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To: Members of the Executive Board

From: The Secretary

Subject: **Bhutan—Selected Issues and Statistical Appendix**

This paper provides background information to the staff report on the 2002 Article IV consultation discussions with Bhutan (SM/03/57, 2/7/03), which is tentatively scheduled for discussion on **Friday, February 21, 2003**. At the time of circulation of this paper to the Board, the Secretary's Department has not received a communication from the authorities of Bhutan indicating whether or not they consent to the Fund's publication of this paper; such communication may be received after the authorities have had an opportunity to read the paper.

Questions may be referred to Ms. Abdelati (ext. 37246) and Mr. Peiris (ext. 39363) in APD.

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BHUTAN

Selected Issues and Statistical Appendix

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Approved by Asia and Pacific Department

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I. BHUTAN'S EXCHANGE RATE REGIME: A COMPARISON WITH SIMILAR REGIMES¹

A. Introduction

1. **Bhutan is unusual in that its currency is pegged to a nonreserve currency.** The Bhutanese currency, the ngultrum is pegged to the Indian rupee at par and the exchange rate regime bears some resemblance to a currency board arrangement. This chapter describes the exchange rate regime in Bhutan and compares it with similar regimes in other countries. Through this comparison, the chapter highlights key policy implications for Bhutan.

2. **The discussion is organized in three main sections.** The first section provides a historical background to the evolution of Bhutan's exchange rate regime and monetary framework. The second section discusses some key implications of the exchange rate and monetary framework for policy formulation. The third section compares the Bhutanese regime with that in similar countries. The last section concludes.

B. Historical Background of Bhutan's Exchange Rate Regime²

3. **The Bhutanese economy was largely unmonetized until the early 1960s.** A small amount of "tikchung" coins, or "half-rupee," had been issued, but these were not widely used.³ Barter transactions prevailed, there was no national currency, and even government taxes were collected in kind or as a labor contribution. Monetization began to occur on a significant scale during the First Five-Year Plan which commenced in 1961. Aid inflows from India to finance the Plan and growing trade resulted in increased availability of Indian rupees, which became an accepted medium of exchange. However, barter arrangements continued to dominate.

4. **The Indian rupee remained the main currency until the 1980s.** When the first commercial bank, the Bank of Bhutan (BoB), was established in 1968, it attempted to provide Indian rupees in exchange for the "tikchung" in circulation. But within two years, the BoB ran into difficulties and could not continue to honor the exchange between the rupee and the tikchung. As a result, the BoB was reorganized with assistance from the State Bank of India, which became a 40 percent shareholder. Tikchungs remained in circulation only as small coins, and were gradually replaced by Indian rupees obtained through a loan from the Government of India.

¹ Prepared by Wafa Abdelati.

² The discussion of the monetary history of Bhutan is based on Penjore (2000).

³ About 100,000 coins were struck in the Calcutta mint for Bhutan between 1928 and 1930, and between 1950 and 1954. See Rhodes (2001).

5. **The ngultrum was introduced in 1974 alongside the Indian rupee, and was not intended to replace it completely.** The ngultrum has been pegged to the Indian rupee at par ever since then, and the Indian rupee circulates freely in Bhutan and serves as legal tender. The continued use of the Indian rupee together with the peg, has had benefits for Bhutan in terms of promoting trade, supporting the free trade agreement with India, and accelerating the process of monetization.

6. **The Royal Monetary Authority (RMA) was established in 1982, and its responsibilities have grown over time.** One of its first tasks was to encourage the rate of monetization of the economy. A rural credit program aided in raising the amount of notes in circulation from 1 percent of GDP at the end of 1983 to 4 percent by 1990. The RMA's mandate includes responsibility to "regulate the availability of money and its international exchange," to "promote monetary stability," to manage the country's reserves, and to be the banker and fiscal advisor to the government. The Act provides for the RMA to introduce reserve requirements (up to 40 percent of banks' deposit liabilities) and to establish a discount facility. Also, the Financial Institutions Act of 1992 bestowed on RMA the responsibility for regulating and supervising financial institutions. Responsibility for monetary and foreign exchange policy is shared with the Ministry of Finance; the Minister of Finance is Chairman of the RMA Board and the Finance Secretary is Vice Chairman.

	1980	1985	1990	1995	2000	2001
GDP (in millions of U.S. dollars)	142	193	285	310	483	507
Per capita GDP (US\$)	239	297	438	462	703	708
Total reserves (US\$)	...	50.3	86.0	124.3	295.4	284.6
Share of convertible currency reserves (in percent)	...	34.6	71.3	97.4	72.2	67.2
Currency/GDP (in percent)	...	2.9	3.9	4.3	5.9	6.7
M2/GDP (in percent)	...	19.4	21.6	32.3	45.8	44.8
Reserves/currency ratio	...	8.69	8.01	10.11	10.88	8.51
Reserves/M0 ratio	...	3.00	1.23	2.03	2.29	2.23
Reserves/M1 ratio	...	2.34	2.88	3.31	3.51	2.71
Reserves/M2 ratio	...	1.32	1.44	1.35	1.39	1.28
Private sector credit as a share of bank deposits and foreign reserves (in percent)	...	11.9	20.0	23.1	17.6	22.6
Exports/GDP (in percent)	13.1	15.4	28.3	36.9	29.8	19.3
Imports/GDP (in percent)	36.1	47.2	32.3	41.6	46.1	37.1
Share of Exports to India (in percent)	...	...	...	74.3	94.9	94.1
Share of Imports from India (in percent)	...	...	...	75.1	82.0	77.5
Total external (in millions of U.S. dollars)	...	144.2	139.0	136.0	173.8	236.8
Share of debt in Rupees (in percent)	...	44.6	42.2	40.6	42.6	54.5

Source: IFS Statistics; RMA Annual Report; staff estimates.

1/ Monetary and trade data on calendar year basis, other data is based on fiscal year.

7. **Statutory foreign exchange reserve backing for the currency was not stipulated in the RMA legislation.** Rather, the RMA is charged with the responsibility for maintaining reserves at a level "adequate for the international transactions of Bhutan." De facto, however, the RMA has maintained reserves at well over 100 percent of currency issue (typically more than 800 percent, see table). Initially, most of the currency was backed by Indian rupee reserves, but now around two thirds of reserves are in convertible currencies. Also, the legislation does not commit the RMA to ensuring full convertibility of the ngultrum for Indian rupees, although this continues as an unwritten commitment and is viewed as essential to ensure the sustainability of the exchange rate arrangement. Although there are no exchange restrictions on current account transactions in Indian currency, all other transactions are

subject to foreign exchange regulations. Exporters are required to repatriate are not allowed to retain their hard currency export proceeds and deposit them with the banking system.⁴

8. **Over the past two decades, the RMA has experimented with a number of instruments of monetary policy.** These include:

- **Quantitative credit limits** and directed lending to priority sectors were initially used in the 1980s but have been phased out.
- **Administered deposit and lending interest rates** were also discontinued and interest rates have been liberalized since 1996. However, banks have not changed interest rates much from their previously determined levels (Figure I.1).
- **RMA discount bills** were introduced in December 1993. Their use remains limited with only about Nu 900 million outstanding at end June 2002. The average interest rate on outstanding bills is currently low at around 4 percent.
- **A reserve repurchase** was introduced in September 1996 for an amount of Nu 500 million. The repurchase was rolled over until January 2002, when it was discontinued.
- **Cash reserve requirement.** This was set at 3 percent when it was introduced in 1984. It was raised to 15 percent in 1994, cut to 10 percent in 2000, and then raised again to 20 percent in July 2002, at which point the interest payable was raised from 2 percent to 3 percent.
- The RMA Act provides for use of **liquidity support facilities**, but given the prevalence of excess liquidity, there has been no need to provide such lending facilities for deposit money banks.

C. Implications of the Exchange Regime and Monetary Framework

9. **The peg to the Indian rupee and its free circulation has been beneficial for Bhutan**, given its trade pattern which is mainly directed toward India. Moreover, given the very large size of the neighboring economy, its role as the largest trading partner for Bhutan, and the long and porous border, it would be impractical to prevent the Indian rupee from circulating within Bhutan.

10. **A the same time, the choice of a fixed exchange rate regime as a monetary anchor and a dual currency limits monetary policy flexibility.** Given the fixed exchange

⁴ The Foreign Exchange Regulations allow for exporters to retain 10 percent of their receipts in foreign currency accounts, but this provision has apparently not come into effect.

rate, the domestic money supply is largely determined by changes in international reserves. Sizeable balance of payments surpluses in recent years due to buoyant electricity export earnings and foreign aid inflows have contributed to a buildup of excess liquidity. The balance of payments surpluses with India have also contributed to increasing the stock of Indian rupees in circulation, making it difficult for the authorities to monitor monetary aggregates.

11. **Given the absence of trade restrictions on the flow of goods between the two countries, the authorities are unable to measure the amount of Indian rupees in circulation in Bhutan.** The amount of Indian rupees in circulation is believed to be fairly limited, on account of the relative confidence in the ngultrum afforded by the policy of unlimited convertibility for current account transactions.⁵

12. **In addition to the reserve buildup, a number of structural constraints have contributed to the buildup of excess liquidity.** Earlier rigidities in interest rates discouraged lending. Lending rates were stipulated according to loan categories, and a minimum return of 10 percent required for investments made by the Employee Provident Fund acted as an effective floor on lending rates.⁶ Demand for credit has been low, and banks have been unable to find viable lending opportunities at the prescribed rates and were sometimes forced to accept more risky investments. Rudimentary loan appraisal skills and high collateral requirements also served to dampen credit expansion. Domestic credit has typically amounted to a small fraction of deposits and bank reserves (between 12 percent and 23 percent between calendar year 1985 and 2001).

13. **Managing excess liquidity has been a challenge for RMA.** The RMA liberalized interest rates to encourage lending in 1997, and removed the limit on interest rate spreads. However, banks have maintained deposit and lending rates at close to their pre-liberalized levels. Deposit rates in Bhutan, which were 10 percent in 1997 compared to 10½-11 percent in India, were 9 percent at the end of 2002 compared to 6-7 percent in India. Rather than buy Indian rupees from the commercial banks, the RMA has allowed the banks to invest the rupees in Indian bank deposits as a way of reducing excess liquidity. However, the RMA has recently issued a new directive for banks to repatriate some of these deposits and sell them to the RMA.⁷

⁵ Penjore (2000) estimates that rupees constituted 24-34 percent of total currencies in circulation in 1997, by assuming that an overall currency/GDP ratio of 7-8 percent would be reasonable for Bhutan.

⁶ See SM/95/273 for further description.

⁷ This measure is intended to avoid shortages of rupees in Bhutan that have arisen on occasion from the banks having invested in fixed term deposits in India. Making sufficient
(continued...)

14. **The exchange rate peg could potentially lead to a loss of competitiveness.** This could arise if domestic inflation becomes higher than in India but there has been no systematic trend in this direction over the last decade (Figure I.2).⁸ Although Bhutan's main export to India, hydropower, is based on long-term supply contracts and demand would be little affected by movements in the real exchange rate, opportunities for private sector development and export diversification would be diminished. Since the loss in competitiveness cannot be corrected by an exchange rate adjustment, it would require adjustments in production costs through a reduction of wages and prices of nontradables.

D. Comparison of Bhutan's Exchange Rate Regime with Similar Arrangements

15. **This section compares Bhutan's exchange rate system to other small countries with a fixed exchange rate.** Bhutan's regime is compared to a currency board arrangement and a monetary union. Alternative regime choices of other small Asian economies whose economic indicators are similar to Bhutan are briefly reviewed.

Similarity to Currency Board Arrangements

16. **The Bhutanese regime bears considerable resemblance to a currency board arrangement (CBA).** As in a CBA, the RMA has a commitment, albeit unwritten (and only for current account transactions), to exchange domestic currency for a specified foreign currency. The fixed rate of exchange parity with the Indian rupee, has been honored since 1974, and is a long-term commitment of the authorities. Reserves are more than adequate to ensure all holders of the currency of its conversion to foreign currency. These features contribute to maintaining confidence in the currency and lend credibility to the authorities' policies. Table I.1 compares Bhutan's regime to the institutional and regulatory framework of existing CBAs.

17. **Building confidence in the domestic currency is the main objective of several CBAs.** The guaranteed convertibility at a fixed exchange rate provides a safeguard against flight into the anchor currency (provided the guarantee is credible). In the case of Argentina (1991) and Bulgaria (1997), a CBA was adopted following periods of high inflation in order to establish a credible and visible stabilization policy that, in turn, would bolster confidence in the domestic currency. However, in the case of Lithuania (1993), Estonia (1991), and Bosnia Herzegovina (1997), an important objective was to boost confidence in a newly

rupees available on demand, and hence avoiding the emergence of a parallel market where the rupee trades at a premium, is seen by the RMA as essential to support the peg.

⁸ The CPI of Bhutan has risen less than that of India in recent years, but the Bhutanese CPI suffers from some well-recognized defects including an outdated and food-dominated commodity basket. A new CPI is being compiled.

introduced domestic currency, much like the case with Bhutan in 1974. In other cases, the small size and openness of the economy, sometimes combined with limited institutional capacities, render a CBA a more practical regime, as for example in the case of the eight countries of the eastern Caribbean.

18. **Unlike Bhutan, the anchor currency is typically a major reserve currency.** The strength and international usability of a currency is an important criterion in selecting an anchor currency. Most CBAs currently in operation have chosen either the U.S. dollar or Euro as their anchor. Among CBAs, Brunei Darussalam is the only exception as its currency is instead pegged to that of a larger neighbor, Singapore. Brunei Darussalam, like Bhutan, allows the anchor currency to circulate freely alongside its currency, which is also an unusual feature in a CBA. The main differences with Bhutan are that, in Brunei Darussalam, there is a formal commitment to the CBA that can only be changed by Parliament, and Brunei Darussalam does not have exchange controls and respects full current and capital account convertibility. In common with Bhutan, Brunei Darussalam's choice of anchor currency was based primarily on the current and prospective trade flows and economic links with its neighbor.

19. **CBAs restrict the conduct of independent monetary policy.** Adherence to the rule of full currency backing means that the central banks' ability to act as a lender of last resort is limited to the excess of reserves over the statutory requirement. In some cases, an emergency fund is set aside at the outset, or from the profits of the central bank, to provide such support where needed. The authorities' ability to use interest rate and exchange rate adjustments to stimulate the economy is also limited, and economic adjustment, instead, must be brought about through wage and price adjustments which can be painful. The monetary authorities are not able to target broad money but can affect the monetary base and multiplier. CBA rules usually prohibit central bank lending to the government because frequently, the government's earlier recourse to central bank financing was the source of inflationary dynamics which led to introduction of the CBA. In order to separate its operations from those of the government, the Hong Kong Monetary Authority moved all government accounts to commercial banks. Often, an independent agency is created for public debt management.

20. **However, a number of monetary instruments have been used under CBAs for liquidity management and to adjust to external events.** Box I.1 summarizes the main policy tools used by countries with different regimes and varying levels of development in managing excess liquidity. Specific examples of their use by CBAs include:

- **Cash reserve requirements** have been used in Brunei Darussalam since 1995. In Estonia and Lithuania, banks were allowed to fulfill their requirements with assets other than deposits as a means of relieving a liquidity shortage. Cash reserve requirements were in use in Argentina before 1995 and were replaced with liquidity requirements. They do not exist in Djibouti and Hong Kong SAR.

Box I.1. Liquidity Management Tools¹

The monetary authorities in many countries are faced with the challenge of sterilizing excess liquidity that usually results from capital inflows. Liquidity management tools vary between countries depending on their level of development and institutional arrangements. **Open market operations are the conventional sterilization tool.** The sale of government and central bank securities reduces the domestic component of the monetary base. However, many developing countries lack the tools available to run sterilization policy, or find it too costly to do so. In other cases, the opportunities for open market operations have been exhausted.

As a supplement to open market operations, a number of other measures have been used to reduce liquidity. These include:

- **Increasing statutory reserve requirements** will have the effect of sterilizing the inflows. When the reserves are remunerated at market interest rates, reserve requirements function similarly to open market operations. However, if banks have very large reserve assets, well beyond what is required by the statutory requirements, or if the reserve requirement has already been raised above what is required for prudential reasons, the scope for using this tool would be limited. Because reserve requirements act like a tax on banks, they may lead to financial disintermediation as some deposits leave the banking system.
- **Moving government deposits** from commercial banks to the monetary authority is another means of absorbing liquidity, and was highly effective in the case of Malaysia and Thailand. It has no additional fiscal cost assuming that the interest rate paid on government deposits is the same as that paid to the central bank. The use of this tool is limited to the availability of deposits, and the monetary authorities capacity to manage them on a day to day basis.
- **Increasing the cost of access to central bank credit** (through the discount window and other lending facilities) can absorb liquidity unless the demand for credit is very inelastic and will not necessarily fall in response to an increase in the discount rate.
- **Foreign exchange swaps** are another tool. The central bank would agree to sell foreign exchange against the domestic currency and simultaneously agree to buy it back at a specified date using the forward exchange rate. Swaps are advantageous for countries where the stock of government securities is low or the government is not running budget deficits. If the swaps market is liquid, they operate as flexibly as open market operations.
- **Easing restrictions on capital outflows** can reduce domestic liquidity by, for example, easing surrender requirements on foreign exchange earnings and permitting local institutions to invest abroad or non-domestic entities to issue local currency bonds in the domestic market. These can also have the advantage of allowing portfolio diversification and increasing the overall efficiency of investments of local institutions.

¹ Based on Jang-Yung Lee, "Implications of a Surge in Capital Inflows: Available tools and Consequences for the Conduct of Monetary Policy," IMF Working Paper 96/53; and "Sterilizing capital inflows," Economic Issues No. 7.

- **Rediscount facilities** are used by many CBAs to facilitate banks' liquidity management. However, they are not used by Brunei Darussalam and Djibouti.
- **Open market operations.** Argentina has actively used repos and reverse repos for liquidity management, in both pesos and U.S. dollars. It also introduced a swap facility in 1991 to provide short-term credits to banks. The Bank of Estonia has fortnightly auctions on 28 day certificates of deposit, which it stands ready to buy back. The Exchange Fund in Hong Kong SAR has been issuing bills of 91, 182, and 364 day maturity and notes of two to ten year maturity. These notes and bills are traded actively in secondary markets.

Comparison with Monetary Unions

21. **It is sometimes said that Bhutan has an “informal monetary union” with India** because the Indian rupee circulates freely in Bhutan alongside the ngultrum and is used interchangeably as a medium of exchange.⁹ However, the arrangement between India and Bhutan does not resemble other monetary unions in terms of the symmetry of currency use or agreement on a single institution to formulate monetary policy. Table I.2 describes the main features of the existing monetary unions.

22. **A true monetary union is accompanied by a single institution with clear responsibility for formulating monetary policies for all countries in the union.** In some cases, but not always, this is accompanied by pegging to an external currency. The monetary union of the Rand Area does not entail a peg to an outside currency. Rather, the currencies of the three smaller members are pegged to the South African rand and the countries have retained their separate central banks. Similarly, the Euro area has a common currency and a joint central bank, the European Central Bank (ECB), even though members have retained their own central banks. In spite of retaining their central banks, there is a formal agreement that the ECB is responsible for monetary policy.

