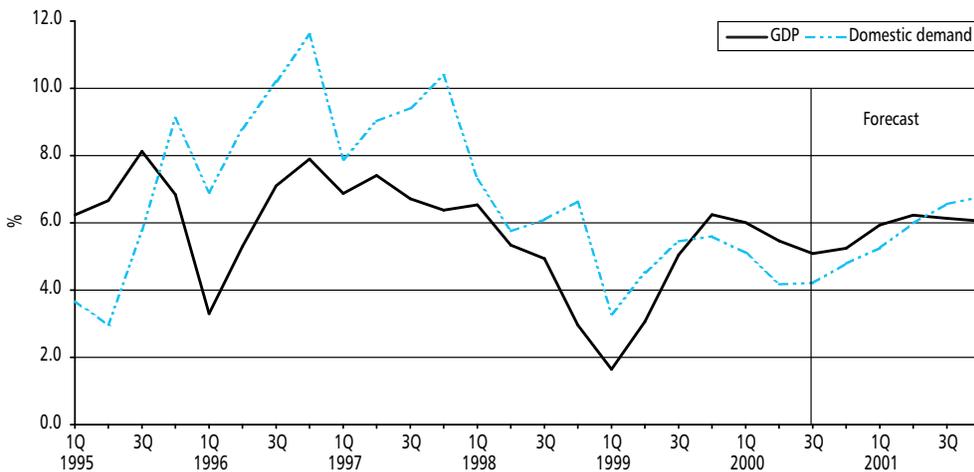
3. Domestic demand is defined as the sum consumption of households, and non-commercial institutions, public consumption and investment. This table does not provide separate indicators for the consumption of non-commercial institutions.

4. Data are not seasonally adjusted.

- and even slower than in the first-half of 1999. In the second-half of 2000, high interest rates leading to a significant increase in households' propensity to save may exert a stronger influence in reducing consumption demand. In addition, we expect continued slow growth of average real wages and a 1% drop in average real pensions and disable allowances, mainly as a result of higher-than-

expected inflation (see section on prices). According to our assessment, household consumption over the whole year will rise 3.8%, i.e. 1.3 percentage points less than in 1999. In 2001, we predict higher growth of household real incomes, and a propensity to save slightly greater than in 2000 (see Table 9). This will be due, on the one hand, to lower inflation and, on the other, to higher than in 2000

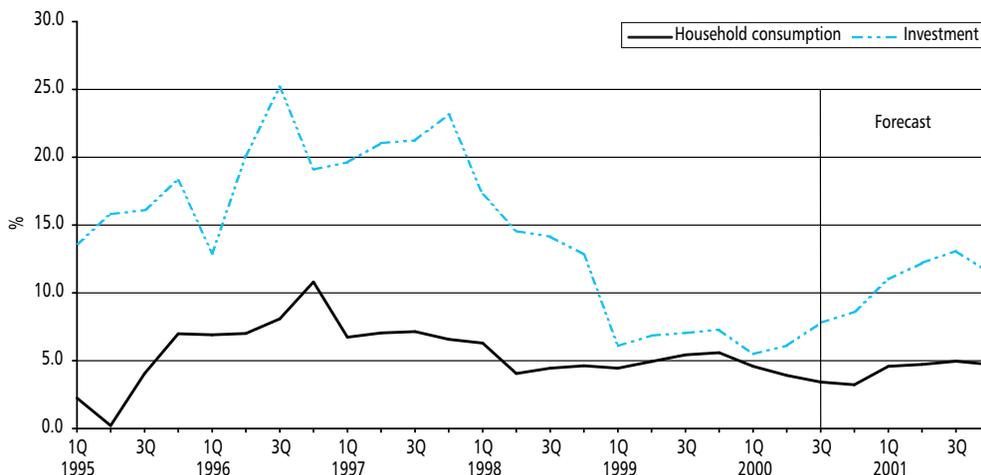
**Figure 1. GDP and domestic demand, 1995–2001 (% change yoy)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

**Figure 2. Household consumption and investment, 1995–2001 (% change yoy)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

economic growth. Household consumption is likely to grow 4.7% in 2001.

As much as consumption demand will be weaker than that in 1999, investment demand is expected to be higher. We expect a gradual restoration of higher investment outlays and improved financial standing of Polish enterprises, together with lower prices of imported machines and

equipment. In addition, the high growth rate will be sustained by large inflows of foreign investment. As a result, growth of fixed investment will increase from 5.5% in 1Q00 to more than 8% in 4Q00, and to roughly 12% in the second-half of 2001.

Until end-2000, we expect public consumption growth to stabilise at about 1%, and to increase to 2% the follow-

**Table 8. Contributions to GDP growth, 1997–2001 (%)**

	GDP	Household consumption	Public consumption	Investment in fixed assets	Stock-building	Net exports	Exports	Imports
1997 1Q-4Q	6.8	4.3	0.6	4.5	0.1	-2.6	3.0	-5.5
1998 1Q-4Q	4.8	3.0	0.3	3.3	0.1	-1.9	3.7	-5.5
1999 1Q-4Q	4.1	3.2	0.2	1.7	-0.1	-0.9	-0.4	-0.5
<i>forecast</i>								
2000 1Q-4Q	5.4	2.4	0.2	1.9	0.4	0.6	4.1	3.5
2001 1Q-4Q	6.1	3.0	0.3	3.2	0.1	-0.4	3.5	4.0

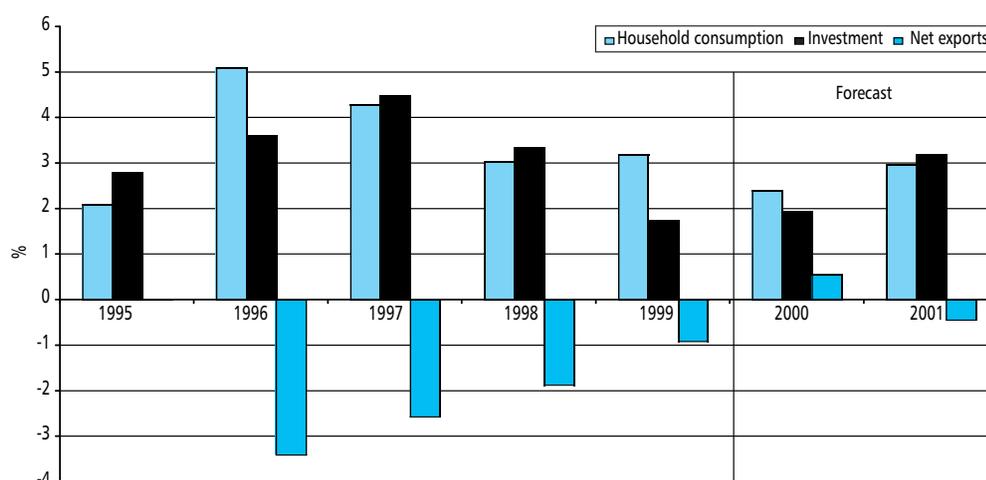
Source: CSO (GDP) and CASE (other data).

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

(annual increase of X / annual increase in GDP) \* rate of growth of X.

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

**Figure 3. Contributions to GDP growth, 1995–2001 (%)**



Source: CSO and CASE.

Note: CASE forecast starting from the year 2000.

ing year. The higher growth rate will stem, among other things, from a change in budgetary policy priorities in 2001 (see section on the budget).

We anticipate a pro-export stimulus to continue until the second-half of 2001. At the same time, the demand for Polish goods in CIS countries, especially in Russia and Ukraine, is likely to strengthen.

The forecast and historical effects of separate components of the aggregated demand on GDP growth are shown in Table 8. The contributions to GDP growth given in Table should be interpreted in the following way. For example, in 1999 household consumption would have contributed 3.2% to GDP growth had all the other components of demand not changed. It should borne in mind that the gain in a given aggregate should be related to the

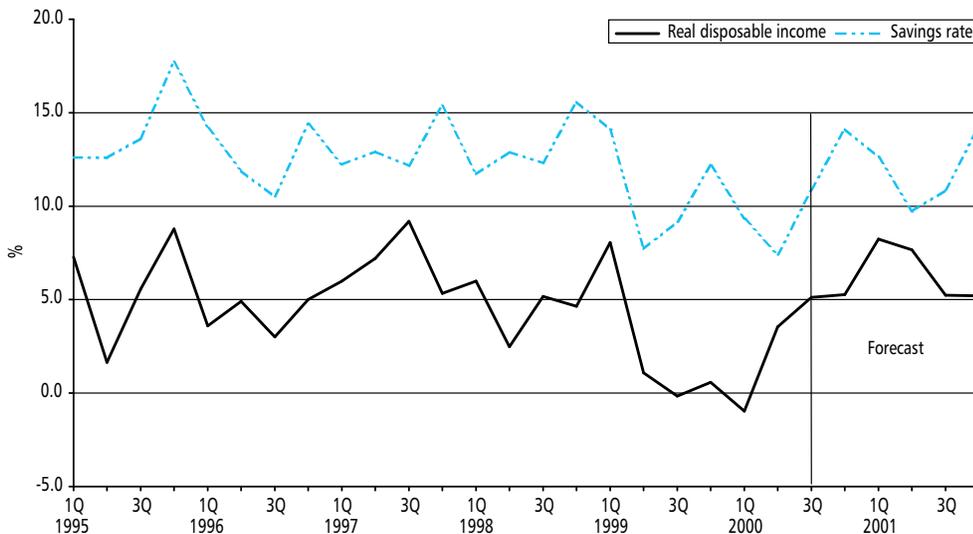
**Table 9. Household disposable income, 1997–2001**

		Disposable income	Wages and salaries	Social benefits	Savings rate	Real disposable income
		% change	% change	% change	%	% change
1997	1Q-4Q	23.1	23.8	19.7	13.1	7.1
1998	1Q-4Q	17.0	17.3	15.3	13.2	4.7
1999	1Q-4Q	9.7	10.7	9.1	10.8	2.3
<i>forecast</i>						
2000	1Q-4Q	13.3	12.7	9.4	10.5	3.2
2001	1Q-4Q	13.8	13.0	9.0	11.9	6.5
1997	1Q	24.2	23.0	19.0	12.2	6.0
	2Q	23.4	19.8	22.4	12.9	7.2
	3Q	24.8	25.5	22.3	12.2	9.2
	4Q	19.2	22.7	16.6	15.4	5.3
1998	1Q	20.7	20.9	17.0	11.7	6.0
	2Q	15.9	17.9	15.4	12.9	2.5
	3Q	16.9	15.5	14.1	12.3	5.2
	4Q	14.3	15.0	14.9	15.6	4.6
1999	1Q	14.8	9.1	10.9	14.1	8.1
	2Q	7.5	10.4	7.3	7.7	1.1
	3Q	7.0	11.4	9.5	9.2	-0.2
	4Q	9.8	11.8	8.7	12.2	0.6
2000	1Q	9.2	13.3	10.0	9.3	-1.0
	2Q	13.9	13.0	11.2	7.4	3.5
<i>forecast</i>						
2000	3Q	15.9	11.8	8.0	10.9	5.1
	4Q	14.2	11.9	8.5	14.1	5.3
2001	1Q	16.4	11.3	9.0	12.6	8.2
	2Q	15.2	11.1	9.0	9.7	7.7
	3Q	12.1	11.1	9.0	10.8	5.2
	4Q	11.8	10.1	9.0	14.3	5.2

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

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

**Figure 4. Change in household real disposable income and savings rate, 1995–2001 (%)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

GDP value of the previous year, and the total sum of the growth rates calculated for all components of domestic, stock-building and foreign demand should be equal to GDP growth.

As a result of weaker consumption demand we expect a temporarily lower contribution of household consumption to GDP growth in 2000. In 2001, we predict a slight rise in consumption to 3%, i.e. to 1998–1999 levels. What should be pointed out is that over the period 1998–2001, the average contribution of consumption to GDP growth will be significantly lower than that in the period 1995–1997.

We anticipate that in 2001 the contribution of investment in GDP growth, like that in the period 1996–1997, will be larger than that of household consumption.

In the years 2000–2001, the contribution of exports to GDP growth may increase considerably and become, on average, higher than that in the years 1996–1998. However, the expected rise in domestic demand, and thus in imports, may reverse the trend of growing contribution of the foreign trade balance observed in the period 1999–2000.

## Value-added

- High growth of industrial production
- Fall in construction sector in 2Q00
- Services sector as a stabilising factor in economic growth
- Faster value-added growth in the period 2000–2001

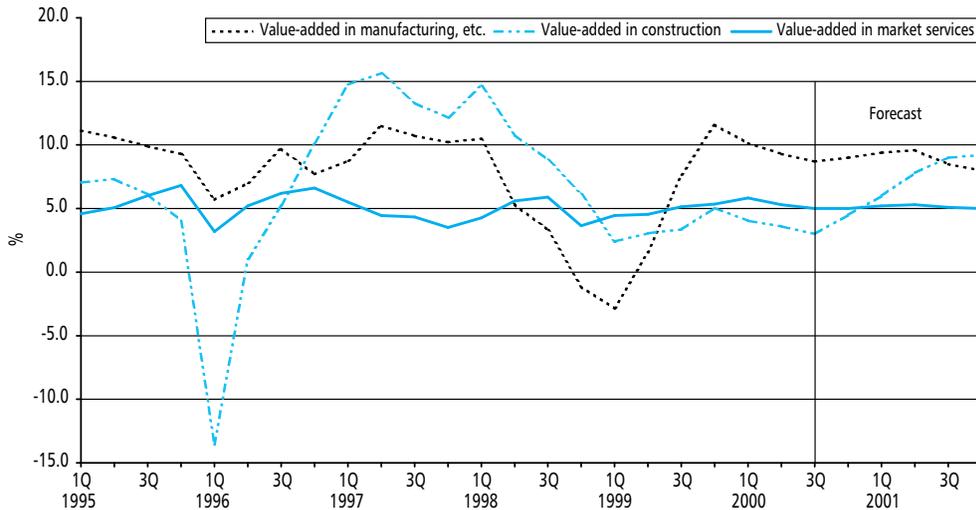
Since 4Q99, value-added growth has slowed down slightly. In 4Q99 and 1Q00, value-added increased 6% and 5.8% respectively, whereas in 2Q00 it is estimated to have risen 5.2%. At the same time, we estimate that value-added in non-agricultural sectors (i.e. excluding agriculture, forestry, hunting, off-shore and inland fishery) increased 5.8% yoy.

As in previous quarters, value-added growth in industry, telecommunications and trade was higher than average, whereas it was lower in other sectors such as construction and non-market services. The results of the estimates are shown in Table 10.

Industrial production in enterprises with more than 9 employees increased 9.7% yoy (see Table 11). The production in the mining industry again registered a drop of 2.4%, which means that the growth in the previous quarter was

only temporary. At the same time, production in manufacturing rose 10.4%, whereas that in energy, gas and water supply sectors was higher by 9.3% yoy. The growth rate was slightly lower than in the previous two quarters

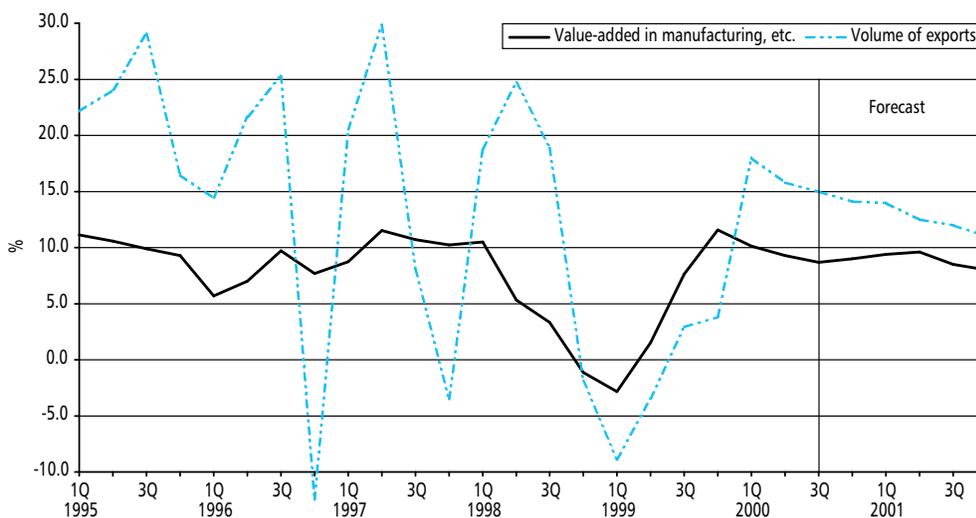
**Figure 5. Value-added in major sectors of the economy, 1995–2001 (% change yoy)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

**Figure 6. Value-added in manufacturing and volume of exports, 1995–2001 (% change yoy)**



Source: CSO and CASE.

Notes: 1. CASE forecast starting from 3Q00.

2. Volume of exports is computed according to the national accounts definition and based on the most recent CSO data.

despite significantly higher dynamics of exports, which is tantamount to lower dynamics of domestic demand.

For the first time since 1Q96, the construction sector registered a decline. As much as this was then caused by exceptionally unfavourable climatic conditions, in 2Q00 the

drop was mainly due to lower demand for construction investment. We estimate that the other components of the construction sector featured a trend similar to that in the previous quarters, and, consequently, the value-added in construction increased 3.6% in 2Q00 compared with 4.0% in the previous quarter.

