

Bhutan: Selected Issues and Statistical Appendix

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BHUTAN

Selected Issues and Statistical Appendix

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Approved by the Asia and Pacific Department

September 20, 2007

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I. MANAGING THE MACROECONOMIC IMPACT OF THE HYDROPOWER SECTOR¹

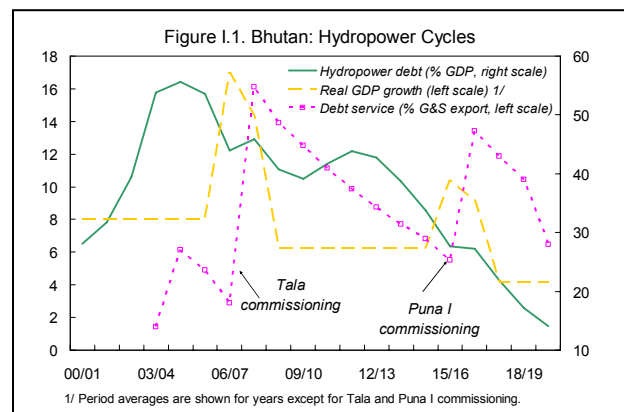
A. Introduction

1. **The hydropower sector in Bhutan has been growing, and a number of projects are being planned.** Bhutan currently has four hydropower projects in operation (including Tala). Of these, the first major hydropower station, Chukha, came on stream in 1986. Construction of Tala hydropower station started in 1997. Upon coming on stream in 2006, Tala more than tripled Bhutan's electricity generation capacity. Looking forward, other hydropower projects are being planned. The Royal Government of Bhutan (RGB) intends to accelerate implementation of new projects to exploit its estimated 12,000 MW potential. Construction of Dagachu and Puna I projects is intended to start in 2007/08.² Two other projects are in early stages of conception.

Project	Date of Commissioning	Peak Capacity	Financing
		(In megawatts)	
Chukha	1986, 1988	336	Government of India: 60 percent grant; 40 percent loan (9 percent interest)
Kurichhu	2001, 2002	60	Government of India: 60 percent grant; 40 percent loan (10.75 percent interest)
Basochu	2001, 2004	64	Government of Austria: 65 percent grant; 25 percent loan (0.25 percent interest). RGoB: 10 percent
Tala	2006	1,020	Government of India: 60 percent grant; 40 percent loan (9 percent interest)
Dagachu	2013	114	Government of Austria, AsDB, RGoB, and possible UNDP financing
Punachu I	2016	1,095	Government of India: 40 percent grant; 60 percent loan (9.5 percent interest)

Source: Royal Government of Bhutan, Ministry of Trade and Industry, Department of Power.

2. **As in the past, the new projects are likely to create hydropower cycles with ample growth dividends.** Construction activities for the projects would support growth in the early years. Growth would rise significantly when the new power projects come on stream. Past projects have been successful due to a combination of factors, including political stability and prudent macroeconomic policy management; favorable relationship with India; India's high economic growth; and a large demand-supply gap in the electricity



¹ Prepared by Hiroko Oura.

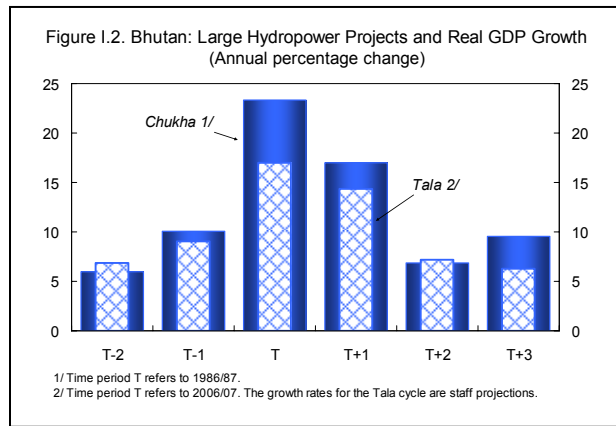
² Fiscal year starts on July 1.

sector in India. Continuation of these factors and human capital accumulation in the sector from past projects bodes well for future projects.

3. **This chapter discusses macroeconomic policy challenges posed by the hydropower sector.** Section B discusses the macroeconomic impact of Tala, drawing on the experience of Chukha and similar projects in other countries. Section C analyzes the financial viability of the projects. Section D concludes.

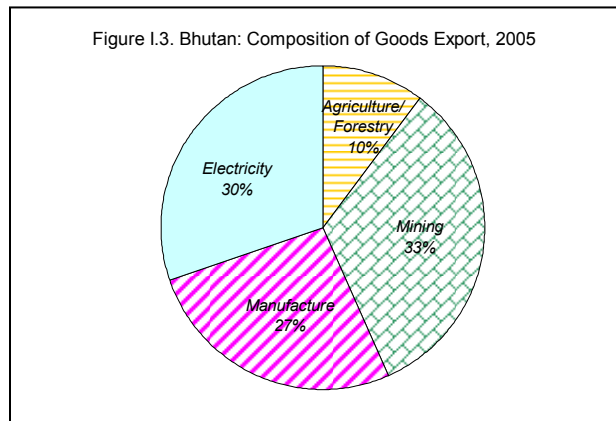
B. The Macroeconomic Impact of Tala

4. **The economic impact of Tala is substantial.** The total construction cost at 1997 prices was 240 percent of 1997 GDP. During the construction phase, Tala supported economic growth strongly. Real GDP growth averaged 7 percent during 1997/98–2006/07. Upon commissioning, Tala tripled Bhutan's hydropower generation capacity. GDP growth is expected to jump to nearly 17 percent in 2007/08. Tala's electricity exports are projected at 11 percent of GDP; exports from existing hydropower stations are about 6 percent of GDP.



5. **Affordable and stable electricity supply would provide benefits to the domestic economy as well.** First, cheaper energy prices can have direct disinflation effects. Second, electrification would add to productivity gains in energy-intensive manufacturing sector and enhance competitiveness in some new business areas. Third, rural electrification would increase productivity in the agricultural sector.

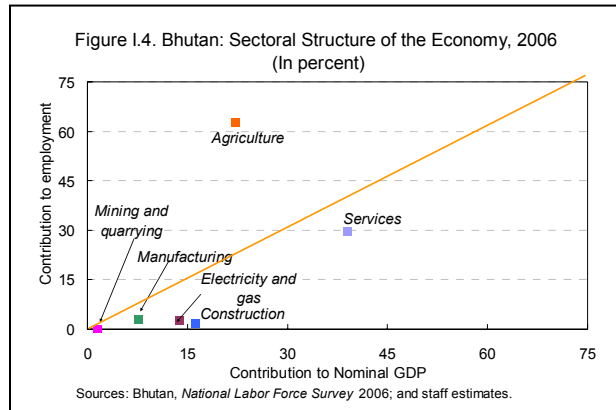
6. **However, a dominant, booming sector poses potential risks and policy challenges.** A potential problem posed by such a sector is the “Dutch disease” effect. These problems are particularly marked if they lead to higher budgetary spending and wage increases to government employees, potentially generating general wage and inflationary pressures. Higher domestic wages and other costs without matching productivity gains can adversely affect nonelectricity tradable goods sectors in



the case of Bhutan, including agriculture (vegetables, fruits, and processed food), forestry (wood products), mining, and manufacturing.

7. Limiting “Dutch disease” effects is important for job creation and poverty

alleviation. Despite the GDP contribution of the hydropower and construction sectors, job creation in these sectors has been limited.³ Therefore, fostering private sector development and strengthening competitiveness in the non-hydropower sectors are critical to creating employment opportunities for a rapidly growing working age population. Furthermore, any negative impact on agriculture could have an adverse impact on poverty through the impact of higher inflation on real income.



8. For Bhutan, there are potential countervailing factors at work:

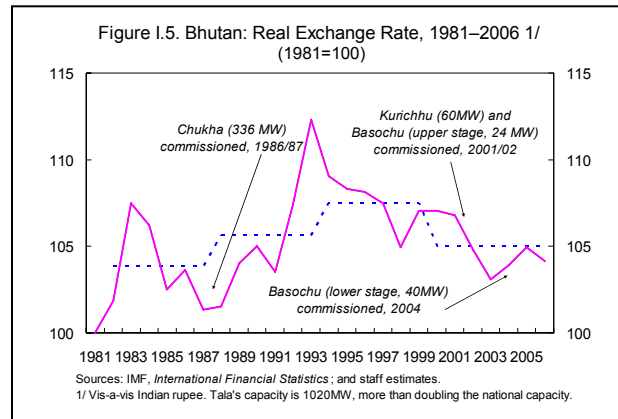
- Debt service on Tala is to start in 2007/08, limiting the net impact on the balance of payments. Annual debt service is projected at 4–6 percent of GDP in initial years.
- Balance of payments and budgetary contributions from Tala would increase only gradually. Large hydropower stations often need a few years to operate at full capacity. For instance, it took almost five years after commissioning for Chukha to operate fully.
- Bhutan is dependent on international aid which could moderate over the medium term as per capita income rises.

³ Construction of Tala was supported by skilled and unskilled Indian immigrant workers. It is estimated that about 90 percent of the construction spending were on Indian capital goods and labor.

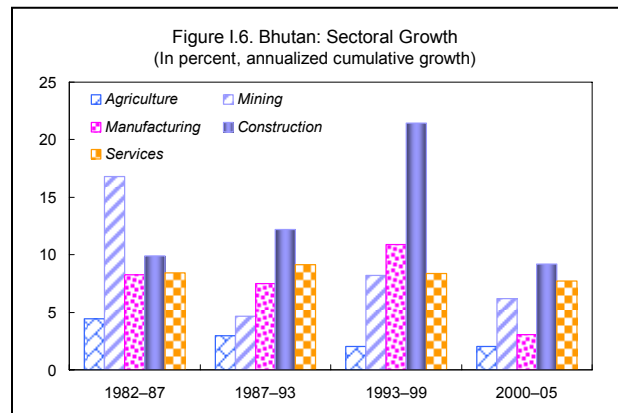
A Comparative Perspective on Tala

9. Bhutan showed some signs of “Dutch disease” with the Chukha power project.

- Inflation in Bhutan has generally tracked price developments in India, as about 75 percent of goods in Bhutanese CPI basket consists of tradables with India. However, the deviation from Indian CPI was noticeable in the immediate years after Chukha commissioning.



- The real exchange rate vis-à-vis India appreciated after Chukha commissioning.
- Revenues increases from Chukha have often expanded budgetary current expenditure. For instance, the upward revision of the electricity export tariff in January 2005 was accompanied by a 45 percent increase in civil servants' wages.
- The growth rate in the non-hydropower tradable sectors (agriculture, mining, and manufacturing) decelerated somewhat after Chukha came on stream. On the other hand, nontradable sectors (construction and services) showed stronger growth.



10. International evidence on “Dutch disease” effects of booming sectors is mixed.

Clear empirical results are hard to come by owing to difficulties with controlling for other factors that may affect the real exchange rate, sectoral structure, and growth (see Kremer (1985), Forsyth (1985), and Stijns (2003) for a discussion of Dutch and British manufacturing industries in 1970s). Cross-country studies are also not conclusive. For instance, Stijns (2003) finds that non-energy exports in oil producing countries are negatively affected after energy price booms. To the contrary, Spatafora and Warner (1999) do not find contractions in agriculture and manufacturing production for oil-producing countries in response to terms of trade shocks. In developing countries, empirical studies often find a slowdown in nonresource tradables sector growth rate in resource rich economies compared to economies without substantial natural resources (Sachs and Warner, 1995). Sala-i-Martin

and Subramanian (2003) note that weak institutions, rent seeking and corruption, rather than Dutch disease, may be the proximate causes of such lower growth.

