

### **Mongolia: Selected Issues and Statistical Appendix**

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MONGOLIA

**Selected Issues and Statistical Appendix**

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Approved by the Asia and Pacific Department

October 11, 2002

This Selected Issues Paper provides background information to the staff report on the 2002 Article IV consultation discussions with Mongolia. The paper includes three studies covering key issues. The paper also includes a statistical appendix providing comprehensive statistical information on the various sectors of the economy.

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## I. GROWTH AND RECOVERY IN MONGOLIA DURING TRANSITION<sup>1</sup>

### A. Introduction

1. Like many former socialist countries, Mongolia began its transformation from a centrally-planned economy to a market-based economy in the early 1990s. While there is a large literature on the growth experience of other transition countries, Mongolia has received relatively little attention.<sup>2</sup> This paper attempts to fill this gap by focusing on the following questions: (i) What were Mongolia's sources of growth before and during transition? (ii) How do Mongolia's growth and recovery compare with those of other transition economies? and (iii) What explains differences in Mongolia's performance relative to other transition economies?

2. The findings of previous studies about other transition economies include the following stylized facts.<sup>3</sup> First, the reforms introduced at the early stages of transition were typically followed by output declines in the short run. Second, traditional factor inputs appear to have had a limited role in explaining growth over time and across countries for transition economies. In particular, econometric studies have found no strong link between the level of aggregate investment and the strength of recovery from the fall in output recorded in the early years of transition. Therefore, most researchers agree that efficiency gains are the main source of growth during the recovery phase of transition, with the development of good institutions playing an important supportive role.

3. The chapter is organized as follows: Section B describes the major sources of economic growth in Mongolia since the early 1980s in the context of a basic growth accounting framework. Section C discusses Mongolia's post-transition growth performance relative to other transition countries. The main conclusions along with some caveats are summarized in Section D.

### B. A Growth Accounting Exercise for Mongolia

#### Methodology and Data

4. Following the conventional growth accounting framework, we assume that Mongolia's output performance since the early 1980s can be explained by the following Cobb-Douglas production function:

---

<sup>1</sup> This chapter was prepared by Kevin Cheng (APD).

<sup>2</sup> Among the studies relating to Mongolia's transition experience, two notable examples are Kalra and Sløk (1999) and Anderson *et al.* (2000).

<sup>3</sup> For an extensive review of the literature on this issue, see *IMF Staff Papers*, Special Issue, Volume 48.

$$Y_t = A_t K_t^\alpha (q_t L_t)^{1-\alpha} \quad (1)$$

where  $K$  is the physical capital stock,  $q$  is a human capital index, and  $L$  is labor input.  $A$  is total factor productivity (TFP) which captures anything not explained by  $K$ ,  $L$ , or  $q$ .

5. Taking logarithms and differentiating, we obtain the following growth accounting equation:

$$\frac{dY}{Y} = \frac{dA}{A} + \alpha \frac{dK}{K} + (1-\alpha) \frac{dL}{L} + (1-\alpha) \frac{dq}{q} \quad (2)$$

Equation (2) decomposes the growth rate of output into the growth rates of TFP, physical capital, labor, and human capital.

6. Physical capital  $K$  is calculated by the conventional perpetual inventory method, as discussed in Barro and Sala-i-Martin (2000):

$$K_{t+1} = I_t + (1-\delta)K_t \quad (3)$$

where  $I$  is the level of real investment and  $\delta$  is the rate of depreciation of the existing capital stock. Given estimates of the depreciation rate and the initial capital stock, and a time series of the investment data, we can calculate the capital stock series recursively using (3). In this study, the depreciation rate is assumed to be 6 percent, which is well within the range of 4–10 percent used in other similar studies. Since Mongolia's industrialization began in the early 1960s, 1959 has been selected as the initial year when the capital stock was assumed to be zero.<sup>4</sup>

7. The time series data used in this study for real GDP ( $Y$ ), real investment ( $I$ ), the capital stock ( $K$ ), labor ( $L$ ), and human capital ( $q$ ) between 1980 and 2001 are presented in Table I.1. Data on real GDP and investment in current prices were obtained from the National Statistical Office (NSO).<sup>5</sup> Due to the lack of official data on the expenditure deflators, the investment deflator was approximated based on the following equation:

---

<sup>4</sup> The Mongolian economy depended almost exclusively on livestock herding until the early 1960s when the economy began to be industrialized with the assistance of the former Soviet Union. It is likely that most of the capital stock that existed in 1959 would have depreciated fully by 1980. In any case, changing the initial year does not materially alter the main results, as illustrated in the sensitivity analysis below. For more details on the structure of the Mongolian economy prior to the transition, see Economist Intelligence Unit (2001)

<sup>5</sup> The data on total investment have been compiled by adding together construction, machinery, inventories, and other miscellaneous items.

$$\text{Investment Deflator} = w * (\text{Construction Investment Deflator}) + (1-w) * (\text{GDP Deflator}),$$

with  $w$  being the share of construction in total investment. The construction deflator has been derived implicitly from the real and nominal construction data obtained from Mongolia's national accounts statistics. Since there are no data for the nonconstruction investment deflator, the GDP deflator has been used as a proxy.<sup>6</sup> Labor input has been approximated by total employment, which was obtained from the NSO. Finally, following Lucas (1988), the human capital index is measured by the average number of years of schooling of the Mongolian population aged 15 or above. Data for this variable were obtained from Mongolia's *Living Standards Survey* (1998) and are presented in Table I.2. Since only data for two years are available (1989 and 1998), figures for other years were estimated by assuming a constant annual growth rate in the human capital stock.

8. The income share of capital,  $\alpha$ , is calculated by a regression approach. Specifically, dividing both sides of (1) by  $L$  and  $q$  and then taking logarithms, we obtain:

$$\ln y_t = \ln A_t + \alpha \ln k_t,$$

with,  $y_t \equiv \frac{Y_t}{q_t L_t}$  and  $k_t \equiv \frac{K_t}{q_t L_t}$ . Taking first differences (indicated by a  $\Delta$ ), we obtain the following regression equation which can give us an estimate of  $\alpha$ :

$$\Delta \ln y_t = \gamma + \alpha \Delta \ln k_t + \varepsilon_t \quad (4)$$

where  $\gamma$  is average TFP growth and  $\varepsilon_t$  is the disturbance term. The regression results are shown below:

	Coefficients	Standard Error	t Statistics
Intercept	-0.008	0.009	-0.95
$\alpha$	0.69	0.18	3.77
Number of Observations	20 (1980–1999)	R-squared	0.43

As discussed below, average TFP growth over the period between 1980 and 2000 is sometimes positive and sometimes negative, which is consistent with an estimated intercept not significantly different from zero. The estimate of  $\alpha$  of 0.69 may seem large, but it is not

<sup>6</sup> This approach is better than simply using the GDP deflator for total investment, because price indices for construction tend to move differently from other items in the national accounts. Moreover, the quality of existing NSO estimates for the GDP deflator is weak, as elaborated below in Chapter II.

out of line with the findings of other empirical studies. For example, Senhadji (1999), using a similar econometric approach as the one used in this paper, found that the average value of  $\alpha$  for his sample of 88 countries was 0.53, with some countries having values as high as 0.91. Similarly, Heytens and Zebregs (2000) estimated that  $\alpha$  was equal to 0.63 in China, an Asian transition economy, which may share a number of characteristics with Mongolia.

Table I.1. Mongolia: Estimates of Real GDP and Factor Inputs, 1980–2001

Year	Real				
	Real GDP	Investment	Capital	Labor	Human Capital
	In billions of togrogs, constant 1995 prices			In thousands of persons	Average number of years of schooling
1980	376.1	172.8	1183.8	516.0	6.7
1981	407.4	235.3	1348.1	518.0	6.7
1982	441.4	250.0	1517.2	532.2	6.8
1983	466.9	208.7	1634.9	543.0	6.9
1984	494.9	236.7	1773.5	550.3	7.0
1985	525.7	259.9	1927.0	589.5	7.1
1986	575.0	294.1	2105.5	643.1	7.2
1987	594.8	278.9	2258.0	665.4	7.3
1988	625.2	275.4	2398.0	743.3	7.4
1989	651.5	291.8	2545.9	764.1	7.5
1990	635.1	205.4	2598.5	783.6	7.6
1991	576.4	97.0	2539.6	795.7	7.7
1992	521.6	54.8	2442.0	806.0	7.9
1993	505.9	122.3	2417.8	765.4	8.0
1994	517.6	92.7	2365.4	759.8	8.1
1995	550.3	91.5	2315.0	767.6	8.2
1996	563.2	91.3	2267.4	769.6	8.3
1997	585.7	111.4	2242.8	765.1	8.4
1998	606.4	129.5	2237.7	792.6	8.5
1999	625.9	146.6	2250.1	813.6	8.7
2000	632.5	153.8	2268.8	809.0	8.8
2001	639.7	175.9	2308.6	832.3	8.9

Sources: Data provided by the NSO; and NSO and UNDP, *Living Standards Survey*, 1998.

Table I.2. Mongolia: Composition of Population Aged 15 or Above by Educational Status

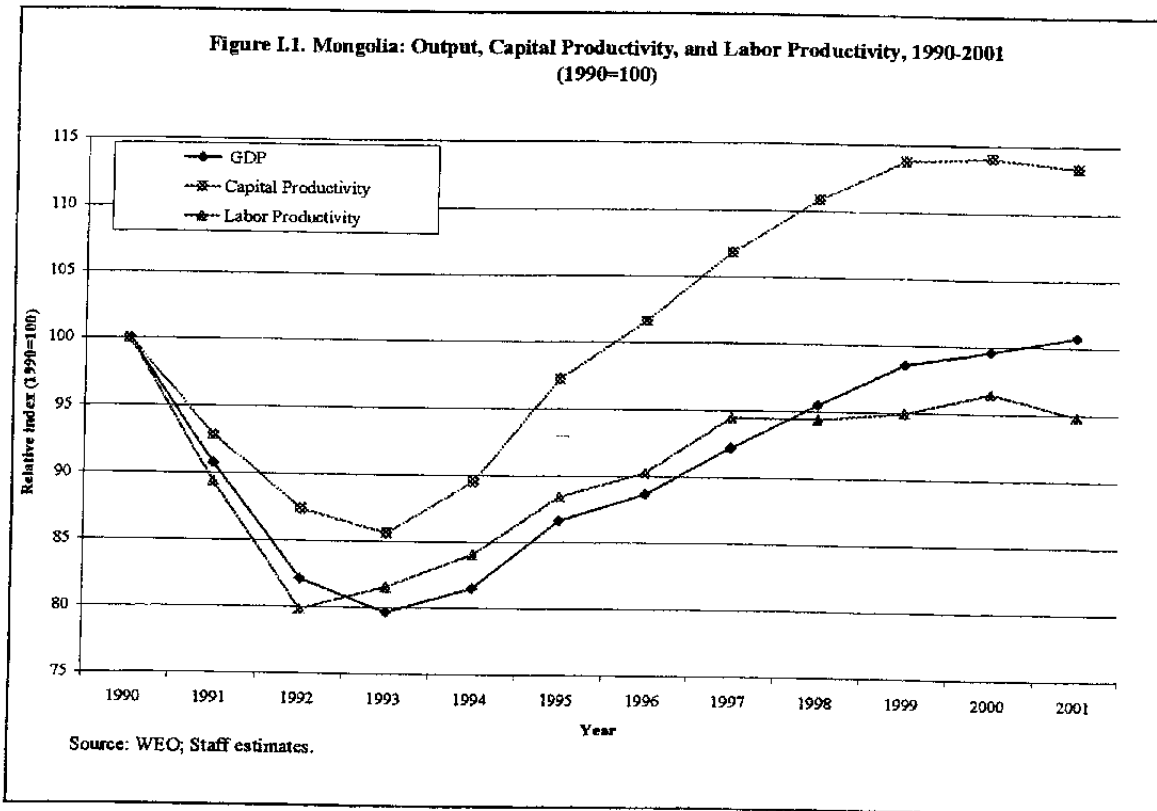
	Uneducated	Primary	Incomplete Secondary	Complete Secondary	Sepecial Education	Tertiary	Average Number of Years of Schooling
	(0 Year of Schooling)	(4 Years of Schooling)	(8 Years of Schooling)	(10 Years of Schooling)	(10 Years of Schooling)	(14–15 Years of Schooling)	
	(In Percent)						
1989	9.4	20.5	33.9	18.1	9.6	8.5	7.5
1998	4.2	15.3	32.2	24.5	12.3	11.5	8.5

Source: NSO and UNDP, *Living Standards Survey*, 1998; and staff estimates.



## Results

9. As indicated in Figure I.1, the evolution of real GDP and capital and labor productivity since 1990, where the latter are defined as GDP/K and GDP/L, suggests that Mongolia, like many other former socialist economies, experienced a painful “transformational recession” in the first few years during its transition to a market economy before beginning to recover as a result of efficiency gains from market-oriented reforms. Real GDP and capital and labor productivity bottomed out in 1992–93 and began to recover to positive rates of growth thereafter. By 1995, capital productivity had started to surpass its 1990 level, and by 2001, real GDP had reverted to the level prior to the transition. Labor productivity as of 2001, however, was still slightly below the level of 1990, possibly reflecting sluggishness in the shedding and reallocation of labor employed in the less productive state-controlled sector of the economy.



10. **Mongolia’s sources of growth before and after the transition resemble those in most other transition economies.** As is indicated in Table I.3, which summarizes the estimates derived from equation (2), capital accumulation appears to have been the key engine for economic growth before the transition began; however, its role diminished following the launching of market-oriented reforms. Similarly, neither education nor employment appears to have made a considerable contribution to economic growth during the early years of transition. While the growth of factor inputs cannot account for Mongolia’s growth performance during the transition, total factor productivity (TFP) seems to be of

paramount importance. In the 1980s, TFP was largely negative, reflecting resource misallocation typical of all planned economies. Then, TFP declined even further at the initial stages of the transition, becoming the primary factor accounting for the collapse in Mongolia's real GDP in the early 1990s. But as stabilization policies took hold and the foundations were laid for the development of a competitive market economy, TFP turned positive from the mid-1990s. Hence, consistent with the findings of empirical work on other transition economies, efficiency gains, as measured by TFP, appear to have been the main factor accounting for the pick-up of growth in Mongolia as the transition took root.

Year	Annual Average Growth Rate of Output	Annual Average Contributions to Output Growth			
		Capital	Employment	Education	TFP
1980-84	7.11	7.34	0.50	0.43	-1.17
1985-89	5.51	4.98	2.08	0.43	-1.98
1990-94	-4.99	-1.60	-0.24	0.43	-3.58
1995-2001	2.54	-0.03	0.42	0.43	1.72

### Sensitivity Analysis

11. Although the above growth accounting exercise is based on arbitrary assumptions about the initial capital stock and its rate of depreciation, sensitivity analysis suggests that the results are robust to different assumptions. Table I.4.A shows the results for the growth accounting exercise under a different assumption about the initial capital stock, with an investment/GDP ratio between 1949-59 that is the same as the average level recorded during the 1970s (38 percent), as opposed to an assumption of a zero capital stock in 1959 in the benchmark scenario. While this probably overstates the initial capital stock by a significant amount, the results in Table I.4.A are only slightly different from those in Table I.3, and the big picture remains the same. Similarly, changes in the depreciation rate do not alter the main results. As shown in Tables I.4.B and I.4.C, the relative contributions to growth from factor inputs and TFP show basically the same patterns with a depreciation rate of 4 percent or 10 percent (compared with 6 percent in the benchmark scenario).

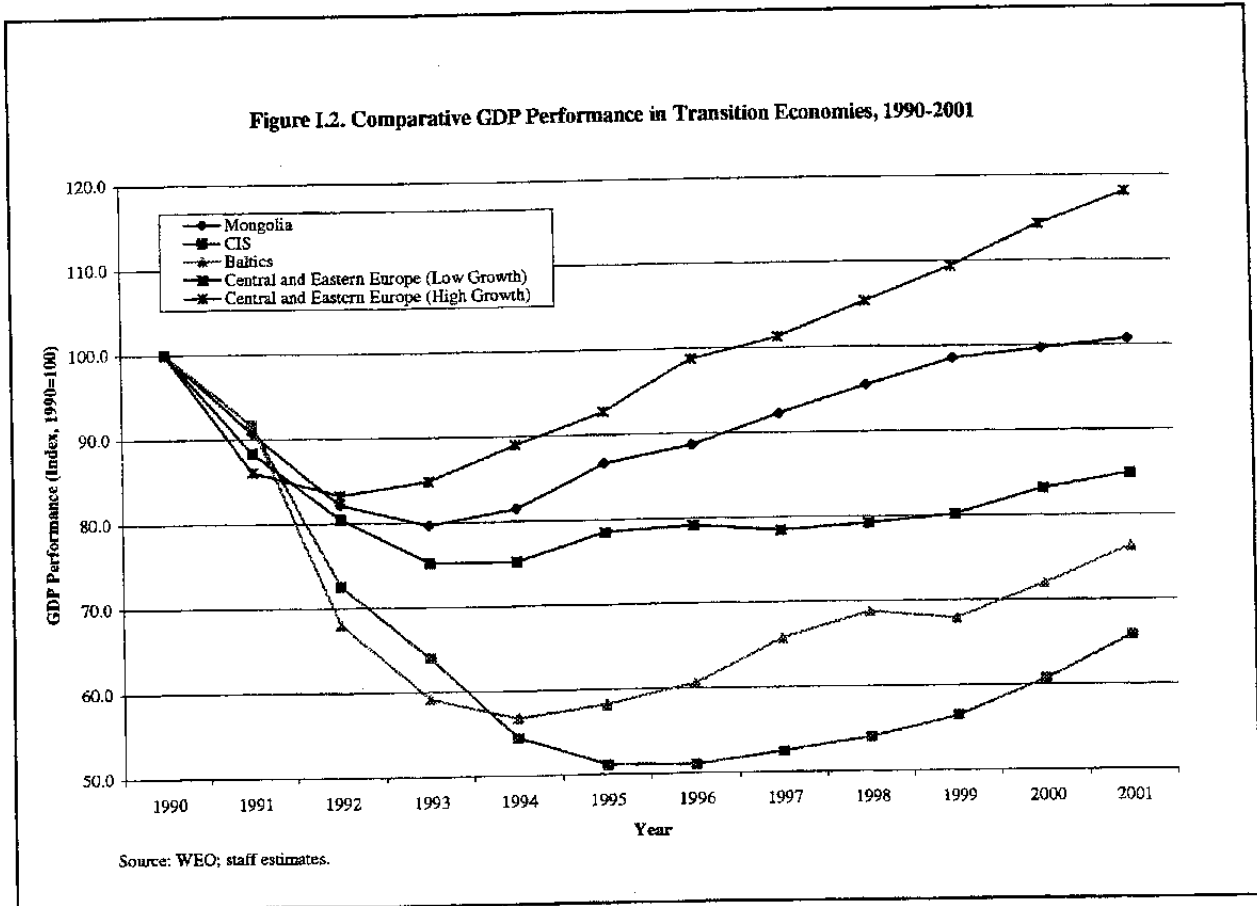
Table I.4. Mongolia: Growth Accounting Exercise: Sensitivity Analysis  
(In percent)

Year	Annual Average Growth Rate of Output	Annual Average Contributions to Output Growth			
		Capital	Employment	Education	TFP
A. Assuming the Investment/GDP Ratio Equals 38 Percent During 1949–59					
1980–1984	7.11	7.19	0.42	0.36	-0.87
1985–1989	5.51	5.08	1.74	0.36	-1.67
1990–1994	-4.99	-1.76	-0.20	0.36	-3.38
1995–2001	2.54	-0.09	0.35	0.36	1.92
B. Assuming a Depreciation Rate of 4 Percent					
1980–1984	7.11	7.97	0.42	0.36	-1.65
1985–1989	5.51	5.62	1.74	0.36	-2.21
1990–1994	-4.99	-0.67	-0.20	0.36	-4.47
1995–2001	2.54	0.48	0.35	0.36	1.34
C. Assuming a Depreciation Rate of 10 Percent					
1980–1984	7.11	6.40	0.63	0.54	-0.47
1985–1989	5.51	4.02	2.61	0.54	-1.67
1990–1994	-4.99	-3.04	-0.30	0.54	-2.19
1995–2001	2.54	-0.50	0.53	0.54	1.97

### C. Comparison with Other Transition Economies

12. Compared with other transition economies, Mongolia's speed of recovery has been moderately fast. While Mongolia's output recovery was slightly more sluggish than in the best-performing countries in Central and Eastern Europe, its growth performance during the transition has been unequivocally superior to those of the Baltics, the Commonwealth of Independent States (CIS) except for Uzbekistan, and the poorer performers in Central and Eastern Europe (Figure I.2 and Tables I.5 and I.6). While the Baltics and the CIS suffered a cumulative output loss averaging 23.8 percent and 34.2 percent, respectively, during 1990–2001, Mongolia's output rose by 0.7 percent during the same period. Moreover, between 1990–2001, Mongolia recorded only three years of output decline, compared with an average of 3.9 years in Central and Eastern Europe, 4.7 years in the Baltics, and 5.8 years in the CIS.

Figure I.2. Comparative GDP Performance in Transition Economies, 1990-2001



13. **Mongolia's relatively fast recovery cannot be easily attributed to any one factor such as geography, historical and economic ties, the level of industrialization, per-capita income, or openness.** As Table I.6 shows, despite Mongolia's physical proximity and historical and economic ties to the CIS, the latter performed more poorly than Mongolia. Similarly, Mongolia's high growth performance cannot be fully explained by its low level of industrialization (as approximated by the agricultural share in GDP over the period 1990-2001). As Table I.7 shows, countries with a like-sized agricultural sector, such as Armenia and Moldova, recovered more slowly than Mongolia during transition. Nor can Mongolia's low income level alone account for its relative growth success in light of the poor performance in other low-income countries such as Tajikistan, and the good performance in high-income countries such as Slovenia (Table I.8). Finally, openness to trade may partly explain Mongolia's relative growth success. As shown in Table I.9, Mongolia is a fairly open economy, with an exports-plus-imports-to-GDP ratio of about 112 percent. Yet, this factor alone cannot explain Mongolia's favorable growth performance, compared with the performance in some other highly open economies such as Moldova.