**Table 10. GDP and value-added in major sectors of the economy, 1997–2001 (% change yoy)**

		GDP		Value-added				
				total	manufacturing, mining, water and gas supply	construction	market services	non-market services
				zloty billion				
1997	1Q-4Q	472	6.8	6.4	10.3	13.6	4.4	2.9
1998	1Q-4Q	554	4.8	4.7	4.3	9.3	4.8	2.3
1999e1	1Q-4Q	617	4.1	3.9	4.6	3.7	4.9	1.0
<b>forecast</b>								
2000	1Q-4Q	707	5.4	5.2	9.2	3.8	5.3	1.0
2001	1Q-4Q	802	6.1	6.0	8.8	8.4	5.1	1.6
1997	1Q	104	6.9	6.4	8.7	14.7	5.5	4.9
	2Q	113	7.4	6.7	11.5	15.6	4.5	1.3
	3Q	119	6.7	6.5	10.7	13.3	4.3	1.1
	4Q	136	6.4	6.2	10.2	12.2	3.5	3.8
1998	1Q	124	6.5	6.4	10.5	14.6	4.3	3.7
	2Q	133	5.3	5.2	5.3	10.8	5.6	0.2
	3Q	140	4.9	4.8	3.3	8.8	5.9	1.4
	4Q	156	3.0	2.9	-1.1	6.1	3.6	3.1
1999e1	1Q	135	1.6	1.4	-2.8	2.4	4.4	1.0
	2Q	147	3.1	2.8	1.5	3.1	4.5	1.1
	3Q	156	5.0	4.8	7.6	3.4	5.1	0.8
	4Q	179	6.2	6.0	11.6	5.0	5.3	1.1
2000	1Qe1	154	6.0	5.8	10.1	4.0	5.8	1.0
	2Qe2	169	5.5	5.2	9.3	3.6	5.3	1.1
<b>forecast</b>								
2000	3Q	179	5.1	4.9	8.7	3.0	5.0	1.0
	4Q	204	5.2	5.1	9.0	4.5	5.0	1.0
2001	1Q	176	5.9	5.7	9.4	6.0	5.2	1.3
	2Q	193	6.2	6.1	9.6	7.8	5.3	1.5
	3Q	203	6.1	6.1	8.5	9.0	5.1	1.7
	4Q	230	6.1	6.0	8.0	9.2	5.0	2.0

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

Notes: 1. Estimates in prices of a previous year.

2. Forecasts in 1999 prices.

3. Data are not seasonally adjusted.

Value-added growth in market services amounting to 5.3% were marginally lower than that in the previous two quarters, primarily due to slower growth of

value-added in trade. On the other hand, value-added growth in non-market services is estimated to have reached 1.1%.

**Table 11. Selected short term indicators of the Polish economy, 1997–2001 (% change yoy)**

		Output		Transport		Corporate sector	
		manufacturing, mining, water and gas supply	construction	freight	passengers	average employment	real gross wages
1997	1Q-4Q	11.5	16.5	1.5	-2.4	1.2	5.5
1998	1Q-4Q	4.6	11.4	-3.4	-2.9	1.5	3.7
1999	1Q-4Q	4.6	3.8	-2.2	-3.0	-1.2	3.0
<i>forecast</i>							
2000	1Q-4Q	9.3	4.7	-1.0	-2.2	0.3	3.4
2001	1Q-4Q	8.9	9.4	0.8	-1.2	0.0	4.6
1997	1Q	7.9	19.6	3.6	-3.1	1.0	4.2
	2Q	13.9	24.9	2.8	-0.3	1.4	5.6
	3Q	11.8	13.3	-1.7	-5.2	1.7	6.7
	4Q	11.2	13.9	0.5	-2.3	0.6	5.3
1998	1Q	10.9	24.0	-5.8	0.3	1.9	4.4
	2Q	6.0	10.2	-4.6	-0.2	1.7	3.3
	3Q	3.9	13.2	1.6	0.5	1.0	3.6
	4Q	-0.8	4.5	-5.8	-0.6	1.6	3.7
1999	1Q	-3.1	0.6	-1.7	-4.4	-0.4	2.5
	2Q	1.2	4.0	-6.3	-5.6	-1.2	3.8
	3Q	7.4	3.2	-7.3	-4.6	-1.3	3.8
	4Q	11.7	6.2	-2.8	-4.1	-1.8	1.8
2000	1Qe1	10.7	4.3	-3.5	-5.6	-3.6	4.6
	2Qe2	9.7	-1.5	-2.8	-2.7	-3.1	2.9
<i>forecast</i>							
2000	3Q	8.8	3.9	-3.0	-2.0	-2.4	2.4
	4Q	9.1	5.0	-1.6	-1.5	-2.0	3.8
2001	1Q	9.6	6.7	-1.0	-1.1	-1.3	4.2
	2Q	9.7	8.8	-0.6	-1.0	-1.0	4.4
	3Q	8.6	10.2	0.3	-0.7	-0.7	4.9
	4Q	8.1	10.5	0.8	-0.6	-0.4	5.0

Source: Data and estimates (e1) – CSO; estimates (e2) with an exception of output and real gross wages, and forecasts – CASE.

Notes: 1. Data on construction and assembly and transportation calculated from the monthly data.

2. Changes calculated from data published in Statistical Bulletin (CSO).

3. Annual data on average employment relate only to enterprises classified as "large enterprises" (e.g. in manufacturing – those with more than five employees until end-1999 and those with more than 9 thereafter).

We expect, as in the previous issue of PEO, that in 2000 the value-added in the whole economy will increase 5.2% yoy, whereas the growth in 2001 is revised downwards from 6.1% to 6.0%. The slowdown in value-added may continue until 3Q00. Starting in 2Q01, value-added may stabilise at the level of 6%. In our opinion, until the second-half of 2001, external demand will be more important for future growth as opposed to domestic demand.

The faster value-added growth within the next two years will be possible thanks to the envisaged faster value-added growth in industry (which is likely to increase 9.2% and 8.8% in 2000 and 2001 respectively) and in construction (the corresponding figures will be 3.8% and 8.4%).

The forecast value-added growth in market services will reach average 1997–1999 levels, being more stable than in other sectors of economy. At the same time, it will grow slower than total value-added, in contrast to the situation in the period 1998–1999. We expect sectors such as telecommunications, trade, hotels, etc. to experience faster growth, whereas transport and services involving real estate, renting and business activities will show a slower growth.

According to our forecast, value-added growth in non-market services will continue to be weak. Only in 2001 can

a higher annual growth rate of more than 2% – similar to that in 1998 – be expected.

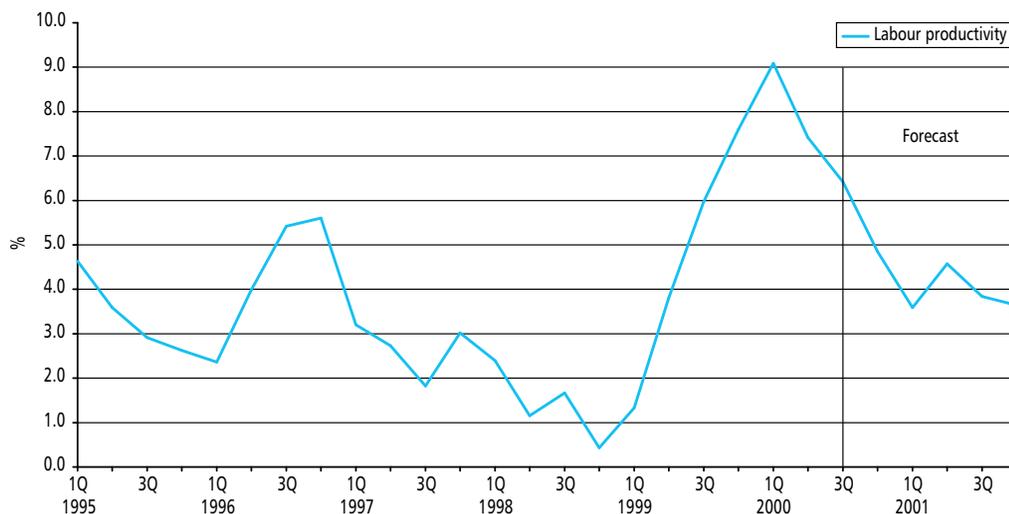
## Labour market

- Fall in labour demand
- Low growth of nominal and real wages
- New unemployment estimates by LFS
- Forecast of stable unemployment in the years 2000–2001

## Unemployment

By end-June 2000, the number of registered unemployed was 2437.4 thousand and was 17.5% higher yoy. Compared with end-1Q00, the number of unemployed fell 96,000 (i.e. 3.8%), which is a normal seasonal effect. One can be optimistic in view of the fact that the monthly upward trend in the number of people de-registered as unemployed has continued since the beginning of this year. This may signify that this year's situation in the labour market has improved.

**Figure 7. Labour productivity in non-agricultural sectors of the economy, 1995–2000 (% change yoy)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

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## **Employment and wages**

In June 2000, employment in enterprises was 5,295 thousand, 0.25% lower than at the end of the previous quarter. This means that, after a dramatic fall at the beginning of this year (reported in the previous issue of PEO) as a result of an economic recovery, one can discern a clear trend of slower annual decrease in employment.

In June, average gross wages in enterprise sector were 2049,04 zlotys – up 11.5% yoy in nominal terms. This means that growth of real wages over the 12-month period was slower than that in the first few months of this year.

## **Analysis of the Labour Force Survey results**

After a 6-month interlude, the CSO published its estimations of unemployment according to the Labour Force Survey (LFS), encompassing both quarters 4Q99 and 1Q00.

In both quarters, the unemployment rate, as the study indicates, is much higher than that reported by employment agencies. According to LFS in 4Q99 the average rate was 15.3%, whereas in 1Q00 it was as high as 16.7% (according to the employment agencies these figures were 13% and 13.9% respectively). Large discrepancies are also found in the data on the number of unemployed. According to LFS, 2,880 thousand were recorded in 1Q00, whereas the employment agencies registered 2,534 thousand unemployed. This was the first time that such large discrepancies between the LFS data and the registered unemployed were noted.

## **LFS and employment agencies: differences in definitions and methods**

The primary and fundamental difference between LFS and the system of unemployment registration lies in the underlying definition of unemployment. According to the agencies, an unemployed is referred to a person, aged 18–64 years (women 18–59 years), who registers at the employment agency and is ready to take up work but does not receive any pre-retirement allowances or benefits, has no agricultural farm, whose income does not exceed half of the minimal pay, and does not draw any permanent social benefits. On the other hand, the definition formulated by

LFS is totally different as it describes an unemployed as a person over the age of 15 (without specifying the upper age limit) who has to declare that he or she has been actively looking for a job, and is ready to take up work within a week. The unemployed also included those who have been promised a job and was only waiting to start. Will these differences affect in any way the discrepancies observed?

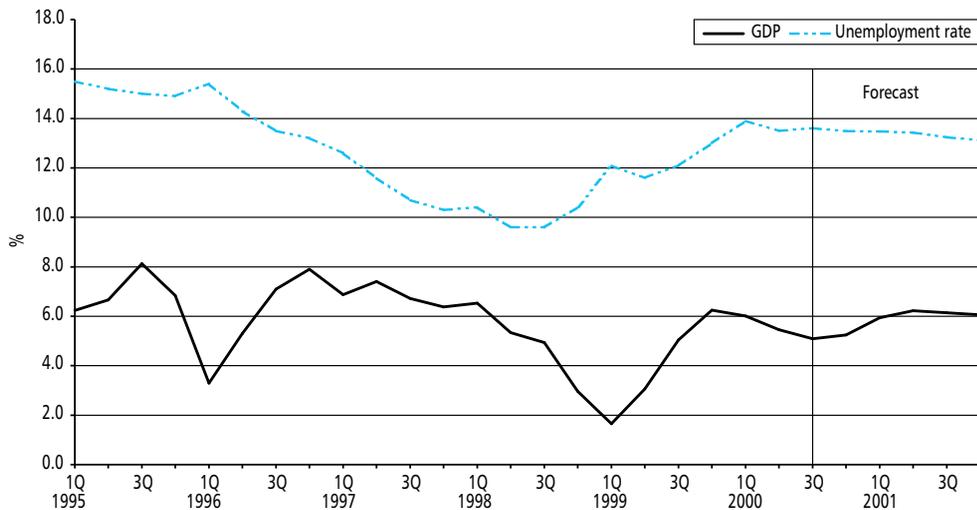
First, unemployed according to LFS, may come from a larger group as opposed to registered unemployed, since no restrictions are imposed on their age. This, however, does not account for the difference between the unemployment rates in both studies. LFS has found that the unemployment rate for people in the production age (18–59/64) that is those who may apply to employment agencies in 1Q00 was 17.1%, while the number of unemployed was 2,845 thousand.

Second, unemployed according to LFS may not meet the requirements necessary to become registered at employment agencies. For example, the number of people entitled to and receiving pre-retirement benefits is now estimated at 530,000. If we assume that their economic activity and unemployment rate are similar to those in the same age brackets, the number of unemployed according to LFS is lower (or increased according to the registration criteria) by 36,000 which means that the unemployment rate determined by LFS is brought down to 16.5%. This cannot be regarded as a significant result.

Third, the study makes it impossible to determine the number of jobs offered which have been rejected by those who declare themselves as active job-seekers (registered unemployed are not allowed to reject more than one offer of suitable employment). Unfortunately, the available data do not make it possible to assess this factor effect.

All the factors considered so far may cause the number of unemployed determined by LFS to become larger than that reported by employment agencies. On the other hand, people engaged in the "grey sphere" register in employment agencies to draw unemployment benefits. They have no reason to declare their status of unemployed in the LFS study. The employment in the "grey sphere", at present estimated to be roughly 5% of the total number of officially employed in Poland, may additionally lower the LFS unemployment rate compared with that registered.

**Figure 8. GDP growth and registered unemployment rate, 1995–2001 (%)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

The LFS, when determining the unemployment rate (unemployment rate = number of unemployed / number of those economically active) makes use of the number of economically active people, that is those employed plus unemployed, estimated on the basis of the results of the survey. On the other hand, in calculations of the rate of registered unemployment, the number of employed is determined on the basis of data provided by enterprises and the agricultural sector census of 1996. As an effect, the numbers of economically active people in both cases are divergent. According to the registered data, the number of such people in 1Q00 was roughly 18,230 thousand, whereas that reported by LFS was about 17,190 thousand. This obviously has an impact on the calculated rate of unemployment. If the number of unemployed provided by LFS is divided by the number of people economically active determined on the basis of registered data, a "mixed" rate of unemployment of 15.8% is obtained, which is 0.9 percentage point less than that provided by LFS.

The question, of course, arises as to which of the above figures pertaining to the economic activity of the population is more credible. On the basis of information available from the CSO, it seems that the difference between those figures stems primarily from the number of people employed in agriculture. It is difficult to tell which of the

above figures is closer to the truth, and the fact that the census of agricultural sector was taken four years ago seems to be irrelevant since similar differences also appeared at that time.

What is interesting, however, is that the difference between the types of activity has been very unstable, depending, as it does, on seasonal effects. Every third quarter witnesses the lowest differences, which may substantiate the information provided by the CSO on the "agricultural" origin of the divergence: the third quarter of the year is a harvest time and economic activity in the country is certain to be on the increase, which is again corroborated by the LFS data. On the other hand, according to the registered data the number of people economically active in summer months tends to fall. Seasonal changes in the number of economically active persons, determined by the above two methods are correlated negatively!

After the 6-month break in LFS, the method of survey has also been modified according to the Eurostat recommendations. In earlier surveys, like in computation of registered unemployment, a one point-like approach was adopted. In other words, it presented the situation at one ("middle") week in a quarter. Now, since 4Q99 the sample group has been broken down in 13 sub-groups, each of them

being examined in a week's interval. In this way, the LFS results represent an average situation in the labour market throughout the whole quarter. It is clear that there is no possibility of determining unequivocally the effect of the above change on the results obtained, and their conformity with the registered data. Theoretically, this difficulty should lead to any definite "upward" or "downward" effect. The fact, however, remains that such a large discrepancy between the LFS and registered data has never been found

earlier, although it may as well be due to a chance. We are of the opinion that the modification in the survey method undoubtedly provides more reliable results that describe a real situation in the labour market in a given quarter.

Summing up, we have to point out that, by merely assessing the differences in definitions and methods applied by LFS and employment agencies, differences in the rates and numbers of unemployed cannot be fully

**Table 12. Components of the labour market, 1997–2001**

		Employment		Registered unemployment	Unemployment rate
		thousand	% change	thousand	%
1997	1Q-4Q	15439	2.8	1826	10.3
1998	1Q-4Q	15800	2.3	1831	10.4
1999	1Q-4Q	15710	-0.6	2350	13.0
<i>forecast</i>					
2000	1Q-4Q	15558	-1.0	2457	13.5
2001	1Q-4Q	15756	1.3	2407	13.1
1997	1Q	15048	2.5	2236	12.6
	2Q	15374	3.0	2040	11.6
	3Q	15594	3.4	1854	10.7
	4Q	15739	2.3	1826	10.3
1998	1Q	15506	3.0	1846	10.4
	2Q	15819	2.9	1688	9.6
	3Q	15921	2.1	1677	9.6
	4Q	15953	1.4	1831	10.4
1999	1Q	15513	0.0	2170	12.1
	2Q	15726	-0.6	2074	11.6
	3Q	15808	-0.7	2178	12.1
	4Q	15792	-1.0	2350	13.0
2000	1Q	15185	-2.1	2533	13.9
	2Q	15524	-1.3	2437	13.5
<i>forecast</i>					
2000	3Q	15678	-0.8	2468	13.6
	4Q	15845	0.3	2457	13.5
2001	1Q	15405	1.4	2473	13.5
	2Q	15678	1.0	2443	13.4
	3Q	15888	1.3	2418	13.2
	4Q	16055	1.3	2407	13.1

Source: Annual and quarterly data with an exception of employment data – CSO; quarterly employment data and forecasts – CASE.

accounted for. They may be partly explained by applying a different method of calculating the total number of people economically active, although we still have no information on the reasons why the above discrepancies have recently become so wide.