11. **Policy measures can help limit “Dutch disease” effects.** An appropriate monetary and fiscal policy mix can help contain demand pressures effectively. Some countries have directly used exchange rate policy to cope with a resource boom (for Indonesia, see Warr, 1985). Maintaining a tight fiscal stance becomes particularly important when the majority of resource revenue accrues to the government. In addition, government expenditures can be geared to productivity-enhancing investment and education/health spending rather than public consumption. Establishing revenue saving rules and investing export earnings in foreign financial assets can also help (e.g., Timor-Leste).

12. **The Itaipu hydropower project in Paraguay provides a useful comparative case study of the potential impact of large hydropower projects** (Baer and Birch, 1987; World Bank, 1992; and Valdovinos and Naranjo, 2004).

- **Itaipu is the largest hydropower plant in the world with 14,000 MW installed capacity (over 13 times of Tala).** Construction on the project started in 1973; major work was completed by 1981; the project started generation in 1985; was operating at full initial capacity in 1991; and capacity was expanded in 2007. The cumulative cost at the end of 1989 was about US\$18 billion (400 percent of 1989 GDP). The project was mostly financed by external debt guaranteed by Brazil.
- **The economy appears to have undergone a boom and bust cycle around the project.** The direct growth and employment effects were large. During 1974–81, construction and real GDP expanded at average rate annual rates of 21 percent and 9 percent, respectively. Private sector investment rose from 10 percent of GDP in the 1960s to 20 percent in the late 1970s. Initially, macroeconomic policies were conservative. In the early 1970s, public saving increased and the central bank accumulated reserves. Inflation accelerated, but in line with the U.S. prices, reflecting the peg to the dollar. Credit growth averaged 13 percent. However, policies became looser at the end of the decade: credit growth picked up to over 25 percent, and domestic inflation rose. A sharp fall in foreign inflows and Itaipu construction activities in 1981, around the time of the Latin American debt crisis, triggered a recession. Moreover, private investment of the 1970s turned out to be unproductive. GDP declined by 4 percent between 1981 and 1983. Macroeconomic policies were eased, and the exchange rate peg was abandoned in 1984.
- **Itaipu’s experience points to some relevant factors.** Full commissioning was delayed from 1988 to 1991. Boom and bust cycles do appear to be associated with large projects. However, the impact may be hard to gauge given the long gestation periods and other complicating factors.

C. Financial Viability of Projects

13. **Past hydropower projects in Bhutan have been financially viable.** The following table compares project costs, internal rate of return (IRR—the threshold discount rate setting NPV at zero), the net present value (NPV) of each project, and the NPV of project cash flows retained in Bhutan. The main points are:

- Chukha has the highest IRR, in part due to a higher export tariff rate. During the twenty years after commissioning, Chukha’s tariff was raised by 37 percent in 1993, 35 percent in 1995, 100 percent in 1997, 50 percent in 1999, and 33 percent in 2005. The expected schedule for export tariff rate increases for Tala is 10 percent every five years until debt service ends and 5 percent every five years once the debt is repaid.
- Puna I is expected to have a smaller real cost of construction than Tala for a larger generation capacity and similar costs per unit of installed capacity to Chukha. As a result, Puna I’s IRR is about 2 percentage points higher than that of Tala. However, the slower pace of tariff rate increases keeps the IRR lower (set at the same pace as Tala, lower than Chukha).

	Installed Capacity	Total Costs 1/	Internal Rate of Return 2/	Project NPV 3/	Bhutanese Share NPV 4/
	(In megawatts)	(In percent of GDP)	(In percent)	(In percent of GDP)	
Chukha	336	59	16.9	135	...
Tala	1020	239	11.9	44	160
Punatsangchu I	1095	165	13.7	169	144

Sources: Department of Energy; and IMF staff calculations.

1/ In 1997 prices in percent of 1997 GDP.

2/ Assuming 10 percent scrap value of total cost at the end of 35 years of commercial operation, annual operation and management cost at 1.5 percent of the total costs with 4 percent annual increase, 15 percent spared for domestic sales, starting export tariff for Tala at 1.8 and for Puna I at expected averages tariff rate for Chukha and Tala in 2016.

3/ Using 10 percent discount rate. In 1997 prices in percent of 1997 GDP. Based on total cashflows for the project.

4/ Using 10 percent discount rate. In 1997 prices in percent of 1997 GDP. Based only on cashflows for Bhutan.

- The NPV of cash flows retained in Bhutan is expected to be lower for Puna I than that for Tala, reflecting the higher amount of debt in financing than Tala. A higher interest rate (10 percent) than Tala (9½ percent) also contributes to lower cash flows retained in Bhutan in NPV terms.

14. **Furthermore, mitigating factors built into project financing limit risks.** The expected project return is high enough to absorb unforeseen negative shocks. For example, with a 50 percent cost overrun for Puna I, the IRR for the project would still be over 10 percent, providing positive project NPV with a 10 percent discount rate. The same shock would knock off about 20 percent of net cash flows retained in Bhutan (in NPV terms). For large shocks, renegotiation over export tariff rates and financing conditions could take place.

As in the case of Tala, the expectation is that cost overrun would be financed by India, using the same grant-to-debt ratio, with RGB liable for debt service.

D. Conclusion

15. **Tala poses “Dutch disease” risks but there are countervailing factors.** There could be a negative impact on growth prospects of non-hydropower sectors and on the poor through nontradable prices inflation. International experience suggests that an appropriate policy mix can help manage financial flows related to such projects. In Bhutan, as the bulk of Tala-related flows go through the government accounts, this requires an appropriate fiscal stance and skillful expenditure management. Wage increases for civil servants would need to be limited, and expenditure would need to be geared to improving infrastructure, education, and health. Expenditures on rural electrification and transportation could help raise productivity. On the monetary side, the authorities need to improve liquidity and reserves management, and ensure that excess liquidity does not generate excessive credit creation.

16. **Hydropower projects in Bhutan have been financially viable, and are likely to produce significant dividends in the future as well.** Tala has come on stream, despite some delays. The expected returns to Tala and Puna I are favorable. Strong ties with India are expected to mitigate project-related risks.

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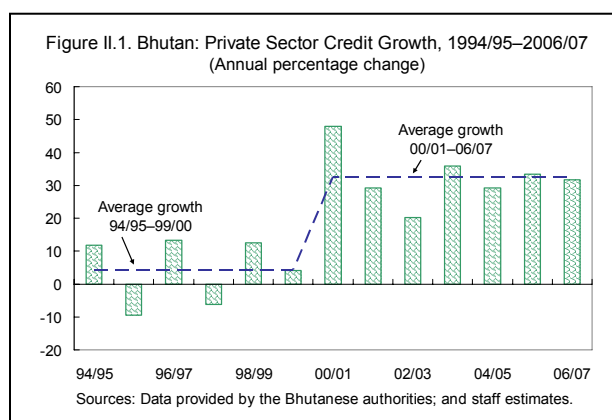
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II. RAPID PRIVATE SECTOR CREDIT GROWTH, MACROECONOMIC RISKS, AND FINANCIAL SECTOR SOUNDNESS⁴

1. **This chapter reviews trends in bank lending in Bhutan, and discusses the implications of rapid credit growth for macroeconomic stability and financial sector soundness.** Private sector credit growth in Bhutan has been high, averaging more than 30 percent per annum over the past seven years. While private sector credit growth and financial deepening are important underpinnings for economic growth and development (see Levine, 2005, for a survey), cross-country experience also indicates that excessively rapid credit expansion can bring substantial risks, including inflationary pressures, weakening of the current account, and financial sector vulnerabilities. Section A reviews the factors underlying rapid credit growth; Section B explores its macroeconomic implications; Section C focuses on the associated risks to the financial sector. Section D concludes.

A. Causes and Nature of Credit Growth

2. **Bhutan has experienced rapid expansion of bank credit to the private sector.** Over the last seven years, private sector credit increased by about 30 percent a year on average. In the previous six years, the annual growth rate was less than 4½ percent. With this growth, private credit as a share of GDP more than doubled from 9½ percent in 2001 to about 20 percent in 2007.



3. **Credit expansion in Bhutan was facilitated by a number of factors.**

- **Bhutan's low initial level of financial development could partially explain the rapid growth of credit.** Several studies suggest that during the early development phase of an economy, financial deepening occurs and credit growth outpaces growth in output (Levine, 1997). Even after seven years of rapid growth, credit to the private sector amounts to only

Table II.1. Credit to Private Sector in Cross-Country Perspective (In percent of GDP)

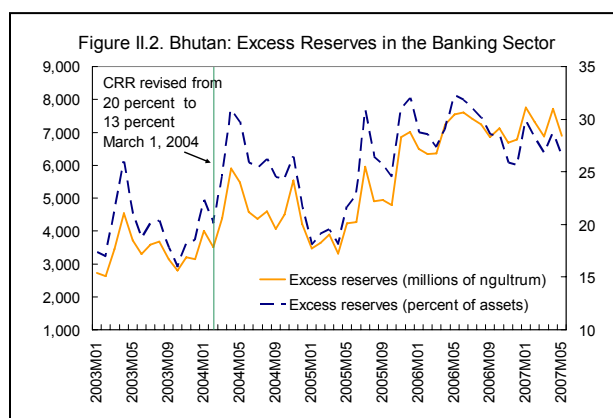
Country	2001/02	2006/07
Bangladesh	27.8	36.2
Bhutan	10.6	20.2
Cambodia	6.3	9.4
India	29.0	45.7
Indonesia	19.8	24.6
Nepal	34.1	36.3
Vietnam	39.3	71.3

Sources: Data provided by the Bhutanese authorities; IMF, *International Financial Statistics*; and staff estimates.

⁴ Prepared by Petia Topalova.

one-fifth of GDP. When compared with other countries in the region, Bhutan remains one of the countries with the lowest level of credit to the private sector relative to the size of the economy.

- The financial sector has ample liquidity, due to large, unsterilized foreign exchange inflows from accumulated concessional loans and grants.** While excess liquidity is hard to measure, the Royal Monetary Authority (RMA) estimates that as of May 2007, the banking sector had nearly Nu 7 billion in excess reserves (26½ percent of total assets).⁵ This level has been maintained for the past 12 months, with a peak of Nu 7.7 billion in January 2007. Excess reserves rose not only in levels but also as a share of banks' assets. While current accounts with the RMA



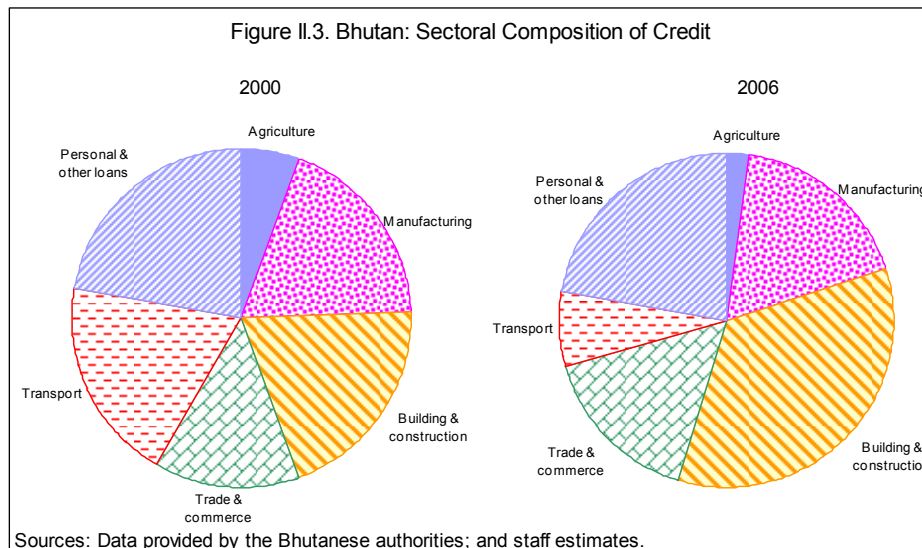
represented less than 20 percent of banks' assets in 2003, they averaged almost 30 percent of assets from January 2006 to May 2007. There is great variation in the distribution of liquidity across financial institutions. Bank of Bhutan (BOB) commands more than 97 percent of the total amount, with Bhutan National Bank (BNB) keeping almost no excess reserves.