14. **Quite surprisingly, Mongolia's pattern of growth and recovery resembles more those in the high-growth Central and Eastern European countries, which are very different from Mongolia in terms of geography, history, market structure, and developmental stage.** Perhaps, Mongolia's relatively good performance can be attributed to

a combination of policy factors, such as a determined macroeconomic adjustment effort to contain inflation and external imbalances and the rapid establishment of an open exchange and trade system, which helped enhance competition and efficiency, as well as more advantageous initial conditions. The latter may have included Mongolia's relatively low degree of industrialization, which is likely to have facilitated price liberalization and enterprise restructuring.<sup>7</sup>

#### D. Conclusions

15. **This chapter has described some of the key stylized facts of Mongolia's growth and recovery during the first decade of its transition to a market-based system and compared them to those of other transition economies.** The major findings have been as follows: (1) As in most former socialist countries, while capital accumulation appears to have been the primary factor accounting for growth in the 1980s, efficiency gains became the main source of growth during the early stages of transition; (2) Mongolia, like most other transition economies, experienced a painful, initial "transformational recession" before the economy began to recover; (3) the speed of Mongolia's recovery has been moderately fast compared with other transition economies; and (4) Mongolia's favorable performance cannot be easily explained by any single factor such as, geography, historical and economic ties, the level of industrialization, per-capita income, or openness; rather, it is likely due to a combination of policy factors and relatively advantageous initial conditions.

16. **While the above results are instructive, they need to be interpreted with caution in light of the well-known weaknesses in the quality of national accounts and related data in transition economies.**<sup>8</sup> In particular, comparisons of economic performance before and after the transition, and across countries, along the lines described above, may be subject to a large margin of error. In the case of Mongolia, there are also reasons to question the quality of post-transition national accounts data, as elaborated in the following chapter.

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<sup>7</sup> Mongolia's experience with public enterprise restructuring and privatization is reviewed in more detail in Chapter III below. For a more general discussion of the possible factors that may have spurred enterprise restructuring and the formation of new enterprises in transition economies, see Djankov and Murrell (2002) and McMillan and Woodruff (2002).

<sup>8</sup> See, for example, Campos and Coricelli (2002) and references therein.

Table I.5. Comparative GDP Performance in Transition Economies, 1990–2001  
Index (1990=100)

Country	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Mongolia</b>	<b>102.6</b>	<b>100.0</b>	<b>90.8</b>	<b>82.1</b>	<b>79.7</b>	<b>81.5</b>	<b>86.6</b>	<b>88.7</b>	<b>92.2</b>	<b>95.5</b>	<b>98.6</b>	<b>99.6</b>	<b>100.7</b>
<b>Commonwealth of Independent States (CIS)</b>													
Armenia	102.2	100.0	87.6	41.5	35.7	37.6	40.2	42.6	44.0	47.2	48.8	51.7	56.7
Azerbaijan	113.3	100.0	99.3	76.7	59.0	47.4	41.8	42.3	44.8	49.3	52.9	58.8	64.1
Belarus	102.3	100.0	98.8	89.2	82.9	75.5	67.7	69.6	77.5	83.9	86.8	91.8	95.6
Georgia	117.6	100.0	78.9	43.5	30.7	27.5	28.3	31.2	34.5	35.5	36.6	37.3	39.0
Kazakhstan	102.3	100.0	89.0	84.3	76.5	66.9	61.4	61.7	62.7	61.5	63.2	69.4	78.5
Kyrgyz Republic	102.4	100.0	92.2	79.4	67.1	53.8	50.9	54.5	59.9	61.1	63.3	66.8	70.3
Moldova	102.4	100.0	82.5	53.9	53.3	36.8	36.3	34.2	34.7	32.4	31.3	32.0	34.0
Russia	96.4	100.0	94.5	76.9	66.9	57.9	55.5	53.6	54.1	51.4	54.2	59.1	62.1
Tajikistan	148.3	100.0	92.9	66.1	58.7	46.2	40.4	38.6	39.3	41.3	42.9	46.4	51.2
Turkmenistan	102.3	100.0	95.3	90.2	81.2	67.2	62.3	58.2	51.6	55.2	64.3	75.9	91.4
Ukraine	103.7	100.0	89.4	80.7	69.2	53.3	46.9	42.2	40.9	40.1	40.0	42.3	46.2
Uzbekistan	95.9	100.0	99.5	88.5	86.4	82.8	82.0	83.4	85.4	89.1	92.9	96.5	100.8
<b>Average</b>	<b>107.4</b>	<b>100.0</b>	<b>91.6</b>	<b>72.6</b>	<b>64.0</b>	<b>54.4</b>	<b>51.1</b>	<b>51.0</b>	<b>52.4</b>	<b>54.0</b>	<b>56.4</b>	<b>60.7</b>	<b>65.8</b>
<b>Baltics</b>													
Estonia	102.3	100.0	92.1	72.2	66.2	64.9	67.7	70.4	77.2	80.8	80.3	86.0	90.3
Latvia	102.3	100.0	88.9	57.6	49.0	49.3	48.9	50.5	54.9	57.0	57.6	61.6	66.2
Lithuania	94.8	100.0	94.3	74.2	62.2	56.1	58.0	60.7	65.1	68.4	65.8	68.3	72.3
<b>Average</b>	<b>99.8</b>	<b>100.0</b>	<b>91.8</b>	<b>68.0</b>	<b>59.2</b>	<b>56.8</b>	<b>58.2</b>	<b>60.5</b>	<b>65.7</b>	<b>68.8</b>	<b>67.9</b>	<b>72.0</b>	<b>76.3</b>
<b>Central and Eastern Europe (Negative Growth)</b>													
Bulgaria	110.0	100.0	89.6	81.7	71.8	66.2	69.1	62.6	59.1	61.5	62.9	66.3	68.9
Croatia	108.1	100.0	83.0	73.3	67.4	71.4	76.3	80.8	86.1	88.3	88.0	91.2	95.0
Macedonia, FYR	108.1	100.0	93.8	87.6	81.0	79.6	78.7	79.6	80.8	83.5	87.1	91.0	87.3
Romania	105.9	100.0	87.1	79.4	80.7	83.8	89.9	93.5	87.8	83.6	82.6	84.1	88.6
<b>Average</b>	<b>108.0</b>	<b>100.0</b>	<b>88.4</b>	<b>80.5</b>	<b>75.2</b>	<b>75.3</b>	<b>78.5</b>	<b>79.1</b>	<b>78.5</b>	<b>79.2</b>	<b>80.1</b>	<b>83.2</b>	<b>84.9</b>
<b>Central and Eastern Europe (Positive Growth)</b>													
Albania	111.1	100.0	72.0	66.8	73.2	80.1	79.4	95.2	88.5	95.6	102.6	110.6	117.8
Czech Republic	102.5	100.0	88.4	87.9	88.0	89.9	95.3	99.4	98.6	97.6	98.0	101.2	104.5
Hungary	103.6	100.0	88.1	85.4	84.9	87.4	88.7	89.9	94.0	98.6	102.7	108.1	112.2
Poland	107.7	100.0	93.0	94.9	99.0	104.1	111.2	117.9	125.9	131.9	137.3	142.8	144.3
Slovak Republic	100.4	100.0	84.1	78.5	75.6	79.3	84.6	89.9	95.4	99.3	100.5	102.8	106.1
Slovenia	108.1	100.0	91.1	86.1	88.5	93.3	97.1	100.5	105.1	109.1	114.8	120.1	123.6
<b>Average</b>	<b>105.6</b>	<b>100.0</b>	<b>86.1</b>	<b>83.3</b>	<b>84.9</b>	<b>89.0</b>	<b>92.7</b>	<b>98.8</b>	<b>101.3</b>	<b>105.4</b>	<b>109.3</b>	<b>114.3</b>	<b>118.1</b>

Sources: WEO; IMF Occasional Paper 184; and staff estimates.

Table I.6. Comparative Growth Performance and Location of Transition Economies, 1990–2001  
(In percent, unless otherwise indicated)

	Cumulative Growth between 1990–2001	Number of Years of Decline Before Initial Recovery	Total Number of Years of Decline Between 1990–2001	Cumulative Decline Before Initial Recovery	Cumulative Growth Since Initial Recovery	Average Growth between Initial Recovery and 2001
<b>MONGOLIA</b>	<b>0.7</b>	<b>3.0</b>	<b>3.0</b>	<b>-20.3</b>	<b>26.4</b>	<b>3.0</b>
<b>Commonwealth of Independent States (CIS)</b>						
Armenia	-43.3	3.0	3.0	-64.3	58.8	5.9
Azerbaijan	-35.9	5.0	5.0	-58.2	53.3	7.4
Belarus	-4.4	5.0	5.0	-32.3	41.2	5.9
Georgia	-61.0	4.0	4.0	-72.5	41.5	5.1
Kazakhstan	-21.5	5.0	6.0	-38.6	28.0	4.2
Kyrgyz Republic	-29.7	5.0	5.0	-49.1	38.1	5.5
Moldova	-66.0	6.0	8.0	-65.8	-0.6	-0.1
Russia	-37.9	6.0	7.0	-46.4	15.8	3.0
Tajikistan	-48.8	6.0	6.0	-61.4	32.5	5.8
Turkmenistan	-8.6	7.0	7.0	-48.4	77.2	15.4
Ukraine	-53.8	9.0	9.0	-60.0	15.4	7.4
Uzbekistan	0.8	5.0	5.0	-18.0	22.9	3.5
<b>Average</b>	<b>-34.2</b>	<b>5.5</b>	<b>5.8</b>	<b>-51.3</b>	<b>35.3</b>	<b>5.8</b>
<b>Baltics</b>						
Estonia	-9.7	4.0	5.0	-35.1	39.1	4.8
Latvia	-33.8	3.0	4.0	-51.0	35.1	3.8
Lithuania	-27.7	4.0	5.0	-43.9	28.8	3.7
<b>Average</b>	<b>-23.7</b>	<b>3.7</b>	<b>4.7</b>	<b>-43.3</b>	<b>34.3</b>	<b>4.1</b>
<b>Central and Eastern Europe (High Growth)</b>						
Albania	17.8	2.0	4.0	-33.2	76.3	6.5
Czech Republic	4.5	2.0	4.0	-12.1	18.9	1.9
Hungary	12.2	3.0	3.0	-15.1	32.2	3.5
Poland	44.3	1.0	1.0	-7.0	55.1	4.5
Slovak Republic	6.1	3.0	3.0	-24.4	40.5	4.3
Slovenia	23.6	2.0	2.0	-13.9	43.6	4.1
<b>Average</b>	<b>18.1</b>	<b>2.2</b>	<b>2.8</b>	<b>-17.6</b>	<b>44.4</b>	<b>4.2</b>
<b>Central and Eastern Europe (Low Growth)</b>						
Bulgaria	-31.1	4.0	6.0	-33.8	4.0	0.6
Croatia	-5.0	3.0	4.0	-32.6	40.8	4.4
Macedonia, FYR	-12.7	5.0	6.0	-21.3	10.9	1.7
Romania	-11.4	2.0	5.0	-20.6	11.5	1.2
<b>Average</b>	<b>-15.1</b>	<b>3.5</b>	<b>5.3</b>	<b>-27.0</b>	<b>16.8</b>	<b>2.0</b>

Sources: WEO; IMF Occasional Paper 184; and staff estimates.

Table I.7. Comparative Growth Performance and Share of Agriculture in GDP in Transition Economies, 1990–2001

		Agriculture Share in GDP	Cumulative Growth between 1990–2001 (rank*)	Number of Years of Decline Before Initial Recovery	Total Number of Years of Decline Between 1990–2001	Cumulative Decline Before Initial Recovery (rank*)	Cumulative Growth Since Initial Recovery (rank*)	Average Growth between Initial Recovery and 2001
	Rank	Average, 1990–2000						
Albania	1	49.1	3	2.0	4.0	12	26	4
Georgia	2	39.9	25	4.0	4.0	26	18	9
Kyrgyz Republic	3	39.9	17	5.0	5.0	19	15	8
Armenia	4	33.6	22	3.0	3.0	24	25	5
<b>MONGOLIA</b>	<b>5</b>	<b>33.2</b>	<b>8</b>	<b>3.0</b>	<b>3.0</b>	<b>6</b>	<b>10</b>	<b>21</b>
Moldova	6	33.0	26	6.0	8.0	25	11	26
Uzbekistan	7	32.8	7	5.0	5.0	5	2	19
Tajikistan	8	29.6	23	6.0	6.0	23	4	7
Turkmenistan	9	24.7	11	7.0	7.0	18	1	1
Azerbaijan	10	24.3	20	5.0	5.0	21	24	3
Belarus	11	18.2	9	5.0	5.0	10	23	6
Romania	12	18.1	13	2.0	5.0	7	8	24
Ukraine	13	18.0	24	9.0	9.0	22	3	2
Bulgaria	14	15.3	18	4.0	6.0	13	22	25
Kazakhstan	15	14.0	15	5.0	6.0	15	16	14
Lithuania	16	13.4	16	4.0	5.0	16	13	17
Macedonia, FYR	17	12.9	14	5.0	6.0	8	12	23
Latvia	18	11.9	19	3.0	4.0	20	14	16
Croatia	19	11.0	10	3.0	4.0	11	21	12
Estonia	20	10.9	12	4.0	5.0	14	19	10
Russia	21	9.3	21	6.0	7.0	17	7	20
Hungary	22	8.6	4	3.0	3.0	4	17	18
Poland	23	6.0	1	1.0	1.0	1	9	11
Slovak Republic	24	5.5	5	3.0	3.0	9	6	13
Czech Republic	25	5.1	6	2.0	4.0	2	20	22
Slovenia	26	4.5	2	2.0	2.0	3	5	15

Sources: WEO; World Bank: World Development Indicators Database; IMF Occasional Paper 184; and staff estimates.

\* The lower the rank, the better the performance.



Table I.8. Comparative Growth Performance and PPP-Based Per-Capita Income Level in Transition Economies, 1990–2001

	Rank	PPP Per Capita Average, 1990–2000	Cumulative Growth between 1990–2001 (rank*)	Number of Years of Decline Before Initial Recovery	Total Number of Years of Decline Between 1990–2001	Cumulative Decline Before Initial Recovery (rank*)	Cumulative Growth Since Initial Recovery (rank*)	Average Growth between Initial Recovery and 2001
Slovenia	1	13277	2	2.0	2.0	3	5	15
Czech Republic	2	12336	6	2.0	4.0	2	20	22
Hungary	3	9716	4	3.0	3.0	4	17	18
Slovak Republic	4	8864	5	3.0	3.0	9	6	13
Russia	5	7873	21	6.0	7.0	17	7	20
Estonia	6	7150	12	4.0	5.0	14	19	10
Poland	7	7112	1	1.0	1.0	1	9	11
Turkmenistan	8	6570	11	7.0	7.0	18	1	1
Lithuania	9	6553	16	4.0	5.0	16	13	17
Belarus	10	6397	9	5.0	5.0	10	23	6
Croatia	11	6128	10	3.0	4.0	11	21	12
Romania	12	6041	13	2.0	5.0	7	8	24
Latvia	13	5870	19	3.0	4.0	20	14	16
Kazakhstan	14	5169	15	5.0	6.0	15	16	14
Bulgaria	15	5011	18	4.0	6.0	13	22	25
Macedonia, FYR	16	4830	14	5.0	6.0	8	12	23
Ukraine	17	4682	24	9.0	9.0	22	3	2
Georgia	18	4621	25	4.0	4.0	26	18	9
Azerbaijan	19	2856	20	5.0	5.0	21	24	3
Moldova	20	2791	26	6.0	8.0	25	11	26
Albania	21	2727	3	2.0	4.0	12	26	4
Armenia	22	2626	22	3.0	3.0	24	25	5
Kyrgyz Republic	23	2580	17	5.0	5.0	19	15	8
Uzbekistan	24	2179	7	5.0	5.0	5	2	19
Tajikistan	25	1462	23	6.0	6.0	23	4	7
<b>MONGOLIA</b>	<b>26</b>	<b>1448</b>	<b>8</b>	<b>3.0</b>	<b>3.0</b>	<b>6</b>	<b>10</b>	<b>21</b>

Sources: WEO; IMF Occasional Paper 184; and staff estimates.

\* The lower the rank, the better the performance.

Table I.9. Comparative Growth Performance and Openness in Transition Economies, 1990–2001

	Rank	Openness (=(Exports+ Imports)/GDP)	Exports/GDP	Cumulative Growth between 1990–2001 (rank*)	Number of Years of Decline Before Initial Recovery	Total Number of Years of Decline Between 1990–2001	Cumulative Decline Before Initial Recovery (rank*)	Cumulative Growth Since Initial Recovery (rank*)	Average Growth between Initial Recovery and 2001
Moldova	1	2.79	1.29	26	6.0	8.0	25	11	26
Estonia	2	1.46	0.70	12	4.0	5.0	14	19	10
Slovak Republic	3	1.35	0.64	5	3.0	3.0	9	6	13
Slovenia	4	1.34	0.69	2	2.0	2.0	3	5	15
Armenia	5	1.30	0.43	22	3.0	3.0	24	25	5
Belarus	6	1.16	0.55	9	5.0	5.0	10	23	6
Czech Republic	7	1.14	0.57	6	2.0	4.0	2	20	22
<b>MONGOLIA</b>	<b>8</b>	<b>1.12</b>	<b>0.50</b>	<b>8</b>	<b>3.0</b>	<b>3.0</b>	<b>6</b>	<b>10</b>	<b>21</b>
Macedonia, FYR	9	1.09	0.50	14	5.0	6.0	8	12	23
Latvia	10	1.09	0.51	19	3.0	4.0	20	14	16
Croatia	11	1.09	0.51	10	3.0	4.0	11	21	12
Lithuania	12	1.04	0.49	16	4.0	5.0	16	13	17
Bulgaria	13	0.94	0.46	18	4.0	6.0	13	22	25
Ukraine	14	0.94	0.46	24	9.0	9.0	22	3	2
Kyrgyz Republic	15	0.88	0.39	17	5.0	5.0	19	15	8
Hungary	16	0.86	0.42	4	3.0	3.0	4	17	18
Azerbaijan	17	0.79	0.35	20	5.0	5.0	21	24	3
Georgia	18	0.64	0.24	25	4.0	4.0	26	18	9
Romania	19	0.58	0.26	13	2.0	5.0	7	8	24
Russia	20	0.54	0.31	21	6.0	7.0	17	7	20
Poland	21	0.51	0.25	1	1.0	1.0	1	9	11
Albania	22	0.44	0.10	3	2.0	4.0	12	26	4
Turkmenistan	23	...	0.00	11	7.0	7.0	18	1	1
Kazakhstan	24	...	...	15	5.0	6.0	15	16	14
Uzbekistan	25	...	...	7	5.0	5.0	5	2	19
Tajikistan	26	...	...	23	6.0	6.0	23	4	7

Sources: WEO; IMF Occasional Paper 184; and staff estimates.

\* The lower the rank, the better the performance.

## II. ISSUES IN DEVELOPING NATIONAL ACCOUNTS ESTIMATES AND PROJECTIONS<sup>1</sup>

### A. Introduction

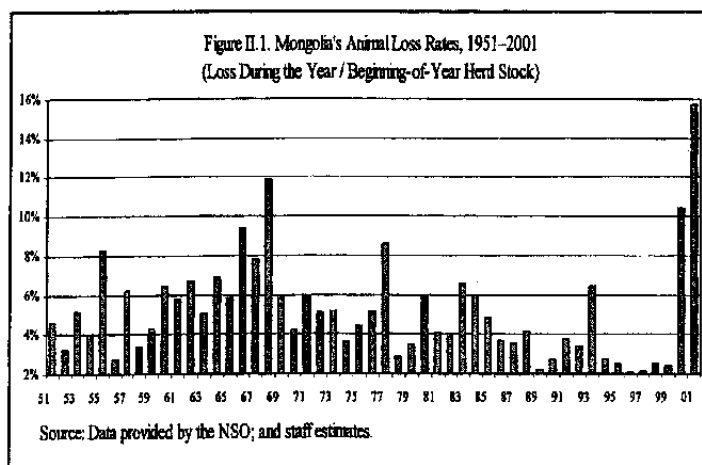
1. **Mongolia's GDP growth rate is officially estimated to have slowed to 1 percent in 2000–01 from an average annual growth rate of 3–4 percent in the late 1990s, but it is targeted to rise to 5–6 percent in the medium-term macroeconomic framework underlying the government's Interim Poverty Reduction Strategy paper (I-PRSP).** The results of the preceding chapter provide a useful framework for the assessment of Mongolia's economic growth prospects in the period ahead. Thus, assuming that TFP growth continues to be underpinned by sustained implementation of sound macroeconomic policies and market-friendly reforms, and that continued contributions from employment growth and improved education are supported by a progressive recovery in investment, the achievement of the government's medium-term growth targets should be within reach. Nevertheless, to better assess the factors underlying the recent trends and medium-term prospects, one has to look also at developments in the key sectoral components of GDP. The performance of the weather-sensitive agricultural sector may be of particular significance in this regard, given its unusually poor performance in 2000–01.

2. **At the same time, it should be noted that Mongolia's national accounts statistics continue to suffer from considerable weaknesses.** This suggests that recent national accounts estimates and projections should be interpreted with great caution. This chapter first summarizes the main weaknesses of the existing national accounts statistics and then reviews the recent developments and prospects for the main components of GDP.

### B. Weaknesses in Mongolia's National Accounts Statistics

#### The Treatment of Animal Losses

3. **Mongolia experienced two consecutive years of drought in 1999–2000, followed by exceptionally severe winter weather in 2000–01, which resulted in annual losses equivalent to 10–15 percent of the beginning-of-year herd stock in 2000–01.** As illustrated in Figure II.1, such big losses have



<sup>1</sup> Prepared by Yutaka Nishigaki, with the help of Tigran Terlemezian, a long-term STA advisor to the NSO.

been extraordinarily rare over the last 50 years, and have occurred only once before in the late 1960s. Having two consecutive years of such losses has been an unprecedented event in Mongolia's recent history.

4. According to the 1993 System of National Accounts and the FAO's handbook on economic accounts, output of the livestock sector should be calculated as the sum of the changes in the value of the herd stock, and the value produced in the forms of meat, milk, hair, skin, and other raw materials of animal origin.<sup>2</sup> While a large loss of animals adversely affects both the value of the herd stock and current production, the former can be expected to have a more significant impact.

5. Table II.1 illustrates the impact of the exceptional weather on total output of the livestock sector. While current production decreased by 20 percent in 2001, after having recorded only a slight increase in 2000, the large decline in the value of the herd stock implies that the relevant component of value added was negative in both years. This negative component accounts fully for the recorded decline in the output of the livestock sector in 2000, and for about half of the decline in 2001.