### **Some specific results of LFS**

As we ran into trouble when we wanted to find explanation for the differences in the number of unemployed provided by the LFS and that by employment agencies, using only aggregated data, we have decided to take a look at the regions in Poland which are mainly responsible for the discrepancy. It seems that, should the differences be fairly uniformly distributed among voivodships, in respect of their populations, it would signify that they are purely statistical, i.e. independent of other structural parameters. If, on the other hand, each voivodship were to have a specific effect (disproportional) on the results for the whole country, it would indicate that the discrepancies between the data provided by the LFS and those of registered unemployment are dependent on specific structural regional parameters typical for voivodships' economies under consideration.

Śląskie, Dolnośląskie and Mazowieckie voivodships have an essential effect on the overall difference in the number of unemployed in the LFS and registered data, the Śląskie and Dolnośląskie voivodships contributing twice as much in relation to their size. These voivodships have populations which constitute about 19% of Poland's total economically active population, while their total contribution to the above difference amounts to nearly 48% (166 thousand out of the 346 thousand difference for the whole country). In other words, this contribution is larger than the proportional contribution by a factor of more than 2.5. The reason for that seems to lie in the fact that the above voivodships represent regions that have recently experienced a faster process of industrial restructuring. A large number of workers or employees laid-off by restructured factories and enterprises have not registered in employment agencies since they have been included in the so-called "shielding" programmes, whereas, according to the LFS's definition, they remained unemployed. All this leads us to think that, with further industrial restructuring, the difference between the LFS and agencies' data on the number of unemployed will increase, and the LFS rate will prove a more accurate parameter to describe the real situation in the labour market, especially in the above mentioned voivodships.

In conclusion, we would like to shortly present a number of specific LFS results. According to LFS, in the period since February 1998 the number of jobs fell by 796,000 (i.e. 5.3%) while the number of unemployed increased by 984,000 (i.e. 51.9%), the difference stemming from demographic changes. It is the public sector that is responsible for the fall in the number of jobs as it led to a massive lay-off of 930,000 people, whereas the private sector created 132,000 new jobs in the same period.

The number of employed looking for a new job has been on the increase. In 1Q00 their number totalled 1.5 million, that is 60% up on the number in the mid-90s. With the situation in the Polish labour market having become recently ever more difficult, the majority of these people, however, did not belong to the group of those who feared that they might be out of the currently held jobs (172,000). Much more people (902,000) wanted to change their jobs for economic reasons. This movement in the labour market may primarily help to reduce long-term unemployment estimated at 1012 thousand (3.1% of total unemployment) at the beginning of this year.

It has been found that out of 2,880 thousand unemployed classified according to the LFS definition, 2050 thousand have registered in employment agencies (against those officially registered numbering 2,534 thousand), only 1,918 thousand being those who declare that they are looking for a job through employment agencies. This all means that nearly one-fourth of all registered are most likely not to use agencies to find a job, and about one-fifth are not employed at all (that is they are employed in the "grey sphere" or are in fact inactive). In 1996, the situation in this respect looked much worse: about one-third of registered unemployed were in fact employed. On the other hand, we may conclude that the number of people that are not registered in employment agencies and are without work is much larger than we could conclude from the aggregated data.

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## **Prices**

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- Stable inflation
- High growth of food prices
- Forecast of gradual disinflation till end-2001



In 2Q00, inflation, as measured by CPI and PPI, stabilised at high levels. However, both indices have significantly increased yoy. CPI was 10.0% yoy against 6.4% yoy in 2Q99, while PPI reached 7.9% yoy against 5.1% yoy in 2Q99.

As for CPI in 2Q00, it was the prices of food, services and non-food products that registered continued fast growth. Large growth in all main components of CPI have also been recorded as a result of the response to supply rather than demand pressures which is evidenced by the lower money supply growth as well as that of consumption credits and both nominal and real wages.

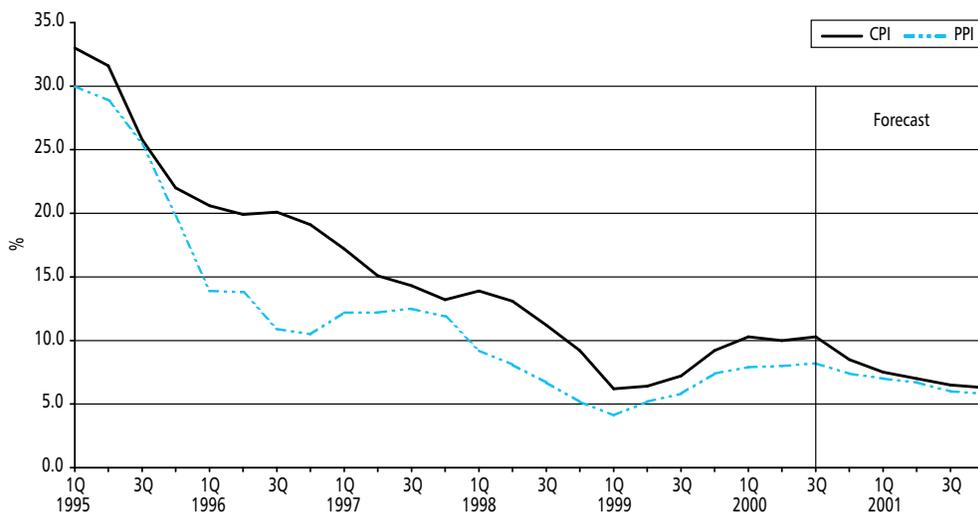
In 2Q00, food prices increased 9.6% yoy which represents both an increase relative to 2Q99 when they dipped 0.3% and to 1Q00 when they rose 8.6%. It should be noted that, due to weather anomalies, early crops of vegetables and fruits have led to an earlier fall in their prices. On the other hand, the prices of bread and cereal products have accelerated as a result of sustained higher prices of cereals on market places, resulting from lower supplies, belated intervention by the Agricultural Agency (ARR) and high tariffs on cereals adopted in 1999. The upward trend in meat prices continued due to accelerated prices of cereals and, as a consequence, declining supply of pigs and higher demand from the CIS countries.

In 2Q00, the prices of non-food products rose 10.4% yoy, compared with 8.1% increase in the similar period last year, caused mainly by higher global fuel prices reflected in the price hikes in the domestic market. In May and June, the fuel prices increased 4.6% mom and 7.8% mom. The relatively strong zloty via import prices and the PPI had a deflationary effect. A similar effect stemmed from lower money supply growth and a stable growth rate of consumption credits. Lower growth of wages, both in real and nominal terms, is a positive signal of the absence of demand pressures and of diminished inflationary expectations.

In 2Q00, the prices of services increased 10.1% yoy. The slower pace of growth in 2000 was due to a different time distribution of energy price hikes. In 1Q00, energy prices were not raised since no agreement had been reached between power stations and the Energy Control Board. The decisions were postponed until 2Q00. The prices of services in 2Q00 were higher primarily due to the rise in electricity and gas prices.

In May, the downward trend in PPI was temporarily reversed. It increased in May and June both mom and yoy, amounting to 8.1% in 2Q00. This was a result of base energy and gas price increase being postponed until 2Q00. The remaining factors affecting PPI had a deflationary effect.

**Figure 9. CPI and PPI, 1995–2001 (% change yoy)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

## Core inflation

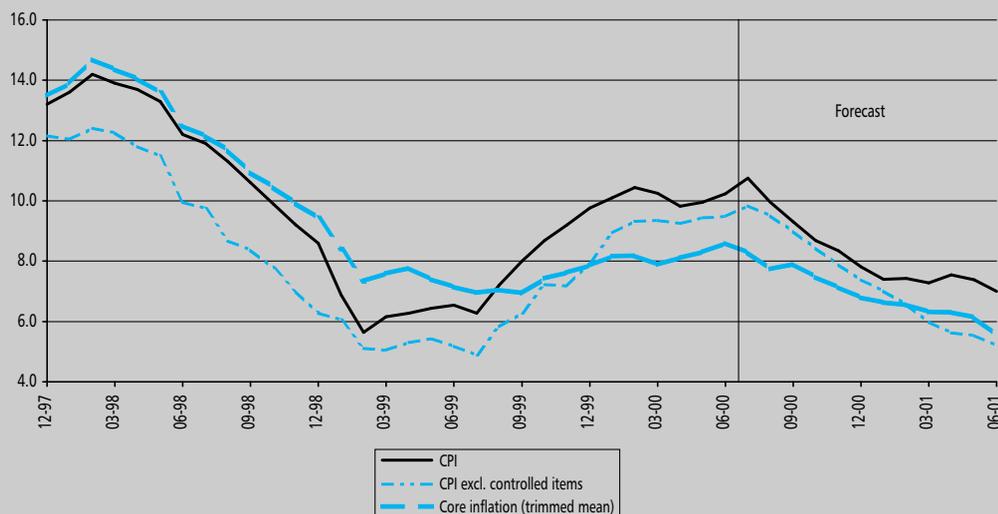
In 2Q2000, 12-month core inflation rose slightly to 8.5%. Since mid-1999, core-inflation dynamics have nevertheless been lower than those of CPI. The figure shows the conventional CPI, the measure of core inflation (trimmed mean) and for comparison, the inflation index calculated with exclusion of CPI items with administratively controlled prices quoted by the NBP along with other core inflation series (author's calculations).

Both indices indicate that core dynamics of prices rose slightly. The 2-percent difference between the dynamics of CPI and those of the core index have been maintained during the first-half of 2000 which suggests that the former has been shaped predominantly by shocks of supply nature. The difference between the CPI and the index calculated with exclusion of administratively controlled prices points to the same explanation. Likewise the analysis of disaggregated price changes confirms this result. It reveals that the source of the high dynamics of 12-month CPI (end-June) lies mainly in: sustainable high gasoline prices (50% yoy rise), rapid sugar price hikes (77%) and increases in the prices of bread which has almost a 3% share in the average household's expenditure (20%, 11% in June alone). Additionally, the CPI was pushed up by high (albeit falling) dynamics of liquid gas (46%), telephone fee (33%) and butter (30%).

It is clear that all of the aforementioned price hikes (as most of the unusually high price increases of items comprising the CPI basket) belong to either one of the three groups: food, energy or administratively controlled goods or services. They are the result of classical supply shocks – temporary and mostly reversible – and, as such, carry no valuable information about the state of demand pressures in the economy (at least in the short horizon). Hence the core inflation series, whose construction relies on discarding the price data that are not representative of the trend displays consistently lower dynamics than the "headline" CPI index. The fact that this gap has been sustained for a longer period of time indicates that we should expect a gradual stabilization and a gradual decrease of CPI dynamics.

Similar trends follow from the formal forecasting model with respect to both core inflation and inflation calculated with exclusion of controlled items. We predict that core inflation will fall gradually over the next 12 months to reach less than 6% in mid 2001. An even bigger drop in the dynamics is forecast for the index calculated without controlled items – the June 2001 12-month increase is expected to fall to slightly over 5%.

Figure. Core inflation, 1997–2001



Source: CSO and CASE.

First, the relatively strong exchange rate in 1Q00 led to lower import price growth. Second, the increase in domestic demand was lower than in previous quarters.

In the second-half of 2000, higher food price growth than in the previous year is expected to be sustained. This may be due to the earlier rise in the prices of vegetable and fruits resulting from their shorter growth cycle and lower supply caused by Spring ground frost. We also expect a sustained upward trend in meat prices which should increase as a result of lower live-stocks of swine and cattle due to lower profitability of breeding, especially on the

back of the recent exorbitant prices of cereals. If, on top of this, the demand from Russia and Ukraine is to continue to grow, the meat prices may accelerate significantly. The prices of cereal products are also likely to rise as a result of the expected increase in the prices of cereals due to this year's weaker crops. In the second-half of 2000, the price growth is to slow down as a consequence of the relatively stronger position of the zloty in the first-half of the year and of the expected lower growth of PPI. In addition, the effect of the restrictive monetary policy pursued by the MPC should still be felt. We also forecast a lower growth of prices of services in the second-half of 2000 as a result of

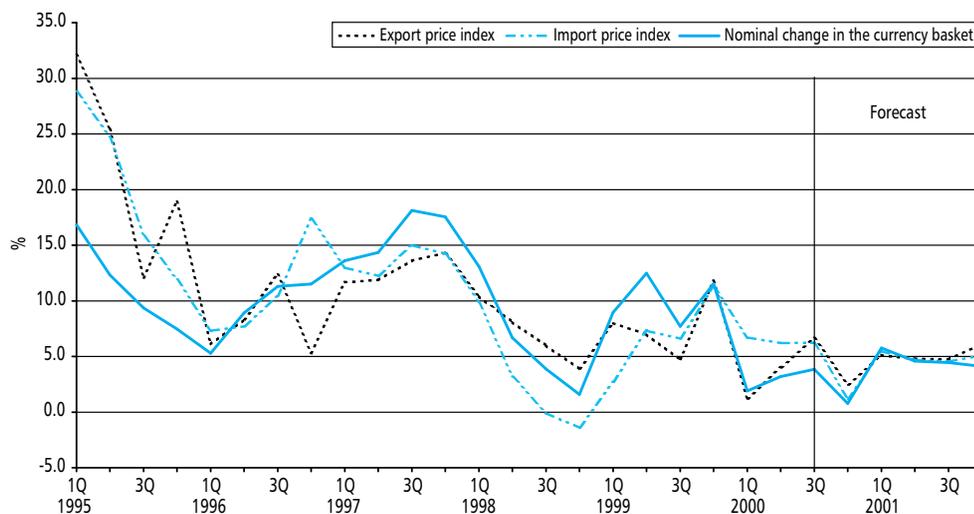
**Table 13. Basic price indicators, 1997–2001 (% change yoy)**

		Price indices				Currency basket	GDP deflator
		CPI	PPI	exports	imports		
1997	1Q-4Q	14.9	12.2	12.9	13.6	16.0	14.0
1998	1Q-4Q	11.8	7.3	6.8	2.4	6.1	11.7
1999	1Q-4Q	7.3	5.6	8.1	7.2	10.3	7.1
<b>forecast</b>							
2000	1Q-4Q	9.8	7.9	3.6	5.1	2.4	8.6
2001	1Q-4Q	6.8	6.4	5.2	5.0	4.7	6.9
1997	1Q	17.2	12.2	11.7	13.0	13.6	13.9
	2Q	15.1	12.2	11.9	12.2	14.3	13.3
	3Q	14.3	12.5	13.6	15.0	18.1	13.4
	4Q	13.2	11.9	14.3	14.2	17.6	15.3
1998	1Q	13.9	9.2	10.4	9.9	13.1	11.9
	2Q	13.1	8.1	8.1	3.2	6.7	12.1
	3Q	11.2	6.7	6.0	-0.1	3.9	12.0
	4Q	9.2	5.2	3.9	-1.4	1.6	11.4
1999	1Q	6.2	4.1	8.0	2.7	9.0	7.2
	2Q	6.4	5.2	7.0	7.3	12.5	7.2
	3Q	7.2	5.8	4.7	6.6	7.7	5.9
	4Q	9.2	7.4	11.8	11.3	11.5	7.8
2000	1Q	10.3	7.9	1.2	6.7	1.9	7.8
	2Qe	10.0	8.0	4.0	6.2	3.2	9.0
<b>forecast</b>							
2000	3Q	10.3	8.2	6.6	6.2	3.8	9.5
	4Q	8.5	7.4	2.5	1.2	0.8	8.3
2001	1Q	7.5	7.0	5.1	5.5	5.8	7.7
	2Q	7.0	6.7	4.8	4.7	4.6	7.1
	3Q	6.5	6.0	4.7	4.5	4.4	6.7
	4Q	6.3	5.8	6.1	5.1	4.1	6.3

Source: Annual data – CSO; currency basket – NBP; GDP deflator, estimates (e) with an exception of CPI, PPI and the currency basket, and forecasts – CASE.

Note: Currency basket over 1996–1998 consists: 55% of US\$ and 45% of DM, and from 1999: euro – 55% and US\$ – 45%.

**Figure 10. Export and import price indices and nominal change in the currency basket, 1995–2001 (% change yoy)**



Source: CSO and CASE.

Notes: 1. CASE forecast starting from 3Q00.

2. Currency basket over 1996–1998 consists: 55% of US\$ and 45% of DM, and from 1999: euro – 55% and US\$ – 45%.

lower growth in global fuel prices which should check the growth of prices of transport services. We also assume that the remaining prices of services will not feature a significant upward trend.

According to our estimates, CPI in December 2000 will increase 8.0% yoy. The annual average growth will be 9.8% in 2000 and 6.7% in 2001. A downward trend is also expected for PPI, whose annual average growth will reach 7.9% and 6.4% in 2000 and 2001 respectively.

retreat of foreign investors from the foreign exchange market as a result of the deterioration in the current account balance in February and the decline in IT share prices on Wall Street on April 17th, it was developments in Poland that had the greatest effect on the market. News of the current account deficit and inflation continued to drive the market. The unfavourable trends in these two variables led to expectations of higher interest rates prior to each session of the MPC. On the other hand, the shifting fate of the AWS-UW coalition was the main political concern influencing market sentiment.

