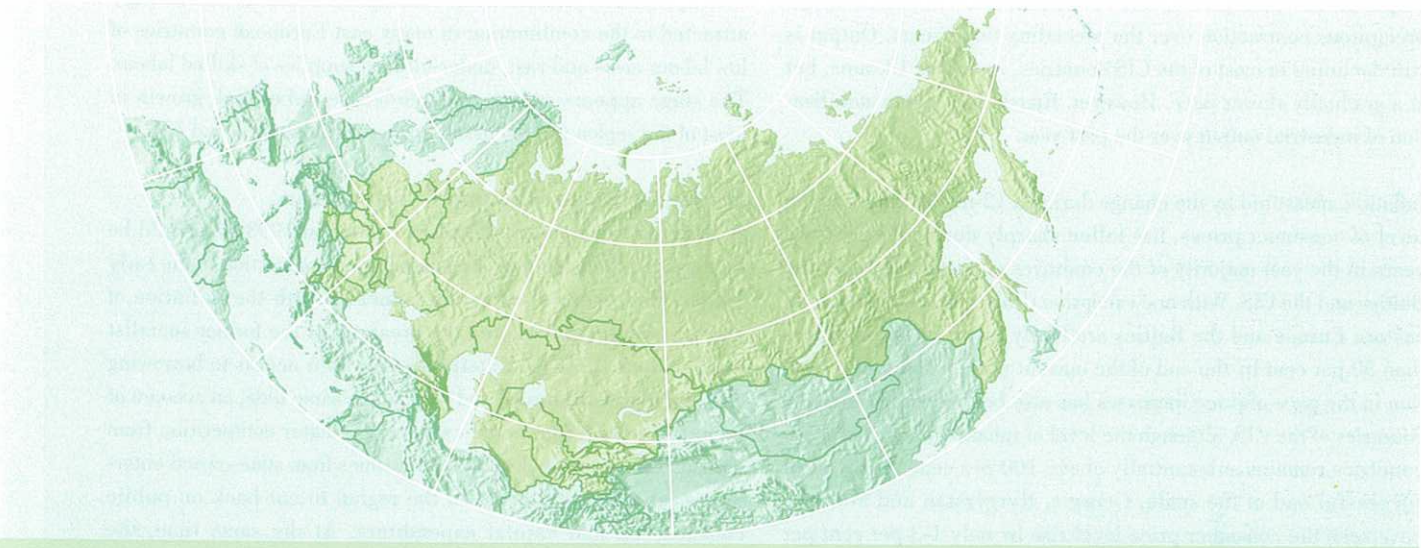
Transition report

Part IV



Macroeconomic overview

Recent economic developments

11

Most countries in eastern Europe and the Baltics recorded healthy output growth during 1994 and the first half of 1995, following a precipitous contraction over the preceding three years. Output is still declining in most of the CIS countries, including Ukraine, but at a gradually slower pace. However, Russia has seen a stabilisation of industrial output over the past year.

Inflation, measured by the change during a 12-month period in the level of consumer prices, has fallen sharply during the past two years in the vast majority of the countries of eastern Europe, the Baltics and the CIS. With one exception (Bulgaria), all countries in eastern Europe and the Baltics are likely to see inflation of less than 50 per cent by the end of the current year. A sharp deceleration in the pace of price increases has also been recorded in many countries of the CIS, although the level of inflation in most of these countries remains substantially above 100 per cent. At the most successful end of the scale, Georgia, Kyrgyzstan and Moldova have seen the consumer price level rise by only 1-3 per cent per month during the first seven months of 1995.

These developments are discussed in further detail in the remainder of this chapter. The commentary on output and inflation is accompanied by a discussion of trends in productivity, employment and cost competitiveness, and by a review of developments in foreign trade, with a particular focus on relations between the European Union and countries in eastern Europe. Much of the supporting data is presented in tabular form in Annex 11.1.

11.1 Eastern Europe and the Baltic states

Output developments

On current trends, 1995 looks set to become the third consecutive year of positive aggregate GDP growth for eastern Europe and the Baltics. The economies of Albania, the Czech Republic, Estonia, Poland, the Slovak Republic and Slovenia are each expected to grow by 3½-6 per cent for 1995. Positive growth, albeit somewhat more modest, is expected in all the remaining economies of eastern Europe and the Baltics. The private sector, which is expanding rapidly (see Annex 2.2), has become a more important influence on aggregate economic growth than the shrinking state sector. Positive growth reflects increases in productivity (discussed in further detail below) and has not been accompanied in any country, except in the Czech Republic in 1994, by an expansion in aggregate employment.

Non-residential investment began to pick up in 1994 in many countries (see the more detailed discussion of investment trends in Chapter 3). The increase in investment has primarily been concentrated on machinery and equipment. Rising investment reflects growing confidence in the stability of the macroeconomic and regulatory environment. It may also reflect export opportunities associated with deepening links with the EU. With greater macroeconomic stability, domestic and foreign investors are increasingly attracted to the combination in many east European countries of low labour costs and vast, under-utilised supplies of skilled labour. The stage appears set for an extended period of high growth in most of the region (as discussed further in Chapters 3 and 12).

Recent increases in output in perspective

Positive growth in most of eastern Europe in 1993-95 should be seen against the backdrop of a sharp output contraction in the early 1990s. This output contraction coincided with the initiation of market-oriented reform and the break-up of the former socialist trading block (CMEA). Enterprises saw their access to borrowing and subsidies constrained and were at the same time, on account of import liberalisation, being exposed to greater competition from abroad. The resulting drop in tax revenues from state-owned enterprises forced governments in the region to cut back on public consumption and capital expenditure. At the same time, the collapse during 1990-91 of the CMEA precipitated a drop in demand from the Soviet Union for goods and services from east European trading partners. The disintegration of the CMEA also led to a sharp increase in the price for energy deliveries from the Soviet Union (and later from Russia) – deliveries that had previously been made on highly concessional terms.

All of these factors led to sharp shifts in relative prices and in the profitability of production across different subregions and industries. In response, activity that had been rendered unprofitable by the changes in relative prices and the partial phase-out of subsidisation was being cut back swiftly. In this environment of rapid change, great uncertainty and large terms-of-trade losses, the expansion of newly profitable production and investment initially only partially offset the decline in the much larger state-owned enterprise sector. According to official estimates, real GDP for eastern Europe and the Baltics as a whole fell by about 20 per cent between 1989 and 1992.

The summary table on growth in Annex 11.1 indicates that Poland and Slovenia are the only countries in eastern Europe that are close to regaining in full what was lost during the early 1990s. In all other countries in eastern Europe, real GDP levels remain 10 per cent or more below the "starting point". Output in the latter countries is likely to return to the pre-reform levels only (at least) 2-4 years from now – in most cases 7-10 years after the transition process began.

It should be emphasised that the officially measured decline in real GDP between 1990 and 1992 is likely to exaggerate the underlying impact on welfare (as discussed in greater detail in Annex 11.1). First, the underlying quantities of output may be underestimated as statistical offices find it difficult to capture activity in the many new

or reformed productive entities. Second, the quality of output may have improved in ways that are not captured in output statistics. Third, market-oriented reforms have led to a shift in the pattern of output towards goods and services that satisfy demand expressed by consumers and investors in the market-place, rather than demand that is formulated by government planners.

A rarely quoted parallel to the output path now seen in eastern Europe can be found in the economic history of the United States immediately after the Second World War. Between 1945 and 1947, real GDP dropped by a fifth in the United States. The contraction reflected a massive post-war reorientation of demand. As in the case of eastern Europe, the reorientation involved a reduced role for government planners and an increased influence of market forces as the government sharply reduced its demand for military goods and services. The sharp contraction in state absorption allowed private consumption and private investment to grow despite the fall in aggregate output. Real GDP in the US regained its "pre-transition" level (that is, the level seen in 1945) only in 1952, seven years after the onset of "reform".

Inflation and exchange rates

Between the end of 1993 and July 1995 inflation fell sharply in a number of countries in eastern Europe and the Baltics, including Albania, Croatia, FYR Macedonia, Lithuania and Romania. All of the latter five countries saw inflation (measured as the change during 12 months in the level of consumer prices) drop during this period from several hundred per cent to less than 40 per cent (6 per cent in Albania, 2 per cent in Croatia, 28-29 per cent in Romania and 38-39 per cent in Lithuania). Croatian consumer prices actually fell during the course of 1994. Bulgaria has also seen a sharp slow-down in the pace of price increases since late 1994 but continues to experience the highest rates of inflation in eastern Europe, with consumer prices increasing by about 60 per cent during the 12 months to July 1995.

Albania, Croatia, the Czech Republic, the Slovak Republic and Slovenia have been the first to reduce inflation to single digits after the onset of market-oriented transition. Inflation in Poland fell to 27.6 per cent in July 1995, responding favourably to the change a few months earlier to the country's exchange rate system (see details below). Meanwhile inflation rose in Hungary to 31 per cent in July (from 21 per cent at the end of 1994) under the influence of sharp devaluations, increases in utility prices and new indirect taxes (see the Transition Indicators in Annex 2.2), aimed chiefly at containing deficits on the state budget and the current account balance.

A number of countries, including the Czech Republic, Estonia, Latvia, Lithuania and the Slovak Republic, are keeping their exchange rates fixed *vis-à-vis* either a hard currency or a basket of hard currencies. Hungary and Poland are adjusting their exchange rate daily by a fixed pre-announced percentage *vis-à-vis* a basket of hard currencies. In some of these countries, rapid gains in labour productivity in manufacturing have been reflected in sharp wage increases, as described in further detail below. Wage pressures have spilled over into the services sector where productivity may have risen more sluggishly and where wage increases, therefore, may have been reflected in higher output prices.[1] Meanwhile large flows of funds have found their way from lenders and investors abroad into enterprises and banks in eastern Europe and the Baltics. The combination of pressure on wages from high productivity growth in some sectors and large financial inflows from abroad has, together with further adjustment of administered prices (notably utility prices), complicated efforts to reduce inflation in countries pursuing fixed exchange rate policies. Difficulties associated with inflation control may well be reinforced in the Czech Republic, Hungary and Poland by steps currently under way in these three countries to remove some of the remaining balance-of-payments restrictions. Many observers believe such liberalisation will result in further net inflows from abroad and further pressure on the real exchange rate to appreciate (either through inflation or through nominal exchange rate appreciation).

In an attempt to restrain the contribution to growth in the money supply from inflows via the balance of payments, the Polish authorities have gradually reduced the cumulative monthly rate of pre-announced devaluations of the zloty from 1.5 per cent in mid-1994 to 1.2 per cent in July 1995. In May 1995 the Polish authorities widened the band within which the central bank will aim to keep the interbank zloty exchange rate. The new band was specified as ±7 per cent of the central intervention rate, up from previously ±2 per cent.[2] The initial effect of this was a nominal appreciation of the zloty within the new and wider intervention band.

Hungary has moved in the opposite direction, accelerating the pace of nominal currency depreciation during the first half of 1995 (with the backing of fiscal tightening) in response to large current account deficits. On 12 March, Hungary devalued the forint in one step by 9 per cent and introduced a system of daily pre-announced devaluations that would be operative from then onwards. The cumulative monthly adjustment in the central intervention rate was 1.6 per cent until the end of June, and has been 1.3 per cent since then. The Hungarian authorities regard the monthly adjustments of 1.3 per cent as a maximum and intend to lower the rate to 1.2 per cent in January 1996.

Productivity and competitiveness

Between 1991 and 1994, dollar wages in manufacturing rose by a cumulative 77 per cent in Bulgaria, 75 per cent in the Czech Republic, 53 per cent in the Slovak Republic, 33 per cent in Hungary, and 24 per cent in Poland (see Table 11.1). All of these

[1] It is possible, however, that the scope for productivity gains in the near term in some countries in eastern Europe and the Baltics is higher in parts of the non-tradable sector than in industry and agriculture. Parts of the non-tradable sector (such as banking, insurance and telecommunications) constituted a particularly neglected part of the planning system and offer great scope for efficiency gains.

[2] The central intervention rate is stipulated by the central bank and devaluations apply to this rate, rather than to the interbank rate, which is determined as a market clearing rate, subject to central bank participation as a buyer or supplier of foreign exchange.

Table 11.1

Indicators of competitiveness

	1990	1991	1992	1993	1994
			(Average percentage change)		
Bulgaria					
Industrial production	-16.8	-22.2	-15.9	-7.0	4.5
Employment in industry	-6.2	-18.8	-15.1	-11.8	-8.8
Wage in industry (expressed in local currency)	20.7	167.7	139.5	51.7	53.9
Exchange rate (LEV/USD)	216.7	210.5	32.2	19.2	100.7
Dollar wage in industry [1]	-61.9	-13.8	81.2	27.2	-23.3
Labour productivity in industry [2]	-11.3	-4.2	-0.9	5.4	14.6
Unit labour cost in industry in US dollars [3]	-57.0	-10.0	82.9	20.7	-33.1
Czech Republic					
Manufacturing production	-3.5	-26.4	-14.5	-9.9	0.2
Employment in manufacturing	-3.1	-11.8	-7.5	-6.6	-3.7
Wage in manufacturing (expressed in local currency)	-1.7	16.8	17.6	25.2	16.3
Exchange rate (CZK/USD)	19.3	64.2	-4.1	3.1	-1.2
Dollar wage in manufacturing [1]	-17.6	-28.9	22.7	21.4	17.8
Labour productivity in manufacturing [2]	-0.4	-16.6	-7.6	-3.5	4.1
Unit labour cost in manufacturing in US dollars [3]	-17.3	-14.8	32.8	25.8	13.1
Hungary					
Manufacturing production	-10.1	-24.0	-4.9	3.2	8.7
Employment in manufacturing	-10.6	-3.9	-15.5	-11.1	0.7
Wage in manufacturing (expressed in local currency)	22.9	25.6	26.6	22.8	20.3
Exchange rate (FT/USD)	7.0	18.2	5.7	16.4	14.4
Dollar wage in manufacturing [1]	14.8	6.2	19.8	5.6	5.2
Labour productivity in manufacturing [2]	0.6	-20.9	12.6	16.0	8.0
Unit labour cost in manufacturing in US dollars [3]	14.2	34.3	6.4	-9.0	-2.6
Poland					
Manufacturing production	-24.1	-12.3	4.8	12.2	14.5
Employment in manufacturing	-3.7	-0.4	-10.5	-2.0	-3.4
Wage in manufacturing (expressed in local currency)	374.2	63.3	37.7	39.1	39.1
Exchange rate (ZLY/USD)	560.2	11.3	28.8	33.1	25.3
Dollar wage in manufacturing [1]	-28.2	46.7	6.9	4.5	11.0
Labour productivity in manufacturing [2]	-21.1	-11.9	17.1	14.5	18.5
Unit labour cost in manufacturing in US dollars [3]	-8.9	66.5	-8.7	-8.8	-6.3
Romania					
Manufacturing production	-18.8	-23.6	-24.3	-6.6	3.7
Employment in manufacturing	0.6	-6.9	-12.5	-7.9	-8.5
Wage in manufacturing (expressed in local currency)	6.6	123.0	166.0	199.6	133.5
Exchange rate (LEI/USD)	43.9	211.9	328.7	146.8	117.6
Dollar wage in manufacturing [1]	-26.0	-28.5	-38.0	21.4	7.3
Labour productivity in manufacturing [2]	-19.2	-17.9	-13.5	1.4	13.3
Unit labour cost in manufacturing in US dollars [3]	-8.4	-12.9	-28.3	19.7	-5.3
Slovak Republic					
Industrial production	-4.5	-17.6	-14.4	-10.2	7.0
Employment in industry	-3.1	-7.8	-15.8	-7.4	-0.3
Wage in industry (expressed in local currency)	3.0	17.8	19.7	18.4	17.0
Exchange rate (KCS/USD)	19.2	63.9	-4.1	8.8	3.6
Dollar wage in industry [1]	-13.6	-28.1	24.8	8.8	13.0
Labour productivity in industry [2]	-1.4	-10.6	1.6	-3.0	7.3
Unit labour cost in industry in US dollars [3]	-12.3	-19.6	22.9	12.2	5.3
Germany					
Unit labour cost in US dollars [4]	18.5	1.3	12.4	-2.1	-4.4
United Kingdom					
Unit labour cost in US dollars [5]	14.4	6.1	1.8	-14.5	1.9

Source

EBRD staff calculations based on data from the "OECD Short-term Economic Indicators No. 2, 1995".

The calculations for Germany and the UK are based on data from the "OECD Main Economic Indicators", June 1995.

1 Measured as the local wage in industry/manufacturing converted into US dollars at the average exchange rate for the year.

2 Measured as industrial/manufacturing output per employee in the industrial/manufacturing sector.

3 Measured as the cost in US dollars of labour used in industry/manufacturing per unit of gross output.

4 Mining and manufacturing wages per unit of output.

5 Total wages and salaries per unit of output.

rates substantially exceed the percentage increases in dollar wages over the same period in EU countries, such as Germany (5 per cent). These increases have caused concern about industrial competitiveness among some observers and governments, although the level of the dollar wage remains modest throughout eastern Europe in comparison with levels prevailing in the EU (see Table 11.2).

Table 11.2

Gross monthly wages in US dollars
(gross of income tax, net of social security tax)

	1992	1993	1994
Bulgaria	–	115	86
Czech Republic	164	200	240
Estonia	47	83	138
Hungary	282	296	317
Latvia[1]	–	77	138
Lithuania[1]	–	37	89
Poland	215	221	241
Russia	28	63	96
Slovak Republic	161	175	196
Ukraine	24	15	30

Source
The data for the former Soviet Union states were taken from PlanEcon August 1995, those for the Visegrad countries were taken from the Statistical Bulletin 1994/4 and 1995/1 (issued jointly by the statistical agencies of the Visegrad countries), and those for Bulgaria were taken from the Bulgarian National Bank Annual Report 1994.

[1] For Latvia and Lithuania the wage levels quoted here refer to the state sector only.

A better measure of competitiveness than the dollar wage is the labour costs (expressed in dollars) associated with production of one unit of output. This concept, referred to below as "unit labour costs", can be expressed as the ratio of labour-related expenses (measured in dollars) to the productivity of labour (the latter term is defined as the number of units of output produced per employee).

Despite the rise in the dollar wage, unit labour costs in dollar terms in manufacturing declined by about 22 per cent in Poland and by 6 per cent in Hungary between 1991 and 1994. This points to a very substantial improvement in labour cost competitiveness for both countries *vis-à-vis* Germany and, especially in the case of Poland, also *vis-à-vis* the United Kingdom. This improvement reflects large increases in labour productivity in Polish manufacturing, amounting to 15-19 per cent per year between 1991 and 1994 (see Table 11.1).

Developments in Romanian and Bulgarian unit labour costs have been dominated to a greater extent by gyrations in the dollar wage. In the case of Romania, the cumulative rate of change of -19 per cent in unit labour costs between 1991 and 1994 was dominated by a drop of 28 per cent in 1992 which reflected rapid currency depreciation (and, correspondingly, a sharp decline in the dollar wage) rather than improvements in productivity. During the course of 1993 and 1994, both stabilisation and structural reform took hold in Romania, and the pattern of labour cost developments came to correspond more closely to that seen in Hungary and Poland, with increases in productivity outstripping increases in dollar wages. In Bulgaria, the exchange rate and hence the dollar wage have fluctuated sharply in recent years, partly in response to changes in market perceptions of the government's commitment to macroeconomic stabilisation. Bulgaria was the only country listed in Table 11.1 in which dollar wages declined in 1994. Compounded by a 15 per cent improvement in labour productivity, this led to a reduction by one-third in unit labour costs, partly offsetting rapid increases in the preceding two years.

In the Czech and Slovak Republics the sharp increases in unit labour costs between 1991 and 1994 reflected rapidly rising dollar wages, far outpacing productivity growth, which in fact was negative until 1994. The increase in dollar wages reflects the fact that wages in local currency increased rapidly, while the nominal exchange rate remained fixed against a basket of hard currencies. Labour productivity movements were driven by the continued weakness of the index for manufacturing output, which started rising only in 1994 in both countries, long after the equivalent indices in Hungary and Poland had begun to increase rapidly. The late and subdued turnaround in recorded industrial production in the Czech Republic may in part be the result of measurement difficulties (the data quoted are based on observations only for enterprises with more than 100 employees), possibly leading to an understatement of labour productivity growth and an overstatement of the rise in unit labour costs (statistical methodological difficulties are discussed in Annex 11.1).

It should be emphasised that even reliable data on unit labour costs would be insufficient as the basis for a precise assessment of changes in competitiveness. Ideally, the applied productivity measure should focus on value added (rather than gross output) and should incorporate changes in the cost and quantity of both labour and capital. However, the analysis of these items is a challenge that lies beyond the scope of this Report. It might appear intuitively plausible that the use, as set out in Table 11.1, of gross output rather than value added leads to an understatement of productivity growth and an overstatement of increases in unit labour costs because the transition process involves large cutbacks in lines of production that subtract rather than add value, so that value added in manufacturing is likely to have fallen less sharply than output. This hypothesis is, however, not always backed by available data. In Hungary, for example, official estimates for real value added in manufacturing point to a drop of 9.3 per cent in 1992 and 2.3 per cent in 1993, whereas the estimates for gross manufacturing output indicate a fall of "only" 4.9 per cent in 1992 and an increase of 3.1 per cent in 1993. To the extent both sets of figures reflect reality, they imply an increase in the use of material inputs per unit of real value added. The reasons for this development are unclear.

Abstracting from these conceptual and statistical difficulties, Table 11.1 does provide at least tentative evidence of solid productivity gains in 1994 in all of the listed countries. Such gains are likely to reflect the combination of two conceptually separate phenomena. One is the shedding by enterprises of staff who were previously kept on the payroll as a "social support mechanism" (to help sustain full employment). This process, which allows a reduc-

tion in employment without a corresponding change in output, will not go on forever. At some point there will be no more "surplus" labour that can be shed without influencing capital requirements or output from the enterprises. It is impossible to know how much surplus labour is left in the enterprise sector.

The other phenomenon involves renewal and expansion of the capital stock, improvements in training, and/or a strengthening of the organisation and management of capital and labour. This process may in principle proceed at a relatively rapid pace for as long as technological, educational and managerial progress can be imported from the West, that is, at least for as long as there is a substantial gap between eastern and western Europe in the effectiveness with which individual factors of production are being used.

Officially measured employment has dropped sharply over the past four years and continued to decline in 1994 in all countries of eastern Europe and the Baltics (except the Czech Republic), despite the fact that output in most countries was increasing at a substantial pace. The scope for shedding of surplus labour may, however, be shrinking rapidly, and it would appear reasonable to expect some increase in employment in a few countries in 1995. In fact, aggregate employment was rising even according to official estimates during the first half of 1995 in the Czech Republic and Poland.