23. **The uniformity of monetary policy in a monetary union limits the scope for counter-cyclical policies within member countries.** Direct and indirect financing of government operations can vary, so that the monetary policy of a monetary union could be more restrictive or less than that of a national government in terms of financing government. Discount facilities and open market operations are the typical liquidity management tools, with changes to reserve requirements infrequent. The Eastern Caribbean Central Bank for example, has not changed its reserve requirement from 6 percent since 1984.

24. **In the case of the CFA Zone and the Eastern Caribbean Currency Union (ECCU), the shared currency of the members is pegged to a reserve currency.** Reserves

⁹ Royal Monetary Authority of Bhutan, *Annual Report 2000/01*, p.18.

are pooled and member countries share a free trade agreement and cooperative arrangements both with each other and with the country to which their currency is pegged. In contrast to the Rand or Euro areas where there is no external peg, the stability of these two monetary unions cannot be derived from a strong monetary authority within the union. ECCU relies on strong reserve backing for the Eastern Caribbean dollar and derives stability from its peg to the U.S. dollar. However, the CFA zone relies on an external guarantee for stability as the two zones are only required to maintain foreign assets equal to no less than 20 percent of sight deposits. Both CFA central banks use rediscount ceilings as the main policy tool. Monetary targets are determined based on submissions of each government and government financing is allowed up to 20 percent of the previous years' budget. The ECCU is a *monetary union which operates under a currency board*. Its main policy objective is to maintain foreign exchange cover and main policy tool is domestic credit creation.

25. **The countries of the Rand Area or Common Monetary Area (CMA) have an asymmetric relationship resembling in some respects the relationship between India and Bhutan.** Lesotho, Namibia, and Swaziland have pegged their currency to a nonreserve currency, the South African rand. The three retain their own currencies, and both Namibia and Lesotho allow the rand to circulate as legal tender, but their currency is not legal tender in South Africa. They have a free trade arrangement with each other and with South Africa. The South African Reserve Bank sets monetary policy for all four but they do not share in a pool of reserves. Interest rates are comparable in the four countries (Figure I.3).

26. **There are a few other asymmetric monetary unions that are not linked to a reserve currency,** but they bear less resemblance to Bhutan. The arrangement between Belgium and Luxembourg from 1922-99 (until Luxembourg adopted the Euro as a currency) was an asymmetric monetary union. Again this involved a formal agreement that monetary creation was controlled by Belgium. The Ruble Zone had a monetary union until 1991, whereby the Russian Central Bank (RCB) determined monetary policy. The lack of convertibility of the ruble and the failure of the RCB to provide stability led the members to create their own currencies to shield themselves from ruble instability.¹⁰

27. **There are also a number of cases where the currency of a large country is accepted as legal tender in a smaller neighbor** but without the existence of a monetary union. In the case of the Bahamas, the U.S. dollar is accepted alongside the Bahamian dollar. In a number of other cases, the large country's currency is the only legal tender, as is the case for Panama, El Salvador, Ecuador, Marshall Island, Federated States of Micronesia, and Palau, all of which use the U.S. dollar, while, Kiribati and San Marino use the Australian dollar and Euro, respectively. Like Bhutan, these countries have strong economic ties with the country whose currency they have adopted and have given up any independent monetary policy, but they are not involved in a monetary union since there is no agreement to accept a

¹⁰ For a full discussion, see Masson and Patillo (2001), p. 39.

shared institution responsible for joint monetary policy. This is similar to Bhutan's arrangement with India except that these countries have chosen not to issue their own currency.

Comparison with Other Neighboring Countries

28. **Other small Asian countries have chosen different exchange regimes than Bhutan.** The few selected for comparison all neighbor a larger more developed country with whom they have significant trade and financial links (Table I.3). Nepal has opted for a peg to the Indian rupee after some experience with floating. The Maldives has pegged its currency to the dollar, while Lao and Cambodia have a managed floating regime. Bangladesh, with a much larger economy, has opted for a peg with a basket of currencies. Like Bhutan, all these countries have a relatively low income level, the Maldives has the highest per capita GDP of \$2000. Also, they all have a large rural population—ranging from 93 percent in Bhutan to 74 percent in the Maldives—that is predominantly engaged in agriculture.

29. **Nepal's economy is closely integrated with India like Bhutan.** Nepal has also chosen to peg its currency, the Nepalese rupee to the Indian rupee. Current account convertibility of the rupee was established in 1993 when the rate was adjusted to Nrs 1.6 per Indian rupee, its current rate. The Indian rupee continues to be in use particularly in the border areas in spite of a 1957 Act prohibiting its use as legal tender. Trade and exchange rate liberalization is synchronized with Indian reforms in order to avoid a situation where imports entering India are indirectly subsidized by Nepal. The share of trade with India in total trade has declined since the 1960s (when it accounted for 95 percent of total trade) to about 40 percent of imports and 60 percent of exports.

30. **As with Bhutan, price and interest rate behavior in Nepal has closely tracked developments in India.** Divergences in the CPI can be readily explained by temporary domestic supply conditions, rather than by variations in money growth. There are also small differences in interest rates (Figure I.1) but these exert little pressure on the exchange rate in the context of capital controls in both countries.

31. **The Nepal Rastra Bank (NRB) has depended mainly on open market operations to reduce excess liquidity during periods of rising international reserves.** In 1993, NRB bonds were sold (equivalent to 20 percent of the stock of private sector credit) to offset the impact of reserve accumulation. The bonds were redeemed (instead of rolling over) in the following year to offset the contractionary impact of a decline in reserves, and the NRB simultaneously purchased Treasury bills at the then new open market window. NRB has not issued bonds since then as the stock of domestic government debt has risen to about 20 percent of GDP (compared to about 2 percent of GDP in Bhutan) providing adequate opportunities for open market operations at lower cost for the NRB. The reserve requirement was reduced in December 2001 to 7-8 percent following a similar policy move in India.

32. **The Maldives also pegs its currency, but has chosen a reserve currency as anchor, the U.S. dollar.** The Maldivian rufiyaa has remained at the rate of Rf 11.7 per dollar since 1994. The main factors in this choice were the large share of exports to the United States and limited institutional capacities in managing a more complex regime. An eight percent devaluation in 2001 was aimed at eliminating an emerging parallel market and reducing pressure on reserves, while helping to improve competitiveness. The pressures emerged from excessive dependence on the overdraft facility with the Maldivian Monetary Authority (MMA) to finance government operations.

33. **The MMA is increasingly moving toward using more indirect instruments of monetary control.** Liquidity management by the Maldives Monetary Authority has depended on reserve requirements, bank-by-bank credit ceilings, and issuance of certificates of deposit (CDs) by the MMA. Banks are required to maintain reserves equal to 35 percent of rufiyaa and dollar deposits, and only 20 percent is remunerated at the rate of 2½ percent. Three and 6 month CD are discounted and available on tap, and have served as an investment for the banks' excess reserves given the dearth of investment alternatives. About thirty percent of banks' total reserves are invested in securities.¹¹ Following the removal of credit ceilings in 2001, credit to the private sector surged as central bank paper did not carry an attractive enough interest rate. Shorter maturities and more attractive interest rates are being considered.¹²

34. **Bangladesh, has pegged its currency, the taka, to a trade weighted basket,** with the U.S. dollar as the reference currency. The taka was devalued against the dollar on several occasions in the last two years to stop the erosion of reserves resulting from an expansionary fiscal policy and domestic credit expansion. In addition, the authorities resorted to exchange and trade restrictions to slow reserve losses.

35. **Lao and Cambodia, although both small countries with large trading partners, have opted for a managed float.** Thailand accounts for 20 percent of Lao exports and over 60 percent of imports. Thailand also accounts for 35 percent of Cambodia's exports, while the United States is the source of 65 percent of Cambodia's imports. Both the U.S. dollar and Thai baht are accepted as legal tender in Cambodia, and although not legally accepted, both currencies also circulate widely in Lao. Foreign currencies constitute over 65 percent of total bank deposits in each country. As a result of high currency substitution, the role of monetary policy is limited and any depreciation is directly passed through to domestic prices without a benefit in terms of competitiveness. Moreover, market-based monetary policy tools are at an early stage of development.

¹¹ SM/01/259.

¹² SM/02/379.

E. Conclusions and Policy Considerations

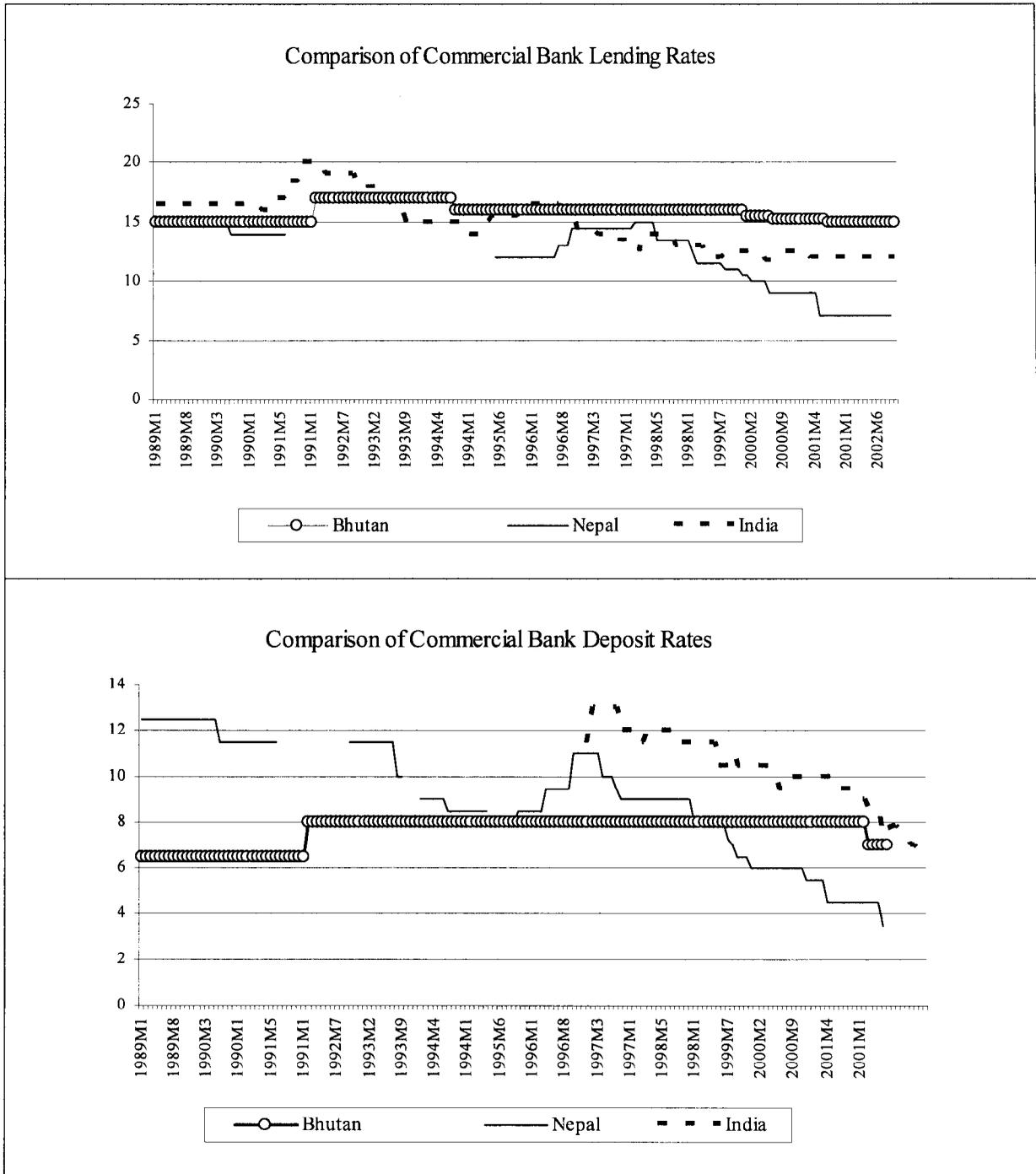
36. **Bhutan's currency regime is unique but shares key characteristics with other fixed exchange rate regimes.** The exchange rate anchor is aimed at maintaining confidence in the domestic currency. A nonreserve currency, the Indian rupee, has been chosen as an anchor currency because of Bhutan's strong economic ties with India and integrated trade pattern. The continued use of the Indian rupee alongside the rupee is beneficial to Bhutan as it facilitates trade particularly since some regions in Bhutan are more accessible from India. This arrangement has allowed Bhutan to share in the stable macroeconomic conditions that have prevailed in India.

37. **The RMA has used a number of measures to absorb liquidity.** Increased monetization of the economy and balance of payments surpluses have contributed to the growth of deposit liabilities while credit extension has been limited for structural reasons. To absorb some of the liquidity, the RMA has raised reserve requirements and introduced RMA bills, but there has not been a stock of government debt that would allow for open market operations in government securities. Some of the other measures used to absorb excess liquidity in other countries, such as foreign exchange swaps, are not relevant for Bhutan. Nevertheless, the excess liquidity does not appear to pose an immediate threat as credit expansion remains limited and there is a weak link between monetary aggregates and price developments.

38. **Liquidity will be gradually absorbed with the emergence of private sector activity and development of the financial sector.** As the authorities recognize, it will be necessary to pursue a development strategy that enables the economy to absorb foreign savings in a manner that is conducive to rapid growth and low inflation. This will entail strengthening the financial sector by improving loan appraisal skills, compliance with prudential regulations, and banking supervision. Enforcement of penalties against bank defaulters will encourage more lending. Liberal and transparent policies toward domestic and foreign investment will be needed as well as supportive exchange and labor regulations.

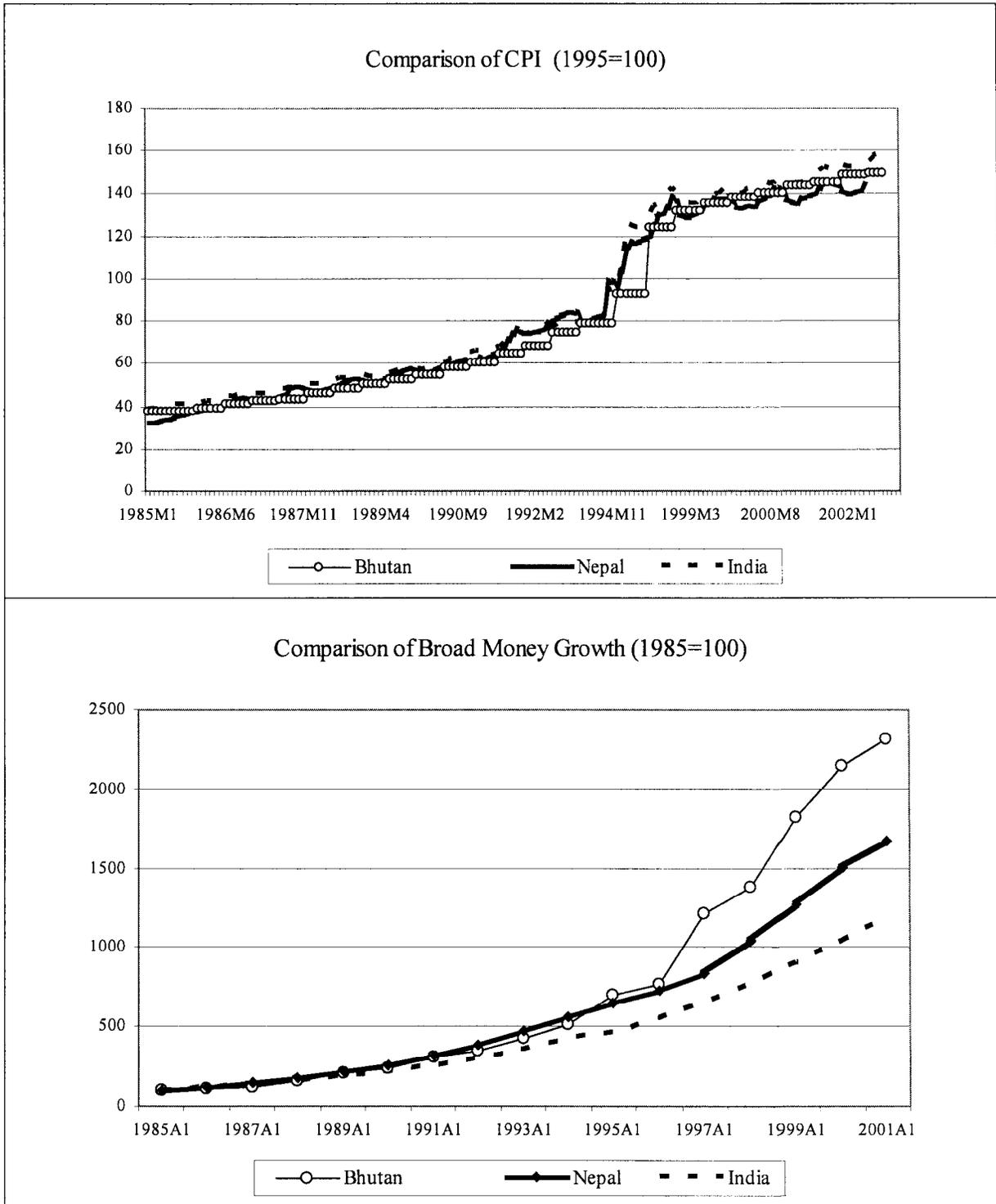
Figure I.1. Bhutan: Comparison of Interest Rates with India and Nepal, 1989–2002

(In percent)



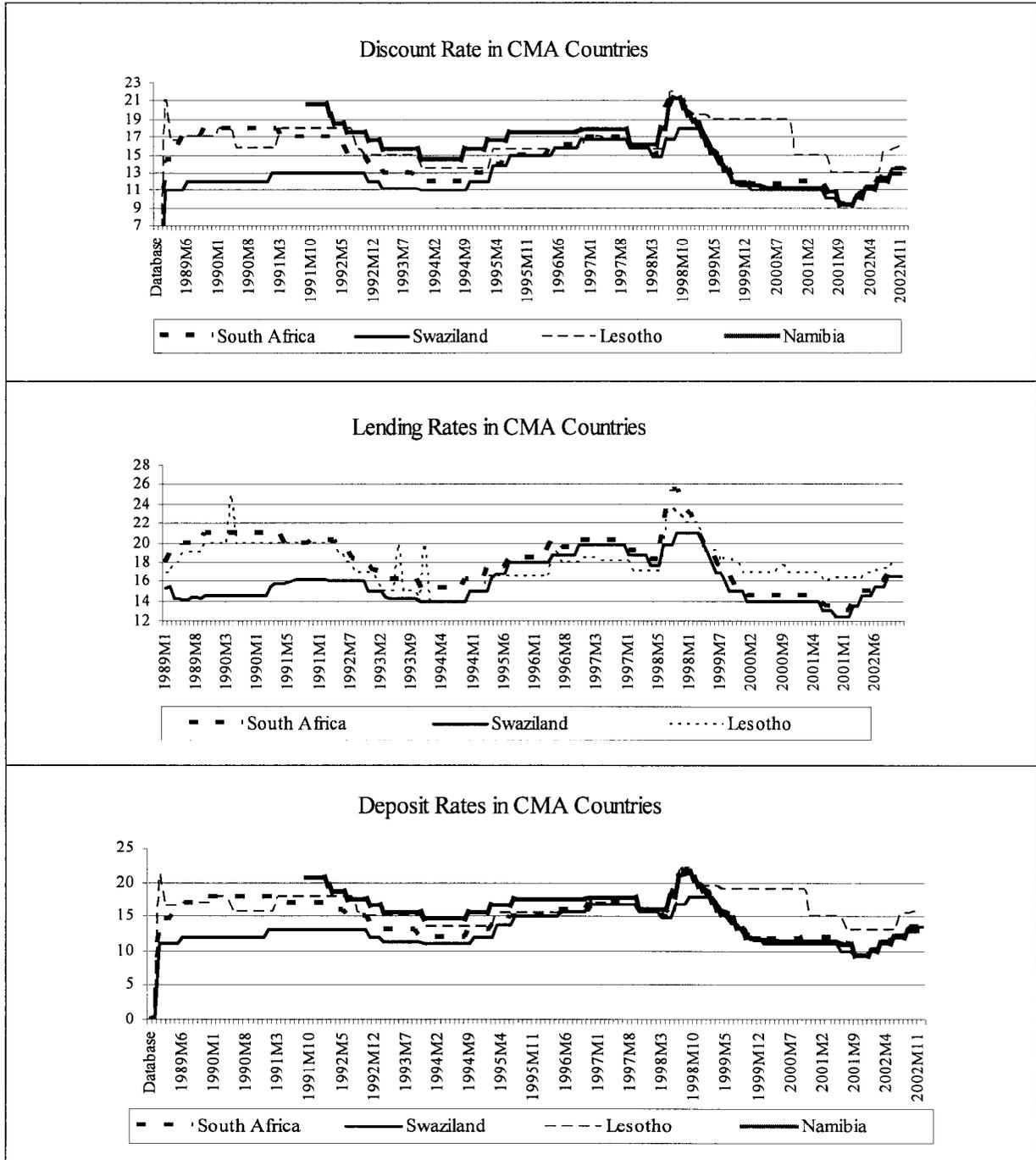
Source: *International Financial Statistics*.