## Exchange rate

- Decision to float the zloty from 12 April, 2000
- Dramatic depreciation of the zloty in May 2000
- Forecast appreciation of the zloty in the second-half of 2000

In 2Q00, volatility in the zloty exchange rate was considerable. In particular, the decision by the government and the Monetary Policy Council (MPC) to float the zloty on 11 April 2000 exacerbated the situation due to the lack of a benchmark in the form of central parity. Following the April

At the turn of April and the first week of May, speculations on a weaker zloty intensified. A combination of news on the current account deficit (compounded by foreign debt payments) and fears of higher interest rates in the US, resulting in a stronger dollar against the euro, drove the zloty/US\$ and zloty/euro exchange rates up to 4.74 and 4.25 respectively. As a consequence, over the period of three days (between 3 May and 5 May) the zloty lost more than 0.21 zloty to the dollar and nearly 0.13 zloty to the euro. However, it should be borne in mind that during the Russian crisis, the zloty lost as much as 0.30 zloty to the dollar. As the above situation coincided with Easter holidays in Poland, speculations were undertaken mainly by London banks that were joined in a panic by

domestic banks by the end of the week. Some statements by top political authorities calling for intervention in the exchange market failed not only to allay fears or stabilise the situation but, on the contrary, only added fuel to the fire. The NBP and the MPC, as during the Russian crisis, were able to calm down market participants and political demands. In mid-May, the announcement of lower inflation and upgraded Polish rating by Standard&Poor's, as well as the reminder of future proceeds from the privatisation of TPSA (Polish Telecom) and the Bank Handlowy strengthened the zloty to 4.5 against the dollar and to 4.059 against the euro.

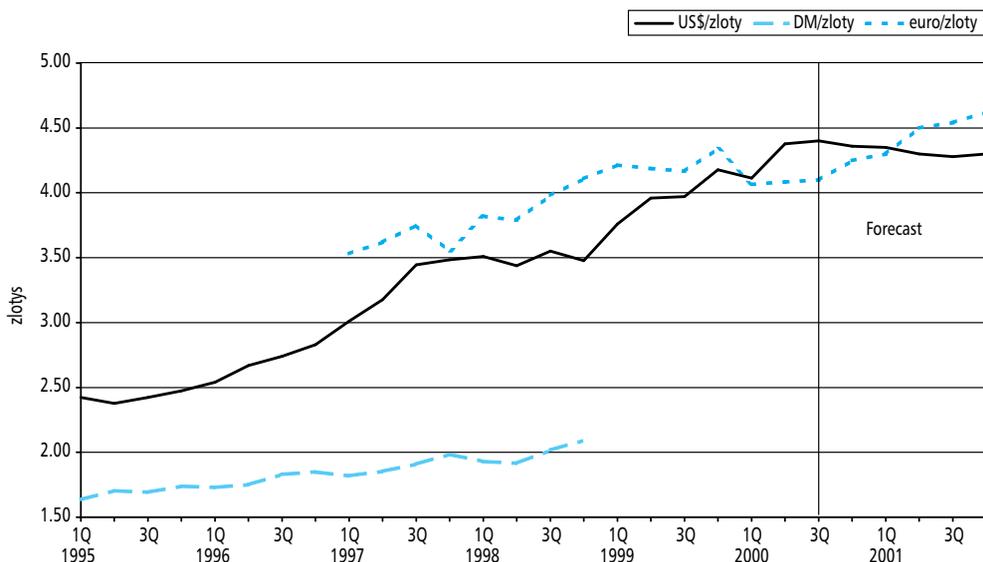
The collapse of the AWS-UW coalition at the turn of May and June did not have a significant impact on the markets and the zloty weakened as little as 0.06 zloty against the dollar. The appointment of Mr Bauc as the new Minister of Finance, various opinions on the budget proposals, the threat of higher NBP interest rates, and the expected proceeds from privatisation alternately strengthened and weakened the zloty throughout June 2000. It seems, however, the May-June period turned out to be a turning point followed with a real appreciation of the zloty over the remainder of the year. The prospects of the zloty appreciation are corroborated by forecast current account improvement in the second-half of 2000,

sustained high industrial production growth, voting VAT in agriculture that rises the budget assumptions credibility and signing a TPSA privatisation agreement at end-July. The negative factors in the second-half of 2000 affecting the zloty exchange rate include the rising food prices that keeps the annual inflation rate at the level above 10%, and the potential threat of a higher general government deficit as a result of a higher debt incurred by the health care sector and the Polish Railways (PKP) whose size has not been fully estimated.

The proceeds from privatisation of TPSA amounting to US\$4.3 billion (i.e. 18.6 billion zlotys) higher than those of 20 billion zlotys assumed in the budget draft, as the total amount of proceeds from privatisation had reached 4.3 billion zlotys by end-June. Out of US\$4.3 billion from privatisation, US\$2.4 billion will be deposited at a special sterilisation account run by monetary authorities to be used to repay foreign debt. In 2000, foreign debt servicing (debt and interests) will amount to more than US\$2.4 billion, of which US\$2 billion will have to be paid between July and September (of which US\$250 million with regard to bonds issued in 1995).

The transactions in the exchange market were estimated, on average, at US\$1.7 billion in April, and

**Figure 11. Basic exchange rates, 1995–2001 (per zloty)**



Source: CSO and CASE.

Note: CASE forecast starting from 3Q00.

around US\$1.3 in May and June 2000. Obviously, the exchange market has continued to be very shallow, and single transactions are not able to affect significantly exchange rates, as evidenced in early May 2000. The sum of US\$1.9 billion, remaining from the proceeds of the TPSA privatisation, will either be located in the exchange market and when converted into the zloty will finance the budget deficit, or increase the banking mar-

ket liquidity as a result of treasury bonds issuance. Due to the costs of sterilisation and the continued restrictive monetary policy the latter option is very unlikely. The NBP will have to face an appreciation pressure on the zloty throughout the second-half of 2000. This pressure is more psychological than real in nature since about US\$2 billion are equivalent to one and half-day turnover on the forex market.

**Table 14. Basic exchange rates, 1997–2001 (per zloty)**

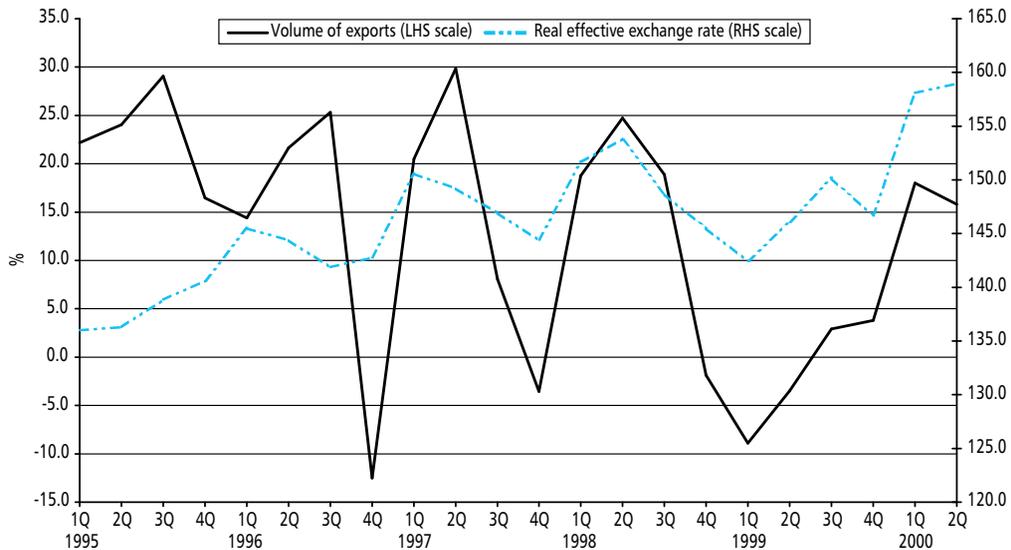
		US\$	DM	ECU/Euro	Real effective exchange rate
1997	1Q-4Q	3.28	1.89	3.71	148.8
1998	1Q-4Q	3.49	1.99	3.92	151.3
1999	1Q-4Q	3.97	2.16	4.23	147.2
<i>forecast</i>					
2000	1Q-4Q	4.31	2.11	4.12	
2001	1Q-4Q	4.31	2.30	4.49	
1997	1Q	3.01	1.82	3.53	150.6
	2Q	3.18	1.85	3.62	149.2
	3Q	3.44	1.91	3.75	146.9
	4Q	3.48	1.98	3.55	144.4
1998	1Q	3.51	1.93	3.82	151.7
	2Q	3.44	1.92	3.79	153.8
	3Q	3.55	2.02	3.98	150.2
	4Q	3.48	2.09	4.11	147.4
1999	1Q	3.76	2.15	4.22	144.5
	2Q	3.96	2.14	4.19	147.4
	3Q	3.97	2.13	4.17	150.1
	4Q	4.18	2.22	4.34	146.7
2000	1Q	4.11	2.08	4.07	158.1
	2Q	4.38	2.09	4.08	159.0
<i>forecast</i>					
2000	3Q	4.40	2.10	4.10	
	4Q	4.36	2.17	4.25	
2001	1Q	4.35	2.20	4.30	
	2Q	4.30	2.30	4.50	
	3Q	4.28	2.32	4.54	
	4Q	4.30	2.36	4.62	

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

Notes: 1. Average exchange rates.

2. Real effective exchange rate, 1990 average = 100.

**Figure 12. The volume of exports and real effective exchange rate, 1995–2000 (% change)**



Source: CSO and JP Morgan.

Note: Real effective exchange rate (right-hand scale), 1990 average = 100.

## Foreign trade

- Slightly weaker import growth
- Improvement in exports
- Decline in the terms of trade
- Continued high export growth until 2001

In 2Q00, according to preliminary NBP data, Polish imports amounted to US\$9.9 billion, roughly US\$0.2 billion higher yoy, and US\$0.2 billion lower compared with 1Q00.

According to the revised GUS estimates for 1Q00, the volume of imports increased to 16.5%. This relatively high result may partly be accounted for by the low base effect, since the volume of imports fell 2.3% in 1Q99. We estimate that growth of the volume of imports fell marginally to 13.6% in 2Q00. The relatively slower growth of imports in the first-half of 2000, compared with the period of 1995–1998, stemmed from restrictive economic policy. Due to high real interest rates and budgetary tightening, the increase in investment, and private and public

consumption was small. In 1Q00, the volume of imported investment goods rose as little 1.3% whereas that of consumer as well as raw materials and intermediate goods by 14.7%.

We expect import growth in the second-half of 2000 to be similar to that in the first-half. On the one hand, the increase in imports will be slow down by lower household consumption growth. On the other hand, faster investment growth will provide a boost to imports. 2001 is likely to witness larger growth of import volumes due to the predicted faster growth of both household consumption and fixed investment.

The data for the first-half of 2000 indicates a significant increase in export growth. In 2Q00, according to the NBP, exports amounted to US\$6.9 billion, which is an improvement both on 2Q99 – by more than US\$0.6 billion – and on 1Q00 – by US\$0.5 billion. After having the results of 1Q00 revised, the volume of exports has been found to increase 24.7% yoy. As in imports, this result may be partly accounted for by the low base effect, since in 1Q99 the volume of exports fell 7.6%. The upswing in exports is primarily a result of faster economic growth in the EU –

Poland's main trading partner. We estimate that in 2Q00 the growth in export volumes was roughly 22%.

In examining the January-May 2000 data, no significant changes in the geographical and commodity structure of the Polish exports compared with the same period of 1999 have been found.

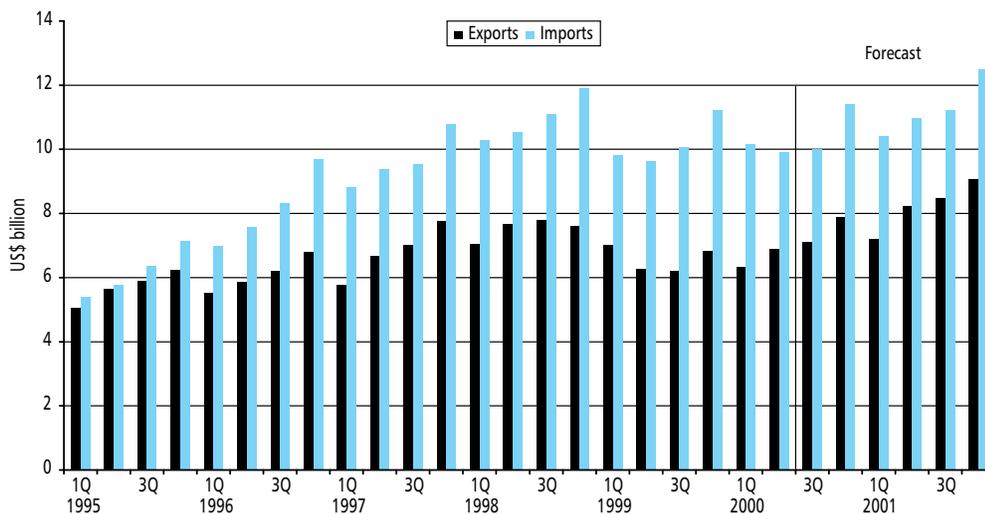
In this report we are more optimistic than in the previous issue of PEO about the prospective improvement in Polish exports. In our opinion, a faster-than-expected economic recovery in the EU – mainly in Germany and Italy – as well as the strengthening of the euro will contribute to higher volume of exports in the second-half of 2000 and at the beginning of 2001. Furthermore, improved economic performance in Russia and Ukraine (included rise in real households' income) will lead to higher imports of Polish-made products. We are still of the opinion that the export boom is primarily dependent on the process of restructuring and modernising Poland's manufacturing sector and, consequently, on the change in the commodity structure of output.

In 1Q00, a deterioration in the terms of trade was observed, with its index down to 94.8. This was partly a result of high world crude oil prices affecting import prices.

This effect was partially offset by the strong zloty. Moreover, the real appreciation of the domestic currency against the currencies of Poland's main trading partners kept in check, to some extent, the zloty-denominated export prices since domestic producers have to reduce prices in zloty terms in order to maintain prices in dollar terms at a constant level. In view of a similar situation in 2Q00, characterised by continued high oil prices and the strong zloty, a similar value of the terms of trade can be expected in 2Q00.

Since March 1999, exports based on customs data published by the CSO were higher than those reported on the basis of payments by the NBP. In the years 1997–1998, this trend was generally opposite. What should be noted is that the difference between these two figures seems to be widening. In our opinion, this is due to the fact that an ever larger number of export transactions have been made outside the Polish banking sector and thus they are not included in the NBP data. Such transactions are mostly encountered in large foreign-controlled firms which can settle their export payments via internal transactions with foreign parent-companies. As for imports, a similar analysis cannot be made since the GUS data are provided in terms of fob (free on board), whereas the NBP data are given in terms of cif (cost, insurance, freight).

**Figure 13. Exports and imports, 1995–2001 (US\$ billion)**



Source: NBP and CASE.

Note: CASE forecast starting from 3Q00.

**Table 15. Exports, imports and net exports, 1997–2001 (US\$ billion)**

	Exports			Imports			Net exports		
	NBP	CSO	National accounts	NBP	CSO	National accounts	NBP	CSO	National accounts
1997 1Q-4Q	27.23	25.75	36.72	38.55	42.31	42.80	-11.32	-16.56	-6.07
1998 1Q-4Q	30.12	28.23	44.62	43.84	47.05	52.92	-13.72	-18.83	-8.30
1999 1Q-4Q	26.35	27.41	40.75	40.73	45.75	50.84	-14.38	-18.34	-10.08
<i>forecast</i>									
2000 1Q-4Q	28.20	29.80	44.63	41.45	48.55	54.18	-13.25	-18.75	-9.55
2001 1Q-4Q	32.97	34.82	52.45	45.09	55.83	62.81	-12.12	-21.02	-10.36
1997 1Q	5.77	6.12	9.33	8.84	9.77	9.95	-3.07	-3.65	-0.62
2Q	6.69	6.31	9.06	9.38	10.56	10.51	-2.69	-4.24	-1.45
3Q	7.02	6.21	8.85	9.55	10.15	10.19	-2.53	-3.94	-1.34
4Q	7.75	7.11	9.48	10.78	11.84	12.15	-3.03	-4.73	-2.67
1998 1Q	7.06	7.02	10.82	10.30	11.09	12.59	-3.24	-4.06	-1.77
2Q	7.67	7.04	11.31	10.55	11.70	13.16	-2.88	-4.65	-1.85
3Q	7.80	6.89	11.13	11.10	12.00	13.09	-3.30	-5.10	-1.96
4Q	7.60	7.27	11.35	11.90	12.28	14.09	-4.31	-5.00	-2.73
1999 1Q	7.01	6.57	9.79	9.83	10.37	12.32	-2.82	-3.80	-2.53
2Q	6.28	6.56	9.56	9.64	10.97	12.42	-3.36	-4.41	-2.86
3Q	6.21	6.75	10.48	10.10	11.49	12.63	-3.89	-4.74	-2.15
4Q	6.84	7.53	10.92	11.15	12.92	13.47	-4.31	-5.39	-2.54
2000 1Q	6.32	6.98	10.70	10.17	11.45	13.79	-3.85	-4.47	-3.09
2Q	6.88	6.88	10.34	9.88	11.47	12.97	-3.00	-4.58	-2.64
<i>forecast</i>									
2000 3Q	7.10	7.30	11.29	10.00	12.00	12.94	-2.90	-4.71	-1.65
4Q	7.90	8.64	12.30	11.40	13.63	14.48	-3.50	-4.99	-2.18
2001 1Q	7.21	7.95	12.11	10.41	12.45	14.88	-3.20	-4.50	-2.77
2Q	8.21	8.21	12.37	10.96	13.47	15.22	-2.75	-5.26	-2.85
3Q	8.48	8.71	13.55	11.22	14.25	15.54	-2.74	-5.54	-1.99
4Q	9.08	9.93	14.42	12.50	15.66	17.18	-3.42	-5.73	-2.76

Source: NBP, CSO, estimates for CSO data (e) and forecasts – CASE.