- Monetary conditions in Bhutan have been loose relative to India.** The discount rate of the RMA bills has been gradually declining from 6 percent in April 2001 to 3½ percent in May 2003. It has remained constant at that level since then, against a background of tightening of monetary conditions in India and the peg of the ngultrum to the Indian rupee. A reduction in the cash reserve requirement (CRR) may have contributed to the loose monetary environment. In order to spur credit growth and support investment, the RMA revised the CRR down from 20 percent to 13 percent of total deposit liabilities effective March 1, 2004, a level at which it has remained since then. The CRR was raised to 15 percent on September 1, 2007.
- The establishment of the National Pension and Provident Fund (NPPF), as an autonomous player in the financial sector, contributed to credit growth.** The NPPF took over the government employment and provident fund from the Royal Insurance Corporation of Bhutan in 2002. Since then, its assets have grown at a rapid

⁵ Excess reserves equal the financial institutions' non-interest bearing current accounts with the central bank in excess of CRR. Excess liquidity is calculated as the amount of quick assets of the financial institutions in excess of the 20 percent statutory liquidity requirement of the RMA.

pace as civil servants' wages increased substantially, boosting the monthly inflow of funds and turning the NPPF into the largest institutional investor in the country. Due to limited investment opportunities, the investment mandate of the NPPF permits investments in limited financing activities, including housing (starting July 1, 2003) and education loans (starting March 1, 2004). The entry of the NPPF put substantial downward pressure on lending rates on housing loans, driving the interest rate from 13 percent to 10 percent in 2003.

- A stable macroeconomic environment contributed to favorable economic outcomes and a demand for bank loans from households.** Rising personal income growth appears to have encouraged household borrowing against current and expected future income. In particular, to respond to a substantial pent up demand, urban land use policy was revised, and a new housing policy instituted under the Urban Development Corporation in 2002. This change in policy generated an increased demand for housing loans from the banking sector skewing the sectoral composition of new credit towards a few sectors. The growth rate of credit to the building and construction sector and for personal loans has outpaced the growth of credit to other sectors in the economy by a large margin especially in the last three years. As of December 2006, 35 percent of the investments of BoB and BNB were accounted for by loans for construction and housing. In the nonbank financial institutions, the percentage of loans to these sectors is similar. Just seven years ago, the construction and housing sector comprised only 20 percent of the financial sector loan portfolio.



- **The corporate sector contributed to the strong demand for credit as well.** The establishment of special economic zones (SEZ) in southern Bhutan led to the emergence of a number of new industries, such as palm oil processing, copper processing, and ferro-alloys. In particular, five new ferro-alloy factories are under construction with financing predominantly from the domestic banking sector.
- **Alternative investment avenues for banks are scarce.** Financial instruments that could absorb excess liquidity in the financial sector are limited to RMA bills. There are no government T-bills or bonds. Both the money market and capital market are in their infancy, offering limited options for diversification.

B. Credit Growth and Macroeconomic Risks

4. **Cross-country evidence suggests that while financial development is associated with faster economic growth, rapid credit growth has also been linked to substantial macroeconomic risks.** Rapid credit growth can lead to overheating in the economy reflecting the surge in domestic demand, consumption and investment, thus raising the risk of inflation. The increase in domestic demand may lead to worsening in the current account from the stronger import demand and a loss of competitiveness due to a real exchange rate appreciation. Problems of reserves management may arise in the case of pegged currency, as foreign currency flows out of the country to pay for rising imports.

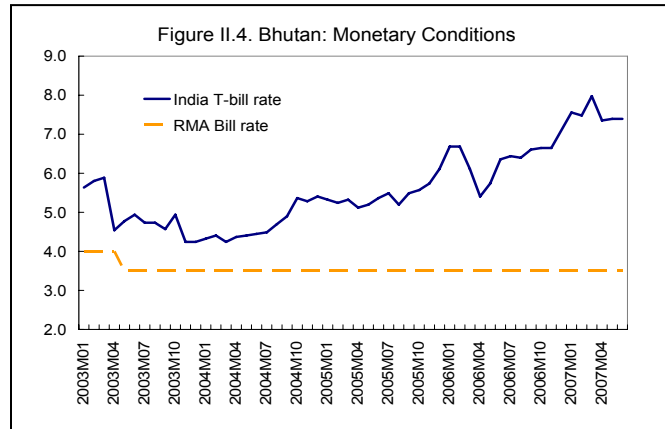
5. **In Bhutan, despite the substantial foreign aid inflows, the buildup of excess liquidity, and the rapid credit growth, the exchange rate peg has helped anchor inflation expectations.** Inflation in Bhutan has mostly followed price developments in India. Over the last seven years, inflation was contained at an average rate of 4 percent with no pronounced upward trend. While data constraints prevent the construction of a longer series of the real exchange rate, there is no evidence of a significant, sustained real appreciation of the Bhutanese currency. The real exchange rate has fluctuated within a narrow band since 2003.

6. **However, rapid credit growth affects the rupee reserve position by potentially fueling non-hydropower related import demand.** Bhutan is closely linked to the Indian economy with the ngultrum peg to the Indian rupee and free trade between the two countries. Over 75 percent of Bhutan's trade is with India; imports from India are 77 percent of total imports since 2000/01. As credit expansion accelerated, non-hydropower related import growth jumped from an average of 15 percent per annum between 1996/97 and 1999/00 to more than 20 percent per annum between 2000/01 and 2006/07. Non-hydropower related current account deficits also rose from an average of 4 percent to 13 percent of GDP over this time period. The high growth in import demand, stemming in part from the high growth in credit, for given rupee inflows in loans and grant aid from India, affects the rupee reserve position in the banks. Since January 2006, rupee reserves were at Rs. 5¼ billion (four months

of imports from India). At end-June 2007, these reserves stood at Rs. $\frac{3}{4}$ billion ($\frac{1}{2}$ month of imports from India).

7. The open, porous border between Bhutan and India permits exploitation of arbitrage opportunities arising from interest rate differentials. The availability of

banking sector credit can facilitate this arbitrage. As noted above, the RMA bill rate has remained unchanged at $3\frac{1}{2}$ percent since 2003, the T-bill rate in India is currently 7 percent. The rate for time deposits of less than one year at the commercial banks is $4\frac{1}{2}$ percent; the comparable deposit rate is 7 percent in the border branches of Indian banks. Anecdotal evidence suggests that these interest rate spreads may have generated some shifts in deposits from Bhutanese banks.



C. Credit Growth and Financial Sector Soundness

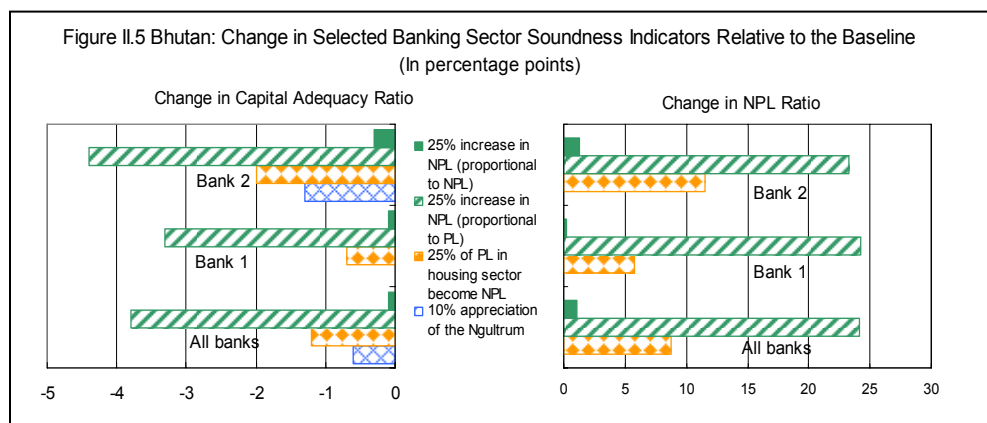
8. Rapid credit growth may also undermine financial soundness. There is a large body of literature that links credit overexpansion and banking crises (see for example IMF, 2004). This can be attributed to the procyclicality of bank lending behavior. Banks may underestimate risks during periods of high growth, thus loosening credit standards and attracting lower quality of borrowers on average. This in turn will lead to higher credit losses during an economic downturn (Arclean and others, 2007). In addition, the speed of credit growth may put a strain on banks' risk assessment and management capacities, which may lead to credit misallocation (Hilbers and other, 2005). When investment avenues in a country are limited, banks may concentrate lending to a particular sector, overexposing themselves to potential adverse shocks to that sector and/or generating mismatches between the maturity of their assets and liabilities.

9. Several prudential indicators point to the general health of the banking sector in Bhutan. However, significant differences between the performance and strategies of the two banks in Bhutan should be noted. Despite the ongoing credit expansion, both banks are well-capitalized and liquid, with healthy profitability and low nonperforming loan ratios. Audited data from December 2005 and December 2006 indicate that return on equity for the financial sector as a whole has increased from $15\frac{1}{4}$ percent to $16\frac{1}{2}$ percent, with both banks registering an improvement in their profitability. The banking sector maintains adequate buffers, well in excess of the minimum requirements. The capital adequacy ratio (CAR) for the two banks declined slightly from its 2005 level, but it stands at a comfortable 17 percent as compared to the minimum requirement of 8 percent. The nonbank financial institutions

maintained an even higher CAR of 36 percent. Judging from the change in nonperforming loan ratios over the past two years, asset quality seems to have improved in the banking sector. The NPL ratio dropped from 7 percent to 5 percent, with the decline driven by an almost flat absolute amount of NPL. Among the nonbanks however, NPL ratios were and continue to be very elevated, comprising almost a quarter of total loans.

10. **The positive indicators notwithstanding, there is substantial sectoral concentration in the financial institutions' asset portfolios.** The bulk of private sector credit was extended for the housing and construction sector boosted by rising property prices. These borrowings are inherently long term, which creates vulnerability for the banks whose liabilities are of much shorter maturity. In addition, despite the low NPL ratios within the housing sector loans at present, a decline in real estate prices would likely lead to a deterioration in asset quality.

11. **Stress testing of the banking sector suggests that the banking system is relatively shielded from shocks.** Stress tests were used to quantify the impact of various shocks on key measures of banking system soundness, such as the capital adequacy ratio and NPL ratios (Cihak, 2007). The shocks considered were (i) a 25 percent increase in NPLs proportional to existing NPLs; (ii) a 25 percent increase in NPLs proportional to performing loans; (iii) 25 percent of performing loans in the housing/construction sector becoming NPLs; and (iv) an appreciation of the ngultrum by 10 percent.



- The banking sector CAR declines by varying amounts but remains above the 8 percent required minimum under all shocks. The range of decline is 0.1–3.8 percentage points for the banking system as a whole. The large decline in the CAR from a 25 percent increase in NPLs proportional to performing loans.

- An appreciation of the ngultrum slightly lowers the capital adequacy ratio of the banking sector. The entire effect stems from one of the banks which has a sizable net open position.
- The NPL ratio is substantially more sensitive to the shocks analyzed. A decline in the quality of the housing and construction sector loans leads to an increase in NPLs, corroborating the potential negative impact a sharp decline of housing prices may have on the health of the banking sector.
- The low existing levels of interbank lending limit potential contagion within the financial sector.

D. Conclusion

12. **Strong economic growth will require and lead to a deepening and further development of the financial system in Bhutan.** However, rapid credit expansion can also expose the economy to macroeconomic and financial risks that require careful monitoring. The findings of this chapter suggest that the strong growth of credit to the private sector may have been accompanied by growing vulnerabilities on the external side. While there are no signs of domestic overheating as of now and inflation has generally been contained, growth in non-hydropower related imports has been strong. In recent months, short-term problems of rupee reserve management have also emerged, partially a by-product of the strong growth in credit. However, there are a number of mitigating factors. Current account deficits have been matched by capital inflows in the form of concessional loans and grants. Moreover, despite the sharp decline in rupee reserves, total foreign exchange reserves have continued to increase and remain at a comfortable level.

