



# BHUTAN

June 2016

## 2016 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR BHUTAN

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2016 Article IV consultation with Bhutan, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its June 22, 2016 consideration of the staff report that concluded the Article IV consultation with Bhutan.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on June 22, 2016, following discussions that ended on May 9, 2016, with the officials of Bhutan on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on June 8, 2016.
- An **Informational Annex** prepared by the IMF staff.
- A **Debt Sustainability Analysis** prepared by the staffs of the IMF and the International Development Association (IDA).
- A **Statement by the Executive Director** for Bhutan.

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## **IMF Executive Board Concludes 2016 Article IV Consultation with Bhutan**

On June 22, 2016, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation<sup>1</sup> with Bhutan.

Bhutan has made significant economic progress in recent years and the GDP per capita more than doubled during 2004-2014, rising from \$1,108 to \$2,612. In the aftermath of the rupee shortage episode of 2012-13, GDP growth has slowed to below 4 percent in Fiscal Year (FY) 2012/13 and FY2013/14 (July 1 – June 30). Measures to cool down activity contributed to the slowdown. However, GDP growth is estimated to have picked up to 5.2 percent in FY2014/15 and is projected to reach 6 percent in FY2015/16. Inflation has decelerated rapidly, from 11.3 percent in Q4 2013 to below 3 percent in Q1 2016, though it is projected to return to about 5 percent. Following the slowdown in the wake of the rupee shortage crisis, growth in credit to the private sector has picked up. The fiscal balance switched from a deficit of 4.2 percent in FY 2012/13 to a surplus of 3.8 percent in FY2013/14, and 1.5 percent of GDP in FY2014/15, reflecting mainly lower capital spending in the early years of the 11<sup>th</sup> Five Year Plan (2013/14 – 2017/18). The current account deficit has been approaching record high levels in recent years, reflecting hydropower investment. These deficits were financed by robust aid inflows, and the overall balance of payments remained generally positive, allowing further accumulation of international reserves.

Growth is projected to accelerate further in the coming years, to 6.4 percent in FY2016/17 and to over 11 percent in FY2017/18, supported by hydropower construction and the commissioning of new hydropower plants, as well as solid growth in domestic services. The increase in hydropower generation capacity will boost electricity exports, and as a result, the current account deficit will decline rapidly, from over 30 percent in FY2016/17 to around 5 percent in FY2020/21. Reflecting accelerated capital spending in the final years of the 11<sup>th</sup> Five-Year Plan, fiscal balance is projected to turn to a moderate deficit in FY2016/17.

Risks are linked mainly to the high public external debt and the need to manage projected large hydropower-related revenues. If not properly managed, the large pickup in hydropower exports

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<sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

and the projected increase in export earnings and budget revenues could undermine macroeconomic stability and the competitiveness of the economy, resulting in overheating and external imbalances akin to those seen during 2012-13. In addition, Bhutan's growth could be adversely affected by a growth slowdown in India triggered by delays in structural reforms. Also, as illustrated by the slowdown in tourist arrivals in the wake of Nepal's earthquake, the Bhutanese tourism industry is susceptible to adverse regional developments.

### **Executive Board Assessment<sup>2</sup>**

Executive Directors welcomed the improvement in Bhutan's macroeconomic performance and commended the authorities for the significant economic and social gains of recent years. Directors also considered that the outlook was favorable going forward. However, the current account deficit and external public debt remain high, mainly reflecting developments in the hydropower sector. Accordingly, Directors cautioned that while hydropower development brings opportunities, it also creates macroeconomic challenges that need to be managed carefully to avoid overheating and imbalances. Moreover, strong efforts are required to increase employment opportunities, especially for the youth, through enhanced skills and training, and economic diversification.

Directors noted that the favorable fiscal outcomes in recent years reflected slower-than-projected implementation of investment projects. They recommended balancing acceleration of capital spending with maintaining sound fiscal balances and macroeconomic stability. Directors underscored the need to improve tax revenue collection and limit exemptions, especially given the expected gradual phasing out of donor assistance and the need for higher social spending. They welcomed plans to introduce a modern goods and service tax and encouraged the authorities to ensure timely implementation by 2018.

Directors considered the current monetary policy stance to be broadly appropriate and commended the authorities for the recent tightening. Directors recommended close monitoring of liquidity, credit and inflation, and encouraged the authorities to stand ready to adjust monetary policy as needed. They also recommended further improvement of the liquidity management system.

Given close economic ties with India, Directors agreed that the exchange rate peg to the Indian rupee has served Bhutan well and remains an appropriate nominal anchor, even as the ngultrum is moderately overvalued. They emphasized that macroeconomic stability and improvements in the business climate and competitiveness are essential to support the peg.

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<sup>2</sup> At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

Directors welcomed the authorities' plans to strengthen reserve management. They noted that while the level of international reserves remains adequate, there is room for improvement in the composition of reserves to better align it with the structure of external debt and trade flows. Directors noted the Royal Monetary Authority's recent efforts to strengthen macroprudential regulation and supervision and welcomed the introduction of additional tools. They emphasized the need to fill remaining regulatory gaps, including in the regulation of nonbank financial institutions.

Directors encouraged elimination of exchange rate restrictions as soon as macroeconomic conditions allow.

## Bhutan: Selected Economic Indicators, 2012/13–2017/18 1/

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
			Est.		Proj.	
<b>Real sector</b>						
Real GDP at market prices (percent change)	3.6	3.8	5.2	6.0	6.4	11.3
Consumer prices (percent change, period average)	11.3	10.0	6.4	4.4	4.6	5.1
<b>General government</b>						
			(In percent of GDP)			
Total revenue and grants	30.2	33.6	28.9	31.5	27.2	27.3
Tax revenue	15.2	14.4	14.7	13.2	13.2	12.6
Non-tax revenue	5.6	6.3	5.4	5.7	5.0	4.5
Foreign grants	9.4	12.7	8.0	12.3	9.0	10.2
Total expenditure and net lending	34.4	29.8	27.4	30.9	28.4	26.6
Current expenditure	17.8	16.0	16.8	17.3	16.8	16.0
Capital expenditure	18.2	14.8	12.3	14.9	12.9	11.8
Current balance (excluding grants)	3.0	4.7	3.3	1.6	1.4	1.1
Overall balance	-4.2	3.8	1.5	0.6	-1.2	0.7
Public sector debt 2/	99.9	96.4	96.5	105.5	113.6	112.7
<b>Monetary sector</b>						
			(Percent change, unless otherwise indicated)			
Broad money	18.6	6.6	7.8	...	...	...
Credit to private sector	6.2	5.1	11.0	...	...	...
Interest rates (end of period, in percent)						
Term Deposit Rates	5.0-9	5.0-8.7	4.0-10	...	...	...
Lending	11.5-16	10.0-16	11.7-17	...	...	...
RMA bills (91-days)	3	2.3	0.13	...	...	...
<b>External sector</b>						
			(In millions of dollars, unless otherwise indicated)			
Current account balance	-470	-483	-581	-579	-708	-528
(In percent of GDP)	-25.4	-26.4	-28.8	-27.8	-31.5	-20.7
Trade balance	-377	-393	-419	-550	-630	-474
Exports (goods)	546	535	578	556	579	751
(Percent change)	-11.5	-2.0	8.2	-3.9	4.0	29.8
<i>Of which:</i> Electricity	188	167	181	192	180	315
Imports (goods)	-923	-928	-998	-1,107	-1,177	-1,174
(Percent change)	-8.8	0.5	7.5	11.0	6.2	-0.2
Grants (current transfer)	86	63	77	111	88	113
Capital and financial account balance	557	638	633	762	724	787
Loans (net)	244	355	374	339	346	343
Errors and omissions	80	-85	-60	0	0	0
Overall balance	168	70	-9	183	16	259
(In percent of GDP)	9.1	3.8	-0.4	8.8	0.7	10.2
Gross official reserves	917	982	958	1,141	1,157	1,417
(In months of goods and services imports)	11.9	11.8	10.4	11.3	11.3	13.1
External debt (in percent of GDP)	94.1	93.6	94.5	105.8	113.0	110.7
Ngultrum per U.S. dollar (period average)	54.9	61.5	62.1	...	...	...
Memorandum items:						
GDP at market prices (in millions of U.S. dollars)	1848.7	1829.6	2017.1	2084.8	2251.1	2549.5
Electricity exports (in percent of total goods exports)	34.5	31.2	31.4	34.6	31.2	42.0
Unemployment rate (in percent) 3/	2.1	2.9	2.6	...	...	...

Sources: Bhutanese authorities; and IMF staff estimates and projections.

1/ Fiscal year begins July 1.

2/ Public and publicly guaranteed debt, including loans for hydropower projects.

3/ On a calendar year basis (e.g., the entry for 2012/13 is for 2012).



# BHUTAN

## STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

June 8, 2016

### KEY ISSUES

**Context.** Macroeconomic conditions have improved recently. Growth appears to be picking up while inflation has declined to low single digits; foreign reserves have been increasing on the back of a strong financial account; the fiscal balance has recorded a surplus in the past two years; and credit growth remains moderate. Financial soundness indicators point to a modest improvement in the health of the financial sector.

**Challenges.** In the near-term, the main challenge is to maintain stable macroeconomic conditions as capital spending accelerates in the final years of the current five-year plan. Looking ahead, the projected increase in hydropower exports needs to be managed carefully, to avoid overheating and external pressures. A temporary hydropower-related increase in revenues could create pressures for higher spending.

#### **Main Policy Recommendations.**

- A large easing of the fiscal stance should be avoided. Given demand conditions, significant increases in capital spending would provide an unsuitably large fiscal stimulus, stretch the absorption capacity of the economy, and increase external pressures.
- Tax revenue reform is needed to broaden the tax base, improve revenue collection and reverse the recent decline in the tax-to-GDP ratio. Existing tax exemptions should be phased out, and granting of new exemptions should be limited.
- The projected spike in hydropower exports and revenues should be managed carefully, to avoid undermining competitiveness and destabilizing the economy. The fiscal institutional framework could be strengthened to ensure that a temporary spike in budget revenues does not lead to a hurried increase in spending.
- Credit and liquidity conditions should be closely monitored and hydropower-related inflows sterilized, to prevent overheating and a resurgence of external pressures. Additional instruments of liquidity management should be developed, to improve monetary policy transmission. Reserve composition should be better aligned with the composition of external debt and trade flows, and reserve management strengthened. The share of Indian rupee reserves should be increased, and the reserves invested in safer Indian government securities.

Approved By  
**Paul Cashin (APD) and  
 Andrea Richter-Hume  
 (SPR)**

Discussions took place in Thimphu during April 27 – May 9, 2016. The staff team comprised J. Jonas (head), T. Richardson (senior resident representative in Delhi), P. Khera and V. Tulin (all APD). Mr. Chaturvedi (OED) participated in key policy meetings. The mission met with Governor Dasho Penjore, Minister of Economic Affairs Lekey Dorji, Director of Department of National Budget of the Ministry of Finance Lekzang Dorji, Director of Department of Public Accounts of the Ministry of Finance Choiten Wangchuk, and other senior officials and representatives of the business community. May Inoue and Michael Dalesio (both APD) assisted in the preparation of this report.

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## INTRODUCTION

**1. Significant economic and social gains have been realized in Bhutan in recent years.** Bhutan has enjoyed political stability, with national parliamentary elections and a smooth political transition to the victorious opposition People’s Democratic Party taking place in 2013. Political stability, large donor assistance, and increased hydropower generation capacity combined to support a more than doubling of GDP per capita during 2004–2014, rising from \$1,108 to \$2,612—a significantly faster growth than that of regional peers.

**Poverty and Social Indicators, Bhutan**

	2000	2007	2012	2014
Population below poverty line (%)	36.3	23.2	12	...
GNI per capita, Atlas method US\$	780	1640	2420	2370
Gross primary enrolment (%) <sup>1</sup>	72	106	110	106.6
Human development index	0.58 (2003)	0.61 (2006)	0.54	0.61 <sup>2</sup>
Infant mortality (per 1,000 live births)	68.4	56.2	43.7	29.7 (2013)

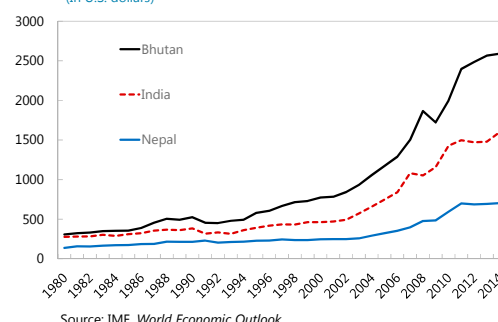
Sources: World Bank, World Development Indicators; UNDP, Human Development Report.

<sup>1</sup>Percent of school age population.

<sup>2</sup>World Human Development Index: .71; Global ranking: 132.

**2. However, these achievements came with some important policy challenges.** While it brought significant economic benefits, large hydropower investment and hydropower-related imports have also presented significant challenges to macroeconomic management. This was illustrated during the “rupee shortage crisis” of 2012–13, when large hydropower investment and hydropower-related imports, together with the boom in housing lending, led to a sharp widening of the current account deficit and a shortfall in Indian rupee reserves.

**Gross Domestic Product, Per Capita**  
(In U.S. dollars)



**3. The authorities’ past macroeconomic policies have been broadly in line with staff advice.** The authorities have exercised fiscal restraint by introducing revenue measures and keeping current expenditures under control, both in accord with the previous staff recommendations. In response to rapid credit growth, they took steps in 2015 to tighten liquidity, and have removed administrative credit restrictions. The authorities have also made progress in expanding the toolkit of macroprudential instruments,

## RECENT DEVELOPMENTS, OUTLOOK AND RISKS

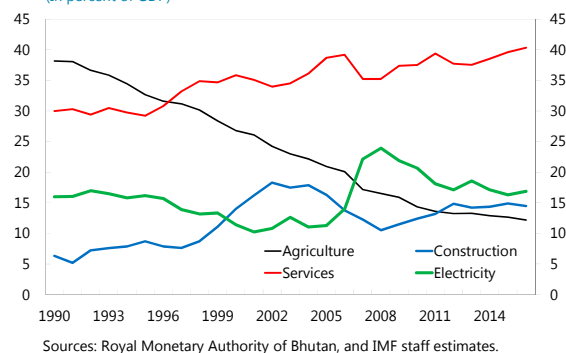
**4. Following a slowdown in activity in the wake of the rupee shortage episode, economic growth has picked up more recently.** From an average of around 8 percent during the Ninth and Tenth Five-Year Plan (FYP) spanning fiscal years (FY) 2003/04–2012/13, real GDP growth fell to below 4 percent in FY2012/13 and FY2013/14. Measures to dampen the activity contributed to the slowdown.



However, real GDP growth is estimated to have picked up to 5.2 percent in FY2014/15 and is projected to reach 6 percent in FY2015/16, driven by a pickup in mining, construction and services.

**5. Inflation has fallen rapidly recently, reaching a record-low level.** After peaking at 11.3 percent in Q4 2013 (y-o-y), consumer price inflation fell to 3.5 percent at the end of 2015, and further to below 3 percent in February and March 2016, below India's 4.8 percent inflation rate (Box 1). Imported goods inflation has been falling more rapidly than domestic goods inflation: in the last twelve months, imported goods inflation fell from 6.2 percent to 1.8 percent, while domestic goods inflation eased less, from 6.5 percent to 4.2 percent.

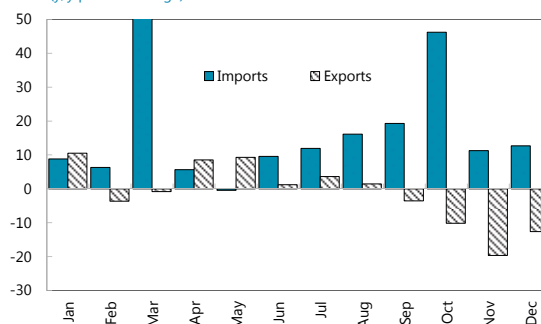
**Sectoral Composition of GDP**  
(In percent of GDP)



**6. Despite the overall low unemployment rate, some problems in the labor market persist.** Overall unemployment in 2014 was relatively low, at 2.6 percent of the labor force, a modest decline from 2.9 percent in 2013. Nonetheless, the unemployment problem is serious in some segments of the labor market. In particular, youth unemployment and urban unemployment are much higher. The authorities view these problems as worrisome, and are taking active steps to address them through training and labor market reforms (Box 2).

**7. The current account deficit remains close to record-high levels, but continues to be financed by large aid flows.** Reflecting higher interest payments on hydropower-related loans, the FY2014/15 current account deficit increased to close to 29 percent of GDP. The overall balance turned slightly negative and international reserves fell marginally to \$960 million by June 2015, before recovering to \$1,022 million in February 2016. However, the trade deficit has widened recently, to Nu.13.3 billion in July-December 2015 compared to Nu.6.8 billion in the same period of 2014.<sup>1</sup> This widening reflects both a pickup in imports (partly reflecting one-off items) and a decline in exports.

**Exports and Imports, 2015**  
(y/y percent change)



**8. Private sector credit growth has accelerated recently, but remains moderate.** Following a deceleration in 2012–2014 to below 10 percent, growth of bank credit to the private sector has picked up in 2015, to about 13–14 percent and around 46 percent of GDP. Credit growth acceleration has been significantly faster in the nonbank sector. Between end-2013 and end-2015, credit outstanding by nonbank financial institutions (NBFIs) has

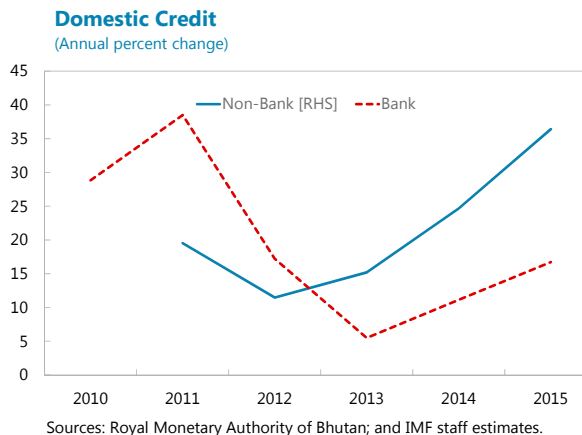
<sup>1</sup> The ngultrum (Nu) has been pegged to the Indian rupee at a parity rate since its introduction in 1974.

almost doubled, and now represents 17 percent of total financial institutions' credit, compared to 12 percent in 2013.

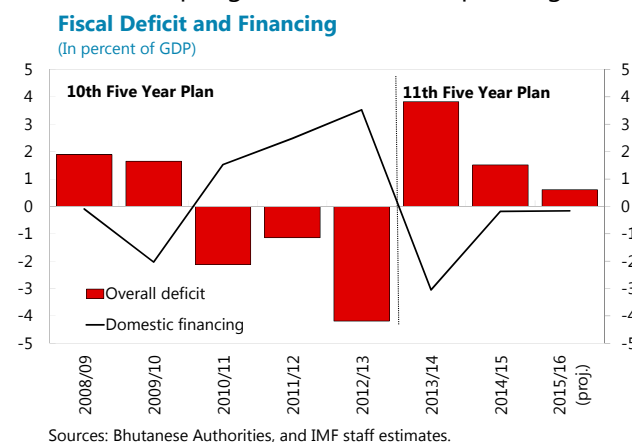
### 9. Financial soundness indicators point to a generally healthy financial system.

Banks' capital adequacy ratio has remained high, at 17 percent by September 2015, above the 10 percent required minimum, and' non-performing loans (NPLs) have remained relatively stable, at around 10 percent of outstanding loans. Banks' liquidity positions

remain solid. The reduction in credit growth also resulted in a lower bank credit-to-deposit ratio, which fell from 86.4 percent in 2013 to 73 percent in 2014, before increasing to about 80 percent in 2015.



**10. Fiscal performance in recent years has reflected the expenditures dynamics of Bhutan's five-year plans.** Specifically, capital expenditure tends to ramp over the course of the plan, as projects get underway. This has been reflected in a deterioration of the fiscal balance as the plan progress. A surplus of 3.8 percent of GDP was recorded in FY2013/14, the first year of the 11<sup>th</sup> FYP, compared to the deficit of 3.7 percent of GDP projected in the original budget. The FY2014/15 (revised) budget envisaged a deficit of 2.3 percent of GDP, mainly on account of rapid growth in current spending, which grew by 22 percent in FY2014/15 (partly reflecting the 20 percent public salary increase recommended by the Second Pay Commission). Capital spending was projected to increase by 13 percent. However, the budget outturn entailed a surplus of 1.5 percent of GDP, with somewhat stronger tax and nontax revenues and grants, and lower capital spending.



### 11. Bhutan's medium-term outlook remains favorable.

Commissioning of new hydropower generation projects will boost output, exports and fiscal revenues. Growth is projected to accelerate to over 11 percent in FY2017/18 and to around 14 percent in FY2018/19, supported by a tripling of hydropower electricity generation. The current account deficit is projected to peak at 31.5 percent of GDP in FY2016/17, and then fall quickly in FY2017/18 and eventually to turn into a surplus. The overall balance is projected to be mostly positive, supported by hydropower grants and loans.

**12. Risks to the outlook are skewed to the downside.** Domestic risks stem from the need to manage high debt and potentially volatile hydropower-related inflows that may fuel rapid credit growth and lead to renewed external pressures. External risks result from weaker tourism and the adverse impact of developments in China on Bhutanese exports. Nepal's earthquake and regional security concerns have adversely affected tourism. At the same time, China's excess capacity in the steel

industry could adversely affect the position of Bhutanese ferroalloy producers exporting to the Indian market. On the positive side, growth in India remains strong, though reform setbacks could weaken activity.

## POLICY DISCUSSIONS

*Policy discussions focused on the appropriate fiscal policy stance in the final years of the 11<sup>th</sup> Five-Year Plan and how to boost domestic revenues, on strengthening the monetary policy transmission mechanism, and how to manage the expected spike in hydropower exports and revenues.*

### A. Fiscal Policy

#### **Background**

**13. For FY2015/16, while the revised budget projected a deficit of 3 percent of GDP, the outturn is projected to be a surplus of 0.6 percent.** While growth in current expenditure has been tepid, the revised budget assumed an unrealistically high jump in capital spending by over 70 percent, which is now projected at about 30 percent. The increase in spending is to be financed primarily by higher GoI grants. In the absence of new revenue measures, domestic revenue growth is projected to be modest. Even though discussion of the FY2016/17 budget in the Cabinet has not yet been finalized, the authorities suggested that the budgeted capital spending will likely remain elevated, and if fully implemented, would result in a deficit of over 5 percent of GDP. Over the medium term, with the commissioning of new hydropower plants, hydropower-related revenues are projected to increase. At the same time, donor financing is projected to fall as per capita incomes rise.

**14. The authorities are working towards a major reform of the tax system.** With the help of IMF/World Bank technical assistance, the authorities have launched the project of introducing a modern goods and services tax (GST) by end-2018. Numerous deficiencies in Bhutan's tax system have contributed to a gradual decline of tax revenues. The objective of tax reform is to mitigate these deficiencies and replace the current sales tax with a simple broad-based GST that would boost government revenues, while minimizing tax-related distortions and supporting an investment-friendly environment.