Figure I.2. Bhutan: CPI and Broad Money Growth, Comparison with India and Nepal, 1985–2002



Source: *International Financial Statistics*.

Figure I.3. Bhutan: CMA Countries—Comparison of Interest Rates, 1989–2002
(In percent)



Source: *International Financial Statistics*.

Table I.1. Bhutan: Comparison with Currency Board Arrangements

	Bhutan	Brunei Darussalam	Bosnia & Herz.	Bulgaria	Djibouti	Estonia	Lithuania	Hong Kong SAR	Argentina
Local currency	Ngultrum	Brunei dollar	Marks/Euro	Bulgarian Lev	Djibouti franc	Estonian kroon	Lithuanian litas	HK\$	Peso
Currency of peg	Indian rupee	US\$	Euro	Euro	US\$	Euro	US\$	US\$	US\$
Currency of peg circulates freely	Yes	Yes	Yes	No	No	No	No	No	No
Date	n.a.	1967	1997	1997	1949	1991	1993	1983	1991
I. Institutional Arrangements									
Administrative agency	n.a.	Brunei Currency Board (BCB)	Central Bank of Bosnia and Herzegovina (CBBH)	Bulgarian National Bank (BNB)	National Bank of Djibouti (NBD)	Bank of Estonia (BoE)	B of Lithuania (BoL)	Exchange Fund (EF) under supervision of HKMA	Central Bank of Argentine Republic (CBAR)
Formal commitment to exchange local currency	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
External current account convertibility	Most current account transactions.	Yes	Yes	Yes	n.a.	only banks in practice	commercial banks	note-issuing banks	FI only
Exchange controls	Yes	No	No	Yes	No	Yes	Few	No	No
Control on fx net open positions	No	Yes	15% per currency, 30% overall (excluding euro)	100% of monetary liabilities.	100% of currency	100% M0	>100% currency	100% certificates of note-issuing banks	100% of M0
Backing rule	No	> 70% M0	At least 100 % of M).	100% of monetary liabilities.	100% of currency	100% M0	>100% currency	100% certificates of note-issuing banks	100% of M0
Power to change XR rule and backing rule	n.a.	Only by Act of Parliament	Only by Act of Parliament	Only by Act of Parliament	n.a.	Devaluation only by Act of Congress	BoL in consultation with government	n.a.	Only by Act of Congress
Profit transfer rule	No	BCB retains interest earned	Yes, on adhoc basis.	Yes, on adhoc basis.	n.a.	Seignorage is passed to BOE	BoL retains interest	Exchange Fund retains interest	Profits above 50% of bank capital transferred to budget
Lender of last resort facility to banks	Yes	No	Yes, very limited in scope.	Yes, very limited in scope.	No	Limited to excess over required reserves, for emergencies	Limited to excess over required reserves	Limited to excess over required reserves	Yes, by rolling over central bank's liquidity rediscounts
Intervention in money markets to smooth interest rates	No, but possible.	No	No	No	No	No	Yes	Yes	Yes

Table I.1. Bhutan: Comparison with Currency Board Arrangements (Concluded)

	Bhutan	Brunei Darussalam	Bosnia & Herz.	Bulgaria	Djibouti	Estonia	Lithuania	Hong Kong SAR	Argentina
II. Monetary Instruments									
Reserve requirements	Yes, 20 percent	Yes, 6 percent	Yes, allowed between 10-15 percent.	Yes, 8%	No	Yes	Yes.	No	high RR replaced by liquidity requirements in 1995
Liquidity requirements	Yes, 20 percent	No	n.a.	Yes, 8%	No	No	No	No	Yes
Rediscounts and advances	Yes.	No	No	No	No	n.a.	Yes, direct borrowing and lending by HKMA to interbank market	Yes, direct borrowing and lending by HKMA to interbank market	Yes
Treasury bills	Yes, small amount.	No	Yes	Yes	n.a.	No	Yes. Weekly one and three-month	No	n.a.
Central bank bills	Yes	No	No	No	No	Yes	No	Yes, used for open market operations of HKMA	No
Swaps	No	No	No	No	No	No	No	Yes	Yes
Repos and reverse repos	Yes.	n.a.	No	No	No	n.a.	Repo in T-bills and ST credit facility from 1997 rates	Yes, to smooth short-run interest rates	Yes, in pesos or dollars.
III. Treasury Operations									
Government deposits	Held at commercial banks	Held at commercial banks	Held at central bank.	Held at central bank.	Held at central bank	At commercial banks	At commercial banks	At EF and commercial banks; fiscal reserves are transferred to EF's account at HKMA.	Held at a state-owned bank for central government, any bank for municipal gov
Credit to government by the monetary authorities	No	No	No	No	No, but possible with special approval from cabinet.	Prohibited.	Prohibited.	n.a.	Yes, with limits on stock outstanding and annual increase.

Source: Balino and Enoch, 1997; and IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions*, IMF Staff.

Table I.2. Bhutan: Comparison with Monetary Unions

	Bhutan	ECCU	CFA Zone	Euro area	CMA
Single currency	No	Yes	Yes	Yes	No
Peg currency circulates freely	Yes	No	No	N/A	Yes
Single central bank	No	Yes	Yes	Yes	No
Common pool of reserves	No	Yes	Yes	Yes	No
Free trade area	No	No	No	Yes	Yes
Trade agreement	Yes	Yes	Yes	Yes	Yes
Common external tariff	No	No	Yes	Yes	Yes
Share of internal to total trade	85%	<10 %	6-12%	46%	...
External current account convertibility	No	Yes	Yes	Yes	Yes
Degree of capital mobility	Low	Moderate	Low	High	High

Source: Masson and Patillo (2001).

Table I.3. Bhutan: Comparison of Bhutan's Regime With Some Neighboring Countries, 2001

	Bhutan	Nepal	Bangladesh	Maldives	Cambodia	Lao P.D.R.
Exchange regime						
Currency	Ngultrum	Rupee	Taka	Rufiyaa	Riel	Kip
Exchange rate regime	Peg to Indian rupee	Peg to Indian rupee	Peg to basket	Peg to US\$	Managed float	Managed float
Other currency is also legal tender	Yes	No	No	No	Yes	No
Other currency in circulation	Indian rupee	Indian rupee	...	...	US\$/ Baht	Baht/US\$/dong/yuan
Estimate of foreign currency in circulation (percent)	>20	>10	<2	...	65 ^{1/}	75 ^{1/}
Foreign exchange regulations						
FX accounts for residents allowed	No	Yes	Yes	Yes	Yes	Yes
Retention of export proceeds	10% allowed	100% allowed	40% allowed	100% allowed	Yes	100% except wood
Controls on some current transactions	Yes	No	Yes	No	No	No
Controls on capital transactions	Yes	Yes	Yes	Yes	Yes	Approval required
Reserves and monetary indicators (2001)						
Total reserves (in millions of U.S. dollars)	284.6	1,044.4	1,279.9	94.3	550.0	130.9
Currency/GDP (in percent)	6.9	14.5	5.0	8.8	4.3	0.7
M2/GDP (in percent)	49.1	54.7	37.2	47.6	16.5	16.4
Reserves to currency ratio	9.3	1.4	0.6	1.9	4.2	10.4
Reserves to M0 ratio	2.4	1.1	0.3	0.6	1.8	1.4
Reserves to M1 ratio	2.9	1.0	0.3	0.7	4.0	3.2
Reserves to M2 ratio	1.3	0.4	0.1	0.3	1.1	0.5
Debt						
Total external debt (in millions of U.S. dollars)	235	2,771	16,001	210	2,254	1,217
Debt/GDP ratio	49.0	49.9	33.9	37.2	66.2	69.2
Trade						
Exports/GDP (in percent)	19.3	16.9	12.6	19.5	38.1	19.9
Imports/GDP (in percent)	37.1	31.9	18.0	61.7	52.2	32.3
Main trading partner	India	India	India	Singapore/India	Thailand	Thailand/Vietnam
Share of exports with main trading partner (in percent)	95	23	30(U.S.)	73 (U.S.)	35	25 (Vietnam);
Share of imports from main trading partner (in percent)	67	26	13 (India)	27 (Singapore);	64(U.S.)	19 (Thailand);
				12 (India)		12 (Vietnam);
						62 (Thailand)
Population, GDP, prices						
Population (in million)	0.7	23.6	140.4	0.3	13.3	5.4
Urban population, 1994-2000 (in percent of total)	7.1	11.9	24.5	26.0	13.0	23.5
Per capita GDP (in millions of U.S. dollars)	708	672	368	2,044	259	319
GDP (in U.S. dollars)	482	5,554	47,200	564	3,404	1,758
CPI (in percent over previous year)	3.6	3.4	1.6	0.7	0.7	7.5

Sources: *International Financial Statistics*; *Direction of Trade Statistics*; *Annual Report on Exchange Arrangements and Exchange Restrictions* (all IMF); and *World Development Indicators* (World Bank).

1/ Share of foreign currency deposits in total bank deposits.

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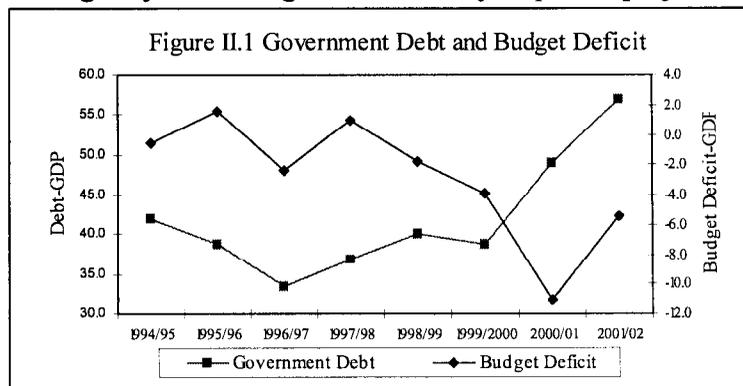
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II. FISCAL SUSTAINABILITY¹³

A. Introduction

1. **Bhutan has maintained a sustainable fiscal stance in the past.** The authorities have adhered to the principle that domestic revenue should more than cover recurrent expenditure, while capital expenditures have been largely financed by concessional external borrowing. After maintaining relatively low levels of indebtedness in the mid-1990s, government debt has jumped in the last two years from about 40 percent of GDP to 57 percent of GDP at the end of June 2002. This has been primarily due to large external borrowing related to hydropower projects, particularly off-budgetary borrowing for the Tala hydropower project amounting to nearly 20 percent of GDP. However, the initiation of a domestic borrowing program has also played a role.¹⁴

2. **Looking forward, the sustainability of fiscal policy has become an important issue.** While the Ninth Five-Year Plan (2002–2007) does not depart from the principle of maintaining



current fiscal balance, it envisages an ambitious development agenda including domestic borrowing of about 2 percent of GDP annually and large borrowing from India associated with the completion of the Tala project by 2005. Both the Tala loans and recourse to domestic borrowing serve to increase the interest bill as a result of a switch from concessional to more market-based borrowing.¹⁵ This raises the prospect of a rapid rise in public debt over the medium term that warrants close monitoring.

3. **A strategy of significant borrowing entails greater risks.** Greater borrowing presumes access to the requisite domestic and foreign borrowing, which may not always be forthcoming. The sustainability of the debt path may also be vulnerable to domestic and

¹³ Prepared by Shanaka J. Peiris.

¹⁴ The Royal Government of Bhutan (RGOB) issued domestic bonds for the first time in October 2001, amounting to Nu 500 million.

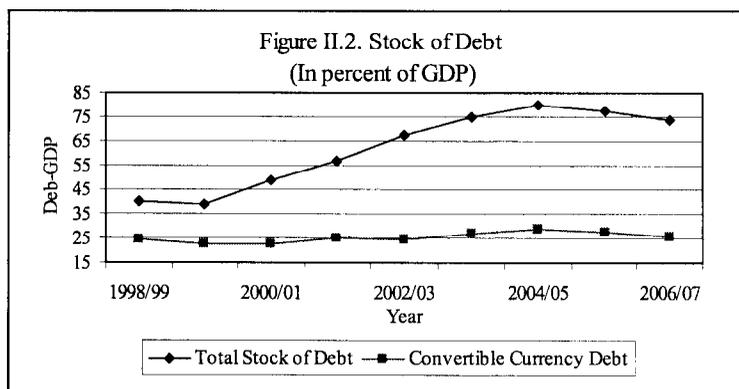
¹⁵ The cost of the Tala project is estimated at Nu 37.3 billion (US\$780 million and 130 percent of current GDP). The project is financed by the Government of India as 60 percent grant and 40 percent loan at an interest rate of 9 percent. By August 2002, funds of Nu 14.0 billion had been utilized, of which Nu 5.6 billion were loans.

external shocks particularly in a small open economy highly integrated with a much larger economy and dependent on a few key sectors.

4. **The beginning of the Ninth Five-Year Plan is an opportune time to evaluate the sustainability of the authorities' medium-term fiscal framework.** Section B below takes a closer look at the debt profile of Bhutan in the recent past. Section C presents a short overview of the relevant theoretical literature addressing fiscal sustainability. Section D provides some simulations of Bhutan's debt dynamics and considers some of the risks and vulnerabilities faced by the government in the future.

B. Debt Profile

5. **The ongoing decline in the proportion of convertible currency debt will serve to increase debt service payments over time.** The change in the currency mix of the outstanding stock of debt reflects increased rupee borrowing from India related to the Tala and Kurichhu projects. Amortization and interest payments on convertible currency loans remain low due to their concessional nature and maturity structure, while rupee debt service costs have steadily fallen with the repayment of a State Bank of India (SBI) overdraft and loans related to the Chukha hydropower project. The RGOB also issued one-year treasury bills worth Nu 500 million in October 2001, which were rolled over for another year in October 2002. The switch away from convertible currency debt to rupee and ngultrum debt (Figure II.2) is effectively a shift from concessional to nonconcessional debt as both rupee and ngultrum borrowings are at market rates. This combined with the imminent expiration of the grace period of a number of convertible currency loans is expected to raise debt service cost in the medium term.



C. Theoretical Overview and Literature Survey

Tests of Fiscal Sustainability

6. **Analytical approaches to fiscal sustainability take as their starting point a representative agent model in which the government must satisfy the intertemporal budget constraint.** Chalk and Hemming (2000) survey empirical tests of fiscal

Table II.1. Bhutan: Consolidated Government Debt--Convertible Currency Loans

(In millions of U.S. dollars)

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
Debt outstanding	80.2	84.0	90.4	98.7	98.7	106.9	129.9
Multilateral							
ADB	31.2	36.3	40.4	43.2	43.2	47.4	55.4
EFIC (Australia)	0.8	0.8	0.7	0.5	0.5	0.4	0.3
IFAD	10.9	11.4	12.2	12.7	12.7	12.5	13.7
KFAED	11.1	10.9	9.6	7.9	7.9	6.5	5.1
IDA	20.5	21.3	22.1	24.0	24.0	27.6	33.2
Bilateral							
Austria	0.0	0.0	4.3	10.4	10.4	12.6	22.2
Commercial (Druk Air loan)	7.9	3.4	1.1	0.0	0.0	0.0	0.0
Debt service	9.0	6.1	5.8	4.8	3.6	3.6	4.0
Amortization	7.1	4.4	4.7	3.8	2.6	2.6	2.7
Interest	1.8	1.7	1.1	1.0	0.9	1.0	1.3

Source: Royal Monetary Authority of Bhutan, *Annual Report* 2001/02.

Table II.2. Bhutan: Consolidated Government Debt--Rupee Loans

(In millions of Indian rupees)

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
Debt outstanding	1,256.7	1,243.8	1,715.5	2,684.0	3,277.0	6,024.4	7,803.6
Government of India							
Chukha	1,078.6	993.8	875.5	787.5	700.5	612.9	525.3
Kurichhu	0.0	0.0	350.0	666.0	1,106.0	1,874.0	1,994.0
Tala	0.0	0.0	240.0	1,230.5	1,470.5	3,537.6	5,284.3
Credit line	178.2	250.0	250.0	0.0	0.0	0.0	0.0
Debt service	556.4	151.4	159.1	394.8	125.8	121.3	117.2
Amortization	385.5	13.9	94.3	337.6	87.6	87.6	87.6
Interest	170.9	137.5	64.9	57.2	38.3	33.7	29.6

Source: Royal Monetary Authority of Bhutan, *Annual Report* 2001/02.

sustainability based on testing whether the present value budget constraint holds for historical data. The approach suggested by Bohn (1998) is applicable in an environment of uncertainty and is the test preferred by Chalk and Hemming (2000). Bohn (1998) estimates an equation of the following form:

$$pb_t = \alpha d_t + \beta X_t + u_t \quad (1)$$

Where pb_t is the primary balance-GDP ratio, d_t is the debt-GDP ratio, X_t is a vector of determinants of the primary balance, and u_t is the disturbance term. According to Bohn (1998), the fiscal policy reaction function is sustainable, under very general conditions, if the primary surplus responds positively to an increase in debt as this ensures that increases in the debt-GDP ratio are eventually reversed by primary surpluses. This amounts to testing whether pb_t increases at least linearly with d_t at high debt ratios or whether $\alpha > 0$.