13. **The financial sector seems to be relatively shielded from adverse events, though risks remain.** The significant sectoral concentration in the financial institutions' asset portfolio has created an asset/liability maturity mismatch and could lead to a sharp deterioration in banks' asset quality in the case of a negative correction in the housing market.

14. **To reap the full benefits of credit expansion and minimize the vulnerabilities that might arise from it, several steps could be taken:**

- The RMA needs to ensure that the excess liquidity does not translate into excessive credit growth through several measures:
 - Issuance of RMA bills could be stepped up and the interest rate could be increased and more closely aligned with monetary policy in India.
 - The CRR should be raised, and provisioning against housing/construction loans could be increased to cool down real estate lending. Effective December 2007, the

provisioning rate on substandard and doubtful loans is to be raised from 20 percent to 30 percent and from 50 percent to 60 percent on housing loans effective. The RMA was also in the process of increasing the CRR from 13 percent to 15 percent.

- Bank supervision and regulation should be strengthened ensuring that banks' risk management practices are up to the challenges of a rapid expansion of credit. Regular stress testing of the resilience of the banking sector should be performed.
- With the ngultrum peg, fiscal policy should be used to contain demand pressures that may worsen non-hydropower related current account deficits or generate inflationary pressures.

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Table 1. Bhutan: Gross Domestic Product by Origin at 2000 Prices, 2001–2005

	2001	2002	2003	2004	2005
	(In millions of ngultrum)				
1. Agriculture, livestock, and forestry	5,849	6,009	6,138	6,266	6,274
1.1 Agriculture proper	2,617	2,689	2,766	2,824	2,861
1.2 Livestock	1,888	1,919	1,927	1,933	1,976
1.3 Forestry and logging	1,345	1,401	1,446	1,509	1,437
2. Mining and quarrying	352	389	402	381	433
3. Manufacturing	1,656	1,733	1,770	1,868	1,951
4. Electricity & water	2,185	2,561	3,030	2,980	3,284
5. Construction	3,461	4,329	4,448	4,819	4,679
6. Wholesale and retail trade	1,029	1,234	1,378	1,633	1,878
7. Hotel and restaurant	112	115	129	157	186
8. Transport, storage, and communication	1,844	2,000	2,007	2,448	2,627
9. Financing, insurance & real estate	1,534	1,296	1,745	1,944	2,441
9.1. Finance & insurance	937	747	1,054	1,245	1,724
9.2. Real estate & dwellings	597	549	691	699	717
10. Community, social services	2,847	3,051	3,288	3,308	3,743
11. Private social, personal & recreational services	97	100	110	120	142
12. Plus taxes net of subsidies	533	829	987	1,231	1,401
 Gross domestic product	 21,498	 23,646	 25,432	 27,155	 29,039
 Change in percent	 7.2	 10.0	 7.6	 6.8	 6.9

Source: *National Accounts Statistics*, 2006, National Statistical Bureau.

**Table 2. Bhutan: Gross Domestic Product by Origin
at Current Prices, 2001–2005**

	2001	2002	2003	2004	2005
	(In millions of ngultrum)				
1. Agriculture, livestock, and forestry	6,037	6,884	7,292	7,864	8,256
1.1 Agriculture proper	2,682	3,000	3,192	3,481	3,685
1.2 Livestock	1,930	2,007	2,163	2,331	2,557
1.3 Forestry and logging	1,425	1,877	1,938	2,052	2,014
2. Mining and quarrying	344	440	581	440	538
3. Manufacturing	1,855	1,945	2,042	2,384	2,688
4. Electricity and water	2,279	2,658	3,352	3,085	3,661
5. Construction	3,818	4,711	5,020	5,630	6,353
6. Wholesale and retail trade	1,045	1,283	1,447	1,726	2,089
7. Hotel and restaurant	113	120	135	169	212
8. Transport, storage, and communication	2,083	2,452	2,626	3,295	3,838
9. Financing, insurance & real estate	1,596	1,434	1,924	2,234	2,799
9.1. Finance & insurance	950	717	1,002	1,233	1,690
9.2. Real estate & dwellings	645	716	922	1,001	1,109
10. Community, social services	3,037	3,342	3,664	3,823	4,472
11. Private social, personal & recreational services	99	108	119	136	164
12. Plus: taxes net of subsidies	551	878	1,068	1,393	1,668
Gross domestic product	22,858	26,254	29,269	32,178	36,737

Source: *National Accounts Statistics*, 2006, National Statistical Bureau.

Table 3. Bhutan: Crop Production Estimates, 2001–2005

	2001	2002	2003	2004	2005
(In thousands of acres)					
Area					
Paddy	48.3	48.5	48.7	46.6	62.5
Wheat/barley	15.0	15.0	69.4	10.4	30.3
Maize	78.8	79.0	9.6	53.9	75.9
Buckwheat/millet	23.4	23.6	19.7	13.7	33.0
Potatoes	8.1	8.5	10.2	8.5	14.5
Chilies	2.9	3.0	3.4	3.1	5.6
Mustard	9.4	9.5	5.1	4.5	14.0
(In metric tons per acres)					
Yield					
Paddy	1.5	1.6	0.9	1.2	1.1
Wheat/barley	0.4	0.5	0.6	1.1	1.1
Maize	1.1	1.2	0.7	1.7	1.2
Buckwheat/millet	0.3	0.3	0.3	1.5	1.6
Potatoes	4.7	5.0	3.9	5.6	3.7
Chilies	1.4	1.6	...	1.5	1.9
Mustard	0.3	0.4	0.3	0.4	0.3
(In thousands of metric tons)					
Production					
Paddy	70.3	73.4	45.9	54.3	67.6
Wheat/barley	6.1	6.5	57.5	5.6	15.8
Maize	79.2	79.5	49.7	90.6	94.0
Buckwheat/millet	6.5	6.6	5.1	4.9	13.8
Potatoes	36.5	38	40.6	47.4	53.6
Chilies	3.2	3.5	0.0	4.5	10.4
Mustard	1.9	2.1	3.6	1.8	4.4

Source: Data provided by the Bhutanese authorities.

Table 4. Bhutan: Livestock and Poultry Production, 2000–2004

(In thousands)

	2000	2001	2002	2003	2004
Cattle	321	330	326	314	269
Yaks	33	34	34	19	19
Sheep/goats	54	56	56	5	5
Pigs	41	42	43	20	20
Poultry	231	242	249	45	45

Source: Ministry of Agriculture.

Table 5. Bhutan: Logging Volume, 2001–2005

(In cubic meters)

	2001	2002	2003	2004	2005
Commercial logging	44,209	48,878	49,826	54,347	53,924
Logging for housing construction and public works plus other uses	6,765	11,134	7,393	9,766	7,981
Total	50,973	60,012	57,218	64,113	61,905

Source: Forestry Development Corporation, Ministry of Agriculture.

Table 6. Bhutan: Imports of Essential Food Items by the Food Corporation of Bhutan, 2001–2005

(In metric tons)

	2001	2002	2003	2004	2005
Rice	6,599	7,434	18,263	7,188	6,227
Wheat	1,371	2,310	2,626	2,500	36
Wheat/wheat products	7,076	17,680	14,807	14,655	319
Sugar	3,155	1,925	1,181	1,966	3,924
Edible oils ('000 liters)	162	380	636	198	569

Source: Food Corporation of Bhutan.

**Table 7. Bhutan: Gross Sales and Output of Selected Industries,
2001–2005**

(In millions of ngultrum)

	2001	2002	2003	2004	2005
Penden Cement Authority	764	814	896	852	807
Bhutan Ferro Alloys Limited	579	643	658	748	651
Bhutan Fruit Products	112	134	122	174	69
Bhutan Carbide and Chemicals	676	708	703	732	760
Bhutan Board Products	294	289	492	546	158

Source: Department of Trade and Industry.

Table 8. Bhutan: Electricity Generation, Tariff Rates, and Trade with India, 2001/02–2005/06

	2001/02	2002/03	2003/04	2004/05	2005/06
(In millions of kilowatt hours)					
Domestic generation	2,059.4	2,200.5	2,528.7	2,355.0	2,647.4
Hydroelectric power	2,059.0	2,199.6	2,526.6	2,353.2	2,645.8
Diesel	0.5	0.9	2.1	1.8	1.5
Purchases from India	6.9	2.6	2.3	2.3	2.5
Total supply of electricity	2,066.3	2,203.0	2,530.9	2,357.3	2,649.8
(In millions of ngultrum)					
Exports to India	2,218	2,364	2,805	2,585	3,510
(In ngultrum per unit)					
Export tariff to India 1/	1.50	1.50	1.50	1.75–2.0	1.75–2.0
Domestic tariff rates 2/					
Below 80 Kwh per month	...	0.6	0.6	0.6	0.6
Above 200 Kwh per month	0.8	0.8	1.0	1.2	1.3

Source: Department of Energy.

1/ Rates shown are for Chukha exports and 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 end-2004.

2/ Tariff rates for low voltage electricity. A lifeline tariff rate of Nu 0.6 for the first 80 Kwh of consumption was introduced in 2002/03.

Table 9. Bhutan: Tourism Statistics, 2002–2006 1/

	2002	2003	2004	2005	2006
Hotel rooms available (number) 2/	1,239	1,270	1,202	1,548	1,532
Average length of stay (nights)	7.0	7.0	8.0	8.5	8.0
Total tourism receipts (in millions of U.S. dollars)	8.0	8.3	12.5	18.5	23.9
Tourist arrivals (number)	5,599	6,261	9,249	13,625	17,909
Tourist arrivals by country					
Total Europe	2,015	2,671	3,478	4,973	6,848
Germany	346	496	671	1,042	1,074
France	192	288	434	532	708
Italy	177	331	462	529	648
Other Europe	1,300	1,556	1,911	2,870	4,418
United States	1,913	1,803	3,243	4,681	5,018
Japan	892	952	1,087	1,554	1,815
Australia	214	165	315	458	774
Other	565	670	1,126	1,959	3,454
Tourist arrivals by purpose					
Touring	5,242	5,823	8,742	13,013	16,578
Trekking	357	438	507	612	1,331

Source: Department of Tourism, Ministry of Trade and Industry.

1/ Data relate to tourists paying in convertible currencies.

2/ Includes hotels approved by the Department of Tourism.

Table 10. Bhutan: Consumer Price Index, 2002–2006 1/

(1979=100, unless otherwise indicated)

(Weight)	Food Items (72.3)	Nonfood Items (27.7)	All Items (100.0)	Annual Percentage Change in:		
				Food	Nonfood	Total
2002						
H1	525.9	924.0	636.1	2.2	3.7	2.7
H2	535.6	938.7	647.2	2.0	2.7	2.3
2003						
H1	535.0	942.4	647.8	1.7	2.0	1.8
Q3	100.0	100.0	100.0	...	...	...
Q4	101.4	102.3	102.0	...	...	...
2004						
Q1	101.9	104.7	103.8	...	...	...
Q2	101.1	104.7	103.6	...	...	...
Q3	102.9	105.3	104.6	2.8	5.3	4.6
Q4	104.2	106.9	106.0	2.7	4.5	3.9
2005						
Q1	108.0	110.0	109.4	6.1	5.1	5.4
Q2	107.4	110.1	109.2	6.2	5.1	5.5
Q3	108.7	111.0	110.3	5.7	5.4	5.5
Q4	109.4	112.1	111.2	5.0	4.9	4.9
2006						
Q1	110.3	114.0	112.8	2.1	3.6	3.1
Q2	114.6	116.6	116.0	6.8	5.9	6.2
Q3	115.0	116.8	116.2	5.8	5.2	5.4
Q4	115.1	118.1	117.1	5.2	5.3	5.3

Sources: National Statistical Bureau; and CEIC Data Company Ltd.