#### **Staff Views**

**15. In the near term, fiscal policy should avoid contributing to the reemergence of overheating pressures and large shifts in the fiscal stance.** Staff cautioned against attempts to boost capital spending excessively in an effort to "catch up" to originally budgeted public investment plans. Large increases in current spending, including wage increase, should be avoided as well. The recent increase of pay and allowances of public servants, the resumption of credit growth, and the pickup in import growth point to a strengthening in domestic demand. At this juncture, a fiscal deficit of around 5 percent of GDP (as under consideration by the authorities) would entail a large fiscal stimulus that could start undermining macroeconomic stability. Staff cautions against such fiscal loosening, and recommends targeting a smaller fiscal deficit in the range of 1–2 percent of GDP in FY2016/17. In

FY2017/18, with the projected acceleration of economic growth, further strengthening of the fiscal balance is recommended. Staff recommends targeting a small surplus of around ½ percent of GDP.<sup>2</sup>

**16. While in recent years the fiscal balance has been stronger than originally targeted, revenue performance has remained weak and needs to be addressed as a matter of priority.** Tax revenues are projected to fall to 13.2 percent of GDP in FY2015/16 and FY2016/17, down from 15.2 percent of GDP in FY2012/13. As in other countries, the widespread and expanding use of tax incentives has resulted in a weakening of tax revenue collection. The authorities estimate that tax exemptions and holidays result in a loss of revenue of up to 2 percent of GDP. Thus, staff recommends that new tax exemptions should be avoided, expiring exemptions should not be renewed, and existing exemptions should be phased out. To increase fiscal transparency, listing and costing all tax expenditures should become an integral part of the budget. The authorities should aim for a simple, broad-based tax system. In this context, the authorities' decision to replace the current sales tax with a simple broad-based GST is welcome. This will increase government revenues while minimizing tax-related distortions and help create an investment-friendly environment.<sup>3</sup>

**17. Over the medium-term, the priority should be to place public finances on a more solid footing, to contain the already-high public debt, and to avoid excessive volatility in the fiscal stance and emergence of external pressures.** On the revenue side, the priority should be the implementation of a broad-based GST. On the expenditure side, the main objectives should be: (i) keep current spending growth moderate, in support of debt reduction; and (ii) to ensure that volatility in revenues and grants does not lead to high spending and fiscal stance volatility. This may require strengthening the fiscal institutional framework to effectively manage the expected spike in hydropower-related revenues. The objective should be to avoid hurried spending of temporarily higher revenues that would pose a risk to both fiscal sustainability and the external position.<sup>4</sup> One option—discussed in the 2011 Article IV Staff Report—would be to introduce a fiscal rule that would constrain the growth of current spending.<sup>5</sup> In addition, a separate account (or stabilization fund) could be created to temporarily “park” additional hydropower revenues, shield them from pressures to be spent quickly and less effectively, and avoid the real exchange rate appreciation that would harm competitiveness and diversification of the economy.

### ***Authorities' Views***

**18. The authorities explained that actual fiscal outcomes are typically stronger than budgeted.** They observed that in the early years of the FYPs, capital spending is usually lagging behind, as it is a period of carrying out preparatory work for capital investment, and for mobilizing resources,

<sup>2</sup> The recommended fiscal balance targets for FY2016/17 and FY2017/18 are derived from a conservative revenue assumption in the absence of new measures, and the authorities' spending plans for these years, but smoothed to avoid large swings in the fiscal balance.

<sup>3</sup> Each percentage point increase in the GST is estimated to yield 0.3 percent of GDP in revenues.

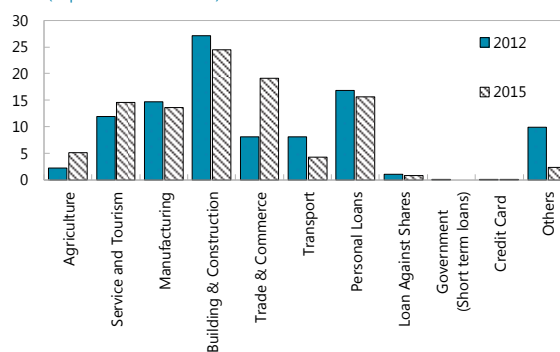
<sup>4</sup> A projected jump in hydropower-related dividends and profit transfers in FY2018/19 and FY2019/20 with the commissioning of the three ongoing hydropower projects Puna-I, Puna-II and Mangdechhu will lead to a spike in nontax revenues.

<sup>5</sup> See IMF Country Report No. 11/123.

with donor coordination taking time. As a result, capital spending tends to pick up only in the later years of the FYP. Thus, capital spending is budgeted to increase significantly in FY2015/16 and FY2016/17. However, the authorities agreed with the staff's point that limited absorptive capacity puts a cap on how much capital spending can be usefully increased, and noted that government agencies do not usually spend the full budgeted amounts.

Accordingly, they agreed with staff that in FY2015/16, the actual deficit could end up lower than budgeted. In the same vein, the authorities cautioned that while the FY2016/17 budget could target a deficit in excess of 5 percent of GDP, the actual deficit may well be less. The authorities noted that they have been exercising tight control over recurrent spending.

**Sectoral Distribution of Credit Allocation**  
(In percent of total credit)



Sources: Royal Monetary Authority of Bhutan; and IMF staff estimates.

**19. The authorities noted that improving revenue collection and increasing reliance on domestic revenues in covering budgetary spending poses a big challenge.** The original target of financing 85 percent of total spending from domestic revenues at the end of the 11<sup>th</sup> FYP will not be met. The authorities noted that domestic revenues have been flat in recent years, and that to increase tax revenues would require measures to be taken by parliament. They recognized the importance of introducing the reformed GST, and underscored the need to have it in place before the 2018 elections, to avoid possible delays.

**20. The authorities agreed that the projected increase in hydropower-related revenues needs to be managed carefully.** They have been discussing the pros and cons of establishing stabilization fund for some time, but no decision has yet been made. The authorities emphasized the need to avoid tying their hands too tightly, as Bhutan needs to use the expected hydropower revenues to finance economic development, given the likely gradual phasing out of external support.

## B. Monetary and Financial Sector Policies

### Background

**21. The slowdown in credit growth during 2013 and 2014 partly reversed in 2015.** After a period of rapid growth in credit to the private sector averaging 35 percent in 2005–2011, credit growth fell to below 10 percent in 2013 and 2014.<sup>6</sup> However, following the September 2014 termination of the ban on vehicle and housing loans (introduced during the “rupee shortage crisis”), credit growth picked up in 2015, though it remained in the 13–14 percent range for most of the year. To sterilize persistent excess liquidity in the banking system, in March 2015, the Royal Monetary Authority (RMA) increased the cash reserve ratio (CRR) from 5 to 10 percent—as also recommended by staff during 2014 Article IV

<sup>6</sup> Credit to the private sector represents the dominant part of total domestic credit.

consultation. In the wake of the credit slowdown, financial soundness indicators have improved modestly.

## 22. The RMA is expanding its toolkit of prudential measures, by increasing its reliance on macro-prudential regulations.

In 2014, with the support of the Asian Development Bank (ADB), the RMA outlined a comprehensive framework for macro-prudential policy.<sup>7</sup> During 2014–2016, some macro-prudential regulations such as the loan to value and loan to income were implemented, while others — including counter-cyclical capital buffer and sectoral capital requirements—are yet to be operationalized and used.<sup>8</sup>

### Staff Views

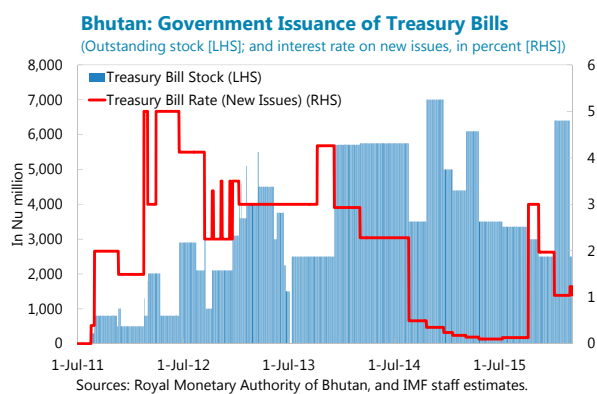
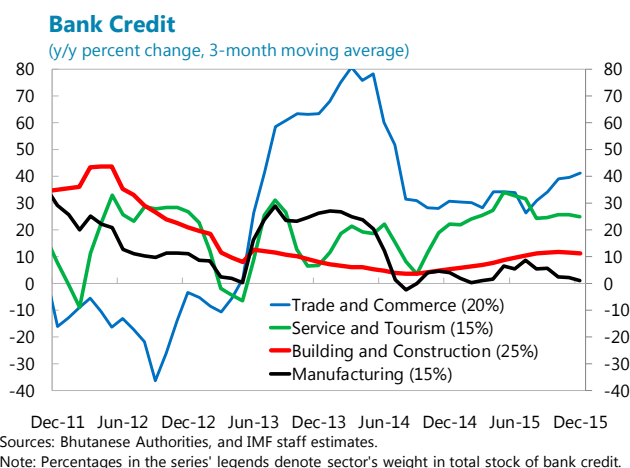
## 23. In staff's view, current monetary conditions appear broadly appropriate.

The decline in inflation does not reflect slack in the economy and is likely to be partly reversed in the future, and domestic demand and economic activity appear to be picking up, as suggested by accelerating import and growth. The fiscal policy stance is likely to continue to be expansionary in FY2016/17, adding to demand growth. The RMA should monitor liquidity and stand ready to promptly respond in case of a resumption of excessive credit growth that would lead to a pickup in inflation or external pressures. Rupee inflows related to hydropower projects and grants should continue to be sterilized. At this stage, the RMA needs to rely on CRR and the statutory liquidity ratio (SLR) as the main available monetary policy instruments.

**24. Looking ahead, RMA's monetary management should be further strengthened.** The CRR and the SLR are rather blunt instruments, and adding further tools could help improve monetary transmission. This would require: (i) developing the short-term government securities market, with T-bills at market-determined rates providing a tool for liquidity management (which includes meeting the

<sup>7</sup> These macro-prudential measures included: (i) minimum requirement for leverage ratio; (ii) counter-cyclical capital buffer; (iii) sectoral capital requirements; (iv) loan-to-value and loan-to-income restrictions; (v) debt-to-equity ratio; (vi) time varying capital provisioning and margin requirements; and (vii) restrictions on the distribution of profits.

<sup>8</sup> Recently, technical assistance to the RMA on the implementation of macro-prudential regulations has also been provided by the IMF's Monetary and Capital Market Department (MCM).



SLR requirements) and an investment alternative; (ii) improving RMA's ability to forecast liquidity in the financial sector and the Ministry of Finance's (MoF) ability to forecast government cash flow;<sup>9</sup> (iii) promoting further development of the interbank lending market as a tool of first resort for banks to meet their short-term financing needs; (iv) introducing a RMA short-term (overnight) standing facility at a penalty rate, to complement the interbank markets and RMA's longer-term RSTLAW facility, and help the banks meet their short-term liquidity needs; and (v) consider introducing a similar RMA standing deposit facility, to allow banks to deposit excess liquidity overnight, with penalty (low) rates setting the floor for interbank deposit rates. In step with these measures, consideration should also be given to reforming the system of base interest rates (Box 3).

**25. A more developed framework for monetary operations would bring numerous benefits.**

Monetary policy transmission would become more effective, as the transition from the policy rate to interbank rates and government securities rate, and from the interbank rates to bank deposit and lending rates, would strengthen. Increased supply of government securities would provide financial institutions a tool for better liquidity management, and an asset for investment. Finally, creating a risk-free benchmark yield curve should help develop an alternative source of corporate funding in corporate bonds and equity markets. Staff understands that discussions are under way in the working committee on the publication of the T-bill issuance calendar, and on improving the debt management policy, including the developments of a long-term domestic debt market, and supports these efforts.

**26. The RMA's efforts to expand its toolkit of prudential regulation are important.** Staff welcomes the introduction of additional macroprudential tools, including limits on loan-to-value and loan-to-income ratios. Despite these improvements in prudential regulations, further strengthening of the RMA's capacity to detect and prevent development of weaknesses in the financial sector is needed, in line with the recent IMF technical assistance recommendations. This includes the need to fill the regulatory gap in the supervision of NBFIs. Currently, the NBFIs are supervised as banks, and some specific risks, such as insurance risk, are not properly monitored and covered.

**27. The RMA's steps to strengthen prudential regulation and supervision should put it on firmer ground to support financial sector development.** The mission notes the concerns that parts of the economy, including small and medium enterprises (SMEs), still lack access to financial services. The Financial Sector Development Action Plan, prepared with the assistance of the World Bank, provides a good opportunity to formulate a financial sector development strategy that would properly balance prudence and development.

**Authorities' Views**

**28. The authorities broadly shared staff's view about monetary conditions and agreed with the staff's assessment that further strengthening of the monetary transmission mechanism is needed.** They noted that in view of the ngultrum's peg to the Indian rupee and close economic and financial ties to India, they need to closely follow India's monetary stance. Regarding monetary

<sup>9</sup> The planned placement of an IMF-sponsored long-term Treasury advisor to assist with government treasury operations can provide an opportunity to improve cash flow management.

transmission, the authorities agreed that the CRR is a blunt instrument, used currently to address both frictional and structural liquidity problems. They noted that the RMA is already considering the introduction of short term (overnight) lending and deposit windows, to replace the system of sweeping overnight balances. However, while the RMA is ready to deploy new monetary policy instruments, for the successful development of the interbank market, short-term instruments to be used as collateral are required, including banks' certificate of deposits and short-term government securities. In addition, a proper legal framework to regulate the creditor-debtor relationships needs to be developed, so that both creditors and debtors understand their rights and obligations. The authorities also noted that there is widespread dissatisfaction with the current system of the base interest rate, and that calls are growing on the RMA to come up with a fairer system of interest rate setting. In response, the RMA is envisaging a review of the base rate system, possibly introducing a single base rate.

**29. The authorities expressed concern about insufficient access of certain borrowers to credit.** They are concerned about the lack of credit availability to certain sectors and segments of the economy. In their view, too much credit goes to finance consumption rather than investment, and some sectors—in particular micro, small and medium-sized enterprises (MSMEs)—face difficulties in accessing credit. Establishing a specialized credit institution is one option under consideration. The authorities expect that these issues will be addressed in the World Bank's Financial Sector Development Action Plan that is currently being finalized.

## C. External Sector

### *Background*

**30. The current account deficit remains extremely large, driven by hydropower investment, but international reserves have been increasing.** The current account deficit is estimated to have approached 29 percent of GDP in FY2014/15, of which about one half was the deficit with India. Following two years of decline or stagnation, growth of exports and imports (goods) picked up in FY2014/15, to about 8 percent.<sup>10</sup> The current account has been financed by surpluses in capital and financial accounts. However, the overall balance turned into a small deficit in FY2014/15 and reserves fell slightly. Subsequently, foreign currency reserves have recovered again in FY2015/16, reaching US\$ 1,022 million by February 2016, covering about 11 months of imports of goods and services, and represent about 53 percent of external debt. In the medium-term, with the commissioning of new hydropower plants, hydropower exports will increase sharply, and the current account deficit is projected to turn into a surplus.

### *Staff Views*

**31. The current account deficits and external public debt are very high, but reflect Bhutan's hydropower-centered development strategy, with unique mitigating factors mitigating external**

<sup>10</sup> Hydropower exports represent about one third of total exports, while hydropower related projects and industries feature among the largest imports. India's share in Bhutan's exports and imports is around 90 percent and 80 percent, respectively.



**vulnerability.** External public and publicly guaranteed (PPG) debt has increased moderately in 2015, to 94.5 percent of GDP, from 93.6 percent of GDP in 2014, and is projected to peak at around 113 percent of GDP in 2017, before starting to decline. The construction of hydropower projects has led to increased external debt-to-GDP, and all indicative thresholds of the LIC-DSA are breached in the baseline (see the Debt Sustainability Analysis Annex). While the extent and length of the breaches would indicate a high risk of external debt distress, there are unique mitigating factors that point to risk remaining moderate. As was explained in the 2014 Debt Sustainability Analysis (see 2014 Article IV Staff Report), explicit guarantees from India that cover financial and construction risks for all hydropower projects allows for the exceptional treatment of hydropower loans from India similar to that of FDI.<sup>11</sup> These unique mitigating circumstances are still in place.

**32. Staff assesses the real effective exchange rate to be moderately overvalued relative to the level suggested by fundamentals.** Using the adjusted external sustainability approach, which takes into account temporary effects of hydropower related flows, staff assess the ngultrum to be moderately overvalued (see Box 4). The peg to the Indian rupee continues to remain appropriate and given that India is Bhutan's largest trade and development partner, provides Bhutan with a key nominal anchor. To continue benefitting from the peg, Bhutan needs to avoid loose macroeconomic policies that would be incompatible with maintaining the peg and that would create the risk of renewed rupee shortages.

**33. Bhutan's foreign reserves are adequate, but further improvement in their composition is advisable.** All standard measures of reserve adequacy for Bhutan are met by a wide margin (Box 5). However, when interpreting the reserve metric indicators, it should be kept in mind that Bhutan's reserves reflect more external assistance than export earnings—though this is projected to change as electricity exports pick up. While the level of reserves is adequate, their composition remains suboptimal. Further gradual increase in the share of rupee reserves is advised, in line with the recommendation of the recent IMF TA, to better align the currency composition of reserves with Bhutan's external liabilities and trade structure.<sup>12</sup>

**34. Staff encourages the authorities' efforts to improve reserve management.** The mission welcomes the recent steps to strengthen reserve management, including the swap agreement with the Reserve Bank of India (RBI) to receive liquidity support.<sup>13</sup> It also welcomes the ongoing discussion with the RBI to sell or buy Indian rupee (INR) against USD, and gain access to Indian Government securities. In addition, Bhutan's planned participation in the World Bank's Reserve Advisory Management Program will provide an opportunity to improve RMA's debt management skills. The new reserve management framework should mitigate the liquidity and the currency risk, avoid the risk of renewed Indian rupee shortages, reduce credit risk and at the same time improve the return on reserves.

<sup>11</sup> These include a strong track record of project implementation, commercial viability and close economic and political ties with India, the main provider of financing for hydropower projects and the key consumer of Bhutanese electricity.

<sup>12</sup> As of February 2016, convertible currency reserves still represented close to 80 percent of total reserves.

<sup>13</sup> Under the SAARC Currency Swap Agreement signed with the RBI, the RMA can make withdrawals of US dollar, Euro or Indian Rupee up to a maximum US\$100 million or its equivalent.

**35. Staff welcomes the removal of some of the exchange restrictions introduced in 2012.** In response to the rupee shortage, Bhutan introduced regulatory measures that gave rise to new exchange restrictions subject to Fund approval under Article VIII, Section 2(a). Subsequently, as the situation stabilized, the restrictions on INR access for certain imports were removed in 2014. The mission understands that since then, no new measures that would give rise to restrictions on the making of payments and transfers for current international transactions or multiple currency practices were introduced.

### **Authorities' Views**

**36. The authorities shared staff's assessment of external debt vulnerability, and agreed with staff's view that reserve management needs to be improved.** They noted the agreement with the RBI that will provide them with more flexibility to actively manage the composition of foreign reserves and address eventual temporary liquidity pressures. The authorities agreed that the projected increase in hydropower exports should help repay a large part of the external debt, and underscored the need to take this factor into account when assessing external debt vulnerability. However, far from being complacent, they have also cautioned against relying too much on the hydropower sector to cushion all external pressures. The authorities underscored the need to monitor separately the hydro and non-hydro parts of the balance of payments, to better understand the current developments and future prospects. They noted that although the hydropower projects are fully financed, the development of the hydropower sector can have repercussions on the current account balance, and suggested that to address long-term balance of payment challenges, policies to encourage domestic production of imported items may be needed. As Bhutan's foreign reserves are built mainly on external aid inflows and borrowing, the authorities continue to consider as necessary the maintenance of existing restrictions under Article XIV, and those inconsistent with the Article VIII obligations (see Information Annex).

## **STAFF APPRAISAL**

**37. Bhutan's economic performance has improved in recent years, but challenges lie ahead.** Following its deceleration in the wake of the "rupee shortage crisis" of 2012–13, growth has picked up more recently. At the same time, inflation has been falling rapidly to record-low levels, reflecting a decline in both imported and domestic goods inflation. The unemployment rate has been trending down, though high youth unemployment continues to pose a problem. In the medium-term, growth is projected to gain further momentum with the commissioning of new hydropower plants. As growth accelerates, it will be important to ensure that overheating and imbalances do not arise.

**38. A disorderly easing of the fiscal stance should be avoided.** In the first two years of the 11<sup>th</sup> Five-Year Plan (FYP), capital spending has been subdued, despite higher-than-budgeted external grants. Together with tight control on current spending, this resulted in a stronger fiscal balance. In the final years of the current FYP, capital spending is expected to accelerate as project implementation gathers speed. However, while some acceleration of capital spending is to be expected, staff cautions against big jumps in capital spending. Large swings in the fiscal balance—as that implied by a

FY2016/17 deficit in excess of 5 percent of GDP—would provide an unsuitably large stimulus and could stretch the absorption capacity of the economy. Looking ahead, a stronger fiscal institutional framework could help effectively manage the projected spike in revenues related to increased hydropower production.

**39. Addressing weak revenue performance is crucial for maintaining long-term fiscal sustainability and the exchange rate peg.** The pegged exchange rate, together with the mild overvaluation of the exchange rate, underscores the importance of fiscal sustainability and improved domestic revenue performance. With external grants expected to gradually decline, the authorities are properly emphasizing the need to increase reliance on domestic revenues to finance government spending. However, in recent years, tax revenues have been weak, reflecting increased use of tax expenditures that have been eroding the tax base, weakening tax compliance and complicating tax administration. The policy of granting tax exemptions and incentives needs to be reassessed. Tax expenditures usually do not deliver the expected benefits in terms of higher investment and growth, but often entail high costs in terms of revenue erosion. At the same time, the reform of the sales tax, with the objective of replacing the existing inefficient sales tax with a modern GST, should proceed as planned and be implemented by 2018.

**40. Staff views monetary conditions to be broadly appropriate.** After a sharp slowdown in the wake of the “rupee shortage crisis” of 2012-13, credit growth has picked up more recently, but remains within a moderate range. To absorb excess liquidity, the RMA appropriately increased the cash reserve ratio (CRR) in March 2015, and at this time, there are no signs of excess or shortage of banking sector liquidity. This being said, the RMA needs to remain vigilant, monitor liquidity conditions and credit growth closely, and stand ready to respond as needed. In parallel, Bhutan’s still rudimentary system of liquidity management needs further improvement.

**41. Steps to strengthen financial supervision and regulation are welcome.** The RMA is to be commended for the effort to expand its toolkit of macroprudential regulation. Looking ahead, the authorities need to close the gaps in the regulation of nonbank financial institutions. A more robust and effective regulation and supervision framework should also provide a more solid ground for policies to promote financial deepening, without incurring a risk to financial stability. Financial soundness indicators point to a generally sound financial system: the capital ratio remains solid, and NPLs have declined moderately.