International trade

The foreign trade turnover of countries in eastern Europe grew rapidly in 1994, in particular in the second half of the year. According to estimates from the UN Economic Commission for Europe,[3] aggregate exports from these countries grew last year by 12-15 per cent (in US dollar terms), while imports increased by about 7-10 per cent. Trade between east European countries rose substantially in 1994, after having contracted sharply during the preceding four years. The relatively strong aggregate export growth appears consistent with the indications in Table 11.1 of steady or improving labour cost competitiveness for many east European countries. The combined trade deficit of the east European countries narrowed in 1994 by about a quarter to just over US$ 10 billion. Romania was the greatest single contributor to this improvement (see the country tables in Annex 11.1).

Ten countries in eastern Europe and the Baltics have entered into "Europe Agreements" with the EU. Europe Agreements for Bulgaria, the Czech Republic, Poland, Romania and the Slovak Republic were signed during 1992-93. Agreements for Estonia, Latvia, Lithuania were signed and one for Slovenia was initialled during the spring and summer of 1995. The Europe Agreements aim to further the integration between east European countries and the EU by lowering barriers to trade, establishing a political dialogue, harmonising legislation, cooperating on science and technology, and providing for technical cooperation. The most important aspect of the agreements is the establishment of free trade in industrial goods over 10 years, asymmetrically – with the EU countries in most cases reducing protectionist measures at a faster pace than their east European counterparts. During the course of 1995 and 1996, the EU will abolish all remaining trade barriers on industrial imports, except textiles (this has already been done for the EU's trade with some of the east European countries). Further concessions on trade in agricultural products are applied on a reciprocal basis. The agreements have to be endorsed by the national parliaments of all EU countries before entering into full effect but the trade parts of the agreements become effective (through a so-called "interim agreement") virtually immediately after being signed. The full approval process has now been completed for the first 6 of the 10 Europe Agreements.

The Central European Free Trade Agreement (CEFTA), signed by the then Czech and Slovak Federal Republic, Hungary and Poland in 1992, involves gradual symmetrical liberalisation of trade, most radically for industrial products, during the period until 2001. Slovenia will join CEFTA in 1996. Trade between the CEFTA countries has been expanding in 1994 and 1995, after declining sharply prior to the existence of the CEFTA agreement.

The prospect of accession to the EU

A "White Paper"[4] outlining the steps to be taken within the countries applying for accession was circulated in the spring of 1995 and endorsed by the EU summit in Cannes in June. Accession to the EU for a country of the region would surely be a landmark on the road to establishment of a fully fledged market economy and one may ask whether it would signal the "end of market-oriented transition". The answer will depend on what is meant by the "end of transition". If the latter concept defines the point at which the economies have overcome the legacy of the many decades of the command economy and are now essentially similar to a western European economy then the answer would surely be "no". For even the most advanced countries of the region, the restructuring problems are much too profound to be overcome in just 10 years from the start of transition. The damaging and dangerous environmental and nuclear legacy will still be threateningly present in the year 2000. The financial institutions will still be inexperienced and many of them fragile. Corporate governance is unlikely to be of the quality typically seen in western European countries. The neglect of the infrastructure by the old regime will take much more than one decade to rectify. In all these basic senses the transition will be far from complete even with accession.

There is no doubt, however, that accession would be an important milestone. It would mark full integration into the major relevant trading bloc and thereby overcome permanently any residual barriers to trade in the main export markets. Accession would reduce the risk foreign providers of funds had previously associated with lending to the new members and thus lower the cost of capital to both public and private sectors, although it would not be guaranteed to provide the levels of long-term capital that will be needed for restructuring to proceed at a satisfactory pace. From

[3] UN Economic Commission for Europe (1995).

[4] European Commission (1995).

the point of view of the new members, accession would be likely to enhance access to infrastructural funds, through, for example, the European Investment Bank and the EU Regional and Structural Funds. From the perspective of trade, capital markets, infrastructure investment, and for many other economic and political issues, it will be a profound advance.

To a large extent, pursuing the transition by establishing a well-functioning market economy will involve much the same measures as would be prescribed for preparation for accession. Hence, since the countries seeking accession are embarked on the transition they are already basically committed to the required path for accession. There are, however, specific institutional and legislative measures, including infrastructure requirements (trans-Europe links, for example), the functioning of financial institutions and environmental standards, for which specific accession-oriented investments will be required.

Events internal to the EU will be among the crucial determinants of the timing and conditions for accession to the Union of east European and Baltic countries. The poorer regions of the EU currently benefit from significant aid in the form of regional and structural funds. Subsidies are also allocated on a sectoral basis, most notably through the Common Agricultural Policy (CAP). Integration of the countries of eastern Europe and the Baltics into the EU would have very significant implications for these redistributive policies.

Many of the east European and Baltic countries are suffering from the same problems as the disadvantaged regions of the EU: inadequate transport and other basic infrastructure, a large and comparatively low-productivity agricultural sector, industrial decline and high levels of unemployment. Funding under EU structural policies attempts to overcome these weaknesses and "cohesion" funds are currently provided to four countries which account for 18 per cent of the EU population. The simple extension of these policies to eastern Europe and the Baltics would imply massive transfers of funds over long periods of time. Simply extending the structural policies to these countries would imply roughly a doubling of the EU's structural funds budget, which is estimated to be ECU 35 billion in 1999.

The issues relating to the EU's Common Agricultural Policy are even more uncertain than those regarding structural funds, although the ultimate financial implications are not as large. In 1994, the cultivated area in Bulgaria, the Czech Republic, Hungary, Poland, Romania and the Slovak Republic was equivalent to 38 per cent of the EU total. Without major reform of the CAP, it may be anticipated that the entry of the prospective members would imply that CAP expenditures rise by at least a third. Enlargement without further substantial modification of the CAP may not be feasible both for the internal reasons associated with the budgetary burden and because of commitments made by the EU and the east European countries under the Uruguay Round.

The Inter-governmental Conference of the EU member countries, to start in 1996, will form a major part of the decision-making process for accession. The Conference is unlikely to be complete before the middle of 1997. The outcome of the Conference will have to be ratified by all EU member governments and this may take another one to two years. In addition, as noted, crucial and controversial aspects of the EU's funds and policies may need to be reformed before it would be realistic to expect existing member countries to vote for full accession of east European and Baltic partner countries. Detailed negotiations with each country will be required before the arrangements can be completed. It appears unlikely that all 10 countries with Europe Agreements would join at the same time.

Access of governments and central banks to international capital markets

Before 1995, the only governments or central banks in eastern Europe that had been able to raise funds in international bond markets after embarking on market-oriented transition were those of the Czech Republic, Hungary and the Slovak Republic. The Hungarian authorities have been by far the most active in these markets, raising US$ 4.4 billion in 1993 and US$ 2.5 billion in 1994 to build up reserves, and to cover principal payments on the country's high stock of foreign debt as well as, in 1993-94, current account deficits equivalent to 9 per cent of GDP, far in excess of inflows of foreign capital to the corporate sector (in the form of lending or foreign investment).

Jitters in international capital markets during the months following the Mexican financial crisis in January 1995 subsided during the second quarter of the year. Thus, the National Bank of Hungary (NBH) was able to raise US$ 1.5-2 billion during the first three quarters of 1995 through international bond issues and syndicated loans. A yen issue by the NBH in September carried a maturity of 20 years.

The governments of the Czech and Slovak Republics saw less of a need during the first half of 1995 to issue bonds in international markets, as they were able to add to their stocks of foreign exchange reserves without resorting to foreign borrowing. Although the Czech Republic's current account moved into a deficit of about 3 per cent of GDP in the first half of 1995 after having been in surplus in 1994, this was outweighed by even greater inflows of investment, portfolio placements and direct lending from abroad to Czech-domiciled enterprises and banks.

In July 1995, the Polish government tapped private capital markets for the first time in the 1990s, raising US$ 250 million from a Eurobond issue with five years' maturity. The government had paved the way in late 1994 by reaching agreement with commercial creditors on repayment terms for pre-1991 state debt. The net present value of obligations covered by the agreement was reduced by about 50 per cent. This debt reduction agreement (which complemented a reduction in 1991 by about 50 per cent in Poland's debt to official creditors) led to the elimination of Polish debt arrears and "normalised" the country's relations with external creditors. The issue of bonds in July 1995 was helped not only by

debt reduction but also by the persistently solid Polish fiscal policy record so far during the 1990s, as affirmed by cuts during 1994 and the first half of 1995 in the deficit of the state budget and of the current account. Although official statistics point to a Polish current account deficit of about US$ 0.8 billion for the first half of 1995 (up slightly from US$ 0.6 billion in the first half of 1994), many observers believe that the "true" current account is in surplus, after incorporation of border trading (particularly buoyant on the export side) which escapes official statistics.

Relations with international capital markets also improved for other countries in the region. In May 1995, the National Bank of Romania became a newcomer to the market for syndicated loans (after years of absence), obtaining a one-year loan in the amount of US$ 150 million from a group of Western banks. In August 1995, Latvia raised about ¥4 billion by issuing bonds with a maturity of two years in international capital markets. In September Slovenia concluded an agreement with commercial creditors to assume part of the debt of the former Yugoslavia. This agreement will "normalise" Slovenia's creditor relations and is likely to open the way for international bond issues. Albania agreed in July with commercial creditors on a debt restructuring package, involving a reduction of up to 80 per cent in the net present value of obligations covered by the agreement.

11.2 The Commonwealth of Independent States

Output developments

Over the past year, the pace of output decline has subsided in the largest CIS countries, Russia and Ukraine, following precipitous falls over the preceding three years. In Russia, industrial production during the first half of 1995 was "only" a few percentage points below the level achieved during the first half of 1994. In Ukraine, output was relatively stable during most of 1994 but declined by about 15 per cent in the first quarter of 1995 (from the level in the last quarter of 1994), partly in response to a substantial tightening of financial policies. It remains uncertain for both Russia and Ukraine to what extent output will be reduced by the expected execution of tight credit policies during the remainder of the year. Output in the remainder of the CIS continued to contract in the first half of 1995, except in Armenia where production staged the first substantial rebound seen so far in the CIS (from a very depressed level). According to official estimates, the level of industrial output in Armenia in the first half of 1995 exceeded the level in the same period of 1994 by at least 10 per cent.

The recent output stability in perspective

The output stability in the larger CIS countries follows a severe contraction during the first four years of the 1990s and very sluggish growth in the latter half of the 1980s. The slow-down in growth in the perestroika period in the late 1980s was caused in part by a decline in oil production, resulting from years of inadequate investment in the oil sector, and in part by the use by enterprises of increased budgetary autonomy to switch spending from investment to wage increases. The drop in oil output coincided with a rise in hard currency debt servicing requirements, forcing the Soviet authorities to raise hard currency revenues by exporting an ever-growing share of oil output to the West while compressing the use of hard currency for imports of inputs and machinery. In order to capture badly needed hard currency revenues, oil exports were diverted away from trading partners in the CMEA. In the 1980s, these trading partners would not normally pay for imports from the Soviet Union in hard currency but in the form of deliveries of goods under complicated bilateral barter deals. In response to Soviet cuts in oil deliveries, the Soviet Union's CMEA trading partners cut exports to the Soviet Union. The trading partners were keen to avoid shipping useful resources to the Soviet Union in exchange for non-convertible claims which they would not be able to use to solicit imports of useful goods and services. The resultant drop in deliveries from eastern Europe to the Soviet Union aggravated shortages of inputs and investment goods within the Union between 1988 and 1990.

The Soviet economic climate deteriorated further in 1991. The break-up of the Union led to a disintegration of inter-republican trading links. Partly as a result of this, the all-encompassing influence of the state order system for domestic procurement and distribution of goods and services was eroded before market-based institutions were ready to take over transportation, distribution and marketing of goods and services. Meanwhile, all levels of government throughout the former Soviet Union were forced to cut back on demand for capital goods in general, and for military goods and personnel in particular, adding further to the recessionary forces that had come to dominate the economies of the newly independent states. Ripple effects from these shocks as well as a gradual further disintegration of the old command system and of inter-republican trading links led to further falls in output in 1992, 1993 and 1994. In cumulative terms, real GDP of the CIS countries has virtually halved during 1990-94, according to official estimates (see the summary table on growth in Annex 11.1). While these estimates are likely to overstate the decline there can be little doubt that the contraction has been severe.

The fiscal and monetary policy regime in Russia was tightened in 1994 and the first half of 1995, although this trend was interrupted occasionally by spells of rapid credit expansion. The overall trend towards harder enterprise budget constraints (resulting from the tightening of central bank credit policy) forced most chronic loss-makers to cut production. This helped release labour and financial resources to the fledgling private sector, although open unemployment was kept at a minimal level through the widespread use by enterprises of "unpaid leave" for employees in preference to outright layoffs. While the release of previously poorly utilised resources helped set the stage for a switch in the medium term to sustainable growth, the initial effect may well have been significantly contractionary. Cuts in unprofitable activity are likely to have occurred at a substantially faster pace than the generation of new high value added lines of output, providing part of the explanation for the officially estimated 15 per cent decline in Russian real GDP in 1994.

However, the weight in GDP of the growing non-state sector has expanded substantially over the past 18 months, while that of the

financially troubled part of the "old" enterprise sector has dropped off. This development has gradually brought Russia closer to the point at which even officially registered aggregate real GDP will again begin to grow. Full-year real GDP may still be lower for 1995 than for 1994 but the turnaround is likely to be reached in 1996.

In interpreting these comments, it is important to keep in mind that all quantitative statements made in this section rely on data from the national statistical agencies in CIS countries (see Annex 11.1). There can be little doubt that these data exaggerate the fall in output. Statistical systems in the CIS countries are dependent to an even greater extent than their counterparts in eastern Europe on reporting from large, "old" companies that have contracted most rapidly, rather than the new and more dynamic private entities.

Inflation and exchange rates

Although rates of inflation remain much higher in the CIS than in eastern Europe, most CIS countries have reduced the rate of price increases very substantially over the past two years through much tighter fiscal and monetary policies, in most cases designed in the context of policy agreements with the International Monetary Fund.

The most impressive progress towards price stability within the CIS has been made in Armenia, Azerbaijan, Georgia, Kazakstan, Kyrgyzstan and Moldova. In Armenia, consumer prices rose 27 per cent during the first four months of 1995, after having increased fivefold during the same months of 1994. Azerbaijan's monthly inflation rates, which had hovered between 17 and 28 per cent from August 1994 to January 1995, dropped to a more modest 1-6 per cent range during February-April 1995. In Georgia, consumer prices rose less than 20 per cent during the first half of 1995, after having risen more than 70-fold during 1994. A slightly less dramatic yet still impressive development was recorded in Kazakstan, where prices rose less than 30 per cent during the first five months of 1995 after having increased 10-fold during 1994. More persistent stabilisation policies have been pursued over the past few years in Kyrgyzstan and Moldova, whose 12-month rates of inflation fell gradually during 1994 and the first half of 1995 to reach, respectively, 41 per cent and 22 per cent in July 1995, down from more than 1,700 per cent in both countries in December 1992. The reduction in inflation rates has been reflected in a gradually increasing degree of stability of nominal exchange rates, notably in Kyrgyzstan and Moldova, but also in Georgia, Russia and Uzbekistan.

In Belarus, Russia, Ukraine and Uzbekistan, inflation fell to 4-7 per cent per month in the second quarter, after having risen sharply to much higher levels towards the end of 1994. In the case of Ukraine, there will be a one-off large increase in the price level during the third quarter of 1995 as administrative prices are adjusted. But the monthly rate of inflation is likely to fall back late in the year, assuming the fiscal and monetary policy determination of the government and the central bank is maintained.

Tajikistan had the unique experience within the CIS of a large price level decline in early 1994 resulting from an unintended monetary contraction in the context of the switch from the use of "old Russian roubles" to the use of "new Russian roubles" without establishment of a formal monetary union with Russia (these events are described in greater detail in the EBRD's *Transition Report Update*, April 1995, p. 11). However, the official estimate of the size of the price decline during January-March 1994 has now been revised downwards from 42 per cent to 27 per cent, and increases during subsequent months are currently thought, despite an extremely tight supply of liquidity, to take end-year inflation for 1994 to a positive 5 per cent. A new national currency, the Tajik rouble, was introduced on 10 May 1995. Tajikistan and Turkmenistan are the only countries in the CIS that have experienced a substantial increase in inflation in 1995.

Unit labour costs in Russia

The depreciation of the Russian exchange rate has, over the past few years, fallen far short of the differential between nominal wage increases in Russia and nominal wage increases in trading partner countries. Meanwhile official data for output and employment indicate that productivity continues to decline. Thus unit labour costs (in dollars) in Russia's industrial sector rose by more than 150 per cent in 1993 and more than 80 per cent in 1994 (see Table 11.3). Even if the data underlying these figures overstate the production decline, there can be little doubt that unit labour costs have risen sharply (Annex 11.1 provides a commentary on problems of interpretation of Russian output data). It is important, however, not to exaggerate the consequences of this rise. Monthly wages, at an average of US$ 96 per month in 1994 (see Table 11.2), remain at a very modest level by international standards. Much of the real currency appreciation in the past few years represents an adjustment to the initial "undershooting" of the real exchange rate (below the long-run sustainable level). This undershooting had occurred in the initial reform period in response to highly negative real interest rates (now replaced by rates that are highly positive in real terms) and a perception of high systemic risk (a perception which is likely to have lessened gradually in recent years).

Table 11.3

Indicators of competitiveness for Russia

	1993	1994
	(Average percentage change)	
Industrial production	-14.1	-20.8
Employment in industry	-3.3	-4.8
Wage in industry (expressed in local currency)	838.9	265.8
Exchange rate (rouble/US dollar)	318.9	136.6
Dollar wage in industry[1]	124.1	54.6
Labour productivity in industry[2]	-11.2	-16.8
Unit labour cost in industry in US dollars[3]	152.3	85.9

Source
EBRD staff calculations based on data from the OECD Short-term Economic Indicators No. 1, 1995.

1 Measured as the local wage in industry converted into US dollars at the average exchange rate for the year.

2 Measured as industrial output per employee in the industrial sector.

3 Measured as the cost in US dollars of labour used in industry per unit of gross output.

Trade developments

Data compiled by the UN Economic Commission for Europe point to a modest increase in 1994 in the dollar value of exports from CIS countries to non-CIS countries of about 9 per cent, and an increase in the corresponding import value of about 5 per cent. Russian export growth was slightly below the average for the CIS countries, whereas the remainder of the CIS saw export growth of about 15 per cent.

The aggregate trade balance for the CIS countries *vis-à-vis* the rest of the world was in surplus by about US$ 20 billion in 1993 and US$ 23 billion in 1994. These figures are dominated by very large Russian surpluses (accounting for about US$ 18 billion in 1993 and US$ 20 billion in 1994, according to official estimates).

However, much uncertainty is associated with trade statistics for the CIS countries. The country tables in Annex 11.1 quote a figure for Russia's trade surplus *vis-à-vis* non-CIS partners in 1994 of US$ 12 billion, substantially below the official estimate of the surplus), based in part on the assumption that official customs statistics fail to record a significant proportion of imports, particularly of consumer goods.

Concluding remarks

The picture that emerges from an analysis of GDP data for eastern Europe, the Baltics and the CIS is one of growth in those countries that entered the process of market-oriented transition and macroeconomic stabilisation in earnest around 1989-91, and of gradually diminishing declines in output in those countries that entered the process a few years later.

Progress in the transition process (described in detail in Chapter 2) has been accompanied by advances in the control of inflation, through increasingly active fiscal and monetary policy. The EBRD expects inflation by the end of 1995 to be in the 5-30 per cent range in most of eastern Europe and the Baltics, and close to 100 per cent in large parts of the CIS (lower in some of the smaller CIS countries). In the following chapter these and other EBRD predictions will be compared with forecasts from a large number of other institutions.

Annex 11.1
Selected economic indicators for each country in transition

Statistics

The interpretation of economic indicators: some caveats

The following set of tables provides a summary of macroeconomic developments in recent years in the EBRD's countries of operations. However, many of the series suffer from quality deficiencies. They are mostly based on official national statistics from governments, statistical agencies and central banks in eastern Europe, the Baltics and the CIS. In some cases they are taken from publications issued by other international financial institutions, which in turn rely heavily on official national statistics. A period of fundamental systemic change to a country's economic system tends greatly to increase data inaccuracy. This section discusses some of the difficulties of interpretation and quality that are associated with the data series. (A less comprehensive version of this section was published in the EBRD's *Transition Report Update*, April 1995.)

Statistics for output and value added

Before the market-oriented transition began in earnest in eastern Europe, the Baltics and the CIS, statistics on production volumes were based on information from state-owned companies. Virtually all of these companies were subject to extensive reporting requirements. However, the devolution of activity over the past 4-5 years to myriad smaller, often private, entities has forced statistical agencies in the region to switch towards survey-based methods of data collection, similar to those applied in the West. The change of technique has created great methodological difficulties.

Since 1989, statistical agencies in the region have been gradually phasing out the Material Product System (MPS), the national accounting system that was applied by centrally planned economies and which excluded many services (in the so-called "non-material sphere") from the "Net Material Product" (NMP), its main measure of value added. The aim of these statistical agencies has been to replace the MPS by the United Nations' System of National Accounts (SNA), which establishes the core of the standards that are applied in most OECD countries as well as in many developing countries throughout the world. The most important concept of aggregate value added in the SNA system is the "Gross Domestic Product" (GDP). The use of a simplified conversion between estimates for NMP and GDP during the gradual switch of system has introduced an element of inaccuracy. A number of statistical agencies in CIS countries continue to apply the "old" data collection principles that were originally aimed at production of an NMP-estimate. Some of these countries amend the NMP-estimate in a very rough procedure to arrive at a figure for GDP. The procedure often amounts to simple multiplication of the NMP-estimate by a fixed factor (usually in the range of 1.1-1.3) to adjust for the exclusion from NMP of most value added from the service sector.

One probable result of inadequate statistical coverage of the relatively dynamic, and rapidly growing, private sector is a negative bias in some countries' growth estimates for the initial years of transition. The companies that are most easily monitored are large state-owned enterprises, which are in most cases contracting rapidly. Private companies in the new market-oriented environment may be tempted, mainly for tax reasons, to understate their production. The resulting negative bias in series for growth of real GDP and gross output may be quite large. In some cases the magnitude of the officially measured decline in real GDP does not appear credible. For example, Georgia's real GDP in 1994 was less than 15 per cent of the 1989 level, according to official figures. During the interim period Georgia was also exposed to a sharp deterioration in the terms of trade and suffered a loss of large fiscal transfers from the central authorities of the former Soviet Union. Thus the implication of the official GDP series would be that the average real income in Georgia is now far less than 15 per cent of the 1989-level.

Studies published several years ago with the backing (if not official endorsement) of statistical agencies in Hungary and Poland point to a need for substantial positive revisions to these countries' official data for GDP growth in the early 1990s. These findings have not been reflected in revisions to the data series that are published by the Hungarian and Polish governments. These series may still fail to capture in full the growth in the emerging private sector, especially the informal part of it. This caveat applies to the figures shown in the attached country tables for Hungary and Poland, which reproduce the official data series. Similar caveats apply to the attached tables on most other countries of eastern Europe, the Baltics and the CIS.