1/ The consumer price index was re-based in the third quarter of 2003, and the frequency was changed to quarterly. Weights for the quarterly CPI also changed as follows: food (31.7); nonfood (68.3); total (100.0).

Table 11. Bhutan: Government Budget Summary, 2001/02–2006/07

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07 Budget
(In millions of ngultrum)						
Revenue and grants	8,849	7,054	10,421	10,439	13,328	16,357
Revenue	5,100	4,785	5,055	6,066	6,903	10,122
Tax revenue	2,415	2,728	2,467	3,069	3,717	5,139
Nontax revenue	2,685	2,057	2,589	2,997	3,186	4,983
Grants	3,749	2,269	5,366	4,373	6,425	6,235
From India	2,532	929	3,533	2,625	3,417	4,175
Other	1,217	1,340	1,833	1,748	3,007	2,060
Expenditure and net lending	10,053	9,945	9,865	12,893	13,771	17,902
Current expenditure	4,468	4,581	5,149	6,171	6,672	7,962
Capital expenditure	5,313	5,413	5,265	6,810	6,809	9,814
Net lending	272	-48	-549	-88	289	126
Current balance (excluding grants)	632	204	-94	-105	231	2,160
Overall balance (including grants)	-1,204	-2,891	556	-2,454	-443	-1,545
Financing	1,204	2,891	-556	2,454	443	1,545
Foreign financing	1,397	1,537	932	739	715	811
Disbursement	1,607	1,759	1,149	1,137	1,114	1,287
Amortization	210	221	217	398	398	477
Domestic financing	-193	1,353	-1,488	1,714	-272	734
(In percent of GDP)						
Revenue and grants	36.0	25.4	33.9	30.3	33.9	34.1
Domestic revenue	20.8	17.2	16.5	17.6	17.6	21.1
Of which: tax revenue	9.8	9.8	8.0	8.9	9.5	10.7
Foreign grants	15.3	8.2	17.5	12.7	16.3	13.0
Expenditure and net lending	40.9	35.8	32.1	37.4	35.0	37.3
Current expenditure	18.2	16.5	16.8	17.9	17.0	16.6
Capital expenditure and net lending	22.7	19.3	15.3	19.5	18.1	20.7
Current balance (excluding grants)	2.6	0.7	-0.3	-0.3	0.6	4.5
Overall balance (including grants)	-4.9	-10.4	1.8	-7.1	-1.1	-3.2
Memorandum item:						
Nominal GDP (in millions of ngultrum)	24,556	27,762	30,724	34,458	39,317	47,996

Sources: Data provided by the Bhutanese authorities; and staff estimates.

Table 12. Bhutan: Government Revenue, 2000/01–2005/06

(In millions of ngultrum)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Tax revenue	1,917	2,415	2,728	2,467	3,069	3,717
Tax on income and profits	1,258	1,379	1,373	1,533	1,530	1,833
<i>Of which</i> : Chukha revenue	618	593	539	585	562	737
Taxes on domestic goods	473	805	1,093	625	1,134	1,542
Taxes on international trade	91	107	116	154	232	158
Other	94	124	146	155	174	184
Nontax revenue	2,755	2,685	2,057	2,589	2,997	3,186
Net profit transfers	714	315	317	198	384	503
Royalties	275	214	215	243	332	407
Dividends	1,296	1,427	1,288	1,753	1,551	1,542
<i>Of which</i> : Chukha revenue	1,201	1,248	1,083	1,621	1,362	1,356
Administrative fees and charges	81	137	148	129	169	197
Sale of government property	47	28	25	74	233	168
Revenue from government departments	311	500	34	41	79	102
Other	31	64	30	151	250	266
Total revenue	4,672	5,100	4,785	5,055	6,066	6,903

Source: Data provided by the Bhutanese authorities.

**Table 13. Bhutan: Economic Classification of Government Current Expenditure,
2000/01–2005/06**

(In millions of ngultrum)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Wages and salaries	1,582	1,746	1,845	1,980	2,398	2,817
Goods and services	2,028	2,114	2,093	2,416	2,872	3,020
Subsidies and transfers	748	445	474	533	496	453
Druk Air Corporation	29	25	21	65	134	142
Bhutan Broadcasting Corporation	16	18	23	29	34	36
Individuals and other nonprofit organizations	498	229	262	293	175	140
Gratuity and retirement benefits	42	48	48	32	38	35
Contribution to Provident Fund	141	151	102	107	115	123
Other	22	-26	18	7	0	-23
Interest payments	78	116	169	220	405	382
Total current expenditures	4,436	4,468	4,581	5,149	6,171	6,672

Source: Data provided by the Bhutanese authorities.

**Table 14. Bhutan: Functional Classification of Government Current Expenditure,
2000/01–2005/06**

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
(In millions of ngultrum)						
General public services	2,026	1,748	2,090	2,692	3,133	3,322
Economic services	1,036	1,199	838	812	919	1,090
Agriculture and irrigation	249	282	201	159	193	230
Animal husbandry	94	99	113	110	129	155
Forestry	153	169	184	205	238	276
Industries, mining, trade, and commerce	58	56	57	51	66	79
Public works, roads, and housing	179	234	225	60	237	275
Transport and communication	30	34	36	201	27	38
Power	272	326	23	27	29	37
Social services	1,375	1,521	1,653	1,642	2,119	2,260
Education	833	892	1,070	1,010	1,375	1,395
Health	525	610	562	601	642	734
Urban development and municipal corporations	16	19	21	31	102	130
(In percent of total current expenditure)						
General public services	45.7	39.1	45.6	52.3	50.8	49.8
Economic services	23.3	26.8	18.3	15.8	14.9	16.3
Social services	31.0	34.0	36.1	31.9	34.3	33.9

Source: Data provided by the Bhutanese authorities.

**Table 15. Bhutan: Functional Classification of Government Capital Expenditure,
2000/01–2005/06**

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
(In millions of ngultrum)						
General public services	1,078	806	1,776	1,548	3,338	2,320
Economic services	4,505	3,448	2,822	2,546	2,425	3,300
Agriculture and irrigation	211	304	155	386	166	342
Animal husbandry	16	109	382	42	36	104
Forestry	122	203	81	87	108	123
Industries, mining, trade, and commerce	51	163	154	54	63	90
Public works, roads, and housing	1,003	1,495	1,014	409	1,835	2,033
Transport and communication	25	49	43	806	43	169
Power	3,078	1,126	992	763	174	440
Social services	698	1,059	712	559	852	1,065
Education	382	630	406	294	463	693
Health	279	388	287	231	310	312
Urban development and municipal corporations	37	41	19	34	79	60
(In percent of total capital expenditure 1/)						
General public services	17.2	15.2	32.8	29.4	49.0	34.1
Economic services	71.7	64.9	52.1	48.4	35.6	48.5
Social services	11.1	19.9	13.2	10.6	12.5	15.6

Source: Data provided by the Bhutanese authorities.

**Table 16. Bhutan: Functional Classification of Total Government Expenditure,
2000/01–2005/06**

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
(In millions of ngultrum)						
General public services	3,104	2,554	3,866	4,240	6,471	5,642
Economic services	5,541	4,647	3,660	3,358	3,344	4,390
Agriculture and irrigation	460	586	356	545	359	571
Animal husbandry	110	208	495	152	165	259
Forestry	275	372	265	292	346	399
Industries, mining, trade, and commerce	109	219	211	105	128	170
Public works, roads, and housing	1,182	1,729	1,239	469	2,072	2,308
Transport and communication	55	83	79	1,007	70	206
Power	3,350	1,452	1,015	790	204	478
Social services	2,073	2,580	2,365	2,201	2,971	3,325
Education	1,215	1,522	1,476	1,303	1,838	2,088
Health	804	998	849	832	952	1,046
Urban development and municipal corporations	53	60	40	66	181	191
(In percent of total expenditure)						
General public services	27.8	25.4	38.9	43.0	50.2	41.0
Economic services	49.6	46.2	36.8	34.0	25.9	31.9
Social services	18.5	25.7	23.8	22.3	23.0	24.1

Sources: Data provided by the Bhutanese authorities; and staff calculation.

Table 17. Bhutan: Monetary Survey, 2001–2007 1/

	2001	2002	2003	2004	2005	2006		2007
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.	Dec.	Feb.
(In millions of ngultrum)								
Net foreign assets	12,789	14,355	17,520	16,457	16,397	22,505	24,425	24,170
Ruppee	2,368	2,314	3,352	3,314	3,595	3,156	3,786	2,998
Other	10,421	12,041	14,168	13,142	12,802	19,349	20,639	21,172
Net domestic assets	-3,474	-3,384	-3,265	-1,625	18	-2,019	-3,442	-2,629
Net claims on government 2/	-456	-812	-465	-1,818	-691	-3,371	-5,184	-4,875
Claims on nongovernment	2,474	3,025	4,173	5,987	7,245	9,300	10,608	10,915
Public enterprises	333	292	415	1,203	1,276	1,278	1,269	1,234
Joint enterprises	121	122	232	211	140	120	143	403
Nonbank financial institutions	...	...	391	314	323	559	538	534
Private sector	2,020	2,611	3,135	4,260	5,506	7,342	8,658	8,744
Other items (net)	-5,492	-5,597	-6,972	-5,794	-6,535	-7,949	-8,866	-8,669
Broad money	9,315	10,971	14,255	14,832	16,416	20,486	20,984	21,541
Narrow money	4,373	4,914	6,794	7,737	8,445	9,073	10,338	9,908
Currency	1,483	1,600	1,699	2,015	2,303	2,615	2,763	2,770
Demand deposits	2,890	3,314	5,095	5,722	6,141	6,458	7,576	7,138
Quasi-money	4,942	6,058	7,461	7,095	7,971	11,413	10,646	11,633
(Changes in percent of initial stock of broad money)								
Broad money	5.5	17.8	29.9	4.0	10.7	24.8	2.4	5.2
Net foreign assets	-5.2	16.8	28.8	-7.5	-0.4	37.2	9.4	8.1
Net domestic assets	10.7	1.0	1.1	11.5	11.1	-12.4	-6.9	-3.0
Net claims on government	7.4	-3.8	3.2	-9.5	7.6	-16.3	-8.9	-7.3
Claims on private sector	7.4	6.3	4.8	7.9	8.4	11.2	6.4	6.8
Other items (net)	-3.7	-1.1	-12.5	8.3	-5.0	-8.6	-4.5	-3.5
Memorandum items:								
Money multiplier 3/	2.0	1.9	1.8	1.6	1.8	1.5	1.7	1.6
Broad money/GDP	0.43	0.45	0.51	0.48	0.48	0.52	0.44	0.45
Nominal GDP (fiscal year)	21,459	24,556	27,762	30,724	34,458	39,317	47,996	47,996

Source: Data provided by the Bhutanese authorities.

1/ A major reclassification in 2003 renders data before and after January 2003 incomparable.

2/ Includes deposits of some public enterprises and off-budgetary entities. Data differ from the bank financing data reported in the fiscal accounts.

3/ Ratio of broad money to reserve money.