Note: National accounts according to the CSO definition (merchandise trade plus the value of transport, construction and communication services, net processing turnover, printing services and others).

## Balance of payments

- Significant improvement in the current account balance
- Continued low levels of unclassified current transactions
- Relatively low inflows of FDI
- Fall in the net inflows of portfolio capital

In 2Q00, the current account deficit improved considerably, amounting to US\$2.1 billion (about 5.5% of GDP) – up US\$0.6 billion yoy and more than US\$1.4 billion qoq. In

May, the current account deficit fell to the lowest level for more than 18 months.

In 2Q00, all the components of the current account balance improved. In particular, the lower current account deficit is a result of a lower merchandise trade deficit which amounted to US\$3.0 billion – the best reading for over a year.

In 2Q00, the deficit in trade in services also improved. It decreased by US\$108 million qoq and amounted to US\$439 million.

The surplus of unclassified current transactions increased in 2Q00, amounting to US\$1.06 billion. While still lower than the readings in the period 1997–1998, the sur-

Table 16. Components of the balance payments, 1997–2001 (US\$ billion)

	Balance on						Net direct investment	Net portfolio investment	Net credits beyond 1 year	Change in official asset reserves	Official asset reserves
	current account		merchandise trade	unclassified current transactions	capital and financial account	% of GDP					
1997	1Q-4Q	-4.31	-2.99	-11.32	6.01	5.41	3.04	2.10	0.42	2.64	20.67
1998	1Q-4Q	-6.86	-4.33	-13.72	6.00	11.67	4.97	1.33	1.67	7.61	28.28
1999	1Q-4Q	-11.57	-7.44	-14.38	3.64	8.25	6.35	1.45	2.06	-0.96	27.31
<i>forecast</i>											
2000	1Q-4Q	-11.44	-6.98	-13.25	4.04	10.85	7.56	2.22	1.85	0.47	27.79
2001	1Q-4Q	-11.70	-6.29	-12.12	4.35	13.20	7.80	1.10	2.40	1.50	29.29
1997	1Q	-1.53	-4.45	-3.07	1.12	1.28	0.46	0.41	0.05	-0.06	17.98
	2Q	-1.19	-3.36	-2.69	1.47	2.36	0.78	1.07	0.17	1.71	19.69
	3Q	-0.91	-2.63	-2.53	1.62	0.80	0.78	0.64	-0.06	0.37	20.05
	4Q	-0.67	-1.72	-3.03	1.80	0.97	1.03	-0.02	0.26	0.62	20.67
1998	1Q	-2.00	-5.67	-3.24	1.16	3.24	1.00	0.21	0.23	3.73	24.40
	2Q	-0.67	-1.71	-2.88	1.72	2.19	1.26	0.36	0.42	2.72	27.12
	3Q	-1.22	-3.08	-3.30	1.87	3.54	1.68	-0.86	0.08	0.98	28.10
	4Q	-2.98	-6.62	-4.31	1.25	2.70	1.02	1.61	0.94	0.17	28.28
1999	1Q	-2.24	-6.26	-2.82	0.80	1.85	1.13	-0.29	-0.08	0.33	28.61
	2Q	-2.76	-7.41	-3.36	0.79	1.29	1.04	0.03	0.56	-1.23	27.38
	3Q	-3.01	-7.67	-3.89	1.15	2.06	2.47	-0.09	0.99	0.51	27.89
	4Q	-3.56	-8.30	-4.31	0.90	3.05	1.71	1.80	0.59	-0.58	27.31
2000	1Q	-3.52	-9.39	-3.85	0.73	2.08	1.55	2.44	0.03	-1.07	26.24
	2Qe	-2.12	-5.48	-3.00	1.06	1.17	1.10	0.28	0.05	-0.25	25.99
<i>forecast</i>											
	3Q	-2.40	-5.89	-2.90	1.25	3.60	2.90	-0.20	0.70	1.20	27.19
	4Q	-3.40	-7.26	-3.50	1.00	4.00	2.00	-0.30	1.00	0.60	27.79
2001	1Q	-3.20	-7.92	-3.20	0.80	3.00	1.60	-0.10	0.80	-0.20	27.59
	2Q	-2.00	-4.46	-2.75	1.00	2.80	1.70	0.20	0.70	0.80	28.39
	3Q	-2.70	-5.69	-2.74	1.40	3.40	2.00	0.40	0.50	0.70	29.09
	4Q	-3.80	-7.10	-3.42	1.15	4.00	2.50	0.60	0.40	0.20	29.29

Source: Data and estimates (e) – NBP; forecasts – CASE.

Note: Data on official asset reserves prior to 1998 comprises the old definition of official gross currency reserves.

plus increased US\$330 million on 1Q00 and US\$274 million on 2Q99. In the second-half of 2000, as in 2001, the unclassified current transactions are not expected to increase significantly, hovering around US\$1.1 billion.

On the capital account side, lower inflows of net FDI should be noted. The FDI balance in 2Q00 amounted to US\$1.1 billion and was at a level similar to that in 2Q99, but at a much lower level than in the previous three quarters. The portfolio investment balance was positive, albeit very low and totalled to US\$276 million. Thus, after two quarters (4Q99 and 1Q00) of significant portfolio investment inflows, they slowed down. As a result, the ratio of net FDI to portfolio investment inflows has risen from 0.62 to almost 4.

In the second-half of 2000, we anticipate increased inflows of FDI on the back of wide-scale privatisation (primarily of TPSA) amounting to US\$2.9 and US\$2.0 billion in 3Q00 and 4Q00 respectively. On the other hand, portfolio capital outflows are expected because of lower interest rates in Poland and the potential hikes in interest rates in the US and the EU.

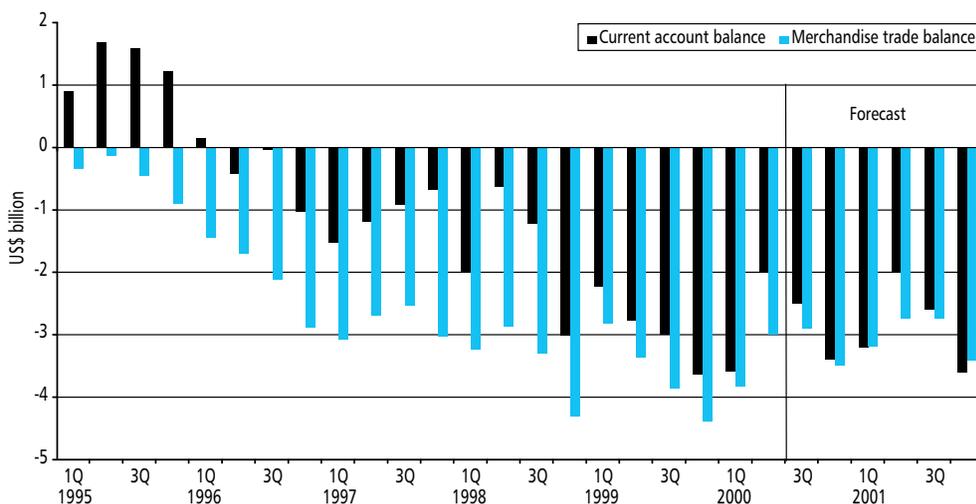
By end-2Q00, the NBP official reserves assets stood at US\$25.99 which constituted a slight deterioration qoq by

more than US\$0.25 billion. Nevertheless, the reserves are still sufficient to cover 7.5-month average imports. It should be noted, however, that in May the NBP introduced a new category of official reserve assets to replace the category of official gross reserves which, by definition, included net repo transactions (the difference between active and passive repo transactions). On the other hand, official reserve assets include only active repo transactions. By end-2000, the reserve assets are predicted to increase to US\$27.8 billion, equivalent to 8.3-month import revenues.

## Public finances

- Underestimation of spending on education and unemployment
- Financial problems besetting the Regional Health Funds
- Improvement in ZUS's financial standing
- Fiscal tightening in 2001
- Restrictive fiscal policy in 2000 partly as a result of the transfer of expenditures to 2001
- Delay of the reform of public finances

**Figure 14. Merchandise trade balance and current account balance, 1995–2001 (US\$ billion)**



Source: NBP and CASE.

Note: CASE forecast starting from 3Q00.

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## **Government budget in 2000**

By end-June 2000, the budget revenues were fulfilled in 45.6% which corresponds almost exactly to revenues from indirect taxes (44.8%) and from corporate income tax (45.3%). Revenues from personal income tax are much slower incoming (37.2%) due to very high taxes overpaid and returned to taxpayers in 1999. By June, 54.9% of the projected revenues from customs duties were fulfilled, while in June alone the NBP made a single transfer of its revenues of 2.2 billion zlotys (i.e. 90.4% of the annual budget plan) to the government budget.

The fulfilment of the government budget spending is higher, amounting to 48% of the budget draft for 2000. In addition to the subsidies earmarked for local government (accumulated traditionally in the first quarter) amounting to 58.2% of those planned, the above expenditures depended heavily on the costs of servicing the domestic debt fulfilled 54%. While the subsidies granted to the Social Insurance Fund in 2000 constituted 44.1% of those planned (significantly lower than last year), what seems to be of importance is that the Labour Fund lacked liquid assets although the ratio of the money transferred stood at 66.3%. As a matter of fact, the above shortfalls will not have any considerable impact on the restrictive budget as a whole, since the projected subsidy for the Labour Fund constitutes only 0.5% of the overall sum of expenditures. What may threaten the implementation of the planned deficit is an error that had been committed in the calculation of the total sum of the target subsidy earmarked for local governments for teachers' pay rises. The resulting additional government budget spending will probably amount to 800 million zlotys (i.e. 0.1% GDP), part of which (about 150 million zlotys) will be provided by the Ministry of Education from its reserves, but the remaining part is very likely to increase budget spending this year or, possibly, in 2001.

All this considered, between January and June, the budget deficit amounted to 10.8 billion zlotys, that is about 70% of the total annual budget deficit of 15.4 billion zlotys planned for 2000. In addition, during the first five months the budget paid 1.6 billion zlotys, i.e. 47.5% of the compensations for pensioners and government sector employees projected for the whole year. These compensations are treated as a reduction in liabilities rather than current expenditure, despite they stimulate domestic demand.

The government budget has so far been financed primarily from the resources transferred from previous years (4.4 billion zlotys, i.e. 95.6% of those planned) and from bond issuance to the amount of almost 6 billion zlotys (i.e. 64% of all such resources planned for the whole year). On the other hand, since the beginning of 2000, the deposit in the NBP has diminished from 9 billion zlotys to 1.1 billion. The foreign debt has also been increased by 1.1 billion zlotys.

By May-2000, proceeds from privatisation were as low as 4.3 billion zlotys (i.e. 21.2% planned for the whole year) as a result of the timing of large transactions for the second-half of 2000. Fears of slower privatisation processes may be linked to the AWS-UW coalition's collapse and to the programme of enfranchisement which may cause trouble in the capital markets. The Act on enfranchisement passed in Parliament will not have immediate consequences for the government budget. It seems, however, that this Act will be vetoed by the President and its legal status may be questioned by the Constitutional Tribunal.

## **Government draft budget for 2000**

The UW decision to quit the government coalition and the replacement of Mr Balcerowicz by Mr Bauc have made fuss over the work on the draft budget for 2001. More restrictive budgetary policies in 2001 seem to be more difficult to implement because of the rising share of the fixed and quasi-fixed expenditure, on the one hand, and because of the weaker position of the newly appointed Minister of Finance. Moreover, the government does not enjoy a majority in Parliament which is necessary to make further cuts in expenditure, whereas decisions will be made against the background of presidential election and next year's parliamentary election.

This is why fiscal policy in 2001 is not likely to be sufficiently restrictive. The Ministry of Finance assumes only a 0.4% rise in real wages in the government sector, pensions and disability allowances, and is planning to reduce the so-called economic deficit (negative government savings) by 0.5 percentage point. It should be noted that even if the budget draft is not adopted by the Parliament the budget will be implemented on the basis of government's draft.

To ensure that on its entry into the EU, Poland enjoys financial and economic stability, a budget surplus must be

accumulated within the next two or three years. The budget draft for 2001 reassigns the necessary adoptive measures, especially reduction in the quasi-fixed spending, to the years following the upcoming parliamentary elections. However, a pursuit of a more restrictive fiscal policy as early as next year is needed due to the risk of a currency crisis.

An important item in the 2001 budget involves compensations due to higher-than-expected inflation in 2000. Should inflation overshoot the projected 5.7% by 4 percentage points, the resulting expenditure may be as high

as 3 billion zlotys (i.e. 0.4% of GDP). Thus, the highly restrictive economic policy in 2000 stemmed, in a certain measure, from the reduction in spending passed on to 2001. Moreover, the government is planning to include next year's compensations in the programme of eliminating its liabilities rather than in budget expenditure. In this way, the amount of the deficit may be arbitrarily altered by artificially reducing spending each year. This kind of operation, like the subsidies granted from the government budget to Regional Health Funds and the ZUS, blurs the transparency in public finances. Such loans are not

**Table 17. Selected items of the government budget, 1997–2001 (US\$ billion)**

		Revenues		Expenditures	Central government balance	
		total	of which tax revenues		zloty billion	% of GDP
1997	1Q-4Q	119.8	98.5	125.7	-5.9	-1.2
1998	1Q-4Q	126.5	113.8	139.8	-13.3	-2.4
1999	1Q-4Q	125.9	112.7	138.5	-12.6	-2.0
<i>forecast</i>						
2000	1Q-4Q	143.6	126.9	156.0	-12.4	-1.8
2001	1Q-4Q	161.2	143.1	169.4	-8.2	-1.0
1997	1Q	23.5	20.2	27.4	-3.9	-3.8
	2Q	27.1	21.1	30.6	-3.5	-3.1
	3Q	32.8	26.4	31.4	1.4	1.1
	4Q	36.4	30.7	36.3	0.1	0.1
1998	1Q	28.7	25.6	32.3	-3.5	-2.9
	2Q	29.3	26.3	35.1	-5.8	-4.4
	3Q	33.1	29.9	34.1	-1.1	-0.8
	4Q	35.5	32.1	38.3	-2.8	-1.8
1999	1Q	27.7	24.8	36.5	-8.7	-6.5
	2Q	28.8	25.2	31.4	-2.6	-1.8
	3Q	32.4	29.5	32.4	0.0	0.0
	4Q	36.9	33.1	38.2	-1.3	-0.7
2000	1Q	30.9	27.6	37.9	-6.9	-4.5
	2Q	33.2	27.5	37.1	-3.8	-2.3
<i>forecast</i>						
2000	3Q	37.5	34.0	37.3	0.3	0.2
	4Q	41.9	37.8	43.8	-1.9	-0.9
2001	1Q	34.6	30.9	41.5	-6.9	-3.9
	2Q	38.8	32.6	42.5	-3.7	-1.9
	3Q	41.9	38.2	39.3	2.6	1.3
	4Q	45.9	41.4	46.1	-0.2	-0.1

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

**Table 18. Public sector balance, 1999–2001**

	1999	2000 Budget Act	2001 draft by Mr Balcerowicz	2001 Budget draft
<b>Government budget balance</b>	<b>-2.0</b>	<b>-2.2</b>		<b>-1.4</b>
Funds balance	-1.0	-0.3		-0.3
Regional Health Funds balance	-0.2	0.0		0.0
Local government balance	-0.2	-0.3		0.0
<b>General government budget balance</b>	<b>-3.5</b>	<b>-2.8</b>	<b>-1.5</b>	<b>-1.7</b>
Compensations	-	-0.5	-0.3	-0.3
II pillar in the social insurance system	0.5	1.2	1.3	1.3
Expenditures financed by revenues from UMTS licences				-0.9
<b>Total effect on domestic savings (i.e. economic deficit)</b>	<b>-3.0</b>	<b>-2.1</b>	<b>-0.5</b>	<b>-1.6</b>

Source: Ministry of Finance.

likely to be ever paid off, and that is why they should be clearly indicated in the budget's balance sheet.

The problem that has led to vigorous controversies is that of earmarking the projected revenues from the sale of licenses for a new generation of mobile telephones (UMTS). The projected sum of 7 billion zlotys (i.e. 0.9% of GDP), following the practice adopted in the past, has been included in the government's income. Economically speaking, this sum constitutes revenues resulting from the sale of state property and financial flows involved (revenue from providing services). That is why, these revenues, like proceeds from privatisation, should be treated as a way of financing the budget deficit. Disregarding the way of accounting, expenditures financed by revenues from sale of the licences will increase the economic deficit.

### **Regional Health Funds**

In accordance with our earlier predictions, pressures to raise the contribution from the current level of 7.5% – deducted from the personal income tax – paid to the Regional Health Funds via ZUS have not, as yet, been put into practice. Potentially such an increase would involve constraints imposed on other spending in 2001 since one percentage point rise in the contribution is equivalent to about 4 billion zlotys, i.e. 0.5% of GDP less in government revenues in 2001. The demands for a higher contribution are very likely to be repeated emphatically again and again

since streamlining expenditure in the health care sector is a slow process which takes a long time, whereas the 2001 budget draft provides, like that for 2000, for Regional Health Funds to achieve a financial balance, which is less than probable. Only in 1Q00 the Funds spent for reimbursements of drugs more by 20% than it was assumed. This issue may cause a deficit of 0.7 billion zlotys (0.1% of GDP) by year-end.