A recent study by Dobozi and Pohl suggests that the percentage changes in electricity consumption may be better proxies for percentage changes in "true" real GDP levels than available official GDP-estimates.[5] One underlying assumption is that reported data on electricity consumption are more reliable than official GDP-estimates. Another is that the ratio of electricity consumption to "true" GDP is constant or declining. Their calculations show that, for eastern Europe, the percentage drop in electricity consumption between 1989 and 1994 corresponds fairly well to official estimates of the GDP decline, whereas for the CIS countries the drop in electricity consumption falls far short of the measured fall in GDP (see Table 11.4). A rise in overhead electricity use per unit of output due to declining capacity utilisation and a fall in maintenance investment, would tend to raise absorption of electricity per unit of value added. However, others factors, including higher electricity tariffs and shifts away from heavy industry, would pull towards increased energy efficiency. Dobozi and Pohl find it plausible to assume on balance that the energy intensity of real value added would have changed only a few percentage points over the period covered by their study. Their assumption would imply that the GDP decline has been overestimated in official statistics to a much greater extent in the CIS countries than in eastern Europe and in the Baltics. The "electricity measure" of GDP developments should, however, also be interpreted with care. In some countries there may be solid grounds for refuting the assumption that the relationship between electricity use and value added has remained constant. In particular, certain countries, including Kazakstan and Kyrgyzstan, have

[5] Dobozi and Pohl (1995).

Table 11.4

Growth in power consumption and real GDP[1]

		(Annual change in per cent)					Cumulative change in per cent
		1990	1991	1992	1993	1994	1989-94
Eastern Europe							
Bulgaria	Power consumption	-6.9	-14.4	-6.6	2.3	0.2	-23.7
	GDP estimates	-9.1	-11.7	-7.3	-2.4	1.4	-26.4
Czech Republic	Power consumption	-0.5	-8.9	-2.1	-0.5	3.1	-9.0
	GDP estimates	0.4	-14.2	-6.0	-0.9	2.6	-18.3
Hungary	Power consumption	-2.4	-6.0	-6.8	-4.1	0.8	-17.3
	GDP estimates	-3.5	-11.9	-3.0	-0.9	2.0	-16.6
Poland	Power consumption	-8.1	-2.4	-2.6	2.1	0.8	-10.1
	GDP estimates	-11.6	-7.6	2.6	3.8	5.0	-8.7
Romania	Power consumption	-15.8	-9.4	-8.9	-1.4	-4.0	-34.2
	GDP estimates	-5.6	-12.9	-10.0	1.3	3.4	-22.5
Slovak Republic	Power consumption	-0.8	-7.7	-4.6	-6.3	2.6	-16.0
	GDP estimates	-0.4	-14.5	-7.0	-4.1	4.8	-20.4
Baltic countries							
Estonia	Power consumption	0.5	-3.0	-15.2	-10.1	6.1	-21.1
	GDP estimates	-8.1	-11.0	-14.2	-6.7	6.0	-30.6
Latvia	Power consumption	-0.3	-3.5	-19.8	-18.8	2.5	-35.8
	GDP estimates	2.9	-8.3	-35.0	-15.0	2.0	-46.8
Lithuania	Power consumption	-4.0	-0.8	-22.0	-25.3	-2.4	-45.8
	GDP estimates	-5.0	-13.1	-37.7	-24.2	1.7	-60.4
Commonwealth of Independent States							
Armenia	Power consumption	-14.3	-1.7	-12.7	-33.8	-10.2	-56.3
	GDP estimates	-7.4	-10.8	-52.4	-14.8	5.4	-64.7
Azerbaijan	Power consumption	-0.4	0.4	-15.0	-3.5	-7.9	-24.5
	GDP estimates	-11.7	-0.7	-22.6	-23.1	-21.9	-59.2
Belarus	Power consumption	1.3	0.4	-10.3	-10.0	-11.8	-27.6
	GDP estimates	-3.0	-1.2	-9.6	-11.6	-21.5	-39.9
Georgia	Power consumption	-2.0	-10.2	-20.5	-14.3	-26.0	-55.6
	GDP estimates	-12.4	-13.8	-40.3	-39.0	-35.0	-82.1
Kazakstan	Power consumption	1.3	-3.1	-5.9	-7.9	-14.5	-27.3
	GDP estimates	-0.4	-13.0	-13.0	-12.0	-25.0	-50.2
Moldova	Power consumption	6.5	-4.6	-14.9	-11.3	-12.6	-33.0
	GDP estimates	-1.5	-11.9	-29.0	-9.0	-22.0	-56.3
Russia	Power consumption	-0.4	-2.3	-6.2	-5.5	-8.5	-21.1
	GDP estimates	-4.0	-13.0	-19.0	-12.0	-15.0	-49.4
Ukraine	Power consumption	1.0	-2.2	-6.2	-7.8	-11.7	-24.6
	GDP estimates	-3.4	-12.0	-17.0	-17.0	-23.0	-54.9
Uzbekistan	Power consumption	1.5	-3.7	-6.1	-3.5	-3.6	-14.6
	GDP estimates	1.6	-0.5	-11.1	-2.4	-2.6	-14.6

[1] The data on power consumption were kindly provided by Istvan Dobozi and Gerhard Pohl from the World Bank. The GDP growth rates quoted here were taken from the country tables in Annex 11.1.

pursued a relative price policy which has led to substitution of electricity for other sources of energy.

Data uncertainty pertains not only to output statistics but also to most other macroeconomic data, including measures of consumption, investment, employment and prices. For some countries, indicators of expenditure fail to support the hypothesis that deficiencies in currently available data on production lead to a negative bias in published series for growth in real GDP. For example, data for consumption and investment in Hungary and Poland in 1993 point to significantly weaker GDP growth than data collected from the production side.[6] This may in part be because expenditure data in these countries suffer from an even greater negative bias than the production series. A possible bias of this sort could result from a gradual shift in retail trade away from long-established outlets that tend to underlie retail trade surveys, as well as from rising investment by small enterprises whose activities are difficult to monitor.

A recent study by Gavrilenkov and Koen,[7] focusing specifically on national accounts expenditure data for Russia, argues the exact opposite. Gavrilenkov and Koen report that the Russian statistical agency Goskomstat recently dramatically revised its retail trade series: the new series put the decline in the volume of retail sales between 1990 and 1994 at 1 per cent, down from 40 per cent according to the older series. This revision has not been reflected in the official Russian national accounts in which GDP is estimated primarily on the basis of production data. Gavrilenkov and Koen present an alternative set of GDP-estimates, in which they incorporate the recent revisions to retail trade (by assuming that these revisions should be reflected in corresponding adjustments in the official estimates for private consumption). The decline in real GDP is about 4-7 percentage points less each year (1991-94) in their alternative set of accounts than in the official version of the Russian national accounts.

The following country tables include various measures of GDP or GNP per capita. The common denomination chosen for this concept in the tables is US dollars per capita. The most straightforward way to derive an estimate of GDP per capita is to divide the official nominal GDP-estimate (in national currency) by the size of the population, and then convert it into US dollars using the average exchange rate for the year. However, if the aim is to gauge the country's standard of living, this is a highly problematic approach because a typical consumer basket is far cheaper in eastern Europe, the Baltics and the CIS (measured in US dollars at the official exchange rate) than it is in western Europe, Japan or the USA.

Measures of GNP at "purchasing power parity" (PPP) aim to overcome this problem. The PPP-estimates quoted in the attached tables were taken from the *World Bank Atlas 1995*. In the computation of these estimates, the World Bank has divided nominal GDP for each country by the country's PPP, defined as the number of units of the country's currency that would be required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States. It is far from easy to produce these estimates. Price data for countries in transition are often inaccurate (see below). Moreover, the PPP-estimates are heavily influenced by the choice of goods-basket for which the price comparison is made. For some of the countries of eastern Europe, the Baltics and the CIS, the PPP-based estimates in the attached tables are based on very preliminary information. Future revisions may produce very different figures. The World Bank has initiated a major research effort (to which the EBRD contributes) to improve the quality of PPP-based estimates of GNP.

Data on exports and imports

Some countries in transition produce two different sets of data on exports and imports. One set is derived from customs data for imports and survey data for exports. Another set is based on banking data on flows of foreign exchange: payments for imports and receipts for exports. It used to be thought in countries such as Hungary that banking data were "more reliable" than customs/survey-based statistics. This assessment was formed during the 1980s when data from the large state banks covered most transactions in these economies. Since then the quality of banking statistics has dropped as banks have become gradually more independent, new private banks have emerged and reporting requirements have weakened. This may have reversed the ranking, in terms of relative reliability, of the different sources of statistics.

High inflation

Many countries in the region have gone through a period of very high inflation which has made it difficult to measure relative price changes. High inflation has also made it particularly awkward to deflate correctly nominal data for production, use of inputs, consumption, fixed investment, stock-building and wages. When price increases as well as volumes of production are subject to large swings from month to month, it is difficult to compute a measure of growth in real GDP. Computation of a constant-price estimate for GDP through simple deflation of the annual nominal GDP-figure by a measure of annual average inflation may lead to serious errors. When inflation is sufficiently high, and fluctuates from week to week, even the use of monthly data as the basis for deflation may lead to large errors.

Index number problems

Index number problems have also complicated the interpretation of price (and production) data for eastern Europe, the Baltics and the CIS. An important index issue is the choice of base year. Some countries, including the Czech Republic, have been slow to change the base year for their national accounts. In the Czech case, the national accounts are still presented at constant 1984-prices. Production sectors with much higher relative prices or volumes in pre-reform 1984 than in post-reform 1994 carry an excessive weight in the computation of growth rates for the economy as a whole. Another very important index issue relates to quality improvements. Part of the price increase that has taken place in recent years in eastern Europe, the Baltics and the CIS

[6] Bartholdy (1994).

[7] Gavrilenkov and Koen (1994).

has been caused by the switch from low-quality, cheap products to high-quality, expensive equivalents. One result is that official price series tend to exaggerate inflation. In some cases, estimates of changes in the production volume may have been derived through deflation of nominal production data by these exaggerated price indices. Such estimates would exaggerate a production decline (or understate a production increase).

Fiscal data

Data from government budgets are sometimes difficult to interpret because of the tradition in many countries of the region of handling many activities of the state and municipalities off-budget. Another problem stems from the fact that chronically loss-making enterprises in some countries are kept alive through their access to credits from the banking system. Such credits may conceptually constitute government subsidies. Where this is the case, it is deceptive to look exclusively to the fiscal accounts for a measure of the underlying budgetary imbalance.

A special difficulty of interpretation pertains to countries with high inflation and a large stock of government debt. A part of the budget deficit in such a country reflects interest payments to holders of claims on the government. A large share of these payments serves only to compensate claimholders for the inflation-induced drop in the real value of their claims. Spending by the government for inflation-indexation of liabilities does not add to the real value of the government's net indebtedness. Therefore, standard concepts of the fiscal deficit, which include expenditures that cover this type of "indexation of the liabilities", may exceed by a wide margin the impact on the ratio of government debt to GDP of the underlying fiscal position.

This makes it difficult to assess the seriousness of a particular deficit, expressed as a percentage of GDP, independently of the government debt stock and the rate of inflation. These factors are crucial to inter-country comparisons of fiscal positions. Similarly, it is important to consider changes in inflation when the path of a particular country's deficit over time is under scrutiny.

Banking reform during transition may also distort the fiscal accounts. In countries where the government effectively guarantees depositors against losses, the "net worth of the state" declines every time bad lending decisions are made by those banks that are covered by the guarantee. Losses associated with such decisions should arguably be accounted for in the state accounts at the time when they occur (although this is rarely possible in practice), rather than at the time when they are reflected in a state-financed bank recapitalisation. If the state injected capital into the banking system in 1994 to cover banking losses accrued over many years this outlay should clearly not be treated as a new budgetary expenditure accruing in 1994. The outlay represents realisation of losses of past years, which should have been treated as expenditure in past years' state budget accounts. The typical practice in eastern Europe (where, for example, the former Czechoslovakia, Hungary, Poland and Romania have injected large amounts of capital into the banks) has been to exclude the banking losses from the fiscal accounts both in the year of accrual and in the year of recapitalisation. The losses do not appear in the fiscal accounts for any year.

An important problem pertains to the interest paid by the state on funds it has used for bank recapitalisation. Banks in need of recapitalisation will typically be paying interest on all deposits while being unable to collect interest on some of their assets. Thus their average interest margin is negative. Prior to recapitalisation, losses resulting from negative interest margins appear only in the books of the banks, not in the state budget. State-financed recapitalisation shifts them from the books of the banks to the accounts of the government. Assume, for simplicity, that the state carries out the recapitalisation by donating to the banks a batch of state bonds. After this, the state will be paying interest on these bonds. One may think of this flow of interest payments as an annual subsidy from the state to the banks to cover losses that derive from the negative interest margin. After bank recapitalisation, these flows are typically treated in the fiscal accounts as state expenditures. This makes perfect sense, but the losses associated with the negative interest margin should also ideally be treated as fiscal expenditures in the accounts for earlier years. The fact that they are not means that official budget data will tend to exaggerate any underlying fiscal deterioration (or underestimate any improvement) in the years after recapitalisation of the banks. The distortion resulting from this problem is probably greater in Hungary, where the state injected capital equivalent to almost 10 per cent of GDP into the state-owned banks during 1992-94, than in any other country in the region.

Concluding remarks

Without pretending to be exhaustive, this section highlights some of the difficulties of interpretation that are associated with the data series that appear in the following macroeconomic country tables. It is emphasised here that the reliability is weak for many series and that many important conceptual issues need to be carefully considered by the user of macro-data for most of the countries of eastern Europe, the Baltics and the CIS.

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Growth in eastern Europe, the Baltics and the CIS

	Real GDP						
	1990	1991	1992	1993	1994	1995 *Projection*	Projected level of real GDP in 1995
Individual countries			*(Percentage change)*				*(1989=100)*
Albania	-10	-28	-10	11	7	6	75
Armenia	-7	-11	-52	-15	5	5	37
Azerbaijan	-12	-1	-23	-23	-22	-15	35
Belarus	-3	-1	-10	-12	-22	-10	54
Bulgaria	-9	-12	-7	-2	1	3	75
Croatia	9	-14	-9	-3	1	2	84
Czech Republic	0	-14	-6	-1	3	4	85
Estonia	-8	-11	-14	-7	6	6	74
FYR Macedonia	-10	-12	-14	-14	-7	-3	53
Georgia	-12	-14	-40	-39	-35	-5	17
Hungary	-4	-12	-3	-1	2	3	86
Kazakstan	0	-13	-13	-12	-25	-12	44
Kyrgyzstan	3	-5	-25	-16	-27	-5	43
Latvia	3	-8	-35	-15	2	1	54
Lithuania	-5	-13	-38	-24	2	5	42
Moldova	-2	-12	-29	-9	-22	-5	42
Poland	-12	-8	3	4	5	6	97
Romania	-6	-13	-10	1	3	4	81
Russia	-4	-13	-19	-12	-15	-3	49
Slovak Republic	0	-15	-7	-4	5	5	84
Slovenia	-5	-8	-5	1	6	6	94
Tajikistan	-2	-7	-29	-11	-21	-12	40
Turkmenistan	2	-5	-5	-10	-20	-5	63
Ukraine	-3	-12	-17	-17	-23	-5	43
Uzbekistan	2	-1	-11	-2	-3	-4	82
Aggregates							
Eastern Europe and the Baltics[1]	-8	-10	-3	1	4	5	88
The Commonwealth of Independent States[2]	-4	-12	-18	-13	-17	-4	48

Note

Data for 1990-94 represent the most recent official estimates of outturns as reflected in publications from the national authorities, the IMF, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year. See the caveats in the initial paragraphs of this Annex.

[1] Estimates for real GDP represent weighted averages for Albania, Bulgaria, the Czech Republic, Estonia, FYR Macedonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. The weights used were national GDP estimates for 1992 converted into common currency at the average official exchange rate for 1992.

[2] Here taken to include all countries of the former Soviet Union, except Estonia, Latvia and Lithuania. Estimates for real GDP represent weighted averages, using the nominal levels of NMP in each country in 1991 as weights.

Inflation in eastern Europe, the Baltics and the CIS

	Retail/consumer prices (end-year)				
	1991	1992	1993	1994	1995 *Projection*
			(Percentage change)		
Albania	104	237	31	16	5
Armenia	25	1,341	10,996	1,885	45
Azerbaijan	126	1,395	1,294	1,788	100
Belarus	93	1,558	1,994	1,875	260
Bulgaria	339	79	64	122	50
Croatia	149	937	1,150	-3	3
Czech Republic	52	13	18	10	10
Estonia	304	954	36	42	22
FYR Macedonia	115	1,935	230	55	10
Georgia	131	1,463	7,492	7,380	25
Hungary	32	22	21	21	28
Kazakstan	150	2,567	2,169	1,160	60
Kyrgyzstan	170	1,771	1,366	87	25
Latvia	262	958	35	26	23
Lithuania	345	1,175	189	45	30
Moldova	162	2,198	837	98	20
Poland	60	44	38	30	23
Romania	223	199	296	62	30
Russia	144	2,318	841	203	145
Slovak Republic	58	9	25	12	10
Slovenia	247	93	23	18	10
Tajikistan	204	1,364	7,344	5	240
Turkmenistan	155	644	9,750	1,100	2,500
Ukraine	161	2,000	10,155	401	150
Uzbekistan	169	910	885	423	155

Note

Data for 1991-94 represent the most recent official estimates of outturns as reflected in publications from the national authorities, the IMF, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year. See the caveats in the initial paragraphs of this Annex.

Albania

	1989	1990	1991	1992	1993	1994 Estimate	1995 Projection
Output and expenditure				*(Percentage change)*			
GDP at constant prices	9.8	-10	-27.7	-9.7	11	7.4	6
Industrial production	5	-7.6	-36.9	-44	-10	-2	na
Prices and wages							
Consumer prices (annual average)	0	0	36	226	85	22.6	7
Consumer prices (end-year)	0	0	104	237	31	15.8	5
Average real wages (public sector)	na	na	-6	-45	-1	na	na
Monetary sector							
Broad money (end-year)	14.8	23.4	104	153	74.4	39.5	na
Government sector				*(In per cent of GDP)*			
General government balance (cash basis)[1]	-5.5	-3.7	-44	-22	-16	-14	-13
General government balance (commitment basis)	-9	-15	-31	-22	-16	-13	na
General government expenditure (commitment basis)	56.8	62.1	61.9	47.6	44.6	41	na
External data in convertible currencies				*(In millions of US dollars)*			
Current account (excluding official transfers)	-49	-122	-293	-442	-369	-238	na
Current account (including official transfers)	na	-122	-213	-101	-70	-146	na
Trade balance	-83	-150	-308	-454	-490	-460	na
External debt, net of foreign exchange reserves	0	94.5	497.8	635	655	768	na
				(Percentage change in the US dollar value)			
Exports (data from the balance of payments)	25	-7	-56	-31	60	25.8	na
Imports (data from the balance of payments)	58	4	7	28	15	0	na
				(In months of current account expenditures, excluding transfers)			
Gross international reserves (end-year), excluding gold	12.5	5.9	0.2	0.7	2.3	3.4	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	3.2	12.6	12.6	12.6	12.6	12.6	3.2
Employment (percentage change, annual average)	1.9	0.2	-18.6	-27.8	-7.8	9.3	na
Unemployment rate (in per cent of domestic labour force, end year)	na	7.6	8.6	26.9	29	19.5	na
GDP (in millions of lek)	18,681	16,813	16,473	49,519	113,041	166,297	na
The share of agriculture in GDP (per cent)[2]	26	40	44	54	56	56	na
The share of industry in GDP (per cent)[2]	37	37	32	17	14	13	na
Exchange rate (lek per US dollar, end-year)	8	10	25	97	101	95.4	na
Exchange rate (lek per US dollar, annual average)	8	8	14.6	75.1	102.1	94.7	na
Interest rate (lending, 12 months maturity, end-year)	1-2	1-2	8-12	39	30	20	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year.

[1] Excluding from expenditures due but unpaid interest on foreign debt.

[2] Based on national accounts at constant 1990-prices.

Armenia

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	14.2	-7.4	-10.8	-52.4	-14.8	5.4	5
Prices and wages							
Consumer prices (annual average)	4.8	10.3	100	825	3,732	5,273	210
Consumer prices (end-year)	na	na	25.0	1,341	10,996	1,885	45
Monetary sector							
Broad money (end year; millions of drams)	na	na	na	na	3,042	23,856	33,886
Government sector				*(In per cent of GDP)*			
Consolidated central government balance (accrual)	na	na	-1.9	-37.6	-48.2	-16.1	-9
Consolidated central government expenditure (accrual)	na	na	-28.0	64.2	68.6	43.7	26
External data in convertible currencies				*(In millions of US dollars)*			
Current account with non-FSU countries	na	na	na	-40.0	-31.5	-15	na
Trade balance with non-FSU countries	na	na	na	-96	-197	-179	na
Exports (data from the balance of payments)	na	na	na	335	165	209	na
to countries outside the FSU	na	na	na	12	29	29	na
to former Soviet republics	na	na	na	323	136	180	na
Imports (data from the balance of payments)	na	na	na	405	392	381	565
from countries outside the FSU	na	na	na	108	226	208	na
from former Soviet republics	na	na	na	297	166	173	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	na	3.3	3.5	3.7	3.7	3.7	3.8
Unemployment (in per cent of the labour force, end-year)	na	na	4	19	26	na	na
GDP (in billions of roubles)	9.5	9.7	15.9	59.1	780	na	na
GNP (in millions of US dollars)	na	na	na	na	na	652	na
GNP per capita (in US dollars) at PPP exchange rates[1]	na	na	na	na	2,080	na	na
The share of agriculture and forestry in NMP (per cent)[2]	15	17	26	41	55	na	na
The share of industry in NMP (per cent)[2]	50	45	55	53	32	na	na
Exchange rate (dram/US dollar; end-period)	na	na	na	na	75.0	406	407

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflects EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year.

1 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

2 NMP excludes depreciation and the value added from most of the service sector.

Azerbaijan

	1989	1990	1991	1992	1993	1994	1995 Projection
Output at constant prices				*(Percentage change)*			
GDP	-4.4	-11.7	-0.7	-22.6	-23.1	-21.9	-15
Prices							
Consumer prices (annual average)	na	7.8	106	616	1,130	1,664	425
Consumer prices (end-year)	na	na	126	1,395	1,294	1,788	100
Government sector				*(In per cent of GDP)*			
General government balance	na	na	-5.0	2.8	-13	-18	-2
General government expenditure	na	na	40.7	46.4	58	57	na
External data in convertible currencies				*(In millions of US dollars)*			
Current account	na	na	153	488	2	-179	-125
Trade balance	na	na	60	489	-5	-177	na
vis-à-vis countries outside the FSU	na	na	-42	371	109	-35	na
vis-à-vis former Soviet Republics	na	na	102	118	-114	-212	na
Exports (merchandise)	na	na	395	1,275	716	637	553
to countries outside the FSU	na	na	24	755	347	274	na
to former Soviet Republics	na	na	371	520	369	363	na
Imports (merchandise)	na	na	336	786	721	814	725
from countries outside the FSU	na	na	67	384	238	486	na
from former Soviet Republics	na	na	269	402	483	328	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	na	na	na	7.3	7.4	7.5	7.5
GDP in billions of manat[1]	na	1.5	2.7	25.1	157.0	1,636	na
GNP per capita (in US dollars) at PPP exchange rates[2]	na	na	na	na	2,230	na	na
The share of agriculture in NMP (per cent)[3]	na	37.4	41.1	32.5	38.2	38.7	na
The share of industry in NMP (per cent)[3]	na	34.8	37.2	50.5	43.3	37.0	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1994-95 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year.