Table 18. Bhutan: Assets and Liabilities of the Royal Monetary Authority of Bhutan, 2001–2007

(In millions of ngultrum)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>		<u>2007</u>
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.	Dec.	Feb.
Assets								
Foreign assets	8,837	10,562	12,292	13,156	13,467	18,656	18,359	22,360
Rupee	89	636	864	1,822	2,070	1,507	201	1,564
Other	8,748	9,926	11,428	11,334	11,398	17,148	18,159	20,796
Gold	211	255	43	44	40	47	38	40
Claims on government	280	127	56	37	100	0	0	0
Claims on joint enterprises 1/	0	0	0	0	0	0	0	0
Claims on commercial banks	23	67	147	249	710	591	103	33
Claims on private sector 2/	2	1	1	1	1	3	10	11
Liabilities								
Foreign liabilities 3/	0	0	0	0	0	0	0	0
Reserve money	4,606	5,917	8,008	9,370	9,340	13,475	12,285	13,262
Currency outside banks	1,483	1,600	1,699	2,015	2,303	2,615	2,763	2,770
Currency in banks	77	94	66	93	107	157	146	232
Bank deposits	3,045	4,223	6,243	7,262	6,930	10,703	9,377	10,259
RMA bills	410	910	700	200	200	200	100	100
Reserve repurchase	500	0	0	0	0	0	0	0
Government deposits	61	182	282	415	779	648	1,496	1,901
Capital account	450	254	93	145	879	1,004	1,040	1,128
Other items (net)	3,327	3,750	3,456	3,356	3,120	3,969	3,590	6,053
Memorandum item:								
Reserve money (12-month percent change)	-5.1	28.5	35.3	17.0	-0.3	44.3	-3.5	...

Source: Data provided by the Bhutanese authorities.

1/ Includes other financial institutions.

2/ Includes advances to RMA staff.

3/ Rupee overdraft facilities.

Table 19. Bhutan: Assets and Liabilities of the Bank of Bhutan, 2001–2007

(In millions of ngultrum)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>		<u>2007</u>
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.	Dec.	Feb.
Assets								
Reserves	2,535	3,812	4,864	4,922	5,364	8,964	7,615	8,561
Cash reserve ratio (CRR)	641	672	1,821	1,538	1,257	1,959	1,756	1,849
Cash	71	90	63	88	77	116	114	190
Excess reserves	1,823	3,050	2,980	3,296	4,029	6,889	5,745	6,523
RMA bills	356	771	390	149	199	83	33	33
Reserve repurchase	500	0	0	0	0	0	0	0
Foreign assets	2,916	2,885	3,613	3,430	2,009	2,329	4,320	2,479
Rupee	2,150	1,981	1,756	2,001	1,087	955	3,136	945
Other	767	904	1,857	1,429	922	1,374	1,184	1,534
Claims on government	678	267	1,538	700	1,083	0	0	0
Claims on public enterprises	333	292	257	268	693	631	634	598
Claims on joint enterprises	113	115	120	159	132	113	135	395
Claims on private sector	949	1,143	1,532	1,871	2,190	2,992	3,660	3,474
Liabilities								
Demand deposits	2,245	2,604	3,864	4,569	4,926	5,081	5,819	5,563
Current	1,196	1,330	2,354	2,866	2,881	2,704	3,364	3,218
Savings	1,049	1,275	1,510	1,703	2,045	2,377	2,455	2,345
Time and foreign currency deposits	2,818	3,393	4,695	3,770	4,637	6,531	5,543	6,076
<i>Of which</i> : convertible currency	201	257	1,159	561	337	458	411	824
Government deposits 1/	672	602	870	901	1,111	1,867	2,087	1,292
Capital account	514	699	854	1,011	1,151	1,225	1,354	1,351
Other items (net)	2,952	2,758	2,031	1,247	78	964	2,128	1,790

Source: Data provided by the Bhutanese authorities.

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

Table 20. Bhutan: Assets and Liabilities of the Bhutan National Bank, 2001–2007

(In millions of ngultrum)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>		<u>2007</u>
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.	Dec.	Feb.
Assets								
Reserves	619	418	1,300	1,953	1,037	1,660	2,178	1,945
Cash reserve ratio	332	358	980	673	767	903	1,106	1,116
Cash	6	4	3	5	30	41	32	42
Excess reserves	281	56	317	1,274	240	716	1,041	788
RMA bills	48	129	304	50	50	83	33	33
Foreign assets	2,024	2,020	1,572	889	881	1,474	1,708	1,947
Rupee	1,328	1,064	732	552	438	693	449	489
Other	696	956	840	337	443	781	1,259	1,458
Claims on government	0	120	120	570	867	0	0	0
Claims on public enterprises	0	0	0	527	583	647	635	636
Claims on joint enterprises	7	7	8	8	8	8	8	8
Claims on private sector	1,070	1,466	2,007	2,732	3,316	4,347	4,988	5,259
Liabilities								
Demand deposits	609	709	1,231	1,153	1,216	1,381	1,757	1,576
Time and foreign currency deposits	1,923	2,409	2,766	3,325	3,334	4,882	5,102	5,557
Government deposits	681	542	780	859	850	855	1,601	1,682
Capital account	284	327	346	752	792	924	919	927
Other items (net)	271	173	187	111	645	179	174	91

Source: Data provided by the Bhutanese authorities.

Table 21. Bhutan: Assets and Liabilities of the Royal Insurance Corporation of Bhutan, 2001–2007

(In millions of ngultrum)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>		<u>2007</u>
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.	Dec.	Feb.
Assets								
Reserves 1/	52	39	92	103	42	66	71	79
Foreign assets	51	56	9	4	7	12	11	15
Claims on public enterprises	17	17	18	25	19	15	18	21
Claims on private sector	907	1,075	1,184	1,307	1,487	1,571	1,612	1,628
Claims on deposit money banks	0	0	55	20	8	68	58	63
Liabilities								
Insurance reserve funds	0	0	0	0	0	0	0	0
Life insurance fund	50	44	57	79	102	139	154	162
Group insurance fund	134	156	186	200	221	235	254	119
Provident Fund	682	418.6	56	70	85	107	118	126
Credit from DMBs	260	675	674	549	160	194	172	172
Capital accounts	156	187	247	276	351	417	445	434
Other items (net)	-254	-293	139	285	247	293	330	497

Source: Data provided by the Bhutanese authorities.

1/ Includes deposits with the Bank of Bhutan.

Table 22. Bhutan: Assets and Liabilities of the Bhutan Development Finance Corporation, 2001–2007

(In millions of ngultrum)

	<u>2001</u> Jun.	<u>2002</u> Jun.	<u>2003</u> Jun.	<u>2004</u> Jun.	<u>2005</u> Jun.	<u>2006</u>		<u>2007</u> Feb.
						Jun.	Dec.	
Assets								
Reserves 1/	19	23	89	29	63	195	131	169
Claims on private sector 2/	587	819	1,092	1,191	1275	1,429	1,572	1,624
Claims on other banks	107	15	0	10	10	80	80	0
Claims on government corporations	1	1	1	1	0	0	0	0
Liabilities								
Foreign liabilities	228	304	343	332	312.5	289	279	272
Credit from RMA	0	0	0	0	0	0	0	0
Credit from DMBs	0	0	200	94	86	378	375	375
Credit from other NMFIs	0	0	0	95	165	155	150	150
Grants	50	50	50	50	50	50	50	50
Capital account	309	356	393	448	513	598	694	699
Other items (net)	127	148	196	213	252	273	272	287

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 23. Bhutan: Financial Sector Investment by Sector of Economic Activity, 2001–2006

(In millions of ngultrum)

	2001 Jun.	2002 Jun.	2003 Jun.	2004 Jun.	2005 Jun.	2006 Jun.
Agriculture	202	230	247	222	230	238
Bank of Bhutan	3	6	6	4	1	1
Royal Insurance Corporation of Bhutan	1	0	0	2	2	2
Bhutan Development Finance Corporation	198	223	241	216	227	236
Bhutan National Bank	--	--	--	--	0	0
Manufacturing	785	974	1,290	1,485	1,440	2,022
Bank of Bhutan	222	254	350	499	524	855
Royal Insurance Corporation of Bhutan	203	257	281	239	109	142
Bhutan Development Finance Corporation	138	181	211	204	226	263
Bhutan National Bank	222	283	449	543	582	762
Building and construction	719	1,113	1,641	2,176	3,126	3,938
Bank of Bhutan	142	232	342	448	633	806
Royal Insurance Corporation of Bhutan	274	332	394	440	661	686
Bhutan Development Finance Corporation	41	141	296	355	419	491
Bhutan National Bank	262	408	609	933	1,413	1,955
Trade and commerce	1,644	1,262	960	1,395	1,466	1,767
Bank of Bhutan	1,163	578	338	479	567	668
Royal Insurance Corporation of Bhutan	118	147	318	489	391	408
Bhutan Development Finance Corporation	170	256	82	116	58	88
Bhutan National Bank	193	281	223	312	451	603
Transport	712	730	796	772	812	829
Bank of Bhutan	404	411	463	448	437	430
Royal Insurance Corporation of Bhutan	161	152	120	68	87	91
Bhutan Development Finance Corporation	24	13	11	12	27	30
Bhutan National Bank	123	154	202	244	261	278
Personal and other loans 1/	497	599	2,507	1,439	3,547	2,505
Bank of Bhutan	90	91	1,684	437	1,495	1,059
Royal Insurance Corporation of Bhutan	124	161	46	44	219	218
Bhutan Development Finance Corporation	15	5	250	266	333	334
Bhutan National Bank	268	341	527	692	1,500	894
Total	4,558	4,907	7,441	7,489	10,620	11,298

Source: Data provided by the Bhutanese authorities.

1/ Includes personal loans, government employee loans, and loans to the services and tourism sectors.

Table 24. Bhutan: Royal Monetary Authority of Bhutan Bills Auctions, 2002–2007 1/

Auction Date	Bids Received (Nu million)	Bids Accepted (Nu million)	Discount Rate (percent)
1/29/02	770	650	5.00
3/4/02	110	110	5.00
3/18/02	150	150	5.00
4/29/02	650	650	4.50
6/3/02	110	110	4.50
6/18/02	150	150	4.50
7/29/02	665	665	4.50
9/2/02	110	110	4.50
9/19/02	150	150	4.00
10/29/02	500	500	4.00
11/2/02	300	300	4.00
11/19/02	450	300	4.00
1/27/03	500	500	4.00
3/5/03	400	200	4.00
3/20/03	400	200	4.00
4/30/03	600	300	4.00
5/5/03	275	200	3.50
6/25/03	400	200	3.50
7/30/03	350	200	3.50
8/27/03	400	200	3.50
9/24/03	200	100	3.50
11/30/03	200	100	3.50
3/31/04	200	100	3.50
4/28/04	100	100	3.50
7/28/04	100	100	3.50
8/25/04	100	100	3.50
10/27/04	100	100	3.50
11/24/04	100	100	3.50
1/26/05	100	100	3.50
2/23/05	100	100	3.50
5/25/05	100	100	3.50
6/29/05	100	100	3.50
9/28/05	100	100	3.50
11/30/05	100	100	3.50
2/22/06	100	100	3.50
2/22/06	100	100	3.50
4/26/06	100	100	3.50
6/28/06	100	100	3.50
8/30/06	100	100	3.50
10/25/06	100	100	3.50
1/31/07	100	100	3.50
4/26/07	100	100	3.50
6/27/07	100	100	3.50

Source: Data provided by the Bhutanese authorities.

1/ The RMA bills carry a maturity of 91 days.