	In billion of Togrogs			Growth Rate (In percent)		Contribution to Growth (In percent)	
	1999	2000	2001	2000	2001	2000	2001
Changes in the value of animals	33.0	-32.2	-75.2	n.a	n.a.	-23.1	-19.6
Production total	249.4	251.1	203.5	0.7	-19.0	0.6	-21.7
Meat production	126.5	133.8	100.6	5.8	-24.8	2.6	-15.2
Milk production	52.2	41.8	32.4	-19.9	-22.5	-3.7	-4.3
Wool production	40.9	41.2	38.2	0.7	-7.3	0.1	-1.4
Raw hides and skin, fur skin	25.6	30.3	28.5	18.4	-5.9	1.7	-0.8
Other products *	4.2	4.0	3.8	-4.8	-5.0	-0.1	-0.1
Livestock sector total	282.4	218.9	128.3	-22.5	-41.4	-22.5	-41.4

\* Includes eggs, honey, blood horns, feather, and manure.  
Source: Data provided by the NSO; and staff estimates.

6. The analytical treatment of such extraordinary losses in the national accounts is an issue worthy of careful consideration. If the weather-related losses are viewed as one-time catastrophic occurrences, then the whole or part of the resulting losses may be excluded from the calculation of GDP.<sup>3</sup> However, in the case of Mongolia, harsh winters can be expected to occur with some regularity. In addition, the animal losses resulting from adverse

<sup>2</sup> Food and Agriculture Organization (1996).

<sup>3</sup> In a similar case, the U.K. Statistical Office treated the animal losses due to the outbreak of foot and mouth disease in 2001 as exceptional losses and excluded them from the calculation of GDP.

weather are not totally exogenous but may also depend on the extent to which provisions have been made to protect herds from the hardships that can be expected to be associated with Mongolia's harsh winter. Thus, until 1999, the national accounts methodology used by the NSO did not make any special provisions for the treatment of extraordinary losses in the herd stock.

**7. In these circumstances, the authorities are considering three options for the methodology to account for the impact of the unusually large animal losses during 2000–01:**<sup>4</sup>

- Option A: Distinguish between animals employed as fixed assets (i.e., used for production year after year) and work in progress (i.e., those in the process of being fattened for future slaughter or future employment as productive assets but still in their growth period), and exclude fixed assets from the GDP estimates.
- Option B: Distinguish between losses that are recurrent or accidental and those that can be deemed as exceptional or catastrophic losses, and exclude exceptional or catastrophic losses from the GDP estimates.
- Option C: Treat the losses that occurred in 2000–01 like the losses that occurred in previous years, and adhere to the same national accounts methodology used by the NSO for previous years.

**8. Mongolia's GDP growth estimates for 2000–01 are highly sensitive to the choice from among the above options.** As illustrated in Table II.2, under Option C, in particular, which reflects the NSO's methodology until 1999, the estimated rate of growth of real GDP would have to be revised down to significant negative numbers for both years.

	2000		2001	
	GDP	Of which: Livestock	GDP	Of which: Livestock
Preliminary official estimates	1.1	-15.7	1.1	-18.5
Option A	3.6	-8.3	-1.6	-24.3
Option B	1.6	-14.3	-1.4	-26.2
Option C	-1.4	-22.5	-5.2	-42.1

Sources: Data provided by the NSO; and staff estimates.

<sup>4</sup> While the authorities are also considering various possibilities for the blending of the above options, these are beyond the scope of this chapter.

### Accuracy and Reliability

9. **Even if one abstracts from the issues related to the measurement of output in the animal husbandry sector, the accuracy and reliability of Mongolia's national accounts are weak.** The criteria that can be used to assess data accuracy and reliability include the size of the statistical discrepancy between GDP estimates derived from the production and expenditure sides, comparisons of national accounts estimates of various GDP components with similar estimates derived from other sources, and the size and frequency of revisions to GDP estimates<sup>5</sup>.

10. **Mongolia's national accounts show substantial discrepancies between the production- and expenditure-side estimates of GDP.** Thus, over the 1995–2000 period, GDP calculated from the expenditure side exceeded the corresponding production side estimates by a margin ranging from 3–8½ percent (Table II.3).

	1995	1996	1997	1998	1999	2000	Average
<b>A. Production Side GDP at Current Price</b>							
Billions of Togrogs	550.3	646.6	832.6	817.4	925.3	1,044.6	...
Growth (in percent)		17.5	28.8	-1.8	13.2	12.9	...
<b>B. Expenditure Side GDP at Current Price</b>							
Billions of Togrogs	589.1	666.9	901.1	878.6	1,005.3	1,092.4	...
Growth (in percent)		13.2	35.1	-2.5	14.4	8.7	...
Statistical Discrepancy (B-A as a percent of A)	7.1	3.1	8.2	7.5	8.6	4.6	6.5

Sources: Data provided by the NSO; and staff estimates.

11. **The individual expenditure components of GDP derived from national accounts data sources also show substantial differences from the corresponding estimates derived from government finance and balance of payments statistics.** As illustrated in Table II.4, data on public consumption as well as public investment obtained from the fiscal accounts show nonnegligible differences from the corresponding national accounts data, with significant year-to-year variations. Data on net exports of goods and services from the balance of payments show even larger and more variable deviations from the corresponding national accounts data.

<sup>5</sup> Carol S. Carson and Lucié (2002).

Table II.4. Mongolia: Difference Between Expenditure Data Derived from the National Accounts and Other Source Data, 1995–2000 (In billions of togrogs, unless indicated otherwise)						
	1995	1996	1997	1998	1999	2000
<b>Public Consumption</b>						
Data from MOFE (A) <sup>1</sup>	70.8	91.3	121.5	147.7	156.0	200.3
GDP data (B)	71.4	91.7	112.0	144.6	158.9	180.3
Difference (B-A)/A percent	0.8	0.4	-7.8	-2.1	1.8	-10.0
<b>Public GFCF</b>						
Data from MOFE (A) <sup>2</sup>	67.8	75.2	97.0	107.7	114.1	106.6
GDP data (B)	79.0	90.1	117.3	115.5	135.6	152.9
Difference (B-A)/A percent	16.6	19.8	21.0	7.2	18.8	43.4
<b>Net Export of Goods and Services</b>						
Data from BOP (A)	-12.0	-51.2	18.1	-110.7	-123.2	-160.1
GDP data (B)	-6.7	-51.1	49.8	-110.3	-128.8	-170.1
Difference (B-A)/A percent	-44.5	-0.2	175.8	-0.4	4.6	6.3

Sources: Data provided by the NSO; and staff estimates.  
<sup>1</sup> 95 percent of current expenditure excluding subsidies, transfers, and interest payments.  
<sup>2</sup> Capital expenditure plus gross foreign on-lending.

12. **The NSO makes periodic revisions to its national accounts statistics to reflect improvements in methodology, coverage, source data, and other factors.** Such revisions are normally expected to result in improvements in the overall quality of statistics. Accordingly, a revised series on GDP estimates from the production side for the period 1995–98 was published in 2000. The main factors underlying this revision were the implementation of the Mongolian Standard Industrial Classification (MSIC) and the associated expansion in industrial detail, especially for services; the incorporation of the results of the 1998 Establishment Census and other new surveys; and a shift in the base year for the constant price estimates from 1993 to 1995. As can be seen from Table II.5, the resulting revisions for nominal GDP were both large and highly variable from year to year, ranging from an upward adjustment by 28 percent in 1995 to a downward adjustment by 6½ percent in 1998. While this pattern of data revisions may be due to legitimate factors, it raises further questions about the reliability and accuracy of Mongolia's national accounts.

Table II.5. Mongolia: Magnitude of Revision of GDP Estimates from the Production Side, 1995–98					
	1995	1996	1997	1998	1999
A. Revised Series (in billions of togrogs)	550.3	646.6	832.6	817.4	925.3
B. Old Series (in billions of togrogs)	429.2	586.5	758.9	875.9	...
Magnitude of Revision (A-B as a percent of B)	28.2	10.2	9.7	-6.7	...

Sources: Data provided by the NSO; and staff estimates.

## Price Deflators

13. **A major difficulty in the estimation of constant price GDP data is the lack of appropriate price indices for deflation.** In particular, the NSO does not currently compile a producer price index (PPI). As a result, the national accounts resort to extensive use of consumer price index (CPI) components, or even the total CPI, for deflating production. In the absence of a national CPI, the CPI of Ulaanbaatar city is used as a substitute. Some specific areas of concern with regard to deflation methods are as follows:

- *Wholesale and Retail Trade:* The price index used to calculate constant price estimates is the price index for the goods component of the CPI. As this index relates to sales and not value-added, distortions are introduced in the event that there are any changes in the relative sizes of margins, taxes, goods costs, and other inputs.
- *Financial Intermediation:* The deflator utilized is the CPI which is unlikely to be a good representation of financial sector wages and profitability. Moreover the high volatility of financial sector profits before and after the banking system crises of the 1990s could not possibly have been captured by the CPI, with the result that the constant price estimates were probably distorted.
- *Public Administration:* The deflator used is the CPI for services. As a result, unless wages are indexed to the CPI for services and paid retroactively (which has definitely not been the case in Mongolia in recent years), the constant price estimates are incorrect.

## Informal Sector

14. **As in most other transition economies, inadequate coverage of a relatively large informal sector poses a particular challenge for the compilation of national accounts in Mongolia.** While a sample survey on unincorporated businesses and the informal sector was conducted by the NSO in 1999, its coverage was relatively limited and a number of business activities were excluded. A number of other studies have suggested that the informal sector accounts for a significant fraction of total employment in Mongolia, especially in trade and other services.<sup>6</sup> The corresponding level of economic activity accounted for by the informal sector is reported to be equivalent to as much as 30 percent of GDP by some estimates. This would be in line with existing estimates for the size of the informal sector in the CIS states, which share a number of institutional and historical features with Mongolia.<sup>7</sup>

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<sup>6</sup> See Morris (2001) for a survey of recent studies.

<sup>7</sup> Schneider and Enste (2000) have surveyed the methodologies employed by various studies to estimate the size of the informal sector and summarized the resulting estimates for a large sample of industrial, transition, and developing countries. The findings of these studies

(continued)



### C. Possible Sources of Growth Over the Medium Term

15. As illustrated in Table II.6, the agricultural and tertiary sectors accounted for the bulk of Mongolia's economic growth during the late 1990s. A key contributing factor to the dynamism of the agricultural sector was the privatization of herds, which greatly enhanced production and investment incentives in the animal husbandry sector. Thus, the total size of the herd increased from 24.7 million in 1990 to 33.6 million by end-1999. In the tertiary sector, which was dominated by trade, transport, and related services, the early privatization of small and medium-sized enterprises, together with the entry of new firms, was also conducive to rapid growth in activity. While profitable opportunities in gold mining and other mineral extraction also led to sustained growth in the output of the mining sector, manufacturing suffered a prolonged decline. As the former employees of defunct state industries sought new opportunities in herding, trading, and other services, including in the informal sector, the growth of activity in these sectors was amplified.

	Average 1991-95	Average 1996-99	Est. 2000	Est. 2001	Proj. 2002	Proj. 2003	Proj. 2004
<b>Agriculture, Hunting and Forestry</b>	...	1.9	-5.8	-5.9	0.1	0.7	1.3
<b>Secondary Sector</b>	...	-0.1	0.3	2.8	1.5	1.6	1.7
Mining and Quarrying	...	0.6	0.8	1.1	0.9	0.9	1.0
Manufacturing	...	-0.8	-0.3	1.5	0.5	0.6	0.6
<b>Tertiary Sector</b>	...	1.5	6.6	4.2	2.3	2.7	2.9
Whole sale and retail trade	...	0.6	4.4	2.4	1.0	1.3	1.5
Hotels and Restaurants	...	0.0	0.1	0.1	0.0	0.1	0.1
Transport, Storage and Communication	...	0.5	1.9	1.2	0.7	0.9	0.9
Financial Intermediation	...	0.0	0.1	0.5	0.3	0.1	0.1
<b>Real GDP</b>	-2.6	3.3	1.1	1.1	3.9	5.0	6.0

16. The effects of the exceptional weather led to a drastic shift in the pattern of economic growth during 2000-01. The decline in the output of the agricultural sector is estimated to have been largely offset by an upsurge of activity in the tertiary sector, led by wholesale and retail trade and transport and communications. However, there are still questions about the appropriate accounting treatment of the losses in the herd stock, which fell to 25.6 million by end-2001. The mining sector's contribution to growth also increased in 2000-01, as new gold mines came on stream, production of copper rose, and the sector continued to attract the lion's share of new foreign direct investment. Manufacturing activity is estimated to have picked up strongly in 2002, especially in textiles, apparel, and dressing and dyeing of fur. However, the exports of these sectors' products have been lackluster, raising questions about the sustainability of the recent pickup in activity.

17. While the staff's latest estimates suggest that, on current trends, real GDP can be expected to increase by 3½-4 percent in 2002, the prospects for the medium term are

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suggest that the average size of the CIS states' informal sectors increased from about one fourth of GDP in the early 1990s to 35 percent of GDP by the mid-1990s.

**subject to a considerable degree of uncertainty.** The government's I-PRSP envisages a progressive increase in the annual rate of growth of real GDP to 5 percent in 2003 and to 6 percent in 2004. As illustrated in Table II.6, assuming that there is resumed growth in the agricultural sector, albeit at a more modest rate than in the late 1990s, and a sustained expansion of the secondary and tertiary sectors, the government's medium-term growth targets could be feasible. However, the large weather-related losses of the last two years have raised the possibility that the agricultural sector may be far more vulnerable in the period ahead than it had been over the last fifty years. This could be a result of both endogenous and exogenous factors. On the domestic policy front, the herders' lack of preparedness to deal with the recent exceptional weather could be seen as a side-effect of the shift from the collective farms of the former centrally planned system. Another possibility is that long-term changes in climatic conditions may imply that the occurrence of drought and extreme cold may not be as infrequent as in the past, with the result that agriculture may become a less reliable source of economic growth than it had been in the 1990s. These considerations reinforce the need for a steadfast implementation of sound fiscal, monetary, and external sector policies, coupled with market-based reforms, to enhance opportunities and incentives for investment in export-oriented activities in sectors that are less vulnerable to the vagaries of Mongolia's climate.

### III. PUBLIC ENTERPRISE REFORM AND PRIVATIZATION IN MONGOLIA<sup>1</sup>

#### A. Introduction

1. **A fundamental objective of Mongolia's reform from the early days of the transition has been to enhance economic growth prospects and foster a more efficient use of the economy's scarce resources.** In addition to macroeconomic stabilization, the program has thus emphasized measures to liberalize prices, strengthen competition, encourage entrepreneurial activity, and develop sound market institutions. The restructuring and privatization of inefficient state-owned enterprises have been critical to the achievement of the above objectives. Privatization has also been important for its signal effect to investors and donors regarding the government's commitment to the transition to a market system.

2. **Given Mongolia's pre-eminent need to promote medium-term fiscal sustainability, one of the objectives of public enterprise reform and privatization has been to support fiscal consolidation.** While, in principle, privatization alone should not be expected to ease the government's intertemporal budget constraint, as the budgetary receipts generated in the short run would normally be equal to the present discounted value of foregone future dividends, in practice there are at least two channels through which it can facilitate fiscal consolidation. First, to the extent that privatization is accompanied by the imposition of hard budget constraints and market discipline, it should help foster tariff reforms and improved enterprise performance. If the anticipated efficiency gains are factored into the sale price of privatized entities, there would be a clear net gain for the budget. Second, privatization is an important means for the improvement of fiscal transparency and the containment of implicit subsidies and contingent government liabilities. These have posed a particular challenge in the case of Mongolia's large and inefficient energy sector.

3. **As in many other transition economies, the constraints facing the restructuring and privatization of public enterprises in Mongolia have been numerous and daunting.** These have included: (1) weak administrative capacity to manage the reform program; (2) lack of a domestic capital market; (3) a legal infrastructure that hardly recognizes private property; (4) price distortions and a thin share market that makes valuation difficult; (5) low domestic savings; (6) high initial start-up costs and/or a need to adjust tariffs and restructure public enterprises prior to privatization; (8) a lack of equitable and uniform enforcement of tax laws, which serves as a deterrent to investors; and (9) the shortage of resources for compensation for social costs resulting from plant closures, the shedding of excess labor, and the discontinuation of the use of public enterprises to achieve social objectives.

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<sup>1</sup> This chapter was prepared by Michael Martin, Resident Representative in Ulaanbaatar.

## B. Developments During 1991–2000

4. **Privatization was a key component of Mongolia's economic reform strategy from the early years of the transition, although important sectors of the economy remained under state control.** It initially encompassed separate programs for small and medium-sized enterprises and in agriculture, relying primarily on a mass privatization program through vouchers, which covered the manufacturing, distribution, and service sectors as well as the animal husbandry sector. Altogether, some 4,500 entities were privatized during 1991–96 through the distribution of vouchers to the public. While these early privatizations did not generate any significant receipts for the budget, they definitely enhanced competition and efficiency and, thereby, facilitated the early recovery of output following its initial decline at the onset of transition.<sup>2</sup> However, some of the largest state-owned enterprises, including those officially designated as most-valued companies (MVCs), remained outside the scope of the privatization program during this period. In addition, airlines, railroads, telecommunications, and utilities, for which special regulatory regimes often apply, continued to be run by state-owned enterprises.

5. **The privatization process speeded up considerably during the late 1990s, but it stalled in 2000 as the political support for reforms waned in the run-up to the Parliamentary elections of mid-2000.** While the government's privatization program was expanded to include some of the larger enterprises, which were now offered for sale through competitive auctions, a select number of MVCs and key economic sectors remained under state ownership. During this period, the State Property Committee (SPC) succeeded in privatizing 910 enterprises and commercial entities. With the help of the improved macroeconomic situation, the recovery of economic activity, and the progressive development of market institutions, privatization during the 1997–2000 period generated about Tog 42 billion or the equivalent of about 5 percent of GDP in financing for the budget. However, as the support for reform within the government began to be eroded, new legislation was approved in 1999 to establish a Negative List of MVCs which could not be privatized without the Parliament's express authorization. As a result, both the number of privatized enterprises and the resulting receipts for the budget fell sharply in 2000 (Statistical Appendix Table 14).

6. **The financial situation of the ailing energy sector also took a turn for the worse in the late 1990s.** Energy consumption in Mongolia is especially high, because of the harsh climate and the low population density. Although the economy depends critically on a well

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<sup>2</sup> An empirical study by Anderson, Lee and Murrell (2000) has documented the favorable effects of competition on total factor productivity in a sample of commercial enterprises that were privatized during the first half of the 1990s. In the animal husbandry sector, as already noted in the preceding chapter, the mass privatization of the herds that were previously managed by collective farms was a major factor contributing to the strong performance of agriculture during the 1990s.

run energy sector, as in many other transition economies, one of the legacies of central planning has been an inefficient use of energy. This has been evident in low operational efficiency in generation, large losses in transmission and distribution, tariffs set well below supply costs, and shortcomings in collection, which have been exacerbated by the chronic payments difficulties of Erdenet, a large copper mine that accounts for about one-third of Mongolia's electricity consumption.<sup>3</sup> While the importation of oil at subsidized prices from Russia may have concealed the cost of these problems in the past, after the alignment of oil import prices with world market prices, the gap between Mongolia's electricity and heating tariffs and supply costs widened to an estimated 25–50 percent in 2000. Largely as a result, the industry's financial losses deteriorated from US\$4.3 million (0.5 percent of GDP) in 1999 to US\$17.1 million (1.8 percent of GDP) in 2000.

**7. Although the weak finances of the energy sector may have had a limited direct impact on the budget to date (in the form of tax arrears and the nonpayment of principal and interest on foreign loans on-lent to the energy sector by the government), they have also resulted in other less transparent but potentially more damaging effects. These are as follows:**

- **The lack of adequate financial resources has led to a large build-up of energy company arrears to other enterprises, which rose to Tog 35 billion (3.4 percent of GDP) as of 2000.** This has been a particularly serious problem to the Bagannuur Coal Company, a state-owned enterprise that is the largest supplier of coal to the Energy Authority.
- **The main public enterprises in the energy and coal sectors have accumulated government-guaranteed external debts amounting to US\$400 million since the early 1990s, or almost half of Mongolia's total external debt outstanding as of January 2000.** With repayments scheduled to reach a peak of about US\$18–20 million a year by 2025, a heavy burden could be placed on the budget if the financial position of these enterprises does not improve.
- **Reduced expenditures for maintenance have led to a depletion of capital, with plant and equipment becoming increasingly outdated.** Over the next few years, both the energy companies and the coal mines will need to significantly increase their expenditures on maintenance and investment. By some estimates, if the needed investment were to be financed through external borrowing, the external debt of the two sectors would have to double to about US\$800 million; this could seriously strain Mongolia's external sustainability.

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<sup>3</sup> For a more detailed discussion of the challenges facing transition economies' energy sectors, see EBRD (2001), pp. 91–104.

8. **Notwithstanding the difficult political constraints on public enterprise reform, overall progress was impressive during the 1990s.** Thus, the economy was essentially transformed during Mongolia's first ten years of transition, with the private sector, which only accounted for about 4 percent of GDP in 1990, having grown to about 60 percent of GDP by 2000. As indicated in the preceding chapter, the extent of the transformation to a market-based economy is probably understated by these figures, as informal sector growth, which has been considerable, is not accounted for in the official national accounts. The agriculture, animal husbandry, construction, food, small-scale transportation, mining, and trade sectors, in particular, had been largely privatized by 2000. In the energy sector, the new government that took office in August 2000 recognized the urgent need for a rethinking of Mongolia's energy development strategy and, as a first step, electricity and heating rates on average, were raised by 14.2 and 100 percent, respectively, with effect from December 2000. In addition, a new Energy Law was passed in late 2000, which set the stage for a comprehensive restructuring of the energy sector, including by establishing an independent Energy Regulatory Authority (ERA) vested with the responsibility to regulate tariffs.

### **C. Developments Since 2000 and Remaining Challenges**

9. **The government's public enterprise reform program received new impetus in early 2001 with the approval of the new Guidelines for Privatization for 2001–04.** The Guidelines effectively abolished the Negative List that had been introduced by the previous Parliament and proposed an ambitious timetable for the privatization of MVCs while also setting important sector-specific objectives for the reforms of the energy sector and the social sectors. Reforms were also proposed for the road sector, telecommunications, the coal sector, railways, and the geodesy and cartography sectors, although these were not to involve privatization, but rather steps to improve performance along commercial lines.

10. **The government's initial privatization program for 2001 envisaged the privatization of three important MVCs, including a beverage company (APU), the Trade and Development Bank (TDB), which is Mongolia's largest and most profitable bank, and Gobi, the largest cashmere company operating in Mongolia.** In the event, reflecting a combination of factors, including the tragic events of September 11 which led to an overall deterioration in the global climate for foreign investment, only APU could be privatized during 2001, at a sale price of Tog 4.5 billion (0.4 percent of GDP). However, significant progress was also made in preparing the TDB and Gobi for privatization.