**42. Even though the real exchange rate is assessed as moderately overvalued, the exchange rate peg with India continues to serve Bhutan well.** The adjusted external sustainability approach, tailored to take into account the temporary effects of electricity-related exports and imports on the current account balance, suggests a moderate real effective exchange rate overvaluation. Disciplined fiscal and monetary policies supporting moderate inflation, as well as measures to improve business climate, are needed for Bhutan to continue benefitting from the peg and ensure that the exchange rate does not deviate significantly from its fundamentals.

**43. The level of external reserves is adequate, but further improvement in reserve management is needed.** All standard metrics of reserve adequacy show that Bhutan’s reserves are

adequate. With external reserves amounting to about one half of GDP, proper reserve management is even more important. First, the currency composition of reserves needs to be better aligned with the composition of external debt and trade flows, by reducing the share of convertible currency reserves and increasing the share of the Indian rupee-denominated reserves. Second, new reserve management policies and investment guidelines need to be implemented.

**44. The authorities did not request and staff does not recommend approval of the exchange restrictions maintained inconsistent with Article VIII obligations.** Bhutan continues to maintain exchange restrictions under the transitional arrangements of Article XIV, Section 2. Staff recognize the limited and unpredictable sources of convertible currency inflows and justifiable concerns over outflows, and encourages the authorities to gradually ease the exchange restrictions towards their eventual elimination, including restrictions that have been maintained under Article XIV, Section 2, which should be eliminated as soon as Bhutan's balance of payments positions permits. The authorities are encouraged to consider accepting the obligations under Article VIII, Sections 2(a), 3 and 4, of the IMF's Articles of Agreement in due course.

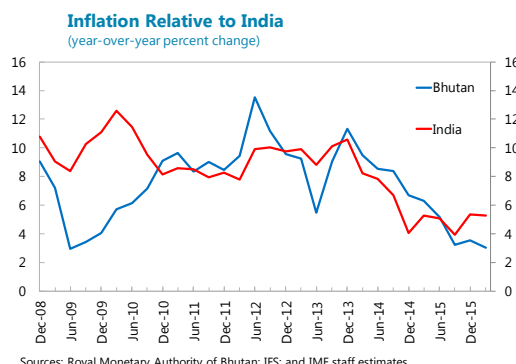
**45.** It is recommended that the next Article IV consultation take place on a 24-month cycle in accordance with the Decision on Article IV Consultation Cycles (Decision No. 14747-10/96).

**Box 1. Inflation in Bhutan: Near-Term Outlook and Considerations for the Long-Term<sup>1</sup>**

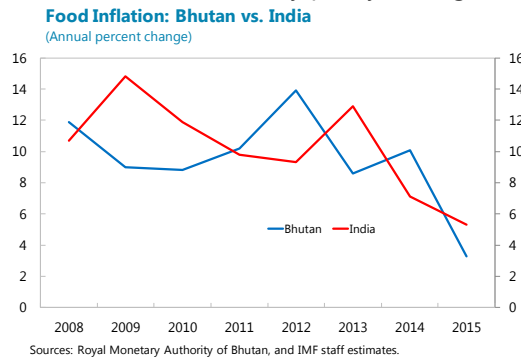
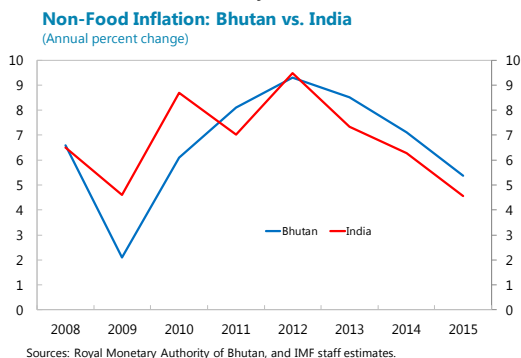
**Bhutan’s rate of inflation is closely linked to Indian inflation.** This link is underpinned by a combination of factors, namely:

- (i) Broadly similar consumption baskets between India and Bhutan. For example, food accounts for about 40 percent of the CPI basket in Bhutan and about 50 percent in India;
- (ii) Large reliance of Bhutan’s economy on imports, of which 90 percent come from India;
- (iii) Long-standing free trade agreement (FTA) between India and Bhutan, which facilitates trade, commerce, and transit between the two countries;
- (iv) Ngultrum’s peg to the Indian rupee, supported by the FTA’s provisions for facilitating trade transactions in both currencies.

**Over the near-term, Bhutan’s inflation is likely to remain slightly below that of India.** Empirical evidence featured in Bhutan’s *2014 Article IV Consultation* (IMF Country Report No. 14/178) suggests that (i) the inflation rates in the two countries co-move in the long-term, (ii) Indian inflation is exogenous to that of Bhutan, and (iii) when a temporary divergence between the inflation rates in the two countries emerges, Bhutan’s inflation tends to converge to that of India within about one year. The extension of the VECM-based model of Bhutanese inflation to recent data indicates that the actual CPI level as of March-2016 has exceeded the model predicted level by about 1 percentage point, essentially reflecting Bhutan’s positive inflation differential with India over 2014–2015H1. Thus, owing to the error-correction dynamics, Bhutan’s near-term baseline inflation outlook is likely to entail a continued lower inflation rate relative to that of India.



**India’s progress on the inflation front will favorably shape Bhutan’s inflation prospects in the long term.** The adoption of a flexible inflation targeting regime with a 4 percent headline CPI inflation target and a +/- 2 percent band around it has been central to India’s anti-inflationary drive of the past few years. Progress has also been made to enhance monetary transmission and underpin food supply through productivity enhancing and market efficiency reforms. This has also helped to bring down both food and non-food inflation in Bhutan. Going forward, the Bhutanese economy is set to benefit from India’s improved inflation outlook, but idiosyncratic drivers will require continued careful monetary policy management.



<sup>1</sup> Prepared by Volodymyr Tulin.

### Box 2. Bhutan's Labor Market: Problems and Solutions<sup>1</sup>

**Problem.** Bhutan's unemployment rate in 2014 was 2.6 percent (11,000 unemployed; this compares with 50,000 foreign workers currently in Bhutan). The female unemployment rate was 3.5 percent, almost twice as much as the male unemployment rate of 1.9 percent. However, the unemployment rate among young people is particularly high, and reached 9.7 percent in 2014. The unemployment rate is also higher in urban areas (6.7 percent) than in rural areas (1.2 percent).

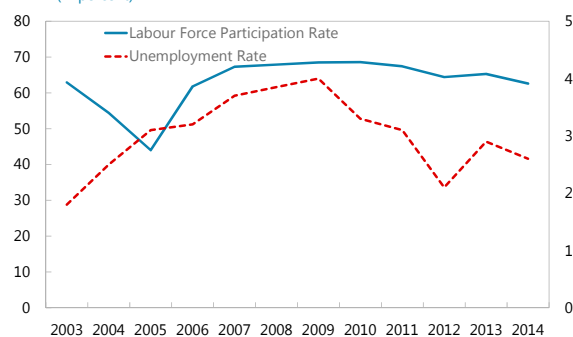
**Causes.** There are several causes of high unemployment among the youth. One is the mismatch between the existing skills of young people and skills demanded by employers. Some occupations are not perceived by youth as sufficiently "well-regarded" and there is not enough interest in pursuing them. Furthermore, public sector jobs are often perceived as offering a better combination of security and pay than private sector jobs. Urban youth also have high reservation wage, and while there is no unemployment support, they receive support from their families while unemployed. Finally, the hydropower sector—an important part of the economy—is not offering many job opportunities. The construction phase is labor-intensive (up to 18,000 workers are working at the ongoing three hydropower projects), but only about 20 percent are Bhutanese citizens. This low number reflects either a lack of skills or unwillingness to take up jobs requiring manual work.

**Solutions.** The government target is to bring the unemployment rate down to 2.5 percent. The challenge is how to absorb the large number of unemployed young people, particularly as the absorption capacity of the public sector is approaching its limits. There is no silver bullet. Improving skills is one solution. The authorities have started six hydropower training centers to provide workers with the qualifications for hydropower construction jobs, and they have been organizing job fairs. All government agencies are required to build crèches, to facilitate employment of women. The authorities have also launched a program of sending people overseas for employment (mainly to India, Thailand and Middle East). The development of labor-intensive SMEs, supported by better access to finance, could also help.

#### Unemployment rate (%)

	2014
Overall	2.6
Male	1.9
Female	3.5
Rural	1.2
Urban	6.7
Youth	9.4

Bhutan: Labor Force Indicators  
(In percent)



Source: Royal Monetary Authority of Bhutan.

<sup>1</sup> Prepared by Jiri Jonas.

### Box 3. Base Rate System in Bhutan<sup>1</sup>

**The objective of Bhutan’s base rate system for interest rates is to improve credit market transparency and efficiency, and monetary policy management.** Bhutan’s base rate system has been in place since 2012 and is modeled on the Indian base rate system implemented in 2010. A bank’s base rate is a minimum rate at which it can lend, as loans are to be priced from the base rate with the addition of bank-determined borrower-specific charges to account for loan product, credit risk, and term premium. As in India, a base rate of a bank in Bhutan takes into account its cost of funds, costs of complying with certain regulations (such as CRR or SLR), overhead costs, and profitability. A range of exemptions from the base rate is also stipulated for lending to priority sectors, such as agriculture, small and artisan schemes, and entrepreneurship. The base rates have been reviewed annually on the basis of banks’ audited annual accounts. In India, banks were required to take these variables into consideration but ultimately were free in deciding on their base rates. In contrast, the Royal Monetary Authority has played an active role in base rate setting, including by imposing ad hoc adjustments to the base rates to engender a greater uniformity of lending rates across the financial system.

Select Bank Lending Interest Rates  
(In percent)



Sources: Royal Monetary Authority of Bhutan, and IMF staff estimates.

#### Addressing shortcomings of the current base rate system

**is a policy priority.** Steps have been taken to initiate semi-annual computation of base rates, as the current practice of annual revisions significantly hampers monetary transmission by essentially imposing one year-lagged monetary conditions onto the next year’s base rate. The lack of uniformity in the application of the base rate methodology, prompted by the practice of ad hoc adjustments to reduce variation of the base rates across banks and financial institutions, has led to inefficiencies and hampered transparency. Specifically, banks with access to external aid and hydropower-related funds have had significantly lower calculated base rates, with further variation due to differences in capital base, operating environment, and profitability parameters. In theory, a base rate should enhance monetary transmission by serving as a reference for floating-rate loans, but in practice bank loans and advances in Bhutan are mostly medium- and longer-term and are set at fixed rates.

#### Improving the responsiveness of the base rate system to changes in monetary stance is of key

**importance.** As is also suggested by the Indian experience, the base rate system has proven ineffective in responding to changes in the monetary policy stance as the average cost of funds used in the calculation tends to adjust slowly relative to the marginal cost of funds. Indeed, India’s recently implemented Marginal Cost of Funds-based Lending Rate (MCLR) which has replaced its base rate system, limits the funding costs used in its calculation to more recently raised funds, assigns these funds a greater weight, and stipulates monthly-based reviews. Adopting similar features could also be contemplated in Bhutan, in part to ensure a more timely adjustment of Bhutan’s financial conditions to India’s improved inflation outlook and its new monetary policy framework. In addition, this would help avoid an undue increase in real interest rates in Bhutan that could chip away at the economic activity. Enhancing monetary transmission would also benefit from promoting greater use of variable rate lending.

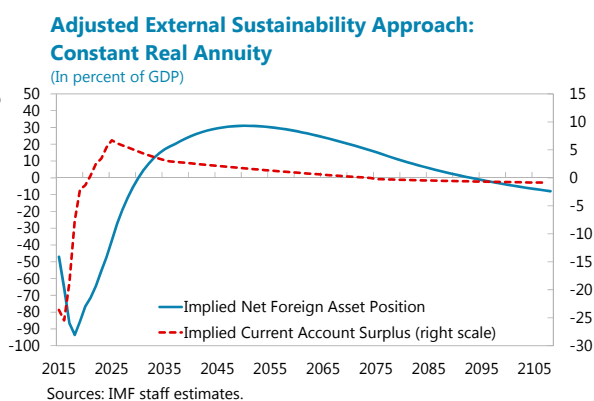
<sup>1</sup> Prepared by Volodymyr Tulin.

### Box 4. External Sector Assessment<sup>1</sup>

**The standard External Balance Assessment (EBA) methodologies are not well suited for Bhutan.** The application of the EBA Lite current account (CA) methodology for Bhutan in FY2015/16 suggests a current account norm of about -8.7 percent of GDP, while the external sustainability (ES) approach suggests a norm of about -5.5 percent of GDP. These approaches do not take into account the temporary nature of hydropower-related imports and future electricity exports, and incorrectly interpret large near-term CA deficits as sign of significant overvaluation. As Bhutan is not part of the EBA Lite sample, country-specific constant in the REER methodology was set at a level that ensures that the sum of sample residuals is zero during 1995–2013. As a result, the 2015 REER is estimated to be undervalued by 7.8 percent.

**The adjusted ES approach<sup>2</sup>, in turn, suggests that Ngultrum is mildly overvalued.** The adjustment incorporates the temporary effect of electricity-related exports and imports on the CA path. Initially, there is an accumulation of foreign liabilities associated with imports of goods and services related to the construction of hydropower plants. When the plants are commissioned, the increase in electricity exports will turn the CA into a surplus and the net foreign assets (NFA) will begin to rise. Specifically, in line with staff’s baseline macroeconomic scenario, the simulations assume that Bhutan’s total electricity generation capacity will reach around 6,800 MW over the next two decades. From then onwards, the generation capacity is held constant and the annual growth of domestic consumption is assumed at 5 percent. From 2075, a year when electricity generation is estimated to be sufficient to meet domestic consumption<sup>3</sup>, net electricity exports are assumed at zero. The calculated equilibrium exchange rate ensures constant real income from net electricity exports. This approach suggests a CA norm of a deficit of around 25 percent of GDP for FY2015/16. While uncertainty around the estimated norm is large, based on the current account elasticity to the real effective exchange rate of -0.25 percent, real exchange rate overvaluation is estimated at around 6 percent.

Based on the empirical EBA-type estimates and factoring in the uncertainties and variability of external flows related to hydropower development, the exchange rate is assessed to be mildly overvalued. The external position is expected to follow a path that results in a reversal of the large current account deficits and the negative net foreign asset position over the medium term. Bhutan has an exchange rate peg with the Indian rupee, and macroeconomic policies are broadly appropriate with this arrangement. International reserves have grown steadily over the recent years and are adequate for precautionary purposes.



<sup>1</sup> Prepared by Volodymyr Tulin.

<sup>2</sup> The adjustment methodology is described in IMF WP/09/281 “Exchange Rate Assessments: Methodologies for Oil Exporting Countries” by R. Bems and I. de Carvalho Filho.

<sup>3</sup> Under this assumption, the Bhutanese per capita electricity consumption at that time will be close to that of the United States as of 2015.



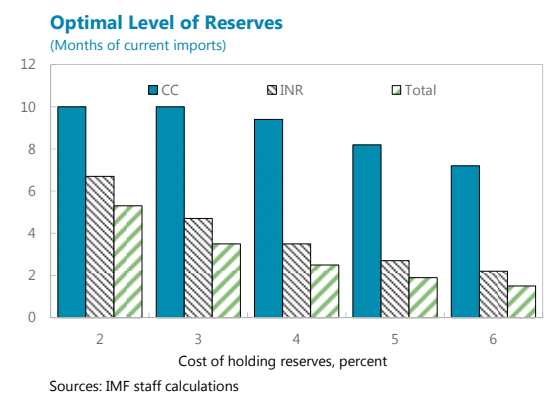
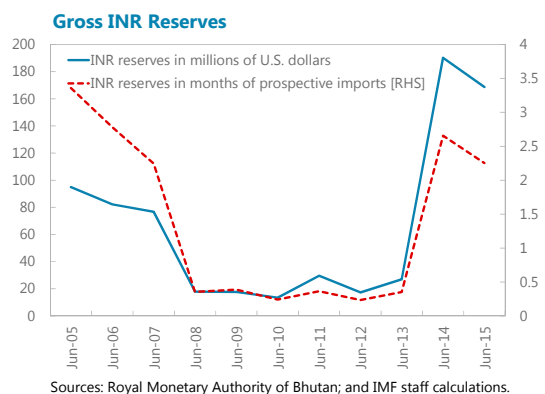
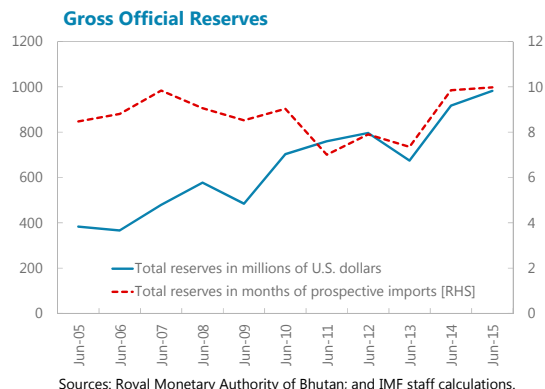
### Box 5. Assessing Reserve Adequacy<sup>1</sup>

**After a dip in reserves in FY2011/12 due to overheating pressures, Bhutan’s international reserves have grown steadily over the last three years in large part resulting from aid inflows.** At the end of FY2014/15 reserve holdings stood at US\$958 million, corresponding to 10.4 months of prospective year imports. As of February 2016, reserve holdings reached US\$1,022 million. Bhutan’s reserve position is higher than suggested by standard “rules of thumb” metrics, such as coverage of 3 months of imports of goods and services, 100 percent of short-term debt and 20 percent of broad money in the economy<sup>2</sup>.

**However, a mismatch between the currency composition of reserves and the structure of Bhutan’s external liabilities and trade remains.** Although Bhutan’s currency is pegged to the Indian rupee (INR) and its international transactions are predominantly with India, the share of INR-denominated assets in Bhutan’s external reserves has been low. During 2010-13, overheating pressures led to a shortage of rupee reserves, with rupee- imports coverage ratio falling to less than 1 month, while convertibility of hard currency reserves was hindered. To ease rupee liquidity the Royal Monetary Authority (RMA) borrowed large INR amounts at costly terms from select Indian commercial banks and tapped its currency swap arrangement with the Reserve Bank of India (RBI). Subsequently, the RMA decided to convert convertible currency (CC) reserves in excess of US\$700 million into INR, which resulted in an increase in the share of INR reserve holdings from 1.5 percent to 21 percent in mid-2013. In addition, recent agreement with the RBI to receive liquidity support will help in strengthening reserve management. At the end of FY2014/15, INR reserve holdings had a share of 17 percent providing cover for 2.3 months of imports from India, whereas CC reserve holdings stood at US\$815 million, corresponding to 35 months of non-Indian import cover.

**The optimal level of international reserves is assessed using IMF metrics tailored to low-income countries.**<sup>3</sup> A cost-benefit approach focusing on the role of reserves in preventing and mitigating absorption drops triggered by large external shocks is weighed against the costs to the economy of holding reserves.<sup>4</sup>

**Calibrating the model for Bhutan yields optimal levels of aggregate gross reserves in the range of 1½ to 5½ months of import cover depending on assumptions about the cost of holding reserves.** Although this suggests that Bhutan’s reserves exceed the optimal level implied by the model, when currency composition is taken into account, the INR reserves cover less than the model-implied optimal level of 2-6½ months of Indian imports while the CC holdings significantly exceed the model-implied optimal coverage level of 7–10 months of imports. The large number of hydropower projects in the pipeline and volatility in external flows to and from India will likely contribute to volatility in rupee reserves, requiring more active reserve management. In addition, the arrangements with the RBI will play a useful role in addressing short-term mismatches in rupee inflows and outflows.



<sup>1</sup> Prepared by Purva Khera.

<sup>2</sup> The composite IMF metric for Bhutan is constructed by assuming that reserves have to fully cover the debt service requirements, part of the import bill and M2. The estimated metric shows that the reserve coverage has stayed comfortably above the 150 percent range (upper bound) during the past decade.

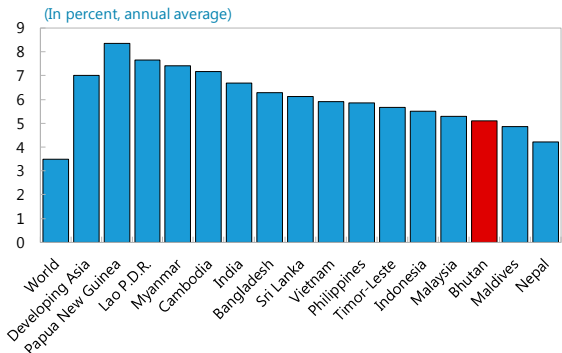
<sup>3</sup> [www.imf.org/external/pubs/cat/longres.aspx?sk=25316.0](http://www.imf.org/external/pubs/cat/longres.aspx?sk=25316.0)

<sup>4</sup> IMF (2013), “Assessing Reserve Adequacy – Further Considerations,” IMF Policy Paper, November 13, 2013.