Table 25. Bhutan: Structure of Interest Rates, 2001–2006

(In percent per annum, end of period)

	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>
	Jun.	Jun.	Jun.	Jun.	Jun.	Jun.
Deposit rates						
Bank of Bhutan						
Savings	5.0	5.0	5.0	4.5	4.5	4.5
Fixed						
3–6 months	7.0	7.0	5.5	4.5	4.5	4.5
6–9 months	7.0	7.0	5.5	4.5	4.5	4.5
9–12 months	7.0	7.0	5.5	4.5	4.5	4.5
1–3 years	9.0	9.0	7.5	6.0	6.0	6.0
3–5 years	10.0	10.0	8.5	7.0	7.0	7.0
Over 5 years	10.0	10.0	8.5	7.0	7.0	7.0
Bhutan National Bank						
Savings	7.0	6.0	5.0	5.0	4.5	4.5
Fixed						
3–6 months	8.0	7.0	6.0	5.5	4.5	4.5
6–9 months	8.0	7.0	6.0	5.5	4.5	4.5
9–12 months	8.0	7.0	6.0	5.5	4.5	4.5
1–3 years	10.0	9.0	7.0	6.0–6.5	6.5	6.5
3–5 years	11.0	10.0	8.0	7.0	7.0	7.0
Over 5 years	11.0	10.0	8.0	7.0	7.0	7.0
Lending rates						
Commerce	15.0–15.5	15.0	15.0	15.0	13.8	13.8
Exports	13.0–15.5	13.0–15.0	13.0–15.0	13.0–15.0	13.0	13.0
Transport	13.0–16.0	13.0–16.0	13.0–16.0	12.0–15.0	13.0–14.0	13.0–14.0
Agriculture	13.0	12.0–15.0	13.0–15.0	13.0–15.0	13.0–15.0	13.0–15.0
Industry and manufacturing	13.0–13.5	12.0–13.0	12.0–13.0	12.0–13.0	12.0–13.0	12.0–13.0
Service industries, including tourism	13.0	12.0–13.0	12.0–13.0	12.0–15.0	10.0–13.0	10.0–13.0
Housing	14.0	13.0	13.0	10.0–13.0	10.0–13.0	10.0–13.0
Miscellaneous	15.0–16.0	15.0	16.0	16.0	15.0	15.0
Memorandum items:						
Deposit rates (India) 1/	8.0	8.0	5.5	5.3	5.8	6.6
Lending rates (India) 2/	12.0	12.0	10.5–11.5	10.25–11.0	10.25–10.75	10.75–11.25

Sources: Data provided by the Bhutanese authorities; and CEIC Data Company Ltd.

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

2/ Prime lending rate.

Table 26. Bhutan: Balance of Payments Summary, 2001/02–2005/2006

(In millions of U.S. dollars)

	2001/02	2002/03	2003/04	2004/05	2005/06 Prov.
Trade balance	-99	-93	-105	-248	-123
Exports, f.o.b.	104	113	158	212	312
Imports, c.i.f.	-203	-206	-263	-461	-435
Services (net)	-5	-17	-8	-11	-1
Income (net)	-5	-11	-16	-17	-11
Current transfers	44	38	56	59	106
India	32	11	31	23	60
Other	12	27	25	36	46
<i>Of which: grant receipts</i>	79	73	94	120	176
Current account (including grants)	-65	-84	-73	-217	-29
Capital and financial account	103	218	185	215	144
Capital transfer	42	121	103	93	60
Foreign direct investment	2	2	3	9	6
Portfolio investment	0	0	0	0	0
Total loans (net)	59	94	103	78	78
Errors and omissions	-12	-80	-104	-18	-4
Overall balance	26	55	8	-21	111
Financing					
Change in net reserves (increase = -)	-26	-55	-8	21	-111
Memorandum items:					
Gross official reserves	315	373	383	367	479
(In months of imports of goods)	18.3	17.1	10.0	10.1	11.3
Ngultrum per US\$ (period average)	48.2	47.9	45.4	44.6	44.7

Source: Data provided by the Bhutanese authorities.

Table 27. Bhutan: Balance of Payments with India, 2001/02–2005/06

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06 Prov.
	(In millions of U.S. dollars)					
Trade balance	-40	-64	-82	-84	-81	-71
Exports, f.o.b.	94	98	106	149	194	237
<i>Of which</i> : Chukha exports	43	42	41	51	47	67
Imports, c.i.f.	-134	-162	-188	-233	-275	-308
Service balance	-7	-6	-9	-4	-20	-17
Travel and other service receipts	13	14	12	17	19	27
Travel and other service payments	-21	-20	-21	-21	-39	-44
Income	-8	-10	-14	-18	-22	-19
Interest and other income receipts	5	4	8	5	4	6
Interest and other income payments	-14	-14	-21	-23	-26	-25
Transfers	31	32	11	31	23	60
Grants to government (budgetary)	55	53	18	50	59	86
Excise duty refund	0	8	12	1	7	17
Transfer payments	-26	-28	-20	-20	-43	-43
Current account balance	-24	-48	-93	-75	-99	-47
Capital and financial account	70	81	186	175	147	112
Capital transfer	33	42	121	103	93	60
Foreign direct investment	0	0	0	0	0	0
Portfolio investments	0	0	0	0	0	0
Loans (net)	37	39	65	72	53	52
Receipts	39	40	67	74	60	58
<i>Of which</i> :						
Concessional	39	40	67	74	60	58
Nonconcessional	0	0	0	0	0	0
Payments	2	2	2	2	6	6
<i>Of which</i> :						
Concessional	2	2	2	2	6	6
Nonconcessional	0	0	0	0	0	0
Errors and omissions	-36	-30	-100	-76	-65	-76
Overall balance	10	2	-7	23	-18	-10
Financing						
Change in net reserves (increase = -)	-10	-2	7	-23	18	10
	(In percent of GDP)					
Memorandum items:						
Exports	20.4	19.1	18.4	22.0	25.1	27.0
Imports	29.0	31.7	32.4	34.5	35.6	35.1
Current account balance	-5.2	-9.5	-16.1	-11.1	-12.9	-5.3

Source: Data provided by the Bhutanese authorities.

Table 28. Bhutan: Balance of Payments with Third Countries, 2001/02–2005/06

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06 Prov.
	(In millions of U.S. dollars)					
Trade balance	-30	-35	-12	-21	-167	-52
Exports, f.o.b.	5	6	6	9	18	75
Imports, c.i.f.	-35	-42	-18	-29	-186	-127
Service balance	3	2	-8	-4	9	16
Travel and other service receipts	18	15	12	14	27	33
Travel and other service payments	-14	-14	-20	-18	-18	-18
Income	11	5	2	1	5	8
Interest and other income receipts	12	7	4	4	8	12
Interest and other income payments	-1	-2	-2	-3	-3	-4
Transfers	14	12	27	25	36	46
Grants to government (budgetary)	25	26	55	44	54	73
Private transfer receipts (including NGOs)	5	5	6	12	13	12
Transfer payments	-16	-20	-34	-31	-31	-39
Current account (including grants)	-2	-17	10	2	-118	18
Capital and financial account	-6	22	32	10	68	31
Foreign direct investment	0	2	2	3	9	6
Portfolio investments	-19	0	0	0	0	0
Loans (net)	13	20	29	31	24	26
Receipts	16	23	33	34	27	29
Payments	3	3	3	3	3	4
Errors and omissions	4	18	20	-27	47	72
Overall balance	-5	23	61	-15	-3	121
Financing						
Change in net reserves (increase = -)	5	-23	-61	15	3	-121
	(In percent of GDP)					
Memorandum items:						
Exports	1.1	1.2	1.1	1.3	2.3	8.5
Imports	7.7	8.2	3.2	4.3	24.1	14.4
Current account	-0.5	-3.3	1.7	0.3	-15.2	2.0

Source: Data provided by the Bhutanese authorities.

Table 29. Bhutan: Exports to India, 2001–2006

	2001	2002	2003	2004	2005	2006
	(In millions of ngultrum)					
Animal products	0	0	0	0	1	9
Vegetables, fruits, nuts, coffee, tea, and spices	280	391	257	286	243	277
Vegetables fats and oil	0	0	0	0	224	1,448
Prepared foodstuffs	218	209	391	408	389	414
Mineral products	609	534	588	674	983	1,587
Electricity	2,073	2,347	2,604	2,712	3,440	4,982
Plastic and rubber products	55	84	199	271	293	247
Raw hides and skins	3	4	4	2	1	2
Wood and wood products	241	177	215	280	310	254
Wood pulp products	1	0	0	2	4	4
Textiles	1	13	113	536	787	476
Footwear, headgear and clothing accessories	0	0	0	0	0	0
Stone, plaster, cement and asbestos products	14	22	18	24	15	25
Base metals and base metal products	595	628	882	1,737	2,491	4,098
Machinery and mechanical appliances	0	39	4	73	34	52
Transport equipment	0	3	0	15	16	1
Optical, photographic and measuring equipment	0	4	2	1	0	0
Miscellaneous manufactured articles	19	12	18	27	22	26
Product of chemical industries	589	668	630	712	714	587
Total	4,700	5,137	5,926	7,762	9,970	14,488
	(In percent of total)					
Animal products	0.0	0.0	0.0	0.0	0.0	0.1
Vegetables, fruits, nuts, coffee, tea, and spices	6.0	7.6	4.3	3.7	2.4	1.9
Vegetables fats and oil	0.0	0.0	0.0	0.0	2.3	10.0
Prepared foodstuffs	4.6	4.1	6.6	5.3	3.9	2.9
Mineral products	13.0	10.4	9.9	8.7	9.9	11.0
Electricity	44.1	45.7	43.9	34.9	34.5	34.4
Plastic and rubber products	1.2	1.6	3.4	3.5	2.9	1.7
Raw hides and skins	0.1	0.1	0.1	0.0	0.0	0.0
Wood and wood products	5.1	3.4	3.6	3.6	3.1	1.8
Wood pulp products	0.0	0.0	0.0	0.0	0.0	0.0
Textiles	0.0	0.3	1.9	6.9	7.9	3.3
Footwear, headgear and clothing accessories	0.0	0.0	0.0	0.0	0.0	0.0
Stone, plaster, cement and asbestos products	0.3	0.4	0.3	0.3	0.1	0.2
Base metals and base metal products	12.7	12.2	14.9	22.4	25.0	28.3
Machinery and mechanical appliances	0.0	0.8	0.1	0.9	0.3	0.4
Transport equipment	0.0	0.1	0.0	0.2	0.2	0.0
Optical, photographic and measuring equipment	0.0	0.1	0.0	0.0	0.0	0.0
Miscellaneous manufactured articles	0.4	0.2	0.3	0.3	0.2	0.2
Product of chemical industries	12.5	13.0	10.6	9.2	7.2	4.1
Total	100	100	100	100	100	100

Source: Department of Revenue and Customs.

Table 30. Bhutan: Imports from India, 2001–2006

	2001	2002	2003	2004	2005	2006
	(In millions of ngultrum)					
Animal products	271	318	369	436	568	629
Cereals, vegetables, fruits, nuts, coffee, tea, and spices	556	608	745	646	725	840
Vegetables fats and oil	201	221	175	165	230	312
Prepared foodstuffs	504	546	574	624	752	766
Mineral products 1/	1,513	1,435	1,860	2,121	2,746	3,221
Products of chemical industries	515	456	562	665	596	679
Plastics and rubber products	158	179	262	372	368	458
Raw hides and skins	5	5	4	8	6	5
Wood and wood products	148	97	101	124	120	119
Wood pulp products	151	145	180	217	233	257
Textiles	169	181	152	176	172	185
Footwear, headgear and clothing accessories	50	64	71	56	54	56
Stone, plaster, cement and asbestos products	145	134	155	183	191	260
Precious or semi-precious metal products	0	0	0	18	162	41
Base metals and base metal products	969	928	1,442	1,965	2,507	2,003
Machinery and mechanical appliances	1,014	1,528	2,786	1,671	2,324	2,273
Transport equipment	455	563	559	571	549	639
Optical, photographic and measuring equipment	88	96	201	69	386	186
Miscellaneous manufactured articles	78	78	62	105	104	125
Works of art, antiques and special transactions	0	1	0	0	0	0
Total	6,989	7,581	10,260	10,194	12,795	13,054
	(In percent of total)					
Animal products	3.9	4.2	3.6	4.3	4.4	4.8
Cereals, vegetables, fruits, nuts, coffee, tea, and spices	8.0	8.0	7.3	6.3	5.7	6.4
Vegetables fats and oil	2.9	2.9	1.7	1.6	1.8	2.4
Prepared foodstuffs	7.2	7.2	5.6	6.1	5.9	5.9
Mineral products 1/	21.6	18.9	18.1	20.8	21.5	24.7
Products of chemical industries	7.4	6.0	5.5	6.5	4.7	5.2
Plastics and rubber products	2.3	2.4	2.5	3.6	2.9	3.5
Raw hides and skins	0.1	0.1	0.0	0.1	0.0	0.0
Wood and wood products	2.1	1.3	1.0	1.2	0.9	0.9
Wood pulp products	2.2	1.9	1.8	2.1	1.8	2.0
Textiles	2.4	2.4	1.5	1.7	1.3	1.4
Footwear, headgear and clothing accessories	0.7	0.8	0.7	0.6	0.4	0.4
Stone, plaster, cement and asbestos products	2.1	1.8	1.5	1.8	1.5	2.0
Precious or semi-precious metal products	0.0	0.0	0.0	0.2	1.3	0.3
Base metals and base metal products	13.9	12.2	14.1	19.3	19.6	15.3
Machinery and mechanical appliances	14.5	20.2	27.1	16.4	18.2	17.4
Transport equipment	6.5	7.4	5.4	5.6	4.3	4.9
Optical, photographic and measuring equipment	1.3	1.3	2.0	0.7	3.0	1.4
Miscellaneous manufactured articles	1.1	1.0	0.6	1.0	0.8	1.0
Works of art, antiques and special transactions	0.0	0.0	0.0	0.0	0.0	0.0
Total	100	100	100	100	100	100

Sources: Department of Revenue and Customs; and for electricity exports/imports, from respective power authorities.