1 GDP-figures in roubles for 1989-92 were converted into manat at the rate of 10 roubles per manat.

2 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

3 NMP excludes depreciation and the value added from most of the service sector. Not compatible with previous years due to changes in economic classification of expenditure.

Belarus

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure				*(Percentage change)*			
GDP at constant prices[1]	8.0	-3.0	-1.2	-9.6	-11.6	-21.5	-10
Consumption at constant prices	na	na	-6.8	-10.2	-6.0	na	na
Investment at constant prices	na	na	4.4	-18.1	-18.0	na	na
Industrial production	na	na	-0.2	-6.0	-11.0	na	na
Prices and wages							
Consumer prices (end-year)	na	na	93	1,558	1,994	1,875	260
Consumer prices (annual average)	1.7	4.5	84	969	1,188	2,220	700
Average real wages	7.8	11.6	-2.8	-14.4	12.2	na	na
Monetary sector							
Net domestic credit (end-year)	na	na	na	1,582	612	1,452	na
Broad money (M3, end-year)	na	na	na	508	928	1,883	na
Government sector				*(In per cent of GDP)*			
General government balance (incl. extra-budgetary funds)	na	na	3.6	-1.6	-8.3	-1.5	na
General government expenditure	na	na	43.9	45.6	51.9	38.1	na
External data							
Current account	na	na	na	3.7	-7.3	-8.4	na
Trade balance							
vis-à-vis countries outside the FSU	na	na	-2.8	5.8	-3.8	6.9	na
vis-à-vis former Soviet republics	na	na	6.3	0.5	-2.5	-13.1	na
Exports (merchandise)				*(In millions of US dollars)*			
to countries outside the FSU	na	na	1,661	1,082	832	1,039	na
Imports (merchandise)							
from countries outside the FSU	na	na	1,957	741	912	621	na
Exports (merchandise)				*(In billions of roubles)*			
to former Soviet republics	na	na	37	380	2,004	3,510	na
Imports (merchandise)							
from former Soviet republics	na	na	32	374	2,278	5,476	na
			(In months of current account expenditures, excluding transfers)				
Gross international reserves of the central bank	na	na	0.0	0.0	0.2	0.4	na
Memorandum items				*(Denominations as indicated)*			
Population (in millions)	10.2	10.3	10.3	10.3	10.4	10.4	na
Unemployment (in per cent of labour force, end-year)	na	na	na	0.5	1.5	2.5	na
The share of agriculture in GDP (per cent)	na	24.2	21.3	23.2	na	na	na
The share of industry in GDP (per cent)	na	38.6	41.0	38.4	na	na	na
GNP per capita (in US dollars) at PPP exchange rates[2]	na	na	na	na	6,360	na	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year.

1 Figures are for NMP until 1990, GDP thereafter. NMP excludes depreciation and the value added from most of the service sector.

2 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate, the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Bulgaria

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure			*(Percentage change)*				
GDP at constant prices	0.5	-9.1	-11.7	-7.3	-2.4	1.4	2.5
Industrial production	-1.1	-16.0	-27.8	-15.0	-7.0	4.1	na
Prices and wages							
Consumer prices (annual average)	6.4	26.3	333.5	82.0	73.0	96.3	68
Consumer prices (end-year)	10.0	72.5	338.9	79.4	63.9	121.9	50
Wages in the state sector (annual average)	8.7	31.7	165.6	103.0	59.0	50.8	na
Monetary sector							
Broad money (end-year)	10.6	16.6	122	43.5	52.9	77.9	na
Government Sector			*(In per cent of GDP)*				
General government balance[1]	-1.4	-12.8	-14.7	-15.0	-15.7	-7.0	na
General government cash balance[2]	na	na	na	-13.0	-10.6	-6.0	-8
General government expenditure (cash basis)[2]	58.4	65.9	45.6	45.4	50.8	43.8	na
External data in convertible currencies[3]			*(In billions of US dollars)*				
Current account (accrual basis)	-1.3	-1.2	-0.8	-1.1	-1.5	-0.1	0.1
Trade balance	-1.2	-0.8	0.0	-0.2	-0.9	0.2	0.4
Gross external debt	9.4	9.9	11.2	12.2	12.6	10.4	na
			(Percentage change in the US dollar value)				
Exports (balance of payments data)	na	-16.7	42.9	5.9	-5.8	11.6	na
Imports (balance of payments data)	na	-22	11.8	10.6	10.6	-13.1	na
			(In months of current account expenditure excluding transfers)				
Gross international reserves (end-year), excluding gold	1.8	0	0.8	1.7	1.2	2.1	na
Miscellaneous items			*(Denominations as indicated)*				
Population (in millions, end-year)	9.0	8.7	8.6	8.5	8.5	8.4	na
Employment (percentage change, end-year)	-2.3	-6.1	-13.0	-8.1	-1.6	na	na
Unemployment (in per cent of the labour force, end-year)	na	1.5	11.5	15.6	16.4	12.8	na
GDP (in billions of leva)	39.6	45.4	135.7	201	299	543	na
GNP per capita (in US dollars) at PPP exchange rates[4]	na	na	na	na	3,730	na	na
The share of agriculture and forestry in GDP (per cent)[5]	11	18	15	16	13	na	na
The share of industry in GDP (per cent)[5]	59	51	48	43	42.3	na	na
Exchange rate (lev per US dollar, end-year)	2.0	7.0	21.8	24.5	32.7	66.5	na
Exchange rate (lev per US dollar, annual average)	1.8	3.9	18.1	23.4	27.7	54.3	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. These data are frequently revised, and we strive to incorporate the latest revisions. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year.

1 General government includes the state, municipalities, social security and extra-budgetary funds.

2 Excluding (from expenditures) unpaid due interest amounting to 4.1 billion lev in 1992, 14.5 billion lev in 1993, and 5.4 billion lev in 1994.

3 Balance of payments data.

4 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

5 At current prices.

Croatia

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure				*(Percentage change)*			
GDP at constant prices[1]	-1.6	-8.6	-14.4	-9.0	-3.2	0.8	2
Industrial production	na	-11.3	-28.5	-15	-6	-3	na
Prices and wages							
Retail consumer prices (end-year)	na	136	149	937	1,150	-3	3
Monetary sector							
Narrow money (end-year)	na	na	na	598	889	110	na
Government sector				*(In per cent of GDP)*			
General government balance[2]	na	na	-5	-4	-1.0	1.7	-0.4
General government expenditure	na	na	39	38	34.6	42.1	48.9
External data in convertible currencies[3]				*(In millions of US dollars)*			
Current account[3]	na	1,053	-589	823	104	103	-1,000
Trade balance[3]	na	-1,168	-536	137	-763	-969	-2,000
Exports[3]	na	4,020	3,292	4,597	3,904	4,260	5,000
Imports[3]	na	5,188	3,828	4,461	4,666	5,229	7,000
				(In months of imports)			
Gross international reserves (end-year)	na	na	na	0.4	1.6	3.2	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	na	4.8	4.8	4.8	4.8	na	na
Unemployment rate (in per cent of labour force[4]	na	na	na	12.9	12.8	12.6	12.5
Exchange rate (average, dinars/kuna per dollar)[5]	na	0.011	0.033	0.298	3.588	5.993	na
GDP (in millions of US dollars at current exchange rates)	na	25,343	12,828	9,151	12,490	14,025	17,750
The share of agriculture in GDP (per cent)	na	10.6	10.2	13.2	12.6	na	na
The share of industry in GDP (per cent)[6]	na	30.4	29.7	26.9	26.8	na	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information on developments in the first half of the year.

1 For 1989, the data refer to GSP, the value-added concept of former Yugoslavia which excludes government, housing, financial services and some personal services.

2 General government includes the state, budget and extra-budgetary funds.

3 For 1990 and 1991 these data exclude trade with Slovenia, FYR Macedonia and Bosnia.

4 Labour force approximated by the number of pension insured individuals plus the number of registered unemployed.

5 Dinars were converted into kuna in May 1994 (when the kuna was introduced) at the rate of 1,000 dinars to one kuna.

6 Including construction.

Czech Republic

	1989	1990	1991	1992	1993	1994	1995
							Projection
Output and expenditure			*(Percentage change)*				
GDP at constant prices	1.4	-0.4	**-14.2**	**-6.4**	**-0.9**	**2.6**	**4**
Private consumption at constant price	na	na	**na**	**20.4**	**2.9**	**5.3**	**na**
Gross fixed investment at constant price	na	na	**na**	**8.9**	**-7.7**	**4.4**	**na**
Industrial production	0.8	-3.5	**-22.3**	**-7.9**	**-5.3**	**2.3**	**na**
Prices and wages							
Consumer prices (annual average)	2.3	10.8	**56.7**	**11.1**	**20.8**	**10.0**	**10**
Consumer prices (end-year)	1.5	18.4	**52.0**	**12.7**	**18.2**	**10.2**	**10**
Producer prices (annual average)	-0.7	4.4	**74.7**	**9.9**	**13.1**	**5.3**	**na**
Wages in industry (annual average)	3.2	4.5	**16.7**	**19.6**	**23.8**	**15.7**	**na**
Monetary sector							
Broad money (end-year)	3.5	0.5	26,8	17.3	**20.5**	**21.5**	**na**
Government sector			*(In per cent of GDP)*				
General government balance	-2.8	0.1	-2.0	-3.3	**1.4**	**1.0**	**0**
General government expenditure	64.5	60.1	54.2	52.8	**48.5**	**49.0**	**na**
Foreign Trade			*(Percentage change in the US dollar value)*				
Exports, excluding trade with Slovakia[1]	8.5	10.1	39.2	35.2	**20.3**	**15.4**	**na**
Imports, excluding trade with Slovakia[1]	-1.5	35.0	29.6	46.2	**4.1**	**19.2**	**na**
Exports, including trade with Slovakia[1]	na	na	na	na	**9.8**	**8.3**	**na**
Imports, including trade with Slovakia[1]	na	na	na	na	**1.3**	**14.0**	**na**
			(In billions of US dollars)				
Current account balance, excluding trade with Slovakia	0.4	-1.1	0.4	**-0.3**	**0.5**	**0.4**	**na**
Trade balance, excluding trade with Slovakia	0.4	-0.8	-0.4	**-1.9**	**-0.2**	**-0.7**	**na**
Current account balance, including trade with Slovakia	na	na	na	**0.6**	**0.4**	**0.3**	**-1**
Trade balance, including trade with Slovakia	na	na	na	**-1.0**	**0.3**	**-0.4**	**na**
Gross foreign direct investment, cash	na	na	na	1.0	**0.6**	**0.9**	**na**
Portfolio investment	na	na	na	0	**1.1**	**0.8**	**na**
External debt, net of reserves of the banking system	6.8	7.7	8.3	**8.6**	**3.9**	**2.8**	**na**
			(In months of current account expenditures excluding transfers)				
Gross international reserves of the central bank	1.8	0.7	1.4	1.0	**3.2**	**4.3**	**na**
Miscellaneous items			*(Denominations as indicated)*				
Population (in millions, end-year)	10.3	**10.3**	**10.3**	**10.3**	**10.3**	**10.3**	**na**
Employment (change in per cent)	na	**-0.9**	**-5.5**	**-2.6**	**-1.6**	**1.1**	**na**
Unemployment rate (end of period)	0	0.8	**4.1**	**2.6**	**3.5**	**3.2**	**na**
GDP (in billions of crowns)	758.8	**567.3**	**716.6**	**803.3**	**911.0**	**1,038.0**	**na**
The share of agriculture in GDP (in per cent)	6.3	**8.4**	**6.0**	**5.7**	**6.2**	**5.5**	**na**
The share of industry and construction in GDP (in per cent)	na	**na**	**na**	**45.0**	**39.8**	**39.3**	**na**
GNP per capita (in US dollars) at PPP exchange rates[2]	na	**na**	**na**	**na**	**7,700**	**na**	**na**
Exchange rate (crowns per US dollar, end-year)	14.3	28.0	27.8	28.9	**30.0**	**28.2**	**na**
Exchange rate (crowns per US dollar, annual average)	15.1	18.0	29.5	28.3	**29.2**	**28.8**	**na**
Interest rate (average 3-month inter-bank deposit rate, per cent)	na	na	na	13.8	**13.2**	**9.1**	**na**

Note

Figures in bold type are those for the Czech Republic and figures in normal type are those for the former CSFR. As a rule, data for the Czech Republic are shown for years after 1991 where possible. Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments during the first half of the year.

[1] Data from the balance of payments, collected on a settlement basis.

[2] PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Estonia

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	-1.1	-8.1	-11	-14.2	-6.7	6	6
Prices and wages							
Consumer prices (annual average)	6.1	23.1	210.5	1,076	89.8	48	25
Consumer prices (end of period)	na	na	303.8	953.5	35.6	42	22
Average real wages	na	na	na	-39	6	4.5	na
Monetary sector							
Broad money (M3, end-year)	na	na	312.4	69.4	52.8	30	na
Government sector				*(In per cent of GDP)*			
General government balance[1]	2.8	2.9	4.6	0.5	-1.4	0.9	1
General government expenditure[1]	36.7	32.8	31.8	31.0	33.9	34	na
External data				*(In millions of US dollars)*			
Current account	na	na	570	83	12	-171	-200
Trade balance	na	-250	561	-63	-156	-345	-400
Exports (merchandise)	na	1,843	2,822	457	812	1,305	1,450
to former Soviet republics	na	1,763	2,749	215	342	586	na
to countries outside the FSU	na	80	72	242	470	718	na
Imports (merchandise)	na	2,093	2,261	520	968	1,650	1,850
from former Soviet republics	na	1,887	2,079	266	324	507	na
from countries outside the FSU	na	206	183	254	644	1,142	na
				(In months of goods imports)			
Gross international reserves (end-year)	na	na	na	4.5	4.8	3.3	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	1.6	1.6	1.6	1.6	1.6	1.5	na
Unemployment (in per cent of working age population)[2]	na	na	0.1	1.9	2.6	2.0	3.5
GDP (in millions of kroons)	na	na	1,832	14,255	22,845	31,723	42,033
GDP per capita at current exchange rates (in US dollars)	na	na	na	739	1,079	1,525	na
GNP per capita (in US dollars) at PPP exchange rates[3]	na	na	na	na	6,860	na	na
The share of agriculture in GDP (per cent)[4]	na	na	20.1	13.2	11.5	10.5	na
The share of industry in GDP (per cent)[4]	na	na	40.4	32.5	26.3	25	na
Exchange rate (kroons per US dollar, end-year)	na	na	na	12.6	13.8	12.4	na
Exchange rate (kroons per US dollar, annual average)	na	na	na	12.1	13.2	13.0	na

Note

Data for 1989-93 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1994-95 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in 1994.

1 General government includes the state, local governments and extra-budgetary funds.

2 Officially registered unemployment.

3 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

4 At current prices.

FYR Macedonia

	1990	1991	1992	1993	1994	1995 Projection
Output			*(Percentage change)*			
GSP at constant prices[1]	-9.9	-12.1	-14.0	-14.1	-7.2	-3
Industrial production	-10.6	-17.2	-17.3	-15.9	-9.4	na
Prices						
Retail prices (end-year)	606	115	1,935	230	55	10
Retail prices (average)	na	na	1,691	350	122	50
Monetary sector						
Denar M2 (end-year) monthly average	na	na	15.2	23	3	na
Government sector			*(In per cent of GSP)*			
General government balance	na	-3.6	-7.2	-11.1	-2.6	-3
General government expenditure	na	40.4	36.1	44.3	45.4	na
Central government balance[2]	na	na	-5.6	-7.1	-2	-1
Central government expenditure[2]	na	18.2	19.6	25.8	27.5	na
External data in convertible currencies			*(In millions of US dollars)*			
Current account	-400	-262	-19	-88	-170	-350
Trade balance	-418	-225	-7	-172	-171	na
Exports[3]	1,113	1,150	1,199	1,055	1,068	na
Imports[3]	1,531	1,375	1,206	1,227	1,238	na
External debt (end-year)[4]	828	806	848	828	865	na
Memorandum items			*(Denominations as indicated)*			
Population (in millions)[5]	2.13	2.15	2.17	2.19	2.1	na
Unemployment rate (annual average)[6]	na	18	19	19	19	na
Official exchange rate (denar per US dollar, end of period)[7]	11.3	19.7	1,235.6	44.5	40.6	na
Official exchange rate (denar per US dollar, average)[7]	na	19.6	509.1	23.2	43.3	na

Note

Data for 1990-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in the first half of the year.

1 GSP is the value-added concept of former Yugoslavia which excludes the value added by government, financial and some personal services.

2 Include transfers to extra-budgetary funds. Figure for 1992 refers to end-December. Figure for 1993 is for end-September 1993.

3 Merchandise only. The gradual inclusion of exports to other republics of the former Yugoslavia from 1991 results in a discontinuity in this series for total exports.

4 Estimated stock of debt excluding interest arrears, penalty interest and the FYRM's share of the unallocated debt of the former SFRY. 1994 figure for first nine months only.

5 Figures for 1992-93 do not include refugees (30,000-60,000). 1994 figure reflects June census.

6 These data have recently been revised sharply downwards, reflecting *inter alia* that some of the registered unemployed may work in the private sector.

7 Figure for 1993 expressed in new denar (=100 old denar).

Georgia

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure at constant prices				*(Percentage change)*			
GDP at constant prices[1]	-4.8	-12.4	-13.8	-40.3	-39	-35	-5
Industrial production	-6.9	-29.9	-24.4	-43.3	-21	-40	na
Agricultural output	-24.3	61.8	-10.6	-34.2	-42	-15	na
Prices							
Retail prices (end-year)	0.9	4.8	131	1,463	7,492	7,380	25
Retail prices (annual average)	na	3.3	79	913	3,126	7,400	250
Monetary sector							
Domestic credit (end-year)	na	na	na	794	2,282	3,000	na
Broad money (end-year)	na	na	na	464	4,319	1,600	na
Government sector				*(In per cent of GDP)*			
Consolidated government balance (cash-basis)	na	na	-3	-28	-34	-17	-7
Consolidated government expenditure (cash-basis)	na	na	33	39	46	24	na
External data				*(In millions of US dollars)*			
Current account	na	na	na	-248	-191	-500	-400
Trade balance	na	na	na	-378	-363	-300	na
Exports	na	na	na	267	360	500	na
Imports	na	na	na	645	723	800	na
Miscellaneous items				*(Denomination as indicated)*			
Population (in millions)	5.4	5.4	5.4	5.4	5.4	5.4	na
Unemployment rate (in per cent)	na	na	na	5.4	8.4	na	na
GNP per capita (in US dollars) at PPP exchange rates[2]	na	na	na	na	1,410	na	na
The share of agriculture in NMP (per cent)[3]	20	37	42	48	46	na	na
The share of industry in NMP (per cent)[3]	44	35	33	33	43	na	na
Exchange rate (millions of coupons per US dollar, end-period)	na	na	na	na	na	1.28	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in the first half of the year.

1 NMP for 1989-93. NMP excludes depreciation and the value added from most of the service sector.

2 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

3 NMP excludes depreciation and most of the service sector.

Hungary

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure							
National accounts at constant prices				*(Percentage change)*			
GDP	0.7	-3.5	-11.9	-3.0	-0.9	2	3
Private consumption[1]	-0.3	-0.8	-5.8	-0.5	1.4	1-2	na
Public consumption[1]	0.2	2.6	-2.7	3.9	30.5	-22	na
Gross fixed investment	8.8	-7.8	-10.0	-2.7	1.7	11-12	na
Exports of goods and services[2]	1.2	-5.3	-15.3	-5.0	-9.5	14.5	na
Imports of goods and services[1, 2]	1.8	-4.3	-8.8	-10.0	24.2	11.7	na
Industrial gross output	-1.0	-9.6	-18.2	-9.8	4.0	9.5	6
Agricultural gross output	-1.8	-4.7	-6.2	-20.0	-6.9	2.4	na
Prices and wages				*(Percentage change)*			
Consumer prices (annual average)	17.0	28.9	35.0	23.0	22.5	18.8	29
Consumer prices (end-year)	18.9	33.4	32.2	21.6	21.1	21.2	28
Producer prices (annual average)	15.4	22.0	32.6	11.5	10.8	11.4	22
Producer prices (end-year)	na	na	24.8	16.6	10.3	14.0	29
Gross monthly earnings per full-time employee	17.9	27.2	33.4	24.7	22.0	24.7	na
Monetary sector				*(Percentage change)*			
Broad money (end-year)	13.8	28.7	28.5	26.8	15.5	13.4	na
Government sector				*(In per cent of GDP)*			
General government balance[3]	-1.4	0.5	-2.2	-5.6	-6.4	-8.2	na
Central government balance[4]	-0.8	0.8	-4.4	-6.9	-6.6	-7.7	-5
General government expenditure[4]	61.0	57.5	58.3	63.4	60.5	na	na
External data in convertible currencies				*(In billions of US dollars)*			
Current account	-1.4	0.1	0.3	0.3	-3.5	-3.9	-3
Trade balance	0.5	0.3	0.2	0.0	-3.2	-3.6	na
External debt, net of reserves	19.2	20.2	18.7	17.1	17.9	21.7	na
Foreign direct investment in cash	0.2	0.4	1.5	1.3	2.2	1.2	na
				(Percentage change in the US dollar value)			
Exports (data from the balance of payments)[5]	17.1	-1.6	45.9	8.3	-19.3	-5.9	na
Imports (data from the balance of payments)[5]	17.8	1.5	51.2	11.1	12.5	-0.8	na
Exports (customs/survey statistics)[5]	na	na	na	5.6	-16.8	20.1	20
Imports (customs/survey statistics)[5]	na	na	na	-2.7	13.2	16.1	10
				(In months of current account expenditures, excluding transfers)			
Gross international reserves (end-year), excluding gold	1.5	1.3	3.8	3.7	5.1	4.9	na
				(In per cent of current account revenues, excluding transfers)			
Debt service	48.8	47.1	34.7	35.5	43.2	55.9	na
Memorandum Items				*(Denominations as indicated)*			
Population (in millions, end-year)	10.4	10.4	10.4	10.3	10.3	10.3	na
Employment (percentage change, end-year)	-0.6	-3.1	-9.6	-9.3	-5.9	-1	na
Unemployment (in per cent of the labour force)	0.3	2.5	8.0	12.3	12.1	10.4	na
GDP (in billions of forints)	1,723	2,089	2,477	2,935	3,535	4,310	na
GDP per capita (in US dollars)	2,803	3,179	3,184	3,607	3,734	3,979	na
GNP per capita (in US dollars) at PPP exchange rates[6]	na	na	na	na	6,260	na	na
The share of agriculture in GDP (per cent)[7]	9.7	9.6	8.6	7.3	6.4	6.6	na
The share of industry in GDP (per cent)[7]	30.1	28.8	25.5	26.4	25.2	25.9	na
Exchange rate (forint per US dollar, end-year)	62.5	61.5	75.6	84.0	100.7	111.6	na
Exchange rate (forint per US dollar, annual average)	59.1	63.2	74.8	79.0	91.9	105.2	na
Interbank interest rate (14-30 days maturity, end-year)	na	na	35.4	15.4	21.8	31.3	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in the first half of the year.