Sustainability Indicators

7. **An alternative approach to assessing fiscal sustainability is the so-called sustainability indicators approach.** This approach tests how far fiscal policy departs from sustainability. There is no formal definition of sustainability, but a sustainable policy is often assumed to be one that does not lead to a significant increase in the debt-GDP ratio. Buiter (1985) argues that a sustainable fiscal policy should maintain the ratio of public sector net worth to output constant over time. Buiter (1985) shows the permanent primary deficit necessary to achieve this objective to be:

$$\overline{pd} = (r_t - n_t) w_t \quad (2)$$

where \overline{pd}_t is the ratio of the constant wealth primary deficit to output, and w is the ratio of net worth to output, n is the growth rate and r is the interest rate. The sustainability indicator is then:

$$\overline{pd} - pd_t = (r_t - n_t) w_t - pd_t \quad (3)$$

which is the difference between the permanent primary deficit and the current primary deficit, pd_t . A positive value indicates that the current primary deficit is large enough to stabilize the net worth ratio, in which case fiscal policy should be regarded as sustainable.

8. **Although intuitive, it is difficult to obtain data on government net worth, especially in developing countries.** Blanchard (1990) overcomes this problem by considering the change in policies required to maintain the current debt-GDP ratio. He develops a primary gap indicator based on the gap between the actual primary deficit and the sustainable primary deficit by:

$$\overline{pd} = (n_t - r_t) b_t \quad (4)$$

where b_t is the debt-GDP ratio and the primary gap indicator is

$$\overline{pd} - pd_t = (n_t - r_t) b_t - pd_t \quad (5)$$

A positive value for this indicator indicates that the current primary deficit is large enough to stabilize the debt ratio and that fiscal policy is sustainable.

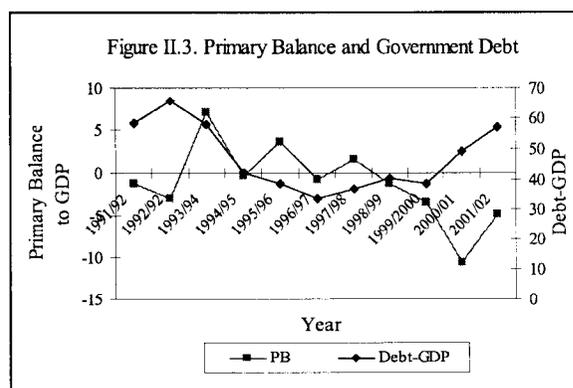
A Broad Approach

9. **The standard approach followed in the Fund to assessing fiscal sustainability is to consider a number of measures of the fiscal deficit and debt-ratios.** The “debt-stabilizing primary surplus is often used to assess current fiscal policy by judging whether the existing fiscal surplus is consistent with a stable debt-GDP ratio, or to indicate how much effort is required to achieve a stable debt ratio” (IMF, 2002). This is clearly parallel to the primary indicators approach of Blanchard (1990).

10. **However, traditional sustainability assessments have some limitations as the indicators used are not standardized and consistently applied, while sensitivity tests are not done in an integrated and systematic manner.** Therefore, IMF (2002) proposes a framework that provides greater uniformity and discipline to sustainability exercises including a comprehensive battery of stress tests. Assessments of sustainability require assumptions about the path of policy variables (such as expenditure and tax policy) and endogenous variables, such as interest rates and growth rates. However, around this baseline projection are a number of risks. For example, there could be unforeseen expenditure overruns or weaker tax collections, or other domestic and external shocks that make the debt dynamics no longer sustainable. This is particularly relevant to a country like Bhutan, which has an undiversified economy, and is vulnerable to domestic and external shocks given its dependence on a few key sectors and exposure to macroeconomic developments in India. Therefore, this chapter follows the approach outlined in IMF (2002) to assess the sustainability of fiscal policy in Bhutan in the future.

D. Empirical Results for Bhutan

11. **Results of sustainability tests for Bhutan indicate that fiscal policy has been sustainable in the past.** The lack of a sufficiently long time series of government debt and deficit data precludes estimation of Bohn’s (1998) test equation for Bhutan. Data problems are also encountered in attempting to implement Blanchard’s primary gap indicator approach. Nevertheless, Figure II.3, which plots the primary balance-GDP ratio and consolidated government debt-GDP ratio,



is consistent with a linear relationship between these two variables (at least with a lag),

suggesting a sustainable fiscal policy stance in the past. Figure II.3 also shows that the debt-GDP ratio decreased through most of the 1990s before reversing back to its initial level in the last few years. This indicates that the authorities have managed to stabilize the debt-GDP ratio in the past, suggesting a sustainable fiscal policy over the period.

12. Assessing fiscal sustainability is crucial given the large capital spending being planned in Bhutan. The Ninth Five-Year Plan envisages increased development expenditure, part of which will be financed by domestic borrowing of about 2 percent of GDP annually. This is a break from the past tradition of financing capital expenditures through concessional external assistance. The sustainability of the authorities' medium term fiscal framework is assessed below through the evolution of the public sector debt-GDP ratio. The risks and vulnerabilities are assessed on the basis of stress tests to baseline projections to check whether debt remains sustainable under a variety of plausible negative shocks to the economy. In formulating the baseline projections, several issues are considered, including the definition of debt, the coverage of the public sector, and the treatment of contingent or implicit liabilities. In general, it is recommended that the definition of debt be based on gross liabilities, and that the coverage of public debt be as broad as possible. This practice is followed in this chapter. The important implication is that large borrowing from India associated with the Tala Hydropower project from 2002/03 to 2004/05 is included in the projections of future debt creating flows.¹⁶

13. The debt dynamics equation analyzes debt incurred by the consolidated public sector expressed in domestic-currency terms. Here, debt dynamics are modeled by the following differential equation:

$$d_{t+1} - d_t = -pb_t + \frac{\hat{r} - \pi(1+g)}{(1+g+\pi+g\pi)} d_t - \frac{g}{(1+g+\pi+g\pi)} d_t + \frac{\varepsilon\alpha(1+\hat{r})}{(1+g+\pi+g\pi)} d_t$$

where d is the debt-to-GDP ratio, pb is the primary balance, \hat{r} is a weighted average of domestic and foreign interest rates, α is the share of foreign-currency denominated public debt, π is the change in the domestic GDP deflator, and g the real GDP growth rate. Changes

¹⁶ A weak financial system with a high proportion of nonperforming loans can imply a significant contingent liability for the government. However, in light of the efforts being made to strengthen the banking sector in Bhutan, including the new prudential regulations, contingent claims on the government arising from the financial sector are not considered a major source of fiscal vulnerability. With regard to pension liabilities, the young working population and small number of retirees currently drawing benefits imply that the National Pension and Provident Fund system should not encounter problems on a flow basis in the foreseeable future. However, the situation may be quite different 30–40 years hence.

in the exchange rate (local currency per U.S. dollar) are denoted by ε , with $\varepsilon > 0$ indicating a depreciation of the local currency.

14. **The equation above separates the different channels that contribute to the evolution of the debt-to-GDP ratio:** the primary deficit and other endogenous/automatic factors, which include the real interest rate, real GDP growth, and exchange rate movements. The separation of the different components allows an assessment of their relative importance for the evolution of the debt ratio. It also serves as the basis for stress tests, which are based on a number of shocks to these variables. The results of these tests are summarized together with the baseline assumptions and projections in Table II.3. In addition to these terms, the table includes other debt-creating flows, i.e., from the recognition of extra-budgetary borrowing for Tala.

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
I. Baseline Medium-Term Projections									
Public sector debt 2/	57.0	67.8	74.7	80.1	77.2	73.8	67.9	65.3	62.9
Identified debt-creating flows		10.8	6.9	5.4	-2.9	-3.4	-2.8	-2.6	-2.4
Primary deficit		5.8	3.6	3.9	4.3	3.3	3.3	3.3	3.3
Contribution from real interest rate		-2.3	-2.2	-2.3	-2.1	-1.7	-1.6	-1.5	-1.4
Contribution from real GDP growth		-3.8	-4.6	-5.3	-5.7	-5.7	-5.2	-5.0	-4.8
Contribution from exchange rate depreciation		0.5	0.6	0.7	0.7	0.7	0.6	0.6	0.6
Other identified debt-creating flows (Tala)		10.6	9.4	8.4	0.0	0.0	0.0	0.0	0.0
II. Key Macroeconomic Assumptions									
Real GDP growth (in percent)		7.5	7.5	7.7	7.9	8.2	8.2	8.2	8.2
Average nominal interest rate on public debt (in percent) 3/		1.9	1.9	2.0	2.5	2.9	2.9	2.9	2.9
Nominal depreciation of local currency (LC per dollar, in percent)		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Inflation rate (GDP deflator, in percent)		5.9	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Tala loans in Billions of Nu		3.1	3.1	3.1	0.0	0.0	0.0	0.0	0.0
III. Stress Tests									
					(Debt-GDP Ratios)				
Baseline		67.8	74.7	80.1	77.2	73.8	67.9	65.3	62.9
1. Real Growth falls to 5 percent in 2003/04-2005/06		67.8	76.3	83.5	82.6	78.8	72.0	69.1	66.4
2. Nominal interest rate jumps by 2 percent in 2003/04-2005/06		67.8	75.9	82.6	81.0	77.3	70.8	68.0	65.4
3. Revenue falls by 3 percent of GDP in 2003/04- 2005/06		67.8	77.7	85.8	85.4	81.3	74.1	71.0	68.1
4. Ngultrum depreciates by 30 percent in 2003/04		67.8	83.5	88.1	84.5	80.5	73.4	70.4	67.6
5. A combination of 2 and 4		67.8	84.9	91.0	88.8	84.4	76.7	73.3	70.3
Source: Royal Monetary Authority of Bhutan; and staff estimates.									
1/ Based on fiscal year beginning July.									
2/ Public sector includes general government plus implicit liability associated with Tala. Debt figures are all gross values.									
3/ Derived as nominal interest expenditure divided by previous period debt stock.									

15. **In the baseline scenario, the public debt-to-GDP ratio is expected to rise significantly from 57 percent in 2001/02 to 80 percent of GDP by 2004/05, but would decline thereafter.** The baseline projection is based on the staff's medium-term framework, which is broadly consistent with the Ninth Five-Year Plan. For the post-plan period, it is assumed that the primary deficit remains constant relative to GDP at the 2006/07 level. Table II.3 shows that off-budgetary borrowing for the completion of Tala has a large impact

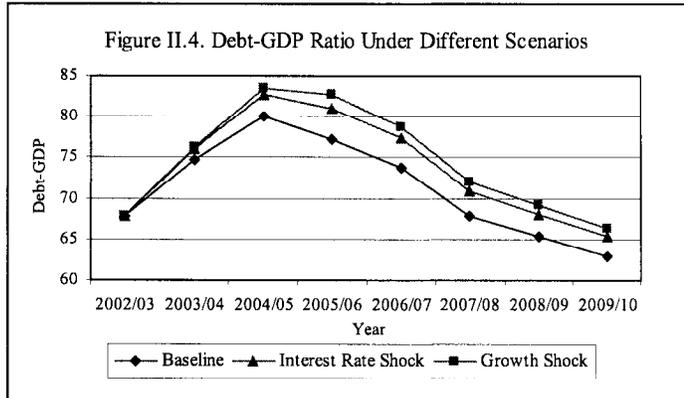
through 2002/03–2004/05. The debt-to-GDP ratio peaks in 2004/05 upon completion of Tala, which by that stage would account for about half of the total stock of debt, before declining to 63 percent of GDP by 2009/10. The decline in the debt-to-GDP ratio after 2004/05 is attributable to the high GDP growth rates, low average interest cost, and fairly moderate level of the primary deficit.

Alternative Scenarios

16. The first shock considered in Table II.3 is a slowdown in growth to 5 percent in 2003/04–2005/06.

This could be the result of domestic factors (e.g., prolonged flood damage to industry) or a significant reduction in demand for Bhutanese exports (e.g., due to greater competition in previously captive markets). The second scenario envisages an upward spike in nominal interest rates of

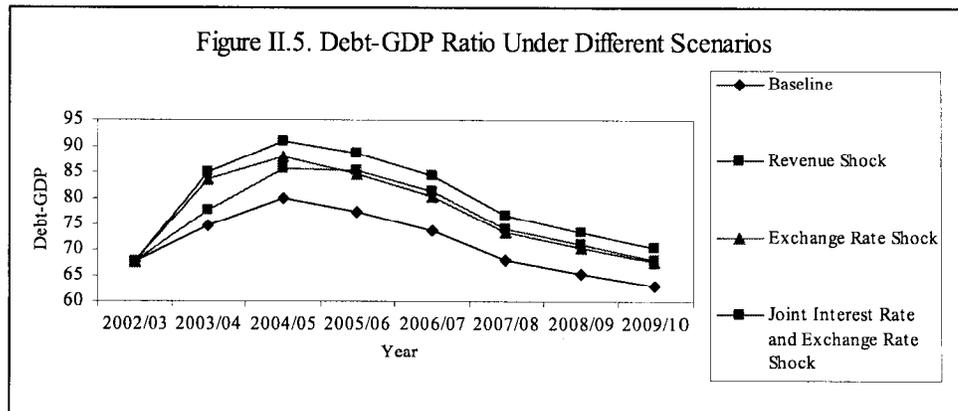
2 percent in 2003/04–2005/06 possibly due to difficulties related to domestic bond issuance or external monetary developments. Both these scenarios result in the debt-GDP ratio peaking at about 83–84 percent in 2004/05 and coming down to about 65–66 percent of GDP in 2009/10.



17. The third and fourth scenarios are plausible revenue and exchange rate shocks, both of which produce significant jumps in the debt-GDP ratio compared to the baseline projection. A 3 percent of GDP fall in government revenue, perhaps due to overly generous tax incentives or a large drop in external grants, would result in the debt-GDP ratio peaking at 86 percent in 2004/05 and declining thereafter. A 30 percent nominal depreciation of the ngultrum-

dollar exchange rates in 2003/04 would result in an even higher peak that year, although the debt-GDP ratio would again level off thereafter. The final simulation is to consider the

repercussions of a simultaneous interest rate and exchange rate shock. This would result in the debt-GDP ratio peaking at 91 percent in 2004/05 and declining thereafter to about 70 percent by 2009/10.



E. Conclusion

18. **Bhutan's public debt dynamics appear to be sustainable under a number of domestic and external shocks.** Under the baseline scenario, the government debt-to-GDP ratio is expected to rise rapidly from 57 percent in 2001/02 to 80 percent by 2004/05, on account of loans from India necessary to complete the Tala project, but would decline to 63 percent of GDP by 2009/10. The stress tests reveal a similar pattern of debt peaking in 2004/05 and tapering off in the following years. The simulations show that a simultaneous jump in interest rates and large depreciation would result in debt peaking at about 91 percent of GDP and declining to a more sustainable level thereafter. Bhutan's generally favorable debt dynamics reflect a combination of high expected growth, low average interest costs and moderate primary deficits. Nevertheless, these parameters are subject to change over time, and the authorities should continue to closely monitor the implications of their fiscal stance and borrowing plans for sustainability.

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Table 1. Bhutan: Gross Domestic Product by Origin at 1980 Prices, 1996-2002

	1996	1997	1998	1999	2000	2001 Prov.	2002 Est.
(In millions of ngultrum)							
Agriculture	1,198	1,234	1,269	1,335	1,395	1,439	1,476
Crops	601	625	647	679	712	742	760
Livestock	256	260	263	280	290	294	302
Forestry	341	349	359	377	394	404	414
Nonagriculture	1,872	2,057	2,235	2,433	2,571	2,789	3,077
Mining	46	44	51	56	48	57	63
Manufacturing	292	292	298	309	290	311	326
Electricity and gas	343	354	367	401	398	447	501
Construction	243	267	322	393	449	527	614
Trade and services	203	218	225	232	237	254	265
Transport, storage, and communication	271	309	350	382	403	419	468
Finance, insurance, and real estate	256	320	349	339	421	458	497
Government services	335	361	363	410	431	458	485
Less: Imputed bank service charges	-116	-106	-90	-88	-104	-143	-144
GDP at 1980 factor cost	3,070	3,291	3,503	3,769	3,967	4,228	4,553
Change in percent	5.2	7.2	6.4	7.6	5.3	6.6	7.7
(In percent of GDP)							
Agriculture	39.0	37.5	36.2	35.4	35.2	34.0	32.4
Crops	19.6	19.0	18.5	18.0	17.9	17.5	16.7
Livestock	8.3	7.9	7.5	7.4	7.3	6.9	6.6
Forestry	11.1	10.6	10.2	10.0	9.9	9.6	9.1
Nonagriculture	61.0	62.5	63.8	64.6	64.8	66.0	67.6
Mining	1.5	1.3	1.5	1.5	1.2	1.4	1.4
Manufacturing	9.5	8.9	8.5	8.2	7.3	7.4	7.2
Electricity	11.2	10.7	10.5	10.6	10.0	10.6	11.0
Other	38.8	41.6	43.3	44.3	46.3	46.7	48.0

Source: Data provided by the Bhutanese authorities.

Table 2. Bhutan: Gross Domestic Product by Origin at Current Prices, 1996-2002

	1996	1997	1998	1999	2000	2001 Prov.	2002 Est.
(In millions of ngultrum)							
Agriculture	4,538	5,369	6,058	6,630	7,773	8,471	9,325
Crops	2,254	2,506	2,893	3,175	3,878	4,214	4,593
Livestock	910	1,238	1,374	1,487	1,625	1,770	1,947
Forestry	1,374	1,625	1,790	1,968	2,270	2,487	2,785
Nonagriculture	6,868	8,627	10,023	11,911	13,393	15,462	18,207
Mining	270	309	262	326	341	401	473
Manufacturing	1,444	1,520	1,622	1,762	1,719	1,936	2,226
Electricity	1,102	1,730	1,941	2,318	2,462	2,601	2,757
Construction	1,040	1,466	1,687	2,113	2,739	3,720	4,836
Trade and services	904	1,014	1,160	1,282	1,465	1,662	1,911
Transport, storage, and communication	856	1,023	1,370	1,637	1,881	2,142	2,463
Finance, insurance, and real estate	442	729	1,004	1,042	1,345	1,601	1,922
Government services	1,014	1,363	1,437	1,873	1,968	2,137	2,393
Less: Imputed bank service charges	-203	-527	-458	-442	-528	-737	-773
GDP at current factor cost	11,406	13,996	16,081	18,541	21,166	23,933	27,533
(In percent of GDP)							
Agriculture	39.8	38.4	37.7	35.8	36.7	35.4	33.9
Crops	19.8	17.9	18.0	17.1	18.3	17.6	16.7
Livestock	8.0	8.8	8.5	8.0	7.7	7.4	7.1
Forestry	12.0	11.6	11.1	10.6	10.7	10.4	10.1
Nonagriculture	60.2	61.6	62.3	64.2	63.3	64.6	66.1
Mining	2.4	2.2	1.6	1.8	1.6	1.7	1.7
Manufacturing	12.7	10.9	10.1	9.5	8.1	8.1	8.1
Electricity	9.7	12.4	12.1	12.5	11.6	10.9	10.0
Other	35.5	36.2	38.5	40.5	41.9	44.0	46.3
Memorandum item:							
GDP deflator (1980=100)	371.5	425.2	459.0	492.0	533.6	566.1	604.8
(percent change)	11.4	14.5	7.9	7.2	8.5	6.1	6.8

Source: Data provided by the Bhutanese authorities.