**Figure 1. Bhutan: Recent Macroeconomic Developments**

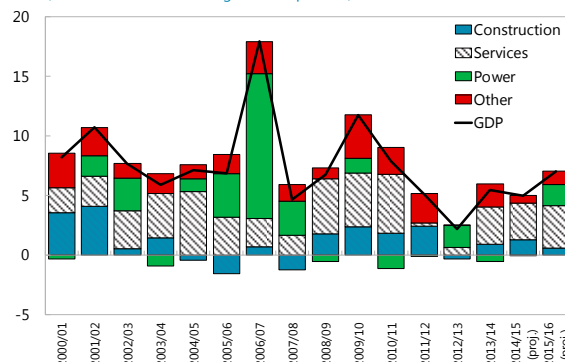
*Bhutan's recent growth has been relatively low ....*

**Real GDP Growth 2011–2015: World, Developing Asia and Selective Countries**  
(In percent, annual average)



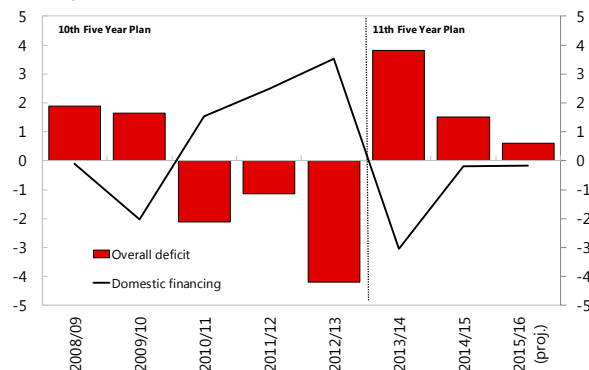
*...but is picking up from its 2012/13 low point...*

**Sources of Growth**  
(Contribution to real GDP growth, in percent)



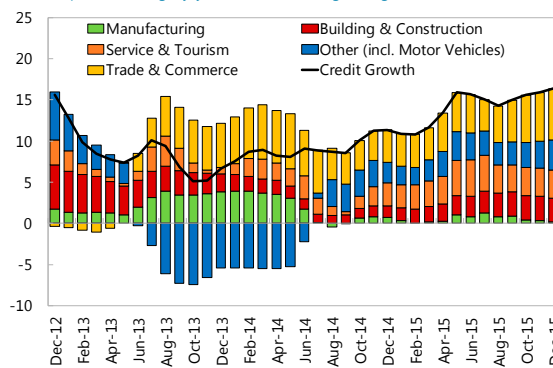
*... as fiscal tightening has been reversed...*

**Fiscal Deficit and Financing**  
(In percent of GDP)



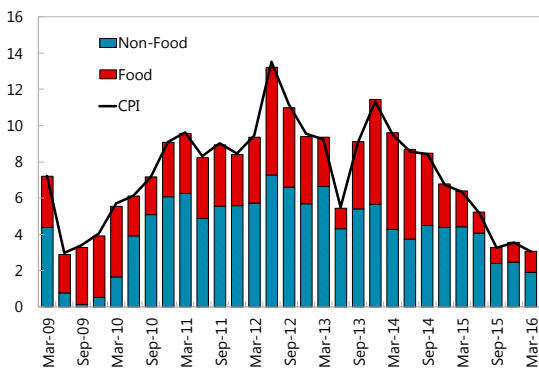
*... and credit growth is picking up.*

**Credit Growth and Contributions**  
(In percent change, y/y of 3-month moving average)



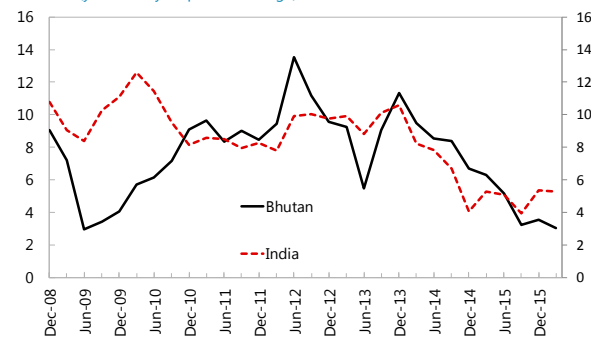
*Inflation has declined, mainly due to lower food inflation...*

**CPI Inflation**  
(In percent, year on year)



*...following a similar decline of inflation in India.*

**Inflation Relative to India**  
(year-over-year percent change)

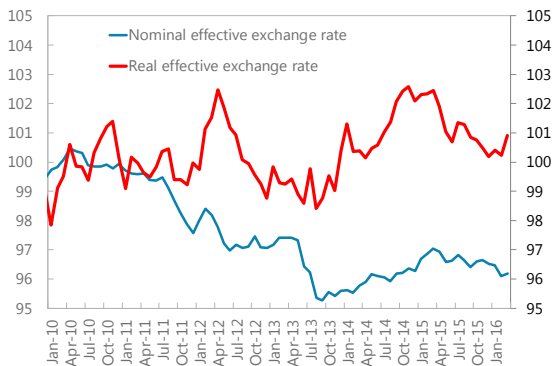


Sources: IMF, International Financial Statistics, Royal Monetary Authority of Bhutan, and IMF staff calculations.

**Figure 2. Bhutan: External Developments**

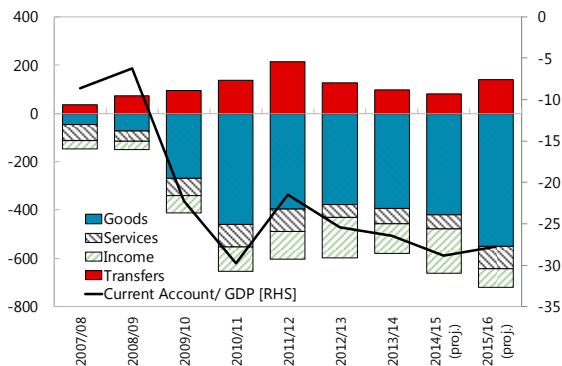
The Bhutanese REER has depreciated somewhat in 2015 ....

**Nominal and Real Effective Exchange Rates**  
(Index, 2010=100, increase signifies appreciation)



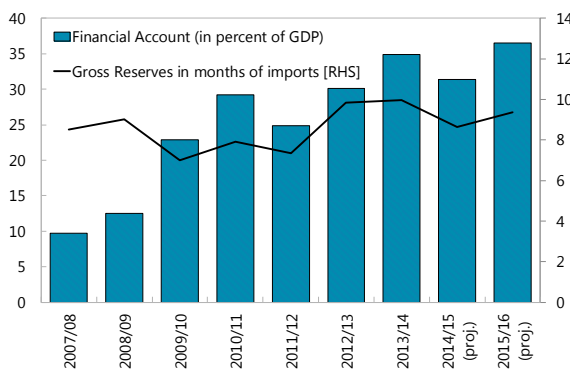
...while large current account deficits persist, reflecting sizable hydro-related imports.

**Current Account and Components**  
(In millions of USD)



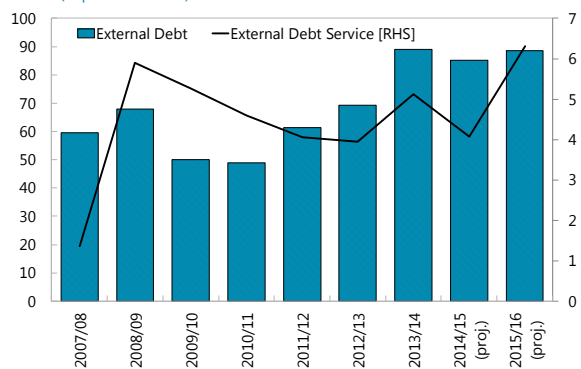
With strong financial account surplus, reserve import coverage remains high ....

**Financial Account and Gross Reserves**



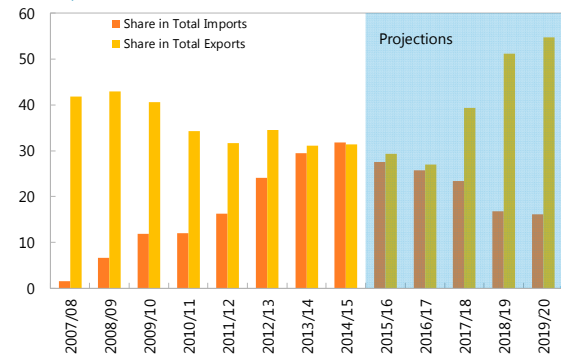
...while the increase in external debt driven by hydropower disbursement has stabilized.

**External Debt and External Debt Service**  
(In percent of GDP)



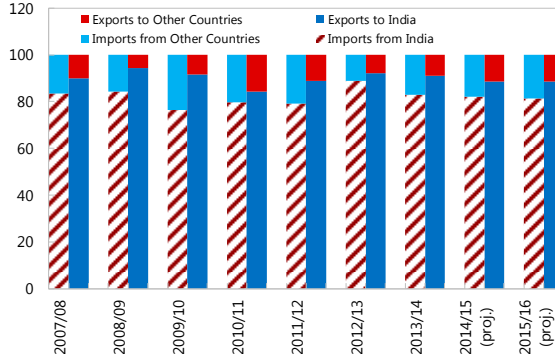
Electricity exports are projected to rise rapidly with major projects coming on-stream...

**Hydropower Imports and Exports**  
(In percent)



...destined mainly for India which is Bhutan's dominant trade partner.

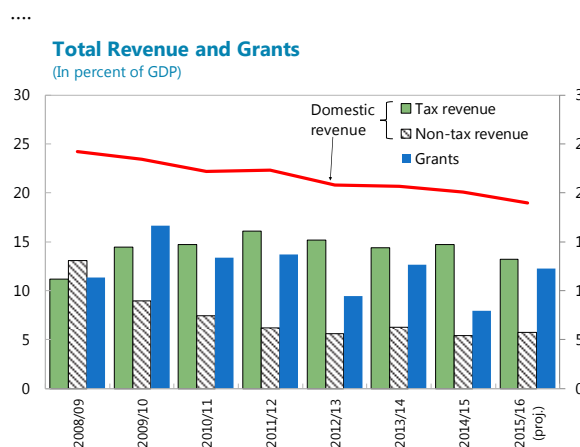
**Foreign Trade**  
(In percent of total exports or imports)



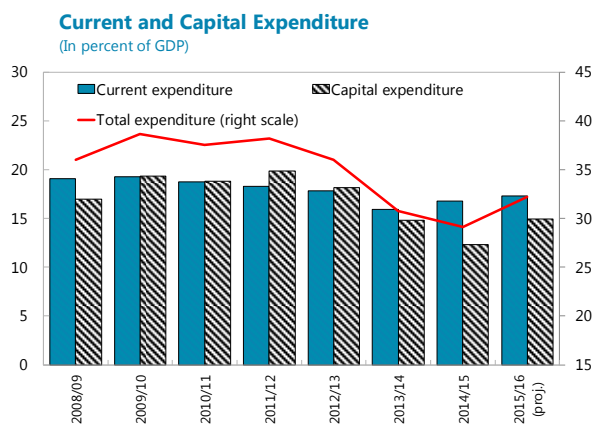
Sources: IMF, International Financial Statistics, Royal Monetary Authority of Bhutan, and IMF staff calculations.

**Figure 3. Bhutan: Fiscal and Monetary Developments**

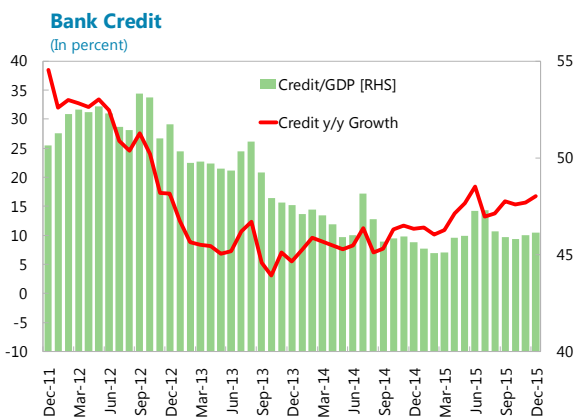
Domestic revenues have been declining as a share of GDP



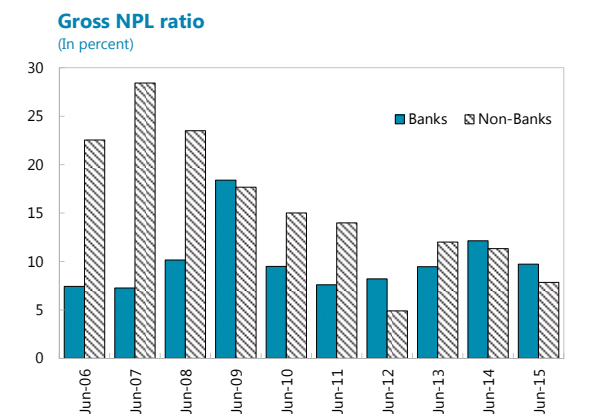
... matched by declining capital expenditures.



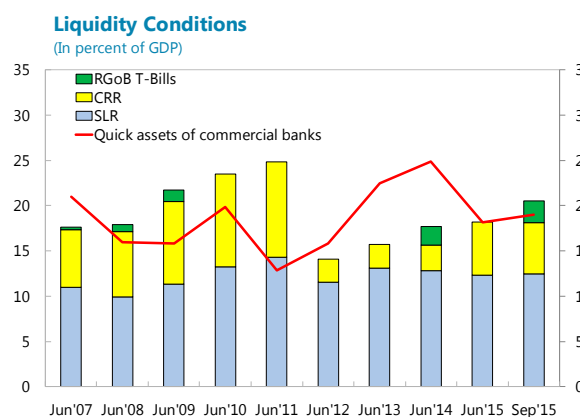
Credit growth has picked up recently ....



...and NPLs among banks and nonbanks have declined.



Liquidity remains well managed...



... while interest rate differentials with India are generally small.

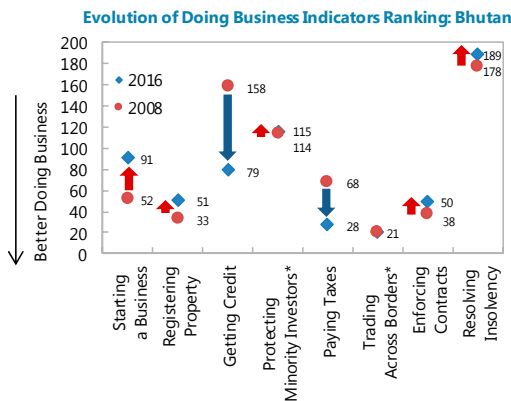
Policy Indicators <sup>1</sup>	Bhutan	India
Policy Rate	6.00	6.50
Base Rates	10.49-11.57 <sup>2</sup>	9.30-9.70
Short Term Liquidity Adjustment Facility Rate	7.00	7.75
Cash Reserve Ratio	10.00	4.00
Statutory Liquidity Ratio	20.00	21.50
Savings Deposit Rates	5.00-6.00	4.00
Term Deposit Rates	5.00-10.00	7.00-7.90
Government T-Bills rates (91 days)	1.97	7.27

<sup>1</sup> As of May 23, 2016.  
<sup>2</sup> The Base Rates of Financial Institutions have been revised w.e.f May 12 2015 and includes the Base Rate of NBFIs, which is now 11.57 percent.

Sources: IMF, International Financial Statistics, Royal Monetary Authority of Bhutan, and IMF staff calculations.

**Figure 4. Bhutan: Business Environment and Governance**

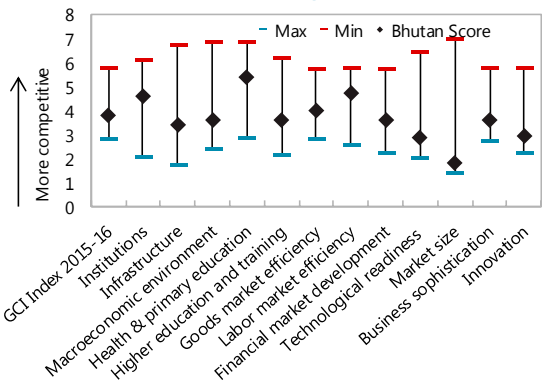
The ease of doing business ranking for Bhutan has worsened in a number of dimensions, though access to credit and contract enforcement have improved.



Source: World Bank, Doing Business Report (2016 and 2008).  
\*Doing Business 2016 revised methodology (2008 reflects 2015).

Institutional quality, health and education are strengths of the economy.

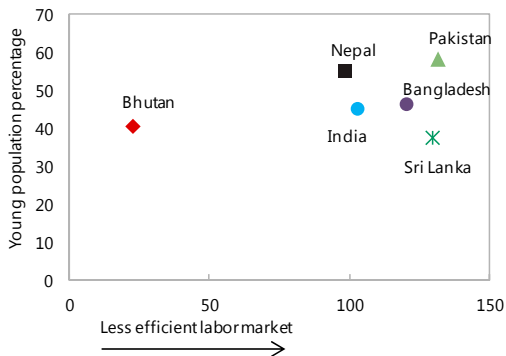
**2015-16 Bhutan Scores in Global Competitiveness Index and Pillars**



Source: World Economic Forum Global Competitiveness Report (15/16)

Labor markets appear more efficient than regional peers...

**Labor Market Efficiency Ranking and Young Population Ratio: South Asia**  
(Young population ratio: in percent of working-age population)

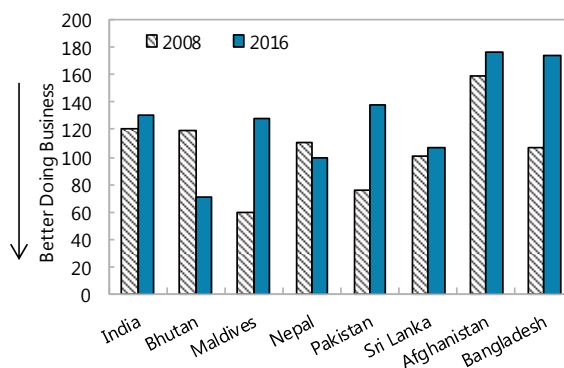


Sources: World Development Indicators (2015) and World Economic

Note: As pointed out in an independent evaluation of the Doing Business survey (see [www.worldbank.org/ieg/doingbusiness](http://www.worldbank.org/ieg/doingbusiness)), care should be exercised when interpreting these indicators given subjective interpretation, limited coverage of business constraints, and a small number of informants, which tend to overstate the indicators' coverage and explanatory power.

The overall doing business ranking has improved, and is higher than most of its regional peers.

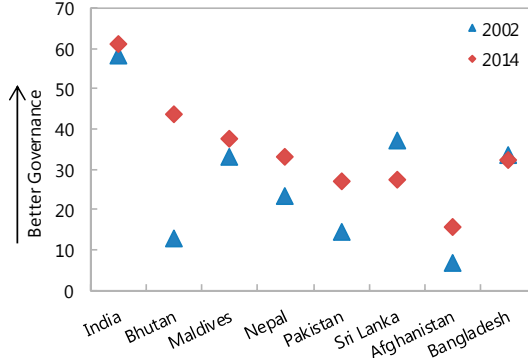
**Ease of Doing Business Ranking: South Asia**



Sources: World Bank, Doing Business Report (2014 and 2008)

Bhutan has demonstrated a significant improvement in voice and accountability.

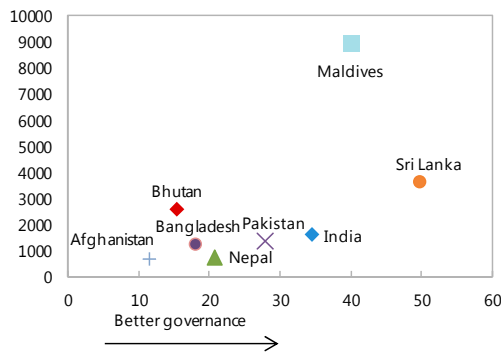
**Voice and Accountability: South Asia**  
(Percentile rank)



Source: Worldwide Governance Indicators 2014.

...though regulatory quality shows room for improvement.

**Regulatory Quality and GDP Per Capita: South Asia 2014**  
(Percentile rank; in US Dollars)



Sources: Worldwide Governance Indicators 2014; IMF.  
Note: Regulatory quality affects perceptions of the ability of

**Table 1. Bhutan: Selected Economic Indicators, 2012/13–2017/18 1/**

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
			Est.		Proj.	
<b>Real sector</b>						
Real GDP at market prices (percent change)	3.6	3.8	5.2	6.0	6.4	11.3
Consumer prices (percent change, period average)	11.3	10.0	6.4	4.4	4.6	5.1
<b>General government</b>						
	(In percent of GDP)					
Total revenue and grants	30.2	33.6	28.9	31.5	27.2	27.3
Tax revenue	15.2	14.4	14.7	13.2	13.2	12.6
Non-tax revenue	5.6	6.3	5.4	5.7	5.0	4.5
Foreign grants	9.4	12.7	8.0	12.3	9.0	10.2
Total expenditure and net lending	34.4	29.8	27.4	30.9	28.4	26.6
Current expenditure	17.8	16.0	16.8	17.3	16.8	16.0
Capital expenditure	18.2	14.8	12.3	14.9	12.9	11.8
Current balance (excluding grants)	3.0	4.7	3.3	1.6	1.4	1.1
Overall balance	-4.2	3.8	1.5	0.6	-1.2	0.7
Public sector debt 2/	99.9	96.4	96.5	105.5	113.6	112.7
<b>Monetary sector</b>						
	(Percent change, unless otherwise indicated)					
Broad money	18.6	6.6	7.8	...	...	...
Credit to private sector	6.2	5.1	11.0	...	...	...
Interest rates (end of period, in percent)						
Term Deposit Rates	5.0-9	5.0-8.7	4.0-10	...	...	...
Lending	11.5-16	10.0-16	11.7-17	...	...	...
RMA bills (91-days)	3	2.3	0.13	...	...	...
<b>External sector</b>						
	(In millions of dollars, unless otherwise indicated)					
Current account balance	-470	-483	-581	-579	-708	-528
(In percent of GDP)	-25.4	-26.4	-28.8	-27.8	-31.5	-20.7
Trade balance	-377	-393	-419	-550	-630	-474
Exports (goods)	546	535	578	556	579	751
(Percent change)	-11.5	-2.0	8.2	-3.9	4.0	29.8
<i>Of which</i> : Electricity	188	167	181	192	180	315
Imports (goods)	-923	-928	-998	-1,107	-1,177	-1,174
(Percent change)	-8.8	0.5	7.5	11.0	6.2	-0.2
Grants (current transfer)	86	63	77	111	88	113
Capital and financial account balance	557	638	633	762	724	787
Loans (net)	244	355	374	339	346	343
Errors and omissions	80	-85	-60	0	0	0
Overall balance	168	70	-9	183	16	259
(In percent of GDP)	9.1	3.8	-0.4	8.8	0.7	10.2
Gross official reserves	917	982	958	1,141	1,157	1,417
(In months of goods and services imports)	11.9	11.8	10.4	11.3	11.3	13.1
External debt (in percent of GDP)	94.1	93.6	94.5	105.8	113.0	110.7
Ngultrum per U.S. dollar (period average)	54.9	61.5	62.1	...	...	...
<b>Memorandum items:</b>						
GDP at market prices (in millions of U.S. dollars)	1848.7	1829.6	2017.1	2084.8	2251.1	2549.5
Electricity exports (in percent of total goods exports)	34.5	31.2	31.4	34.6	31.2	42.0
Unemployment rate (in percent) 3/	2.1	2.9	2.6	...	...	...

Sources: Bhutanese authorities; and IMF staff estimates and projections.

1/ Fiscal year begins July 1.

2/ Public and publicly guaranteed debt, including loans for hydropower projects.

3/ On a calendar year basis (e.g., the entry for 2012/13 is for 2012).