1 Private consumption excludes consumption by Hungarians abroad; includes consumption by foreigners in Hungary. Public consumption and imports for 1993 includes deliveries of military aircraft from Russia as settlement of CMEA-related debts to Hungary. Excluding this item, public consumption grew about 1½ per cent in each of the years 1993 and 1994, while imports grew 13 per cent in 1993 and 19 per cent in 1994.

2 These series incorporate sharp revisions for 1992-93, published in April 1995. The revisions reduce the role of re-exported goods in the figures for both imports and exports.

3 General government includes the state, municipalities and extra-budgetary funds.

4 Comprising the state and extra-budgetary funds. Includes the activities of the State Development Institution from 1990.

5 Balance of payments data are based on banking statistics and are presented on a settlement basis. Since 1993 trends in balance of payments data on exports and imports have deviated markedly from trends observed in partner country statistics, notably OECD trade statistics. Banking statistics have become less reliable over this period as statistical reporting requirements for banks have been loosened. Many observers now find the customs/survey-based series more reliable. Because of a break in the series, customs/survey based data are quoted here only from 1992 onwards.

6 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

7 At constant 1991 prices.

Kazakstan

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	-0.4	-0.4	-13	-13	-12	-25	-12
Industrial output	2	-1	-1	-14	-16	-28	na
Agricultural output	-14	16	-9	1	-10	-23	na
Prices and wages							
Retail prices (annual average)	na	4.2	90.9	1,381	1,662	1,880	180
Retail prices (end-year)	na	na	149.5	2,567	2,169	1,160	60
Wages (average monthly wage in tenge)	na	na	na	na	384	3,392	na
Monetary sector							
Broad money (end-year)	na	na	211	391	692	560	na
Government sector				*(In per cent of GDP)*			
General government balance	0	1.4	-7.9	-7.3	-1.2	-6.5	-5
Total expenditure	35.4	31.4	32.9	31.9	24.7	24	na
External data				*(In billions of US dollars)*			
Total trade balance	na	na	na	-1.1	-0.4	0.8	na
Exports	na	na	na	3.5	4.8	3.3	na
Imports	na	na	na	4.6	5.2	4.1	na
Total current account	na	na	na	0.3	0.1	na	na
Trade balance *vis-à-vis* countries outside the FSU	-0.7	-1.2	-1.1	0	0.1	na	na
Exports	1.6	1.3	0.8	1.5	1.6	na	na
Imports	2.3	2.5	1.9	1.5	1.5	na	na
Current account balance *vis-à-vis* countries outside the FSU	na	na	na	0.3	0.1	na	na
Miscellaneous				*(Denominations as indicated)*			
Population (in millions, end-year)	16.5	16.6	16.7	16.9	16.9	16.9	na
Unemployment rate (end-year)	0	0	0	0.5	0.6	1.6	na
Exchange rate (annual average, roubles per US dollar until 1993, tenge per US dollar thereafter)	0.63	0.59	117	222	930	36	na
GNP per capita (in US dollars) at PPP exchange rates[1]	na	na	na	na	3,770	na	na
The share of industry in GDP (per cent)	29.9	21	37.1	46.4	44.3	40.2	na
The share of agriculture in GDP (per cent)	34.8	41.8	34.1	30.4	31.4	38.8	na
Direct investment (millions of US dollars)	na	na	na	100	470	450	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in 1994.

1 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Kyrgyzstan

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	4	3	-5	-25	-16	-27	-5
Industrial production at constant prices	na	na	0	-27	-25	-30	na
Agricultural production at constant prices	na	na	-10	-6	-9	-15	na
Prices and wages							
Consumer prices (annual average)	na	3.0	85	855	1,209	280	45
Consumer prices (end-year)	na	na	170	1,771	1,366	87	25
Producer prices (end-year)	na	na	288	4,031	1,355	85	na
GDP deflator	na	na	na	na	1,282	299	na
Monetary sector							
Broad money (end-year)	na	na	84	428	180	124	36
Net domestic assets (end year)	na	na	na	761	307	44	37
Government sector				*(In per cent of GDP)*			
Government balance	2.1	0.3	4.6	-17.4	-13.5	-8.4	-12
Government expenditure and net lending	35.9	38.3	30.3	33.9	36.8	32.7	na
Government tax revenue	28.0	26.3	17.1	14.5	13.5	15.5	na
External data				*(In millions of US dollars)*			
Current account balance, excluding transfers	na	na	-136	-61	-256	-194	-200
Official transfers	na	na	na	na	105	76	na
Trade balance	na	na	-136	-74	-159	-96	na
Exports	na	na	3,719	258	335	340	na
to non-FSU	na	na	23	23	112	117	na
to FSU	na	na	3,696	235	223	223	na
Imports	na	na	3,855	332	494	436	na
from non-FSU	na	na	785	15	178	172	na
from FSU	na	na	3,070	317	317	264	na
External Debt	na	na	na	na	295	420	535
Memorandum items				*(Denominations as indicated)*			
Population (in millions, end-year)	4.3	4.4	4.4	4.4	4.4	4.5	na
GDP (in billions of roubles until 1992, in millions of soms thereafter)	7.6	8.3	86	765	5,720	10,700	na
GNP per capita (in US dollars) at PPP exchange rates[1]	na	na	na	na	2,420	na	na
Exchange rate (annual average, roubles per dollar, som per dollar from 1993 onwards)	0.6	0.6	1.8	161.0	6.1	11.0	na
The share of industry in NMP	33.3	31.8	32.9	38.4	30.0	29.5	na
The share of agriculture in NMP	41.7	43.1	45.6	43.0	46.0	43.3	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information from the aforementioned sources about developments in 1995.

[1] PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods in the domestic market as one dollar would buy in the United States.

Latvia

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	6.8	2.9	-8.3	-35	-15	2	1
Prices and wages							
Consumer prices (annual average)	4.7	10.5	124.4	951.2	109.1	35.7	25
Consumer prices (end-year)	na	na	262.4	958.0	35.0	26.0	23
Real average wage in the state sector (annual average)	na	na	-16.3	-15.7	1.0	12	na
Monetary sector							
Domestic credit (end-year)	na	na	91	304	146	65	na
Broad money (M2, end-year)	na	na	153	170	84	49	na
Government sector				*(In per cent of GDP)*			
General government financial balance	1	2	6	0	1.0	-1.7	-1.6
General government expenditure	51.0	44.0	31	28.2	34.8	38.0	na
External data							
Current account balance	na	na	na	1.8	6.7	-3.4	-3.4
				(In millions of US dollars)			
Exports (merchandise)	na	na	na	831	998	967	1,080
to FSU	na	na	na	396	541	488	na
to other countries	na	na	na	435	457	480	na
of which: re-exports of energy	na	na	na	134	117	na	na
Imports (merchandise)	na	na	na	1,046	1,159	1,367	1,500
Energy	na	na	na	na	525	405	na
from FSU (non-energy)	na	na	na	na	237	244	na
from other countries (non-energy)	na	na	na	na	396	718	na
Gross foreign debt	na	na	na	69	240	370	na
Gross foreign debt (percentage of GDP)	na	na	na	na	11	11	na
Debt service (percentage of exports)	na	na	na	na	2	5	na
Gross reserves (in months of imports)	na	na	na	69	4.4	4.6	na
Exchange rate (lats per US dollar; end of period)	na	na	na	0.843	0.595	0.548	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in million)	2.7	2.7	2.7	2.7	2.7	2.7	na
Unemployment (end-year, per cent of labour force)	0	0	0.1	2.1	5.3	6.5	na
GNP per capita (in US dollars) at PPP exchange rates[1]	na	na	na	na	5,170	na	na
Credit interest rate (in per cent, end-year)	na	na	23	92	67	32	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD assessments, partly based on information about developments in the first half of the year.

1 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Lithuania

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices[1]	1.5	-5.0	-13.1	-37.7	-24.2	1.7	5
Domestic demand at constant prices	na	na	na	-40.5	-28.0	1.3	4
Industrial production[2]	na	na	na	-50.9	-42.7	2.0	6
Prices and wages							
Consumer prices (annual average)	2.1	8.4	224.7	1,020.5	409.2	72	35
Consumer prices (end-year)	na	na	345.0	1,175.0	188.7	45	30
Average real wages	8.1	7.3	-18.3	-32.8	-45.0	8	na
Monetary sector							
Broad money (M2)	14	55	71	351	160	63	na
Government sector				*(In per cent of GDP)*			
General government balance[3]	-3.8	-4.5	5.0	0.5	2.4	-1.5	-1
General government expenditure	53.8	49.2	38.9	37.8	27.9	26.5	25
External data in convertible currencies							
Current account	na	na	na	3.4	-5.7	-3.7	-3
Trade balance	-8.4	-8.8	9.1	3.4	-10.3	-5.4	-4
				(In millions of US dollars)			
Exports (merchandise)	na	na	na	1,145	1,698	1,892	2,300
to countries outside the FSU	na	na	na	557	716	863	na
to former Soviet republics	na	na	na	588	982	1,028	na
Imports (merchandise)	na	na	na	1,084	1,992	2,210	2,700
from countries outside the FSU	na	na	na	341	520	705	na
from former Soviet republics	na	na	na	742	1,472	1,505	na
of which: Energy	na	na	na	na	901	655	na
Net international reserves of the central bank	na	na	na	24	290	482	na
Gross foreign debt	na	na	na	126	345	490	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	3.69	3.73	3.75	3.76	3.75	3.73	na
Unemployment (end-year, per cent of labour force)	na	na	0.3	1.0	2.5	4.2	6.6
GNP per capita (in US dollars) at PPP exchange rates[4]	na	na	na	na	3,160	na	na
The share of agriculture in GDP at factor cost (per cent)[5]	27.2	24.9	23.8	28.2	21.0	18.0	na
The share of industry in GDP at factor cost (per cent)[5]	34.5	36.4	36.9	25.4	41.0	38.0	na
Exchange rate (local currency per US dollar, end-year)[6]	na	17.5	113.9	378.9	3.9	4.0	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance, with most of the data for 1993 and 1994 stemming from the IMF. Data for 1995 reflect EBRD evaluations, partly based on information on developments in the first half of the year.

1 Figures are for NMP until 1990, GDP thereafter. NMP excludes depreciation and the value added from most of the service sector.

2 All manufacturing in 1992; state enterprise sector only in 1993.

3 General government includes the state, municipalities and extra-budgetary funds.

4 PPP stands for purchasing power parity. The estimate quoted here for 1993 stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

5 Data for 1993 from WDR 1995, Table 3. The 1993 data are not consistent with the figures given for earlier years. But they are believed to reflect the structure of GDP more accurately than the earlier figures, though the shares of both agriculture and industry in GDP have been declining with the share of services increasing.

6 Roubles per US dollar in 1990 and 1991, talonai per US dollar in 1992, and litai per US dollar from 1993.

Moldova

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices[1]	8.8	-1.5	-11.9	-29	-9	-22	-5
Prices							
Consumer prices (annual average)[2]	na	4.2	98	1,276	789	327	35
Consumer prices (end-year)[2]	na	na	162	2,198	837	98	20
Government sector				*(In per cent of GDP)*			
State budget balance[3]	2	3	0	-23.4	-8.8	-8	4
State budget expenditures and net lending[3]	na	na	na	43.6	25.9	16	na
External data in convertible currencies				*(In millions of US dollars)*			
Current account	na	na	na	-39	-182	-180	na
vis-à-vis countries outside the FSU	na	na	na	-22	-8	-60	na
vis-à-vis former Soviet Republics	na	na	na	-17	-174	-120	na
Trade balance	na	na	na	-37	-180	-100	na
vis-à-vis countries outside the FSU	na	na	na	-20	-35	-40	na
vis-à-vis former Soviet Republics	na	na	na	-17	-144	-60	na
Exports	na	na	na	868	451	500	na
to countries outside the FSU	na	na	na	185	174	200	na
to former Soviet Republics	na	na	na	683	277	300	na
Imports	na	na	na	-905	-631	-600	na
from countries outside the FSU	na	na	na	-205	-210	-240	na
from former Soviet Republics	na	na	na	-700	-421	-360	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	4.4	4.4	4.4	4.3	4.3	4.3	na
GDP (in millions of Moldovan lei)	na	na	na	215	2,131	8,500	na
GDP per capita (in US dollars) at PPP exchange rates[4]	na	na	na	na	3,210	na	na
GDP per capita (in US dollars) at current exchange rates	na	na	na	na	354	460	na
The share of agriculture in NMP (in per cent)[5]	na	na	na	43	42	na	na
The share of industry in NMP (in per cent)[5]	na	na	na	33	42	na	na
Exchange rate (lei per US dollar, average for the year)	na	na	na	na	1.4	4.3	na

Note

Data for 1989-94 represent the most recent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Projections for 1995 should be treated with the same caveats as apply to official estimates and forecasts. They are based on government and EBRD evaluations of expected developments and on official estimates of outturns for 1994.

1 Changes in NMP at constant prices until 1991, GDP thereafter. NMP excludes depreciation and the value added from most of the service sector.

2 Retail prices for 1989-91.

3 Includes republican and local budgets except for the Trans-Dniester region.

4 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

5 NMP excludes depreciation and the value added from most of the service sector.

Poland

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure			*(Percentage change)*				
GDP at constant prices[1]	0.2	-11.6	-7.6	2.6	3.8	5.0	5.5
Consumption at constant prices	6.1	-11.7	7.2	3.5	5.1	1.2	na
Gross fixed investment at constant prices	-2.1	-10.6	-3.1	2.3	2.9	7.0	na
Export volume	0.1	13.7	-2.4	-2.6	-2.4	na	na
Import volume	1.5	-17.9	37.8	13.9	20.0	na	na
Industrial production	-1.4	-26.1	-11.9	3.9	5.6	13.0	13
Prices and wages							
Consumer prices (annual average)	251.1	585.8	70.3	43.0	35.3	32.2	27
Consumer prices (end-year)	639.7	249.3	60.4	44.4	37.6	29.5	23
Producer prices (annual average)	212.8	622.3	48.1	28.5	32.2	30.1	na
Wages and salaries (annual average)	291.8	398.0	70.6	39.2	33.6	37.0	na
Monetary sector							
Broad money (end-year)	236.0	121.9	47.4	57.5	36.0	38.2	23
Government sector			*(In per cent of GDP)*				
General government balance[2]	-7.4	3.1	-6.5	-6.7	-2.9	-2.5	-3.1
General government outlays[2]	48.8	39.8	48.0	50.7	48.4	50.2	na
State budget balance[3]	-6.1	0.7	-7.0	-6.9	-3.4	-3.0	-3.2
State budget outlays[3]	36.9	32.7	32.7	33.9	32.9	32.4	33.7
External data in convertible currencies			*(In billions of US dollars)*				
Current account balance	-1.8	0.7	-2.2	-0.3	-2.3	-0.9	-1.1
Trade balance	0.2	2.2	0.1	0.5	-2.3	-0.8	-1.0
External debt	40.2	48.9	48.3	48.2	48.7	40.9	na
			(Percentage change in the US dollar value)				
Exports (data from the balance of payments)	4.5	43.4	17.5	9.7	-2.9	24.8	na
Imports (data from the balance of payments)	16.3	17.9	46.9	6.1	17.7	12.0	na
			(In months of imports of goods and non-factor services)				
Gross official reserves (end-year)	3.6	5.5	3.3	3.5	3.0	3.6	na
Memorandum items			*(Denominations as indicated)*				
Population (in millions)	38.0	38.2	38.3	38.4	38.5	38.6	na
Employment (percentage change, end-year)	-0.8	-6.2	-3.9	-3.1	-2.8	-1.5	na
Unemployment (in per cent of the labour force, end-year)	0.1	6.1	11.8	13.6	15.7	16.0	na
GDP (in billions of new zloty)	11.832	59.152	82.527	114.944	155.605	211.500	na
GNP per capita (in US dollars) at PPP exchange rates[4]	na	na	na	na	5,010	na	na
Private sector share of GDP (per cent)	28.6	31.4	45.3	48.2	53.5	56.0	na
The share of agriculture in GDP (per cent)[5]	7.8	8.4	9.3	8.3	7.1	na	na
The share of industry in GDP (per cent)[6]	49.5	43.6	39.2	39.6	37.8	na	na
Exchange rate (new zloty per US dollar, end-year)	0.650	0.950	1.096	1.577	2.134	2.437	na
Exchange rate (new zloty per US dollar, average)	0.145	0.950	1.058	1.363	1.812	2.272	na
Interest rate (re-discount rate, end of period)	136.0	48.0	36.0	32.0	29.0	28.0	na

Sources

Central Statistical Office, Poland; National Bank of Poland; International Monetary Fund; and EBRD staff estimates.

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on information on developments in the first half of the year.

1 An unofficial report published by the Central Statistical Office puts the decline in real GDP between 1989 and 1991 at 5 -10 per cent, significantly below the official figures.

2 "General government" includes the state, municipalities and extra-budgetary funds. The data are compiled on a commitment basis, except for external interest payments which are cash-based.

3 For the period 1988-90 the "state budget" includes central government accounts and accounts of local and regional authorities. The state budget for 1991 and subsequent years includes the central government accounts, the accounts of regional authorities and accounts of several previously extra-budgetary funds. Flows are compiled on a commitment basis, except for external interest payments which are cash-based.

4 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

5 At constant prices. Includes agriculture and forestry.

6 At constant prices.

Romania

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure			*(Percentage change)*				
National accounts							
Real GDP	-5.8	-5.6	-12.9	-10.0	1.3	3.4	4
Private consumption	0.6	8.0	-16.2	-9.3	-2.0	na	na
Public consumption	1.2	12.7	8.4	1.4	3.0	na	na
Gross fixed investment	-1.6	-35.5	-31.6	4.9	4.7	na	na
Exports of goods and services	-10.2	-39.4	-17.9	-3.0	11.1	na	na
Imports of goods and services	2.9	18.5	-29.6	7.6	3.9	na	na
Industrial output[1]	-5.3	-23.7	-22.8	-21.9	1.3	3.3	5
Prices and wages							
Consumer prices (annual average)	1.1	5.1	174.5	210.9	256.1	131.0	40
Consumer prices (end-year)	0.6	37.7	222.8	199.2	295.5	61.7	30
Wholesale prices (annual average)	0.0	26.5	255.8	191.7	165.0	na	na
Wages (annual average)	3.9	10.6	121.2	170.0	202.1	na	na
Monetary sector			*(In per cent of GDP)*				
Broad money (end-year)	5.3	22.0	101.2	79.6	143.2	100	na
Government sector			*(In per cent of GDP)*				
Central goverment balance (national definition)	na	na	-1.9	-4.4	-1.8	-3.5	-3
General government balance[2]	8.4	1.2	0.6	-4.6	-0.1	-3	-2
General government expenditure[2]	42.7	39.3	40.4	42.2	31.0	na	na
External data in convertible currencies			*(In billions of US dollars)*				
Current account balance	2.9	-1.8	-1.3	-1.7	-1.5	-0.7	na
Trade balance	2.6	-1.8	-1.3	-1.4	-1.1	0.3	na
Gross external debt, net of reserves (end-year)	-1.3	0.6	1.6	2.7	3.5	4	na
			(Percentage change in the US dollar value)				
Exports (data from the balance of payments)[3]	-7.9	-44.0	-1.7	22.9	13.6	28	na
Imports (data from the balance of payments)[3]	17.3	49.9	-10.2	16.3	6.2	5	na
			(In months of current account expenditures, excluding transfers)				
Gross international reserves (end-year), excluding gold	6.0	0.8	1.0	1.3	1.6	2.6	na
Miscellaneous items			*(Denominations as indicated)*				
Population (in millions, mid-year)	23.1	23.2	23.2	22.8	22.8	22.7	22.6
Employment (percentage change, end-year)	1.3	-1.0	-0.5	-3.0	-3.8	-2.7	na
Unemployment rate (in per cent of the labour force, end-year)	na	na	3.0	8.4	10.2	10.9	na
GDP (in billions of lei)	800	858	2,199	5,982	18,835	47,500	na
GDP per capita (in US dollars) at current exchange rates[4]	2,321	1,649	1,242	852	1,087	1,324	na
GDP per capita (in US dollars) at PPP exchange rates[5]	na	na	na	na	2,910	na	na
The share of agriculture in GDP (per cent)[6]	13.9	18.0	18.5	20.1	21	na	na
The share of industry in GDP (per cent)[6]	52.8	48.2	43.6	44.3	41	na	na
Exchange rate (lei per US dollar, end-year)[7]	14.4	34.7	189.0	460.0	1,276.0	1,767	na
Exchange rate (lei per US dollar, average)[7]	14.9	22.4	76.3	308.0	760.1	1,580	na
Bank lending rate (end-year)[8]	3	3	8-18	52	86	56	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in the first half of the year.

1 For 1988 and 1989: industrial real value added.

2 General government includes the state, local governments and extra-budgetary funds.

3 Balance of payments data; payments settled plus accrued payments due.

4 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

5 Applying the average exchange rate quoted above.

6 At current prices.

7 During most of the period covered in this table, the exchange rate facing individuals has differed from that facing enterprises. The rates quoted here are the officially quoted rates facing enterprises.

8 For 1988-91: The central bank's refinancing rate. For 1992: commercial bank rate on medium-term lending to enterprises. For 1993: average end-year commercial bank rate on lending to enterprises. For 1994: the central bank's average lending rate in October 1994.