11. **A tender for the privatization of TDB was issued in early September 2001, but bidding was delayed several times, and a privatization contract was finally signed in May 2002.** Both the IFC and the IBRD agreed to take up some shares in the Bank if a qualified strategic investor could be identified who would like such participation. Formal expressions of interest and bids were expected to be placed before the end of 2001, but the deadline was extended several times. The public tender process for the sale of the government's 76 percent interest in the TDB was finally concluded in May 2002. The State

Property Committee (SPC) executed the sale to a consortium of foreign investors for US\$12.23 million (1.0 percent of GDP).<sup>4</sup> In addition, the foreign investors have agreed to inject at least US\$28 million (2.2 percent of GDP) of additional capital into the bank within 24 months following the closing of the transaction, and have proposed to expand TDB's deposit base over that two-year period at the rate of 25 percent per annum and its loan portfolio at 50 percent per annum. New lending activities for the bank are to include consumer credit and trade and project finance, while new distribution channels are to include a significant increase in the number of ATMs, expansion of regional business centers, and telephone and internet banking services. In due course, TDB would also set up representative offices in nearby regional centers in Russia, China, as well as the USA, to enhance and promote international trade with Mongolia.

12. **A tender for the privatization of the government's 70 percent interest in Gobi was announced in July 2001, but good quality bidders were difficult to come by in the aftermath of September 11.** In these circumstances, the State Property Committee decided to close the bidding as of late March 2002. In the meantime, with cashmere prices having fallen by 33 percent since September 2001, it may be necessary to re-evaluate the minimum price; a firm has been contracted through international tender to advise the authorities on an appropriate pricing strategy. The intention was to reopen bidding in the third quarter of 2002, with a view to disposing the government's entire equity position.

13. **The government's privatization program for 2002 was approved in January 2002.** Aside from the continued pursuit of the privatization of Gobi, the program, envisages the privatization of the Neft Oil Concern (NIC), Mongolia's national airline (MIAT), and two insurance companies. In addition, the remaining four MVCs, including Power Plant No. 2, the Ulaanbaatar Power Distribution Network, the Mongolian Telecommunications Company, and the Agricultural Bank, are to be restructured and prepared for subsequent privatization.

14. **The privatization of NIC, an oil and gas distribution company, will probably have to await the resolution of some difficult problems.** NIC's capital has been eroded in recent years by the large quasi-fiscal losses incurred as NIC was required to supply oil to remote rural areas at subsidized prices. As a result, NIC will need to be financially rehabilitated before it can be privatized. To this end, NIC's receivables could be assigned to offset its overdue debts to the government, which were on the order 1 percent of GDP as of 2001, and it may also be necessary that new capital be infused from the government. Equally

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<sup>4</sup> The foreign investors include a privately owned Swiss bank specialized in asset management and trade finance and a privately owned leading international merchant of metals headquartered in the U.S. The consortium has partnered with a well-known international bank to provide strategic and operational management of TDB, as well as to implement an development program focused on institutional strengthening and performance enhancement.

importantly, the government will need to make a credible commitment to any prospective buyer to allow flexibility in the setting of future prices and a clear agreement will have to be reached as to who should bear the cost of cleaning up the environmental damage that has resulted from NIC's past operations.

15. **In the case of MIAT, the national airline, which has been plagued by financial and safety problems, a major constraint to privatization is the issue of the internal fare structure.** Currently rates for domestic travel are well below costs, and it will probably be politically difficult to raise these rates. No investor would be interested in purchasing the company unless this issue is resolved. Aside from its inadequate fare structure, MIAT is currently overstaffed, its fleet is outdated and underutilized, and its scheduling needs to be overhauled. While the government is keen to resolve these problems expeditiously, with the recent sharp downturn in the profitability of the airline industry world wide, the prospects for an early privatization of MIAT look dim. In these circumstances, the government is considering the possibility of bringing in an external management team to strengthen the airline before privatization is pursued, as was done with the Agricultural Bank.

16. **The Agricultural Bank of Mongolia, which is the principal provider of banking services to the rural communities, has recorded an impressive turn-around in its profitability and financial health over the last two years.** Poor governance in the context of a lax regulatory environment had brought the bank to the verge of failure in the late 1990s, and the authorities had placed the bank under an external management contract in the summer of 2000, with a view to its rehabilitation and eventual privatization. Under this arrangement, the bank has managed to eliminate its financial losses, has comfortably met the Bank of Mongolia's increasing minimum capital requirements, and recorded a pre-tax profit of Tog 1.5 billion (0.1 percent of GDP) during the first five months of 2002. The bank has also opened 83 new offices throughout Mongolia, and its network of 352 branches now reaches virtually every territorial unit in the country. While the Agricultural Bank was not among the entities that were to be privatized in 2002 under the government's privatization program approved in January, an international tender for its privatization was announced in July 2002.

17. **The Energy Authority was unbundled into 18 separate generation, transmission, and distribution companies in April 2001, but progress towards resolving the energy sector's fundamental problems has so far been limited.** A key objective of the unbundling exercise was to separate any portions of the company that may be natural monopolies from those that can be effectively privatized and/or opened to competition from new entrants. The recent restructuring makes it difficult to assess the evolution of the sector's financial position with any degree of accuracy. Nevertheless, the available evidence suggests that the new enterprises continue to sustain financial losses, while accounts receivable and arrears to other sectors have remained high. While electricity tariffs were raised by 15 percent with effect from July 2002, vociferous opposition to the increases by a broad range of political forces has since forced the ERA to partially roll back tariffs. Thus, current electricity tariffs at the retail level are Tog47/Kwh (US\$0.042/Kwh), whereas estimates for the marginal cost of producing electricity are in the range of US\$0.055/Kwh to US\$0.065/Kwh, and the long-run



marginal cost is probably on the order of US\$0.080/Kwh.<sup>5</sup> In these circumstances, despite some progress towards clearing arrears between budgetary entities and the key energy sector enterprises, the problem of inter-enterprise arrears has yet to be addressed. Perhaps more worrying from a medium-term perspective, unless the energy sector can quickly revamp its operations to become commercially viable, there is a risk that investment for the much-needed upgrading of the sector's plant and equipment will be inefficiently utilized. The ultimate result could then be a sharp increase in Mongolia's publicly guaranteed external debt, which would undermine efforts to protect fiscal and external sustainability.

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<sup>5</sup> Long-run marginal cost is marginal operating cost plus the cost of additional capacity required to increase output. The optimal pricing rule that is often applied to transition economies would set electricity tariffs somewhere between marginal operating cost and the LRMC. See EBRD (2001, p. 95) for a fuller discussion on this issue.

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Table 1. Mongolia: Selected Economic and Financial Indicators, 1997–2001

Nominal GDP (2001): \$1,030 million  
 Population (2001): 2.37 million  
 Quota: SDR 51.1 million

	1997	1998	1999	2000	2001
	(Percent change)				
Real GDP	4.0	3.5	3.2	1.1	1.1
Consumer prices (period average)	36.6	9.4	7.6	11.6	8.0
Consumer prices (end period)	20.5	6.0	10.0	8.1	8.0
	(In percent of GDP)				
General government revenue	25.5	27.6	27.2	33.6	38.0
General government expenditure	34.5	41.9	39.4	40.5	43.3
Current balance	1.6	-0.7	-0.2	3.1	4.7
Overall balance	-9.1	-14.3	-12.2	-6.8	-5.3
Net domestic credit to government	-3.3	4.1	0.0	-0.7	-1.9
Total public debt 1/ 2/	64.5	86.0	100.1	94.7	87.6
NPV of total public debt	...	...	71.8	64.3	60.2
	(Percent change)				
Net foreign assets	68.3	-31.6	96.9	33.6	8.9
Net domestic assets	-6.3	56.5	-23.6	-17.9	96.1
Domestic credit	-5.1	60.1	-11.1	-8.0	41.6
Credit to enterprises	13.2	18.5	-39.7	29.5	141.9
Broad money	19.8	8.8	31.7	17.5	28.0
Reserve money	26.2	13.5	51.8	19.4	8.4
Broad money velocity (GDP/BM) 3/	5.5	5.0	4.3	4.1	3.5
Annual interest rate on central bank bills (percent) 4/	35.0	23.3	11.4	8.5	8.8
	(In millions of US dollars, unless otherwise indicated)				
Current account balance, excluding official transfers (In percent of GDP)	13	-129	-127	-153	-164
Current account balance, including official transfers (In percent of GDP)	1.2	-13.2	-14.1	-15.8	-15.9
Current account balance, including official transfers (In percent of GDP)	74.3	-75.5	-60.3	-54.4	-76.8
Trade balance (In percent of GDP)	7.0	-7.8	-6.7	-5.6	-7.5
Trade balance (In percent of GDP)	30	-120	-113	-140	-170
Exports, fob (Percent change)	2.9	-12.4	-12.5	-14.4	-16.5
Imports, cif (Percent change)	569	462	454	536	523
Imports, cif (Percent change)	34.3	-18.7	-1.8	18.0	-2.4
Financial and capital account balance (In percent of GDP)	538	582	567	676	693
Financial and capital account balance (In percent of GDP)	5.4	8.2	-2.6	19.2	2.5
Financial and capital account balance (In percent of GDP)	53	116	62	68	79
Financial and capital account balance (In percent of GDP)	5.0	12.0	6.9	7.0	7.7
Gross official international reserves (end-period) 5/ (In weeks of next year/projected imports c.i.f.)	137.5	123.2	156.8	190.9	206.8
Gross official international reserves (end-period) 5/ (In weeks of next year/projected imports c.i.f.)	12.3	11.3	12.1	14.3	13.5
Public and publicly guaranteed external debt 2/ (In percent of GDP)	605	759	828	837	854
Public and publicly guaranteed external debt 2/ (In percent of GDP)	57.4	78.1	91.4	86.3	82.9
NPV of public and publicly guaranteed external debt 2/ (In percent of GDP)	...	...	571	542	571
NPV of public and publicly guaranteed external debt 2/ (In percent of GDP)	...	...	63.0	55.9	55.5
Debt service 5/ (In percent of exports of goods & services)	41.0	36.2	31.9	24.2	33.9
Debt service 5/ (In percent of exports of goods & services)	6.3	6.7	5.7	3.8	5.3
Exchange rates					
Togros per US dollar (period average)	790	841	1,022	1,077	1,098
NEER, end-period (1995=100)	63	69	61	59	62
REER, end-period (1995=100)	113	118	107	108	117
NEER, period average (1995=100)	62	65	63	61	61
REER, period average (1995=100)	109	119	110	115	118
Export prices (US dollar, percent change)	-3.6	-18.1	-7.0	13.6	-11.9
Copper price (US dollar, percent change)	19.3	-38.1	-5.8	18.4	-12.7
Import prices (US dollar, percent change)	-6.5	-6.8	-2.4	2.5	-1.6
Terms of trade (percent change)	3.1	-12.1	-4.8	10.8	-10.4
Real GDP (excluding agriculture, percent change)	3.8	1.7	2.6	11.5	10.7
Nominal GDP (billion togros)	833	817	925	1,045	1,131
Nominal GDP (million US dollars)	1,054	972	906	970	1,030

Sources: Mongolian authorities; and Fund staff estimates.

1/ Includes IMF loans, guarantees and arrears.

2/ Excludes unresolved claims by Russia estimated at TR 10.5 billion.

3/ Seasonally adjusted figures for broad money velocity from 1997 onwards.

4/ Annualized yield on end-period auction of 14-day bills.

5/ Beginning December 2000, includes commercial banks' foreign exchange deposits with the Bank of Mongolia.

Table 2. Mongolia: Gross Domestic Product, 1997–2001  
(At current prices)

	1997	1998	1999	2000	2001
(In billions of togrogs)					
Gross domestic product	832.6	817.4	925.3	1044.6	1130.5
Industry	199.8	149.1	168.5	204.3	229.4
Agriculture	298.9	306.2	342.1	322.9	289.8
Construction	18.3	20.1	23.0	19.3	23.7
Transportation	51.5	56.8	62.4	83.1	100.5
Communications	12.6	15.1	22.3	29.1	35.2
Trade	174.8	172.2	191.7	243.9	284.5
Services	76.8	97.8	115.4	142.0	167.3
Net factor income from abroad	-11.3	0.3	-10.3	-9.9	-3.2
Gross national product	821.3	817.7	915.0	1034.7	1127.3
(In percent of GDP)					
GDP	100.0	100.0	100.0	100.0	100.0
Industry	24.0	18.2	18.2	19.6	20.3
Agriculture	35.9	37.5	37.0	30.9	25.6
Construction	2.2	2.5	2.5	1.8	2.1
Transportation	6.2	7.0	6.7	8.0	8.9
Communications	1.5	1.9	2.4	2.8	3.1
Trade	21.0	21.1	20.7	23.3	25.2
Services	9.2	12.0	12.5	13.6	14.8

Sources: National Statistical Office, and Ministry of Finance and Economy.

Table 3. Mongolia: Gross Domestic Product, 1997–2001  
(At 1995 constant prices)

	1997	1998	1999	2000	2001
	(In billions of togrogs)				
Gross domestic product	585.7	606.4	625.9	632.8	640.0
Industry	132.4	137.9	139.5	142.8	161.4
Agriculture	227.7	242.2	252.4	216.1	181.6
Construction	9.2	9.1	9.3	7.9	8.9
Transportation	31.5	33.4	34.0	39.7	41.9
Communication	9.7	10.9	13.0	19.1	23.9
Trade	109.9	106.5	107.8	135.5	146.4
Services	65.2	66.3	69.9	71.6	75.9
Net factor income from abroad	-0.1	-2.7	-3.5	-3.5	-3.7
Gross national product	585.6	603.7	622.4	629.3	636.3
	(Percent change)				
GDP growth	4.0	3.5	3.2	1.1	1.1
Industry	-3.3	4.2	1.1	2.4	13.0
Agriculture	4.3	6.4	4.2	-14.4	-16.0
Construction	-2.7	-1.1	1.6	-14.6	12.4
Transportation	2.1	6.0	1.9	16.7	5.5
Communication	19.7	12.0	19.0	47.5	25.0
Trade	17.1	-3.1	1.3	25.7	8.0
Services	-0.6	1.7	5.4	2.5	5.9
Gross national product	5.2	3.1	3.1	1.1	1.1

Sources: National Statistical Office, and Ministry of Finance and Economy.

Table 4. Mongolia: Output of Major Agricultural Products, 1997–2001

	1997	1998	1999	2000	2001
(In thousands of metric tons, unless otherwise specified)					
Meat	496.0	554.0	599.1	639.2	468.1
Milk (million tons)	419.0	431.0	467.0	375.6	290.3
Diary products (tons)	68.4	104.1	36.5	24.9	17.7
Eggs (millions)	6.1	8.5	9.6	6.7	7.7
Wool	26.0	26.0	20.9	21.7	19.8
Wheat	240.4	194.6	169.5	142.0	138.7
Cereals	240.0	195.0	169.5	142.1	142.2
Potatoes	54.2	65.1	6.7	58.8	58.3
Other vegetables	23.8	34.0	45.6	38.9	44.5
(In millions of head)					
Livestock	31.3	32.9	33.5	30.1	26.1
Sheep	14.2	14.7	15.2	13.8	11.9
Goats	10.3	11.1	11	10.2	9.6
Cattle	3.6	3.7	3.8	3.1	2.1
Horses	2.9	3.1	3.2	2.6	2.2
Camels	0.4	0.4	0.3	0.3	0.3
(Percent change)					
Meat	-7.6	11.7	8.1	6.7	-26.8
Milk	13.2	2.9	8.4	-19.6	-22.7
Diary products (tons)	38.4	52.3	-64.9	-31.8	-28.9
Eggs	24.5	39.3	12.9	-30.2	14.9
Wool	-7.1	0.0	-19.6	3.8	-8.8
Cereals	9.1	-18.8	-13.1	-16.2	0.1
Potatoes	17.8	20.1	-89.7	777.6	-0.9
Other vegetables	5.8	42.9	34.1	-14.7	14.4
(In percent of total head)					
Memorandum item:					
Privately owned livestock	94.4	95.3	96.2	96.7	97.2

Sources: National Statistical Office, and Ministry of Finance and Economy.

Table 5. Mongolia: Output of Basic Industrial and Mining Products, 1997–2001  
(In thousands of metric tons, unless otherwise specified)

	1997	1998	1999	2000	2001
Electricity (million kilowatt hours)	2,662	2,675	2,842	2,946	3,010
Coal	4,924	5,057	4,964	5,185	5,337
Fluorspar	567	612	597	734	585
Copper concentrate	358	358	362	358	381
Gold concentrate (kilograms)	8,451	9,531	10,246	11,808	13,700
Bricks (millions)	16	19	17	17	21
Cement	112	109	104	92	68
Lime	58	56	50	37	30
Sawn timber (thousand of cubic meters)	37	36	16	15	21
Scoured wool	1	1	1	1	2
Felt (thousand meters)	75	103	102	114	111
Woolen fabrics (thousand meters)	8	5	19	21	38
Coats (thousands)	2	0	0	0	0
Suits (thousands)	1	2	9	14	16
Leather footwear (thousand pairs)	42	33	7	6	17
Leather coats (thousands)	0	0	0	0	0
Sheepskin coats (thousands)	3	1	0	1	2
Meat (excluding pork)	8	7	4	6	12
Sausages	793	663	439	755	728
Flour	64	66	67	40	38
Bakery goods	20	19	15	20	23
Confectionery	13	11	8	8	7
Milk and dairy products (liters)	2	3	2	2	1
Toilet soap	148	...	71	60	0
Household soap	312	200	153	220	4
Carpets (thousands of square meters)	644	588	629	705	615
Processed metal	14	...	13	13	10

Sources: National Statistical Office, and Ministry of Finance and Economy.



Table 6. Mongolia: Gross Industrial Output at 1995 prices, 1997–2001

	1997	1998	1999	2000	2001
	(In billions of togrogs)				
Food	34.2	33.0	29.2	28.7	33.6
Leather and shoes	1.1	0.9	0.4	0.6	0.7
Textiles	19.7	21.7	22.6	19.3	25.3
Clothing	1.8	1.8	2.0	2.3	3.7
Energy 1/	42.7	43.1	45.2	46.6	47.7
Coal	13.6	12.9	12.7	12.8	13.1
Mining of metal ores	89.0	94.7	97.4	102.7	116.3
Other mining and quarrying	11.2	12.8	14.2	16.5	15.6
Non-metallic products	5.1	4.9	4.6	4.2	3.9
Wood processing	1.5	1.5	1.1	1.0	1.4
Chemicals	0.9	1.0	1.0	1.0	1.1
Printing	0.6	1.1	1.0	1.6	1.6
Furniture	2.6	2.4	3.1	3.1	4.7
Other	3.5	3.1	3.5	3.2	3.8

Sources: National Statistical Office, and Ministry of Finance and Economy.

1/ Includes electric and thermal energy.

Table 7. Mongolia: Coal Mining Sector, 1997–2001  
(In thousands of metric tons)

	1997	1998	1999	2000	2001
Production	4,924	5,057	4,964	5,185	5,337
Imports	100	38	30	43	10
Consumption	5,035	4,986	5,017	5,212	5,327
Intermediate 1/	3,673	4,193	4,127	4,449	4,537
Final consumption	1,362	793	890	763	790
Industry and construction	856	465	347	180	152
Agriculture	7	11	32	3	...
Communal housing and public services	282	192	202	407	334
Other	217	125	309	173	304
Exports	0	3	...	...	...
Memorandum item:					
Stock, end of year	89	195	170	186	206

Sources: National Statistical Office, and Ministry of Finance and Economy.

1/ Consumption by thermal power stations.

Table 8. Mongolia: Petroleum Balances, 1997–2001  
(In thousands of metric tons)

	1997	1998	1999	2000	2001
Opening stocks	63.7	65.1	53.3	37.8	36.4
Gasoline - Octane 76	20.3	17.4	18.6	9.7	18.3
Gasoline - Octane 93	1.1	1.7	1.8	2.4	1.8
Airplane fuel	4.3	3.4	2.9	2.1	1.3
Diesel	31.6	36.3	24.7	18.9	11.6
Other 1/	6.4	6.3	5.3	4.7	3.4
Imports	185.5	195.9	132.9	98.8	101.2
Gasoline - Octane 76	110.5	114.8	79.6	65.2	56.1
Gasoline - Octane 93	17.0	21.4	6.0	7.7	13.5
Airplane fuel	7.7	10.2	0.9	...	0.9
Diesel	43.0	43.3	44.9	23.1	25.6
Other 1/	7.3	6.2	1.5	2.8	5.1
Domestic production 2/	68.9	17.3	0.0	6.9	0.0
Total supply	318.1	278.3	186.2	143.5	137.6
Consumption 3/	251.9	224.1	147.8	106.7	101.2
Losses	1.1	0.9	0.6	0.5	0.5
Closing stocks	65.1	53.3	37.8	36.3	35.9
Gasoline - Octane 76	17.4	18.6	9.7	18.4	14.8
Gasoline - Octane 93	1.7	1.8	2.4	1.7	2.5
Airplane fuel	3.4	2.9	2.1	1.4	1.7
Diesel	36.3	24.7	18.9	11.6	13.6
Other 1/	6.3	5.3	4.7	3.2	3.3
Memorandum item:					
Total import of Mongolia	371.8	403.2	409.9	445.3	450.3
NIC's share of the total import	49.9	48.6	32.4	22.2	22.5

Sources: Neft Import Concern; and Ministry of Finance and Economy.

1/ Fuel for electricity generation and lubricants.

2/ Purchased domestically.

3/ Sales of Neft Import Concern.

Table 9. Mongolia: Electricity Sector, 1997–2001

	1997	1998	1999	2000	2001
(In millions of kilowatt hours)					
Supply	3,006	3,042	3,045	3,127	3,212
Domestic	2,662	2,675	2,842	2,946	3,016
Imports	344	367	203	181	196
Utilization, total	3,006	3,042	3,045	3,127	3,212
Industry and construction	1,261	1,210	959	1,182	1,203
Transport and communications	76	63	67	79	87
Agriculture	32	11	27	21	17
Commercial housing and public services	400	426	444	463	476
Other sectors	113	219	370	165	164
Loss in transmission and distribution	493	465	509	576	603
Power stations' own use	589	588	610	616	644
Exports	42	60	59	25	18
(Togrogs per kilowatt hour, annual average)					
Tariff					
Industry	37.0	37.0	41.0	41.0	45.0
Agriculture	37.0	37.0	41.0	41.0	45.0
Households	32.0	32.0	35.0	35.0	45.0
(Percent change)					
Supply and utilization	0.3	1.2	0.1	2.7	2.7
Domestic	1.8	0.5	6.2	3.7	2.4
Imports	-10.2	6.7	-44.7	-10.8	8.3
Industry and construction	2.9	-4.0	-20.7	23.3	1.8
Transport and communications	22.6	-17.1	6.3	17.9	10.1
Agriculture	-46.7	-65.6	145.5	-22.2	-19.0
Commercial housing and public services	5.3	6.5	4.2	4.3	2.8
Other sectors	-45.7	93.8	68.9	-55.4	-0.6
Loss in transmission and power stations' Own use in total supply (in percent)	36.0	34.6	36.7	38.1	38.8

Sources: National Statistical Office, and Ministry of Finance and Economy.