### **Social Insurance Board (ZUS)**

The financial standing of ZUS in the first few months of 2000 has improved, as evidenced by a 12% drop in its total debts from 2.4 billion zlotys to 2.1 billion zlotys in 1Q00. This improvement has been partially due to the financial outcome of the higher-than-expected inflation. With the revenues from contributions on the rise, the additional revaluation of benefits will be paid as late as 2001. The number of Open Pension Funds' participants may also turn out to be overestimated. As a result, the Social Insurance Fund will be able to transfer 1.5 billion zlotys less than planned in the budget. Another factor that is favourable for ZUS is that the situation in the mining industry, ZUS's main debtor, has improved and the sector has recently been able to pay 50% of outstanding contributions. In the event that the act on restructuring Polish Railways (PKP) is passed, some contributions will also be coming from this source, especially after 2001. The problem of outstanding contributions may be resolved by the programme of selling back the

ZUS liabilities. It should, however, be pointed out that any improvement in the financial standing of ZUS will be, in the first place, a result of a corrective action and more energetic measures taken in the collection of contributions.

In light of the above facts, ZUS does not seem to be facing a liquidity crisis at present, as evidenced by the pace at which contributions are being paid to Regional Health Funds and Open Pension Funds. In the first-half of 2000, Open Pension Funds received contributions to the amount of 3.7 billion zlotys compared with 2.3 billion zlotys throughout 1999.

## **Taxes**

While a headway in the work on corporate income tax is expected, the likelihood of a tax reform as proposed by Mr Balcerowicz, the former Minister of Finance, is almost nil. Under the present circumstances, any attempt at increasing VAT on some products (in line with the EU standards), assumed in the budget draft and estimated at 1.5 billion zloty revenues, will also be difficult. In this context, the fact that a 3% VAT in agriculture has been agreed on by the Parliament is an optimistic signal. The budget is to receive 1.3 billion zlotys from this source.

## **Local governments**

The threat to the sector of public finances posed by the excessive debts incurred by local governments has not, as yet, been substantiated. By end-1Q00, the total debts amounted to 6.2 billion zlotys, that is as little as 0.6% up on end-1999. The total deficit in local governments' finances throughout 2000 is very likely not to exceed the 0.3% GDP mark. What is worrying in respect of public finances are only occasional postulates by local governments that there should be a possibility for them to take out loans both in domestic and foreign banks (so far only in domestic banks is allowed) and to eliminate safety restrictions, provided in the act on public finances, on increasing indebtedness.

What will be of great importance for local budgets is the draft act on local government revenues to be introduced in Parliament. The set of amendments recommended in this act is expected to have a neutral effect on total revenues, but to increase the share of own revenues in local governments. In this way, additional motivation will be cre-

ated for local governments to develop regional economic activity and introduce charges and special tariffs on public services in order to be able to self-finance such services. However, the proposed act has aroused a number of controversies since local governments fear that their revenues will be reduced and uncertain. As a consequence, the very possibility of developing long-term investment programmes will be limited. A most likely result may be that the act currently in force will be extended over to the next year, and the new proposals will not be able to pass through the government and/or Parliament.

## **Monetary policy**

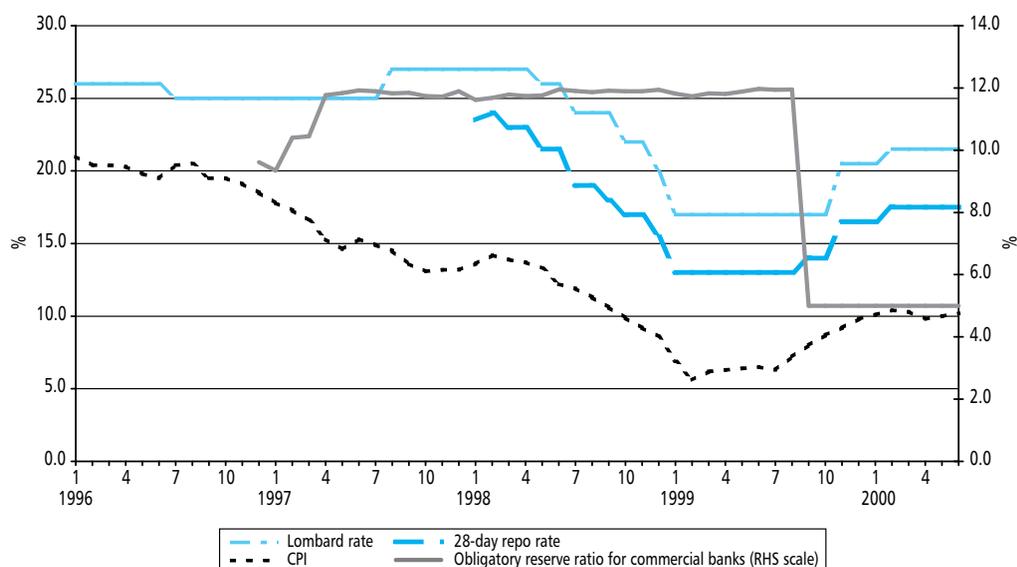
- **Maintenance of the restrictive monetary policy in 2Q00**
- **Continued curbing of overliquidity in the banking sector**

The highly restrictive monetary policy was sustained in 2Q00. Minimum interest rates of zloty-denominated credits in the main commercial banks increased 0.8 percentage points qoq in May. No change, however, was registered in commercial bank rates. The annual real interest rate remained at about 7.5%. The money multiplier and the velocity of monetary aggregates were also at the levels registered in the previous quarters.

## **Reserve money and monetary policy instruments**

The central bank has been successful in its policy of reducing the reserve money supply, which in June 2000 fell 1.8% relative to end-1999. The contribution of net foreign assets in creating reserve money was also on the decrease on the back of small proceeds from privatisation and lack of significant movements of short-term capital. Official reserve assets (according to the newly adopted NBP terminology replacing official gross assets by exclusion of passive repo transactions) increased in May and June by more than US\$200 million, amounting to almost US\$26 billion. The fall in reserves in April (by US\$740 million) stemmed from dampened foreign portfolio investment inflows to Poland, and from the lower capital account balance coupled with the continued current account deficit and the weakened euro against the dollar.

**Figure 15. Monetary policy instruments, 1996–2000 (%)**



Source: NBP and CASE.

**Table 19. Components of the reserve money supply, 1997–2000 (cumulative % change)**

	Reserve money (RM)	Net foreign assets (NFA)	Net domestic assets (NDA)	Net claims on government (NCG)	Claims on deposit money banks (CDMB)	Other items net (OIN)
1997 1Q	10.12	5.82	12.05	14.22	-2.17	-7.75
2Q	20.44	30.20	5.66	26.67	-21.01	-15.43
3Q	31.65	43.47	11.55	25.77	-14.21	-23.38
4Q	23.50	57.60	54.16	17.14	37.01	-88.27
1998 1Q	4.82	25.37	-7.00	-5.31	-1.69	-13.55
2Q	17.54	36.32	-10.22	-8.74	-1.48	-8.56
3Q	17.50	48.85	-4.39	-6.35	1.96	-26.94
4Q	26.78	63.44	-0.90	2.95	-3.85	-35.75
1999 1Q	0.44	-0.78	-0.57	-0.50	-0.07	1.79
2Q	10.20	14.07	1.54	2.10	-0.57	-5.42
3Q	-13.94	6.15	-3.65	-2.79	-0.87	-16.45
4Q	-1.57	18.50	-4.75	-3.71	-1.04	-15.34
2000 1Q	-14.44	1.03	-1.91	-1.57	-0.34	-13.56
2Q	-1.83	-3.72	8.15	9.82	-1.67	-6.27

Source: The NBP Bulletin and authors' calculations.

- Notes: 1. The shares of components of reserve money are calculated using the following formula:  $\Delta RM/RM_{-1} = \Delta NFA/RM_{-1} + \Delta NCG/RM_{-1} + \Delta CDMB/RM_{-1} + \Delta OIN/RM_{-1}$ , cumulative in the current year. Net foreign assets were re-estimated (valuation adjustment) using the average exchange rate of the currency basket for a given period to account for fluctuations in the exchange rate of the zloty.
2. Changes in comparison to PEO 1/99 stem from the introduction of the currency basket into calculations instead of using USD/PLN exchange rate.

The reserves are reported in dollars and the contribution of euro assets in reserves is estimated at about 70%. Significant growth in domestic credits resulted from a constant increase in the net budget sector debts throughout all the months of 2Q00, reaching a level of almost 17 billion zlotys.

As a result of matching foreign currency proceeds from privatisation to foreign debt maturity (see section on the exchange rate) in 2000, the sterilisation account controlled by monetary authorities may be cleaned out. As an effect, the NBP will not have to increase the range of passive instruments in its account when balancing off the sterilisation account. The central bank will continue to eliminate the operational overliquidity in the banking sector and convert passive instruments into active ones. Complete elimination of the operational overliquidity requires achieving the balance of open market transactions of 14 billion zlotys (now about 20 billion zlotys) that would be changed into converted bonds with the same

market value (their nominal value is estimated at more than 16.4 billion zlotys).

The situation in the treasury bonds market has reflected the volatile exchange rate of the zloty throughout 2Q00. The treasury bond yield in the secondary market has been on the rise with along the depreciation of the zloty against the dollar. The foreign investors balance in the primary market has continued to be negative since March, whereas that in the secondary market, except for capital outflow in April, has remained positive. A similar trend was observed in the primary bond market, where foreign investors increased their share in total purchases up to 50% of all bonds sold in March. After the 19% fall in April, their share rose again to more than 26%. The 5-year fixed-interest and 2-year zero-coupon bonds enjoyed most active demand, their average yield having increased from 13.1% to 14.6% and from 15.26% to 17.6% between January and June. In the period of rising demand for treasury bonds, that is March and May, 10-year bonds were issued, their yield having increased from 10.7% only to 11.9%.

**Table 20. Components of broad money, 1997–2000 (cumulative %)**

		Broad money (M2)	Net foreign assets (NFA)	Net domestic assets (NDA)	Net claims on government (NCG)	Claims on private sector (CPS)	Other items net (OIN)
1997	1Q	5.04	-0.06	8.20	2.29	5.91	-3.10
	2Q	12.59	6.02	12.89	2.17	10.72	-6.33
	3Q	20.38	10.91	18.10	1.66	16.43	-8.63
	4Q	30.89	15.20	27.18	6.28	20.90	-11.49
1998	1Q	2.25	3.76	0.85	-2.85	3.70	-2.36
	2Q	8.97	4.79	5.25	-2.60	7.86	-1.08
	3Q	15.35	4.33	13.76	0.86	12.90	-2.74
	4Q	25.12	9.72	20.60	3.42	17.18	-5.20
1999	1Q	4.30	-0.53	5.74	1.18	4.55	-0.91
	2Q	7.01	2.35	9.59	1.77	7.82	-4.93
	3Q	11.42	2.45	13.19	0.14	13.06	-4.23
	4Q	19.36	6.43	18.45	1.51	16.94	-5.53
2000	1Q	-0.58	1.94	-0.54	-3.62	3.08	-1.98
	2Q	8.05	0.86	8.02	-2.32	10.34	-0.82

Source: The NBP Bulletin and authors' calculations.

Notes: 1. The share of broad money components are calculated using the following formula:  $\Delta M2/M2_{-1} = \Delta NFA/M2_{-1} + \Delta NCG/M2_{-1} + \Delta CDMB/M2_{-1} + \Delta OIN/M2_{-1}$ , cumulative in the current year. Net foreign assets were re-estimated (valuation adjustment) using the average exchange rate of the currency basket for a give period to account for fluctuations of the exchange rate of the zloty.

2. Changes in comparison to PEO 1/99 stem from the introduction of the currency basket into calculations instead of using USD/PLN exchange rate.

**Table 21. Calendar of the most important events in the monetary policy of the NBP over the period 4Q99–2Q00**

Source	Date of the resolution	Events
J. NBP No. 20	17 November, 1999	NBP rediscount rate 19% Lombard rate 20.5% Refinancing rate 20.5/21.5% 28-day repo rate at least 16.5%
J. NBP No. 21	19 November, 1999	Interest rate on NBP current deposits 6.15%
J. NBP No. 26	22 December, 1999	Amendment to the law on reserves due to bank insurance, in force on 30 March, 2000
J NBP No. 1	23 February 2000	NBP rediscount rate 20% Lombard rate 21.5% Refinancing rate 21.5/22.5% 28-day repo rate at least 17.5%
J NBP No. 2	25 February 2000	Interest rate on NBP current deposits 6,45%
J NBP No. 6 and Monitor Polski No. 11/231 and 232	11 April 2000	Abolition of crawling peg of the zloty and the permissible exchange rate fluctuation band

Source: Official Journal of the NBP, Monitor Polski - various issues. Authors' compilation.

### **The banking system and broad money**

In 2Q00, growth of broad money supply increased more than 8% relative to end-1999 and almost 6% mom in June. This was a result of rapid growth of the credits for the private sector, including 10.2 billion zlotys for individuals in June of which 9 billion zlotys in the third decade incurred for the purchase of PKN Orlen shares in public offer. Since the portion earmarked for private investors was 748 million zlotys, and orders amounted to 8.8 billion zlotys, the difference was transferred back to the banks in the first decade of July. A similar situation occurred when the first portion of the PKN Orlen share were issued, and individual investors took on credits to the amount of more than 7 million zlotys. On the debit side of the balance sheet the above sum was reflected in higher cash and credit deposits by brokerage houses in their own accounts. By subtracting these difference we have found that the rise in credits for

individuals and that of brokerage houses' deposits remained at the level of about 1 billion zlotys, resulting in an insignificant growth in domestic assets. There are no signs that credits granted to companies have increased, their monthly gain being 1–2%. The restrictive monetary policy has continued to strengthen the negative share of the government sector in money supply.

Until mid-2000 (except for June), zloty-denominated deposits of individuals had risen faster than credits – a reverse trend than in previous years. Foreign currency accounts carried by companies have shown a certain distinctive feature in that, since end-1Q00, they have been converting their zloty-denominated assets into those denominated in foreign currencies, probably due to fears of fluctuations in the zloty exchange rate. The largest amounts of assets were converted in March and June, the periods of greatest disturbances in the currency market (see exchange rate).

# Currency crisis indicators

The recent wave of financial crises in the 1990s has led to a resumption of studies aimed at developing a universal set of indicators serving as early warning signals against crises. As yet, no such set has been successfully developed since no consensus has been reached on the theoretical fundamentals and practical problems concerning the availability and quality of data. In addition, each country – due to its specific problems – may be characterised by variables describing its economic stability which vary from country to country. What is worth mentioning is that all quantitative indicators used in warnings against crises are imperfect and do not provide a sufficient basis for a full assessment of financial and macroeconomic stability.

The main issue is how to determine when a currency crisis occurs. Generally speaking, changes in the exchange rate regime may result from an unsustainable exchange market pressure that ends up in a regime-shift by monetary authorities and signals a currency crisis. These changes can either curb the regime through abandoning external and/or internal convertibility of domestic currency and then pegging it, or else make the regime more flexible by floating the domestic currency. Being multiple and varied, the changes are relatively easy to identify and need to be announced as an acting law (all members of the IMF are obliged to report changes in exchange rate regimes, see "Exchange Rate Arrangements" by IMF published on a yearly basis). However, a currency crisis cannot be identified either only by changes in the exchange rate regime or by changes in the nominal exchange rate for two reasons. First, a regime change may not necessarily reflect problems of maintaining the current level of exchange rate. It can

result from economic developments and a shift to a less restrictive regime or from a political decision to join the monetary union that tightens domestic currency volatility. Second, not all speculative attacks are successful. The excess demand for foreign exchange (in return for domestic currency) can be met through several operational channels controlled by monetary authorities such as exchange rate channel, interest rate channel, and reserve channel.

Eichengreen, Rose, and Wyplosz [1994] (*Contagious Currency Crisis, National Bureau of Economic Research (NBER) Working Paper 5681, July 1996*) have thus proposed an index of exchange market pressure (EMP) to combine all three channels of purely speculative pressures. A weighted average of exchange rate changes, reserve changes, and interest rate changes is measured relative to a foreign currency.

$$EMP_{i,t} = [(\alpha\% \Delta e_{i,t}) + (\beta \Delta(i_{i,t} - i_{r,t})) - (\gamma(\% \Delta r_{i,t} - \% \Delta r_{r,t}))],$$

where:  $e_{i,t}$  denotes the price of a foreign currency in  $i$ 's currency at time  $t$ ;  $i_i$  and  $i_r$  denote the short-term interest rates differential with respect to a reference currency;  $r_i$  and  $r_r$  denote the percentage difference in the changes of ratios of international reserves to narrow money (M1); and  $\alpha$ ,  $\beta$ ,  $\gamma$  are weights. The crisis is defined as an extreme value of the EMP index that reaches some value of the standard deviation above the sample mean. Weighting the EMP index results from different volatility of the components, and weights, sample mean, and benchmark standard deviation is different for every country. The foreign currency (or basket of currencies) with the highest weight in effective exchange rate index

fulfils the role of a reference currency. Usually, the US dollar or the German mark (as in Eichengreen, Rose, and Wyplosz [1994]) have been used as reference currencies.

The operational channels controlled by monetary authorities are not fully separate, and in practice a combination of channels is usually adopted. Therefore, the EMP index covers all possible channels of interventions on the exchange market registering a currency crisis as extreme values of the index.

Below we present the CASE early warning crisis indicator. We hope that our indicator will be useful in assessing Poland's economic situation and the potential threat of a currency crisis. We would like to point out that the values provided by the indicator should be interpreted with caution, and should be based on other available data. This indicator is not an absolute and infallible tool used as a warning signal against crises. We are fully aware that the choice of variables and the system of weights, together with the system of rating, may be subject of criticism. However, all indicators of this kind may be criticised. To determine the indicator we have selected variables which

we think are most appropriate for Poland. In our selection we had to make a compromise between theoretical assumptions and the practical availability of data.