Russian Federation

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure				*(Percentage change)*			
Real GDP	na	na	-13	-19	-12	-15	-3
Real NMP	1.9	-4.0	-11.0	-20.0	-13	-16	-4
Investment at constant prices	4.1	0.1	-11.0	-45.0	-15.0	-27	-10
Industrial production	1.4	-0.1	-8.0	-18.8	-16.0	-21	-6
Prices and wages				*(In percentage)*			
Retail prices (annual average)	2.0	5.6	92.7	1,354	896	302	205
Retail prices (end-period)	na	na	143.9	2,318	841	203	145
Wages (annual average)	9.9	14.8	73.9	1,065	885	269	na
Industrial wholesale prices (annual average)	1.2	3.9	138.1	1,949	na	na	na
Industrial wholesale prices (end-period)	na	na	236.3	3,275	1,007	345	155
Monetary sector				*(Percentage change)*			
Credit to enterprises and households	na	na	127	803	452	242	na
Broad money (end-period)[1]	14.6	17.6	126	643	416	190	na
Government sector				*(In per cent of GDP)*			
State budget balance (cash basis)[2]	na	na	-16.0	-6.9	-5.7	na	na
General government balance (cash basis)[3]	na	na	-31.0	-18.8	-7.6	-9.9	-5.7
External data[4]				*(In billions of US dollars)*			
Current account balance							
vis-à-vis non-CIS countries (incl. gold)	na	-2.5	1.5	-1.7	2.0	5.3	5
Trade balance *vis-à-vis* non-CIS countries (excl. gold)	13.1	10.0	6.4	5.4	10.4	12.3	12
Gross external debt in convertible currencies							
(of the Soviet Union/Russia, end of period)	54.4	61.1	67.0	78.2	86.8	92.8	na
				(Percentage change in the US dollar value)			
Exports to non-CIS countries (excl. gold)	8.5	0.8	-19.8	-16.7	9.0	10.6	15
Imports from non-CIS countries	13.8	7.3	-16.9	-16.8	-12.0	8.2	20
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions, end-year)	147.6	148.3	148.9	148.6	148.3	148.2	148
Unemployment rate (in per cent of labour force, end-year)[5]	0.0	0.0	0.1	0.8	1.1	2.1	3.5
Exchange rate (roubles per US dollar, end-year)	0.6	1.7	1.7	415.0	1,247.0	3,550	na
Exchange rate (roubles per US dollar, average)	0.6	1.7	1.7	222.0	930.0	2,212	na
Refinancing rate	na	na	6–9	80	210	180	na
Nominal GDP (in billion roubles)	573	622	1,130	14,046	162,300	630,000	na
GNP per capita (in US dollars) at PPP exchange rates[6]	na	na	na	na	5,240	na	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, Russian Economic Trends, PlanEcon and the Economist Intelligence Unit. Data for 1995 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in the first half of the year.

1 Excluding foreign currency deposits.

2 Official definition of the consolidated state budget.

3 After accounting for import subsidies and extra-budgetary funds.

4 The source of external data used in this table is PlanEcon. There are many difficult conceptual issues associated with Russian balance of payments statistics. For example, estimates from other sources for the current account balance for each of the years 1992-94 differ by up to US$ 4-6 billion from PlanEcon figures. This is because most non-governmental sources, including the IMF, the World Bank and PlanEcon, make discretionary adjustments to official estimates, and because different sources adjust to different extents for overdue (but unpaid) interest (payments as well as receipts), for under-recording of trade and for gold transactions.

5 Officially registered unemployed.

6 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Slovak Republic

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	1.4	-0.4	-14.5	-7.0	-4.1	4.8	5
Industrial production[1]	-0.7	-3.6	-17.6	-14.0	-13.5	6.4	na
Prices and wages							
Consumer prices (annual average)	2.3	10.8	61.2	10.1	23.1	13.4	11
Consumer prices (end-year)	1.5	18.4	58.3	9.1	25.1	11.7	10
Producer prices (annual average)	-0.7	4.4	68.8	5.3	17.2	10.0	na
Average wages in industry	3.2	4.5	16.5	20.2	16.8	17.4	na
Monetary sector							
Broad money (end-year)	3.5	0.5	26.8	4.7	18.5	18.8	na
Net domestic assets (end-year)	0.9	5.2	21.9	7.2	14.8	12.4	na
Government sector				*(In per cent of GDP)*			
General government balance	-2.8	0.1	-2	-13.1	-6.7	-3.7	-3
General government expenditure	64.5	60.1	54.2	63.8	49.1	40.7	na
External data in convertible currencies				*(In billions of US dollars)*			
Current account balance	0.4	-1.1	0.4	0.2	-0.4	0.7	0.2
Trade balance	0.4	-0.8	-0.4	-0.7	-0.9	0.1	na
				(Percentage change in the US dollar value)			
Exports (data from the balance of payments)[2]	8.5	10.1	39.2	35.2	-16.9	25	na
Imports (data from the balance of payments)[2]	-1.5	35	29.6	46.2	-12.5	7	na
				(In billions of US dollars)			
External debt	na	na	na	na	3.6	4.3	na
Gross official reserves (end year and excluding gold)	na	na	na	na	0.4	1.7	na
				(In months of imports)			
Official reserves (end year)	na	na	na	na	0.9	3.1	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions, end-year)	5.3	5.3	5.3	5.3	5.3	5.3	na
Unemployment rate (in per cent of labour force, end-year)	0	1.5	7.9	11.0	14.4	14.8	na
GDP (in billions of crowns)	758.8	244.0	280.1	301.1	340.2	398.3	na
The share of agriculture in GDP (per cent)[3]	6.3	8.2	5.8	6.1	6.6	6.1	na
The share of industry in GDP (per cent)[3]	59.6	61.6	63.9	38.0	36.7	37.5	na
GNP per capita (in US dollars) at PPP exchange sales[4]	na	na	na	na	6,450	na	na
Exchange rate (crowns per US dollar, end-year)	14.3	28	27.8	28.9	33.0	31.5	na
Exchange rate (crowns per US dollars, annual average)	15.1	18	29.5	28.3	30.8	32	na
One month average interbank deposit rate	na	na	na	na	17.9	15.6	na

Note

Figures in bold type are those for the Slovak Republic and figures in normal type are those for the former CSFR. As a rule, data for the Slovak Republic are shown for years after 1991 where possible. Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, the UNECE, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD estimates, partly based on the sources mentioned above.

1 Covers only state enterprises until 1991, but includes the private sector from 1992.

2 From 1993, growth rates are for transactions including the Czech Republic from the balance of payments.

3 Share of NMP until 1992 and GDP thereafter. NMP excludes depreciation and the value added from most of the service sector.

4 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995.* In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Slovenia

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	-1.8	-4.7	-8.1	-5.4	1.3	5.5	6
Industrial production	-0.1	-10.5	-12.4	-13.2	-2.8	6.4	6
Agricultural production	-3.3	1.6	-3	-6	-3.7	1.6	na
Prices and wages							
Retail prices (annual average)	1,306	550	117.7	201.3	32.3	19.8	15
Retail prices (end-year)	2,772	105	247.1	92.9	22.9	18.3	10
Producer prices (annual average)	1,413	390	124.1	215.7	21.6	17.7	na
Nominal wages, net of income tax (annual average)[1]	1,141	379	82.5	198.5	52.0	28.3	na
Monetary sector							
Broad money (end-year)	na	na	na	131.6	64.7	47.2	na
Government sector				*(In per cent of GDP)*			
General government balance	0.3	-0.3	2.6	0.2	0.5	-1.0	-0.6
General government expenditure	42.1	49.6	41.1	46.8	49.4	48.8	47
External data in convertible currencies				*(In billions of US dollars)*			
Current account[2]	1.1	0.5	0.1	0.9	0.2	0.5	0.4
Trade balance[2]	0.2	-0.6	-0.3	0.8	-0.2	-0.1	-0.4
External debt, net of reserves[3]	na	na	1.8	1.0	1.1	0.8	na
				(Percentage change in US dollar value)			
Exports (data from the balance of payments)[2]	3.19	20.8	-6	8.1	-9	14.0	10
Imports (data from the balance of payments)[2]	9.9	47.0	-12.6	0.1	5.9	6.2	12
				(In months of current account expenditures, excluding transfers)			
Gross international reserves, excluding gold	na	0.6	0.4	1.9	2.4	3.9	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions, annual average)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Employment (percentage change, annual average)	-1.1	-3.8	-7.2	-6	-0.5	0.0	-0.5
Unemployment (in per cent of the labour force, annual average)	2.9	4.7	8.2	11.1	14.5	14.6	12.7
GDP (in 10 trillions of dinars up to 1990, in billions of tolars thereafter)	34.8	196.1	349.4	1,005.3	1,435.0	1,800	na
The share of agriculture in GDP (per cent)	4.3	4.7	4.9	4.9	4.5	4.5	na
The share of industry in GDP (per cent)	44.3	38	40.8	37.6	35.4	35.1	na
Exchange rate (tolar per US dollar, end-year)[4]	11.8	10.7	56.7	98.7	131.8	126.5	na
Exchange rate (tolar per US dollar, annual average)[4]	2.9	11.3	27.6	81.3	113.2	128.8	na
Working capital nominal interest rate (end-year)	na	na	562.6	71.6	42.6	38.5	na

Note

Data for 1989-94 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Data for 1995 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in the first half of 1995.

1 Data for 1989-91 covers only the social sector; starting from 1992 private enterprises employing three or more persons are included.

2 For 1989-91 excluding trade with former Yugoslavia.

3 Excluding non-allocated federal Yugoslav debt.

4 For the period prior to 8 October 1991 (the date of the introduction of the tolar) measured as the multiple of 10,000 dinars that would buy one US dollar. The tolar was introduced at 10,000 dinar per tolar.

Tajikistan

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices[1]	-2.9	-1.6	-7.1	-28.9	-11.1	-21.4	-12
Industrial production	1.9	1.9	-7.4	-35.7	na	-30	na
Agricultural production	-13.0	-9.2	-9.9	-27.7	na	-3	na
Prices and wages							
Retail prices (annual average)[2]	na	4	112	1,157	2,195	341	120
Retail prices (end-period)[2]	na	na	204	1,364	7,344	5	240
Wholesale prices (annual average)	na	na	79	3,450	4,241	586	na
Average monthly wages	6	10	64	464	672	167	na
Monetary sector							
Broad money (end-year)	na	na	68	579	1,429	159	na
Government sector				*(In per cent of GDP)*			
General government balance[3]	na	na	-16.4	-29.9	-24.7	-6.4	na
General government expenditure[3]	na	na	49.6	65.7	51.7	34.2	na
External data				*(In millions of US dollars)*			
Trade balance total	na	na	na	-54.8	-208.1	-109.1	na
vis-a-vis countries outside the FSU	-3.9	-6.5	0.1	-21.4	-81.1	70.5	na
vis-a-vis former Soviet Republics	-15.4	-9.4	2.1	-33.4	-127	-179.6	na
Exports total	na	na	na	184.8	452.2	512.0	na
to countries outside the FSU	5.2	4.3	2.9	110.8	317.6	399.4	na
to former Soviet Republics	30.7	23.5	28.2	74.0	134.6	112.6	na
Imports total	na	na	na	239.0	660.4	621.1	na
from countries outside the FSU	9.1	10.8	2.8	132.2	398.8	328.9	na
from former Soviet Republics	46.1	32.9	28.2	107.4	261.6	292.2	na
Current account (incl. official transfers)	na	na	na	52.8	206.9	115.8	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions, end-year)	5.1	5.2	5.3	5.6	5.7	5.7	na
Employment (percentage change)	na	3.3	1.7	-3.0	0.1	0.5	na
GDP (in millions of roubles)[4]	4,817	5,490	10,540	64,760	631,162	1,717,974	na
GDP per capita (in US dollars) at PPP exchange rates[5]	na	na	na	na	1,430.0	na	na
The share of agriculture in NMP (per cent)	37.2	38.3	43.9	32.8	na	na	na
The share of industry in NMP (per cent)	26.7	28.6	30.6	45.4	na	na	na

Note

Data for 1989-93 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Data for 1994-95 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in 1994.

1 GDP from 1991. NMP for 1989-90 excludes depreciation and the value added from most of the service sector.

2 RPI through 1991, CPI thereafter.

3 Includes state budget, pension and employment funds.

4 NMP for 1989-91.

5 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Turkmenistan

	1989	1990	1991	1992	1993	1994	1995 Projection
Output				*(Percentage change)*			
GDP at constant prices	-6.9	2.0	-4.7	-5.3	-10	-20	-5
Price and wages							
Consumer prices (annual average)	2.1	4.6	103	493	3,102	2,400	1,800
Consumer prices (end-period)	na	na	155	644	9,750	1,100	2,500
Government sector				*(In per cent of GDP)*			
Central government expenditure[1]	30.1	43.6	38.2	42.2	19.2	6.2	na
Central government balance[1]	-1.9	1.2	2.5	13.2	-0.5	-1.1	na
External data				*(In millions of US dollars)*			
Current account	na	na	na	na	677	500	na
Current account, cash basis[2]	na	na	na	na	-254	-334	na
Trade balance	na	-249	590	1,140	1,033	949	na
Exports	na	151	1,238	2,149	2,626	2,425	na
Imports	na	400	648	1,009	1,593	1,476	na
Memorandum items				*(Denominations as indicated)*			
Population (in millions)	3.6	3.7	3.8	3.8	3.9	3.9	na
Employment (in millions)	1.49	1.54	1.57	1.57	na	na	na
GDP (in millions of manat)[3]	7	7	17	300	11,000	200,000	na
The share of agriculture in NMP (in per cent)[4]	43	48	46	48	17	na	na
The share of industry in NMP (per cent)[4, 5]	23	16	20	11	39	na	na
GDP per capita in purchasing power terms (US dollars)[6]	na	na	na	3,950	na	na	na
Official exchange rate (manat per US dollar, end-year)	na	na	na	na	2	175	na

Note

Data for 1989-94 are largely estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Figures for 1995 are EBRD staff estimates/projections, partly based on information about developments in the first half of the year.

1 Excludes many government activities. For example, activities of several key ministries are not included in the central government concept.

2 Computed as the difference between the current account and the flow-accumulation of overdue claims on other countries.

3 Based on converting rouble amounts into manat at an exchange rate of 500 roubles per manat for 1989-92.

4 NMP excludes depreciation and the value added from most of the service sector.

5 The methodology used by the Turkmen Statistical Office leads to an understatement of the contribution from natural gas production.

6 PPP stands for purchasing power parity. The estimate quoted here stems from the World Bank's *World Development Report 1994*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Ukraine

	1989	1990	1991	1992	1993	1994	1995 Projection
Output and expenditure				*(Percentage change)*			
GDP at constant prices	4	-3	-12	-17	-17	-23	-5
Private consumption	5	2	-8	-9	-21	-22	na
Public consumption	7	5	19	-17	-26	na	na
Net fixed investment	-2	-32	-79	-37	-23	na	na
Industrial production	3	0	-5	-7	-8	-28	na
Agricultural production	na	na	-19	-9	-2	-16	3
Prices and wages							
Consumer prices (annual average)	2.2	4.2	91	1,210	4,735	891	350
Consumer prices (end-year)	na	na	161	2,000	10,155	401	150
Producer prices (annual average)	na	4.5	125	2,384	3,962	904	na
Producer prices (end-year)	1.7	4.5	163	4,129	9,668	559	na
Average wages (annual average)	na	na	na	1,523	3,850	317	na
Monetary sector							
Broad money (end-year)	na	na	na	921	2,103	465	na
Net domestic assets of the banking system (end-year)	na	na	na	1,280	1,242	476	na
Government sector				*(In per cent of GDP)*			
General government balance[1]	na	na	-13.6	-29.3	-9.7	-9.1	-4
State budget balance[1]	5.8	2.6	-14.1	-30.4	-10.1	-8.6	-3
State budget expenditure[1]	27.3	31.4	41.0	71.9	51.2	49.9	na
State budget revenue[1]	na	na	na	41.5	41.1	44.3	na
External data				*(In billions of US dollars)*			
Current account balance	na	na	-2.9	-0.6	-0.8	-1.4	-1.3
Nonfactor services	na	na	na	na	1.6	1.0	na
Merchandise trade balance total	-9.0	-12.7	-3.4	-0.6	-2.5	-2.4	na
vis-à-vis non-FSU countries	-0.8	-2.6	-2.7	0.5	0.5	0.3	na
vis-à-vis FSU republics	-8.2	-10.1	-0.7	-1.1	-3.0	-2.1	na
Exports total	77.1	74.6	50.0	11.3	12.8	11.8	na
to non-FSU	14.0	13.2	7.3	6.0	5.2	4.7	na
to FSU republics	63.1	61.4	42.7	5.3	7.6	7.2	na
Imports total	86.1	87.3	53.4	11.9	15.3	14.2	na
from non-FSU	14.8	15.8	10.0	5.5	4.7	4.3	na
from FSU republics	71.3	71.5	43.4	6.4	10.6	9.8	na
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions)	51.7	51.8	51.9	52.0	52.1	51.7	na
Employment (percentage change, end-year)	na	-3.5	-1.6	-5.0	-5.9	na	na
Unemployment rate (in per cent, end-year)	0	0	0	0.3	0.4	0.4	na
GDP (in billions of roubles until 1991; in trillions of karbovanetsi after that)	154	165	295	4	153	1,137	na
GNP per capita (in US dollars) at PPP exchange rates[2]	na	na	na	na	4,030	na	na
The share of agriculture and fisheries in NMP (per cent)[3]	28	30.3	30.2	22.5	16	na	na
The share of industry and mining in NMP (per cent)[3]	42.6	41.3	42.4	50.7	52	na	na
Exchange rate (roubles or karbovanetsi per US dollar, average per year)[4]	0.62	0.59	1.74	198	7,629	63,224	na

Note

Data for 1989-94 represent the most recent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund, the World Bank, the OECD, PlanEcon and the Institute of International Finance. Projections for 1995 should be treated with the same caveats as apply to official estimates and forecasts.

1 General government includes the state, municipalities and extra-budgetary funds. The state budget includes direct credits. All balances on cash, not accrual, basis.

2 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

3 NMP excludes depreciation and the value added from most of the service sector.

4 Roubles per US dollar until 1991, karbovanetsi per US dollar thereafter.

Uzbekistan

	1989	1990	1991	1992	1993	1994	1995 Projection
The real economy				*(Percentage change)*			
Real GDP	3.7	1.6	-0.5	-11.1	-2.4	-2.6	-4
Real NMP	3.1	4.3	-0.9	-12.9	-3.5	na	na
Industrial output	3.6	1.8	1.8	-12.3	-8.3	na	na
Agricultural output	-4.3	6.3	-5.2	-7.3	-0.7	na	na
Prices and wages							
Retail prices (end of period)	na	na	169	910	885	423	155
Retail prices (annual average)	0.7	3.1	82.2	645	534	746	325
Wholesale prices	2.1	7.2	147.3	3,275	2,545	1,346	na
Wages (annual average)	6.4	11.2	51.1	612	na	na	na
Monetary Sector							
Broad money (end-year)	na	na	133	470	785	482	na
Government sector				*(In per cent of GDP)*			
Total revenue	35.0	44.9	49.1	31.0	41	43	47
Total expenditure	35.9	46.1	52.7	43.0	61	45	51
General government balance	-0.9	-1.1	-3.6	-12.0	-20	-2	-4
Consolidated fiscal balance[1]	na	na	-4.1	-18.0	-12	-3.6	-4
External data[2]				*(In million of US dollars)*			
Exports	na	na	na	1,424	2,877	3,218	3,500
Imports	na	na	na	1,660	3,255	3,178	3,630
Trade balance	na	na	688	-236	-378.0	41	-130
Current account	na	na	na	-239	-429	-432	-670
Gross external debt	na	na	na	258	1,009	1,462	2,030
Gross international reserves	na	na	na	530	1,020	1,330	1,500
Miscellaneous items				*(Denominations as indicated)*			
Population (in millions, end-year)	20.0	20.5	20.9	21.3	22.0	22.2	na
Investment (in per cent of GDP)	32	32	26	25	24	20	na
Nominal GDP (in billion roubles)	30.7	32.4	61.5	447.2	4,428.1	46,971	na
GNP per capita (in US dollars) at PPP exchange rates[3]	na	na	na	na	2,580	na	na

Note

Data for 1989-93 represent official estimates of outturns as reflected in publications from the national authorities, the International Monetary Fund the World Bank, the OECD, PlanEcon and the Economist Intelligence Unit. Data for 1995 reflect EBRD evaluations, partly based on preliminary information from the aforementioned sources about developments in the first half of 1995.

1 Including balance of extra-budgetary funds, gold and foreign currency operations.

2 Consolidated balance of non-FSU and FSU transactions.

3 PPP stands for purchasing power parity. The estimate quoted here stems from the *World Bank Atlas 1995*. In the computation of this estimate the country's nominal GNP per capita was divided by the PPP, defined as the number of units of the country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the United States.

Forecasts and prospects

12

This chapter presents a compilation of forecasts for growth and inflation in the countries of eastern Europe, the Baltics and the CIS. The primary aim is to convey the perception among forecasters of growth prospects for countries in the region.

Section 12.1 presents a sample of predictions for the next two years. For most countries in eastern Europe and the Baltics, GDP is forecast to grow by 3-6 per cent in both 1995 and 1996. For the CIS as a whole, negative growth of 4-9 per cent is predicted for 1995, followed by a turnaround to positive growth of less than 1 per cent in 1996. Most forecasters are predicting further progress towards price stability during 1995 and 1996 throughout the region.

Section 12.3 discusses the accuracy of forecasts for growth and inflation based on comparisons between forecasts and outturns. On the evidence of such comparisons, the ability of forecasters to predict short-term developments in GDP and inflation in eastern Europe and the Baltic countries appears to have improved in 1994. Meanwhile, the precision of their short-term predictions for the evolution of the same variables in the CIS countries appears to have deteriorated dramatically.

12.1 Growth forecasts for 1995-96

Most forecasters expect annual GDP growth in 1995 and 1996 of 3-6 per cent in almost all countries in eastern Europe and the Baltics, with a somewhat lower rate only for Hungary (see Tables 12.1 and 12.2). As the size of the population is expected to remain broadly stable in most of these countries, the rate of growth in real per capita income is expected to be close to the rate of increase in real GDP.

Growth projections of this order of magnitude (i.e. 3-6 per cent a year) may be rationalised with reference to the analysis of medium-term prospects in Chapter 3 and of productivity and unit labour costs in Chapter 11. The central part of the argument presented there is that new investment will add not only to the capacity of productive capital but also to the productivity of "old" capital (notably buildings) and to the scope for efficient usage of the highly educated labour force in the region, much of which is currently under-utilised. This will allow large productivity increases throughout eastern Europe and the Baltics, adding to substantial gains already achieved in 1993 and 1994 (the latter are documented in tables in Chapter 11).

PlanEcon's *Review and Outlook*[1] stands out among the sources quoted at the end of this chapter as the only one whose macroeconomic forecasts for eastern Europe extend beyond 1996. PlanEcon's projections for growth fall within a range of 4-6 per cent per year for the entire period 1996-99 for all of the six largest east European countries. PlanEcon expects the ratio of fixed investment to GDP for each country to remain, during the entire period to 1999, broadly at the level seen in 1994 (about 16 per cent in Poland at the lower extreme, and 26 per cent in the Slovak Republic at the upper extreme). The lower end of this range falls short of the average in OECD countries. Even the higher end of the range remains far below ratios recorded in recent years in the high-growth economies of East Asia.[2] Nevertheless, predictions of relatively high medium-term growth can be supported by the line of argument that was pursued above in the discussion of near-term growth prospects (see Chapter 3). Given the vast supply of under-utilised skilled labour and "old" machines and buildings, it might well be possible to sustain high productivity growth at least until the end of the decade without significant increases in the *quantity* of investment (ratios of fixed investment to GDP). The new investment, however, will have to be market-oriented and of high *quality*.