Table 10. Mongolia: Employment by Sector, 1997–2001  
(Number of employees, in thousands at end of year)

	1997	1998	1999	2000	2001
Total employment 1/	765.1	792.6	813.6	809.0	832.3
Agriculture and forestry	374.5	394.2	402.6	393.5	402.4
Industry	100.4	97.9	98.8	91.0	93.3
Transport and communications	30.3	33.4	34.9	34.1	35.1
Construction	27.4	27.5	27.6	23.4	20.4
Education	43.0	42.5	43.2	54.4	55.2
Health	35.4	35.6	34.8	33.5	33.0
Other	154.1	161.5	171.7	179.1	192.9
Foreign employees	23.2	16.9	...	...	...
Memorandum items:					
Labor force	828.8	842.4	853.4	847.6	872.6
Unemployed	63.7	49.8	39.8	38.6	40.3

Sources: National Statistical Office, and Ministry of Finance and Economy.

1/ Excludes foreign employees.

Table 11. Mongolia: Ulaanbaatar Consumer Prices, 1997–2002 1/  
(December 2000 = 100)

	1997	1998	1999	2000	2001	2002 Jan-Aug
	(Period average)					
Overall index	76.9	84.1	90.4	100.9	109.0	110.1
Flour and flour goods	97.0	93.2	94.5	99.2	101.9	98.4
Meat and meat products	98.8	102.9	103.5	135.4	137.5	137.9
Milk and dairy products	80.3	85.9	90.4	93.0	100.2	91.5
Sugar, candy, tea, fruits	86.0	86.5	91.4	91.1	100.3	100.8
Potato and vegetables	91.6	87.2	94.5	127.6	113.0	123.7
Other food stuffs	77.4	86.2	97.9	100.8	102.4	102.2
Alcohol and tobaccos	77.3	85.4	89.5	97.1	112.4	115.9
Men's clothing	78.6	92.9	95.6	97.0	103.6	108.4
Women's clothing	73.6	91.3	97.6	98.0	102.0	100.5
Children's clothing	85.0	97.0	97.7	99.9	99.5	101.8
Footwear	64.4	81.7	95.8	97.0	99.8	98.7
Cloth	96.9	103.8	100.4	99.9	98.4	100.4
Housing, heating, and electricity	54.8	66.7	74.9	81.3	110.0	119.2
Household goods	94.0	95.0	94.1	98.6	100.9	101.4
Medical care	80.2	84.5	92.5	100.0	100.2	102.1
Transport and communication	62.9	72.4	83.8	97.9	100.5	102.8
Education ad recreation	59.8	75.7	88.9	98.2	99.3	97.9
Other goods and services	74.2	85.6	93.7	100.1	102.1	103.9
	(End of period)					
Overall index	79.4	84.1	92.5	100.0	108.0	107.4
Flour and flour goods	96.5	94.8	97.3	100.0	103.0	94.0
Meat and meat products	76.4	79.3	90.3	100.0	119.5	129.0
Milk and dairy products	92.2	96.0	96.0	100.0	106.4	69.7
Sugar, candy, tea, fruits	89.8	84.6	92.4	100.0	99.8	97.3
Potato and vegetables	78.2	70.3	103.3	100.0	106.1	127.8
Other food stuffs	82.6	95.7	100.1	100.0	104.8	103.1
Alcohol and tobaccos	88.7	84.8	90.4	100.0	116.3	112.0
Men's clothing	91.2	99.7	97.3	100.0	111.1	106.4
Women's clothing	93.3	98.0	102.0	100.0	103.6	98.2
Children's clothing	96.3	101.8	100.7	100.0	104.4	101.7
Footwear	77.3	90.9	100.1	100.0	100.9	97.7
Cloth	107.0	105.0	100.4	100.0	97.4	102.5
Housing, heating, and electricity	66.1	72.2	75.8	100.0	122.2	124.0
Household goods	99.8	93.0	97.3	100.0	101.4	101.6
Medical care	82.8	84.9	100.0	100.0	99.4	106.8
Transport and communication	64.0	76.0	96.8	100.0	101.0	102.4
Education ad recreation	69.6	83.4	96.3	100.0	98.4	97.9
Other goods and services	78.3	90.8	96.3	100.0	103.4	104.8
	(Percent change)					
Memorandum items:						
Annual average	36.6	9.4	7.6	11.6	8.0	...
End of period	20.5	6.0	10.0	8.1	8.0	...

Source: National Statistical Office.

1/ The number of commodities comprising the consumer basket increased from 205 to 239 since December 2000.

Table 12. Mongolia: Ulaanbataar Consumer Price Inflation, 2000–2002  
(12-month percentage change)

	Weight	2000	2001												2002							
		12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8
Overall index	1.00	8.1	10.5	10.2	13.3	9.1	9.2	4.6	4.7	7.6	5.8	6.3	7.3	8.0	2.8	1.9	-3.0	-3.4	-5.1	-1.1	0.2	1.4
Food stuffs	0.51	5.2	7.4	5.4	11.2	3.1	3.2	-4.4	-1.4	4.6	0.9	4.3	4.4	9.7	1.4	0.0	-7.9	-8.1	-11.0	-4.6	-3.0	-1.2
Flour and flour goods	0.13	2.8	1.9	2.3	2.4	2.4	2.2	1.9	2.4	2.6	4.3	4.3	3.0	2.3	2.0	-1.5	-2.5	-3.3	-4.6	-6.8	-7.7	
Meat and meat products	0.16	10.8	10.9	5.2	18.0	-4.9	-1.9	-13.2	-7.2	5.4	0.3	5.2	2.9	19.5	0.8	0.0	-14.9	-14.0	-21.0	-11.9	-4.3	2.6
Milk and dairy products	0.05	4.2	14.4	17.1	17.5	11.9	17.4	-0.2	-3.6	2.4	-2.3	0.5	2.6	6.4	-5.6	-12.5	-15.3	-14.7	-13.9	-7.1	-6.8	-8.8
Sugar, candy, tea, and fruits	0.05	8.2	8.9	12.0	13.6	15.6	14.4	14.1	9.0	14.3	11.1	10.1	1.6	-0.2	0.4	0.5	0.1	-0.5	-1.1	3.2	3.1	-4.0
Potatoes and vegetables	0.05	-3.2	-5.9	-12.2	-3.9	-3.8	-21.2	-28.0	-20.0	-9.7	-19.0	-5.0	5.1	6.1	4.3	1.5	-8.1	-7.7	4.8	19.5	1.6	3.9
Other food stuffs	0.04	-0.1	1.0	-1.3	-0.7	1.2	-0.2	-0.2	0.0	0.6	1.4	7.2	6.3	4.8	2.7	1.8	0.5	-1.2	-0.3	-0.4	2.6	1.4
Alcohol and tobacco	0.04	10.6	21.3	19.5	14.0	15.9	16.1	16.2	16.2	13.1	13.7	13.5	15.2	16.3	6.5	7.7	8.4	7.0	2.6	0.3	0.2	-0.4
Clothes and shoes	0.13	-0.3	1.3	1.8	2.1	3.3	3.6	3.2	3.9	3.8	6.1	7.5	6.5	4.5	5.2	5.4	3.1	1.4	1.0	1.4	0.2	-0.5
Men's clothing	0.03	2.8	3.7	2.6	2.5	4.9	4.8	4.3	5.5	6.4	10.6	12.7	12.4	11.1	11.7	12.2	10.8	6.7	6.6	6.7	5.4	3.3
Women's clothing	0.04	-2.0	0.1	2.5	3.8	4.5	4.4	3.8	3.7	4.6	5.8	5.9	7.0	3.6	2.8	3.5	-0.2	-0.6	-0.6	-1.0	-2.5	-3.5
Children's clothing	0.01	-0.7	-2.2	-2.5	-4.0	-1.4	-4.0	-3.9	-2.6	-4.5	3.5	5.7	6.6	4.4	5.1	5.4	3.7	3.4	5.4	5.8	5.1	6.0
Footwear	0.05	-0.1	1.5	1.7	1.8	2.3	3.8	3.4	4.4	3.0	3.7	5.5	2.6	0.9	2.9	2.5	0.7	-1.2	-2.3	-1.2	-2.0	-1.7
Cloth	0.00	-0.4	1.1	0.2	-0.4	-1.3	-3.2	-4.0	-3.8	-4.4	-0.6	0.6	0.8	-2.6	-2.5	-1.7	0.3	2.3	4.3	5.1	5.7	7.4
Housing, heating, and electricity	0.11	32.0	41.8	44.9	43.0	43.7	42.6	42.9	31.4	30.6	32.1	23.3	33.3	22.2	11.6	10.5	9.6	9.4	9.9	9.6	13.8	16.9
Household goods	0.03	2.7	2.0	2.6	3.7	2.5	1.6	1.4	4.3	3.0	1.0	2.8	2.7	1.4	1.5	0.9	-0.2	-1.1	-0.3	1.0	1.3	0.6
Medical care	0.01	0.0	0.6	0.6	0.3	0.2	0.2	0.3	0.7	0.4	-0.5	0.2	0.2	-0.6	-1.3	-1.2	-0.9	-0.8	2.4	2.5	6.2	6.4
Transport and communication	0.10	3.3	4.7	5.4	5.3	4.5	3.7	4.4	-0.1	0.2	0.4	1.2	1.3	1.0	2.5	2.2	1.7	2.0	3.4	3.2	3.1	2.3
Education and recreation	0.07	3.9	4.0	4.0	2.0	2.1	2.0	1.1	1.1	0.7	0.2	-1.2	-1.2	-1.6	-2.3	-2.2	-2.0	-2.1	-2.1	-1.4	-0.9	-1.0
Other goods and services	0.04	3.9	0.2	0.2	0.6	1.9	2.5	2.2	2.6	1.9	2.5	2.6	3.1	3.4	2.6	2.7	2.9	1.3	1.8	2.1	2.1	3.0

Source: National Statistical Office.

Table 13. Mongolia: Retail Prices, 1997–2001  
(End of period; in togrogs per kilogram, except where stated)

	1997	1998	1999	2000	2001
Mutton	595	620	720	801	959
Beef	650	700	774	875	1,088
Flour	365	325	325	355	362
Bread	230	240	250	250	266
Sugar	555	500	590	684	677
Rice	360	390	420	446	476
Vegetable oil (liter)	1,400	1,570	1,550	1,500	1,250
Tea bricks (2 kilograms)	2,465	2,260	2,465	2,550	2,397
Tobacco	1,400	1,290	1,265	1,500	1,520
Gasoline A-93 (liter)	235	265	410	390	410
Gasoline A-76 (liter)	206	226	380	350	375
Diesel (liter)	222	249	396	470	420

Sources: National Statistical Office; and Neft Import Concern.



Table 14. Mongolia: Privatization of State-Owned Enterprises, 1998–2001 1/

	No. of Enterprises Privatized	Privatization Revenue (million togrogs)
1998		
Total privatization	138	12,177
Large enterprises	36	7,292
Construction sector	16	4,907
Mineral sector	1	80
Agriculture sector	12	1,339
Other	7	965
Small enterprises and assets	102	4,885
1999		
Total privatization	365	9,475
Large enterprises	16	7,133
Construction sector	3	477
Mineral sector	2	918
Agriculture sector	4	2,741
Other	7	2,997
Small enterprises and assets	349	2,342
2000		
Total privatization	19	5,487
Large enterprises	9	5318
Construction sector	3	1,588
Mineral sector	2	1,364
Agriculture sector	1	742
Other	3	1,625
Small enterprises and assets	10	169
2001		
Total privatization	11	4,903
Large enterprises	1	4,446
Construction sector	0	0
Mineral sector	0	0
Agriculture sector	0	0
Other	1	4,446
Small enterprises and assets	10	457

Source: State Property Commission.

1/ Excludes privatization receipts of local governments.

Table 15: Mongolia: Government Average Wages, 1997–2001

	1997	1998	1999	2000	2001
Employment (thousands)	136.8	135.2	134.0	136.4	133.7
Wage bill (billions of togrogs)	44.8	56.0	63.5	86.1	92.1
Per capita wage (thousands of togrogs)	327.5	414.2	473.9	631.2	688.6
Nominal wage index (1996=100)	126.6	160.1	183.1	244.0	266.1
Percent change	26.6	26.5	14.4	38.7	20.6
CPI index (period average, 1996=100)	136.6	149.4	160.8	180.0	190.5
Percent change	36.6	9.4	7.6	11.6	8.0
Real wage index (1996=100)	92.6	107.1	113.9	135.6	139.7
Percent change	-7.4	15.6	6.3	24.3	11.6
Exchange rate (Togrogs/US\$)	795	854	1022	1077	1098
Monthly per capita wage (US\$)	34.3	40.4	38.6	48.9	52.3

Sources: Ministry of Finance and Economy; National Statistical Office; and Fund staff estimates.

Table 16. Mongolia: Summary Operations of the General Government, 1997–2001

	1997	1998	1999	2000	2001
	(In billions of togrogs)				
Total revenue	212.1	225.5	251.7	351.4	429.5
Current revenue	206.0	216.8	244.8	346.5	420.1
Tax revenue and social security contributions	164.0	154.0	182.0	260.9	328.2
Income taxes	62.6	41.5	39.0	62.8	64.5
Taxes on goods and services	58.5	70.6	87.1	117.2	157.5
Customs duties	8.8	1.5	9.0	22.3	27.0
Social security contributions	21.2	26.1	30.6	39.3	54.0
Other taxes	12.8	14.4	16.3	19.2	25.2
Nontax revenue	42.0	62.8	62.7	85.7	91.9
Capital revenue and grants	6.1	8.7	6.9	4.9	9.3
Total expenditure and net lending	287.6	342.1	364.6	422.6	489.7
Current expenditure	192.6	222.4	246.9	314.2	366.7
Wages and salaries	44.8	56.0	63.5	86.1	92.1
Goods and services	83.1	99.6	100.7	124.7	162.6
Subsidies and transfers	43.5	55.8	65.3	85.2	95.5
Interest payments	21.2	11.1	17.3	18.2	16.5
Capital expenditure and net lending	95.0	119.7	117.7	108.4	123.0
Domestically financed capital expenditure	29.4	34.0	28.9	43.8	49.0
Domestic net lending	-1.9	12.0	3.6	1.8	5.3
Foreign financed projects	67.6	73.7	85.2	62.9	68.8
Current balance	13.4	-5.6	-2.1	32.3	53.4
Overall balance	-75.5	-116.6	-112.9	-71.3	-60.2
Errors and Omissions	0.0	0.0	4.5	-0.3	-6.2
Financing	75.5	116.6	117.3	71.0	67.1
Foreign, net	92.8	68.6	105.8	66.6	72.8
Project loans	67.6	73.7	86.9	63.0	68.8
Cash loans	43.9	7.5	16.5	13.4	23.7
Less: Amortization	18.7	12.7	9.7	9.7	19.7
Privatization	10.4	14.5	11.7	7.2	5.6
Settlement of claims with Central Bank	0.0	0.0	12.2	4.2	9.8
Domestic banking system, net	-25.4	33.6	-0.2	-7.0	-18.8
Domestic nonbank financing, net	-2.3	0.0	0.0	0.0	-2.4
	(In percent of GDP)				
Total revenue	25.5	27.6	27.2	33.6	38.0
Current revenue	24.7	26.5	26.5	33.2	37.2
Tax revenue and social security contributions	19.7	18.8	19.7	25.0	29.0
Nontax revenue	5.0	7.7	6.8	8.2	8.1
Capital revenue and grants	0.7	1.1	0.7	0.5	0.8
Total expenditure and net lending	34.5	41.9	39.4	40.5	43.3
Current expenditure	23.1	27.2	26.7	30.1	32.4
Capital expenditure and net lending	11.4	14.6	12.7	10.4	10.9
Errors and Omissions	0.0	0.0	0.5	0.0	-0.5
Financing	9.1	14.3	12.7	6.8	5.9
Foreign, net	11.1	8.4	11.4	6.4	6.4

Sources: Ministry of Finance and Economy; and Fund staff estimates.

Table 17. Mongolia: General Government Revenue, 1997–2001

	1997	1998	1999	2000	2001
(In billions of togrogs)					
Total revenue and grants	212.1	225.5	251.7	351.4	429.5
Current revenue	206.0	216.8	244.8	346.5	420.1
Tax revenue and social security contributions	164.0	154.0	182.0	260.9	328.2
Income taxes	62.6	41.5	39.0	62.8	64.5
Enterprise income tax	54.9	31.3	26.5	48.0	43.8
<i>of which</i> Erdenet	19.6	0.0	0.0	15.5	11.3
Personal income tax	7.7	10.1	12.6	14.8	20.7
Social security contributions	21.2	26.1	30.6	39.3	54.0
Sales tax and VAT	38.1	46.1	60.4	76.2	104.2
Domestic VAT (Sales tax prior to 1998)	19.8	21.1	28.9	30.2	43.8
VAT on imports (Sales tax prior to 1998)	18.3	25.0	31.4	46.0	60.4
Excise taxes	20.3	24.5	26.7	41.0	53.3
Excise on alcohol	9.7	8.9	11.2	15.5	23.2
Excise on vodka and tobacco	3.1	3.8	3.5	4.5	3.1
Excise on imported beer	...	...	0.2	0.4	3.1
Excise on vehicles	0.5	2.3	3.1	7.2	7.3
Excise on petroleum	7.0	9.5	8.8	13.4	16.6
Customs duties and export taxes	8.8	1.5	9.0	22.3	27.0
Customs duties	7.2	0.7	5.9	17.2	26.0
Export taxes	1.6	0.8	3.2	5.2	1.0
Other taxes	12.8	14.4	16.3	19.2	25.2
Petrol and diesel tax	4.8	4.3	4.3	4.2	5.5
Vehicle license fee	0.8	2.0	2.5	2.9	3.4
Tax on private property	0.0	0.0	0.3	0.3	1.7
Other	7.3	8.0	9.2	11.9	14.6
Nontax revenue	42.0	62.8	62.7	85.7	91.9
Own budget revenues	22.0	25.6	29.0	35.2	47.2
Dividends	7.7	10.6	5.7	17.2	11.6
<i>of which</i> Erdenet	...	...	1.1	11.0	1.6
Other nontax revenue	12.3	26.5	28.0	33.2	33.2
Capital revenue and grants	6.1	8.7	6.9	4.9	9.3
Capital revenue	0.1	0.1	0.0	0.1	0.2
Grants 1/	6.0	8.6	6.9	4.8	9.2
(In percent of total revenue)					
Current revenue	97.1	96.2	97.2	98.6	97.8
Tax revenue and social security contributions	77.3	68.3	72.3	74.2	76.4
Enterprise income tax	25.9	13.9	10.5	13.7	10.2
Personal income tax	3.6	4.5	5.0	4.2	4.8
Social security contributions	10.0	11.6	12.1	11.2	12.6
Taxes on goods and services	27.6	31.3	34.6	33.4	36.7
Customs duties and import surcharges	4.1	0.7	3.6	6.3	6.3
Other taxes	6.1	6.4	6.5	5.5	5.9
Nontax revenue	19.8	27.9	24.9	24.4	21.4
Capital revenue	0.0	0.1	0.0	0.0	0.0
Grants	2.8	3.8	2.7	1.4	2.1
(In percent of GDP)					
Total revenue	25.5	27.6	27.2	33.6	38.0
Current revenue	24.7	26.5	26.5	33.2	37.2
Tax revenue and social security contributions	19.7	18.8	19.7	25.0	29.0
Enterprise income tax	6.6	3.8	2.9	4.6	3.9
Personal income tax	0.9	1.2	1.4	1.4	1.8
Social security contributions	2.6	3.2	3.3	3.8	4.8
Taxes on goods and services	7.0	8.6	9.4	11.2	13.9
Customs duties and import surcharges	1.1	0.2	1.0	2.1	2.4
Other taxes	1.5	1.8	1.8	1.8	2.2
Nontax revenue	5.0	7.7	6.8	8.2	8.1
Capital revenue	0.0	0.0	0.0	0.0	0.0
Grants	0.7	1.0	0.7	0.5	0.8

Sources: Ministry of Finance and Economy; and Fund staff estimates.

1/ Grants relate to receipt of the budget of counterpart funds from recipient of the grants. This differs from the balance of payments definition which records grants when they are received from abroad.

Table 18. Mongolia: General Government Expenditure, 1997-2001

	1997	1998	1999	2000	2001
	(In billions of togrogs)				
Total expenditure and net lending	287.6	342.1	364.6	422.6	489.7
Current expenditure	192.6	222.4	246.9	314.2	366.7
Wages and salaries	44.8	56.0	63.5	86.1	92.1
Goods and services	83.1	99.6	100.7	124.7	162.6
Subsidies and current transfers	43.5	55.8	65.3	85.2	95.5
Subsidies 1/	0.4	0.4	0.6	0.5	6.1
Transfers	43.2	55.5	64.7	84.7	89.4
Social Security Fund	30.7	38.8	42.3	58.4	64.3
Social Assistance Fund	10.0	10.3	11.8	11.6	13.7
Other transfers	2.5	6.4	10.6	14.7	11.5
Interest payment	21.2	11.1	17.3	18.2	16.5
Capital expenditure and net lending	95.0	119.7	117.7	108.4	123.0
Domestically financed capital expenditure	29.4	34.0	28.9	43.8	49.0
Domestic lending minus repayment	-1.9	12.0	3.6	1.8	5.3
Foreign financed projects	67.6	73.7	85.2	62.9	68.8
	(In percent of total expenditure)				
Current expenditure	67.0	65.0	67.7	74.4	74.9
Wages and salaries	15.6	16.4	17.4	20.4	18.8
Goods and services	28.9	29.1	27.6	29.5	33.2
Subsidies and transfers	15.1	16.3	17.9	20.2	19.5
Subsidies	0.1	0.1	0.2	0.1	1.2
Transfers and other	15.0	16.2	17.7	20.1	18.3
Social Security Fund	10.7	11.3	11.6	13.8	13.1
Other	4.3	4.9	6.1	6.2	5.1
Interest payments	7.4	3.2	4.7	4.3	3.4
Capital expenditure and net lending	33.0	35.0	32.3	25.6	25.1
Domestically financed capital expenditure	10.2	9.9	7.9	10.4	10.0
Domestic lending minus repayment	-0.7	3.5	1.0	0.4	1.1
Foreign financed projects	23.5	21.6	23.4	14.9	14.0
	(In percent of GDP)				
Total expenditure and net lending	34.5	41.9	39.4	40.5	43.3
Current expenditure	23.1	27.2	26.7	30.1	32.4
Wages and salaries	5.4	6.8	6.9	8.2	8.1
Goods and services	10.0	12.2	10.9	11.9	14.4
Subsidies and current transfers	5.2	6.8	7.1	8.2	8.4
Subsidies	0.0	0.0	0.1	0.0	0.5
Transfers	5.2	6.8	7.0	8.1	7.9
Social Security Fund	3.7	4.7	4.6	5.6	5.7
Social Assistance Fund	1.2	1.3	1.3	1.1	1.2
Other transfers	0.3	0.8	1.1	1.4	1.0
Interest payment	2.5	1.4	1.9	1.7	1.5
Capital expenditure and net lending	11.4	14.6	12.7	10.4	10.9
Domestically financed capital expenditure	3.5	4.2	3.1	4.2	4.3
Domestic lending minus repayment	-0.2	1.5	0.4	0.2	0.5
Foreign financed projects	8.1	9.0	9.2	6.0	6.1

Sources: Ministry of Finance and Economy; and Fund staff estimates.