1/ Data on electricity imports are already included under the category 'mineral products.'

Table 31. Bhutan: Exports to Third Countries, 2001–2005

	2001	2002	2003	2004	2005
	(In millions of ngultrum)				
Vegetables and fruits	164	115	166	299	357
Processed food	14	7	5	10	5
Mineral products	92	139	81	142	261
Plastic products	0	0	3	21	5
Photographic film and photographic materials	0	0	0	0	0
Wood products	1	7	2	4	1
Woodpile products	8	2	0	0	29
Textiles	5	11	0	1	0
Coins	0	0	0	0	0
Base metals and base metal products	0	3	0	12	0
Machinery	0	57	0	6	619
Philatelic products	0	0	0	0	0
Handicrafts products	2	0	0	0	138
Household items and personal effects	8	2	7	15	0
Total	294	343	264	510	1,416
	(In percent of total)				
Vegetables and fruits	55.7	33.6	62.9	58.6	25.2
Processed food	4.9	1.9	1.8	1.9	0.4
Mineral products	31.3	40.7	30.8	27.9	18.4
Plastic products	0.0	0.0	1.0	4.1	0.4
Wood products	0.4	2.1	0.7	0.7	0.1
Woodpile products	2.6	0.4	0.0	0.0	2.0
Textiles	1.7	3.2	0.1	0.2	0.0
Base metals and base metal products	0.0	0.8	0.0	2.4	0.0
Machinery	0.0	16.6	0.1	1.2	43.7
Philatelic products	0.0	0.0	0.0	0.0	0.0
Handicrafts products	0.8	0.1	0.0	0.1	9.8
Household items and personal effects	2.7	0.7	2.6	2.9	0.0
Total	100	100	100	100	100

Source: Department of Revenue and Customs.

Table 32. Bhutan: Imports from Third Countries, 2001–2005

	2001	2002	2003	2004	2005
	(In millions of ngultrum)				
Animal products	7	8	8	1	2
Vegetables, fruits, nuts, coffee, cereals, seeds	3	19	5	33	21
Vegetables fats and oil	10	19	51	148	93
Whiskies and processed food	77	60	32	154	151
Mineral oil and fuel	1	32	1	106	2
Product of chemical industries	19	26	26	55	97
Medicine and Pharmaceuticals	24	11	12	23	39
Photographic film and materials	2	2	0	13	3
Plastic and rubber products	132	105	100	235	242
Wood products	22	11	2	9	13
Wood pulp products	21	10	22	55	44
Textiles	60	81	99	522	538
Machinery, mechanical appliances, base metals and electronic items	1,539	1,506	948	6,961	2,922
Ceramic and melamine products	13	11	1	8	3
Trekking equipment, footwear and carpets	13	13	9	48	18
Miscellaneous manufactured articles	31	36	17	75	36
Precious and semi-precious metals	1	0	3	0	14
Tobacco and cigarettes	3	5	2	0	0
Personal effects	21	16	0	0	0
Total	2,001	1,974	1,338	8,446	4,240
	(In percent of total)				
Animal products	0.4	0.4	0.6	0.0	0.1
Vegetables, fruits, nuts, coffee, cereals, seeds	0.2	1.0	0.4	0.4	0.5
Vegetables fats and oil	0.5	1.0	3.8	1.7	2.2
Whiskies and processed food	3.9	3.1	2.4	1.8	3.6
Mineral oil and fuel	0.1	1.6	0.1	1.3	0.1
Product of chemical industries	1.0	1.3	1.9	0.7	2.3
Medicine and Pharmaceuticals	1.2	0.6	0.9	0.3	0.9
Photographic film and materials	0.1	0.1	0.0	0.1	0.1
Plastic and rubber products	6.6	5.3	7.5	2.8	5.7
Wood products	1.1	0.6	0.2	0.1	0.3
Wood pulp products	1.1	0.5	1.6	0.7	1.0
Textiles	3.0	4.1	7.4	6.2	12.7
Machinery, mechanical appliances, base metals and electronic items	76.9	76.3	70.8	82.4	68.9
Ceramic and melamine products	0.7	0.6	0.1	0.1	0.1
Trekking equipment, footwear and carpets	0.6	0.6	0.7	0.6	0.4
Miscellaneous manufactured articles	1.5	1.8	1.3	0.9	0.9
Precious and semi-precious metals	0.1	0.0	0.2	0.0	0.3
Tobacco and cigarettes	0.2	0.3	0.2	0.0	0.0
Personal effects	1.1	0.8	0.0	0.0	0.0
Total	100	100	100	100	100

Source: Department of Revenue and Customs.

Table 33. Bhutan: Direction of Trade, 2001–2006

	2001	2002	2003	2004	2005	2006
(In millions of U.S. dollars)						
Exports						
India	100	106	71	171	226	320
Bangladesh	5	5	5	9	13	10
Other	2	2	1	2	19	84
Total	105.8	113	77	183	258	414
Imports						
India	148	156	220	225	290	288
Japan	13	7	4	13	15	9
Germany	1	2	1	94	5	4
United States	1	1	1	2	2	3
United Kingdom	3	6	0	3	1	1
Singapore	5	5	4	9	10	11
Thailand 1/	6	5	3	8	6	6
China 1/	0	2	1	5	4	6
Bangladesh 1/	1	1	1	4	3	2
Nepal 1/	0	0	0	1	2	4
Other	11	11	12	48	48	86
Total	191	197	248	411	386	420
(In percent of total)						
Exports						
India	94.1	93.8	92.6	93.8	87.6	77.2
Bangladesh	4.5	4.0	6.2	5.0	4.9	2.5
Other	1.4	2.2	1.1	1.2	7.5	20.3
Total	100	100	100	100	100	100
Imports						
India	77.7	79.4	88.4	54.7	75.1	68.7
Japan	6.9	3.4	1.7	3.2	3.8	2.1
Germany	0.7	1.0	0.6	22.8	1.2	1.1
United States	0.5	0.6	0.3	0.4	0.5	0.6
United Kingdom	1.8	3.0	0.2	0.8	0.2	0.3
Singapore	2.4	2.6	1.7	2.3	2.6	2.7
Thailand 1/	3.2	2.5	1.3	1.9	1.6	1.4
China 1/	0.2	0.8	0.3	1.1	1.1	1.5
Bangladesh 1/	0.7	0.8	0.4	1.0	0.9	0.4
Nepal 1/	0.2	0.2	0.2	0.3	0.6	0.9
Other	5.6	5.8	4.8	11.6	12.4	20.4
Total	100	100	100	100	100	100

Source: Data provided by the Bhutanese authorities.

Table 34. Bhutan: External Debt and Debt Service, 2001/02–2006/07 1/

	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07 Mar.
(In millions of U.S. dollars; end of period)						
Total external public sector debt	291.8	405.5	529.1	607.7	680.7	715.1
Convertible currency debt	129.9	176.8	215.9	235.5	269.5	294.7
Concessional debt	130	177	208	226	260	285
AsDB	55	76	82	88	99	105
IDA	33	42.9	53	59	70	78
IFAD	14	20	20	20	21	22
Kuwait Fund	5	3.6	2	1	1	1
Other 2/	23	35	51	58	69	79
Commercial debt	0	0	8	10	9	9
Nonconvertible currency debt	162	229	313	372	411	420
Debt service payments	6.4	6.9	7.9	18.7	21.4	17.1
Convertible currency	4.0	4.5	5.5	5.6	8.5	6.0
Principal	2.7	2.9	3.0	2.6	4.4	2.4
Interest	1.3	1.6	2.6	3.0	4.1	3.6
Nonconvertible currency	2.4	2.4	2.4	13.1	13.0	11.1
Principal	1.8	1.8	1.9	8.2	8.2	6.3
Interest	0.6	0.5	0.5	4.9	4.8	4.8
(In percent of GDP unless otherwise indicated)						
Memorandum items:						
External debt	57.3	70.0	78.2	78.7	77.5	...
Convertible currency	25.5	30.5	31.9	30.5	30.7	...
Concessional	25.5	30.5	30.7	29.2	29.6	...
Commercial	0.0	0.0	1.2	1.3	1.1	...
Nonconvertible currency	31.8	39.5	46.3	48.2	46.8	...
Debt service ratio 3/	4.8	5.0	4.2	7.2	5.8	...
Nominal GDP (US\$ millions)	509	579	677	772	879	...
Exports of goods and services (US\$ millions)	133.0	137.7	188.9	258.4	372.9	...

Source: Data provided by the Bhutanese authorities.

1/ Public and publicly guaranteed.

2/ Includes Australia, Austria, and Denmark.

3/ In percent of exports of goods and nonfactor services.

**Table 35. Bhutan: External Debt and Debt Service by Creditor,
2001/02–2005/06**

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

	2001/02	2002/03	2003/04	2004/05	2005/06
Concessional debt					
AsDB					
Amount outstanding	55	76	82	88	99
Interest payment	0.5	0.6	0.7	0.8	1.1
Principal repayment	0.6	0.7	0.9	1.0	1.3
IDA					
Amount outstanding	33	43	53	59	70
Interest payment	0.2	0.3	0.4	0.6	0.6
Principal repayment	0.2	0.3	0.4	0.6	1.7
IFAD					
Amount outstanding	14	20	20	20	21
Interest payment	0.1	0.2	0.4	0.2	0.2
Principal repayment	0.3	0.4	0.4	0.4	0.4
Kuwait Fund					
Amount outstanding	5	4	2	1	1
Interest payment	0.4	0.1	0.1	0.1	0.0
Principal repayment	1.5	1.5	1.2	0.6	0.4
Others					
Amount outstanding	23	35	51	58	69
Interest payment	0.0	0.4	0.7	1.1	1.4
Principal repayment	0.1	0.3	0.1	0.0	0.0
Total concessional debt					
Amount	130	177	208	226	260
Interest payment	1.3	1.6	2.4	2.8	3.3
Principal repayment	2.7	3.1	3.0	2.6	3.8
Commercial debt					
Amount	0	0	8	10	9
Interest payment	0.0	0.0	0.2	0.3	0.8
Principal repayment	0.0	0.0	0.0	0.0	0.6
Nonconvertible debt					
Amount	162	229	313	372	411
Interest payment	0.6	0.5	0.5	4.9	4.8
Principal repayment	1.8	1.8	1.9	6.1	6.1
Total debt					
Amount	292	405	529	608	681
Interest payment	1.9	2.1	3.0	7.9	8.9
Principal repayment	4.5	4.9	4.9	8.7	10.5

Source: Data provided by the Bhutanese authorities.