Table 2. Bhutan: Government Budget Summary, 2012/13–2017/18

	2012/13	2013/14	2014/15	2015/16 Proj.	2016/17 Proj.	2017/18 Proj.
(In millions of ngultrum)						
Revenue and grants	30,656	37,819	36,231	43,632	41,710	48,718
Domestic revenue	21,102	23,245	25,141	26,191	27,944	30,464
Tax revenue	15,403	16,183	18,387	18,288	20,207	22,498
Direct tax	9,390	11,132	11,627	11,810	12,985	14,205
<i>Of which: Hydropower-related 1/</i>	2,097	2,648	2,549	2,756	3,063	3,109
Indirect tax	6,013	5,051	6,760	6,478	7,223	8,293
Nontax revenue	5,699	7,062	6,754	7,903	7,737	7,965
<i>Of which: DHI dividend 2/</i>	1,552	1,800	1,812	1,850	1,906	1,963
<i>Of which: Hydropower dividend and profit transfers 3/</i>	1,479	1,969	1,877	1,989	2,238	2,179
Foreign budgetary grants	9,563	14,236	9,955	16,988	13,767	18,254
From India	4,693	10,684	6,594	12,564	11,140	9,018
Other	4,869	3,552	3,361	4,424	2,627	9,237
Expenditure and net lending	34,902	33,523	34,334	42,794	43,617	47,544
Current expenditure	18,096	17,941	21,032	23,909	25,761	28,492
Interest expenditure	2,642	2,090	2,025	2,148	2,030	1,954
Capital expenditure	18,431	16,668	15,444	20,643	19,759	21,142
Net lending	-739	-1,332	-2,553	-1,759	-1,903	-2,090
Current balance (excl. grants)	3,005	5,303	4,109	2,281	2,183	1,972
Primary balance	-1,604	6,387	3,922	2,986	123	3,128
Overall balance	-4,246	4,297	1,897	838	-1,907	1,174
Foreign financing	668	-867	-1,670	-617	652	-271
Disbursement	3,571	1,535	927	2,239	3,466	2,452
Amortization	2,903	2,402	2,596	2,856	2,814	2,723
Government of India	2,201	1,529	1,529	1,529	1,343	1,343
Domestic financing	3,578	-3,430	-227	-222	1,255	-903
(In percent of GDP, unless otherwise indicated)						
Revenue and grants	30.2	33.6	28.9	31.5	27.2	27.3
Domestic revenue	20.8	20.7	20.1	18.9	18.2	17.1
Tax revenue	15.2	14.4	14.7	13.2	13.2	12.6
Direct tax	9.3	9.9	9.3	8.5	8.5	8.0
<i>Of which: Hydropower-related</i>	2.1	2.4	2.0	2.0	2.0	1.7
Indirect tax	5.9	4.5	5.4	4.7	4.7	4.6
Nontax revenue	5.6	6.3	5.4	5.7	5.0	4.5
<i>Of which: DHI dividend 2/</i>	1.5	1.6	1.4	1.3	1.2	1.1
<i>Of which: Hydropower dividend and profit transfers 3/</i>	1.5	1.8	1.5	1.4	1.5	1.2
Foreign grants	9.4	12.7	8.0	12.3	9.0	10.2
From India	4.6	9.5	5.3	9.1	7.3	5.0
Other	4.8	3.2	2.7	3.2	1.7	5.2
Expenditure and net lending	34.4	29.8	27.4	30.9	28.4	26.6
Current expenditure	17.8	16.0	16.8	17.3	16.8	16.0
Interest expenditure	2.6	1.9	1.6	1.6	1.3	1.1
Capital expenditure	18.2	14.8	12.3	14.9	12.9	11.8
Net lending	-0.7	-1.2	-2.0	-1.3	-1.2	-1.2
Current balance (excl. grants)	3.0	4.7	3.3	1.6	1.4	1.1
Primary balance	-1.6	5.7	3.1	2.2	0.1	1.8
Overall balance	-4.2	3.8	1.5	0.6	-1.2	0.7
Foreign financing	0.7	-0.8	-1.3	-0.4	0.4	-0.2
Disbursement	3.5	1.4	0.7	1.6	2.3	1.4
Amortization	2.9	2.1	2.1	2.1	1.8	1.5
Government of India	2.2	1.4	1.2	1.1	0.9	0.8
Domestic financing	3.5	-3.0	-0.2	-0.2	0.8	-0.5

Sources: Data provided by the Royal Government of Bhutan; and IMF staff estimates and projections.

1/ Includes corporate tax on Druk Green Power Corporation (DGPC), new power projects and Bhutan Power Corporation (BPC).

2/ Druk Holding and Investment Ltd. (DHI) portfolio includes hydropower, namely DGPC and BPC shares, as well as non-energy assets.

3/ Includes dividend from DGPC, new power projects and BPC, and profits transfer from Tala Hydroelectric Project Authority (THPA).

Table 3. Bhutan: Balance of Payments, 2012/13–2019/20

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
			Est.	Proj.	Proj.	Proj.	Proj.	Proj.
	(In millions of U.S. dollars)							
Current account	-470	-483	-581	-579	-708	-528	-418	-143
Trade balance	-377	-393	-419	-550	-630	-474	-251	-28
Exports, f.o.b.	546	535	578	556	579	751	1,044	1,265
Of which: Electricity	188	167	181	192	180	315	564	737
Imports, c.i.f.	-923	-928	-998	-1,106	-1,209	-1,225	-1,295	-1,293
Of which: Hydropower-related	-218	-265	-274	-268	-316	-311	-252	-209
Services	-54	-65	-60	-94	-111	-120	-98	-76
Credit	123	124	124	130	141	154	169	185
Debit	-177	-189	-183	-224	-253	-274	-267	-261
Of which: Electricity	-99	-121	-124	-115	-136	-142	-113	-90
Income	-166	-121	-183	-76	-68	-71	-129	-112
Credit	18	19	23	23	29	30	39	46
Debit	-183	-140	-205	-99	-97	-102	-168	-157
Current transfers	128	96	80	141	102	137	60	72
Credit	158	119	111	172	136	175	105	122
Of which: Grants 1/	86	63	77	111	88	113	68	79
Debit	-31	-23	-31	-32	-34	-39	-45	-50
Capital and financial account	557	638	633	762	724	787	615	532
Capital transfer 2/	264	275	225	392	345	406	279	258
Foreign direct investment	49	8	33	31	34	38	44	49
Portfolio investment	0	0	0	0	0	0	0	0
Loans (net)	244	355	374	339	346	343	291	225
Other flows 3/	0	0	0	0	0	0	0	0
Errors and omissions	80	-85	-60	0	0	0	0	0
Overall balance	168	70	-9	183	16	259	196	389
Memorandum items:	(In percent of GDP, unless otherwise indicated)							
Current account balance	-25.4	-26.4	-28.8	-27.8	-31.5	-20.7	-14.1	-4.3
Trade balance	-20.4	-21.5	-20.8	-26.4	-28.0	-18.6	-8.5	-0.9
Merchandise exports (percent change)	-11.5	-2.0	8.2	-3.9	4.0	29.8	39.0	21.2
Merchandise imports (percent change)	-8.8	0.5	7.5	10.9	9.2	1.3	5.8	-0.2
Capital and financial account	30.1	34.9	31.4	36.6	32.2	30.9	20.7	16.2
Overall balance	9.1	3.8	-0.4	8.8	0.7	10.2	6.6	11.8
External debt	94.1	93.6	94.5	105.8	113.0	110.7	101.0	89.6
(In millions of U.S. dollars)	1,739	1,713	1,906	2,205	2,543	2,823	2,993	2,951
(In percent of exports of goods and services)	260.0	259.9	271.4	321.5	353.2	311.8	246.8	203.5
Debt service (in percent of exports of goods and services)	12.1	15.7	26.0	20.0	14.2	14.0	11.2	15.2
(In millions of U.S. dollars)	81	104	183	137	102	127	135	221
Gross official reserves (in millions of U.S. dollars)	917	982	958	1,141	1,157	1,417	1,613	2,002
(In months of imports of goods)	11.9	11.8	10.4	11.3	11.3	13.1	15.0	17.5
(In months of imports of goods and services)	9.8	10.0	8.6	9.4	9.3	10.9	12.5	14.7
Nominal GDP (in millions of U.S. dollars)	1,849	1,830	2,017	2,085	2,251	2,550	2,965	3,293

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

1/ Includes budgetary grants only.

2/ Including grants for hydropower projects (Tala, Puna I, Puna II, Mangdechhu, Kholongchhu, Bunakha, Chamkarchhu, and Wangchhu)

3/ Including trade credit, rupee credit lines, short-term capital flows and IMF SDR allocation in 2009.



Table 4. Bhutan: Medium-Term Macroframework, 2012/13–2020/21

	Eleventh Plan Period								
	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
<b>Real sector (percent change)</b>									
Real GDP at market prices	3.6	3.8	5.2	6.0	6.4	11.3	13.9	8.5	5.2
Consumer prices (period average)	11.3	10.0	6.4	4.4	4.6	5.1	5.2	4.9	4.7
<b>Fiscal sector (in percent of GDP) 1/</b>									
Revenue and grants	30.2	33.6	28.9	31.5	27.2	27.3	25.8	32.2	29.1
Domestic revenue	20.8	20.7	20.1	18.9	18.2	17.1	20.5	26.7	24.5
Of which : tax revenue	15.2	14.4	14.7	13.2	13.2	12.6	11.8	11.6	11.9
Grants	9.4	12.7	8.0	12.3	9.0	10.2	5.3	5.5	4.6
Expenditure and net lending	34.4	29.8	27.4	30.9	28.4	26.6	25.8	25.9	25.8
Current expenditure	17.8	16.0	16.8	17.3	16.8	16.0	17.6	17.2	18.8
Of which : interest	2.6	1.9	1.6	1.6	1.3	1.1	3.4	2.9	4.4
Capital expenditure	18.2	14.8	12.3	14.9	12.9	11.8	11.6	11.4	11.3
Net lending	-0.7	-1.2	-2.0	-1.3	-1.2	-1.2	-3.4	-2.7	-4.2
Current balance (excl. grants)	3.0	4.7	3.3	1.6	1.4	1.1	3.0	9.5	5.6
Overall balance	-4.2	3.8	1.5	0.6	-1.2	0.7	0.0	6.3	3.2
External financing	0.7	-0.8	-1.3	-0.4	0.4	-0.2	-2.1	-1.7	-3.6
Domestic financing	3.5	-3.0	-0.2	-0.2	0.8	-0.5	2.1	-4.6	0.3
Public sector debt (in percent of GDP)	99.9	96.4	96.5	105.5	113.6	112.7	106.2	95.4	91.5
Of which : domestic debt	6.3	2.6	1.7	1.4	2.0	1.3	3.1	-1.8	-1.4
<b>Monetary Sector (percent change)</b>									
Broad money	18.6	6.6	7.8	...	...	...	...	...	...
Credit to private sector	6.2	5.1	11.0	...	...	...	...	...	...
<b>External sector (in millions of U.S. dollars)</b>									
Current account balance (including grants)	-470	-483	-581	-579	-708	-528	-418	-143	-188
(In percent of GDP)	-25.4	-26.4	-28.8	-27.8	-31.5	-20.7	-14.1	-4.3	-5.3
Trade balance	-377	-393	-419	-550	-630	-474	-251	-28	-11
Exports	546	535	578	556	579	751	1,044	1,265	1,361
Of which: Electricity exports	188	167	181	192	180	315	564	737	781
Imports	-923	-928	-998	-1,106	-1,209	-1,225	-1,295	-1,293	-1,371
Of which: Hydropower-related	-218	-265	-274	-268	-316	-311	-252	-209	-205
Services, income, and transfers (net)	-92	-90	-162	-29	-78	-55	-167	-115	-178
Of which : grants 2/	128	96	80	141	102	137	60	72	56
Capital and financial account balance	557	638	633	762	724	787	615	532	469
Of which : foreign direct investment	49	8	33	31	34	38	44	49	53
Of which : loans (net)	244	355	374	339	346	343	291	225	176
Overall balance	168	70	-9	183	16	259	196	389	281
(In percent of GDP)	9.1	3.8	-0.4	8.8	0.7	10.2	6.6	11.8	7.9
Gross foreign reserves (in millions of U.S. dollars)	917	982	958	1,141	1,157	1,417	1,613	2,002	2,283
(In months of goods and services imports)	11.9	11.8	10.4	11.3	11.3	13.1	15.0	17.5	19.2
External debt (public and private, in percent of GDP)	94.1	93.6	94.5	105.8	113.0	110.7	101.0	89.6	81.3
Of which: Power sector debt	53.5	61.0	67.7	83.7	94.2	98.6	93.1	89.1	86.1
External debt service									
(In percent of exports of goods and services)	12.1	15.7	26.0	20.0	14.2	14.0	11.2	15.2	13.3
Nominal GDP (in millions of US\$)	1,849	1,830	2,017	2,085	2,251	2,550	2,965	3,293	3,541

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

1/ Government budgetary accounts. Revenues, interest payments, and foreign financing include flows related to hydropower projects.

2/ Includes budgetary grants only.

Table 5. Bhutan: Monetary Survey, 2010/11–2014/15

	2010/11	2011/12	2012/13	2013/14	2014/15
(In millions of ngultrum)					
<b>Monetary survey</b>					
Net foreign assets	35,145	35,532	48,566	53,887	58,249
Indian rupee	-7,113	-9,551	1,493	265	4,034
Other	42,258	45,083	47,073	53,621	54,214
Net domestic assets	15,495	14,591	10,885	9,501	10,096
Net claims on government 1/	-5,074	-784	-7,508	-1,978	-7,740
Claims on nongovernment	34,576	45,220	49,109	54,277	63,995
Public enterprises 2/	555	1,486	2,285	4,438	7,174
Private sector 3/	33,235	43,735	46,825	49,839	56,821
Other items (net) 4/	-14,006	-29,846	-30,717	-42,798	-46,160
Broad money	50,640	50,123	59,451	63,388	68,344
Narrow money	30,270	31,960	37,794	39,702	41,676
Currency	6,894	6,391	5,681	5,705	5,946
Demand deposits	23,377	25,570	32,113	33,997	35,729
Quasi-money 5/	20,370	18,163	23,548	23,686	26,669
<b>Royal Monetary Authority</b>					
Net foreign assets	32,636	32,723	45,633	50,575	55,113
Indian rupee	-7,824	-10,943	674	-507	2,827
Other	40,459	43,666	44,959	51,082	52,286
Net domestic assets	-12,908	-15,980	-21,636	-23,937	-28,864
Net claims on government	-5,074	173	1,163	-3,855	-7,780
Claims	0	957	1,900	0	0
Minus: deposits	5,074	784	737	3,855	7,780
Claims on deposit money banks	112.7	182.2	2243.6	281.6	1696.9
Claims on private sector	19	19	14	14	28
Minus: RMA bills	20.7	26	0	0	0
Other items (net)	-7,945	-16,328	-25,056	-20,378	-22,809
Reserve money	19727.6	16743.1	23997.4	26638.2	26248.8
<b>Memorandum items:</b>					
	(Change in percent of initial stock of broad money)				
Broad money	21.2	-1.0	18.6	6.6	7.8
Net foreign assets	-0.2	0.8	26.0	8.9	6.9
Net domestic assets	21.4	-1.8	-7.4	-2.3	0.9
Net claims on government	-2.5	8.5	-13.4	9.3	-9.1
Claims on private sector	19.2	20.7	6.2	5.1	11.0
Other items (net)	6.2	-31.3	-1.7	-20.3	-5.3
	(Change in percent of initial stock of reserve money)				
Reserve money	-4.1	-15.1	43.3	11.0	-1.5
Net foreign assets	-0.7	0.4	77.1	20.6	17.0
Net domestic assets	-3.4	-15.6	-33.8	-9.6	-18.5
Money multiplier	2.6	3.0	2.5	2.4	2.6
Velocity of money	1.5	1.7	1.7	1.6	1.5
Broad money/GDP	0.67	0.59	0.59	0.63	0.68
Broad money growth (12-month percent change)	21.2	-1.0	18.6	6.6	7.8
Reserve money growth (12-month percent change)	-4.1	-15.1	43.3	11.0	-1.5
Credit to private sector (12-month percent change)	31.9	31.6	7.1	6.4	14.0

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

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

2/ From 2011/12 onward, public enterprises include government corporations and other public corporations as in the previous definition.

3/ From 2011/12 onward, private sector credit includes joint corporations, NBFIs and private sector as in the previous definition.

4/ Includes foreign exchange valuation adjustments and capital accounts.

5/ Includes time and foreign currency deposits.

**Table 6. Bhutan: Financial Soundness Indicators, 2006/07–2014/15 1/**

(In percent, unless otherwise specified)

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015
	June	June	June	June	June	June	June	June	June	Sep
<b>Risk weighted capital adequacy ratio</b>										
Financial sector	19.9	18.6	17.3	17.1	14.4	18.4	18.2	18.9	17.2	16.5
Banks	16.9	15.9	16.5	17.1	14.2	19.1	18.2	20.0	17.5	17.0
Nonbanks	31.7	28.1	23.6	17.2	16.0	19.4	15.8	14.0	15.7	14.3
<b>NPL ratio</b>										
Financial sector	12.4	13.4	18.3	10.1	8.5	8.2	9.5	12.0	9.5	11.0
Banks	7.3	10.2	18.4	9.5	7.6	8.2	9.5	12.1	9.7	11.9
Nonbanks	28.4	23.5	17.7	15.2	14.1	4.9	11.9	11.3	7.9	6.4
<b>Return on assets</b>										
Financial sector	0.6	0.3	0.1	1.0	0.6	0.9	0.7	0.7	0.5	0.9
Banks	...	0.3	-0.1	0.9	0.4	0.9	0.7	...	0.4	0.7
Nonbanks	...	0.3	2.4	2.1	2.2	3.6	4.2	...	1.8	2.6
<b>Credit to deposit ratio (banks only)</b>	...	70.5	74.2	74.6	81.7	105.8	84.9	82.9	86.4	83.1
<b>Statutory liquidity requirement (SLR)</b>										
Banks	38.3	32.0	27.9	35.5	18.0	27.5	34.4	38.8	29.6	30.5
Nonbanks	20.1	14.0	10.6	20.9	13.9	19.1	23.8	31.2	23.5	14.4

Source: Royal Monetary Authority of Bhutan.

1/ Data are for July–June fiscal years.

## Annex I. Risk Assessment Matrix

Nature/Source of Threat	Likelihood	Impact	Policies to Minimize Impact
<b>Domestic Risks</b>			
<b>Mismatches in rupee inflows and outflows</b>	<b>H</b>	<b>H:</b> Mismatches in Indian rupee inflows and outflows, and prospective bulky debt service payments could lead to renewed pressure on rupee reserves and could tighten liquidity conditions.	Build Indian rupee buffers by holding a larger share of reserves in rupees to meet obligations. Develop a foreign exchange cash-flow forecasting framework to anticipate pressures and build buffers.
<b>Delayed project implementation</b>	<b>M</b>	<b>H:</b> Delays in projected completion of hydropower projects could lead to lower electricity exports and larger fiscal deficits.	Constrain non-essential expenditure growth and implement measures to broaden tax base and improve tax administration.
<b>Debt sustainability</b>	<b>M</b>	<b>M.</b> So far, hydropower projects have been government-to-government. The next generation of hydropower projects will rely on joint ventures, with some risks shifting to the Government of Bhutan.	Strengthen the capacity to evaluate and manage the risks from joint venture hydropower projects.
<b>Bank balance sheet risks</b>	<b>M</b>	<b>M:</b> Following a period of rapid credit growth, banks' assets quality has been volatile and asset-liability maturity mismatch persists. NPLs remain elevated, and liquid assets ratio fell.	Avoid loosening of liquidity conditions. Strengthen and intensify supervision and tighten prudential regulations. Take early action as signs of deteriorating asset quality emerge.
<b>External Risks</b>			
<b>Structurally weak growth in key advanced and emerging economies</b>	<b>M</b>	<b>H:</b> Delays in structural reform could weaken growth in India, which could adversely affect non-hydro exports, aid and hydropower construction disbursements to Bhutan.	Scale back non-essential spending plans while mobilizing domestic revenues, to maintain scope for fiscal response.
<b>Renewed pickup of inflation in India</b>	<b>M</b>	<b>M:</b> The recent slowdown in India's inflation could be temporary, reflecting decline in global commodity prices. Renewed inflation would push up imported inflation from India which would hurt the poor.	Tighten monetary conditions and reduce bank liquidity to prevent second-round effects from building.
<b>Tourism slowdown</b>	<b>H</b>	<b>M:</b> Nepal earthquake and regional security concerns adversely affect tourism receipts.	Promote other sources of BOP receipts such as FDI.

"L"=Low; "M"=Medium; "H"=High.

This matrix shows events that could materially alter the baseline path (the scenario most likely to materialize in the view of IMF staff). The relative likelihood of risks listed is the staff's subjective assessment of the risks surrounding the baseline. The Risk Assessment Matrix reflects staff views on the source of risks and overall level of concern as of the time of discussions with authorities.



# BHUTAN

## STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

June 8, 2016

Prepared By

Asia and Pacific Department

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## FUND RELATIONS

(As of April 30, 2016)

### Membership Status:

Joined: September 28, 1981; Article XIV.

### General Resources Account

	SDR Million	% Quota
Quota	20.40	100.00
Fund Holdings of Currency (Exchange Rate)	15.85	77.72
Reserve Tranche Position	4.55	22.28
Lending to the Fund		

### SDR Department:

	SDR Million	% Allocation
Net cumulative allocation	5.99	100.00
Holdings	5.99	100.03

**Outstanding Purchases and Loans:** None

**Latest Financial Arrangements:** None

### Projected Payments to Fund <sup>1/</sup>

(SDR million; based on existing use of resources and present holdings of SDRs):

	<b>Forthcoming</b>				
	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Principal					
Charges/interest	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

<sup>1/</sup> When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

**Implementation of HIPC Initiative:** Not Applicable

**Implementation of Multilateral Debt Relief Initiative (MDRI):** Not Applicable

**Implementation of Post-Catastrophe Debt Relief (PCDR):** Not Applicable

## Exchange System

Since its introduction in 1974, the ngultrum has been pegged to the Indian rupee at par. Bhutan continues to avail itself of transitional arrangements under Article XIV, Section 2, pursuant to which it maintains exchange restrictions in connection with: (i) the availability of foreign exchange for travel, except for medical travel abroad by Bhutanese citizens, invisibles, and private transfers; (ii) foreign exchange balancing requirement on remittances of income in convertible currencies or other foreign currencies from FDI; and (iii) the availability of foreign exchange for importers who are not able to provide the identity of the seller.

Bhutan also maintains exchange restrictions subject to Fund approval under Article VIII, Section 2(a) in connection with: (i) the FX balancing requirements for imports of capital goods (for projects involving FDI) and primary raw materials (for certain industrial projects); (ii) banning residents who do not comply with the requirement to repatriate export proceeds from accessing foreign exchange for unrelated imports; (iii) requiring foreign direct investment businesses to pay for their establishment and operational expenses from their own convertible currency resources; (iv) requiring Bhutanese companies to pay the interest on and amortization of external loans from their own convertible currency resources; (v) restricting the availability of Indian rupee for making payments and transfers to India in the following current international transactions: personal and business travel and study-abroad living arrangement, family, advance payments for imports from India and to recruit Indian workers and (vi) banning the access to Indian rupee for unrelated current international transactions for those who contravene RMA's 2012 guidelines on Indian rupee transactions. On September 1, 2014, the RMA reintroduced housing and vehicle loans (after temporary suspension of access to Indian rupees to finance imports of personal vehicles and housing construction materials in March 2012).<sup>1</sup>

Staff is in the process of assessing other measures introduced by the authorities with respect to their implications to Bhutan's obligations under Article VIII, Section 2(a) and 3.

## Article IV Consultation

Bhutan is on a 24-month consultation cycle. The 2014 Article IV consultation was concluded by the Executive Board on June 20, 2014.

<sup>1</sup> This measure removed the previous exchange restrictions found on the access to Indian rupee for imports of certain construction materials and vehicles from India. Staff also found that the exchange restriction on access to Indian rupees for salary remittances by non-residents has been removed. For a description of the measures which lead to the remaining findings of exchange restrictions outlined above, please see IMF Country Report No. 14/179 (Informational Annex).