1/ Beginning in 2001, this item includes subsidies to state-owned enterprises for quasi-fiscal activities which, previously, had been recorded under purchases of goods and services.

Table 19. Mongolia: General Government Expenditure by Function, 1997–2001

	1997	1998	1999	2000	2001
(In billions of togrogs)					
Total expenditure	287.6	342.1	364.6	422.6	489.7
General public services	25.0	31.9	33.0	42.2	50.4
Defense	15.4	17.7	18.4	26.1	25.4
Public order and safety	12.0	15.0	17.0	23.9	28.7
Education	46.6	58.4	64.8	82.1	98.7
Health	28.6	32.9	35.7	46.0	53.1
Social security and welfare	42.9	51.7	59.9	76.0	84.5
Housing and community services	3.4	3.8	4.7	7.0	7.1
Recreation and culture	9.3	11.4	11.5	14.3	15.1
Economic affairs	23.7	28.6	22.4	33.0	45.1
Other 1/	80.7	90.9	97.1	72.1	81.6
(In percent of total expenditure)					
General public services	8.7	9.3	9.0	10.0	10.3
Defense	5.4	5.2	5.1	6.2	5.2
Public order and safety	4.2	4.4	4.7	5.6	5.9
Education	16.2	17.1	17.8	19.4	20.2
Health	9.9	9.6	9.8	10.9	10.8
Social security and welfare	14.9	15.1	16.4	18.0	17.3
Housing and community services	1.2	1.1	1.3	1.7	1.4
Recreation and culture	3.2	3.3	3.1	3.4	3.1
Economic affairs	8.2	8.4	6.1	7.8	9.2
Other 1/	28.1	26.6	26.6	17.1	16.7
(In percent of GDP)					
Total expenditure	34.5	41.9	39.4	40.5	43.3
General public services	3.0	3.9	3.6	4.0	4.5
Defense	1.9	2.2	2.0	2.5	2.2
Public order and safety	1.4	1.8	1.8	2.3	2.5
Education	5.6	7.1	7.0	7.9	8.7
Health	3.4	4.0	3.9	4.4	4.7
Social security and welfare	5.1	6.3	6.5	7.3	7.5
Housing and community services	0.4	0.5	0.5	0.7	0.6
Recreation and culture	1.1	1.4	1.2	1.4	1.3
Economic affairs	2.8	3.5	2.4	3.2	4.0
Other 1/	9.7	11.1	10.5	6.9	7.2

Sources: Ministry of Finance and Economy; and Fund staff estimates.

1/ Includes capital expenditure and net lending (foreign-financed projects).

Table 20. Mongolia: General Government Social Expenditure, 1997–2001

	1997	1998	1999	2000	2001
	(In billions of togrogs)				
Total expenditure	287.6	342.1	364.6	422.6	489.7
Social expenditure	130.8	158.2	176.6	225.4	258.5
Social security and social assistance	42.9	51.7	59.9	76.0	84.5
Education	46.6	58.4	64.8	82.1	98.7
Health	28.6	32.9	35.7	46.0	53.1
Housing and community services	3.4	3.8	4.7	7.0	7.1
Recreational, cultural affairs and services	9.3	11.4	11.5	14.3	15.1
	(In percent of total expenditure)				
Social expenditure	45.5	46.2	48.4	53.3	52.8
Social security and social assistance	14.9	15.1	16.4	18.0	17.3
Education	16.2	17.1	17.8	19.4	20.2
Health	9.9	9.6	9.8	10.9	10.8
Housing and community	1.2	1.1	1.3	1.7	1.4
Recreational, cultural affairs and services	3.2	3.3	3.1	3.4	3.1

Sources: Ministry of Finance and Economy; and Fund staff estimates.

Table 21. Mongolia: Subsidies and Transfers, 1997–2001

	1997	1998	1999	2000	2001
	(In billions of togrogs)				
Total subsidies and transfers	43.5	55.8	65.4	85.2	95.5
Total subsidies	0.4	0.4	0.7	0.5	6.1
Energy	0.1	0.1	0.1	0.0	5.4
Urban transport	0.3	0.3	0.6	0.5	0.5
Other	0.0	0.0	0.0	0.0	0.1
Total transfers	43.2	55.5	64.7	84.7	89.4
Social Security Fund	30.7	38.8	42.3	58.4	64.3
Social Assistance Fund	6.8	7.4	11.8	11.6	13.7
Other	5.7	9.3	10.6	14.7	11.4
	(In percent of GDP)				
Total subsidies and transfers	5.2	6.8	7.1	8.2	8.4
Total subsidies	0.0	0.0	0.1	0.0	0.5
Total transfers	5.2	6.8	7.0	8.1	7.9

Sources: Ministry of Finance and Economy; and Fund staff estimates.



Table 22. Mongolia: Social Security and Social Assistance Funds, 1997–2001

	1997	1998	1999	2000	2001
(In billions of togrogs)					
<b>Social Security Fund</b>					
Total revenue	33.82	38.53	47.61	60.60	74.78
Budget transfers	5.00	8.56	13.51	13.51	20.96
Social security contributions 1/	28.55	29.47	33.16	46.46	52.55
Civil servants	7.75	8.66	9.76	16.68	16.92
Business entities	12.79	12.39	14.40	17.33	20.97
Employees	8.01	8.41	9.00	12.45	14.65
Other	0.27	0.50	0.95	0.64	1.28
Total expenditure	31.87	40.02	43.65	57.71	65.82
Old age pension	22.53	26.54	28.24	38.37	41.85
Handicapped persons	2.45	3.26	3.82	5.52	6.21
Survivors' benefits	3.58	4.45	4.69	6.27	6.74
Disability benefits	0.52	0.65	0.63	0.75	0.92
Death benefits	0.59	0.71	0.73	0.83	1.22
Allowance for accidents	0.81	1.01	1.17	1.93	2.16
Serviceman's pension	...	1.85	2.06	3.57	3.79
Unemployment benefits	0.20	0.30	0.55	0.46	0.53
Administration	0.93	0.88	1.25	0.00	1.08
Capital investment	0.26	0.36	0.00	0.00	0.00
Other	...	0.00	0.51	0.00	1.31
Overall balance	1.95	-1.49	3.96	2.90	8.96
<b>Social Assistance Fund</b>					
Total expenditure	10.03	10.32	11.82	11.60	13.67
Pregnancy	1.76	1.88	1.83	2.27	3.56
Mothers with large families	0.50	0.47	1.58	0.69	0.51
Child care	1.92	0.07	0.06	0.09	0.06
Twins	0.00	0.00	0.01	0.01	0.01
Infant nursing	0.04	1.76	2.84	2.87	3.30
Social pension	1.53	1.59	2.75	3.59	3.82
War veterans	0.09	1.12	0.95	1.02	1.59
Other	4.19	3.42	1.79	1.06	0.82
(In percent of total government expenditure)					
<b>Memorandum items:</b>					
Social Security Fund expenditure	11.1	11.7	12.0	13.7	13.4
Budget transfers to the Social Security Fund	1.7	2.5	3.7	3.2	4.3
Social Assistance Fund expenditure	3.5	3.0	3.2	2.7	2.8
(In percent of GDP)					
Social Security Fund expenditure	3.8	4.9	4.7	5.5	5.8
Budget transfers to the Social Security Fund	0.6	1.0	1.5	1.3	1.9
Social Assistance Fund expenditure	1.2	1.3	1.3	1.1	1.2

Sources: Ministry of Finance and Economy; and Fund staff estimates.

1/ A Part of social security contributions constitutes intergovernmental transfers.

Table 23. Mongolia: Number of Social Security Beneficiaries, 1997–2001

(In thousands)

	1997	1998	1999	2000	2001
Social security	310.7	294.9	298.9	310.5	316.5
Old age	174.3	167.7	167.5	171.6	173.2
Handicapped persons	24.4	26.6	29.4	32.7	35.2
Survivors' benefits	34.5	34.2	33.7	34.9	35.6
Disability benefits	57.7	56.7	58.1	61.4	62.9
Other benefits	19.8	9.7	10.2	9.9	9.6
Social assistance	530.0	454.6	249.1	223.9	242.2
Pregnancy	70.8	69.0	43.8	45.9	50.5
Mothers with large families	294.4	233.4	61.6	28.7	53.8
Child care	93.5	5.8	37.6	31.5	20.6
Twins	0.4	0.6	0.3	0.4	0.3
Infant nursing	4.3	40.3	4.7	3.5	3.3
War veterans	40.7	57.6	41.5	47.9	56.2
Social pension	23.2	24.8	25.4	30.6	33.8
Disabled Nursing homes for elderly	...	5.2	3.6	9.3	10.1
Other	2.7	17.9	30.6	26.1	13.6

Source: Ministry of Finance and Economy.

Table 24. Mongolia: Government Employment and Wage Bill, 1997–2001

	1997	1998	1999	2000	2001
	(Number of positions)				
Government employment					
General public services	15,780	15,515	15,114	15,456	15,584
Public order and safety	12,891	13,995	14,384	14,960	12,658
Education	47,686	47,649	46,498	47,670	48,863
Health	27,266	27,021	27,046	26,168	25,344
Social security and welfare	1,591	1,571	1,639	1,552	621
Recreation and culture	6,303	6,307	5,858	6,241	6,195
Agriculture and forestry	3,239	1,423	1,335	1,474	1,432
Other services	22,057	21,711	22,137	22,927	22,551
Total	136,813	135,192	134,011	136,448	133,248
	(In billions of togrogs)				
Wages and salaries					
General public services	6.0	8.3	9.4	12.8	13.0
Public order and safety	4.6	6.4	7.5	11.0	12.0
Education	16.4	20.6	24.1	32.2	36.2
Health	7.8	9.6	10.5	13.9	15.1
Social security and welfare	0.6	0.6	0.7	0.9	0.3
Recreation and culture	2.2	2.1	2.5	3.2	3.5
Agriculture and forestry	1.2	0.6	0.6	0.8	0.6
Other services	5.9	7.6	8.2	11.4	11.7
Total	44.8	56.0	63.5	86.1	92.1

Source: Ministry of Finance and Economy.

Table 25. Mongolia: Expenditure of the Health Sector, 1997–2001  
(In billions of togrogs)

	1997	1998	1999	2000	2001
Total expenditure	28.6	32.9	35.7	46.0	53.1
Wages and salaries	7.8	9.6	10.5	13.9	15.0
Social security	2.0	2.4	2.6	4.1	4.3
Social security payments	1.7	2.0	2.1	3.4	3.5
Health insurance	0.3	0.5	0.5	0.7	0.8
Other goods and services	17.3	19.3	21.5	25.8	31.9
Electricity	1.2	1.1	1.2	1.5	1.6
Fuel and heating	3.3	3.5	4.3	4.6	5.6
Transport (fuel)	1.2	1.2	1.3	1.8	2.0
Food	2.0	2.0	2.0	2.2	2.7
Medicines	4.8	5.7	6.0	7.3	9.5
Other	4.7	5.8	6.7	8.5	10.5
Investment	1.0	1.1	0.7	1.5	1.3
Capital repair expenditures	0.5	0.5	0.4	0.6	0.7

Source: Ministry of Finance and Economy.

Table 26. Mongolia: Expenditure of the Education Sector, 1997–2001  
(In billions of togrogs)

	1997	1998	1999	2000	2001
Total expenditure	46.6	58.4	64.8	82.1	98.7
Wages and salaries	16.4	20.6	24.1	32.2	36.1
Social security	4.0	4.5	5.1	9.7	9.8
Social security payments	3.2	3.6	4.2	8.1	8.2
Health insurance	0.7	0.9	0.9	1.6	1.7
Other goods and services	24.7	30.1	31.9	36.7	45.8
Electricity	1.7	1.9	2.0	2.3	2.8
Fuel and heating	9.2	10.3	10.9	12.5	15.4
Transport (fuel)	0.5	0.5	0.5	0.6	0.7
Food	3.3	3.3	3.3	4.1	5.4
Medicines	0.0	0.0	0.0	0.0	0.0
Other	10.0	14.2	15.2	17.2	21.6
Investment	0.7	1.8	2.5	2.4	3.1
Capital repair expenditures	0.9	1.4	1.2	0.6	0.8
Lending minus repayment	...	0.0	0.0	0.6	3.1

Source: Ministry of Finance and Economy.

Table 27. Mongolia: Monetary Survey, 1997–2002

	1997	1998	1999	2000				2001				2002	
	Dec	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
(In billions of togrogs)													
Broad Money 1/	170.1	167.3	220.4	228.1	255.8	266.1	258.8	270.5	313.9	317.4	331.4	345.9	401.0
Currency	49.8	56.4	87.3	95.0	118.9	114.5	100.9	93.7	125.5	116.3	109.2	101.3	131.8
Deposits	120.3	110.8	133.1	133.1	137.0	151.6	157.9	176.8	188.5	201.1	222.2	244.6	269.2
Demand deposits	26.3	26.1	27.6	23.6	24.8	29.1	29.8	29.9	29.6	35.5	47.0	45.6	55.9
Togrog time deposits	44.7	44.8	45.2	49.4	49.6	55.6	59.0	67.0	72.3	81.6	87.9	103.0	113.1
Forex time deposits	49.3	39.8	60.3	60.1	62.5	66.9	69.1	80.0	86.5	84.0	87.3	96.0	100.2
Net foreign assets	112.3	76.8	151.2	160.5	173.8	196.1	202.1	200.6	222.9	222.7	220.1	221.0	222.7
Net international reserves	131.0	93.6	153.6	162.3	169.7	195.7	206.5	204.7	228.3	228.6	227.0	230.1	232.7
Bank of Mongolia	73.1	67.5	113.0	115.5	123.8	136.9	154.3	147.7	177.7	178.2	176.3	178.2	186.2
Commercial banks	57.9	26.1	40.7	46.8	46.0	58.8	52.2	57.1	50.6	50.5	50.7	51.9	46.5
Other NFA	-18.8	-16.8	-2.4	-1.8	4.1	0.4	-4.4	-4.2	-5.5	-6.0	-7.0	-9.1	-10.0
Bank of Mongolia	-1.7	3.1	6.3	4.3	8.2	4.6	0.4	0.5	0.4	0.3	0.2	0.2	0.3
Commercial banks	-17.1	-19.9	-8.7	-6.1	-4.1	-4.3	-4.8	-4.7	-5.9	-6.3	-7.2	-9.3	-10.3
Net domestic assets	57.8	90.4	69.1	67.6	82.1	70.0	56.8	70.0	91.1	94.8	111.3	124.9	178.3
Domestic credit	91.7	146.8	130.6	136.7	117.3	118.4	120.1	138.8	141.4	152.4	170.1	190.9	238.0
Net credit to government	21.3	47.9	47.7	51.0	58.6	57.3	51.3	56.1	42.0	47.9	31.5	35.9	42.3
Credit	65.9	70.9	76.7	91.5	95.8	92.5	95.2	95.4	89.4	97.0	84.3	89.9	93.7
Minus: Deposits	44.5	23.0	28.9	40.5	37.1	35.3	43.9	39.2	47.3	49.1	52.9	54.1	51.4
Claims on nonbanks	70.4	98.9	82.8	85.7	58.6	61.1	68.8	82.7	99.4	104.5	138.6	155.1	195.7
Claims on public enterprises	11.7	18.3	8.6	9.3	6.9	6.8	6.3	5.2	8.8	8.7	10.4	10.5	12.7
Claims on the private sector	44.2	48.0	31.4	33.7	34.7	36.5	45.5	60.6	76.7	81.5	114.8	127.6	163.3
Nonperforming loans	14.5	32.6	42.1	41.9	16.4	17.4	15.9	15.7	12.1	11.9	10.9	14.1	16.3
Accrued interest receivable on loans	...	...	0.7	0.8	0.6	0.4	1.1	1.2	1.8	2.3	2.5	2.9	3.6
Other items, net	-33.9	-56.4	-61.4	-69.2	-35.2	-48.4	-63.4	-68.8	-50.3	-57.6	-58.7	-66.1	-59.7
(In percent)													
Memorandum items:													
Twelve-month percentage change													
Broad money 1/	19.8	8.8	31.7	48.4	38.6	33.6	17.5	18.6	22.7	19.3	28.0	27.8	27.7
Net foreign assets	68.3	-31.6	96.9	152.0	128.3	77.6	33.6	24.9	28.2	13.6	8.9	30.2	-0.1
Domestic credit	-5.1	60.1	-11.1	-16.4	-32.6	-21.3	-8.0	1.5	20.6	28.7	41.6	37.5	68.3
Claims on public enterprises	-36.9	56.2	-53.2	-48.1	-52.8	-57.0	-26.7	-44.3	27.1	27.7	65.8	101.6	44.6
Claims on the private sector	43.3	8.5	-34.5	-35.0	-32.3	-18.6	44.8	79.8	120.8	123.2	152.4	110.6	113.0
Key ratios													
Currency/total deposits	41.4	50.9	65.6	71.4	86.8	75.5	63.9	53.0	66.6	57.8	49.1	41.4	49.0
Demand deposits/total deposits	21.9	23.6	20.8	17.7	18.1	19.2	18.9	16.9	15.7	17.7	21.1	18.7	20.8
Togrog time deposits/total deposits	37.1	40.5	33.9	37.1	36.2	36.7	37.4	37.9	38.4	40.6	39.6	42.1	42.0
Forex time deposits/total deposits	41.0	35.9	45.3	45.2	45.7	44.1	45.7	45.2	45.9	41.8	39.3	39.2	37.2
Currency/broad money	29.3	33.7	39.6	41.6	46.5	43.0	39.0	34.6	40.0	36.6	32.9	29.3	32.9
Demand deposits/broad money	15.5	15.6	12.5	10.3	9.7	10.9	11.5	11.0	9.4	11.2	14.2	13.2	13.9
Time deposits/broad money	55.2	50.6	47.9	48.0	43.8	46.0	49.5	54.3	50.6	52.2	52.9	57.5	53.2

Sources: Bank of Mongolia; and Fund staff estimates.

1/ The end-1997 broad money stock is artificially inflated by a one-off increase due to a US\$20 million (Tog 16.3 billion) deposit, which was reversed in early 1998. The annual broad money growth rate reflects an adjustment for this increase.

Table 28. Mongolia: Balance Sheet of the Bank of Mongolia, 1997–2002

	1997	1998	1999	2000				2001				2002	
	Dec	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
(In billions of togogs)													
Reserve money	64.6	73.3	111.3	120.1	144.7	145.2	132.9	127.1	154.5	153.1	144.1	142.8	176.0
Currency outside Banks	49.8	56.4	87.3	95.0	118.9	114.5	100.9	93.7	125.5	116.3	109.2	101.3	131.8
DMB reserves	13.2	16.0	23.9	24.0	25.3	29.1	32.0	33.4	29.0	36.8	34.6	41.6	44.2
Cash in vaults	7.0	5.0	4.3	7.3	6.6	6.4	6.4	6.0	7.9	8.0	10.0	9.5	14.1
Demand deposits of DMBs	6.2	11.0	19.6	16.7	18.6	22.7	25.5	27.4	21.1	28.9	24.6	32.0	30.1
Deposits of business units	1.6	0.8	0.2	1.1	0.6	1.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Net Foreign Assets	71.4	70.6	119.3	119.8	131.9	141.6	154.6	148.2	178.1	178.5	176.5	178.5	186.5
Net international reserves	73.1	67.5	113.0	115.5	123.8	136.9	154.3	147.7	177.7	178.2	176.3	178.2	186.2
Assets	111.8	111.1	168.1	177.9	182.2	194.7	209.3	199.9	227.3	227.5	227.9	235.9	242.0
Minus: Liabilities	38.7	43.6	55.1	62.4	58.4	57.8	55.1	52.3	49.6	49.4	51.5	57.6	55.8
Other assets, net	-1.7	3.1	6.3	4.3	8.2	4.6	0.4	0.5	0.4	0.3	0.2	0.2	0.3
Assets	2.0	3.1	6.3	4.3	8.2	4.6	0.4	0.5	0.4	0.3	0.2	0.3	0.3
Minus: Liabilities	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Domestic Assets	-6.9	2.7	-8.0	0.4	12.8	3.6	-21.7	-21.0	-23.7	-25.4	-32.5	-35.7	-10.5
Net Credit to Government	17.6	29.7	32.6	43.7	53.3	48.8	34.1	38.2	26.6	31.5	35.0	30.2	30.0
Credit	30.4	32.6	37.4	50.9	59.9	55.7	53.4	53.3	43.1	43.5	51.9	50.1	47.4
Reconstruction bonds	13.8	19.6	19.6	19.6	19.6	19.6	19.6	20.4	10.6	9.8	13.6	12.5	8.6
Treasury IMF account	6.4	6.4	13.2	22.2	22.2	22.2	33.8	32.9	32.4	33.7	38.3	37.6	38.8
Other	10.2	6.5	4.6	9.0	18.0	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minus: Deposits	12.8	2.9	4.8	7.2	6.5	6.9	19.3	15.1	16.5	12.0	16.9	19.9	17.4
Domestic currency	6.0	2.5	4.5	4.2	4.9	5.8	12.9	12.4	10.3	9.4	13.1	16.8	15.0
Foreign currency	6.8	0.4	0.4	3.0	1.7	1.1	6.4	2.7	6.2	2.6	3.9	3.0	2.4
Claims on deposit money banks	3.1	5.6	6.7	7.7	6.0	4.6	4.8	3.0	3.9	4.6	7.3	5.4	5.8
Claims on nonbanks	3.9	9.0	4.6	4.6	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0
Minus: Central bank bills (net)	19.1	11.7	21.2	19.6	27.0	30.0	21.1	18.1	28.8	36.5	50.0	40.0	31.2
Other items, net	-12.4	-29.8	-30.6	-36.0	-20.4	-20.8	-40.4	-45.2	-26.3	-26.1	-25.8	-32.3	-16.2
(In percent)													
Memorandum items:													
Reserve money growth (12 month percent change)	26.2	13.5	51.8	100.4	60.1	48.6	19.4	5.8	6.7	5.5	8.4	12.4	13.9
Broad money/reserve money (ratio)	2.63	2.28	1.98	1.90	1.77	1.83	1.95	2.13	2.03	2.07	2.30	2.42	2.28

Sources: Bank of Mongolia; and Fund staff estimates.