Moving beyond the assumptions underlying PlanEcon's forecasts, it would appear reasonable to expect investment demand to increase faster than GDP in coming years, assuming that the stability of the macroeconomic and legal environment becomes gradually more entrenched. As set out in Chapter 4, an increase in investment demand is likely to be induced by the potential for high profits associated with the expected productivity gains. The ratio of investment to GDP has in fact risen in recent years in many countries in eastern Europe (again, see Chapter 3). The likelihood of further increases in the ratio reinforces the case for expecting buoyant GDP growth in eastern Europe in the years ahead.

As indicated by the figures in Tables 12.1 and 12.2, forecasters tend to be less optimistic about the near-term prospects for the largest CIS countries than they are about those in eastern Europe. Most of the CIS is currently at an intermediate stage of market-oriented transition and macroeconomic stabilisation (as detailed in Chapters 2 and 11), and a sustained rebound in output is yet to be recorded in the large CIS countries. The timing of such a rebound remains highly uncertain. Forecasters quoted in these tables expect GDP to decline in 1995 by 3-7 per cent in Russia and 5-12 per cent in Ukraine. For 1996, most forecasters expect positive growth of 1-4 per cent in Russia but a further output contraction of 1-5 per cent in Ukraine. For the CIS as a whole (with Russia and Ukraine being the dominant countries in terms of size), this translates broadly into a GDP decline of 4-9 per cent in 1995 and growth of 0-3 per cent in 1996.

1 PlanEcon (1995a, b).

2 It should be noted that ratios of investment to GDP in the early part of the high-growth era in at least some of the Asian Tiger countries were similar to those seen now in eastern Europe. The ratio of investment to GDP has tended to rise during the course of the high-growth period in many of these countries. This supports the argument that the investment preconditions for high growth are present in eastern Europe and the Baltics.

Table 12.1

GDP growth forecasts for 1995 (in per cent)[1]

Eastern Europe and the Baltic states

	Average of forecasts[2]	Range of forecasts[3]	EBRD forecast (September)	OECD forecast (June)	IMF forecast (May)	Project Link forecast (April)	European Union forecast (June)	PlanEcon forecast (June)	Economist Intelligence Unit forecast (September)	Vienna Institute forecast (June)	JP Morgan forecast (September)	CS First Boston forecast (July)	IKC forecast (June)[4]	GKI forecast (September)[5]	Kopint-Datorg forecast (June)[6]
Albania	6.2	0.9	6	–	6.0	–	–	6.9	6.0	–	–	–	–	–	–
Bulgaria	2.3	4.0	2.5	2.0	–	1.0	1.6	5.0	2.0	2	3.0	–	–	–	1.5
Croatia	4.3	5.0	2	–	–	–	–	–	4.0	7	–	–	–	–	3.5
Czech Republic	4.0	1.3	4	4.0	3.8	4.0	4.2	4.8	4.0	4	4.0	3.5	–	–	3.5
Estonia	5.9	1.4	6	–	6.0	–	–	6.4	5.0	–	–	–	–	–	–
FYR Macedonia	-1.0	4.0	-3	–	–	–	–	–	1.0	–	–	–	–	–	–
Hungary	1.4	2.8	3	1.0	0.2	1.8	0.3	3.0	1.5	1	1.3	0.7	–	0.5	2.0
Latvia	2.9	4.0	1	–	4.6	–	–	5.0	1.0	–	–	–	–	–	–
Lithuania	4.8	3.7	5	–	6.7	–	–	4.3	3.0	–	–	–	–	–	–
Poland	5.7	2.3	6	5.5	5.0	4.9	5.0	7.2	5.9	6	6.6	5.0	5.5	–	6.0
Romania	3.4	2.8	4	3.0	–	3.9	2.8	4.8	3.0	2	–	–	–	–	3.5
Slovak Republic	4.7	3.0	5	5.0	4.0	3.7	3.0	6.0	5.7	4	5.5	5.0	–	–	4.5
Slovenia	5.4	3.0	6	–	5.0	–	–	7.0	5.5	5	5.3	–	–	–	4.0
Average	3.8	2.9	–	–	–	–	–	–	–	–	–	–	–	–	–
Commonwealth of Independent States															
Armenia	8.3	6.6	5	–	–	–	–	11.6	–	–	–	–	–	–	–
Azerbaijan	-6.4	17.3	-15	–	–	–	–	2.3	–	–	–	–	–	–	–
Belarus	-10.4	1.2	-10	–	–	–	–	-11.2	-10.0	–	–	–	–	–	–
Georgia	0.3	10.5	-5	–	–	–	–	5.5	–	–	–	–	–	–	–
Kazakstan	-9.5	5.5	-12	–	–	–	–	-6.5	-10.0	–	–	–	–	–	–
Kyrgyzstan	-2.0	6.0	-5	–	–	–	–	1.0	–	–	–	–	–	–	–
Moldova	-0.8	3.5	-5	–	–	–	–	3.5	–	–	–	–	–	–	–
Russia	-4.1	5.0	-3	-5.0	–	-4.4		-2.7	-2.0	-7	-3.5	-3.0	–	–	-6.5
Tajikistan	-5.5	13.1	-12	–	–	–	–	1.1	–	–	–	–	–	–	–
Turkmenistan	-1.2	7.7	-5	–	–	–	–	2.7	–	–	–	–	–	–	–
Ukraine	-8.8	7.0	-5	–	–	–	–	-5.5	-8.0	-10	-12.0	–	–	–	-12.0
Uzbekistan	-3.3	1.4	-4	–	–	–	–	-2.6	–	–	–	–	–	–	–
Average	-3.4	7.1	–	–	–	–	–	–	–	–	–	–	–	–	–

[1] All forecasts in this table were published or reported to the EBRD between April and September 1995 (see also the references at the end of this chapter). There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The dates in parentheses indicate in which month the forecasts were reported or published by each institution. The EBRD forecasts were prepared in August and published in October.

[2] The number at the bottom of this column is calculated as the mean of all the average forecasts shown in this column.

[3] This column shows the difference between the highest and the lowest of the forecasts.

[4] IKC is the Foreign Trade Research Institute in Poland.

[5] GKI is the GKI Economic Research Company in Hungary.

[6] Kopint-Datorg is the Institute for Economic and Market Research and Informatics in Hungary.

Table 12.2

GDP growth in 1996 (in per cent) [1]

Eastern Europe and the Baltic states

	Average of forecasts [2]	OECD forecast (June 1995)	IMF forecast (May 1995)	Project Link forecast (April 1995)	European Union forecast (June 1995)	PlanEcon forecast (June 1995)	Economist Intelligence Unit forecast (Sept. 1995)	Vienna Institute forecast (June 1995)	JP Morgan forecast (Sept. 1995)	CS First Boston forecast (July 1995)
Albania	5.8	–	5.5	–	–	7.0	5.0	–	–	–
Bulgaria	3.0	2.0	–	3.0	2.1	5.0	3.0	2.5	3.5	–
Czech Republic	4.7	5.0	4.9	4.9	4.5	5.6	4.2	5	4.3	4.0
Estonia	5.5	–	5.3	–	–	7.3	4.0	–	–	–
Hungary	2.5	3.0	1.5	2.4	2.0	4.1	3.0	2	1.9	2.7
Latvia	4.6	–	5.0	–	–	5.8	3.0	–	–	–
Lithuania	4.5	–	4.0	–	–	6.0	3.5	–	–	–
Poland	5.0	5.0	5.0	4.9	5.0	6.5	4.7	5	4.7	4.0
Romania	3.7	4.5	–	3.6	2.0	5.3	4.0	3	–	–
Slovak Republic	4.2	5.0	4.0	4.6	4.0	5.3	5.1	3	4.0	2.8
Slovenia	5.3	–	5.0	–	–	7.0	4.5	5	4.8	–
Average	4.4	–	–	–	–	–	–	–	–	–
Commonwealth of Independent States										
Armenia	8.4	–	–	–	–	8.4	–	–	–	–
Azerbaijan	4.8	–	–	–	–	4.8	–	–	–	–
Belarus	-4.5	–	–	–	–	-3.0	-6.0	–	–	–
Georgia	9.3	–	–	–	–	9.3	–	–	–	–
Kazakstan	0.6	–	–	–	–	4.1	-3.0	–	–	–
Kyrgyzstan	7.8	–	–	–	–	7.8	–	–	–	–
Moldova	6.9	–	–	–	–	6.9	–	–	–	–
Russia	1.6	2.5	–	1.9	–	3.5	3.0	-3	1.0	2.0
Tajikistan	2.8	–	–	–	–	2.8	–	–	–	–
Turkmenistan	3.4	–	–	–	–	3.4	–	–	–	–
Ukraine	-2.9	–	–	–	–	-0.6	-2.0	-5	-4.0	–
Uzbekistan	-0.2	–	–	–	–	-0.2	–	–	–	–
Average	3.2	–	–	–	–	–	–	–	–	–

[1] All forecasts quoted here were published or reported to the EBRD between April and September 1995. The dates in parentheses indicate the month in which the forecasts were reported or published by each institution.

[2] The number at the bottom of this column refers to the mean of all the average forecasts shown in this table.

12.2 Inflation forecasts for 1995-96

All forecasters expect further advances over the next two years in efforts to control inflation in the countries of eastern Europe, the Baltics and the CIS (see Tables 12.3-12.5 and Box 12.1). Forecasters appear generally to share the optimism expressed in Chapter 11 regarding the determination and ability of governments and central banks in these countries to strengthen monetary and fiscal policy. Consistent with trends observed for the first half of the year (see Chapter 11), forecasters generally expect inflation to fall in 1995 (as compared with 1994) in all 25 countries except Hungary, and to fall from the new level in 1996 (including in Hungary). Average inflation (as defined in Box 12.1) is forecast for all east European and Baltic countries (except for Bulgaria) at levels below or close to 40 per cent in 1995 and at levels below 30 per cent in 1996. For most countries, a gradual decline can be observed in the path of projections moving from the "starting level" of average inflation in 1995, to a lower level of end-year inflation for the same year, and further to a still lower average inflation for 1996.

Inflation is generally expected to be much higher in the CIS than in eastern Europe and the Baltics. The EBRD expects the lowest average 1995 inflation rate within the CIS to materialise in Moldova (35 per cent) and Kyrgyzstan (45 per cent), and the highest in Turkmenistan (1,800 per cent). The EBRD's end-year 1995 forecasts for CIS countries range from 20 per cent for Moldova to 2,500 per cent for Turkmenistan.

12.3 The accuracy of forecasts

Estimated outturns

The measurement of forecasting accuracy depends crucially on the choice of proxy for the "outturn". Nobody knows the true value of the outturns. All estimates of GDP and of aggregate price levels are associated with statistical uncertainty (see Annex 11.1). The data that represent the outturns in the first column of Tables 12.6-12.10 were taken from the country tables in Annex 11.1. The original source of the figure that is quoted as the outturn for a

Table 12.3

Inflation forecasts for 1995 (change in the average consumer price level, in per cent)[1]

Eastern Europe and the Baltic states

	Average of forecasts	Range of forecasts[2]	EBRD forecast (Sept.)	OECD forecast (June)	IMF forecast (May)	Project Link forecast (April)	European Union forecast (June)	PlanEcon forecast (June)	Economist Intelligence Unit forecast (Sept.)	Vienna Institute forecast (June)	JP Morgan forecast (Sept.)	CS First Boston forecast (July)	IKC forecast (June)[3]	GKI forecast (Sept.)[4]	Kopint-Datorg forecast (June)[5]
Albania	13.8	16.0	7	–	11	–	–	23.0	14.0	–	–	–	–	–	–
Bulgaria	67.3	21.8	68	–	–	53.2	75.0	75.0	68.0	65	69.2	–	–	–	65.0
Croatia	1.9	4.0	0	–	–	–	–	–	4.0	3	–	–	–	–	0.5
Czech Republic	9.6	2.5	10	9	8	9.5	10.0	9.6	9.0	10	9.8	10.0	–	–	10.5
Estonia	25.8	2.0	25	–	26	–	–	25.0	27.0	–	–	–	–	–	–
FYR Macedonia	37.5	25.0	50	–	–	–	–	–	25.0	–	–	–	–	–	–
Hungary	27.8	4.5	29	27	28	–	25.0	27.3	28.0	29	28.3	26.0	–	28.5	29.0
Latvia	22.3	6.0	25	–	19	–	–	20.0	25.0	–	–	–	–	–	–
Lithuania	33.8	10.0	35	–	30	–	–	30.0	40.0	–	–	–	–	–	–
Poland	26.7	9.6	27	23	25	21.7	30.0	25.0	26.5	29	27.5	31.3	25.0	–	29.0
Romania	39.6	15.3	40	45	–	29.7	40.0	37.0	35.0	45	–	–	–	–	45.0
Slovak Republic	10.9	2.0	11	10	10	10.5	10.0	11.5	10.6	12	10.5	11.3	–	–	12.0
Slovenia	12.4	11.0	15	–	5	–	–	15.0	13.0	16	13.0	–	–	–	9.8
Commonwealth of Independent States															
Armenia	301.5	–	210	–	–	–	–	393.0	–	–	–	–	–	–	–
Azerbaijan	587.5	–	425	–	–	–	–	750.0	–	–	–	–	–	–	–
Belarus	1,086.7	660.0	700	–	–	–	–	1,360.0	1,200.0	–	–	–	–	–	–
Georgia	769.5	–	250	–	–	–	–	1,289.0	–	–	–	–	–	–	–
Kazakstan	246.7	210.0	180	–	–	–	–	390.0	170.0	–	–	–	–	–	–
Kyrgyzstan	47.5	–	45	–	–	–	–	50.0	–	–	–	–	–	–	–
Moldova	45.2	–	35	–	–	–	–	55.3	–	–	–	–	–	–	–
Russia	167.7	102.2	205	–	–	102.8	–	173.0	200.0	180	181	170	–	–	130
Tajikistan	190.0	–	120	–	–	–	–	260.0	–	–	–	–	–	–	–
Turkmenistan	1,800.0	–	1,800	–	–	–	–	1,800.0	–	–	–	–	–	–	–
Ukraine	355.2	281.2	350	–	–	–	–	421.2	380.0	400	440	–	–	–	140
Uzbekistan	382.5	–	325	–	–	–	–	440.0	–	–	–	–	–	–	–

[1] All forecasts in this table were published or reported to the EBRD between April and September 1995 (see also the references at the end of this chapter). There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The dates in parentheses indicate in which month the forecasts were reported or published by each institution. The EBRD forecasts were prepared in August and published in October.

[2] This column shows the difference between the highest and the lowest of the forecasts.

[3] IKC is the Foreign Trade Research Institute in Poland.

[4] GKI is the GKI Economic Research Company in Hungary.

[5] Kopint-Datorg is the Institute for Economic and Market Research and Informatics in Hungary.

Table 12.4

Inflation forecasts for 1995

(change in the end-year consumer price level, in per cent) [1]

	Average of forecasts	EBRD forecast (September)	JP Morgan forecast (September)
Eastern Europe and the Baltic states			
Albania	5.0	5	–
Bulgaria	52.5	50	33.0
Croatia	3.0	3	–
Czech Republic	9.9	10	9.8
Estonia	22.0	22	–
FYR Macedonia	10.0	10	–
Hungary	29.3	28	30.5
Latvia	23.0	23	–
Lithuania	30.0	30	–
Poland	23.6	23	24.1
Romania	30.0	30	–
Slovak Republic	10.0	10	10
Slovenia	10.3	10	10.5
Commonwealth of Independent States			
Armenia	45.0	45	–
Azerbaijan	100.0	100	–
Belarus	260.0	260	–
Georgia	25.0	25	–
Kazakstan	60.0	60	–
Kyrgyzstan	25.0	25	–
Moldova	20.0	20	–
Russia	144.0	145	143
Tajikistan	240.0	240	–
Turkmenistan	2,500.0	2,500	–
Ukraine	215.0	150	280
Uzbekistan	155.0	155	–

[1] All forecasts in this table were published or reported to the EBRD between April and September 1995 (see also the references at the end of this chapter). There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The dates in parentheses indicate in which month the forecasts were reported or published by each institution. The EBRD forecasts were prepared in August and published in October.

particular country will in most cases be that country's central statistical office. There are, however, exceptions to this rule. Specifically for Estonia and Turkmenistan, the growth estimates come from the IMF *World Economic Outlook* (May 1995) and differ substantially from estimates quoted by the national statistical agencies. In the case of Estonia, for example, the IMF data point to growth in 1994 of 6 per cent whereas the local statistical agency puts growth for 1994 at -2.3 per cent, but a number of ministries and the central bank find the IMF estimate more realistic than that of the national statistical office.

Another difficulty is that estimates of outturns change over time. Government statisticians often continue to revise data several years after completion of the period to which the data pertain. This may reflect the emergence of new information, or it may be caused by methodological advances. It follows, for example, that the *measured* accuracy of a particular forecast for 1994 might change as late as 1998, as the estimate of the "outturn" continues to be revised.

Box 12.1

End-year inflation and average inflation – what is the difference?

The "end-year inflation" rate represents the percentage difference between the price level in December of a particular year and the price level in December of the preceding year. The "average inflation" rate measures the percentage difference between the mean of monthly price levels in a particular year and the mean of monthly price levels in the preceding year. The gap between the end-year rate and the average rate can be great when inflation is high.

The "end-year inflation" rate arguably conveys more information about events in a particular year than does the "average inflation" rate. Consider, for example, a country in which prices remain constant throughout the course of year 2. It would probably appear reasonable to most observers to state that inflation was zero in that country in year 2. Consistent with this assessment, "end-year inflation" would be zero. But "average inflation" would not (unless prices had been constant throughout year 1 as well). Developments in Croatia provide a good illustration of this point. The Croatian consumer price index was 3 per cent lower in December 1994 than in December 1993. Therefore, Croatian end-year inflation for 1994 was -3 per cent. Derivation of the average inflation rate for Croatia for 1994 requires computation not only of the average of monthly consumer price indices for 1994 but also of the equivalent average for 1993. It turns out that the average for 1993 was much lower than the average for 1994 because prices rose 12-fold during the course of 1993 before remaining close to the new and higher level throughout 1994. In fact, the average price level in 1994 exceeded the average level in 1993 by 97.5 per cent. The latter figure is therefore quoted in the attached tables as Croatian "average inflation" for 1994.

The two inflation concepts are both useful. They can both, for example, be used to convert a nominal time series into a constant price level. If the aim is to prepare a constant price series for end-year balance sheets, then the "end-year inflation" concept should be used as the basis for deflation of the nominal series. If instead the objective is to convert a time series of nominal flows, such as wages, into constant prices, then data for "average inflation" provide the basis for deflation.

Before a year begins, end-year inflation for that year will be easier to predict than average inflation. This is because average inflation will be sensitive to the (yet unknown) monthly pattern of price increases, whereas end-year inflation will not. Later in the year, however, the balance shifts, because the average rate of inflation will be affected much less than the end-year rate by surprising jumps in monthly prices towards the end of the year.

The accuracy of growth forecasts

Table 12.6 shows "prediction errors" for 1994. All forecasts in the table were prepared or published by the listed forecasting institutions at some point between May and October of 1994. The table includes two columns per forecasting institution. The first of these contains forecasts made in the middle of 1994; the second presents the "errors". For each forecaster, the "error" is measured as the absolute value of the difference between the forecast for growth in 1994 and the estimated "outturn".

The average of all quoted errors on 1994-forecasts for east European and Baltic countries amounted to 1.9 percentage points, down markedly on the equivalent average error on 1993-forecasts (as quoted in the EBRD *Transition Report*, 1994) of 3.7 percentage points. The errors will inevitably tend to decline as the transition economies gradually overcome the initial systemic shocks and

Table 12.5

Inflation forecasts for 1996 (change in the average consumer price level, in per cent)[1]

Eastern Europe and the Baltic states

	Average of forecasts[2]	Range of forecasts[3]	OECD forecast (June)	IMF forecast (May)	Project Link forecast (April)	European Union forecast (June)	PlanEcon forecast (June)	Economist Intelligence Unit forecast (September)	Vienna Institute forecast (June)	JP Morgan forecast (September)	CS First Boston forecast (July)
Albania	12.3	9.0	–	9	–	–	18.0	10.0	–	–	–
Bulgaria	41.4	30.0	–	–	38.5	40.0	60.0	40.0	40	30	–
Czech Republic	8.7	5.0	8	7	8.0	12.0	9.1	7.0	7	9.5	11.0
Estonia	18.7	6.0	–	21	–	–	20.0	15.0	–	–	–
Hungary	20.3	10.5	16	17	–	18.0	20.5	20.0	22	26.5	22.0
Latvia	15.3	9.0	–	11	–	–	15.0	20.0	–	–	–
Lithuania	27.0	5.0	–	26	–	–	25.0	30.0	–	–	–
Poland	20.0	13.0	18	12	16.7	25.0	20.0	20.0	20	23.0	25.0
Romania	29.3	10.0	35	–	30.8	25.0	30.0	25.0	30	–	–
Slovak Republic	9.4	6.0	8	6	9.0	12.0	10.7	10.0	10	9.5	9.0
Slovenia	8.3	8.0	–	3	–		11.0	8.5	10	9.0	–
Average	19.1	10.1									
Commonwealth of Independent States											
Armenia	108.0	–	–	–	–	–	108.0	–	–	–	–
Azerbaijan	410.0	–	–	–	–	–	410.0	–	–	–	–
Belarus	650.0	300.0	–	–	–	–	500.0	800.0	–	–	–
Georgia	411.0	–	–	–	–	–	411.0	–	–	–	–
Kazakstan	82.0	24.0	–	–	–	–	94.0	70.0	–	–	–
Kyrgyzstan	50.0	–	–	–	–	–	50.0	–	–	–	–
Moldova	54.3	–	–	–	–	–	54.3	–	–	–	–
Russia	80.0	40.0	–	–	66.7	–	75.0	80.0	100	98	60.0
Tajikistan	365.0	–	–	–	–	–	365.0	–	–	–	–
Turkmenistan	600.0	–	–	–	–	–	600.0	–	–	–	–
Ukraine	153.3	130.0	–	–	–	–	130.0	100.0	–	230	–
Uzbekistan	330.0	–	–	–	–	–	330.0	–	–	–	–
Average	274.5	123.5									

[1] All forecasts in this table were published or reported to the EBRD between April and September 1995. There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The dates in parentheses indicate in which month the forecasts were reported or published by each institution.

[2] The number at the bottom of this column refers to the mean of the average forecasts shown in the column.

[3] This column shows the difference between the highest and the lowest of the forecasts.

enter a period of relative stability. Over the past two years, a large proportion of east European countries appear to have entered a period of stable growth. As a result, the range of realistically feasible growth rates has narrowed. This is likely to be the key source of the observed drop in the average forecasting error.

The average error on 1994-forecasts exceeded 1.9 percentage points in only three of the countries in eastern Europe and the Baltics, namely Latvia, Romania and the Slovak Republic. Growth forecasts were excessively optimistic for Latvia and overly pessimistic for Romania and the Slovak Republic.