**Technical Assistance****Fiscal (FAD):**

1982, 1983	-	Tax policy, budgeting, and accounting
1984	-	Tax legislation
1984–86, 1988–89	-	Technical experts assigned as General Fiscal Advisor to the Ministry of Finance
1987, 1989	-	Tax system and public enterprises
1992, 2003	-	Income taxation
2003	-	Workshop on tax auditing and revenue forecast
2004	-	Accounting (with MFD)
2009	-	Indirect tax system, scope for VAT introduction
2009, 2015	-	Sales tax/VAT
2012	-	Diagnostic mission on budget preparation
2012, 2013	-	Assistance for cash flow forecasting and cash management
2013, 2016	-	Capacity building on budget analysis through structured management review
2013	-	Treasury management
2013	-	Treasury diagnostic
2013, 2014, 2016	-	Macrofiscal capacity building
2013, 2014	-	Budget planning and analysis
2015	-	Extension of Resident Advisor
2015	-	Cash management
2015	-	Tax policy
2016	-	Treasury single account

**Legal (LEG):**

1982–84	-	Tax legislation
2004, 2005	-	Central banking and financial services legislation and foreign exchange regulations (with MFD)
2011	-	TA in Payments Law
2015	-	National Strategy and Structures & Tools
2015, 2016	-	Enhancing the AML/CFT Regime

**Monetary and Financial (CBD/MAE/MFD/MCM):**

1983	-	Set-up the Royal Monetary Authority (RMA)
1980–92	-	Technical experts assigned as General Advisors to RMA
1989	-	Financial system review
1991	-	Financial sector legislation/development of supervisory capabilities
	-	Technical experts assigned as Advisor for Bank Supervision



1992	-	Issuance of government securities
1993–96	-	Implementation of issuance of government securities
2003	-	Monetary and exchange operations / financial systems
2004	-	Accounting
2004, 2005, 2015	-	Central banking and financial services legislation and foreign exchange regulations
2005, 2007	-	Risk based internal audit policies and practices
2006, 2007	-	Implementation of accounting reforms
2007	-	Debt management and financial markets development
2007	-	Follow-up on excess liquidity issues
2007	-	Follow-up on reserve management
2008	-	Foreign exchange issues
2013	-	Enhancing financial sector surveillance
2013	-	Treasury and reserve management
2015	-	Cash/currency management
2016	-	Reserve Management
2016	-	Banking supervision and regulation
2016	-	Banking and accounting systems

**Statistics (STA):**

1988	-	Trade statistics
1990	-	Statistics database
2004	-	Multisector statistics/GDDS mission
2005, 2009, 2011, 2013-	-	Balance of payments statistics
2010	-	GDDS: Metadata Development
2011, 2012	-	JSA ICP: Producer Price Index
2012	-	Module management/oversight
2012	-	National Accounts - Quarterly
2011, 2013	-	JSA ICP-SNA: Quarterly National Accounts
2013	-	Government Finance Statistics
2013	-	Consumer Price Index
2013	-	Assessment/Evaluation
2016	-	National accounts
2016	-	e-GDDS: National Summary Data Page creation

**Resident Representative:** None.

## RELATIONS WITH THE WORLD BANK GROUP

(As of April 2016)

### **The World Bank Group (WBG) Strategy in Bhutan**

The WBG Board endorsed the new Country Partnership Strategy (CPS) for Bhutan on September 23, 2014. It supports the Royal Government of Bhutan Eleventh Five-Year Plan (11FYP) (2013–2018) approved by the Parliament in October 2013. The government focuses on Self Reliance and Inclusive Green Socio-economic Development in the Eleventh Five year Plan. Self-Reliance is interpreted as “ability to meet all national development needs as articulated through 5 year plans by 2020” and Inclusive development refers to “reducing poverty and inequality by enhancing the standard of living and the quality of life of the most vulnerable sections of the society”.

The CPS seeks to protect Bhutan’s recent gains in reducing poverty through a continued focus on improving rural livelihoods and managing urbanization, while protecting its natural assets (ongoing investment lending in all three areas). The CPS organizes activities under three results areas: (i) improving fiscal and spending efficiency, (ii) increasing private sector growth and competitiveness, and (iii) supporting green development, implemented by the IDA and the IFC, through financial, analytical and advisory support.

### **International Development Association (IDA) - “World Bank”**

#### IDA Portfolio and Pipeline

The World Bank provides around \$15-20 million of new IDA resources per year. There are four ongoing specific investment operations for a net commitment of \$82 million of IDA. These include three country specific IDA operations: Urban Development II and additional financing, Remote Rural Communities Development; one regional IDA project: Regional Cooperation on Wildlife Protection; as well as one GEF grant operation: Sustainable financing for biodiversity conservation. In addition, the Bank manages several small grants for Bhutan on climate resilience, disaster management, public financial management, urban budget processes, REDD+.

The World Bank has also extended three development policy operations over the last six years. The most recent, Development Policy Credit (DPC-2) was approved by the World Bank’s Board of Executive Directors in August 2014 for a total of \$20 million. It is the first of a two-operation series, focusing on macroeconomic and fiscal sustainability and improving the investment climate. Projects under preparation include a regional project to facilitate trade and ICT connectivity, the second and last operation of the Development Policy Credit series, a GAFSP-funded agriculture project, a regional hydromet project and a public transport project funded by GPOBA.

#### Analytical and Advisory Services (ASA)

Ongoing analytic work includes a Public Expenditure and Financial Assessment (PEFA), an assessment of the environmental and social impact of hydropower, a labor market study, an agribusiness note and an investment climate assessment. Recent analytic work include a policy note on the macroeconomic impact of hydropower and the role of public finance, a green growth study, a food-

security policy note, a poverty assessment. Technical assistance activities support an improved investment climate, mining policy, a financial sector action plan and implementation, the review of Bhutan's tourism policy, hydromet, disaster management and climate change (Bhutan is a pilot PPCR country), a procurement review to allow Thimphu municipality to use Alternative Procurement arrangements, support to the statistical system to use CAPI solutions for surveys. A Multi-Donor Trust Fund on Public Financial Management is expected to become effective in September 2016, with the EU and ADA contributing a total of US\$4m. The Bhutan Royal Monetary Authority is expected to become a member of the Reserve Advisory Management Program (RAMP) of the World Bank Treasury.

### **International Finance Corporation (IFC)**

The IFC has a total committed investment portfolio in Bhutan of about \$34 million. The portfolio consists predominantly of IFC's investments in the financial sector and support for the expansion of a local hotel. IFC, using some of its own funds and mobilizing funds from the Global Agriculture and Food Security Program together with ADB are investing \$12 million in a hazelnut plantation project. IFC's first debt assistance of \$10 million to a hotel was made in 2003 and successfully liquidated in June 2015.

The advisory portfolio includes advice in structuring PPPs, improving Bhutan's investment climate and enhancing access to financial services. IFC is also providing assistance to the Ministry of Economic Affairs and Druk Holding and Investments to help them consider setting up a power trading company in India.

IFC continues to explore areas of assistance in the hydropower, tourism, manufacturing, agribusiness, health, and education sectors, among others. IFC's advisory support on investment climate reforms, infrastructure development through PPPs and the financial sector is expected to continue.

### **Multilateral Investment Guarantee Agency (MIGA)**

On October 21, 2014, Bhutan became the 181st member of MIGA. In light of Bhutan's recent membership, MIGA has not provided guarantee coverage for investment in Bhutan to date.

## RELATIONS WITH THE ASIAN DEVELOPMENT BANK

Bhutan became a member in 1982 and ADB began its lending operations to the country in 1983. Bhutan is classified as a Group A country and is eligible for the Asian Development Fund (ADF) resources. Classified as moderately debt stressed, Bhutan has been receiving a 50:50 mix of ADF loan and ADF grant assistance since 2011. Cost-sharing ceiling has been set at 99 percent for loans, technical assistance, and other grants.

ADB assistance has followed closely Bhutan's Five Year Plans (FYP) and been guided by ADB's country partnership strategies (CPS) and country operations business plans (COBP). The CPS (2014-2018) and COBP (2016-2018) are currently being implemented in line with the government's Eleventh FYP (2013-2018) and Strategy 2020—ADB's Long-Term Strategic Framework. The overarching goal of the current CPS (2014-2018) is to support three strategic pillars: inclusive economic growth, environmentally sustainable growth, and regional cooperation and integration (RCI). The core sectors of ADB operations are energy (including development of hydropower generation and transmission) finance, transport, and water and other urban infrastructure and services. The country assistance program evaluation, conducted in 2010, rated ADB country operations and programs in Bhutan *successful*, which were found to be well aligned with country development needs, government development priorities, and Strategy 2020.

ADB has been closely coordinating with other development partners in key sectors to avoid duplication. It provided parallel financing for urban development in Thimphu with the World Bank, and for rural electrification with the Japan International Cooperation Agency and the Austrian Development Agency. ADB also collaborated with SNV on renewable energy, and is currently supporting a pilot biogas project in southern Bhutan, which builds on the experience of SNV to create a viable biogas sector. Other examples of effective partnerships include ADB's rural electrification loans following the Rural Electrification Master Plan, which was developed with assistance from the Government of Japan. Similarly, development partners are using the Road Sector Master Plan, which was developed with ADB assistance. ADB's resident mission in Thimphu is helping further strengthen its partnership and coordination with development partners.

The current COBP covers the period 2016-2018. The indicative cumulative lending allocation for this period is \$327.87 million. The 2016-2018 lending program will help develop the South Asia Subregional Economic Cooperation (SASEC) Transport, Trade Facilitation, and Logistics Project, Air Transport Connectivity Enhancement Project, Urban Infrastructure Project, Improved Urban Environmental Infrastructure Project, Amochhu River Training and Flood Prevention Project, SASEC Green Power Investment Program. A nonlending program of \$2.3 million has been programmed for 2016-2018.

**Ongoing Loans and Grants**  
(As of 31 March 2016)

Project	Year of Approval	Project Amount (\$ million)	Disbursements (\$ million)
<b>LOANS</b>			
Urban Infrastructure Project	2011	18.00	2.42
SASEC Trade Facilitation Program	2012	8.30	
SASEC Road Connectivity Project	2014	28.41	0.0
Second Green Power Development Project (OCR loan)	2014	70.0	2.42
Second Green Power Development Project (ADF loan)	2014	25.25	0.00
Strengthening Economic Management Program II	2015	20.21	0.00
<b>GRANTS</b>			
Rural Renewable Energy Development Project	2010	21.59	16.24
Air Transport Connectivity Enhancement Project	2012	6.92	4.27
SASEC Road Connectivity Project	2014	18.96	1.23
Second Green Power Development Project	2014	25.25	0.00
<p>OCR = Ordinary Capital Resources, SASEC = South Asia Subregional Economic Cooperation</p> <p>Notes: Loans and grants include those funded by ADF and OCR. The first tranche of both the SASEC Trade Facilitation Program and the Strengthening Economic Management Program was released in 2013, and the second/final tranche is expected to be released in 2014.</p>			

## STATISTICAL ISSUES

<b>Statistical Issues Appendix</b> (as of May 20, 2016)	
<b>I. Assessment of Data Adequacy for Surveillance</b>	
<p><b>General:</b> Data provision – particularly timeliness – has some shortcomings, but is broadly adequate for surveillance. Most affected areas are: national accounts, balance of payments, and fiscal data.</p>	
<p><b>Real sector:</b> As part of a Japan-funded technical assistance project for the Implementation of the System of National Accounts and the International Comparison Project, the Statistics Department of the IMF (STA) has been providing technical assistance to improve the national accounts and develop a producer price index.</p>	
<p><b>National Accounts:</b> The accuracy and reliability of the data are affected by inadequate source data. Key shortcomings include heavy reliance on production data collected by line ministries, which often lack quality control, long lags in providing estimates, large revisions of historical data and, in certain cases, ad hoc estimation procedures. Lack of reliable data on expenditure components hampers estimation of national savings and domestic investment. The key factors contributing to the data deficiency are the shortage of qualified personnel and facilities. The National Statistical Bureau (NSB) is also constrained by the absence of a Statistics Act. Thus far, Bhutan does not produce quarterly national accounts data, and STA has been providing TA on the quarterly compilation. Annual data are provided with long lags.</p>	
<p><b>Price statistics:</b> Starting in 2004, the consumer price index (CPI) is compiled on a quarterly basis, the number of commodity prices has been greatly expanded, and the geographical scope broadened. Monthly CPI series for domestic and imported goods starting from April 2013 are now being released.</p>	
<p><b>Government finance statistics:</b> Despite recent improvements in the quality of government finance statistics (GFS), the fiscal data are subject to frequent and substantial revisions, particularly in the expenditure area. The compilation and dissemination of budget execution data and GFS are very limited. Only annual budget execution data are compiled and disseminated, and with a long lag. No GFS are disseminated nationally. The authorities were planning to start producing and distributing internally quarterly data, but thus far there has been little progress. There are inconsistencies between the fiscal and monetary data with regard to bank financing, stemming from differences in the definition of government.</p>	
<p><b>Monetary statistics:</b> While monetary statistics are generally consistent with the Fund's guidelines, there is room for improvement in a number of areas, specifically: (i) the valuation of financial assets is based on purchase price while market or market-price equivalents would be preferable; (ii) to avoid misclassifications, a list of government units and nonfinancial public enterprises should be prepared and shared with the reporting financial institutions; During the technical assistance mission on <i>Monetary and Financial Statistics</i> (MFS) in March 2010, the authorities and STA improved the timeliness of data reporting to STA to be in line with national publications. As part of the mission objectives, the Royal Monetary Authority (RMA) has also submitted to STA the Financial Soundness Indicators (FSI) for Bhutan on a quarterly basis, and the FSI have been published on the IMF's FSI website: <a href="http://fsi.imf.org/">http://fsi.imf.org/</a>.</p>	
<p><b>Balance of payments:</b> External sector statistics has improved recently. BOP and IIP dissemination moved from annual to quarterly, to sixth BOP and IIP format. RMA is expected soon to start reporting external debt statistics to the World Bank's Quarterly External Debt Statistics Database. Coverage, accuracy and timeliness of ESS data has improved. Despite recent improvements, external statistics continue to be affected by shortcomings. These include: (i) limited coverage of services' transactions in the current account, (ii) long lags in dissemination and lack of high frequency data.</p>	
<b>II. Data Standards and Quality</b>	
<p>Bhutan participates in the General Data Dissemination System (GDSS), and posted metadata for the first time on the Fund's Dissemination Standard Bulletin Board (DSBB) in May 2010. After the e-GDSS superseded the GGDS in May 2015, Bhutan was assessed as Baseline-2, disseminating all 15 recommended data categories. STA is providing assistance in creating a National Summary Data Page consistent with e-GDSS.</p>	<p>No data ROSC is available.</p>

**Table of Common Indicators Required for Surveillance**  
(as of May 20, 2016)

	Date of Latest Observation	Date Received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>8</sup>	Frequency of Publication <sup>8</sup>
Exchange rates	03/2016	03/2016	D	D	D
International reserve assets and reserve liabilities of the Monetary Authorities <sup>1</sup>	02/2016	05/2016	M	M	M
Reserve/base money	02/2016	05/2016	M	M	M
Broad money	02/2016	05/2016	M	M	M
Central bank balance sheet	02/2016	05/2016	M	M	M
Consolidated balance sheet of the banking system	02/2016	05/2016	M	M	M
Interest rates <sup>2</sup>	03/2016	05/2016	M	M	M
Consumer price index <sup>3</sup>	02/2016	05/2016	Q/M	M	M
Revenue, expenditure, balance and composition of financing <sup>4</sup> – general government <sup>5</sup>	2013/14	06/2015	A	A	A
Revenue, expenditure, balance and composition of financing <sup>3</sup> – central government	2013/14	06/2015	A	A	A
Stocks of central government and central government-guaranteed debt <sup>6</sup>	6/2015	12/2015	A	A	A
External current account balance	09/2015	05/2016	Q	Q	Q
Exports and imports of goods and services	09/2015	05/2016	Q	Q	Q
GDP/GNP	2014	12/2015	A	A	A
Gross external debt	12/2015	05/2015	Q	Q	Q
International investment position <sup>7</sup>	09/2015	05/2016	Q	Q	Q

<sup>1</sup> Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

<sup>2</sup> Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>3</sup> Monthly CPI data for domestic and imported goods is available from April 2013 onward.

<sup>4</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>5</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

<sup>6</sup> Including currency and maturity composition.

<sup>7</sup> Includes external gross financial asset and liability positions vis-à-vis nonresidents.

<sup>8</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA).



# BHUTAN

## STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—DEBT SUSTAINABILITY ANALYSIS<sup>1</sup>

June 8, 2016

### Approved By

**Paul Cashin and Andrea  
Richter Hume (IMF) and  
Satu Kahkonen (IDA)**

### Prepared by

International Monetary Fund  
International Development Association

*The assessment of Bhutan's external risk has not changed materially from the 2014 DSA. Since FY2010/11, Bhutan's rapid hydropower development has led to a substantial buildup of external debt. As a consequence, external debt ratios breach all indicative thresholds, and these breaches are projected to continue for several more years.<sup>2</sup> The extent and length of these breaches indicate a high risk of external debt distress. However, based on unique mitigating circumstances (as spelled out in the 2014 DSA), staff continue to assess Bhutan's external risk as moderate. These mitigating factors are as follows. A large share of external debt is linked to hydropower project loans from the Government of India (GoI). GoI covers both financial and construction risks of these projects and buys the surplus electricity output at a price reflecting cost plus a 15 percent net return. India's large unmet demand for power and the political commitment to increase its reliance on clean energy ensure a strong demand even in the current environment of low prices of alternative energy sources. As a result, Bhutan's debt situation is expected to improve in the medium and long term, reflecting significantly higher electricity exports when hydropower projects come on stream. This being said, stress tests to public sector debt dynamics reveal the need for fiscal consolidation and the importance of sustaining economic growth going forward.*

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<sup>1</sup> This DSA was prepared by IMF and International Development Association staff in collaboration with the Asian Development Bank and Bhutanese authorities. The analysis updates the previous Joint DSA dated May 30, 2014 (IMF Country Report No. 14/178). The DSA follows the IMF and World Bank Staff Guidance Note on the Application of the Joint Fund-Bank Debt Sustainability Framework for Low-Income Countries (November 7, 2013). The data underlying the analysis are from the Bhutanese authorities, IMF, and World Bank staff estimates.

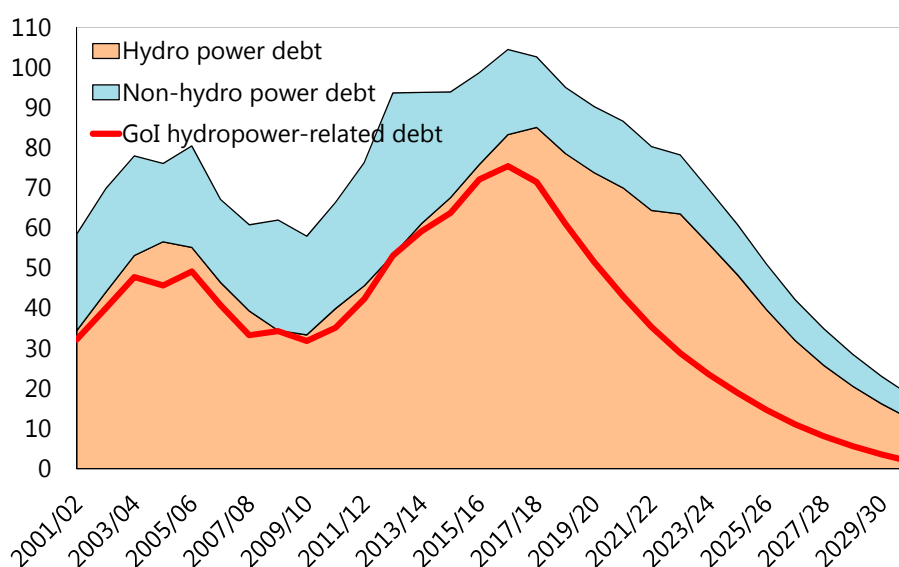
<sup>2</sup> The magnitude of the breach has increased due to the revision of the Country Policy and Institutional Ratings (CPIA) to medium, from a strong rating in the 2014 DSA. In 2013 and 2014, Bhutan's 3-year moving average CPIA ratings were 3.74 and 3.71, marginally below the "strong" rating threshold of 3.75.



## BACKGROUND

1. **Bhutan's public and publicly guaranteed (PPG) external debt jumped to 94 percent of GDP in 2013, up from 75 percent of GDP in 2012, and has remained relatively stable in 2014 and 2015.**<sup>3</sup> The earlier rise in public debt was driven mainly by hydropower sector-related external borrowing (see text chart below). Hydropower projects are primarily financed by India with a mix of loans (70 percent) and grants (30 percent).<sup>4</sup> External debt continues to be dominated in Indian rupees (and related to hydropower sector debt), which accounts for about 70 percent of total external debt, with convertible currency debt accounting only 30 percent of GDP. Domestic debt remains a small fraction of public debt.

**Hydro and Non-hydro Power Debt Outstanding**  
(In percent of GDP)



## UNDERLYING DEBT SUSTAINABILITY ANALYSIS ASSUMPTIONS

2. **The baseline scenario assumes that additional expansion of Bhutan's power generation capacity will triple the generation capacity.** Presently, five hydropower plants are operating, with total capacity about 1,600 megawatts (MW). The hydropower development policy of Bhutan currently envisages eight new hydropower projects to be commissioned by 2026 (see table below), adding 5,200 MW to

<sup>3</sup> The DSA uses fiscal years (FY). For example, 2013 means FY 2012/13.

<sup>4</sup> The second generation of hydropower projects will be based on joint venture (JV) models (see text table below). In this model, 70 percent of the project will be financed by loans from India, while the remaining 30 percent will be financed by equity equally split between India and Bhutan's governments. India will provide a grant to Bhutan to finance its equity share.

Bhutan's power generation capacity.<sup>5</sup> Total techno-economically feasible hydropower potential is estimated to be 24,000 MW. External financing for non-hydropower sector activities continues to remain predominantly from multilateral and bilateral donors at concessional terms.

### Hydropower Projects in the Pipeline

	Capacity (MW)	Date of Commissioning	Development Model
Mangdechhu	720	2017-18	IG
Puna-II	1020	2017-18	IG
Puna-I	1200	2018-19	IG
Nikachhu	118	2018-19	JV
Kholungchhu	600	2022-23	JV
Bunakha	180	2023-24	JV
Chamkharchhu-I	770	2025-26	JV
Wangchhu	570	2025-26	JV
<b>Total</b>	<b>5178</b>		

### 3. The hydropower sector will continue to have a major impact on the rest of the economy as summarized by the following key baseline macroeconomic assumptions.