Table 29. Mongolia: Consolidated Balance Sheet of Commercial Banks, 1997-2002

	1997	1998	1999	2000				2001				2002	
	Dec	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
(In billions of togrogs)													
<b>ASSETS</b>	121.1	113.1	135.0	135.2	136.4	150.0	157.9	176.8	189.3	202.4	226.0	246.8	271.5
Net foreign assets	40.8	6.2	31.9	40.8	41.9	54.5	47.4	52.4	44.7	44.2	43.5	42.5	36.2
Net international reserves	57.9	26.1	40.7	46.8	46.0	58.8	52.2	57.1	50.6	50.5	50.7	51.9	46.5
Assets	64.9	26.1	41.7	47.5	47.2	59.6	53.3	58.4	52.9	52.1	52.3	53.1	47.9
Minus: Liabilities	7.0	0.0	1.1	0.7	1.2	0.9	1.1	1.3	2.3	1.6	1.7	1.2	1.5
Other foreign assets, net	-17.1	-19.9	-8.7	-6.1	-4.1	-4.3	-4.8	-4.7	-5.9	-6.3	-7.2	-9.3	-10.3
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minus: Liabilities	17.1	19.9	8.7	6.1	4.1	4.3	4.8	4.7	5.9	6.3	7.2	9.3	10.3
Net domestic assets	80.2	106.9	103.0	94.4	94.5	95.5	110.5	124.4	144.5	158.2	182.5	204.3	235.3
Reserves	13.2	16.0	23.9	23.2	23.6	27.6	31.0	33.3	28.4	35.4	34.6	41.0	47.4
Cash	7.0	5.0	4.3	7.3	6.6	6.4	6.4	6.0	7.9	8.0	10.0	9.5	14.1
Deposits with BOM	6.2	11.0	19.6	15.9	17.0	21.2	24.5	27.3	20.5	27.4	24.6	31.4	33.3
Central bank bills	19.1	11.7	21.2	19.6	27.0	30.0	21.1	18.0	28.7	36.4	49.7	39.7	31.0
Domestic credit	54.1	103.9	93.4	88.4	63.0	68.7	85.1	99.6	113.8	119.8	134.1	159.6	207.0
Net credit to government	3.7	18.2	15.1	7.3	5.3	8.4	17.2	17.9	15.5	16.4	-3.5	5.5	12.3
Claims on Government	35.5	38.3	39.3	40.6	35.9	36.8	41.8	42.1	46.3	53.5	32.5	39.7	46.3
Less: Government deposits	31.7	20.1	24.1	33.3	30.6	28.4	24.6	24.2	30.8	37.1	35.9	34.2	34.0
Loans to nonbanks	50.4	85.6	78.2	81.1	57.7	60.2	67.9	81.7	98.4	103.5	137.5	154.0	194.7
Public enterprises	7.8	9.3	4.0	4.7	6.0	5.9	5.4	4.3	7.9	7.8	9.5	9.6	11.8
Private sector	28.1	43.7	31.4	33.7	34.7	36.5	45.5	60.4	76.5	81.4	114.7	127.4	163.2
Nonperforming loans	14.5	32.6	42.1	41.9	16.4	17.4	15.9	15.7	12.1	11.9	10.9	14.1	16.1
Accrued interest receivable on loan	...	...	0.7	0.8	0.6	0.4	1.1	1.2	1.8	2.3	2.5	2.9	3.6
Other assets, net	-6.1	-24.7	-35.4	-36.9	-19.1	-30.7	-26.7	-26.4	-26.4	-33.4	-35.9	-36.0	-50.1
<b>LIABILITIES</b>	121.1	113.1	135.0	135.2	136.4	150.0	157.9	176.8	189.3	202.4	226.0	246.8	271.5
Deposits	120.3	110.8	132.9	132.0	136.4	150.0	157.9	176.8	188.5	201.1	221.9	244.6	269.2
Demand deposits	26.3	26.1	27.5	23.5	24.8	29.1	29.8	29.9	29.6	35.5	47.0	45.6	55.9
Public enterprises	19.4	18.3	18.8	17.1	16.5	19.6	19.8	21.1	19.8	23.2	30.6	31.1	35.6
Private sector	6.9	7.8	8.8	6.4	8.3	9.5	10.0	8.8	9.9	12.3	16.4	14.5	20.3
Time and savings deposits	44.7	44.8	45.1	48.3	49.0	54.0	59.0	67.0	72.3	81.6	87.6	103.0	113.1
Foreign currency deposits	49.3	39.8	60.3	60.1	62.5	66.9	69.1	80.0	86.5	84.0	87.3	96.0	100.2
Borrowing from BOM	0.8	2.3	2.1	3.2	0.0	0.0	0.0	0.0	0.8	1.3	4.1	2.2	2.3
Memorandum items:													
Net foreign assets (million U.S. dollars)	50.2	6.9	29.8	37.4	39.3	50.2	43.3	47.8	40.8	40.2	39.5	38.5	32.7
Foreign currency deposits (million U.S. dollars)	60.6	44.2	56.2	55.2	58.7	61.6	63.0	72.9	78.9	76.4	79.2	86.9	90.7

Sources: Bank of Mongolia; and Fund staff estimates.



Table 30. Mongolia: Net Bank Credit to Government, 1997–2002

(In billions of togrogs)

	1997	1998	1999	2000				2001				2002	
	Dec	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun
Net credit to government from the banking system	21.3	47.9	47.7	51.0	58.6	57.3	51.3	56.1	42.0	47.9	31.5	35.9	42.3
Claims	65.9	70.9	76.7	91.5	95.8	92.5	95.2	95.4	89.4	97.0	84.3	89.9	93.7
Minus: Deposits	44.5	23.0	28.9	40.5	37.1	35.3	43.9	39.2	47.3	49.1	52.9	54.1	51.4
Bank of Mongolia (net)	17.6	29.7	32.6	43.7	53.3	48.8	34.1	38.2	26.6	31.5	35.0	30.3	30.0
Claims on Government	30.4	32.6	37.4	50.9	59.9	55.7	53.4	53.3	43.1	43.5	51.9	50.2	47.4
Advance financing to budget	0.4	2.8	0.0	4.4	13.4	9.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Loans to the MoF in CFC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FX financing without togrog funds	4.0	3.7	4.6	4.6	4.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Government bonds	13.8	19.6	19.6	19.6	19.6	19.6	19.6	20.4	10.6	9.8	13.6	12.6	8.6
Reconstruction bonds	9.8	19.6	19.6	19.6	19.6	19.6	19.6	20.4	10.6	9.8	13.6	12.6	8.6
Treasury bills	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MARA account	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Treasury IMF account	6.4	6.4	13.2	22.2	22.2	22.2	33.8	32.9	32.4	33.7	38.3	37.6	38.8
Less: Deposits	12.8	2.9	4.8	7.2	6.5	6.9	19.3	15.1	16.5	12.0	16.9	19.9	17.4
Central Government	12.3	2.3	4.8	7.2	6.5	6.9	19.3	15.1	16.5	12.0	16.9	19.9	17.4
Budget deposits	9.7	0.5	1.3	4.4	2.9	2.7	13.4	7.9	11.1	6.0	7.7	8.2	7.2
In domestic currency	2.9	0.1	0.9	1.4	1.2	1.6	7.0	5.2	4.9	3.4	3.9	5.1	4.7
In foreign currency	6.8	0.4	0.4	3.0	1.7	1.1	6.4	2.7	6.2	2.6	3.9	3.0	2.4
Budget reserves	2.6	1.8	3.4	2.6	3.3	3.8	4.3	3.9	3.3	2.7	3.5	3.1	0.9
Budget investment funds	0.0	0.0	0.1	0.2	0.3	0.3	0.1	0.2	0.2	0.6	2.0	2.4	0.8
Loan repayment account (MARA)	...	...	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	1.4	1.5
Deposits of the social insurance fund	...	...	...	...	...	...	1.3	2.9	1.8	2.5	3.6	4.8	7.0
Local Government	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Budget revenue	0.5	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial banks (net)	3.7	18.2	15.1	7.3	5.3	8.4	17.2	17.9	15.5	16.4	-3.5	5.5	12.3
Claims on Government	35.5	38.3	39.3	40.6	35.9	36.8	41.8	42.1	46.3	53.5	32.5	39.7	46.3
Advance financing of MoF	0.4	0.2	0.2	0.8	1.3	2.7	0.0	0.6	1.9	3.0	1.8	0.7	1.9
Government securities	34.8	35.8	38.1	37.9	32.5	33.6	41.8	41.0	43.8	49.4	30.6	38.5	44.3
Inherited and directed credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accrued interest receivable	0.0	2.3	1.0	2.0	2.0	0.5	0.0	0.5	0.6	1.1	0.0	0.5	0.2
Projects	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nontrade settlement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FX financing without togrog funds	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Takeover of agricultural loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Less: Government deposits	31.7	20.1	24.1	33.3	30.6	28.4	24.6	24.2	30.8	37.1	35.9	34.2	34.0
Central Government	28.6	17.2	21.4	29.2	25.6	23.0	21.0	19.7	25.0	27.9	29.9	28.0	28.6
Budget deposits	11.7	3.3	3.8	4.5	6.4	6.5	0.8	0.1	0.0	0.0	0.0	0.0	0.0
Budget reserves	1.4	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Budget funds with BITT	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current account of budget units	2.7	3.1	7.0	13.5	11.0	9.8	11.1	10.0	11.5	11.6	9.4	8.7	6.5
Social security and pension funds	7.9	8.2	10.0	11.0	8.0	6.4	8.6	9.2	12.9	15.8	20.0	18.8	21.3
Privatization funds	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Budget investment funds	0.0	0.0	0.1	0.1	0.0	0.1	0.3	0.3	0.5	0.4	0.4	0.3	0.3
Time deposits	4.3	1.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4
Repayable assistance to Reconstruction Bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Local Government	2.4	2.0	2.1	3.6	4.4	4.7	3.0	3.9	5.3	8.0	5.0	5.3	4.5
Budget revenue	1.1	0.5	0.6	1.6	2.6	2.7	1.4	1.9	2.8	4.6	2.2	2.7	2.6
Reserves	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current account of budget units	1.3	1.1	1.2	1.5	1.5	1.7	1.3	1.7	2.0	2.7	2.2	2.1	1.4
Budget investment funds	0.0	0.3	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.8	0.5	0.5	0.4
Time deposits	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts outside budget	0.6	0.9	0.6	0.4	0.6	0.7	0.6	0.5	0.6	1.2	1.0	0.9	0.9

Sources: Bank of Mongolia; and Fund staff estimates.

Table 31. Mongolia: Interest Rates, 1997-2002  
(In percent per annum)

	1997	1998	1999				2000				2001				2002
	Dec	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar	Jun	Sep	Dec	Mar
<b>Deposit rates</b>															
Current accounts	2	0.8-6	0.8-6	0.8-6	3-6	3.0-6.0	3.0-6.0	3.0-6.0	3.0-6.0	2.4-6.0	2.4-6.0	2.4-4.8	0.3-4.8	0.0-5.1	0.0-5.1
Savings deposit accounts	4-35	4-20	4-20	4-20	4-20	3.0-13.2	3.6-13.2	1.2-13.2	1.2-13.2	1.2-13.2	1.2-9.6	1.2-9.6	1.2-9.6	1.2-9.6	1.2-9.6
<b>Time deposit accounts</b>															
Domestic currency															
0-1 year	6-70	6-43	6-43	6-43	5-43	9.6-30.0	9.6-30.0	3.6-30.0	3.6-30.0	3.6-24.0	2.4-24.0	2.4-25.2	2.4-24.0	2.4-24.0	2.4-24.0
1-3 year	36-43	24-30	24-30	24-30	24-30	...	...	...	...	...	...	...	...	...	...
Foreign currency															
1-3 year	4-43	1-24	1-24	1-24	2-24	3.6-14.4	3.6-14.4	2.4-14.4	1.2-12.0	1.2-12.0	1.0-12.0	1.0-18.0	1.0-14.4	1.0-13.2	1.0-13.2
<b>Loan rates</b>															
Bank of Mongolia	45-50	23.3	23.3	17.5	17.5	11.4	11.2	15.6	10.9	8.6	11.2	12.5	9.9	8.6	11.4
Commercial loans 1/ Short-term (less than 1 year)															
Domestic currency	...	45.8	47.2	42.2	42.4	38.8	36.5	38.9	42.7	34.7	38	34.5	37.4	41.4	39.3
Foreign currency	...	34.2	37.2	34.1	30.6	36.5	31.7	27.1	29.3	25.8	21.5	22.8	21.4	22.2	21.1

Source: Bank of Mongolia.

1/ Average rates.

Table 32. Mongolia: Balance of Payments, 1997–2001 1/  
(In millions of U.S. dollars)

	1997	1998	1999	2000	2001
Trade balance	30.2	-120.1	-113.1	-140.2	-170.0
Exports, f.o.b.	568.5	462.3	454.2	535.8	523.2
Copper	199.1	124.8	119.2	160.3	147.1
Noncopper	369.4	337.5	334.9	375.5	376.1
Imports, c.i.f.	-538.3	-582.4	-567.3	-676.0	-693.1
Services balance	-7.3	-11.5	-7.4	-8.5	-22.2
Receipts	80.0	77.9	100.6	104.2	113.5
Payments	-87.3	-89.4	-108.0	-112.7	-135.7
Income, net	-14.3	0.4	-12.8	-12.4	2.9
Official interest payments	-7.6	-9.2	-7.9	-9.3	-9.0
Private unrequited transfers	4.2	2.5	5.9	8.0	25.0
Current account deficit (-), excluding official transfers	12.8	-128.8	-127.4	-153.0	-164.2
Public unrequited transfers (net)	61.5	53.3	67.1	98.6	87.4
Official grants	54.8	45.8	60.2	86.2	72.1
Other official transfers (net)	6.7	7.5	6.9	12.4	15.3
Financial and Capital account	52.5	116.4	62.4	68.3	79.0
Direct investment	20.0	18.9	34.2	40.0	43.0
Medium- and long-term loans (net)	109.8	93.7	97.2	80.5	68.8
Disbursements	142.3	122.5	173.7	151.0	167.2
Amortizations	-32.5	-28.8	-76.6	-70.5	-98.4
Commercial Banks, (net)	-18.1	40.0	-22.9	-13.5	3.6
Short-term	-59.2	-35.5	-46.1	-38.7	-36.3
Errors and omissions	-69.6	-69.8	12.7	20.2	12.5
Overall balance	57.2	-28.8	14.7	34.1	14.7
Financing	-57.2	28.8	-14.7	-34.1	-14.7
Change in net official reserves (increase -)	-64.3	15.0	-30.5	-35.2	-19.5
Arrears accumulated (+) or payments (-)	-1.6	13.8	2.0	-15.8	4.8
Exceptional financing (rescheduling)	8.7	0.0	13.8	16.8	0.0
Memorandum items:					
Current account deficit (-), excluding official transfers (in percent of GDP)	1.2	-13.2	-14.1	-15.8	-15.9
Net official reserves (end of period)	89.9	74.9	105.4	140.6	160.1
Gross official reserves (end of period)	137.5	123.2	156.8	190.9	206.8
(In weeks of next year imports)	12.3	11.3	12.1	14.3	13.5
Outstanding arrears (end of period)	0.9	13.8	15.8	0.0	4.8

Sources: Mongolian authorities; and Fund staff estimates.

1/ Beginning in 1999, BOP coverage was expanded to reflect the findings of a new private sector survey. As a result, data for 1999–2001 are not directly comparable with the corresponding data of previous years.

Table 33. Mongolia: Commodity Composition of Exports, 1997-2001

(In millions of U.S. dollars, unless otherwise indicated; unit values are denominated in U.S. dollars)

	1997	1998	1999	2000	2001
Copper concentrate (value)	199.1	124.8	119.2	160.3	147.1
Volume (concentrate in '000 tons)	479.7	485.7	492.7	496.0	540.9
Refined copper equivalent	119.1	80.5	138.0	138.9	146.0
Unit value--refined (per ton)	1671.7	1550.0	864.2	1154.1	1007.3
Molybdenum concentrate	15.7	12.1	9.0	6.2	5.1
Volume (tons)	4109.3	4131.3	4164.4	3028.2	3081.8
Unit value (per ton)	3820.6	2919.2	2167.1	2032.5	1647.9
Fluorite concentrate	23.4	18.5	16.8	19.3	19.8
Volume ('000 tons)	178.0	156.8	164.1	197.1	215.6
Unit value (per ton)	131.5	117.6	102.7	98.1	92.0
Gold	117.0	117.2	95.9	69.7	74.7
Volume (kg)	11695.9	12544.1	10960.3	7839.8	8328.7
Unit value (per kg)	10003.5	9339.9	8752.1	8892.0	8966.9
Sawn wood	20.8	34.1	4.9	0.3	0.0
Volume ('000 cubic meters)	168.7	268.1	38.3	2.5	0.1
Unit value (per cubic meter)	123.3	127.1	126.7	126.7	219.3
Cashmere tops	0.9	0.5	2.2	0.6	0.3
Volume (tons)	12.5	9.6	41.5	7.1	2.8
Unit value (per kg)	72.0	48.4	52.4	89.9	103.0
Cashmere, dehaired	31.6	33.0	45.9	54.5	55.0
Volume (tons)	590.4	849.8	1168.3	770.2	1006.6
Unit value (per kg)	53.5	38.8	39.3	70.8	54.7
Cashmere garments	10.4	5.0	7.8	13.0	11.6
Volume ('000 pieces)	275.0	152.2	314.5	428.5	325.2
Unit value (per piece)	37.8	32.8	24.8	30.4	35.7
Cashmere, greasy/raw	16.2	0.3	14.4	21.9	0.9
Volume (tons)	824.6	16.2	799.5	717.2	50.2
Unit value (per kg)	19.6	18.9	18.0	30.5	17.3
Textiles	26.1	23.7	18.4	73.2	16.2
Volume ('000 pieces)	2890.0	3786.1	4399.6	6696.7	7701.5
Unit price	9.0	6.3	4.2	10.9	2.1
Camel wool, raw	2.1	1.4	1.7	1.7	2.2
Volume (tons)	904.2	664.3	893.3	836.8	964.0
Unit value (per kg)	2.3	2.1	1.9	2.0	2.3
Skin and hides	21.1	23.8	23.9	34.9	16.3
Volume ('000 pieces)	2600.0	2798.5	2688.2	4395.8	1579.0
Unit price	8.1	8.5	8.9	8.0	10.3
Leather goods	3.7	0.3	0.0	0.0	0.0
Volume ('000 pieces)	37.0	2.1	0.0	0.0	...
Unit value (per piece)	100.0	149.8	...	...	...
Sheepskin coats	0.0	0.1	0.1	0.2	0.3
Volume ('000 pieces)	0.4	0.8	6.1	1.1	1.4
Unit value (per piece)	56.5	158.0	17.2	218.6	222.2
Carpets	0.0	0.0	0.9	1.4	0.0
Volume ('000 square meters)	3.1	0.0	28.9	68.1	0.0
Unit value (per square meter)	14.5	...	32.1	19.9	...
Meat	9.0	8.7	13.2	15.8	12.0
Volume ('000 tons)	6.4	6.7	13.2	16.7	13.5
Unit value (per ton)	1406.3	1287.6	997.7	948.2	888.0
Scrap Metal	16.1	9.5	5.6	5.2	4.0
Volume ('000 tons)	90.1	32.2	17.1	20.2	10.7
Unit value (per ton)	179.1	294.6	325.0	259.1	371.7
Other	55.2	49.6	74.2	57.5	157.6
<b>Total</b>	<b>568.5</b>	<b>462.3</b>	<b>454.2</b>	<b>535.8</b>	<b>523.2</b>

Sources: Mongolian authorities and Fund staff estimates.

Table 34. Mongolia: Commodity Composition of Imports, 1997–2001  
(In millions of U.S. dollars)

	1997	1998	1999	2000	2001
Food	76.5	80.9	60.8	101.9	113.1
Live animals and animal products	1.3	1.4	1.1	2.1	4.9
Vegetable products	32.0	26.7	18.0	46.4	51.0
Animal and vegetable oil	5.0	6.1	5.6	6.1	6.8
Prepared food	38.2	46.6	36.1	47.2	50.4
Energy	91.2	91.3	85.2	120.3	143.8
Mineral products	91.2	91.3	85.2	120.3	143.8
<i>Of which</i> : Petroleum products	73.6	72.1	71.8	109.8	124.0
Equipment Goods	170.1	194.9	231.1	200.3	180.4
Machinery and equipment	124.9	127.1	176.7	133.3	112.5
Vehicles and transportation equipment	45.2	67.8	54.4	67.0	67.9
Raw Materials and Spare Parts	66.1	62.8	44.3	56.4	73.2
Chemical products	26.3	29.4	20.2	28.1	33.0
Raw hides and skins	0.7	0.2	0.4	0.2	0.7
Building materials	6.2	5.0	4.4	5.5	9.8
Metals	32.8	28.2	19.3	22.7	29.8
Consumer Goods	64.5	73.5	91.3	135.6	119.5
Rubber products	11.8	10.3	12.6	13.3	15.1
Wood and wood products	4.0	1.8	0.9	1.7	2.2
Cellulosic materials	6.4	7.7	6.2	8.7	10.3
Textile	26.5	31.5	46.2	79.9	63.3
Footwear and clothes	1.3	2.3	1.2	1.8	2.2
Measuring instruments	7.7	11.6	17.2	21.1	17.5
Manufactured articles	6.8	8.3	7.0	9.1	8.9
Other imports	35.1	79.1	51.3	61.5	63.0
Total (c.i.f)	538.3	582.4	567.3	676.0	693.1
Memorandum items:					
Nonfood imports	461.8	501.5	506.5	574.1	580.0
Nonenergy imports	447.1	491.1	482.1	555.7	549.3

Sources: Mongolian authorities and Fund staff estimates.