For the CIS countries, the average error on all 1994-forecasts was a spectacular 10.2 percentage points. This compares with a more moderate average error of 5.5 percentage points on 1993-forecasts (as quoted in last year's *Transition Report*). Great uncertainty pertains for these countries to both "outturns" and prospects for growth (see Box 12.2).

Comparing the accuracy of growth forecasts from different institutions

Table 12.7 juxtaposes errors on the GDP growth forecasts from different institutions. Two comparisons are being made in the table. One is based on the full set of forecasting institutions quoted in Table 12.6. This comparison involves forecasts only for Bulgaria, Hungary and Poland (denoted as EE3) because these are the only countries for which all the forecasting institutions provided data. On this basis, the EBRD's forecasts come out on top.

Focusing on Russia and the six largest east European countries, Table 12.7 also compares the accuracy for forecasts from those institutions that provide data on all of these countries. On this comparison, the forecasts from PlanEcon were the most accurate. An equivalent assessment could not meaningfully be made in last year's *Transition Report* on the basis of 1993-forecasts as very few institutions were, at that time, covering all of the countries that underlie the assessment.

The accuracy of inflation forecasts

Tables 12.8 and 12.9 gauge the accuracy of inflation forecasts for 1994 from a number of institutions. All forecasts in the table were prepared or published by the listed forecasting institutions at some point between May and October 1994. A general pattern in both tables is that errors grow with the level of inflation. "Average inflation" of less than 50 per cent was recorded in 1994 in eight of the 25 countries listed in Table 12.8 (see Box 12.1 for a discussion of the concepts of "average inflation" and "end-year inflation"). For six of these eight countries, the average prediction error across all forecasting institutions was less than 2 percentage points. For the two remaining countries among these eight, Poland (where inflation exceeded expectations) and Albania (whose inflation was reduced more rapidly than the forecasts would have implied), the error was less than 4 percentage points. Much higher error levels of about 20-25 percentage points were recorded for Bulgaria and Romania, the two countries with the highest inflation in eastern Europe in 1994. Errors on forecasts for the high-inflation countries in the CIS were typically in the order of several hundred percentage points. In consistency with this pattern, the level of forecasting errors for inflation dropped substantially from 1993 to 1994, in tandem with the decline in the level of inflation in large parts of the region (detailed data on the accuracy of forecasts for 1993 were published in the *Transition Report*, 1994, p. 176).

Comparing the accuracy of inflation forecasts from different institutions

Table 12.10 shows the institution-specific average errors on inflation forecasts for the group of countries covered by all institutions providing 1994 forecasts for average inflation. This group of countries includes Bulgaria, the Czech Republic, Hungary, Poland and Romania. On this measure, forecasts for average inflation from PlanEcon and the Economist Intelligence Unit were the most accurate in 1994 (after having been outperformed by those of the Vienna Institute in 1993).

A comparison of inflation accuracy based on simple averages of errors tends to be dominated by developments in high-inflation countries. In the case of the comparison just made, the average errors are dominated by the influence of observations for Bulgaria and Romania. Table 12.10, therefore, also presents a cross-institution comparison based on a data set that excludes observations for these two countries (leaving only observations for the Czech Republic, Hungary and Poland). On this basis, the best averages (that is, the lowest errors) pertained to forecasts from the OECD, the IMF and the Economist Intelligence Unit.

12.4 Concluding remarks

The sampled forecasting institutions expect growth rates for most countries in eastern Europe and the Baltics of 3-6 per cent in both 1995 and 1996. This contrasts sharply with forecasts for the larger CIS countries, for which a further substantial output drop is expected for 1995, followed in 1996 by modest growth (in the case of Russia) or further decline (in the case of Ukraine). However, some of the smaller CIS countries are expected to register positive growth in 1995.

Forecasters generally expect further gradual progress towards price stability in all countries in the region. Inflation for 1996 is widely expected to be below 30 per cent in almost all countries of eastern Europe and the Baltics. Much lower rates are expected for a handful of countries in this group.

Among the forecasters quoted in this chapter, only PlanEcon provides medium-term forecasts for inflation in all of the CIS countries. For 1996, PlanEcon expects inflation (measured as the average price increase) of less than 100 per cent in only three CIS countries: Kazakstan, Kyrgyzstan and Moldova. This would appear somewhat pessimistic given the progress already made with respect to inflation in several other CIS countries (see Chapter 11). Eight of the surveyed forecasting institutions provide predictions for Russian inflation in 1996, ranging from 60 per cent (OECD) at the lower extreme to 173 per cent at the upper extreme (PlanEcon).

Table 12.6

GDP growth in 1994 (in per cent)[1]

Eastern Europe and the Baltic states

	Actual[2]	Average absolute value of error[3,4]	Range of forecasts[5]	EBRD forecast (Sept.)	EBRD error[3]	OECD forecast (July)	OECD error[3]	IMF forecast (October)	IMF error[3]	Project Link forecast (April)	Project Link error[3]	European Union forecast (June)	European Union error[3]	PlanEcon forecast (June/Aug.)	PlanEcon error[3]	Economist Intelligence Unit forecast (June)[1]	Economist Intelligence Unit error[3]	Vienna Institute forecast (June)	Vienna Institute error[3]	JP Morgan forecast (July)	JP Morgan error[3]
Albania	7.4	1.2	3.6	8	-0.6	–	–	8.0	-0.6	–	–	–	–	9.6	-2.2	6.0	1.4	–	–	–	–
Bulgaria	1.4	1.9	3.4	0	1.4	0	1.4	-2.0	3.4	-0.4	1.8	0.5	0.9	1.4	0.0	0.0	1.4	-2	3.4	-1.9	3.3
Croatia	0.8	1.8	5.0	2	-1.2	–	–	1.8	-1.0	–	–	–	–	–	–	2.0	-1.2	-3	3.8	–	–
Czech Republic	2.6	0.7	3.3	3	-0.4	2	0.6	1.5	1.1	–	–	2.5	0.1	4.8	-2.2	3.0	-0.4	2	0.6	2.4	0.2
Estonia	6	1.0	3.0	5	1.0	–	–	6.0	0.0	–	–	–	–	5.9	0.1	3.0	3.0	–	–	–	–
FYR Macedonia	-7.2	3.7	6.7	-8	0.8	–	–	-14.7	7.5	–	–	–	–	–	–	-10.0	2.8	–	–	–	–
Hungary	2	1.2	5.5	1	1.0	1	1.0	1.0	1.0	0.0	2.0	2.0	0.0	5.5	-3.5	1.0	1.0	2	0.0	0.4	1.6
Latvia	2	3.3	10.0	5	-3.0	–	–	4.1	-2.1	–	–	–	–	3.0	-1.0	-5.0	7.0	–	–	–	–
Lithuania	1.7	1.3	3.0	4	-2.3	–	–	4.7	-3.0	–	–	–	–	1.7	0.0	2.0	-0.3	–	–	–	–
Poland	5.0	0.9	3.5	5	0.0	4	1.0	4.5	0.5	4.2	0.8	2.5	2.5	6.0	-1.0	4.0	1.0	4	1.0	4.5	0.5
Romania	3.4	2.8	5.8	0	3.4	0	3.4	0	3.4	1.2	2.2	1.4	2.0	3.8	-0.4	1.0	2.4	-2	5.4	–	–
Slovak Republic	4.8	4.3	7.0	1	3.8	0	4.8	0	4.8	–	–	-3.1	7.9	3.9	0.9	-0.5	5.3	2	2.8	–	–
Slovenia	5.5	1.4	2.3	4	1.5	–	–	4.0	1.5	–	–	–	–	5.3	0.2	4.0	1.5	3	2.5	–	–
Average absolute value of the error, 1994	–	1.9	4.8	–	1.5	–	2.0	–	2.3	–	1.7	–	2.2	–	1.1	–	2.2	–	2.5	–	1.4
Average absolute value of the error, 1993[4]	–	3.7	–	–	–	–	2.9	–	–	–	3.7	–	3.2	–	4.0	–	–	–	4.7	–	1.5
Commonwealth of Independent States																					
Armenia	5.4	4.4	8.8	–	–	–	–	3.0	2.4	–	–	–	–	11.8	-6.4	–	–	–	–	–	–
Azerbaijan	-21.9	13.5	10.7	-15	-6.9	–	–	-6.0	-15.9	–	–	–	–	-4.3	-17.6	–	–	–	–	–	–
Belarus	-21.5	4.0	12.9	-30	8.5	–	–	-17.1	-4.4	–	–	–	–	-19.0	-2.5	-22.0	0.5	–	–	–	–
Georgia	-35	23.4	3.2	–	–	–	–	-10.0	-25.0	–	–	–	–	-13.2	-21.8	–	–	–	–	–	–
Kazakstan	-25	15.4	5.5	-11	-14.0	–	–	-6.0	-19.0	–	–	–	–	-11.5	-13.5	-10.0	-15.0	–	–	–	–
Kyrgyzstan	-27	19.5	4.5	-10	-17.0	–	–	-5.5	-21.5	–	–	–	–	-6.9	-20.1	–	–	–	–	–	–
Moldova	-22	19.2	0.9	-3	-19.0	–	–	-2.2	-19.8	–	–	–	–	-3.1	-18.9	–	–	–	–	–	–
Russia	-15	3.7	4.0	-12	-3.0	-10	-5.0	-12.0	-3.0	–	–	–	–	-11.2	-3.8	-10.0	-5.0	-10	-5.0	-14	-1.0
Tajikistan	-21.4	9.9	6.9	–	–	–	–	-15.0	-6.4	–	–	–	–	-8.1	-13.3	–	–	–	–	–	–
Turkmenistan	-20	15.1	13.2	–	–	–	–	1.7	-21.7	–	–	–	–	-11.5	-8.5	–	–	–	–	–	–
Ukraine	-23	4.7	15.0	-20	-3.0	–	–	-25.0	2.0	–	–	–	–	-20.3	-2.7	-10.0	-13.0	-20	-3.0	–	–
Uzbekistan	-2.6	5.8	3.0	-8	5.4	–	–	-10.1	7.5	–	–	–	–	-7.1	4.5	–	–	–	–	–	–
Average absolute value of the error, 1994	–	10.2	7.4	–	9.6	–	5.0	–	12.4	–	–	–	–	–	11.1	–	8.4	–	4.0	–	1.0
Average absolute value of the error, 1993[4]	–	5.5	–	–	–	–	–	–	–	–	–	–	–	–	6.5	–	–	–	2.4	–	–

1 All forecasts in this table were published or reported to the EBRD in June/July/August 1994 except for the IMF forecast which was taken from the October 1994 *World Economic Outlook*. There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The dates in parentheses indicate in which month the forecasts were reported or published by each institution. The EBRD forecasts were prepared in August and published in October.

2 "Actuals" represent the most recent official estimate of outturns for 1994, as reflected in publications from the national authorities, the IMF, the World Bank, the OECD, PlanEcon and the Institute of International Finance.

3 What is referred to as "errors" denotes the difference between actuals and forecasts (measured in percentage points).

4 The number at the bottom of this column is calculated as the mean of all the absolute values of the errors shown in this table (i.e. it is not a simple average of the errors in this column). The number for 1993 (taken from the EBRD *Transition Report* 1994) was based on fewer observations than the number for 1994.

5 This column shows the difference between the highest and the lowest of the forecasts.

Table 12.7

Comparison of growth forecasts for 1994 from different institutions[1]

	EBRD error	OECD error	IMF error	Project Link error	European Union error	PlanEcon error	Economist Intelligence Unit error	Vienna Institute error	JP Morgan error
Bulgaria	1.4	1.4	3.4	1.8	0.9	0.0	1.4	3.4	3.3
Czech Republic	-0.4	0.6	1.1	–	0.1	-2.2	-0.4	0.6	0.2
Hungary	1.0	1.0	1.0	2.0	0.0	-3.5	1.0	0.0	1.6
Poland	0.0	1.0	0.5	0.8	2.5	-1.0	1.0	1.0	0.5
Romania	3.4	3.4	3.4	2.2	2.0	-0.4	2.4	5.4	–
Slovak Republic	3.8	4.8	4.8	–	7.9	0.9	5.3	2.8	–
Russia	-3.0	-5.0	-3.0	–	–	-3.8	-5.0	-5.0	-1.0
Average of the absolute error EE3	0.8	1.1	1.6	1.5	1.1	1.5	1.1	1.5	1.8
Average of the absolute error EE6 and Russia	1.9	2.5	2.5	–	–	1.7	2.4	2.6	–

[1] The EE3 group of countries includes Bulgaria, Hungary and Poland. EE6 includes all the EE3 countries plus the Czech Republic, Romania and the Slovak Republic. What is referred to as "errors" denotes the difference between actuals and forecasts (measured in percentage points).

Corresponding to the regional gaps in inflation and growth forecasts, there is a great disparity in accuracy between forecasts for eastern Europe and the Baltics on the one side and the CIS on the other. This is evidenced by data that analyse the proximity to "actuals" of "old" forecasts for 1993 and 1994. Each of the forecasts under analysis was prepared 3-6 months into the year to which the forecasts applied. The average error on forecasts for growth in countries of eastern Europe and the Baltics dropped to 1.9 percentage points in 1994, from 3.7 percentage points in 1993. The corresponding average error for predictions of growth in the CIS countries rose to more than 10 percentage points in 1994 from less than 6 percentage points in 1993. An equivalent disparity between the two regions pertained to the level of errors on forecasts for inflation; these were typically far smaller for countries in eastern Europe and the Baltics than for countries in the CIS. A glance at the evolution in errors between 1993 and 1994 indicates a substantial improvement over time on a broad regional front in the accuracy of inflation forecasts. This is likely to reflect a strengthening of monetary policy management and an attendant improvement in the ability of governments to deliver on their inflation objectives in most countries of the region.

Box 12.2

Forecasting the turnaround in an economy with declining output

Consider the challenge facing a forecaster who has seen output in a particular country, say Georgia, drop by 10 per cent in 1994. Let us assume that the end-1994 output index is 100. Suppose the forecaster is convinced that output in Georgia will at some point abruptly turn around and begin to rise at an annualised rate of 10 per cent.

Suppose further that the forecaster assumes this will happen on 1 January 1996. His or her assumptions would be consistent (ignoring any seasonality in growth) with the output index falling from about 100 at the beginning of 1995 to about 90 at the end of 1995 before rising to about 99 at the end of 1996. The average output level in 1996 would deviate less than 1 per cent from that in 1995. The forecaster will therefore expect 1996 growth to be somewhere between zero and -1 per cent.

Suppose that in practice the turnaround is "one year late", in the sense that output continues to drop throughout 1996 at an annualised pace of 10 per cent before beginning to grow at an equivalent annualised pace on 1 January 1997. In this case the forecaster winds up with an error on his or her growth prediction for 1996 of 10 percentage points, after delivering a prediction that was accurate in terms of the order of magnitude of growth. The error arises solely on account of the forecaster's misjudgement of the timing of the turnaround. This illustrates the particular difficulty that is associated with forecasting of growth in countries that remain in deep recession but are expected to emerge with potentially quite high positive growth rates at some unknown point in the future.

Table 12.8

Inflation in 1994 (change in the average consumer price level, in per cent)[1]

Eastern Europe and the Baltic states

	Actual[2]	Average absolute value of the error[3]	OECD forecast (June)	OECD error[3]	IMF forecast (October)	IMF error[3]	Project Link forecast (April)	Project Link error[3]	European Union forecast (June)	European Union error[3]	PlanEcon forecast (June)	PlanEcon error[3]	Economist Intelligence Unit forecast (June)	Economist Intelligence Unit error[3]	Vienna Institute forecast (June)	Vienna Institute error[3]
Albania	22.6	3.7	–	–	27	-4.4	–	–	–	–	28	-5.4	24.0	-1.4	–	–
Bulgaria	96.3	20.3	75	21.3	81	15.3	52	44.3	65.0	31.3	89	7.3	90.0	6.3	80	16.3
Croatia	97.5	0.5	–	–	98	-0.5	–	–	–	–	–	–	–	–	–	–
Czech Republic	10.0	0.7	11	-1.0	9	1.0	9	1.0	10.0	0.0	9	1.0	11.0	-1.0	10	0.0
Estonia	48	1.7	–	–	47	1.0	–	–	–	–	46	2.0	50.0	-2.0	–	–
FYR Macedonia	122	57.0	–	–	65	57.0	–	–	–	–	–	–	–	–	–	–
Hungary	18.8	1.2	19	-0.2	19	-0.2	20	-1.2	18.0	0.8	16	2.8	19.0	-0.2	22	-3.2
Latvia	35.7	1.8	–	–	36	-0.3	–	–	–	–	35	0.7	40.0	-4.3	–	–
Lithuania	72	4.3	–	–	69	3.0	–	–	–	–	70	2.0	80.0	-8.0	–	–
Poland	32.2	3.8	30	2.2	30	2.2	24	8.2	27.0	5.2	28	4.2	30.0	2.2	30	2.2
Romania	131.0	24.4	170	-39.0	156	-25.0	120	11.0	150.0	-19.0	140	-9.0	150.0	-19.0	180	-49.0
Slovak Republic	13.4	1.9	16	-2.6	14	-0.6	–	–	17.0	-3.6	14	-0.6	15.0	-1.6	16	-2.6
Slovenia	19.8	0.9	–	–	18	1.8	–	–	–	–	19	0.8	19.0	0.8	20	-0.2
Commonwealth of Independent States																
Armenia	5,273	185.0	–	–	5,458	-185.0	–	–	–	–	–	–	–	–	–	–
Azerbaijan	1,664	383.0	–	–	1,281	383.0	–	–	–	–	–	–	–	–	–	–
Belarus	2,220	439.5	–	–	1,621	599.0	–	–	–	–	–	–	2,500.0	-280.0	–	–
Georgia	7,400	2,600.0	–	–	10,000	-2,600.0	–	–	–	–	–	–	–	–	–	–
Kazakstan	1,880	540.0	–	–	1,680	200.0	–	–	–	–	–	–	1,000.0	880.0	–	–
Kyrgyzstan	280	20.6	–	–	299	-20.6	–	–	–	–	–	–	–	–	–	–
Moldova	327	82.0	–	–	245	82.0	–	–	–	–	–	–	–	–	–	–
Russia	302	58.0	450	-148.0	336	-34.0	–	–	–	–	310	-8.0	400.0	-98.0	300	2.0
Tajikistan	341.4	1,158.6	–	–	1,500	-1,158.6	–	–	–	–	–	–	–	–	–	–
Turkmenistan	2,400	792.0	–	–	1,608	792.0	–	–	–	–	–	–	–	–	–	–
Ukraine	891.2	371.8	–	–	1,000	-108.8	–	–	–	–	813	78.2	2,000.0	-1,108.8	700	191.2
Uzbekistan	746	603.0	–	–	1,349	-603.0	–	–	–	–	–	–	–	–	–	–

1 All forecasts in this table were published or reported to EBRD in June/July/August 1994 except for the IMF forecasts which are taken from the October 1994 *World Economic Outlook*. There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The dates in parentheses indicate in which month the forecasts were reported or published by each institution. The EBRD forecasts were prepared in August and published in October.

2 "Actuals" represent the most recent official estimate of outturns for 1994, as reflected in publications from the national authorities, the IMF, the World Bank, the OECD, PlanEcon and the Institute of International Finance.

3 What is referred to as "errors" denotes the difference between actuals and forecasts (measured in percentage points).

Table 12.9

Inflation in 1994 (change in the end-year consumer price level, in per cent)[1]

Eastern Europe and the Baltic states

	Actual[2]	Average absolute value of the error[3]	EBRD forecast (September)	EBRD error[3] (June)	JP Morgan forecast	JP Morgan error[3]
Albania	15.8	3.0	19	-3.2	–	–
Bulgaria	121.9	47.0	70	51.9	80	41.9
Croatia	-3.0	3.0	0	-3.0	–	–
Czech Republic	10.2	0.1	10	0.2	10	0.0
Estonia	42	0.0	42	0.0	–	–
FYR Macedonia	55	15.0	70	-15.0	–	–
Hungary	21.2	1.5	20	1.2	23	-1.8
Latvia	26.0	1.0	25	1.0	–	–
Lithuania	45	5.0	40	5.0	–	–
Poland	29.5	3.1	27	2.5	27	2.7
Romania	61.7	28.0	90	-28.3	–	–
Slovak Republic	11.7	1.0	13	-1.3	–	–
Slovenia	18.3	2.0	16	2.3	–	–
Commonwealth of Independent States						
Armenia	1,885	–	–	–	–	–
Azerbaijan	1,788	212.0	2000	-212.0	–	–
Belarus	1,875	–	–	–	–	–
Georgia	7,380	–	–	–	–	–
Kazakstan	1,160	260.0	900	260.0	–	–
Kyrgyzstan	87	3.0	90	-3.0	–	–
Moldova	98	22.0	120	-22.0	–	–
Russia	203	88.0	180	23.0	356	-153.0
Tajikistan	5	–	–	–	–	–
Turkmenistan	1,100	–	–	–	–	–
Ukraine	401	51.0	350	51.0	–	–
Uzbekistan	423	177.0	600	-177.0	–	–

[1] All forecasts in this table were published or reported to EBRD in June/July/August 1994. The dates in parentheses indicate in which month the forecasts were made by each institution. There may, for a number of institutions, be a substantial lag between preparation and publication of forecasts. The EBRD forecasts were prepared in August and published in October.

[2] "Actuals" represent the most recent official estimate of outturns for 1994, as reflected in publications from the national authorities, the IMF, the World Bank, the OECD, PlanEcon and the Institute of International Finance.

[3] What is referred to as "errors" denotes the difference between actuals and forecasts (measured in percentage points).

Table 12.10

Comparison of inflation forecasts for 1994 from different institutions (change in the average consumer price level, in per cent)[1]

	Actual	OECD error	IMF error	Project Link error	European Union error	PlanEcon error	Economist Intelligence Unit error	Vienna Institute error
Bulgaria	96.3	21.3	15.3	44.3	31.3	7.3	6.3	16.3
Czech Republic	10.0	-1.0	1.0	1.0	0.0	1.0	-1.0	0.0
Hungary	18.8	-0.2	-0.2	-1.2	0.8	2.8	-0.2	-3.2
Poland	32.2	2.2	2.2	8.2	5.2	4.2	2.2	2.2
Romania	131.0	-39.0	-25.0	11.0	-19.0	-9.0	-19.0	-49.0
Average of the absolute error (EE5)[1]	–	12.7	8.7	13.1	11.3	4.9	5.7	14.1
Average of the absolute error (EE3)[1]	–	1.1	1.1	3.5	2.0	2.7	1.1	1.8

[1] The EE5 group of countries includes Bulgaria, the Czech Republic, Hungary, Poland and Romania. The EE3 countries are all of these, excluding Bulgaria and Romania. What is referred to as "errors" denotes the difference between actuals and forecasts (measured in percentage points).

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Note that in addition to the references listed below we have relied on extensive communication by fax with some of the forecasting institutions quoted in this chapter.

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Transition report 1995

ISBN 1-898802-02-5

9 781898 802020

ISBN: 1 898802 02 5 ISSN: 1356-3424