Our indicator does not provide an ex-post measure of the occurrence of a currency crisis (like EMP). Rather it points to trends favourable to a currency crisis. The value of the indicator for a given quarter should be related to the previous quarter. The indicator includes 10 macroeconomic and financial variables – each of which has the same weight. Changes in the magnitude and sign of variables have a certain score attributed to them (see Table 22). In four cases, critical levels have been determined, which, if exceeded, additional 10 scores are added (inflation, budget deficit, current account deficit and total foreign debt). The lower the value of the indicator, the lower the threat of a currency crisis. The indicator values range between 0 and 140.

The highest value of the CASE indicator of 71 was reached in 1Q00 (see Table 23). This was the result of a superimposition of negative trends of 7 variables. In the first place, the current account deficit (1.8% of GDP by end-1Q00) and the budget deficit (1.8% GDP) were given high

**Table 22. Composition of the CASE early warning crisis indicator**

Variables	Magnitude and sign of a change	Scores
1. GDP forecast for 2000 – change to the forecast of previous quarter	below –20%	10
	from –20% to %0	6
	no change	5
	from 0% to 20%	4
	above 20%	0
2. Actual unemployment rate (end-quarter) – yoy change	above 10%	10
	from 0% to 10%	6
	no change	5
	from –10% to 0%	4
	below –10%	0
3. CPI forecast (end-2000) – change to the forecast of previous quarter	above 5%	10
	from 0% to 5%	6
	no change	5
	from –5% to 0%	4
	below –5%	0
	if CPI above 15%	additional 10



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4. Government budget deficit forecast as % of GDP in 2000 – change to the forecast of previous quarter	
above 5%	10
from 0% to –5%	6
no change	5
from –5% to 0%	4
below –5%	0
if below –4% GDP	additional 10

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5. Forecast of the current account deficit as % of GDP in 2000 – change to the forecast of previous quarter	
above 5%	10
from 0% to 5%	6
no change	5
from –5% to 0%	4
below –5%	0
if below –8% GDP	additional 10

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6. Real effective exchange rate by JP Morgan – deviation from a 3-year average	
below –5% and above 5%	10
From –5% to –3% and from 3% to 5%	6
from –1% to 1%	0

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7. Credit expansion (end-quarter) – yoy change	
above 1%	10
from 0% to 1%	6
no change	5
from –1% to 0%	4
below –1%	0

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8. Polish short-term debt to liquid reserve ratio (end of previous quarter – data available with one-quarter lag) – yoy change	
above 8%	10
from 0% to 8%	6
no change	5
from –8% to 0%	4
below –8%	0

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9. Total Polish foreign debt as % of GDP (end of previous quarter – data available with one-quarter lag) – yoy change	
above 5%	10
from 0% to 5%	6
no change	5
from –5% to 0%	4
below –5%	0
if the debt is over 60% of GDP	additional 10

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10. Real 3-month WIBOR (average for the last month of a quarter) – qoq change	
above 0.5%	10
from 0% to 0.5%	6
no change	5
from –0.5% to 0%	4
below –0.5%	0

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Source: CASE.

**Table 23. CASE early warning crisis indicator, 1999–2000**

	3Q99	4Q99	1Q00	2Q00
1. GDP forecast for 2000	6	5	5	5
2. Unemployment rate (end-quarter)	10	10	10	10
3. CPI forecast (end-2000)	10	10	6	10
4. Forecast of government budget deficit as % of GDP for 2000	0	0	10	0
5. Forecast of C.A. deficit as % of GDP for 2000	10	10	10	4
6. Real effective exchange rate	10	0	10	10
7. Credit expansion (end-quarter)	4	0	4	6
8. Polish short-term foreign debt to liquid reserves ratio (end-quarter)	10	10	6	10
9. Total Polish foreign debt as % of GDP (end-quarter)	6	10	6	6
10. Real 3-month WIBOR (end-quarter)	0	10	4	6
<b>CASE indicator</b>	<b>66</b>	<b>65</b>	<b>71</b>	<b>67</b>

Source: CASE.

values. In addition, the effective real zloty exchange rate rose more than 6% against the 3-year rate, and the unemployment rate increased to 13.9%.

In 2Q00, our indicator diminished by 4 points to 67 points, which meant that the variables in the CASE indica-

tor, on the whole, registered positive changes. This result is in agreement with our appraisal of Poland's economy. The lower value of the indicator stemmed mainly from a more optimistic forecast of the budget and current account deficits. On the other hand, negative trends were noted in inflation and in the real 3-month WIBOR.

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## Threats

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1. The current account deficit, while improving in 2Q00, presents the greatest threat to Polish macroeconomic stability. Should the deficit rise further, this may lead to a currency crisis in a situation when portfolio capital dries up and FDI inflows dramatically fall.
2. Continued high unemployment may excessively constrain domestic demand and thus reduce the long-term rate of economic growth.
3. The continued low household propensity to save and, as a consequence, the low level of domestic savings restrict investment demand and in turn reduce potential economic growth.
4. Low propensity to save and high interest rates encourage Polish entrepreneurs to take on foreign credits. Should the demand for short-term foreign loans increase excessively, the risk of a currency crisis will grow.
5. In 2000, weaker tensions in the general government budget can be expected in contrast to 1999. Nevertheless, higher-than-expected proceeds from privatisation may tempt the authorities to introduce a less restrictive budgetary policy in 2001. As a consequence, domestic demand could become excessively high, and in turn leading to overall macroeconomic instability.

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## Recommendations for economic policy

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1. The priority for Polish economic policy should be a further reduction in the current account deficit through a reduction in domestic demand growth. The best way to achieve this is to continue the fiscal tightening and lowering of growth of budgetary spending as a proportion of GDP.
2. The second key priority should focus on alleviation of labour market rigidities. The method of determining the minimum wage should be modified and employers should not be burdened excessively with non-wage labour costs.
3. The long-term economic policy should aim at reducing income taxes. This will make it possible to increase domestic savings (and investment) and, at the same time, increase demand for labour which may result in lower unemployment.
4. The uncertain situation in the general government budget requires stricter budgetary discipline and avoidance not only of additional financing of shortfalls in para-budgets such as ZUS, Regional Health Funds, etc., but also of errors in estimating fixed expenditures (e.g. on salary in the education sector) from privatisation proceeds.

**Table A1. GDP at 1998 prices, 1994–2001 (% change yoy)**

	GDP	Gross value-added					
		total	agriculture and forestry	manufacturing, mining, etc.	construction	market services	non-market services
1994 1Q-4Q	5.2	4.9	-15.1	9.6	2.7	6.9	7.4
1995 1Q-4Q	7.0	6.7	10.4	10.2	5.8	6.0	2.5
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	3.9	-2.0	4.6	3.7	4.9	1.0
<b>forecast</b>							
2000 1Q-4Q	5.4	5.2	-6.5	9.2	3.8	5.3	1.0
2001 1Q-4Q	6.1	6.0	3.7	8.8	8.4	5.1	1.6
1995 1Q	6.2	6.6	7.3	11.1	7.0	4.6	4.4
2Q	6.7	6.7	8.1	10.6	7.3	5.1	3.8
3Q	8.1	7.4	16.3	9.9	6.1	6.0	3.2
4Q	6.8	6.1	9.0	9.3	4.1	6.8	-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	1.4	-1.8	-2.8	2.4	4.4	1.0
2Q	3.1	2.8	-2.7	1.5	3.1	4.5	1.1
3Q	5.0	4.8	-1.8	7.6	3.4	5.1	0.8
4Q	6.2	6.0	-1.4	11.6	5.0	5.3	1.1
2000 1Qe1	6.0	5.8	-7.0	10.1	4.0	5.8	1.0
2Qe2	5.5	5.2	-7.0	9.3	3.6	5.3	1.1
<b>forecast</b>							
2000 3Q	5.1	4.9	-6.5	8.7	3.0	5.0	1.0
4Q	5.2	5.1	-5.5	9.0	4.5	5.0	1.0
2001 1Q	5.9	5.7	-0.9	9.4	6.0	5.2	1.3
2Q	6.2	6.1	2.1	9.6	7.8	5.3	1.5
3Q	6.1	6.1	4.8	8.5	9.0	5.1	1.7
4Q	6.1	6.0	7.2	8.0	9.2	5.0	2.0

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

Note: 1. Data and estimates in prices of a previous year.

2. Data not seasonally adjusted.

3. Forecasts in 1999 prices.

**Table A2. Aggregate demand at current prices, 1994–2001 (billion zloty)**

	GDP	Domestic demand	Consumption			Investment	Stock-building	Net exports
			total	households	public			
1994 1Q-4Q	223.90	219.07	179.40	139.94	39.46	40.39	-0.71	4.83
1995 1Q-4Q	308.10	300.87	240.16	185.56	54.60	57.40	3.30	7.24
1996 1Q-4Q	387.83	393.86	309.04	241.90	67.14	80.39	4.43	-6.03
1997 1Q-4Q	472.35	492.72	376.72	296.65	80.07	110.85	5.15	-20.37
1998 1Q-4Q	553.56	582.57	437.56	346.94	90.62	139.20	5.80	-29.01
1999e1 1Q-4Q	617.04	657.04	489.77	390.88	98.89	161.68	5.59	-40.00
<b>forecast</b>								
2000 1Q-4Q	706.77	747.78	554.67	444.62	110.05	184.75	8.36	-41.01
2001 1Q-4Q	801.55	846.20	619.47	498.11	121.36	217.46	9.27	-44.65
1995 1Q	69.63	66.65	55.02	42.66	12.35	10.66	0.98	2.98
2Q	74.29	72.67	59.57	45.43	14.14	12.16	0.94	1.62
3Q	79.38	76.80	61.47	47.73	13.73	14.49	0.85	2.58
4Q	84.81	84.74	64.11	49.74	14.37	20.09	0.54	0.06
1996 1Q	85.27	83.92	72.33	56.50	15.83	10.97	0.63	1.35
2Q	92.88	94.38	77.71	60.41	17.30	15.95	0.72	-1.51
3Q	98.48	100.81	78.85	61.82	17.03	20.93	1.03	-2.33
4Q	111.20	114.75	80.15	63.18	16.97	32.54	2.05	-3.54
1997 1Q	103.78	105.63	89.24	70.19	19.05	15.48	0.92	-1.85
2Q	112.98	117.58	93.26	73.81	19.45	23.29	1.03	-4.60
3Q	119.15	123.78	95.69	76.22	19.47	27.13	0.96	-4.62
4Q	136.43	145.73	98.54	76.43	22.10	44.96	2.24	-9.30
1998 1Q	123.70	129.90	107.22	85.24	21.97	21.54	1.14	-6.20
2Q	133.37	139.73	109.05	85.56	23.49	29.37	1.31	-6.36
3Q	140.01	146.96	112.32	88.98	23.35	33.30	1.33	-6.94
4Q	156.48	165.98	108.96	87.15	21.81	54.99	2.02	-9.50
1999e1 1Q	134.78	144.28	119.59	95.16	24.43	24.60	0.09	-9.51
2Q	147.33	158.66	123.35	97.50	25.85	34.10	1.22	-11.33
3Q	155.72	164.26	123.54	98.65	24.89	38.78	1.94	-8.54
4Q	179.21	189.84	123.29	99.57	23.73	64.20	2.35	-10.63
2000 1Qe1	153.97	166.67	137.23	109.72	27.51	27.81	1.62	-12.70
2Qe2	169.36	180.90	140.22	111.45	28.77	38.93	1.75	-11.54
<b>forecast</b>								
2000 3Q	179.19	186.44	139.89	112.24	27.65	44.21	2.34	-7.25
4Q	204.25	213.77	137.33	111.21	26.12	73.80	2.64	-9.51
2001 1Q	175.67	187.72	153.41	123.03	30.39	32.51	1.79	-12.05
2Q	192.68	204.93	156.94	125.12	31.82	46.02	1.97	-12.25
3Q	202.93	211.44	156.31	125.82	30.49	52.54	2.60	-8.51
4Q	230.27	242.12	152.81	124.14	28.67	86.40	2.91	-11.85

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

Note: Domestic demand is defined as the sum of consumption of households, public consumption, non-commercial institutions' consumption and investment. Consumption of non-commercial institutions is not separated in the table.

**Table A3. Aggregate demand at 1998 prices, 1994–2001 (% change yoy)**

	GDP	Domestic demand	Consumption			Investment	Exports	Imports	
			total	households	public				
1994 1Q-4Q	5.2	4.8	3.9	4.3	2.8	9.2	13.1	11.3	
1995 1Q-4Q	7.0	5.5	3.2	3.3	2.9	16.5	22.8	24.3	
1996 1Q-4Q	6.0	9.7	7.2	8.7	2.1	19.7	12.0	28.0	
1997 1Q-4Q	6.8	9.2	6.1	6.9	3.2	21.7	12.2	21.4	
1998 1Q-4Q	4.8	6.4	4.2	4.8	1.6	14.2	14.3	18.5	
1999 1Q-4Q	4.1	4.8	4.3	5.1	1.1	6.9	-1.5	1.4	
<i>forecast</i>									
2000 1Q-4Q	5.4	4.6	3.2	3.8	1.0	7.4	15.6	10.8	
2001 1Q-4Q	6.1	6.2	4.2	4.7	2.1	12.0	12.3	11.6	
1996	1Q	3.4	8.0	7.1	8.5	2.2	13.1	14.4	36.7
	2Q	5.4	6.7	3.4	6.5	-6.4	20.5	21.6	29.1
	3Q	7.2	10.6	6.7	8.3	1.2	26.8	25.3	42.2
	4Q	7.9	13.0	11.6	11.4	12.0	17.3	-12.5	7.9
1997	1Q	6.9	7.9	6.0	6.7	3.4	19.6	20.5	24.2
	2Q	7.4	9.0	6.3	7.1	3.5	21.0	29.9	36.1
	3Q	6.7	9.4	6.4	7.1	3.4	21.2	8.1	18.4
	4Q	6.4	10.4	5.7	6.6	2.4	23.2	-3.5	11.7
1998	1Q	6.5	7.3	5.4	6.3	2.2	17.3	18.8	20.2
	2Q	5.3	5.7	3.5	4.1	1.6	14.6	24.7	23.0
	3Q	4.9	6.1	3.8	4.4	1.5	14.2	18.9	20.6
	4Q	3.0	6.6	3.9	4.6	1.1	12.9	-1.9	11.6
1999	1Q	1.6	3.3	3.7	4.4	1.1	6.1	-8.9	-2.8
	2Q	3.1	4.5	4.1	4.9	1.0	6.8	-3.5	2.0
	3Q	5.0	5.5	4.6	5.4	1.2	7.0	2.9	4.5
	4Q	6.2	5.6	4.7	5.6	1.1	7.3	3.8	2.0
2000	1Qe1	6.0	5.1	3.9	4.6	1.0	5.5	18.0	12.7
	2Qe2	5.5	4.2	3.3	3.9	1.0	6.1	15.8	9.6
<i>forecast</i>									
2000	3Q	5.1	4.2	2.9	3.4	1.0	7.8	15.0	10.2
	4Q	5.2	4.8	2.8	3.2	1.0	8.6	14.1	10.9
2001	1Q	5.9	5.2	4.1	4.6	2.0	11.0	14.0	10.6
	2Q	6.2	6.0	4.2	4.7	2.2	12.2	12.5	10.8
	3Q	6.1	6.6	4.4	5.0	2.2	13.1	12.0	12.3
	4Q	6.1	6.8	4.2	4.7	2.0	11.5	11.0	12.5

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

Notes: 1. Domestic demand is defined as the sum of households' consumption, non-commercial institutions' consumption, public consumption and investment. Consumption of non-commercial institutions is not separated in the table.

2. Data are not seasonally adjusted.

3. Estimates in prices of a previous year.

**Table A4. Employment, 1994–2001 ('000)**

		Total	Paid employment				Market services	Non-market services
			of which employment	agriculture and forestry	manufacturing, mining, etc.	construction		
1994	1Q-4Q	14475	8519	3887	3641	820	3938	2189
1995	1Q-4Q	14735	8570	3836	3757	841	4054	2248
1996	1Q-4Q	15021	8548	4010	3730	843	4161	2277
1997	1Q-4Q	15439	8637	3985	3740	908	4489	2316
1998	1Q-4Q	15800	8752	3969	3701	961	4798	2371
1999	1Q-4Q	15710	8702	3931	3529	954	4892	2404
<i>forecast</i>								
2000	1Q-4Q	15558	8506	3905	3340	953	4935	2425
2001	1Q-4Q	15756	8450	3895	3363	990	5039	2470
1994	1Q	14300	8486	3891	3634	797	3833	2145
	2Q	14431	8485	3895	3629	822	3933	2152
	3Q	14461	8517	3916	3630	829	3927	2159
	4Q	14706	8587	3904	3667	831	4004	2300
1995	1Q	14489	8507	3839	3739	800	3878	2233
	2Q	14711	8562	3835	3757	847	4039	2233
	3Q	14763	8534	3863	3752	855	4074	2219
	4Q	14977	8668	3856	3780	862	4172	2307
1996	1Q	14682	8487	4002	3714	737	3969	2260
	2Q	14932	8513	4001	3719	837	4120	2255
	3Q	15083	8522	4044	3730	879	4181	2249
	4Q	15386	8671	4038	3759	919	4326	2344
1997	1Q	15048	8567	3982	3753	788	4235	2290
	2Q	15374	8645	3980	3733	910	4441	2311
	3Q	15594	8675	4020	3735	952	4578	2309
	4Q	15739	8706	4006	3740	981	4656	2356
1998	1Q	15506	8717	3956	3717	864	4609	2360
	2Q	15819	8759	3953	3722	978	4804	2362
	3Q	15921	8714	3991	3676	1010	4901	2343
	4Q	15953	8817	3976	3688	992	4879	2418
1999	1Q	15513	8747	3900	3587	871	4725	2430
	2Q	15726	8717	3925	3543	973	4877	2408
	3Q	15808	8649	3960	3507	1001	4974	2366
	4Q	15792	8695	3940	3480	970	4992	2410
2000	1Q	15185	8467	3880	3350	840	4705	2410
	2Q	15524	8508	3890	3330	970	4924	2410
<i>forecast</i>								
2000	3Q	15678	8485	3920	3330	1000	5018	2410
	4Q	15845	8565	3930	3350	1000	5095	2470
2001	1Q	15405	8357	3880	3350	880	4825	2470
	2Q	15678	8491	3880	3350	1000	5008	2440
	3Q	15888	8527	3910	3370	1040	5118	2450
	4Q	16055	8625	3910	3380	1040	5205	2520

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

Note: Employment is calculated according to the CSO's methodology.