Table 3. Bhutan: Gross Domestic Product by Expenditure at Current Market Prices, 1996-2001

	1996	1997	1998	1999	2000	2001 Prov.
(In millions of ngultrum)						
Consumption	7,630	10,975	12,920	14,376	16,159	17,959
Private	5,128	7,324	9,612	10,105	11,737	12,847
Public	2,502	3,651	3,308	4,271	4,422	5,112
Investment	5,276	4,882	6,245	8,236	10,109	11,963
Nongovernment 1/	3,479	2,711	3,483	5,296	6,582	7,624
Government	1,797	2,171	2,762	2,940	3,527	4,339
Domestic demand	12,907	15,857	19,166	22,612	26,268	29,922
Net exports of goods and nonfactor services	-1,141	-1,357	-2,538	-3,450	-4,519	-5,027
Exports of goods and nonfactor services	3,979	4,771	5,148	5,714	5,964	5,768
Imports of goods and nonfactor services	5,120	6,128	7,686	9,164	10,483	10,795
Gross domestic product at market prices	11,765	14,500	16,628	19,162	21,749	24,895
Net factor income from abroad	-1,247	-1,141	-2,323	-3,083	-2,679	-2,681
Gross national product at market prices	10,519	13,359	14,305	16,079	19,070	22,214
(In percent of GDP)						
Consumption	64.9	75.7	77.7	75.0	74.3	72.1
Gross domestic investment	44.8	33.7	37.6	43.0	46.5	48.1
Gross national saving	24.6	16.4	8.3	8.9	13.4	17.1
Net exports of goods and nonfactor services	-9.7	-9.4	-15.3	-18.0	-20.8	-20.2
Net factor income from abroad	-10.6	-7.9	-14.0	-16.1	-12.3	-10.8

Source: Data provided by the Bhutanese authorities.

1/ Mainly comprises investment by public enterprises.

Table 4. Bhutan: Crop Production Estimates, 1996-2002 1/

	1996	1997	1999	2000	2001 Est.	2002 Est.
Area (in thousands of acres)						
Paddy	57.8	57.9	64.6	47.3	48.3	48.5
Wheat/barley	18.9	28.6	24.5	15.3	15	15
Maize	94.2	95.7	90.7	76.9	78.8	79
Buckwheat/millet	28.3	27.5	30.7	24	23.4	23.6
Potatoes	8.5	8.0	9.2	7.7	8.1	8.5
Chillies	3.1	3.0	...	2.3	2.9	3
Mustard	6.1	5.8	...	8.5	9.4	9.5
Beans and pulses	7.1	5.6	...	...	...	...
Oranges	19.5	14.5	12.4	14.7	16.2	17
Apples	3.7	3.5	3.5	3.7	4.1	4.3
Cardamom	...	...	...	...	...	...
Yield (metric tons per acres)						
Paddy	1.2	1.1	0.9	1.5	1.5	1.6
Wheat/barley	0.6	0.7	0.9	0.4	0.4	0.5
Maize	0.7	0.7	0.6	1	1.1	1.2
Buckwheat/millet	0.4	0.8	0.7	0.3	0.3	0.3
Potatoes	4.3	3.3	2.9	4.6	4.7	5
Chillies	1.6	1.2	...	1.2	1.4	1.6
Mustard	0.4	0.3	...	0.2	0.3	0.4
Beans and pulses	0.5	0.4	...	...	...	...
Oranges	3.9	3.7	2.4	4.0	4.2	4.8
Apples	2.6	3.9	3.3	2.6	3.1	3.7
Cardamom	...	...	...	...	0.3	0.4
Production (in thousands of metric tons)						
Paddy 2/	67.0	63.1	59.6	68.6	70.3	73.4
Wheat/barley	11.8	19.9	10.4	6.1	6.1	6.5
Maize	66.5	67.5	57.5	77.3	79.2	79.5
Buckwheat/millet	10.9	10.9	11.0	6.7	6.5	6.6
Subtotal: Foodgrains 2/	156.2	161.3	138.5	158.7	162.1	166.0
Potatoes	36.7	26.1	27.1	35.4	36.5	38
Chillies	4.8	3.6	...	2.9	3.2	3.5
Mustard	2.3	1.6	...	1.7	1.9	2.1
Beans and pulses	3.6	2.0	...	2.1	2.5	2.7
Oranges	71.6	54.0	29.4	29.6	31.1	34.2
Apples	23.7	13.6	4.9	5.1	5.6	6.2
Cardamom	...	...	...	0.5	0.6	0.6

Source: Data provided by the Bhutanese authorities.

1/ Data for 1998 not available.

2/ Official estimates total the production of paddy (rather than rice) with that of other grains.

To convert paddy production into rice, these estimates are multiplied by a milling ratio of 60-70 percent.

Table 5. Bhutan: Livestock and Poultry Production, 1996-2002

(In thousands)

	1996	1997	1998	1999	2000	2001	2002 Est.
Cattle	341	351	357	345	321	330	326
Yaks	42	45	46	40	33	34	34
Sheep/goats	65	67	68	61	54	56	56
Pigs	100	103	105	53	41	42	43
Poultry	175	186	191	293	231	242	249

Source: Ministry of Agriculture.

Table 6. Bhutan: Logging Volume, 1995/96-2000^{1/}

(In cubic meters)

	1995/96	1996/97	1997/98	1998	1999	2000
Commercial logging	15,512	27,279	27,770	62,293	48,312	43,579
Logging for housing construction and public works plus other uses	20,078	22,149	22,884	21,998	17,061	15,390
Total	35,590	49,428	50,654	84,291	65,373	58,969

Source: Forestry Development Corporation, Ministry of Agriculture.

1/ Before 1998, data compiled on a fiscal year basis (July-June). Excludes logging resulting from concessions to various public enterprises.

Table 7. Bhutan: Imports of Essential Food Items by the Food Corporation of Bhutan, 1996-2002

(In metric tons)

	1996	1997	1998	1999	2000	2001	2002 Est.
Rice	13,392	15,047	9,005	14,971	6,302	6599	8887
Wheat/wheat products 1/	13,825	19,700	3,826	16,140	3,321	7076	17680
Sugar	3,812	3,903	3,780	3,780	3,780	3155	2424
Edible oils 2/	493	106	34	131	186	162	402

Source: Food Corporation of Bhutan.

1/ Wheat/wheat products include stock lifted by Drala Flour Mill

2/ Edible oil in '000 litres

Table 8. Bhutan: Gross Sales and Output of Selected Industries, 1996-2002

(In millions of ngultrum)

	1996	1997	1998	1999	2000	2001	2002 1/
Penden Cement Authority	209.5	265.5	564.7	684.5	696.7	763.9	574.3
Bhutan Ferro Alloys Limited	497.1	522.9	488.4	534.7	428.4	579.0	483.6
Bhutan Fruit Products	133.2	107.2	112.3	124.9	108.8	111.6	107.4
Army Welfare Project 2/	198.6	232.0	237.9	234.9	255.0	283.8	182.6
Bhutan Carbide and Chemicals	561.2	560.3	583.6	569.3	474.6	675.9	527.3
Bhutan Board Products	348.0	428.7	383.8	257.8	228.6	294.1	288.8

Source: Department of Trade and Industry.

1/ Up to third quarter of 2002.

2/ Manufacturer of alcoholic beverages.

Table 9. Bhutan: Electricity Generation, Tariff Rates, and Trade with India, 1995/96-2001/02

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
	(In millions of kilowatt hours)						
Domestic generation	1,972.2	1,838.4	1,800.0	1,746.1	2,130.5	1,805.6	..
Hydroelectric power	1,972.1	1,838.3	1,799.9	1,746.0	2,130.3	1,805.3	..
Diesel	0.1	0.1	0.1	0.1	0.2	0.3	..
Purchases from India	7.2	7.0	7.5	8.2	9.2	9.9	..
Total supply of electricity	1,979.4	1,845.4	1,807.5	1,754.3	2,139.7	1,815.5	..
	(In millions of ngultrum)						
Exports to India	772.1	870.6	1,351.1	1,278.6	2,411.2	1,991.3	2,027.3
	(In ngultrum per unit)						
Export tariff to India 1/	0.50	1.00	1.00	1.00	1.50	1.50	1.50
Domestic tariff rates							
General	0.50	0.50	0.60	0.60	0.70	0.7	0.8
Major industries	0.50	0.50	0.60	0.60	0.70	0.7	0.8
Unmetered rates (light points) 2/	5.00	5.00	5.00	5.00	5.00	5.0	5.0
Unmetered rates (power points) 2/	20.00	20.00	25.00	25.00	25.00	25.0	25.0

Source: Department of Power.

1/ Rates shown were in effect from April 1, 1995 to March 31, 1997, from April 1, 1997 to June 30, 1999, and from July 1, 1999 to present.

2/ Rates are per month.

Table 10. Bhutan: Tourism Statistics, 1995-2001¹

	1996	1997	1998	1999	2000	2001
Hotel rooms available (number) 2/	560	560	560	560	742	1,256
Average length of stay (nights)	8	7	7	7	7	7
Total tourism receipts (in millions of U.S. dollars)	6.5	6.6	8.0	8.9	10.5	9.2
Tourist arrivals (number)	5,138	5,363	6,203	7,158	7,535	6,393
Tourist arrivals by country						
Total Europe	2,386	2,590	3,132	3,118	2,948	2,452
Germany	722	533	520	574	662	414
France	331	229	366	236	399	287
Italy	242	186	218	276	156	192
Other Europe	1,091	1,642	2,028	2,032	1,731	1,559
United States	963	910	1,471	2,122	2,754	2,149
Japan	1,211	1,173	1,032	1,102	875	1,038
Australia	71	121	64	131	179	138
Other	507	569	504	685	779	616
Tourist arrivals by purpose						
Touring	3,277	4,617	4,860	6,328	6,633	5,925
Trekking	1,861	746	1,343	830	926	468

Source: Bhutan Tourism Corporation.

1/ Data relate to tourists paying in convertible currency.

2/ Includes those hotels approved by the Department of Tourism

Table 11. Bhutan: Consumer Price Index, 1996-2002

(1979=100, unless otherwise stated)

(Weight)	Food Items (72.3)	Nonfood Items (27.7)	All Items (100.0)	Annual Percentage Change in:			Indian CPI (Annual Percentage Change)
				Food	Nonfood	Total	
1996							
June	407.8	566.3	451.7	10.9	6.4	9.3	8.8
December	422.9	607.8	474.1	7.8	9.2	8.3	10.4
1997							
June	423.1	646.2	484.9	3.8	14.1	7.4	6.6
December	438.1	666.2	501.2	3.6	9.6	5.7	6.3
1998							
June	465.3	694.4	528.7	10.0	7.5	9.0	12.4
December	494.5	737.1	561.7	12.9	10.6	12.1	15.3
1999							
June	508.1	757.9	577.3	9.2	9.1	9.2	5.3
December	507.3	795.1	587.0	2.6	7.9	4.5	0.5
2000							
June	511.2	825.2	598.1	0.6	8.9	3.6	5.2
December	513.9	871.3	612.9	1.3	9.6	4.4	3.5
2001							
June	515.5	891.0	619.5	0.8	8.0	3.6	3.4
December	525.2	913.6	632.8	2.2	4.9	3.2	5.2
2002							
June	526.9	921.9	636.3	2.2	3.5	2.7	4.2

Sources: Central Statistical Office and CEIC database.

Table 12. Bhutan: Government Budget Summary, 1997/98-2002/03

	1997/98	1998/99	1999/2000	2000/01	2001/02 Prov.	2002/03 Budget
(In millions of ngultrum)						
Revenue and grants	4,950	6,919	7,859	8,686	8,787	9,531
Domestic revenue	3,134	3,656	4,585	4,975	5,470	5,118
Tax revenue	1,247	1,266	1,977	1,917	2,397	2,762
Nontax revenue	1,887	2,390	2,608	3,058	3,073	2,356
Grants	1,816	3,263	3,274	3,711	3,317	4,413
From India	1,045	1,929	2,188	2,551	1,565	2,765
Other	771	1,334	1,086	1,160	1,752	1,648
Expenditure and net lending	4,806	7,224	8,624	11,179	10,185	10,945
Current expenditure	2,628	3,178	3,702	4,436	4,664	4,598
Capital expenditure	1,961	4,106	4,632	6,281	5,447	6,319
Net lending	218	-60	290	461	73	28
Current balance (excluding grants)	506	478	882	539	806	521
Overall balance (including grants)	144	-305	-766	-2,493	-1,398	-1,414
Financing	-144	305	766	2,493	1,398	1,414
Foreign financing	336	554	607	1,059	788	912
Disbursement	611	804	812	1,269	1,019	1,152
Amortization	275	250	205	213	231	240
Domestic financing	-480	-249	158	1,434	608	500
(In percent of GDP)						
Revenue and grants	32.9	40.0	39.6	38.5	34.1	32.5
Domestic revenue	20.8	21.1	23.1	22.1	21.3	17.5
<i>Of which:</i> Tax revenue	8.3	7.3	10.0	8.5	9.3	9.4
Foreign grants	12.1	18.8	16.5	16.5	12.9	15.1
Expenditure and net lending	32.0	41.7	43.4	49.6	39.6	37.4
Current expenditure	17.5	18.4	18.6	19.7	18.1	15.7
Capital expenditure and net lending	14.5	23.4	24.8	29.9	21.5	21.7
Current balance (excluding grants)	3.4	2.8	4.4	2.4	3.1	1.8
Overall balance (including grants)	1.0	-1.8	-3.9	-11.1	-5.4	-4.8
Memorandum item:						
Nominal GDP at factor cost (In millions of ngultrum)	15,038	17,311	19,853	22,549	25,733	29,282

Source: Data provided by the Bhutanese authorities.

1/ Based on National Budget for FY 2001/02, June 2001, p. 7.

2/ Based on RMA June 2002 SEI, Table 28.

Table 13. Bhutan: Government Domestic Revenue, 1997/98-2002/03

(In millions of ngultrum)

	1997/98	1998/99	1999/2000	2000/01	2001/02 Prov.	2002/03 Budget
Total tax revenue	1,247	1,266	1,977	1,917	2,397	2,762
Tax on income and profits	668	725	1,057	1,258	1,274	1,478
<i>Of which: Chukha revenue</i>	364	374	565	618	546	...
Taxes on domestic goods	509	454	829	533	992	1,148
Taxes on international trade	48	64	67	91	99	107
Other	22	23	24	34	32	29
Nontax revenue	1,887	2,390	2,608	3,058	3,073	2,356
Net profit transfers	162	526	248	714	364	490
Royalties	162	194	222	275	214	325
Dividends	921	971	1,222	1,296	1,427	1,430
<i>Of which: Chukha revenue</i>	856	871	1,131	1,201	1,248	..
Administrative fees & Charges	52	57	72	81	90	..
Sale of government property	54	54	48	47	28	..
Revenue from govt. departments	411	446	564	311	500	..
Other	125	144	232	335	450	111
Total domestic revenue	3,134	3,656	4,585	4,975	5,470	5,118

Source: Data provided by the Bhutanese authorities.

Table 14. Bhutan: Economic Classification of Government Current Expenditure, 1997/98-2002/03

(In millions of ngultrum)

	1997/98	1998/99	1999/2000	2000/01	2001/02 Prov.	2002/03 Budget
Wages and salaries	997	1,135	1,472	1,582	1,751	1,807
Goods and services	1,306	1,520	1,798	2,035	2,306	2,261
Subsidies and transfers	222	439	352	741	482	394
Druk Air Corporation	41	37	33	29	25	0
Bhutan Broadcasting Corporation	7	8	6	16	17	21
Individuals and other nonprofit organization	51	270	136	498	224	227
Gratuity and retirement benefits	25	25	24	42	37	30
Contribution to Provident Fund	88	94	134	141	157	105
Other	10	5	19	15	22	12
Interest Payments	103	84	80	78	125	136
Total current expenditures	2,628	3,178	3,702	4,436	4,664	4,598

Source: Data provided by Bhutanese authorities.

Table 15. Bhutan: Functional Classification of Government Current Expenditure, 1997/98-2002/03

	1997/98	1998/99	1999/2000	2000/01	2001/02 Prov.	2002/03 Budget
(In millions of ngultrum)						
General public services	1,156	1,423	1,558	2,025	1,945	1,909
Economic services	735	851	948	1,036	1,199	979
Agriculture and irrigation	146	172	214	249	282	297
Animal husbandry	62	74	85	94	99	114
Forestry	89	106	115	153	169	189
Industries, mining, trade, and commerce	25	36	32	58	56	70
Public works, roads, and housing	153	142	150	179	234	234
Transport and communication	78	81	99	30	34	38
Power	181	241	253	272	326	37
Social services	737	904	1,196	1,375	1,521	1,709
Education	428	554	717	833	892	1,036
Health	301	341	468	525	610	652
Urban development and municipal corporations	8	9	11	16	19	21
Current expenditure	2,628	3,178	3,702	4,436	4,664	4,598
(In percent of total current expenditure)						
General public services	44.0	44.8	42.1	45.7	41.7	41.5
Economic services	28.0	26.8	25.6	23.4	25.7	21.3
Social services	28.0	28.4	32.3	31.0	32.6	37.2

Source: Data provided by the Bhutanese authorities.

Table 16. Bhutan: Functional Classification of Government Capital Expenditure, 1997/98-2002/03

	1997/98	1998/99	1999/2000	2000/01	2001/02 Prov.	2002/03 Budget
(In millions of ngultrum)						
General public services	467	798	874	1,078	940	1,323
Economic services	1,108	2,706	3,029	4,505	3,448	3,493
Agriculture and irrigation	54	181	172	211	304	377
Animal husbandry	16	32	18	16	109	140
Forestry	43	84	123	122	203	112
Industries, mining, trade, and commerce	14	21	54	51	163	136
Public works, roads, and housing	399	387	818	1,003	1,495	1,614
Transport and communication	118	225	107	24	49	58
Power	464	1,778	1,737	3,078	1,125	1,056
Social services	386	601	729	698	1,059	1,503
Education	116	323	404	382	630	783
Health	257	265	300	279	388	668
Urban development and municipal corporations	13	13	26	37	41	52
Capital expenditure	1,961	4,106	4,632	6,281	5,447	6,319
Net lending	218	-60	290	461	73	28
Capital expenditure and net lending	2,178	4,046	4,922	6,742	5,520	6,347
(In percent of total capital expenditure)						
General public services	21.4	19.7	17.8	16.0	17.0	20.8
Economic services	50.8	66.9	61.5	66.8	62.5	55.0
Social services	17.7	14.9	14.8	10.4	19.2	23.7

Source: Data provided by the Bhutanese authorities.