- Real sector:** Similar to the spike in real GDP when Tala was commissioned in 2006/07, Puna I, Mangdechhu and Puna II will continue to boost economic growth as they come on stream in 2017/18 and 2018/19.<sup>6</sup> Real growth is projected to average around 9 percent in 2016–21, higher than the 10-year historical average of 7.4 percent. Growth will accelerate significantly in 2018–2019, with the commissioning of the above-mentioned plants, and then moderate to an average 5.5 percent in 2022–36.
- Fiscal sector:** Upon completion, the commissioning of hydropower projects will boost temporarily the domestic revenue-to-GDP ratio, mainly as a result of higher nontax revenues (transfer of profits and dividend payments). External budgetary aid is assumed to decline sharply during the 13<sup>th</sup> FYP (2024–2028) as Bhutan's per capita income rises. On average, the overall fiscal deficit remains broadly balanced over the long term.
- External sector:** The current account deficit is projected to remain close to the current levels till 2017, and then to start declining rapidly, as a result of significant increase in electricity exports upon the completion of hydropower projects. In the medium-term, electricity exports are estimated to more than quintuple from current levels, and the current account balance should move to a surplus by 2025, with external reserves increasing significantly.

<sup>5</sup> There is uncertainty surrounding the exact timing of the projects, as well as the future of some additional projects under discussion that are not included in the projection.

<sup>6</sup> Prior to commissioning, construction of these hydropower plants has been the second largest contributor after services to real growth during the 10<sup>th</sup> FYP. A more than doubling of electricity generation capacity with the commissioning of these plants will lead to a jump in electricity exports and fiscal revenue, providing a much larger boost to economic growth in comparison to the construction phase.

## Key Macroeconomic Assumptions

	10 year Historical Average	Baseline Average	
		2016–2021	2022–2036
Current transfers, net total (in percent of GDP)	6.7	3.7	-0.4
Real GDP growth (percent)	7.4	8.6	5.5
Growth of exports of goods and services (US dollar terms)	13.8	16.3	5.7
Non-interest current account deficit (in percent of GDP)	14.3	13.9	-0.5
Primary deficit (in percent of GDP)	-2.3	-4.0	-0.6

## EXTERNAL DEBT SUSTAINABILITY ANALYSIS

## A. Baseline

**4. Bhutan's external debt ratios remain above the LIC-DSA indicative thresholds during the first half of the projected period under the baseline, but the commissioning of the hydropower projects in 2017/18 and 2018/19 and the start of debt repayment put the debt ratio on a steady downward trajectory.** Bhutan's external debt is driven mainly by hydropower developments. External PPG debt as a share of GDP is projected to peak at 113 percent in 2017, with disbursements for hydropower-sector projects, before declining slightly to 111 percent of GDP in 2018.<sup>7</sup> As the first phase of hydro construction comes to an end (see table above) and debt repayment starts, the stock of PPG debt is projected to start falling briskly, to below the 50 percent of GDP by 2026, and to below 10 percent of GDP by 2036. As a result, the present value (PV) of PPG external debt-to-GDP gradually declines to only 5 percent over the long term, crossing the 40 percent indicative threshold in 2027. The PV of PPG debt-to-exports ratio remains above the threshold of 150 percent until 2024, but falls to 15 percent at the end of the projected period. Similarly, the PV of PPG external debt-to-revenues ratio peaks at close to 722 percent in 2018, but falls below the 250 percent threshold in 2025, and to 24 percent by 2036.

**5. The PPG debt service-to-export ratio is projected to exceed the indicative thresholds in the medium term intermittently by a relatively small margin.** The PPG debt service-to export ratio peaks at around 24 percent in 2017 and 2018. However, as exports pick up and debt repayment declines, the ratio falls below the 20 percent threshold by 2019, before rising above the threshold again marginally in 2020–22. In contrast, reflecting partly conservative revenue projection, the debt service-to-revenue ratio remains moderately above the 20 percent indicative threshold for most of the projected period, falling below only in 2032.

## B. Sensitivity Analysis

**6. The indicative thresholds for the PV of PPG external debt-to-GDP, debt-to-exports and debt-to-revenue ratios are breached under alternative scenarios and stress tests.** All these indicators breach

<sup>7</sup> In the 2014 DSA, public external debt was projected to peak at 120 percent of GDP. The main reason for the lower debt in the present DSA is the lower number of hydropower projects in the pipeline (three projects less).

their respective thresholds after the shocks in 2016, and most continue to breach the threshold for an extended period of time. The standard sensitivity analysis points to a high risk of debt distress (Figure 1 and Table 2). In particular, historical alternative scenario and bound test with exports in 2017–18 linked to historical average show very large breach. However, these scenarios fail to capture the projected jump in hydropower exports or fiscal revenues. Similarly, the worsening of external debt indicators under the bound test of 30 percent nominal depreciation in 2017 overestimates Bhutan's debt vulnerability as a large share of Bhutan's external income is in Indian rupees, which act as a natural hedge to the largely rupee-denominated external debt.

**7. Debt service ratios indicative thresholds, too, are breached for large part of the projection period.** As in the case of PPG external debt ratios, the historical scenario shows the largest breach for the debt service ratios as well. Debt service ratios remain above their respective thresholds under the historical scenario for the whole projection period. Under the bound tests, debt service ratios return eventually below their thresholds, but mostly late in the projection period.

## PUBLIC DEBT SUSTAINABILITY ANALYSIS

### A. Baseline

**8. The baseline public debt dynamics follows closely that of the external debt.** The PV of public debt exceeds the public debt benchmark by a significant amount. The public debt-to-GDP ratio is projected to peak at around 115 percent of GDP in 2017, less than the 129 percent of GDP peak in the 2014 DSA. After 2017, public debt is projected to decline steadily, falling to below 60 percent in 2027 and to 49 percent by 2036. Bhutan's public debt consists mainly of the external debt, and thus the same assessment of the unique mitigating circumstances as in the case of the PPG external debt above applies. With the gradually declining role of external financing, domestic financing is assumed to start playing a larger role in the financing of the development agenda, and the share of domestic debt in the public debt will increase.

### B. Sensitivity Analysis

**9. The public debt ratios are projected to be on a declining path over the long term under alternative scenarios and various stress tests.** However, the scenario with the primary balance unchanged from the 2016 level fails to capture additional revenues from the commissioned hydropower plants, and shows only a very gradual decline in the debt ratio. The sensitivity analysis also suggests that the debt and debt service ratios are sensitive to negative growth shocks. However, the size of the negative growth shock in 2017–20 is substantially magnified by the fact that growth is projected to peak during this period, with the commissioning of the new hydropower plants.

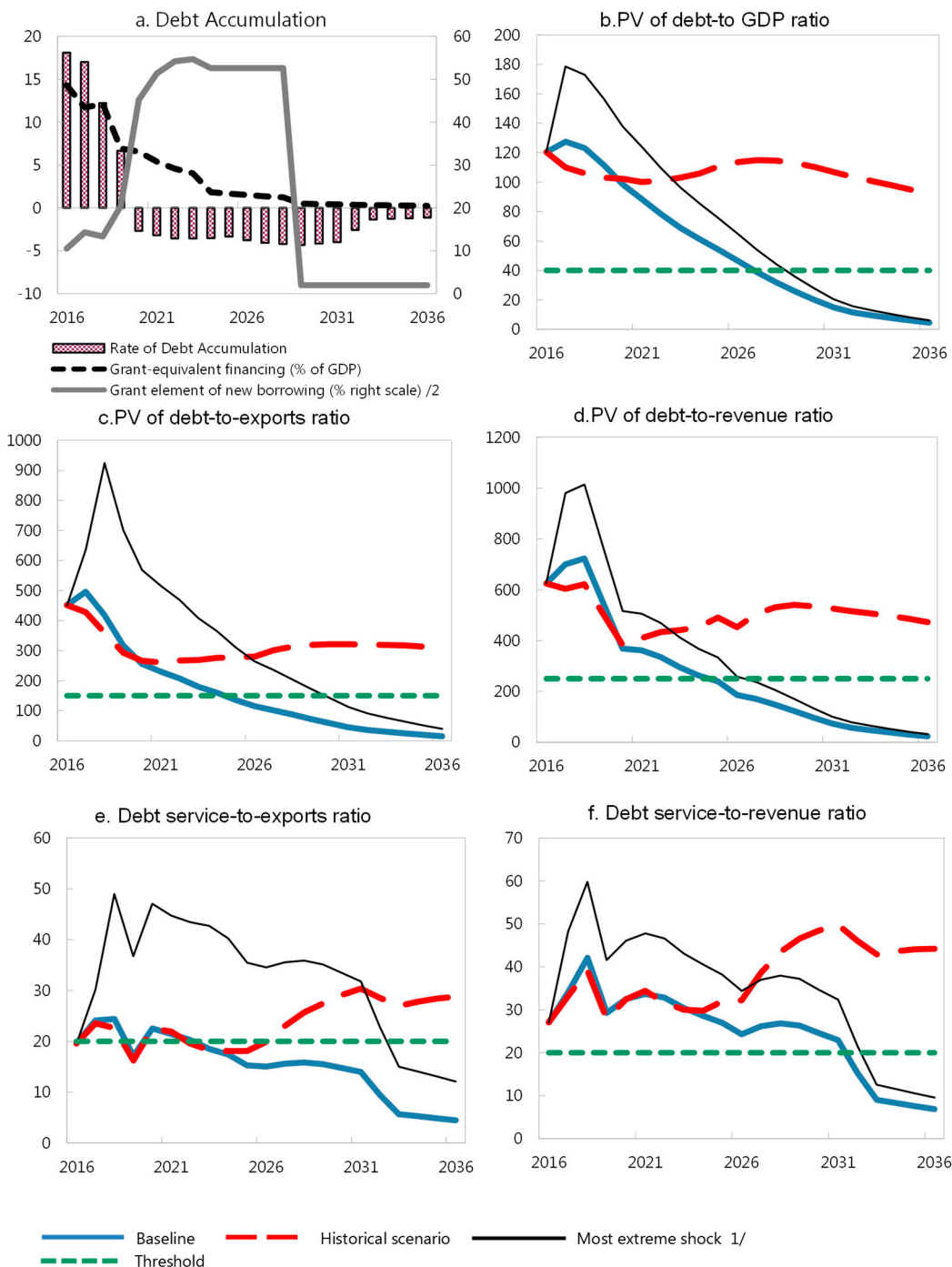
## STAFF ASSESSMENT

**10. The current assessment remains broadly the same as the assessment made in the 2014 IMF/World Bank Joint DSA, which found that Bhutan's debt dynamics are subject to a moderate risk of distress.** Even though Bhutan's PPG external debt indicators continue to breach external debt thresholds

by large margins and for a long period, the unique and mitigating factors discussed in detail in the 2014 DSA remain valid and underpin staffs' unchanged assessment.

- The current and projected PPG external debt is now somewhat less than projected in the 2014 DSA, due to the fact that some hydropower projects have been put on hold. In 2015, PPG external debt stock reached 94.5 percent of GDP, 20 percentage points less than projected in the previous DSA. However, as mentioned above, Bhutan's CPIA rating has also worsened, from 'strong' to "medium"—even though the overall decline in CPIA score was relatively modest, to 3.74 and 3.71, marginally below the "strong" rating threshold of 3.75. Even with the lower CPIA rating and thus lower debt and debt service thresholds, these are mostly breached for similar or shorter period than in the previous DSA, reflecting the lower current and projected debt.
- India provides explicit guarantees that cover financial and construction risks for the intra-governmental hydropower projects. In addition, India buys all surplus power that is not consumed domestically, and the price is on a cost-plus basis which includes a net return of 15 percent. As a result, hydropower loans from India are more akin to foreign direct investment rather than debt-creating loans. Moreover, in power-hungry India, there is little risk of insufficient demand for future hydropower supply. This arrangement significantly reduced the risk of external debt distress.
- Bhutan's hydropower production, exports and thus the capacity to service its debt will increase only in the medium term. Therefore, staff continue to advise against any nonconcessional borrowing at this stage. As highlighted previously and confirmed again by the present DSA, Bhutan is vulnerable to adverse shocks. DSA's stress testing illustrates potential vulnerabilities in Bhutan's external debt situation to export and growth shocks, as well as to shortfalls in aid inflows and failure to reverse declining tax revenues.
- Assuming they are effectively executed and associated macroeconomic challenges properly managed, the additional hydropower projects should eventually bring solid economic dividends, supporting higher exports and income.
- The authorities agreed with staff's assessment of external risk. They emphasized that the projected increase in hydropower exports should help repay a big part of the external debt, and underscored the need to take this factor into account when assessing the external debt vulnerability.

**Figure 1. Bhutan: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2016–2036 1/**

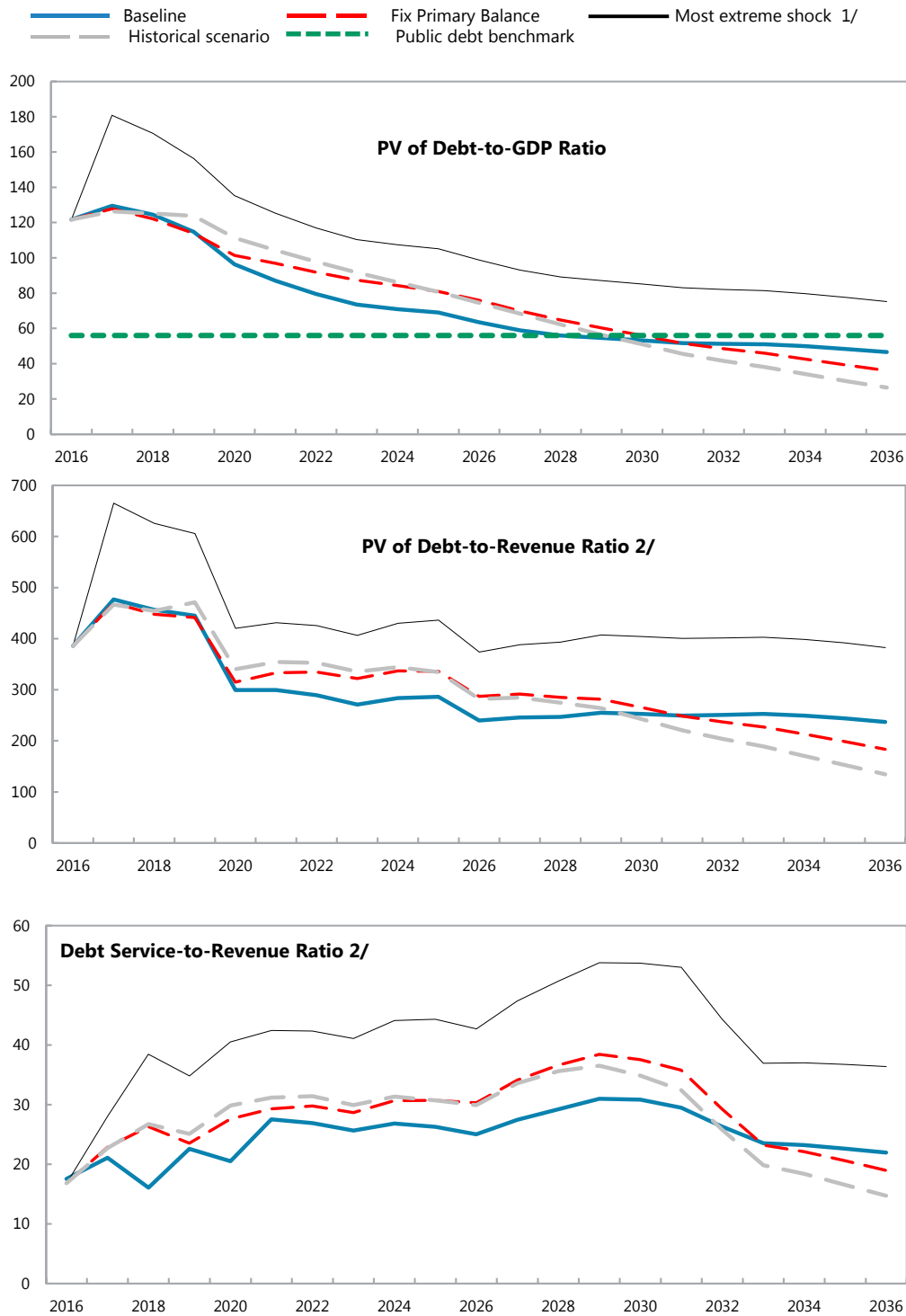


Sources: Country authorities; and staff estimates and projections.

1/ The most extreme stress test is the test that yields the highest ratio on or before 2026. In figure b. it corresponds to a One-time depreciation shock; in c. to a Exports shock; in d. to a One-time depreciation shock; in e. to a Exports shock and in figure f. to a One-time depreciation shock

2/ Sharp drop in grant element of new borrowing reflects a decline in the amount of new external borrowing, in part as a result of growing reliance on domestic financing.

**Figure 2. Bhutan: Indicators of Public Debt Under Alternative Scenarios, 2016–2036 1/**



Sources: Country authorities; and staff estimates and projections.  
 1/ The most extreme stress test is the test that yields the highest ratio on or before 2026.  
 2/ Revenues are defined inclusive of grants.

**Table 1. Bhutan: External Debt Sustainability Framework, Baseline Scenario, 2013–2036 1/**

(In percent of GDP, unless otherwise indicated)

	Actual			Historical Average	Standard Deviation	Projections									
	2013	2014	2015			2016	2017	2018	2019	2020	2021	2016-2021 Average		2026	2036
<b>External debt (nominal) 1/</b>	<b>94.1</b>	<b>93.6</b>	<b>94.5</b>			<b>105.8</b>	<b>113.0</b>	<b>110.7</b>	<b>101.0</b>	<b>89.6</b>	<b>81.3</b>		<b>44.8</b>	<b>6.7</b>	
<i>of which: public and publicly guaranteed (PPG)</i>	94.1	93.6	94.5			105.8	113.0	110.7	101.0	89.6	81.3		44.8	6.7	
Change in external debt	19.0	-0.4	0.9			11.2	7.2	-2.3	-9.8	-11.3	-8.3		-6.6	-1.7	
Identified net debt-creating flows	21.7	27.1	18.4			20.8	23.7	8.0	-0.6	-4.8	-0.5		-5.4	2.2	
<b>Non-interest current account deficit</b>	<b>22.6</b>	<b>24.0</b>	<b>26.8</b>	<b>14.3</b>	<b>12.4</b>	<b>26.6</b>	<b>29.7</b>	<b>16.8</b>	<b>10.5</b>	<b>-0.6</b>	<b>0.7</b>		<b>-4.2</b>	<b>3.9</b>	-0.5
Deficit in balance of goods and services	20.4	21.5	20.8			26.4	28.0	18.6	8.5	0.9	0.3		-7.2	3.2	
Exports	29.5	29.2	28.7			26.7	25.7	29.5	35.2	38.4	38.4		40.5	29.8	
Imports	49.9	50.7	49.5			53.1	53.7	48.0	43.7	39.3	38.7		33.3	33.0	
Net current transfers (negative = inflow)	-6.9	-5.3	-4.0	-6.7	3.2	-6.7	-4.5	-5.4	-2.0	-2.2	-1.6		0.6	0.6	0.4
<i>of which: official</i>	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other current account flows (negative = net inflow)	9.0	7.7	10.0			6.9	6.2	3.6	4.1	0.7	2.0		2.4	0.1	
<b>Net FDI (negative = inflow)</b>	<b>-2.7</b>	<b>-0.5</b>	<b>-1.7</b>	<b>-3.0</b>	<b>4.2</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>	<b>-1.5</b>		<b>-1.5</b>	<b>-1.5</b>	-1.5
<b>Endogenous debt dynamics 2/</b>	<b>1.8</b>	<b>3.7</b>	<b>-6.7</b>			<b>-4.2</b>	<b>-4.5</b>	<b>-7.4</b>	<b>-9.6</b>	<b>-2.7</b>	<b>0.3</b>		<b>0.3</b>	<b>-0.1</b>	
Contribution from nominal interest rate	3.2	2.7	2.0			1.3	1.8	4.0	3.7	5.0	4.7		3.2	0.2	
Contribution from real GDP growth	-2.6	-3.6	-4.4			-5.5	-6.3	-11.3	-13.2	-7.7	-4.4		-2.9	-0.4	
Contribution from price and exchange rate changes	1.2	4.6	-4.3			...	...	...	...	...	...		...	...	
<b>Residual (3-4) 3/</b>	<b>-2.7</b>	<b>-27.6</b>	<b>-17.6</b>			<b>-9.6</b>	<b>-16.5</b>	<b>-10.2</b>	<b>-9.2</b>	<b>-6.5</b>	<b>-7.8</b>		<b>-1.1</b>	<b>-3.9</b>	
<i>of which: exceptional financing</i>	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
PV of external debt 4/	...	...	107.5			120.4	127.6	123.3	111.7	98.3	88.4		46.6	4.6	
In percent of exports	...	...	374.9			451.5	496.3	418.4	317.3	255.7	230.1		114.9	15.3	
<b>PV of PPG external debt</b>	<b>...</b>	<b>...</b>	<b>107.5</b>			<b>120.4</b>	<b>127.6</b>	<b>123.3</b>	<b>111.7</b>	<b>98.3</b>	<b>88.4</b>		<b>46.6</b>	<b>4.6</b>	
In percent of exports	...	...	374.9			451.5	496.3	418.4	317.3	255.7	230.1		114.9	15.3	
In percent of government revenues	...	...	512.3			625.1	700.3	722.7	544.2	368.3	361.7		185.8	23.5	
<b>Debt service-to-exports ratio (in percent)</b>	<b>19.5</b>	<b>33.6</b>	<b>22.9</b>			<b>19.6</b>	<b>24.1</b>	<b>24.4</b>	<b>17.1</b>	<b>22.6</b>	<b>21.4</b>		<b>15.0</b>	<b>4.5</b>	
<b>PPG debt service-to-exports ratio (in percent)</b>	<b>19.5</b>	<b>33.6</b>	<b>22.9</b>			<b>19.6</b>	<b>24.1</b>	<b>24.4</b>	<b>17.1</b>	<b>22.6</b>	<b>21.4</b>		<b>15.0</b>	<b>4.5</b>	
<b>PPG debt service-to-revenue ratio (in percent)</b>	<b>27.6</b>	<b>46.8</b>	<b>31.3</b>			<b>27.1</b>	<b>34.0</b>	<b>42.1</b>	<b>29.3</b>	<b>32.5</b>	<b>33.7</b>		<b>24.3</b>	<b>6.9</b>	
Total gross financing need (Billions of U.S. dollars)	0.5	0.7	0.6			0.6	0.8	0.6	0.4	0.2	0.3		0.0	0.4	
Non-interest current account deficit that stabilizes debt ratio	3.6	24.4	26.0			15.3	22.4	19.1	20.3	10.7	9.0		2.3	5.5	
<b>Key macroeconomic assumptions</b>															
Real GDP growth (in percent)	3.6	3.8	5.2	7.4	3.0	6.0	6.4	11.3	13.9	8.5	5.2		8.6	6.1	5.0
GDP deflator in US dollar terms (change in percent)	-1.6	-4.7	4.8	2.9	7.6	-2.5	1.5	1.7	2.1	2.3	2.2		1.2	2.0	2.0
Effective interest rate (percent) 5/	4.3	2.8	2.3	3.5	1.6	1.4	1.8	4.0	3.8	5.5	5.6		3.7	6.7	3.1
Growth of exports of G&S (US dollar terms, in percent)	-11.5	-2.0	8.2	13.8	30.9	-3.9	4.0	29.8	39.0	21.2	7.6		16.3	9.7	5.2
Growth of imports of G&S (US dollar terms, in percent)	-8.8	0.5	7.5	9.6	19.9	10.9	9.2	1.3	5.8	-0.2	6.0		5.5	7.9	7.0
Grant element of new public sector borrowing (in percent)	...	...	...	...	...	10.5	14.3	13.3	20.4	45.2	51.4		25.9	52.6	2.0
Government revenues (excluding grants, in percent of GDP)	20.8	21.0	21.0			19.3	18.2	17.1	20.5	26.7	24.5		25.1	19.4	21.5
Aid flows (in Billions of US dollars) 7/	0.7	0.5	0.5			0.3	0.3	0.3	0.2	0.3	0.2		0.1	0.0	
<i>of which: Grants</i>	0.2	0.2	0.2			0.3	0.2	0.3	0.2	0.2	0.2		0.1	0.0	
<i>of which: Concessional loans</i>	0.5	0.3	0.4			0.0	0.1	0.1	0.1	0.1	0.1		0.0	0.0	
Grant-equivalent financing (in percent of GDP) 8/	...	...	...			14.3	11.7	12.1	6.9	6.6	5.4		1.5	0.3	1.3
Grant-equivalent financing (in percent of external financing) 8/	...	...	...			45.3	41.6	49.4	51.6	83.8	87.9		91.6	100.0	96.3
<b>Memorandum items:</b>															
Nominal GDP (Billions of US dollars)	1.8	1.8	2.0			2.1	2.3	2.5	3.0	3.3	3.5		5.1	10.5	
Nominal dollar GDP growth	1.9	-1.0	10.2			3.4	8.0	13.3	16.3	11.0	7.5		9.9	8.1	7.0
PV of PPG external debt (in Billions of US dollars)	...	...	2.1			2.5	2.8	3.1	3.3	3.2	3.1		2.4	0.5	
(PVt-PVt-1)/GDPt-1 (in percent)	...	...	...			18.1	17.0	12.2	6.7	-2.7	-3.2		8.0	-3.8	-1.1
Gross workers' remittances (Billions of US dollars)	...	...	...			...	...	...	...	...	...		...	...	...
PV of PPG external debt (in percent of GDP + remittances)	...	...	107.5			120.4	127.6	123.3	111.7	98.3	88.4		46.6	4.6	
PV of PPG external debt (in percent of exports + remittances)	...	...	374.9			451.5	496.3	418.4	317.3	255.7	230.1		114.9	15.3	
Debt service of PPG external debt (in percent of exports + remittances)	...	...	22.9			19.6	24.1	24.4	17.1	22.6	21.4		15.0	4.5	

Sources: Country authorities; and staff estimates and projections.