**Table A5. Unemployment, 1995–2001**

		Registered unemployment		Unemployment LFS	
		(' 000)	%	(' 000)	%
1995	1Q-4Q	2629	14.9	2233	13.1
1996	1Q-4Q	2360	13.2	1961	11.5
1997	1Q-4Q	1826	10.3	1737	10.2
1998	1Q-4Q	1831	10.4	1827	10.6
1999	1Q-4Q	2350	13.0	2641	15.3
<b>forecast</b>					
2000	1Q-4Q	2457	13.5		
2001	1Q-4Q	2407	13.1		
1995	1Q	2754	15.5	2491	14.7
	2Q	2694	15.2	2156	12.6
	3Q	2657	15.0	2227	12.9
	4Q	2629	14.9	2233	13.1
1996	1Q	2726	15.4	2349	14.0
	2Q	2508	14.3	2103	12.4
	3Q	2341	13.5	2018	11.6
	4Q	2360	13.2	1961	11.5
1997	1Q	2236	12.6	2176	12.8
	2Q	2040	11.6	1927	11.3
	3Q	1854	10.7	1853	10.7
	4Q	1826	10.3	1737	10.2
1998	1Q	1846	10.4	1896	11.1
	2Q	1688	9.6	1753	10.2
	3Q	1677	9.6	1786	10.3
	4Q	1831	10.4	1827	10.6
1999	1Q	2170	12.1	2141	12.5
	2Q	2074	11.6		
	3Q	2178	12.1		
	4Q	2350	13.0	2641	15.3
2000	1Q	2533	13.9	2880	16.7
	2Q	2437	13.5		
<b>forecast</b>					
2000	3Q	2468	13.6		
	4Q	2457	13.5		
2001	1Q	2473	13.5		
	2Q	2443	13.4		
	3Q	2418	13.2		
	4Q	2407	13.1		

Source: Data – CSO and forecasts – CASE.

Note: The CSO resumed publishing LFS (labour force survey) statistics in 4Q99.

**Table A6. Selected price indices, 1997–2000 (% yoy)**

		CPI	PPI		Export price index	Import price index
			Manufacturing, etc.	Construction		
1997	01	17.8	12.9	14.5	12.5	16.0
	02	17.3	11.9	14.4	7.9	13.4
	03	16.6	11.8	14.5	12.7	9.8
	04	15.3	12.0	14.5	11.9	11.6
	05	14.6	12.4	14.4	9.2	17.0
	06	15.3	12.2	14.0	14.1	8.6
	07	14.9	12.0	14.3	14.5	14.1
	08	14.5	12.5	14.2	10.5	16.2
	09	13.6	13.0	14.1	15.2	14.7
	10	13.1	12.1	14.3	16.3	13.1
	11	13.2	12.1	14.2	12.9	14.8
	12	13.2	11.5	14.5	13.4	14.5
1998	01	13.6	9.2	15.7	9.8	7.9
	02	14.2	9.1	15.7	10.0	11.0
	03	13.9	9.2	15.4	11.5	10.4
	04	13.7	8.4	14.6	8.4	4.4
	05	13.3	8.2	14.4	8.2	0.7
	06	12.2	7.7	14.1	7.8	4.4
	07	11.9	7.0	13.6	6.9	1.5
	08	11.3	6.6	13.0	4.4	-5.6
	09	10.6	6.4	12.4	7.0	3.3
	10	9.9	5.8	11.7	3.8	3.4
	11	9.2	5.1	11.1	3.2	-2.3
	12	8.6	4.8	10.6	4.7	-5.1
1999	01	6.9	3.9	9.9	2.8	-0.3
	02	5.6	3.7	9.4	9.6	1.5
	03	6.2	4.7	9.0	10.7	5.6
	04	6.3	5.0	8.6	9.9	9.0
	05	6.4	5.2	8.4	10.2	8.2
	06	6.5	5.2	8.1	1.1	4.8
	07	6.3	5.5	7.8	0.3	5.2
	08	7.2	5.9	7.8	7.2	10.3
	09	8.0	6.2	8.2	6.3	4.6
	10	8.7	6.8	8.3	11.0	7.4
	11	9.2	7.5	8.6	13.5	11.7
	12	9.8	8.1	8.9	10.8	15.1
2000	01	10.1	8.2	7.7	7.2	11.8
	02	10.4	8.1	7.5	1.4	7.4
	03	10.3	7.3	7.7	-3.5	2.4
	04	9.8	7.4	8.3	-2.6	3.8
	05	10.0	7.9	8.4		
	06	10.2	8.8	9.0		

Source: CSO.

**Table A7. Exchange rates, 1997–2000 (in zloty)**

		US\$/zloty	DM/zloty	euro(ECU)/zloty
1997	01	2.9273	1.8312	3.5538
	02	3.0279	1.8104	3.5132
	03	3.0793	1.8163	3.5276
	04	3.1212	1.8250	3.5604
	05	3.1713	1.8605	3.6272
	06	3.2385	1.8749	3.6618
	07	3.3965	1.8962	3.7416
	08	3.4817	1.8948	3.7276
	09	3.4566	1.9333	3.7917
	10	3.4223	1.9454	3.8226
	11	3.5033	2.0230	3.9996
	12	3.5256	1.9852	3.9268
1998	01	3.5316	1.9461	3.8432
	02	3.5386	1.9505	3.8503
	03	3.4593	1.8941	3.7560
	04	3.4194	1.8827	3.7329
	05	3.4188	1.9246	3.7917
	06	3.4789	1.9420	3.8362
	07	3.4592	1.9226	3.8002
	08	3.5850	2.0046	3.9543
	09	3.6066	2.1211	4.1713
	10	3.4955	2.1353	4.2071
	11	3.4496	2.0514	4.0323
	12	3.4858	2.0884	4.0979
1999	01	3.5417	2.1007	4.1087
	02	3.7948	2.1727	4.2494
	03	3.9430	2.1927	4.2886
	04	4.0016	2.1905	4.2843
	05	3.9368	2.1387	4.1830
	06	3.9431	2.0947	4.0969
	07	3.8827	2.0537	4.0166
	08	3.9510	2.1447	4.1946
	09	4.0799	2.1925	4.2881
	10	4.1092	2.2513	4.4031
	11	4.2527	2.2484	4.3974
	12	4.1696	2.1577	4.2200
2000	01	4.1036	2.1274	4.1608
	02	4.1439	2.0886	4.0850
	03	4.0902	2.0200	3.9507
	04	4.2347	2.0469	4.0033
	05	4.4988	2.0839	4.0758
	06	4.3994	2.1341	4.1740

Source: NBP.

Notes: 1. Monthly average.

2. Until end-1998 the Ecu exchange rate, then the euro exchange rate.

**Table A8. Foreign trade, 1997–2000 (US\$ million)**

		Exports		Imports		Net exports	
		CSO	NBP	CSO	NBP	CSO	NBP
1997	01	2011	1905	3405	3383	-1394	-1478
	02	2029	1941	3051	2650	-1022	-709
	03	2081	1920	3313	2805	-1231	-885
	04	2180	2361	3652	3319	-1472	-958
	05	1947	2035	3336	2864	-1388	-829
	06	2187	2296	3569	3196	-1382	-900
	07	2015	2372	3396	3275	-1382	-903
	08	1888	2157	3073	2876	-1186	-719
	09	2304	2489	3677	3397	-1373	-908
	10	2676	2790	3999	3654	-1324	-864
	11	2292	2359	3898	3311	-1606	-952
	12	2142	2604	3940	3819	-1797	-1215
1998	01	2156	2120	3172	3565	-1016	-1445
	02	2377	2265	3667	3078	-1290	-813
	03	2490	2671	4248	3657	-1758	-986
	04	2340	2468	3849	3496	-1509	-1028
	05	2300	2449	3886	3350	-1586	-901
	06	2401	2753	3959	3699	-1558	-946
	07	2393	2936	3929	3924	-1537	-988
	08	2168	2529	3552	3309	-1385	-780
	09	2332	2336	4516	3864	-2183	-1528
	10	2621	2533	4372	3908	-1750	-1375
	11	2369	2369	4098	3695	-1728	-1326
	12	2283	2693	3807	4297	-1524	-1604
1999	01	2027	2119	3147	3331	-1120	-1212
	02	2092	2495	3239	3279	-1147	-784
	03	2452	2398	4034	3223	-1583	-825
	04	2167	2159	3633	3195	-1466	-1036
	05	2237	1989	3700	3020	-1463	-1031
	06	2154	2122	3667	3424	-1514	-1302
	07	2119	2092	3761	3414	-1641	-1322
	08	2193	2078	3651	3308	-1458	-1230
	09	2438	2044	4093	3353	-1655	-1309
	10	2595	2221	4324	3360	-1729	-1139
	11	2511	2151	4373	3712	-1862	-1561
	12	2423	2470	4290	4235	-1866	-1765
2000	01	2268	2470	3517	4235	-1249	-1771
	02	2547	1922	3909	3380	-1361	-1458
	03	2714	2038	4327	3178	-1613	-1148
	04	2473	2371	3911	3613	-1438	-1242
	05	2318	2032	3827	3108	-1509	-1076
	06		2407		3301		-894

Source: NBP and CSO.

Note: NBP data on payments basis, CSO data on SAD basis.

**Table A9. Balance of payments, 1997–2000 (US\$ million)**

		Balance on					Official asset reserves	
		current account	merchandise trade	current transfers	unclassified current transactions	direct investment		portfolio investment
1997	01	-898	-1478	87	379	108	204	-559
	02	-228	-709	89	350	138	352	-306
	03	-408	-885	80	391	210	-148	374
	04	-766	-958	111	493	317	528	-668
	05	-139	-829	88	524	168	310	-328
	06	-289	-900	78	454	294	233	-954
	07	-318	-903	103	508	290	301	-44
	08	-138	-719	68	527	110	203	-419
	09	-454	-908	90	589	377	135	1
	10	-64	-864	120	762	477	421	-823
	11	-283	-952	96	509	292	-246	-8
	12	-327	-1215	140	525	260	-195	143
1998	01	-963	-1443	102	374	477	-309	-97
	02	-278	-813	131	397	150	268	-2197
	03	-755	-986	120	392	277	253	-284
	04	-428	-1001	121	578	334	89	-847
	05	-200	-901	117	587	539	130	-492
	06	-8	-945	399	550	248	144	-650
	07	-102	-988	192	574	589	121	-2285
	08	183	-780	165	856	661	-643	-174
	09	-1296	-1528	163	438	496	-336	649
	10	-962	-1375	159	449	359	-73	228
	11	-830	-1326	149	363	201	723	-634
	12	-1187	-1604	124	437	638	963	178
1999	01	-894	-1212	101	320	291	-81	-1397
	02	-512	-784	102	242	317	-177	-923
	03	-833	-825	176	237	530	-46	-1472
	04	-938	-1036	113	232	364	2	82
	05	-690	-1031	108	300	403	-251	206
	06	-1134	-1302	132	253	382	167	351
	07	-1055	-1322	138	301	297	70	-909
	08	-783	-1230	142	429	1393	228	-77
	09	-1147	-1309	137	423	788	-388	1212
	10	-849	-1139	130	426	363	451	198
	11	-1178	-1561	148	299	789	809	-71
	12	-1640	-1706	161	174	681	306	-303
2000	01	-1207	-1458	113	286	763	298	25
	02	-962	-1148	113	225	361	581	664
	03	-1346	-1242	133	218	430	1573	-122
	04	-851	-1076	122	398	449	131	200
	05	-401	-894	162	324	310	20	-184
	06	-870	-1034	138	337	342	125	240

Source: NBP.

Notes: 1. May and June data – preliminary.

2. Data on official asset reserves prior to 1998 comprises data on gross official reserves.

**Table A10. Interest rates, 1998–2000**

		Rediscount rate	Lombard rate	3-month WIBOR	28-day repo rate
1998	01	24.5	27.0	26.1	23.5
	02	24.5	27.0	25.2	24.0
	03	24.5	27.0	25.1	23.0
	04	24.5	27.0	24.5	23.0
	05	23.5	26.0	23.2	21.5
	06	23.5	26.0	22.1	21.5
	07	21.5	24.0	21.0	19.0
	08	21.5	24.0	19.8	19.0
	09	21.5	24.0	18.8	18.0
	10	20.0	22.0	17.9	17.0
	11	20.0	22.0	16.7	17.0
	12	18.3	20.0	15.9	15.5
1999	01	15.5	17.0	14.8	13.0
	02	15.5	17.0	13.2	13.0
	03	15.5	17.0	13.2	13.0
	04	15.5	17.0	13.2	13.0
	05	15.5	17.0	13.3	13.0
	06	15.5	17.0	13.3	13.0
	07	15.5	17.0	13.4	13.0
	08	15.5	17.0	13.7	13.0
	09	15.5	17.0	14.3	14.0
	10	15.5	17.0	16.6	14.0
	11	19.0	20.5	18.2	16.5
	12	19.0	20.5	18.0	16.5
2000	01	19.0	20.5	17.2	16.5
	02	20.0	21.5	17.8	17.5
	03	20.0	21.5	18.4	17.5
	04	20.0	21.5	18.3	17.5
	05	20.0	21.5	18.4	17.5
	06	20.0	21.5	18.5	17.5
<i>forecast</i>	3Q00	-	21.5	18.6	-
	2000	-	19.5	17.4	-
	2001	-	15.5	13.3	-

Source: Data – NBP and forecast – CASE.

Notes: 1. End-month except for WIBOR – monthly average.

2. End-month forecast.

Table A11. Monetary indicators, 1997–2001 (billion zloty)

		M0	M2	Cash	Zloty deposits			Foreign currency deposits	Credits			Net liabilities of the budgetary sector
					total	individual	corporate		total	individual	corporate	
1997	1Q-4Q	42.3	176.4	27.3	118.3	80.9	37.4	30.8	108.3	18.4	89.9	55.3
1998	1Q-4Q	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	47.9	263.5	38.1	185.7	124.1	61.6	39.7	175.9	36.6	139.3	64.7
<i>forecast</i>												
2000	1Q-4Q	52.1	299.4	35.0	218.4	155.0	63.4	46.0	215.7	46.2	169.5	59.0
2001	1Q-4Q	59.8	343.9	35.5	259.5	191.5	68.0	48.9	258.8	57.5	201.3	60.0
1997	1Q	37.7	141.6	24.6	91.9	63.3	28.7	25.0	88.0	12.8	75.2	49.9
	2Q	41.2	151.8	26.8	98.5	68.5	30.0	26.5	94.5	14.8	79.7	49.8
	3Q	44.1	162.3	27.6	105.9	73.3	32.6	28.7	102.2	16.4	85.8	49.1
	4Q	42.3	176.4	27.3	118.3	80.9	37.4	30.8	108.3	18.4	89.9	55.3
1998	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
	4Q	53.6	220.8	30.2	156.9	109.6	47.3	33.6	138.5	23.9	114.6	61.3
1999	1Q	53.9	230.3	32.0	161.2	116.5	44.6	37.1	148.6	25.3	123.3	63.9
	2Q	59.1	236.2	33.6	166.2	119.2	47.0	36.4	155.8	28.3	127.5	65.2
	3Q	46.2	246.0	34.2	173.3	122.4	51.0	38.5	167.4	32.4	135.0	61.6
	4Q	47.9	263.5	38.1	185.7	124.1	61.6	39.7	175.9	36.6	139.3	64.7
2000	1Q	48.0	262.0	33.0	186.9	134.8	52.1	42.2	184.0	38.5	145.6	55.1
	2Q	49.0	284.7	35.1	205.2	141.7	63.5	44.4	203.2	50.8	152.4	58.5
<i>forecast</i>												
2000	3Q	49.7	283.3	35.3	203.5	148.5	55.0	44.5	207.8	44.0	163.8	56.0
	4Q	52.1	299.4	35.0	218.4	155.0	63.4	46.0	215.7	46.2	169.5	59.0
2001	1Q	55.8	304.5	35.0	224.0	167.0	57.0	45.5	224.2	48.5	175.7	52.0
	2Q	54.7	318.0	35.0	236.0	176.0	60.0	47.0	234.0	51.0	183.0	56.0
	3Q	57.6	328.6	35.3	246.0	184.0	62.0	47.3	250.3	53.5	196.8	55.0
	4Q	59.8	343.9	35.5	259.5	191.5	68.0	48.9	258.8	57.5	201.3	60.0

Source: Data – NBP and forecast – CASE.