Table 17. Bhutan: Functional Classification of Total Government Expenditure, 1997/98-2002/03

	1997/98	1998/99	1999/2000	2000/01	2001/02 Prov.	2002/03 Budget
	(In millions of ngultrum)					
General public services	1,623	2,221	2,432	3,103	2,885	3,232
Economic services	1,842	3,558	3,977	5,541	4,647	4,472
Agriculture and irrigation	201	354	386	460	586	674
Animal husbandry	78	106	102	110	208	254
Forestry	132	190	238	275	372	301
Industries, mining, trade, and commerce	39	56	86	109	219	206
Public works, roads, and housing	552	529	968	1,182	1,729	1,848
Transport and communication	196	306	206	55	83	96
Power	645	2,018	1,990	3,350	1,451	1,093
Social services	1,123	1,505	1,925	2,073	2,580	3,212
Education	544	877	1,121	1,215	1,522	1,819
Health	558	606	768	804	998	1,320
Urban development and municipal corporations	21	22	37	53	60	73
Net lending	218	-60	290	461	73	28
Total expenditure and net lending	4,806	7,224	8,624	11,179	10,185	10,945
	(In percent of total expenditure)					
General public services	33.8	30.7	28.2	27.8	28.3	29.5
Economic services	38.3	49.2	46.1	49.6	45.6	40.9
Social services	23.4	20.8	22.3	18.5	25.3	29.3

Source: Data provided by the Bhutanese authorities.

Table 18. Bhutan: Monetary Survey, 1996-2002

	1996 June	1997 June	1998 June	1999 June	2000 June	2001 June	2002	
							June	Sept.
(In millions of ngultrum)								
Net foreign assets	5,181.1	6,233.3	9,088.0	11,335.9	13,248.3	12,788.9	14,348.5	14,270.4
Rupee	77.0	708.7	1,267.8	2,542.3	3,113.4	2,367.8	2,314.3	1,780.6
Other	5,104.1	5,524.6	7,820.2	8,793.6	10,134.9	10,421.1	12,034.2	12,489.8
Net domestic assets	-1,912.4	-1,955.5	-3,024.9	-3,976.7	-4,317.7	-3,369.0	-3,271.5	-3,175
Net claims on government 1/	-523.6	-277.9	-648.5	-1,485.3	-1,110.7	-455.8	-744.4	-726.2
Claims on Nongovernment	1,946.8	1,813.0	1,894.1	1,866.3	1,862.7	2,469.9	3,021.2	3145.4
Public enterprises	503.5	497.1	459.4	391.0	353.6	332.7	292.3	277.7
Joint enterprises	231.9	218.8	192.6	165.7	146.1	120.6	121.9	120
Private sector	1,211.4	1,097.1	1,242.1	1,309.6	1,363.0	2016.6	2,607.0	2,747.7
Other items (net) 2/	-3,335.6	-3,490.6	-4,270.5	-4,357.7	-5,069.8	-5,383.1	-5,548.3	-5607.9
Broad money	3,268.7	4,277.8	6,063.1	7,359.2	8,930.6	9,419.9	11,077.0	11,095.4
Narrow money	1,315.8	1,973.3	2,500.2	2,868.5	3,691.7	4,477.9	5,019.5	5,263.2
Currency	455.2	617.0	1,050.3	852.8	1,119.4	1,483.1	1600.2	1546.2
Demand deposits	860.6	1,331.9	1,327.1	1,832.6	2,474.8	2,889.7	3,313.6	3,621.3
Other demand deposits	0.0	24.4	122.8	183.1	97.5	105.1	105.7	95.7
Quasi-money 3/	1,952.9	2,304.5	3,562.9	4,490.7	5,238.9	4,942.0	6,057.5	5,832.2
(Changes in percent of initial stock of broad money)								
Broad money	30.4	30.9	41.7	21.4	21.4	5.5	17.6	7.1
Net foreign assets	76.2	32.2	66.7	37.1	26.0	-5.1	16.6	11.4
Net domestic assets	-45.8	-1.3	-25.0	-15.7	-4.6	10.6	1.0	-4.3
Net claims on government	-8.2	7.5	-8.7	-13.8	5.1	7.3	-3.1	-2.8
Claims on private sector	5.1	-3.5	3.4	1.1	0.7	7.3	6.3	5.4
Other items (net)	-38.6	-4.7	-18.2	-1.4	-9.7	-3.5	-1.8	-6.6
Memorandum items:								
Money multiplier 4/	1.3	2.0	1.8	1.6	1.8	2.0	1.8	1.8
Broad money/GDP	0.31	0.34	0.40	0.43	0.45	0.42	0.43	...
Nominal GDP (fiscal year)	10,508	12,701	15,038	17,311	19,853	22,549	25,733	...

Source: Data provided by the Bhutanese authorities.

1/ Includes deposits of some public enterprises and off-budgetary entities; as such, data differ from the bank financing data reported in the fiscal accounts.

2/ Includes foreign exchange valuation adjustments and capital accounts.

3/ Includes time and foreign currency deposits.

4/ Ratio of broad money to reserve money.

Table 19. Bhutan: Assets and Liabilities of the Royal Monetary Authority of Bhutan, 1996-2002

(In millions of ngultrum)

	1996	1997	1998	1999	2000	2001	2002	
	June	June	June	June	June	June	June	Sept.
Foreign assets	4,788.6	5,286.2	7,601.8	8,606.0	9,162.9	9,258.8	11,065.3	10,641.3
Ruppee	34.0	39.2	41.4	95.3	102.0	89.4	635.7	107.0
Other	4,754.6	5,247.0	7,560.4	8,510.7	9,060.9	8,958.7	10,174.8	10,290.3
Gold	0.0	179.3	185.5	165.7	226.2	210.7	254.8	244.0
Claims on government	51.0	51.0	50.0	100.0	0.0	280.0	127.0	127.0
Claims on joint enterprises 1/	6.0	5.0	5.0	0.0	0.0	0.0	0.0	0.0
Claims on commercial banks	182.5	3.6	6.8	855.5	411.9	22.7	67.4	207.9
Claims on private sector 2/	0.0	3.6	3.2	3.0	2.5	2.0	1.4	2.1
Assets = Liabilities	5,028.1	5,349.3	7,666.8	9,564.5	9,577.3	9,563.5	11,261.1	10,978.3
Foreign liabilities 3/	73.6	250.0	250.0	3.0	2.5	0.0	0.0	0.0
Reserve money	2,586.9	2,122.6	3,318.5	4,464.0	4,950.9	4,710.9	6,023.0	6,010.9
Currency outside banks	455.2	617.0	1,050.3	852.8	1,119.4	1,483.1	1,600.2	1,546.2
Currency in banks	27.0	62.1	62.8	78.1	48.0	77.4	94.3	94.4
Bank deposits	2,104.7	1,419.1	2,082.6	3,350.1	3,686.0	3,045.3	4,222.9	4,274.8
Nonbank deposits	0.0	24.4	122.8	183.0	97.5	105.1	105.7	95.8
RMA Bills	550.0	750.0	560.0	510.0	510.0	410.0	910.0	925.0
Reserve Repurchase	0.0	500.0	500.0	500.0	500.0	0.0	0.0	0.0
Government deposits	207.9	28.2	30.5	894.4	462.2	60.5	114.4	163.3
Capital account	174.1	111.8	393.1	288.7	361.6	449.7	254.1	223.3
Other items (net)	1,435.6	1,586.7	2,614.7	2,907.1	2,792.6	3,721.7	3,704.7	3,655.8
<i>Of which: foreign exchange reval.</i>	...	1,637.8	2,408.7	2,003.8	1,794.8	1,821.4	1,998.0	1,908.3
Memorandum item:								
Reserve money (percent change)	85.0	-17.9	56.3	34.5	10.9	-4.8	27.9	18.1

Source: Data provided by the Bhutanese authorities.

1/ Includes other financial institutions.

2/ Includes advances to RMA staff.

3/ Rupee overdraft facilities.

Table 20. Bhutan: Assets and Liabilities of the Bank of Bhutan, 1996-2002

(In millions of ngultrum)

	1996	1997	1998	1999	2000	2001	2002	
	June	June	June	June	June	June	June	Sept.
Reserves	1,901.1	1,412.7	2,336.4	2,506.2	3,051.7	3,390.9	4,582.6	4,172.9
Cash reserve ratio (CRR)	405.4	420.3	201.0	201.8	45.8	640.6	671.7	1,448.3
Cash	27.0	36.2	50.3	60.1	534.1	71.1	90.2	90.1
Excess reserves	1,468.7	956.3	2,085.2	2,244.3	2,471.8	1,822.8	3,049.6	1,774.3
RMA bills 1/	550.0	359.0	498.2	464.5	391.4	356.4	771.1	860.2
Reserve repurchase	0.0	500.0	500.0	500.0	500.0	500.0	0.0	0.0
Foreign assets	302.9	1,160.7	1,573.0	2,018.1	2,328.9	2,916.2	2,884.6	2,961.6
Rupee	116.6	913.8	1,404.4	1,863.7	1,819.5	2,149.7	1,980.9	1,948.4
Other	186.3	246.9	168.6	154.4	509.4	766.5	903.7	1,013.2
Claims on government	105.0	0.0	0.0	50.0	50.0	677.7	266.9	425.2
Claims on public enterprises	503.5	497.1	459.4	391.0	353.6	332.7	292.3	277.7
Claims on joint enterprises	215.1	204.6	176.8	156.6	141.1	113.4	114.5	112.7
Claims on private sector	529.1	526.2	556.6	543.3	513.0	948.5	1,143.1	1,199.2
Assets = Liabilities	4,106.7	4,660.3	6,100.4	6,629.6	7,329.7	9,235.8	10,055.1	10,009.5
Demand deposits	860.6	1,193.1	1,105.0	1,559.7	2,029.1	2,280.5	2,604.4	2,853.9
Current	552.6	776.8	643.2	934.4	1,143.5	1,195.6	1,329.7	1,585.2
Savings	308.0	416.3	461.8	625.3	885.6	1,048.9	1,274.7	1,268.7
Time & foreign currency deposits	1,952.9	1,856.0	2,998.4	3,592.4	3,571.4	2,817.7	3,392.5	3,392.5
Of which: convertible currency	83.1	112.3	262.9	210.1	201.9	201.3	256.5	225.8
Government deposits 2/	411.2	285.3	607.5	393.0	430.7	671.6	601.5	695.6
Capital account	358.5	388.4	407.6	410.7	451.3	513.8	698.9	554.0
Other items (net)	523.5	937.5	981.9	673.8	847.2	694.8	364.0	554.0

Source: Data provided by the Bhutanese authorities.

1/ Recorded at face value.

2/ Includes deposits of public enterprises and off-budgetary entities.

Table 21. Bhutan: Assets and Liabilities of the Bhutan National Bank, 1997-2002

(In millions of ngultrum)

	1997	1998	1999	2000	2001	2002	
	June	June	June	June	June	June	Sept.
Reserves	186.2	239.2	271.0	319.3	618.5	418.1	809.3
Cash reserve ratio (CRR)	0.0	16.9	82.5	247.3	331.6	358.2	552.3
Cash	26.0	12.5	18.0	2.3	6.3	4.1	4.3
Excess reserves	160.2	209.8	170.5	69.7	280.6	55.8	252.7
Foreign assets	36.4	163.2	711.8	1,756.5	2,024.2	2,019.8	1,865.8
Rupee	5.7	72.0	583.3	1,191.9	1,328.3	1,064.1	923.5
Other	30.7	91.2	128.5	564.6	695.9	955.7	942.3
Claims on government	0.0	0.0	0.0	0.0	0.0	120.0	120.0
Claims on public enterprises	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Claims on joint enterprises	9.2	10.8	9.1	5.0	7.2	7.4	7.4
Claims on private sector	567.3	682.3	763.3	847.5	1,066.1	1,466.3	1,550.2
Assets = Liabilities	799.1	1,095.5	1,755.2	2,928.3	3,716.0	4,031.6	4,352.7
Demand deposits	138.8	222.1	272.9	445.7	609.2	709.2	767.4
Time and foreign currency deposits	448.5	564.5	898.3	1,667.5	1,923.0	2,408.5	2,524.2
Government deposits	15.4	60.5	347.9	267.8	681.4	542.4	539.5
Capital account	133.2	148.8	174.4	191.3	283.9	327.4	332.4
Other items (net)	63.2	99.6	61.7	356.0	270.5	172.5	101.1

Source: Data provided by the Bhutanese authorities.

Table 22. Bhutan: Assets and Liabilities of the Royal Insurance Corporation of Bhutan, 1996-2002

(In millions of ngultrum)

	1996	1997	1998	1999	2000	2001	2002	
	June	June	June	June	June	June	June	Sept.
Reserves 1/	27.8	263.6	39.7	31.3	131.8	51.5	39.3	14.1
Foreign assets	0.7	1.1	1.3	2.3	53.2	51.3	55.7	55.7
Claims on public enterprises	34.1	37.3	30.1	41.9	41.2	17.3	17.3	17.3
Claims on private sector	812.9	753.3	721.7	683.8	679.8	907.2	1,075.4	1,112.9
Claims on deposit money banks	300.0	230.0	783.0	1,080.0	1,318.0	0.0	0.0	0.0
Claims on other financial institutions	13.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Assets = Liabilities	1,188.6	1,285.3	1,575.8	1,839.3	2,224.0	1,027.3	1,187.7	1,200.0
Insurance reserve funds	13.0	12.3	13.1	15.2	256.5	0.0	0.0	0.0
Life Insurance Fund	28.6	31.3	32.7	41.9	45.3	50.1	44.1	45.5
Group Insurance Fund	75.2	83.1	94.7	103.5	116.8	133.6	155.5	151.3
Provident Fund	851.0	1,039.0	1,308.2	1,359.3	1,866.9	682.2	418.6	0.0
Capital accounts	95.4	69.3	102.9	182.0	111.6	155.5	187.4	191.6
Other items (net)	125.4	50.3	24.2	137.5	-173.2	-254.1	-293.0	136.4

Source: Data provided by the Bhutanese authorities.

1/ Includes deposits with the Bank of Bhutan.

Table 23. Bhutan: Assets and Liabilities of the Bhutan Development Finance Corporation, 1996-2002

(In millions of ngultrum)

	1996	1997	1998	1999	2000	2001	2002	
	June	June	June	June	June	June	June	Sept.
Reserves 1/	13.8	32.3	39.9	14.0	24.7	18.7	23.3	21.8
Claims on private sector 2/	372.4	403.6	422.3	484.9	462.8	587.1	818.9	884.6
Claims on other banks	29.1	8.2	4.1	16.0	130.1	107.0	15.0	5.0
Claims on government corp.	0.0	1.8	1.8	1.8	1.4	0.9	0.9	0.9
Assets = Liabilities	415.3	445.9	468.1	516.7	619.0	713.7	858.1	912.3
Foreign liabilities	132.0	171.2	165.2	161.7	225.8	228.4	304	335.8
Credit from RMA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital account	228.0	222.8	240.8	246.1	274.1	308.6	356.0	362.9
Other items (net)	55.3	51.9	62.1	108.9	119.0	176.7	198.1	163.5

Source: Data provided by the Bhutanese authorities.

1/ Includes deposits with Bank of Bhutan.

2/ Includes small amounts of investments in shares of public enterprises.

Table 24. Bhutan: Financial Sector Investment by Sector of Economic Activity, 1996-2002

(In millions of ngultrum)

	1996	1997	1998	1999	2000	2001	2002
	June	June	June	June	June	June	June
Agriculture	117.1	148.1	157.6	182.5	168.3	201.8	229.6
Bank of Bhutan	8.2	6.5	4.6	3.8	3.1	3.2	6.2
Royal Insurance Corporation of Bhutan	0.0	0.0	0.6	0.6	0.7	0.6	0.3
Bhutan Development Finance Corporation 1/	108.9	141.6	152.5	178.1	164.5	198	223.1
Bhutan National Bank 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Manufacturing	1,029.0	1,096.2	898.4	715.1	588.0	785.2	974.0
Bank of Bhutan	334.6	331.4	291.3	257.0	240.3	222.4	253.8
Royal Insurance Corporation of Bhutan	317.0	392.4	237.6	182.1	111.3	202.7	256.8
Bhutan Development Finance Corporation 1/	167.0	145.1	141.4	100.8	71.2	138.3	180.7
Bhutan National Bank 2/	210.4	227.3	228.1	175.2	165.3	221.8	282.7
Building and construction	555.9	583.1	610.1	565.1	620.3	718.8	1,113.5
Bank of Bhutan	83.0	84.1	86.5	91.5	99.1	142.0	232.2
Royal Insurance Corporation of Bhutan	274.8	262.0	268.1	269.6	279.7	273.9	331.5
Bhutan Development Finance Corporation 1/	54.3	84.4	5.8	23.1	28.4	41.3	140.8
Bhutan National Bank 2/	143.8	152.6	249.7	180.9	213.1	261.6	408.0
Trade and commerce	314.2	383.3	370.6	467.7	427.1	1,643.5	1,261.8
Bank of Bhutan	184.7	268.5	223.9	234.5	259.1	1,163.3	578.2
Royal Insurance Corporation of Bhutan	90.1	70.2	62.5	105.3	62.8	118.0	146.9
Bhutan Development Finance Corporation 1/	0.0	0.0	75.1	113.3	89.3	169.6	255.8
Bhutan National Bank 2/	39.4	44.6	9.1	14.6	15.9	192.6	280.9
Transport	581.6	597.6	610.5	668.1	598.3	712.0	729.8
Bank of Bhutan	521.4	515.5	519.4	465.6	405.6	404.2	411.4
Royal Insurance Corporation of Bhutan	46.5	63.2	51.3	69.4	68.1	160.9	151.7
Bhutan Development Finance Corporation 1/	0.0	0.0	0.0	46.0	36.9	24.0	12.5
Bhutan National Bank 2/	13.7	18.9	39.8	87.1	87.8	122.9	154.2
Personal and other loans	246.9	254.2	328.0	479.3	691.0	497.0	598.8
Bank of Bhutan 3/	113.8	105.9	54.8	101.7	138.8	89.5	91.4
Royal Insurance Corporation of Bhutan	63.1	57.2	70.0	52.1	154.1	124.1	161.3
Bhutan Development Finance Corporation	0.0	0.0	47.6	23.6	26.5	15.4	5.3
Bhutan National Bank 2/	70.0	91.1	155.7	301.9	371.6	268.0	340.8
Total	2,844.7	3,062.5	2,975.1	3,077.6	3,092.8	4,558.3	4,907.5

Source: Data provided by the Bhutanese authorities.

1/ Due to nonavailability of data for the quarter, June 1994, BDFC loans outstanding in the agriculture sector exclude the Rural Credit Scheme.

2/ Financial sector investment was carried out by the Unit Trust of Bhutan prior to January 1997 when it was converted to a commercial bank, the Bhutan National Bank.

3/ Includes personal loans, government employee loans, and others.