Table 35. Mongolia: Direction of Trade, 1997-2001

(In percent of total exports or imports)

	1997	1998	1999	2000	2001
Exports 1/	100.0	100.0	100.0	100.0	100.0
Countries of the former CMEA	10.6	11.9	13.7	10.4	10.6
Former U.S.S.R.	10.6	11.9	13.6	10.4	10.6
Russia	10.4	11.8	13.5	9.7	10.3
Kazakhstan	0.2	0.1	0.1	0.2	0.2
Other	0.1	0.0	0.0	0.5	0.0
Former Czechoslovakia 2/	0.0	0.0	0.0	0.0	0.0
Korea, Democratic People's Republic of	0.0	0.0	0.1	0.0	0.0
EU countries	10.4	10.7	10.0	7.5	6.5
Belgium	0.3	1.0	0.3	0.3	0.3
France	0.1	0.1	0.2	0.4	0.0
Germany	1.4	0.6	0.7	0.4	0.6
Italy	2.5	2.9	4.1	3.1	3.0
Netherlands	0.6	1.0	1.0	0.7	0.7
United Kingdom	5.3	3.7	3.8	2.4	1.7
Austria	0.0	0.0	0.0	0.0	0.0
Finland	0.0	1.1	0.0	0.0	0.0
Other	0.2	0.2	0.0	0.1	0.0
Other	79.1	77.4	76.4	82.1	83.0
China	21.8	29.3	57.1	57.3	53.7
Hong Kong, China	1.1	2.6	1.0	1.6	1.5
Japan	8.4	3.7	3.0	1.7	3.3
Korea	9.8	9.6	0.6	0.6	0.9
Singapore	0.0	0.4	0.3	0.0	0.0
Switzerland	31.0	20.4	0.2	0.2	0.1
United States	5.6	8.5	12.9	19.9	22.0
Federal Republic of Yugoslavia (Serbia/Montenegro)	0.0	0.0	0.0	0.0	0.0
Other	1.4	2.9	1.3	0.8	1.6
Imports	100.0	100.0	100.0	100.0	100.0
Countries of the former CMEA	37.3	35.4	33.3	37.5	40.9
Former U.S.S.R.	36.3	31.5	30.5	35.8	38.7
Russia	35.4	29.9	29.2	33.6	36.4
Kazakhstan	0.4	0.7	0.1	1.1	0.6
Other	0.5	1.0	1.2	1.2	1.7
Bulgaria	0.7	0.8	0.6	0.0	0.2
Former Czechoslovakia 2/	1.6	1.3	1.0	0.6	1.0
Hungary	0.4	0.4	0.3	0.3	0.2
Poland	1.1	1.3	0.9	0.8	0.7
Korea, Democratic People's Republic of	0.0	0.0	0.0	0.0	0.0
EU countries	20.2	17.8	10.3	11.4	10.6
Denmark	2.8	0.2	0.6	0.7	1.3
France	2.3	5.3	1.7	1.4	0.9
Germany	4.3	5.1	4.6	4.8	5.1
United Kingdom	1.1	0.7	0.8	1.0	0.7
Austria	0.0	3.2	0.1	0.3	0.1
Finland	0.4	1.2	1.1	0.8	0.6
Other	9.3	2.1	1.5	1.4	1.2
Other	42.5	46.8	56.4	51.1	48.5
China	12.9	11.6	13.5	17.8	19.3
Hong Kong, China	1.2	1.6	1.1	2.6	2.5
India	0.1	0.3	0.4	0.3	0.2
Japan	7.4	11.8	22.4	11.9	9.5
Korea	4.4	7.5	7.1	9.0	9.7
Singapore	3.8	3.4	1.8	1.7	1.5
Switzerland	0.4	0.2	0.5	0.5	0.8
United States	7.9	7.2	6.1	4.6	2.5
Federal Republic of Yugoslavia (Serbia/Montenegro)	0.0	0.0	0.0	0.0	0.0
Other	4.4	3.1	3.6	3.6	3.2

Sources: Mongolian authorities; and Fund staff estimates.

1/ Data for exports of copper refer to country of initial purchaser rather than country of destination of final product.

2/ Data after 1993 refer to Czech Republic and Slovak Republic.

Table 36. Mongolia: Services and Income Accounts, 1998–2001  
(In millions of U.S. dollars)

	1998		1999		2000		2001	
	Receipts	Payments	Receipts	Payments	Receipts	Payments	Receipts	Payments
<b>SERVICES</b>								
Passenger fares	11.8	4.6	7.3	3.5	7.3	3.4	10.1	4.4
Railway	6.0	2.1	2.2	1.2	1.9	1.1	3.7	1.1
Airline	5.8	2.5	5.1	2.3	5.4	2.3	6.4	3.3
Port services	18.2	15.9	2.9	24.5	3.1	12.3	3.1	23.6
Transit fees	2.2	2.6	18.8	1.2	20.9	1.6	22.6	2.4
Travel	35.0	45.1	35.6	40.9	35.9	51.3	39.3	55.3
Embassy expenses abroad	2.7	4.5	2.0	5.5	3.4	5.3	3.9	5.3
Embassies/international organizations	0.5	0.0	0.5	0.0	0.5	0.0	0.4	2.4
Commissions	0.0	0.8	0.0	0.5	4.3	0.8	0.0	1.0
Communications	7.2	6.0	7.5	4.2	7.7	4.4	7.7	4.4
Technical Assistance	0.0	6.5	0.0	7.5	0.0	13.2	0.0	15.3
Other	0.3	3.4	26.1	20.1	21.1	20.3	26.4	21.6
Total	77.9	89.4	100.7	107.9	104.2	112.6	113.5	135.7
<b>INCOME</b>								
Direct investment income	0.0	0.1	0.0	2.9	0.0	5.3	0.0	3.4
Interest on bank deposits	8.8	0.0	6.7	0.0	11.0	0.0	10.8	0.1
Interest on debt	0.0	9.2	0.0	15.9	0.0	19.4	0.0	13.6
Official Medium- and long-term	0.0	9.2	0.0	7.9	0.0	9.3	0.0	9.0
Short-term	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private Sector	0.0	0.0	0.0	8.0	0.0	10.1	0.0	4.5
Interest on trade credit	...	...	0.0	0.4	0.0	0.4	0.0	0.4
Other interest	0.9	...	0.0	0.3	2.0	0.3	9.9	0.3
Total	9.7	9.3	6.7	19.5	13.0	25.4	20.7	17.8

Sources: Mongolian authorities; and Fund staff estimates.

Table 37. Mongolia: Medium- and Long-Term Loan Disbursements, 1997–2001  
(In millions of U.S. dollars)

	1997	1998	1999	2000	2001
Official loans	134.3	93.7	101.9	71.0	84.2
Japan	12.9	36.4	32.5	20.2	16.3
Balance of payments support	0.0	0.0	0.0	0.0	0.0
Project	12.9	36.4	32.5	20.2	16.3
Germany	5.1	4.7	4.8	4.8	9.9
China	7.1	0.3	0.0	0.0	0.0
Balance of payments support	0.0	0.0	0.0	0.0	0.0
Project	7.1	0.3	0.0	0.0	0.0
Korea	0.0	0.1	2.5	0.0	0.5
Russia	0.0	0.0	0.0	0.0	0.0
India	0.0	0.0	0.0	0.0	0.0
Norway	7.0	2.7	0.4	0.0	0.0
Kuwait	0.7	1.0	1.0	1.1	3.8
World Bank	34.0	16.4	13.0	13.3	23.0
Balance of payments support	9.3	0.0	0.0	0.0	11.1
Project	24.1	2.4	12.6	13.1	11.3
Technical assistance	0.6	14.0	0.4	0.2	0.6
Asian Development Bank	67.4	31.8	47.1	31.3	30.0
Balance of payments support	35.9	0.0	16.1	12.2	10.0
Project	31.5	5.1	31.0	19.1	20.0
Technical assistance	0.0	26.8	0.0	0.0	0.0
IFAD	0.3	0.3	0.6	0.3	0.7
Commercial loans	8.0	28.8	71.9	80.0	83.0
Copper mine	0.0	0.0	...	...	...
Mini-metal project	0.0	0.0	...	...	...
Airplanes	0.0	28.8	...	...	...
Leather factory	6.0	0.0	...	...	...
Commercial bank	2.0	0.0	...	...	...
Other	0.0	0.0	...	...	...
Total	142.3	122.5	173.7	151.0	167.2

Sources: Ministry of Finance and Economy, and Fund staff estimates.



Table 38. Mongolia: Short-Term Capital Flows, 1997–2001  
(In millions of U.S. dollars)

	1997	1998	1999	2000	2001
Import credits	-16.0	-0.2	-9.5	-6.6	-11.5
Inflows	6.1	12.3	3.4	5.4	5.0
Erdenet	...	...	3.0	5.0	4.3
Others	...	...	0.4	0.4	0.7
Outflows	22.1	12.5	12.9	12.0	16.5
Erdenet	...	...	12.9	9.5	16.5
Trade credit extended on exports	-11.1	7.2	-0.3	4.1	3.3
Inflows	-11.1	8.2	5.2	6.5	4.5
Erdenet	...	...	5.2	6.5	4.5
Outflows	0.0	1.0	5.5	2.4	1.2
Others	...	...	5.5	2.4	1.2
Others	-0.1	-0.4	-3.1	-7.2	-7.1
Inflows	6.2	9.4	10.0	10.9	11.8
Erdenet	...	...	3.0	4.1	3.7
Others	...	...	7.0	6.8	8.1
Outflows	6.3	9.8	13.1	18.1	18.9
Erdenet	...	...	5.9	7.7	7.9
Others	...	...	7.2	10.4	11.0
Total	-27.2	6.6	-12.9	-9.7	-15.3

Sources: Mongolian authorities; and Fund staff estimates.

Table 39. Mongolia: Official International Reserves of the Bank of Mongolia, 1997–2002  
(In millions of U.S. dollars, end of period)

	1997	1998	1999	2000	2001	2002 May
Gross foreign assets	137.5	123.2	156.8	190.9	206.8	219.9
Cash	1.5	2.9	3.1	3.6	7.3	11.4
SDR holdings	0.7	0.5	0.2	0.1	0.0	0.0
Reserve position in the IMF	0.0	0.0	0.0	0.0	0.1	0.0
Monetary gold	24.6	9.1	0.4	22.5	51.1	9.8
Current account	0.6	1.1	0.9	6.5	2.0	55.6
Deposit account	78.7	89.6	127.8	114.5	124.6	114.6
Foreign government bills	33.8	23.5	20.3	43.6	21.6	28.4
Short-term foreign liabilities	47.6	48.3	51.4	50.2	46.8	46.6
Borrowing from banks	0.0	0.0	0.0	0.0	0.0	0.0
International Bank for Economic Cooperation	0.0	0.0	0.0	0.0	0.0	0.0
International Investment Bank	0.0	0.0	0.0	0.0	0.0	0.0
Use of Fund credit	47.6	48.3	51.4	50.2	46.8	46.6
Net international reserves 1/	89.9	74.9	105.4	140.6	160.1	173.3

Sources: Bank of Mongolia; and Fund staff estimates.

1/ Beginning in December 2000, includes foreign exchange assets arising from commercial banks' foreign exchange deposits with the Bank of Mongolia.

Table 40: Mongolia: Selected Indicators of Commercial Bank Foreign Exchange Operations, 1997–2002

	1997	1998	1999	2000	2001	2002 May
Foreign assets (US\$ million)	81.7	29.0	38.9	48.7	47.5	39.7
Cash	5.6	3.1	4.5	4.3	6.6	5.3
Demand deposits	44.4	19.0	6.1	6.1	13.2	8.5
Time deposits	31.7	6.8	28.3	38.1	27.6	25.8
Other assets	0.0	0.0	0.0	0.1	0.0	0.0
Foreign liabilities (US\$ million)	15.1	22.1	9.1	5.3	8.0	9.7
Deposits of foreign banks and non residents	8.6	0.0	1.0	1.0	1.5	0.9
Loans from foreign banks	5.3	7.9	2.8	0.5	0.5	0.9
Other foreign liabilities	1.2	14.2	5.3	3.8	6.0	7.9
Foreign currency denominated loans (US\$ million)	20.2	44.3	28.3	25.0	45.4	58.9
Summary indicators (in percent)						
FC loans/total loans	31.9	46.3	38.8	40.3	36.4	36.1
Non-performing loans/total loans (forex)	20.3	16.7	44.8	17.7	5.9	6.3
Non-performing loans/total loans (togrog)	32.8	56.9	60.5	28.1	9.3	8.7
Foreign currency deposits (US\$ million)	60.6	44.2	56.2	63.0	79.2	89.2
Summary indicators (in percent)						
FC deposits/total deposits	41.0	35.9	45.4	43.7	39.3	37.6
FC current accounts/total current accounts	57.4	49.2	56.2	54.2	46.2	49.1
FC demand deposits/total demand deposits	31.2	37.9	48.2	47.2	51.6	46.6
FC time and savings deposits/total time and savings deposits	21.0	19.8	31.2	31.7	29.6	25.8

Sources: Bank of Mongolia; and Fund staff estimates.

Table 41. Mongolia: External Debt and Debt Service, 1997–2001

	1997	1998	1999	2000	2001
(In millions of US dollars)					
External debt	604.8	759.0	827.8	837.0	853.5
Medium- and long-term	557.3	710.7	776.4	786.7	806.7
IMF	47.6	48.3	51.4	50.3	46.8
Short-term	0.0	0.0	0.0	0.0	0.0
Debt service	41.0	36.2	31.9	24.2	33.8
Amortization	35.0	28.3	24.1	14.9	24.8
Interest	6.0	8.0	7.8	9.3	9.0
Medium- and long-term	39.9	34.7	27.9	17.5	26.8
Amortization	34.1	27.0	20.3	8.5	18.0
Interest	5.8	7.7	7.6	9.0	8.8
IMF	1.1	1.5	4.0	6.6	7.0
Repurchase/Repayments	0.9	1.3	3.8	6.3	6.8
Charges	0.2	0.2	0.2	0.3	0.2
Short-term	0.0	0.0	0.0	0.0	0.0
(In percent)					
External debt/GDP	57.4	78.1	91.4	86.3	82.9
Medium- and long-term	52.9	73.1	85.7	81.1	78.3
IMF	4.5	5.0	5.7	5.2	4.5
Short-term	0.0	0.0	0.0	0.0	0.0
External debt/exports of goods & services	93.3	140.5	149.2	130.8	134.1
Medium- and long-term	85.9	131.6	139.9	122.9	126.7
IMF	7.3	8.9	9.3	7.9	7.4
Short-term	0.0	0.0	0.0	0.0	0.0
Debt-service ratio 1/	6.3	6.7	5.7	3.8	5.3
Amortization	5.4	5.2	4.3	2.3	3.9
Interest	0.9	1.5	1.4	1.5	1.4
Medium- and long-term	6.2	6.4	5.0	2.7	4.2
Amortization	5.3	5.0	3.7	1.3	2.8
Interest	0.9	1.4	1.4	1.4	1.4
IMF	0.2	0.3	0.7	1.0	1.1
Repurchase/repayments	0.1	0.2	0.7	1.0	1.1
Charges	0.0	0.0	0.0	0.0	0.0
Short-term	0.0	0.0	0.0	0.0	0.0

Sources: Mongolian authorities; and Fund staff estimates.

1/ In percent of goods and services.

Table 42. Mongolia: External Debt Stock by Creditor, 1997–2001  
(In millions of U.S. dollars, end of period)

	1997	1998	1999	2000	2001
External Debt	604.8	759.0	827.8	837.0	853.5
Medium and long-term official	518.0	647.0	763.4	773.7	793.6
Multilateral (excluding IMF)	288.0	350.8	412.5	437.2	474.5
Asian Development Bank	193.3	234.7	281.6	298.8	319.3
World Bank	94.4	115.5	129.6	136.9	153.1
IFAD	0.3	0.6	1.3	1.5	2.1
Bilateral official	229.9	296.3	350.9	336.5	319.1
Paris Club	212.3	275.4	322.2	306.6	283.5
Japan	112.3	171.6	214.8	208.4	193.6
Russia	51.9	50.2	51.5	43.3	26.4
Germany	31.7	36.0	37.6	37.5	46.5
Finland	8.2	6.2	6.2	6.0	6.0
Norway	8.2	11.4	12.1	11.4	11.0
Non-Paris Club	17.6	20.9	28.7	29.9	35.6
China	13.0	14.3	15.5	15.5	15.5
Korea	2.4	2.9	8.7	8.1	7.9
India	1.5	1.3	1.2	1.0	0.9
Hungary	0.0	0.0	0.0	0.0	0.0
Kuwait	0.7	2.4	3.3	5.3	9.2
IMF	47.6	48.3	51.4	50.3	46.8
Commercial	39.3	64.1	13.0	13.0	13.1
Short-term	0.0	0.0	0.0	0.0	0.0

Sources: Ministry of Finance and Economy, and Fund staff estimates.

Table 43. Mongolia: Monthly Exchange Rates, 1998–2002  
(In togrogs per U.S. dollar, period average)

	Official rate 1/	Interbank rate 2/	Street rate
<b>1998</b>			
January	815.2	816.9	821.3
February	816.6	818.2	820.9
March	816.7	817.6	821.1
April	818.0	818.6	820.7
May	821.4	823.9	831.1
June	833.6	838.9	849.6
July	839.3	842.4	852.8
August	846.3	853.5	866.1
September	852.0	856.0	863.6
October	857.9	863.9	871.8
November	872.5	880.5	889.1
December	891.9	905.4	911.9
<b>1999</b>			
January	916.5	929.7	944.1
February	975.2	982.0	986.5
March	1019.6	1049.2	1066.3
April	1024.9	1017.5	1014.2
May	1004.4	1001.3	1003.3
June	1008.1	1008.9	1012.7
July	1015.0	1017.1	1020.7
August	1035.2	1041.5	1047.5
September	1052.5	1055.6	1061.0
October	1065.7	1069.2	1075.3
November	1074.2	1075.4	1076.3
December	1070.4	1070.4	1072.6
<b>2000</b>			
January	1080.8	1084.8	1092.1
February	1089.2	1090.3	1094.6
March	1091.8	1091.7	1090.5
April	1059.6	1044.4	1045.5
May	1024.7	1025.3	1029.9
June	1053.6	1060.7	1066.8
July	1071.3	1073.3	1076.7
August	1078.8	1080.9	1082.9
September	1084.5	1085.2	1088.3
October	1089.7	1089.4	1093.8
November	1096.6	1097.4	1100.1
December	1097.0	1097.5	1099.0
<b>2001</b>			
January	1097.8	1098.7	1101.5
February	1099.0	1099.2	1099.8
March	1098.0	1098.1	1098.3
April	1093.0	1092.7	1092.3
May	1092.5	1092.7	1094.1
June	1096.0	1096.1	1097.5
July	1096.7	1096.9	1098.1
August	1098.4	1098.6	1100.2
September	1099.5	1099.2	1099.4
October	1099.6	1099.7	1100.2
November	1100.0	1100.2	1101.1
December	1101.3	1101.4	1102.1
<b>2002</b>			
January	1102.0	1102.2	1103.0
February	1103.4	1103.4	1103.5
March	1104.0	1103.9	1103.5
April	1104.0	1103.7	1103.2
May	1103.4	1103.1	1103.1

Source: Bank of Mongolia.

1/ Midpoint rate announced by the Bank of Mongolia.

2/ Midpoint rate established in the interbank foreign exchange market.

## MONGOLIA—TRADE REGIME

### Trade regime

1. Mongolia maintains a liberal trade regime with a low uniform level of import tariffs of 5 percent, a limited number of export taxes and no significant quantitative trade restrictions (Table 1). It has a minimum level 1 of the trade restrictiveness rating computed by the IMF.<sup>1</sup> The import tariffs levels are among the lowest in the Asian region. Between May 1997 and July 1999 there were no import tariffs (0 rate).
2. Prior to 1991, Mongolia maintained a system of multiple customs tariffs. A number of products were subject to export and import prohibitions. In addition, a regime of (non-automatic) licensing applied to many products, including meat, grain, fodder, refined spirits, and alcoholic beverages. The export of raw cashmere was prohibited. Mongolia also maintained substantial export subsidies for sectors such as mining, metal processing, machinery, and infrastructure.
3. Mongolia applied for membership to the World Trade Organization (WTO) in 1991. As part of the accession procedures, the trade system was gradually liberalized. Mongolia joined the WTO in January 1997. Under the rules of accession, Mongolia agreed to bind its entire tariff schedule at a ceiling rate of 20 percent (with some exceptions and specific tariff concessions). However, most of the applicable ceilings were higher than the general 15 percent rate prevailing in Mongolia at that time. The prohibition on exports of raw cashmere was replaced by an export tax in 1997, which Mongolia agreed to phase out by 2007. Shortly after the accession to the WTO all import tariffs were abolished on May 1, 1997. On July 1, 1999 a uniform import tariff rate of 5 percent was introduced with exceptions for a few goods (Table 1). On January 1, 2001, import tariffs were temporarily increased to a uniform rate of 7 percent, but they were brought back down to a uniform rate of 5 percent on January 1, 2002.
4. Mongolia receives benefits under the Generalized System of Preferences as administered by Australia, Japan, New Zealand, Norway, Switzerland, the European Union countries, Bulgaria, Czech Republic, Russia, and Slovakia.

### Procedures

5. Export and import procedures are regulated by the Mongolian customs law. There are 33 permanent and temporary customs duty ports. As part of its membership in the WTO, Mongolia is committed to adhere to the WTO customs valuation agreement as of

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<sup>1</sup> Source: IMF Trade Policy Information Database (TPID). More information on the construction of the trade restrictiveness rating can be found in the study, Trade Liberalization in IMF-Supported Programs.

January 2000. The main changes that Mongolia would need to introduce under this agreement relate to standardization of the customs forms and the adoption of the unified transaction method for valuation of imported goods.

6. For clearance of goods, exporters and importers are required to fill out a declaration form and pay the prescribed duties/taxes. They may also be required to submit relevant documents, including trade contracts, invoices, transport documents, packing lists, certificates of origin, verification of prior payments of taxes, bank securities, and import licenses and permits (where applicable).

7. Gold and other precious metals may be exported through the Bank of Mongolia (BOM), authorized commercial banks, or by holders of mining licenses themselves. In practice, however, no major institution other than the BOM has so far been licensed to export gold. As a result, the BOM has in recent years been the main purchaser of gold from gold mines and commercial banks at the international price and the sole exporter of gold from Mongolia. In all cases, the amount and content of exports are subject to registration at the BOM. In addition, the exports need to be certified by the Precious Metals Grading Bureau of the Ministry of Finance and Economy. Exporters are charged for the costs of the laboratory tests.