1/ Includes both public and private sector external debt.

 2/ Derived as  $[r - g - \rho(1+g)] / (1+g+\rho+g\rho)$  times previous period debt ratio, with  $r$  = nominal interest rate;  $g$  = real GDP growth rate, and  $\rho$  = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

Sizable capital grants are part of residuals.

4/ Assumes that PV of private sector debt is equivalent to its face value.

5/ Current-year interest payments divided by previous period debt stock.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

7/ Defined as grants, concessional loans, and debt relief.

8/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the PV of new debt).



**Table 2. Bhutan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016–2036**  
(In percent)

	Projections							2036
	2016	2017	2018	2019	2020	2021	2026	
<b>PV of debt-to-GDP ratio</b>								
<b>Baseline</b>	120	128	123	112	98	88	<b>47</b>	5
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2016-2036 1/	120	110	106	103	102	100	<b>114</b>	92
A2. New public sector loans on less favorable terms in 2016-2036 2/	120	131	130	120	108	98	<b>56</b>	13
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	120	128	133	120	105	95	<b>50</b>	5
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	120	130	139	125	111	101	<b>54</b>	6
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	120	134	138	126	110	99	<b>52</b>	5
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	120	129	129	117	103	93	<b>49</b>	5
B5. Combination of B1-B4 using one-half standard deviation shocks	120	131	146	132	117	106	<b>57</b>	6
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	120	179	173	157	138	124	<b>65</b>	6
<b>PV of debt-to-exports ratio</b>								
<b>Baseline</b>	451	496	418	317	256	230	<b>115</b>	15
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2016-2036 1/	451	428	360	293	266	261	<b>280</b>	308
A2. New public sector loans on less favorable terms in 2016-2036 2/	451	510	441	342	280	256	<b>139</b>	43
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	451	489	413	314	252	227	<b>113</b>	14
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	451	636	924	701	569	516	<b>264</b>	40
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	451	489	413	314	252	227	<b>113</b>	14
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	451	502	438	332	268	242	<b>122</b>	17
B5. Combination of B1-B4 using one-half standard deviation shocks	451	524	625	474	383	346	<b>176</b>	25
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	451	489	413	314	252	227	<b>113</b>	14
<b>PV of debt-to-revenue ratio</b>								
<b>Baseline</b>	625	700	723	544	368	362	<b>186</b>	24
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2016-2036 1/	625	604	622	503	383	410	<b>453</b>	473
A2. New public sector loans on less favorable terms in 2016-2036 2/	625	720	762	587	403	402	<b>225</b>	66
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	625	704	777	585	395	388	<b>198</b>	24
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	625	715	812	611	417	413	<b>217</b>	31
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	625	735	812	611	413	405	<b>207</b>	25
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	625	709	756	569	386	380	<b>197</b>	26
B5. Combination of B1-B4 using one-half standard deviation shocks	625	719	857	646	438	433	<b>226</b>	30
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	625	981	1014	764	516	506	<b>259</b>	31

**Table 2. Bhutan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2016–2036 (concluded)**

(In percent)

Debt service-to-exports ratio								
<b>Baseline</b>	20	24	24	17	23	21	<b>15</b>	4
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2016-2036 1/	20	24	23	16	23	22	<b>20</b>	29
A2. New public sector loans on less favorable terms in 2016-2036 2/	20	24	22	16	22	21	<b>16</b>	4
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	20	24	24	17	23	21	<b>15</b>	4
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	20	30	49	37	47	45	<b>35</b>	12
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	20	24	24	17	23	21	<b>15</b>	4
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	20	24	25	18	23	22	<b>16</b>	5
B5. Combination of B1-B4 using one-half standard deviation shocks	20	25	34	25	33	31	<b>23</b>	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	20	24	24	17	23	21	<b>15</b>	4
<b>Debt service-to-revenue ratio</b>								
<b>Baseline</b>	27	34	42	29	32	34	<b>24</b>	7
<b>A. Alternative Scenarios</b>								
A1. Key variables at their historical averages in 2016-2036 1/	27	33	39	28	32	34	<b>32</b>	44
A2. New public sector loans on less favorable terms in 2016-2036 2/	27	34	39	28	32	34	<b>26</b>	5
<b>B. Bound Tests</b>								
B1. Real GDP growth at historical average minus one standard deviation in 2017-2018	27	35	46	32	35	37	<b>26</b>	7
B2. Export value growth at historical average minus one standard deviation in 2017-2018 3/	27	34	43	32	34	36	<b>28</b>	9
B3. US dollar GDP deflator at historical average minus one standard deviation in 2017-2018	27	36	48	33	37	38	<b>28</b>	8
B4. Net non-debt creating flows at historical average minus one standard deviation in 2017-2018 4/	27	34	43	30	33	35	<b>26</b>	8
B5. Combination of B1-B4 using one-half standard deviation shocks	27	35	47	34	37	39	<b>30</b>	9
B6. One-time 30 percent nominal depreciation relative to the baseline in 2017 5/	27	48	60	42	46	48	<b>34</b>	10
<i>Memorandum item:</i>								
Grant element assumed on residual financing (i.e., financing required above baseline) 6/	13	13	13	13	13	13	<b>13</b>	13

Sources: Country authorities; and staff estimates and projections.

1/ Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and non-debt creating flows.

2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.

3/ Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly a an offsetting adjustment in import levels).

4/ Includes official and private transfers and FDI.

5/ Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

6/ Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Table 3. Bhutan: Public Sector Debt Sustainability Framework, Baseline Scenario, 2013–2036

(In percent of GDP, unless otherwise indicated)

	Actual			Average <sup>6/</sup>	Standard Deviation <sup>6/</sup>	Estimate					Projections				
	2013	2014	2015			2016	2017	2018	2019	2020	2021	2016-21 Average	2026	2036	2022-36 Average
<b>Public sector debt 1/</b>	100.3	96.2	96.2			107.1	115.0	112.0	104.1	87.8	80.0		61.6	48.7	
<i>of which: foreign-currency denominated</i>	94.1	93.6	94.5			105.8	113.0	110.7	101.0	89.6	81.3		44.8	6.7	
Change in public sector debt	24.1	-4.1	0.0			10.9	7.9	-3.1	-7.9	-16.3	-7.8		-4.6	-2.0	
Identified debt-creating flows	1.2	-12.3	-5.7			-5.3	-6.2	-11.5	-15.5	-14.3	-9.1		-4.3	-1.9	
Primary deficit	1.6	-5.7	-3.1	-2.3	2.4	-2.2	-0.1	-1.8	-3.4	-9.2	-7.6	-4.0	-3.0	-0.2	
Revenue and grants	30.2	33.6	28.9			31.5	27.2	27.3	25.8	32.2	29.1		26.4	19.6	
<i>of which: grants</i>	9.4	12.7	8.0			12.3	9.0	10.2	5.3	5.5	4.6		1.4	0.3	
Primary (noninterest) expenditure	31.8	27.9	25.8			29.4	27.1	25.5	22.4	23.0	21.4		23.4	19.5	
Automatic debt dynamics	-0.3	-6.6	-2.6			-3.1	-6.1	-9.8	-12.1	-5.1	-1.5		-1.3	-1.7	
Contribution from interest rate/growth differential	-0.2	-1.5	-6.1			-12.1	-14.1	-15.8	-17.2	-10.1	-6.4		-4.2	-2.2	
<i>of which: contribution from average real interest rate</i>	2.4	2.2	-1.3			-6.6	-7.6	-4.0	-3.6	-2.0	-2.1		-0.4	0.2	
<i>of which: contribution from real GDP growth</i>	-2.6	-3.7	-4.8			-5.5	-6.5	-11.7	-13.6	-8.2	-4.4		-3.8	-2.4	
Contribution from real exchange rate depreciation	-0.1	-5.1	3.5			9.0	8.0	6.0	5.1	5.0	5.0		...	...	
Other identified debt-creating flows	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Privatization receipts (negative)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Recognition of implicit or contingent liabilities	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Debt relief (HIPC and other)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0			0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Residual, including asset changes 2/	22.8	8.2	5.6			16.2	14.1	8.4	7.7	-2.0	1.3		-0.3	-0.1	
<b>Other Sustainability Indicators</b>															
<b>PV of public sector debt</b>	...	...	109.2			121.8	129.6	124.5	114.8	96.4	87.1		63.4	46.5	
<i>of which: foreign-currency denominated</i>	...	...	107.5			120.4	127.6	123.3	111.7	98.3	88.4		46.6	4.6	
<i>of which: external</i>	...	...	107.5			120.4	127.6	123.3	111.7	98.3	88.4		46.6	4.6	
PV of contingent liabilities (not included in public sector debt)	...	...	...			...	...	...	...	...	...		...	...	
Gross financing need 3/	7.3	8.7	3.0			3.4	5.7	2.6	2.4	-2.6	0.4		3.6	4.2	
PV of public sector debt-to-revenue and grants ratio (in percent)	...	...	377.3			386.0	476.7	456.5	445.3	299.4	299.5		240.0	236.9	
PV of public sector debt-to-revenue ratio (in percent)	...	...	520.3			632.2	711.6	730.1	559.6	361.4	356.1		253.0	240.1	
<i>of which: external 4/</i>	...	...	512.3			625.1	700.3	722.7	544.2	368.3	361.7		185.8	23.5	
Debt service-to-revenue and grants ratio (in percent) 5/	18.8	27.9	21.3			17.6	21.1	16.1	22.6	20.5	27.5		25.0	22.0	
Debt service-to-revenue ratio (in percent) 5/	27.3	44.7	29.4			28.8	31.5	25.7	28.4	24.7	32.7		26.4	22.3	
Primary deficit that stabilizes the debt-to-GDP ratio	-22.5	-1.6	-3.1			-13.1	-8.0	1.3	4.5	7.1	0.2		1.5	1.9	
<b>Key macroeconomic and fiscal assumptions</b>															
Real GDP growth (in percent)	3.6	3.8	5.2	7.4	3.0	6.0	6.4	11.3	13.9	8.5	5.2	8.6	6.1	5.0	
Average nominal interest rate on forex debt (in percent)	4.3	3.0	2.3	3.6	1.6	1.4	1.8	4.0	3.8	5.5	5.6	3.7	6.7	3.1	
Average real interest rate on domestic debt (in percent)	9.0	-4.1	-4.0	-0.1	3.8	1.2	-2.2	-1.5	-0.4	0.5	1.4	-0.2	1.9	1.4	
Real exchange rate depreciation (in percent, + indicates depreciation)	-0.1	-5.5	4.0	1.7	8.1	...	...	...	...	...	...	...	...	...	
Inflation rate (GDP deflator, in percent)	7.4	6.8	5.8	6.1	1.4	4.2	4.2	4.5	4.5	4.5	4.6	4.4	4.5	4.5	
Growth of real primary spending (deflated by GDP deflator, in percent)	-5.5	-8.8	-2.8	-1.7	3.1	20.7	-1.9	4.9	-0.2	11.5	-2.0	5.5	5.8	2.0	
Grant element of new external borrowing (in percent)	...	...	...	...	...	10.5	14.3	13.3	20.4	45.2	51.4	25.9	52.6	2.0	

Sources: Country authorities; and staff estimates and projections.

1/ Gross government debt including hydro-related liabilities.

2/ Positive residuals reflect off-budget hydropower sector transactions, debt financing of which is included in the stock of public debt, and the associated interest payments are financed through the budget.

3/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period.

4/ Revenues excluding grants.

5/ Debt service is defined as the sum of interest and amortization of medium and long-term debt.

6/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.

**Table 4. Bhutan: Sensitivity Analysis for Key Indicators of Public Debt, 2016–2036**

	Projections							
	2016	2017	2018	2019	2020	2021	2026	2036
<b>PV of Debt-to-GDP Ratio</b>								
<b>Baseline</b>	122	130	125	115	96	87	63	47
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	122	126	125	124	111	104	75	26
A2. Primary balance is unchanged from 2016	122	128	122	114	101	97	76	36
A3. Permanently lower GDP growth 1/	122	130	126	117	100	91	75	77
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	122	132	137	128	109	101	84	77
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	122	130	126	116	97	88	66	50
B3. Combination of B1-B2 using one half standard deviation shocks	122	129	131	122	104	95	76	66
B4. One-time 30 percent real depreciation in 2017	122	181	171	156	135	125	99	75
B5. 10 percent of GDP increase in other debt-creating flows in 2017	122	138	132	122	103	93	70	53
<b>PV of Debt-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	386	477	457	445	299	300	240	237
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	386	466	454	471	340	354	282	135
A2. Primary balance is unchanged from 2016	386	470	448	442	315	333	287	183
A3. Permanently lower GDP growth 1/	386	479	459	453	308	313	283	389
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	386	484	485	486	334	343	316	389
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	386	477	461	450	303	304	248	252
B3. Combination of B1-B2 using one half standard deviation shocks	386	475	470	467	318	324	287	336
B4. One-time 30 percent real depreciation in 2017	386	665	626	606	420	431	374	382
B5. 10 percent of GDP increase in other debt-creating flows in 2017	386	508	484	472	319	322	264	267
<b>Debt Service-to-Revenue Ratio 2/</b>								
<b>Baseline</b>	18	21	16	23	20	28	25	22
<b>A. Alternative scenarios</b>								
A1. Real GDP growth and primary balance are at historical averages	17	23	27	25	30	31	30	15
A2. Primary balance is unchanged from 2016	17	23	26	24	28	29	30	19
A3. Permanently lower GDP growth 1/	17	23	27	24	28	29	30	30
<b>B. Bound tests</b>								
B1. Real GDP growth is at historical average minus one standard deviations in 2017-2018	17	23	28	26	30	31	33	32
B2. Primary balance is at historical average minus one standard deviations in 2017-2018	17	23	27	24	28	29	28	21
B3. Combination of B1-B2 using one half standard deviation shocks	17	23	27	25	29	30	31	27
B4. One-time 30 percent real depreciation in 2017	17	28	38	35	40	42	43	36
B5. 10 percent of GDP increase in other debt-creating flows in 2017	17	23	28	25	29	29	30	23

Sources: Country authorities; and staff estimates and projections.

1/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of the length of the projection period.

2/ Revenues are defined inclusive of grants.

**Statement by Subir Gokarn, Executive Director for Bhutan  
and Indu Chaturvedi, Senior Advisor to Executive Director  
June 22, 2016**

1. Our authorities' discussions with the 2016 Article IV mission were constructive and productive. The mission chief, Mr. Jiri Jonas and his team have an excellent understanding of the macro-economic situation in Bhutan, including the unique features of the country's economy. The authorities wish to place on record their appreciation of the outstanding work done by the IMF mission team. They also broadly agree with the assessment made in the Article IV report, and hope to benefit from staff's recommendations.
2. Our authorities are also thankful to IMF staff and management for the Fund's engagement with Bhutan over the years. As the country endeavors to achieve rapid socio-economic progress, it also needs to develop capacities in various areas of economic management. The authorities have, in this task, received from the Fund both encouragement and assistance, of which they are deeply appreciative. Indeed, Bhutan has been a major beneficiary of Fund technical assistance (TA). Eighteen TA missions were completed in FY2015; fifteen were completed in FY2016; and three have been completed and six are planned for completion in FY2017; These cover diverse areas, including budget planning, government finance statistics, balance of payment statistics, AML/CFT, currency management and national accounts.
3. Bhutan's development record over the last three decades has been impressive, and particularly so in recent years. GDP per capita more than doubled during 2004-14. During 2000-2014, the percentage of population below poverty line reduced from 36.3 to 12, infant mortality fell from 68.4 to 29.7 and universal primary enrollment was achieved. There have been similar marked improvements in several other indicators also- maternal mortality ratio, immunization coverage, road connectivity in rural areas, rural electrification and so on. Bhutan scores very well on indicators of environment - more than 80 percent of the country's land area is under forest cover, it is a net sink for Global Greenhouse Gas (GHG) emissions, the quality of water at the macro level is very high and air pollution is considerably lower than internationally acceptable levels.
4. Our authorities are committed to building on this strong track record and following policies that ensure both macroeconomic stability and strong and inclusive growth. They recognize that addressing the several challenges that lie ahead would require both sound macroeconomic management and structural reforms. These challenges include managing hydropower related inflows, managing the projected spike in hydropower revenues keeping in view the likely phasing out of external aid, and addressing youth and urban unemployment.
5. The authorities are in agreement with staff's assessment that Bhutan's medium-term outlook is favorable. They are confident that with the commissioning of new hydropower generation projects, growth will significantly accelerate from FY2017/18 and the current account will return a surplus. The financial sector has been assessed as generally healthy by staff. While the authorities note staff's emphasis on containing the fiscal deficit in FY2016/17 and FY2017/18, they feel that staff's concerns about fiscal outcomes are somewhat overstated.
6. The authorities are cognizant of the need for avoiding an excessively expansionary stance and large shifts in the fiscal balance. The fiscal deficit in FY2015/16 is projected to be significantly lower than what was budgeted for. Though it is correct that capital spending tends

to pick up in the last two years of the five year plans, the authorities endeavor to ensure that the selected projects are not beyond the implementing capacity of the government agencies. They also recognize the need for increasing tax revenues and are hopeful of introducing a new goods and services tax (GST), with Parliament's approval, by the end of 2018. On the expenditure side, they have taken several measures to contain current spending. Going forward, they also intend to strengthen the fiscal framework with a view to containing public debt and avoiding excessive volatility in the fiscal stance. However, any such framework will have to keep in view the fact that as hydropower exports and revenues increase and GDP growth accelerates, external support is likely to reduce. This is an area to which the authorities plan to give more attention in the coming months.

7. Staff's advice on monetary policy is consistent with the authorities' own views. The current monetary policy stance is viewed as suited to the prevailing monetary conditions. There is certainly a need to improve the monetary policy transmission mechanism which currently relies solely on the cash reserve ratio (CRR). The authorities will carefully consider staff's suggestions in this regard and follow a graded approach in moving forward, mindful of the need for adequate institutional capacities and supporting legal frameworks. They also intend to review the base rate system keeping in view both the wide-spread dissatisfaction with it and staff's suggestions, which include learning from the Indian experience.

8. As reported by staff, a comprehensive framework for macro-prudential policy was put in place by the RMA in 2014 and some macro-prudential regulations have already been implemented. The authorities intend to implement additional regulations in the coming months, in doing which the advice of the recent TA mission on banking supervision and regulation should prove useful.

9. In the external sector, the large current account deficit and the high external public debt should be seen in the background of the large external investment and imports relating to the hydropower projects that are under implementation. The authorities feel that there is no reason for concern on these counts. As already stated, the current account should move to a surplus once hydropower exports pick up. Also, staff rightly points out the unique circumstances that mitigate the external risks that appear high because of the current level of the ratio of public and public guaranteed (PPG) debt to GDP. Though the current level of international reserves is high, covering about 11 months of imports, this too needs to be seen in the context of the current hydropower centered development strategy. These reserves are built largely on external aid flows and borrowing for the hydropower related investments. The authorities note staff's advice for further improvement in the composition of foreign reserves. They would not describe the Rupee shortage of 2012-13 as a crisis. They also do not consider the risk of another rupee shortage as likely, particularly because of RMA's recent swap agreement with the RBI which would enable RMA to have access to short-term Indian Rupee liquidity support. Moreover, arrangements to sell or buy Indian Rupees against USD and gain access to Indian Government securities are being currently pursued.

10. The authorities consider it important that spillovers from development of hydropower are managed well. They are keen to separately keep track of developments in the hydropower and non-hydropower sectors. In particular, they would like to separate the impact of developments in the two sectors on the balance of payments. Fund technical assistance in this regard will be very welcome.

11. Our authorities also plan to give attention to the problem of high youth and urban unemployment. Development of the private sector and diversification of the economy would be critical to addressing this challenge. In the near term, they see the need for employment of a significantly greater number of Bhutanese citizens in the construction of hydropower projects. All necessary measures will be taken to substantially raise the percentage of Bhutanese citizens employed in construction of these projects from the current low level of 20 percent. Staff has rightly mentioned the need for addressing the existing lack of skills in this regard. However, the authorities do not agree with staff that a lack of willingness to take up jobs requiring manual work could also be a contributing factor to this state of affairs. A more plausible contributing factor would be lack of awareness about the job opportunities that are likely to be created resulting in lack of acquisition of the required skills. The authorities intend to address all such factors.