Table 25. Bhutan: Royal Monetary Authority of Bhutan Bills Auctions, 1998-2002 1/

Auction Date	Bids Received (Nu million)	Bids Accepted (Nu million)	Discount Rate (percent)
2/6/1998	660.00	250.00	8.00
4/1/1998	775.00	300.00	6.00
5/7/1998	650.00	150.00	5.95
6/30/1998	520.00	300.00	8.50
8/6/1998	765.00	150.00	4.85
9/9/1998	580.00	110.00	8.50
9/28/1998	530.00	300.00	8.50
11/4/1998	555.00	150.00	8.50
12/9/1998	595.00	110.00	8.50
12/28/1998	565.00	300.00	8.50
2/3/1999	620.08	150.00	8.50
3/10/1999	605.00	110.00	8.50
3/25/1999	620.00	250.00	9.50
5/5/1999	585.00	150.00	5.00
6/9/1999	600.00	110.00	5.95
6/24/1999	635.00	250.00	4.00
8/4/1999	625.00	150.00	5.95
9/8/1999	620.00	250.00	8.50
9/17/1999	620.00	250.00	8.50
11/2/1999	611.00	150.00	3.50
12/7/1999	520.00	110.00	6.00
12/22/1999	640.00	250.00	6.00
2/1/2000	535.00	150.00	6.00
3/6/2000	535.00	110.00	6.00
3/21/2000	570.00	250.00	8.50
5/3/2000	570.00	150.00	8.50
6/5/2000	540.00	110.00	8.50
6/19/2000	500.00	250.00	8.50
8/1/2000	500.00	150.00	8.50
9/4/2000	500.00	110.00	8.50
9/18/2000	500.00	150.00	9.50
11/1/2000	500.00	150.00	8.50
12/4/2000	671.00	110.00	7.50
12/18/2000	705.00	150.00	5.50
1/30/2001	520.00	150.00	6.50
3/5/2001	660.00	110.00	5.90
3/19/2001	500.00	150.00	6.00
4/30/2001	550.00	150.00	6.00
6/4/2001	700.00	110.00	5.00
6/18/2001	600.00	150.00	4.90
7/31/2001	650.00	150.00	4.00
9/3/2001	500.00	110.00	3.80
9/17/2001	500.00	150.00	5.40
10/29/2001	300.00	150.00	5.00
12/3/2001	160.00	110.00	5.00
12/18/2001	150.00	150.00	5.00
1/29/2002	770.00	650.00	5.00
3/4/2002	110.00	110.00	5.00
3/18/2002	150.00	150.00	5.00
4/29/2002	650.00	650.00	4.50
6/3/2002	110.00	110.00	4.50
6/18/2002	150.00	150.00	4.50
7/29/2002	665.00	665.00	4.50
9/2/2002	110.00	110.00	4.50
9/19/2002	150.00	150.00	4.00
10/29/2002	500.00	500.00	4.00

Source: Data provided by the Bhutanese authorities.

1/ Since July 1994, the RMA bills carry a maturity of 91 days.

Table 26. Bhutan: Structure of Interest Rates, 1996-2002

(In percent per annum, end of period)

	1996 June	1997 June	1998 June	1999 June	2000 June	2001 June	2002 June
Deposit rates							
Bank of Bhutan							
Savings	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Fixed							
3-6 months	8.0	8.0	8.0	8.0	7.0	7.0	7.0
6-9 months	8.0	8.0	8.0	8.0	7.0	7.0	7.0
9-12 months	8.0	8.0	8.0	8.0	7.0	7.0	7.0
1-3 years	10.0	10.0	10.0	10.0	9.0	9.0	9.0
3-5 years	11.0	11.0	11.0	11.0	10.0	10.0	10.0
Over 5 years	11.0	11.0	11.0	11.0	10.0	10.0	10.0
Bhutan National Bank 1/							
Savings	...	7.0	7.0	7.0	7.0	7.0	6.0
Fixed							
3-6 months	...	8.0	8.0	8.0	8.0	8.0	7.0
6-9 months	...	8.0	8.0	8.0	8.0	8.0	7.0
9-12 months	...	8.0	8.0	8.0	8.0	8.0	7.0
1-3 years	...	10.0	10.0	10.0	10.0	10.0	9.0
3-5 years	...	11.0	11.0	11.0	11.0	11.0	10.0
Over 5 years	...	11.0	11.0	11.0	11.0	11.0	10.0
Lending rates							
Commerce	16.0	16.0	16.0	16.0	15.5-16.0	15.0-15.5	15.0
Exports	13.0	13.0	13.0	13.0	13.0-15.5	13.0-15.5	13.0-15.0
Transport	13.0	13.0	13.0	13.0	13.0-15.5	13.0-16	13.0-16.0
Agriculture	13.0	13.0	13.0	13.0	13.0	13.0	12.0-15.0
Industry & manufacturing	13.0	13.0	13.0	13.0	13.0-13.5	13.0-13.5	12.0-13.0
Service industries, including tourism	14.0	14.0	14.0	14.0	13.0	13.0	12.0-13.0
Housing	14.0	14.0	14.0	14.0	14.0	14.0	13.0
Miscellaneous	16.0	16.0	16.0	16.0	15.0-16.0	15.0-16.0	15.0
Memorandum items:							
Deposit rates (India) 2/	...	12.0	11.5	9.3	8.8	8.0	8.0
Lending rates (India) 3/	16.5	13.5	12.8	12.0	11.8	12.0	12.0

Sources: Data provided by the Bhutanese authorities and CEIC database.

1/ Bhutan National Bank was established in January 1997.

2/ Average deposit rate of major banks (one-year maturity).

3/ Prime lending rate.

Table 27. Bhutan: Balance of Payments Summary, 1995/96-2001/02

(In millions of U.S. dollars)

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
Trade balance	-13.2	-31.9	-24.8	-57.6	-70.7	-96.8	-90.7
India	8.4	4.4	9.3	-17.3	-31.0	-66.5	-54.1
Other	-21.6	-36.4	-34.1	-40.3	-39.7	-30.2	-36.5
Exports, f.o.b. 1/	97.7	99.3	111.3	104.7	114.3	99.5	97.7
India	89.8	90.2	105.3	98.2	108.0	94.4	91.9
Other	7.9	9.1	6.0	6.6	6.3	5.2	5.8
Imports, c.i.f. 1/	-110.9	-131.3	-136.1	-162.3	-185.0	-196.3	-188.4
India	-81.4	-85.8	-96.0	-115.5	-139.0	-160.9	-146.0
Other	-29.5	-45.5	-40.1	-46.8	-46.0	-35.4	-42.3
Net services	-1.6	-0.4	-12.6	-4.5	-20.2	-9.3	-8.1
India	-1.7	-1.6	-12.1	-8.5	-22.6	-10.4	-9.8
Other	0.1	1.2	-0.5	4.0	2.4	1.1	1.8
Net income	-1.8	2.8	3.6	8.4	-10.3	-4.6	-11.7
India	-4.9	-2.4	0.9	2.4	-14.6	-9.9	-10.1
Other	3.1	5.2	2.7	6.0	4.2	5.3	-1.6
Net current transfers	58.0	50.9	66.0	75.6	105.3	83.9	82.2
India	23.2	25.2	40.4	41.0	72.5	49.6	46.8
Other	34.8	25.7	25.5	34.6	32.8	34.3	35.4
<i>Of which: budgetary grant receipts 1/</i>	82.7	62.4	56.1	76.6	89.2	80.0	75.6
India	34.1	26.5	34.8	45.3	58.4	55.0	39.2
Other	48.6	35.9	21.4	31.3	30.9	25.0	36.3
Current account (including grants)	41.4	21.4	32.2	21.9	4.0	-26.7	-28.2
India	25.0	25.6	38.6	17.6	4.3	-37.1	-27.3
Other	16.3	-4.3	-6.4	4.3	-0.2	10.4	-1.0
Capital and financial account	-12.1	5.4	6.8	27.0	42.0	30.8	59.4
India	-11.2	1.6	0.0	22.7	37.0	36.8	36.9
Other	-0.9	3.8	6.8	4.3	5.0	-6.0	22.5
Foreign direct investment	0.0	0.0	0.0	1.1	0.0	0.0	2.1
Portfolio investment	0.0	0.0	0.0	0.0	0.0	-19.0	0.0
Total	-12.1	5.4	6.8	25.9	42.0	49.8	57.3
Concessional loans (net)	1.4	3.7	9.2	35.1	42.0	49.8	57.3
India	0.0	-2.4	0.0	30.7	37.0	36.8	36.9
Other	1.4	6.1	9.2	4.4	5.0	13.0	20.4
Nonconcessional loans (net)	-13.5	1.7	-2.4	-9.2	0.0	0.0	0.0
India	-11.2	4.0	0.0	-8.0	0.0	0.0	0.0
Other	-2.3	-2.3	-2.4	-1.1	0.0	0.0	0.0
Errors and omissions	-5.1	4.1	4.4	-0.6	-12.4	-28.0	-10.8
India	-11.7	-4.8	-26.6	-11.3	-29.3	-19.1	-12.8
Other	6.7	8.9	31.0	10.7	16.9	-8.9	2.0
Overall balance	24.2	30.9	43.4	48.3	33.6	-24.0	20.4
India	2.0	22.5	11.9	28.9	11.9	-19.4	-3.1
Other	22.1	8.4	31.5	19.4	21.7	-4.6	23.5
Financing							
Change in net reserves (increase -)	-24.2	-30.9	-43.4	-48.3	-33.6	24.0	-20.4
India	-2.0	-22.5	-11.9	-28.9	-11.9	19.4	3.1
Other	-22.1	-8.4	-31.5	-19.4	-21.7	4.6	-23.5
Memorandum items:							
Gross official reserves	145.1	176.0	216.8	259.1	292.6	294.1	316.6
(In months of imports)	15.7	16.1	19.1	19.2	19.0	18.0	20.2
Ngultrum per US\$ (period avg.)	34.29	35.77	38.39	42.59	43.64	46.39	48.21

Source: Data provided by the Bhutanese authorities.

1/ Exports and imports are on a calendar year basis.

2/ Includes budgetary and non-budgetary grants

Table 28. Bhutan: Balance of Payments with India, 1995/96-2001/02

	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02
							Prelim.
(In millions of U.S. dollars)							
A. Balance of goods and services	6.7	2.8	-2.8	-25.9	-53.6	-76.9	-64.0
Merchandise trade balance	8.4	4.4	9.3	-17.3	-31.0	-66.5	-54.1
Exports, f.o.b. 1/	89.8	90.2	105.3	98.2	108.0	94.4	91.9
Of which: Chukha exports	21.0	20.9	33.6	31.4	46.2	50.2	...
Imports, c.i.f. 1/	-81.4	-85.8	-96.0	-115.5	-139.0	-160.9	-146.0
B. Service balance	-1.7	-1.6	-12.1	-8.5	-22.6	-10.4	-9.8
Travel and other service receipts	1.7	1.7	1.7	1.7	6.5	17.6	17.1
Travel and other service payments	-3.4	-3.4	-13.9	-10.2	-29.1	-28.0	-26.9
C. Income	-4.9	-2.4	0.9	2.4	-14.6	-9.9	-10.1
Interest and other income receipts	0.0	1.5	2.6	3.9	3.3	4.9	3.2
Interest and other income payments	-5.0	-3.9	-1.7	-1.4	-17.9	-14.8	-13.3
D. Transfers	23.2	25.2	40.4	41.0	72.5	49.6	46.8
Grants to government (budgetary)	34.1	26.5	34.8	45.3	50.1	55.0	32.5
Excise duty refund	0	0	0	0	8.2	0.0	6.8
Other government transfer receipts	3.4	17.0	37.5	50.3	80.0	46.2	54.8
Transfer payments	-14.3	-18.2	-31.8	-54.6	-65.9	-51.5	-47.2
Current account balance	25.0	25.6	38.6	17.6	4.3	-37.1	-27.3
Foreign direct investment	0	0	0	0	0	0	0
Portfolio investments	0	0	0	0	0	0	0
Loans (net)	-11.2	1.6	0.0	22.7	37.0	36.8	36.9
Receipts	0.0	2.0	0.0	28.6	39.0	38.7	38.7
of which concessional	0.0	0.0	0.0	30.7	0.0	0.0	0.0
of which non-concessional	0.0	2.0	0.0	-2.1	0.0	0.0	0.0
Payments	-11.2	-0.4	0.0	-5.9	-2.0	-1.9	-1.8
of which concessional	0.0	-0.4	0.0	0.0			
of which non-concessional	-11.2	2.0	0.0	-5.9	0.0	0.0	0.0
Errors and omissions	-11.7	-4.8	-26.6	-11.3	-29.3	-19.1	-12.8
Overall balance	2.0	22.5	11.9	28.9	11.9	-19.4	-3.1
Financing							
Change in net reserves (increase -)	-2.0	-22.5	-11.9	-28.9	-11.9	19.4	3.1
(In percent of GDP)							
Memorandum items:							
Exports	29.4	25.5	27.0	24.5	24.2	20.0	18.6
Imports	26.6	24.2	24.6	28.8	31.2	34.0	29.6
Current account balance	8.2	7.2	9.9	4.4	1.0	-7.9	-5.5

Source: Data provided by the Bhutanese authorities.

Table 29. Bhutan: Balance of Payments with Third Countries, 1995/96-2001/02

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
	(In millions of U.S. dollars)						
A. Balance of goods and services	-21.5	-35.2	-34.6	-36.3	-37.3	-29.2	-34.8
Merchandise trade balance	-21.6	-36.4	-34.1	-40.3	-39.7	-30.2	-36.5
Exports, f.o.b. 1/	7.9	9.1	6.0	6.6	6.3	5.2	5.8
Imports, c.i.f. 1/	-29.5	-45.5	-40.1	-46.8	-46.0	-35.4	-42.3
Aid related	-12.1	-16.5	-12.3	-23.0	-15.5	-18.2	-21.3
B. Service balance	0.1	1.2	-0.5	4.0	2.4	1.1	1.8
Travel and other service receipts	8.1	9.5	9.1	11.9	12.5	16.2	14.7
Travel and other service payments	-8.0	-8.3	-9.6	-7.9	-10.1	-15.1	-12.9
C. Income	3.1	5.2	2.7	6.0	4.2	5.3	-1.6
Interest and other income receipts	6.0	6.9	6.4	8.2	9.3	10.6	5.9
Interest and other income payments	-2.9	-1.6	-3.7	-2.2	-5.1	-5.3	-7.5
D. Transfers	34.8	25.7	25.5	34.6	32.8	34.3	35.4
Grants to government (budgetary)	48.6	35.9	21.4	31.3	30.9	25.0	36.3
Other government transfer receipts	0.5	0.6	0.8	1.0	2.3	11.3	4.0
Private transfer receipts (including NGOs)	6.2	5.7	11.6	11.7	7.4	6.1	7.0
Transfer payments	-20.6	-16.5	-8.2	-9.4	-7.7	-8.1	-11.9
Current account (incl grants)	16.3	-4.3	-6.4	4.3	-0.2	10.4	-1.0
Capital and financial Account	-0.9	3.8	6.8	4.3	5.0	-6.0	22.5
Foreign direct investment	0.0	0.0	0.0	1.1	0.0	0.0	2.1
Portfolio investments	0	0	0	0	0	-19.0	0
Loans (net)	-0.9	3.8	6.8	3.3	5.0	13.0	20.4
Receipts	6.2	8.2	11.5	7.1	7.7	15.6	23.1
of which non-concessional	0	0	0	0	0	0	0
of which concessional	6.2	8.2	11.5	7.1	7.7	15.6	23.1
Payments	-7.1	-4.4	-4.7	-3.8	-2.6	-2.6	-2.7
of which non-concessional	-2.3	-2.3	-2.4	-1.1	0.0	0.0	0.0
of which concessional	-4.9	-2.1	-2.4	-2.7	-2.6	-2.6	-2.7
Errors and omissions	6.7	8.9	31.0	10.7	16.9	-8.9	2.0
Overall balance	22.1	8.4	31.5	19.4	21.7	-4.6	23.5
Financing							
Change in net reserves (increase -)	-22.1	-8.4	-31.5	-19.4	-21.7	4.6	-23.5
	(In percent of GDP)						
Memorandum items:							
Exports	2.6	2.6	1.6	1.6	1.4	1.1	1.2
Imports	9.7	12.9	10.3	11.7	10.3	7.5	8.6
Current account	-0.3	1.7	2.4	1.1	1.1	-1.3	4.6
Exchange rate (Nu/US\$, period avg.)	34.3	35.8	38.4	42.6	43.6	46.4	48.2

Source: Data provided by the Bhutanese authorities.

1/ Exports and imports are reported on a calendar year basis.

Table 30. Bhutan: Imports from India, 1995-2000

	1995	1996	1997	1998	1999	2000
	(In millions of ngultrum)					
1 Animal products	76.5	89.9	122.9	119.1	171.9	209.9
2 Cereals, vegetables, fruits, nuts, coffee, tea, and spices	346.5	403.3	412.7	458.1	697.4	6.7
3 Vegetables fats and oil	134.7	134.4	127.6	151.1	161.6	168.6
4 Prepared foodstuffs	213.5	213.1	261.2	306.6	388.6	422.2
5 Mineral products	396.0	462.0	626.0	612.8	840.5	1,227.8
6 Products of chemical industries	239.6	235.5	235.7	224.4	318.3	1,659.3
7 Plastics and rubber products	104.2	111.8	100.2	113.0	177.6	150.3
8 Raw hides and skins	4.6	3.9	3.9	2.4	4.3	3.5
9 Wood and wood products	68.7	157.7	164.5	108.5	110.6	238.8
10 Woodpulp products	61.5	81.4	94.0	72.9	117.6	148.2
11 Textiles	102.2	106.9	120.6	146.6	157.1	155.3
12 Footwear, headgear and clothing accessories	31.0	42.4	50.9	16.4	44.6	70.6
13 Stone, plaster, cement and asbestos products	95.2	112.2	83.1	111.3	86.7	80.5
14 Precious or semi-precious metal products	0.1	0.2	0.3	0.2	0.2	0.3
15 Base metals and base metal products	241.8	251.4	271.0	256.1	767.5	791.7
16 Machinery and mechanical appliances	355.8	298.9	359.8	520.8	1,094.8	966.9
17 Transport equipment	111.4	136.1	341.0	295.7	579.1	503.9
18 Optical, photographic and measuring equipment	18.1	25.4	41.1	59.5	63.8	76.7
19 Miscellaneous manufactured articles	28.8	28.4	36.9	45.6	63.7	85.6
20 Works of art, antiques and special transactions	0.0	0.9	0.4	0.0	0.0	0.1
Total	2,630.2	2,895.8	3,453.8	3,621.1	5,845.9	6,966.9
	(In percent of total)					
1 Animal products	2.9	3.1	3.6	3.3	2.9	3.0
2 Vegetables, fruits, nuts, coffee, tea, and spices	13.2	13.9	11.9	12.7	11.9	0.1
3 Vegetables fats and oil	5.1	4.6	3.7	4.2	2.8	2.4
4 Prepared foodstuffs	8.1	7.4	7.6	8.5	6.6	6.1
5 Mineral products	15.1	16.0	18.1	16.9	14.4	17.6
6 Electricity 1/	9.1	8.1	6.8	6.2	5.4	23.8
7 Plastic and rubber products	4.0	3.9	2.9	3.1	3.0	2.2
8 Raw hides and skins	0.2	0.1	0.1	0.1	0.1	0.1
9 Wood and wood products	2.6	5.4	4.8	3.0	1.9	3.4
10 Woodpulp products	2.3	2.8	2.7	2.0	2.0	2.1
11 Textiles	3.9	3.7	3.5	4.0	2.7	2.2
12 Footwear, headgear and clothing accessories	1.2	1.5	1.5	0.5	0.8	1.0
13 Stone, plaster, cement and asbestos products	3.6	3.9	2.4	3.1	1.5	1.2
14 Base metals and base metal products	0.0	0.0	0.0	0.0	0.0	0.0
15 Machinery and mechanical appliances	9.2	8.7	7.8	7.1	13.1	11.4
16 Transport equipment	13.5	10.3	10.4	14.4	18.7	13.9
17 Optical, photographic and measuring equipment 2/	4.2	4.7	9.9	8.2	9.9	7.2
18 Miscellaneous manufactured articles	0.7	0.9	1.2	1.6	1.1	1.1
19 Product of chemical industries	1.1	1.0	1.1	1.3	1.1	1.2
20 Works of art, antiques, and special transactions	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Data provided by the Bhutanese authorities.

Table 31. Bhutan: Exports to India, 1995-2000

	1995	1996	1997	1998	1999	2000
	(In millions of ngultrum)					
1 Animal products	0.8	1.2	0.4	0.1	0.7	0.3
2 Vegetables, fruits, nuts, coffee, tea, and spices	207.5	237.0	297.4	271.8	261.8	197.7
3 Vegetables fats and oil	0.0	0.1	0.0	0.2	...	0.0
4 Prepared foodstuffs	193.0	206.8	198.4	214.5	222.1	194.4
5 Mineral products	362.0	364.2	425.9	700.6	695.4	527.4
6 Electricity 1/	-362.0	-364.2	1,334.4	1,338.7	2,018.4	2,189.6
7 Plastic and rubber products	13.4	31.8	14.4	16.6	12.7	10.8
8 Raw hides and skins	3.2	3.1	3.1	2.0	2.3	2.8
9 Wood and wood products	614.8	475.5	579.9	440.5	297.5	250.6
10 Woodpulp products	1.1	1.8	0.2	0.1	0.1	0.2
11 Textiles	0.7	0.5	2.1	0.7	1.4	1.8
12 Footwear, headgear and clothing accessories	0.3	0.0	0.0	0.0	...	0.2
13 Stone, plaster, cement and asbestos products	3.4	5.4	6.7	6.5	6.3	12.5
14 Base metals and base metal products	358.0	508.4	499.0	474.4	533.2	450.0
15 Machinery and mechanical appliances	10.5	24.0	36.9	11.5	6.5	6.4
16 Transport equipment	1.1	0.4	0.3	0.2	0.8	1.1
17 Optical, photographic and measuring equipment 2/	0.0	0.0	0.0	0.2	...	...
18 Miscellaneous manufactured articles	51.6	54.6	68.6	82.4	66.2	45.6
19 Product of chemical industries	536.5	562.3	574.3	614.6	565.8	485.5
20 Works of art, antiques, and special transactions	0.0	2.5	0.0	0.0	...	0.0
Total	1,995.9	2,115.3	4,041.9	4,175.6	4,691.2	4,377.0
	(In percent of total)					
1 Animal products	0.0	0.1	0.0	0.0	0.0	0.0
2 Vegetables, fruits, nuts, coffee, tea, and spices	10.4	11.2	7.4	6.5	5.6	4.5
3 Vegetables fats and oil	0.0	0.0	0.0	0.0	0.0	0.0
4 Prepared foodstuffs	9.7	9.8	4.9	5.1	4.7	4.4
5 Mineral products	18.1	17.2	10.5	16.8	14.8	12.0
6 Electricity 1/	-18.1	-17.2	33.0	32.1	43.0	50.0
7 Plastic and rubber products	0.7	1.5	0.4	0.4	0.3	0.2
8 Raw hides and skins	0.2	0.1	0.1	0.0	0.0	0.1
9 Wood and wood products	30.8	22.5	14.3	10.5	6.3	5.7
10 Woodpulp products	0.1	0.1	0.0	0.0	0.0	0.0
11 Textiles	0.0	0.0	0.1	0.0	0.0	0.0
12 Footwear, headgear and clothing accessories	0.0	0.0	0.0	0.0	0.0	0.0
13 Stone, plaster, cement and asbestos products	0.2	0.3	0.2	0.2	0.1	0.3
14 Base metals and base metal products	17.9	24.0	12.3	11.4	11.4	10.3
15 Machinery and mechanical appliances	0.5	1.1	0.9	0.3	0.1	0.1
16 Transport equipment	0.1	0.0	0.0	0.0	0.0	0.0
17 Optical, photographic and measuring equipment 2/	0.0	0.0	0.0	0.0	0.0	0.0
18 Miscellaneous manufactured articles	2.6	2.6	1.7	2.0	1.4	1.0
19 Product of chemical industries	26.9	26.6	14.2	14.7	12.1	11.1
20 Works of art, antiques, and special transactions	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Data provided by the Bhutanese authorities.

Table 32. Bhutan: Imports from Third Countries, 1995-2000

	1995	1996	1997	1998	1999	2000
	(In millions of Ngultrum)					
1 Animal products	0.2	0.9	0.4	2.1	1.0	2.3
2 Vegetables, fruits, nuts, coffee, cereals, seeds	0.1	0.7	0.3	0.5	12.2	3.1
3 Vegetables fats and oil	5.2	...	6.0	20.6	13.2	6.0
4 Whiskies and processed food	10.1	11.0	15.2	43.8	34.4	46.1
5 Mineral oil and fuel	17.0	29.1	36.3	40.1	56.9	66.9
6 Product of chemical industries	2.0	7.2	13.5	62.8	7.5	9.1
7 Medicine and Pharmaceuticals	6.5	27.6	22.0	79.0	19.6	20.6
8 Photographic film and materials	0.1	1.8	1.3	33.7	0.1	0.4
9 Plastic and rubber products	18.8	34.3	23.6	118.8	70.3	84.6
10 Wood products	0.0	1.0	21.9	17.3	7.0	12.5
11 Woodpulp products	70.4	66.1	49.0	115.6	26.3	38.1
12 Textiles	5.2	10.5	26.4	51.5	35.9	43.9
13 Machinery, mechanical appliances, base metals and electronic items	837.8	1,407.1	1,244.8	1,157.1	1,667.9	1,268.1
14 Ceramic and melamine products	8.6	10.9	18.7	35.4	3.1	0.8
15 Trekking equipment, footwear and carpets	2.9	7.8	4.9	33.3	7.6	5.7
16 Miscellaneous manufactured articles	4.0	0.4	5.5	23.8	9.1	28.1
17 Precious and semi-precious metals	21.1	7.2	1.6	3.3	7.8	0.5
18 Tobacco and cigarettes	1.7	5.3	5.3	5.4	6.4	5.0
19 Personal effects	0.0	0.0	27.8	51.3	3.3	1.8
Total	1,011.7	1,629.0	1,524.4	1,895.4	1,989.6	1,643.7
	(In percent of total)					
1 Animal products	0.0	0.1	0.0	0.1	0.1	0.1
2 Vegetables, fruits, nuts, coffee, cereals, seeds	0.0	0.0	0.0	0.0	0.6	0.2
3 Vegetables fats and oil	0.5	0.0	0.4	1.1	0.7	0.4
4 Whiskies and processed food	1.0	0.7	1.0	2.3	1.7	2.8
5 Mineral oil and fuel	1.7	1.8	2.4	2.1	2.9	4.1
6 Product of chemical industries	0.2	0.4	0.9	3.3	0.4	0.6
7 Medicine and Pharmaceuticals	0.6	1.7	1.4	4.2	1.0	1.3
8 Photographic film and materials	0.0	0.1	0.1	1.8	0.0	0.0
9 Plastic and rubber products	1.9	2.1	1.5	6.3	3.5	5.1
10 Wood products	0.0	0.1	1.4	0.9	0.4	0.8
11 Woodpulp products	7.0	4.1	3.2	6.1	1.3	2.3
12 Textiles	0.5	0.6	1.7	2.7	1.8	2.7
13 Machinery, mechanical appliances, base metals and electronic items	82.8	86.4	81.7	61.0	83.8	77.1
14 Ceramic and melamine products	0.9	0.7	1.2	1.9	0.2	0.0
15 Trekking equipment, footwear and carpets	0.3	0.5	0.3	1.8	0.4	0.3
16 Miscellaneous manufactured articles	0.4	0.0	0.4	1.3	0.5	1.7
17 Precious and semi-precious metals	2.1	0.4	0.1	0.2	0.4	0.0
18 Tobacco and cigarettes	0.2	0.3	0.3	0.3	0.3	0.3
19 Personal effects	0.0	0.0	1.8	2.7	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Data provided by the Bhutanese authorities.

Table 33. Bhutan: Exports to Third Countries, 1995-2000

	1995	1996	1997	1998	1999	2000
(In millions of Ngultrum)						
1 Vegetables and fruits	156.1	194.4	167.1	186.4	176.7	117.9
2 Processed food	6.4	8.6	6.6	5.7	8.1	14.3
3 Mineral products	85.5	88.3	44.8	63.7	60.7	74.7
4 Plastic products	0.0	0.8	0.0	0.8	0.7	0.0
5 Photographic film and photographic materials	0.0	0.0	0.0	0.0	0.0	0.0
6 Wood products	13.4	6.0	4.4	4.0	6.6	0.1
7 Woodpile products	3.1	9.9	1.6	2.9	0.3	3.2
8 Textiles	2.4	1.4	0.0	1.2	16.2	14.0
9 Coins	0.0	0.1	0.0	0.0	0.0	0.0
10 Base metals and base metal products	0.0	1.3	1.2	9.6	6.6	4.2
11 Machinery	3.0	1.0	1.2	9.6	6.6	4.2
12 Philatelic products	3.0	1.0	5.6	0.0	0.0	0.3
13 Handicrafts products	0.1	12.1	0.9	3.8	0.2	0.5
14 Household items and personal effects	0.0	1.7	0.0	0.0	0.8	9.8
Total	270.2	326.8	232.1	280.0	276.8	238.9
(In percent of total)						
1 Animal products	57.8	59.5	72.0	66.6	63.8	49.4
2 Vegetables, fruits, nuts, coffee, tea, and spices	2.4	2.6	2.8	2.0	2.9	6.0
3 Vegetables fats and oil	31.6	27.0	19.3	22.8	21.9	31.3
4 Prepared foodstuffs	0.0	0.2	0.0	0.3	0.3	0.0
5 Mineral products	0.0	0.0	0.0	0.0	0.0	0.0
6 Electricity 1/	5.0	1.8	1.9	1.4	2.4	0.0
7 Plastic and rubber products	1.1	3.0	0.7	1.0	0.1	1.3
8 Raw hides and skins	0.9	0.4	0.0	0.4	5.9	5.9
9 Wood and wood products	0.0	0.0	0.0	0.0	0.0	0.0
10 Woodpile products	0.0	0.4	0.5	3.4	2.4	1.8
11 Textiles	1.1	0.3	0.5	3.4	2.4	1.8
12 Footwear, headgear and clothing accessories	1.1	0.3	2.4	0.0	0.0	0.1
13 Stone, plaster, cement and asbestos products	0.0	3.7	0.4	1.4	0.1	0.2
14 Base metals and base metal products	0.0	0.5	0.0	0.0	0.3	4.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Data provided by the Bhutanese authorities.

Table 34. Bhutan: Direction of Trade, 1996-2000

	1996	1997	1998	1999	2000
(In millions of U.S. dollars)					
Exports					
India	99.6	114.2	101.2	109.4	97.4
Bangladesh	8.1	5.0	4.7	4.9	3.7
Other	1.0	1.1	1.9	1.6	1.6
Total	108.7	120.3	107.8	115.8	102.7
Imports					
India	89.4	97.6	87.7	135.7	166.1
Japan	18.6	23.2	9.9	6.0	6.8
Germany	2.1	1.3	1.8	0.0	0.6
United States	0.7	0.8	1.0	0.5	0.8
United Kingdom	1.3	0.5	0.8	0.7	4.6
Singapore	10.6	4.0	9.7	23.2	5.6
Other	17.0	12.7	22.8	15.7	18.2
Total	139.7	140.1	133.7	182.0	202.6
(In percent of total)					
Exports					
India	91.6	94.9	93.9	94.5	94.8
Bangladesh	7.5	4.2	4.4	4.2	3.6
Other	0.9	0.9	1.8	1.3	1.6
Total	100.0	100.0	100.0	100.0	100.0
Imports					
India	64.0	69.7	65.6	74.6	81.9
Japan	13.3	16.6	7.4	3.3	3.4
Germany	1.5	0.9	1.3	0.0	0.3
United States	0.5	0.6	0.7	0.3	0.4
United Kingdom	0.9	0.4	0.6	0.4	2.3
Singapore	7.6	2.9	7.3	12.7	2.8
Other	12.2	9.1	17.1	8.6	9.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Data provided by the Bhutanese authorities.

Table 35. Bhutan: External Debt and Debt Service, 1995/96-2001/02 1/

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
(In millions of U.S. dollars; end of period)							
Total public sector debt	116.1	112.2	128.0	160.4	172.0	235.1	289.3
Convertible currency debt	80.2	84.0	90.4	98.2	98.7	106.9	129.9
Concessional debt	74.5	80.6	89.3	98.2	98.7	106.9	129.9
AsDB	31.2	36.3	40.4	43.2	43.2	47.4	55.4
IDA	20.5	21.3	22.1	24.0	24.0	27.6	33.2
IFAD	10.9	11.4	12.2	12.7	12.7	12.5	13.7
Kuwait Fund	11.1	10.9	9.6	7.9	7.9	6.5	5.1
Other 2/	0.8	0.8	5.0	10.4	10.9	13.0	22.5
Commercial debt	5.7	3.4	1.1	0.0	0.0	0.0	0.0
Nonconvertible currency debt	35.9	34.7	40.6	62.2	73.3	128.2	159.4
Debt service payments	25.1	10.3	10.0	14.1	6.5	6.1	6.4
Convertible currency	8.9	6.1	5.8	4.8	3.6	3.5	4.0
Principal	7.1	4.4	4.7	3.8	2.6	2.6	2.7
Interest	1.8	1.7	1.1	1.0	0.9	0.9	1.3
Nonconvertible currency	16.2	4.2	4.2	9.3	2.9	2.6	2.4
Principal	11.2	0.4	2.5	7.9	2.0	1.9	1.8
Interest	5.0	3.9	1.7	1.3	0.9	0.7	0.6
(In percent of GDP)							
Memorandum items:							
External debt	38.7	31.6	36.0	39.9	38.7	49.0	55.0
Convertible currency	26.7	23.7	25.4	24.5	22.2	22.3	24.7
Concessional	24.8	22.7	25.1	24.5	22.2	22.3	24.7
Commercial	1.9	1.0	0.3	0.0	0.0	0.0	0.0
Nonconvertible currency	12.0	9.8	11.4	15.5	16.5	26.7	30.3
Debt service ratio 3/	23.4	9.3	8.2	11.9	4.9	4.6	5.0

Source: Data provided by the Bhutanese authorities.

1/ All public sector.

2/ Includes Australia and Austria. Data on convertible currency debt to bilateral creditors are incomplete.

3/ In percent of exports of goods and non-factor services.

Table 36. Bhutan: External Debt and Debt Service by Creditor, 1995/96-2001/02

(In millions of U.S. dollars; end of period)

	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02
Concessional debt							
AsDB							
Amount outstanding	31.6	36.5	40.9	44.5	45.6	47.5	55.4
Interest payment	0.3	0.3	0.4	0.6	0.4	0.5	0.5
Principal repayment	0.3	0.5	0.5	0.6	0.6	0.6	0.6
IDA							
Amount outstanding	20.5	21.3	21.9	22.6	24.3	27.7	33.2
Interest payment	0.2	0.2	0.2	0.3	0.2	12.5	13.7
Principal repayment	0.2	0.2	0.2	0.3	0.3	0.2	0.2
IFAD							
Amount outstanding	10.9	11.5	12.4	12.6	12.5	12.5	13.7
Interest payment	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Principal repayment	0.2	0.2	0.2	0.3	0.3	0.3	0.3
Kuwait Fund							
Amount outstanding	11.5	11.4	10.8	9.6	9.0	6.5	5.1
Interest payment	0.6	0.6	0.2	0.2	0.2	0.2	0.2
Principal repayment	4.2	1.1	1.1	1.5	1.5	1.5	1.5
Others							
Amount outstanding	0.8	0.8	0.7	0.6	7.6	0.4	23.3
Interest payment	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Principal repayment	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Total concessional debt							
Amount	75.3	81.5	86.7	89.9	98.9	94.5	130.7
Interest payment	1.2	1.2	0.8	1.2	0.9	13.3	14.8
Principal repayment	4.9	2.0	2.1	2.7	2.6	2.6	2.7
Commercial debt							
Amount	5.7	3.4	1.1	0.0	0.0	0.0	0.0
Interest payment	0.6	0.4	0.2	0.0	0.0	0.0	0.0
Principal repayment	2.3	2.3	2.3	1.1	0.0	0.0	0.0
Nonconvertible debt							
Amount	30.6	27.3	40.2	70.6	73.9	127.3	160.6
Interest payment	4.0	3.5	1.3	1.1	0.9	0.7	0.6
Principal repayment	0.0	0.4	2.5	2.3	2.0	2.0	1.8
Total debt							
Amount	111.5	112.2	128.0	160.4	172.0	235.1	289.3
Interest payment	5.8	5.1	2.3	2.4	1.8	14.0	15.4
Principal repayment	7.1	4.7	6.9	6.1	4.6	4.6	4.5

Source: Data provided by the Bhutanese authorities.

Table 37. Bhutan: Gross International Reserves by Major Holders, 1996/97-2001/02

	1995/96	1996/97	1997/98 Rev.	1998/99 Rev.	1999/2000 Rev.	2000/01	2001/02
(In millions of U.S. dollars)							
Total reserves	145.1	176.0	216.8	259.1	292.6	294.1	316.6
Convertible currency reserves	140.8	149.3	180.8	200.2	221.7	217.2	240.4
Royal Monetary Authority	135.5	141.5	174.6	193.5	197.7	186.1	202.4
Bank of Bhutan	5.3	6.9	4.0	3.0	11.4	16.3	18.4
Bhutan National Bank	...	0.9	2.2	3.6	12.6	14.8	19.5
Royal Insurance Corporation of Bhutan	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Net reserves	138.1	169.1	210.8	259.0	292.6	268.6	289.0
(In millions of Indian rupees)							
Rupee reserves	150.6	958.7	1,517.8	2,542.3	3,165.0	3,617.4	3,730.7
Royal Monetary Authority	34.0	39.2	41.4	95.3	102.0	89.4	635.7
Bank of Bhutan	116.6	913.8	1,404.4	1,863.7	1,819.5	2,149.7	1,980.9
Bhutan National Bank	...	5.7	72.0	583.3	1,191.9	1,328.3	1,064.1
Royal Insurance Corporation of Bhutan	...	...	...	...	51.5	50.0	50.0

Source: Data provided by the Bhutanese authorities.