

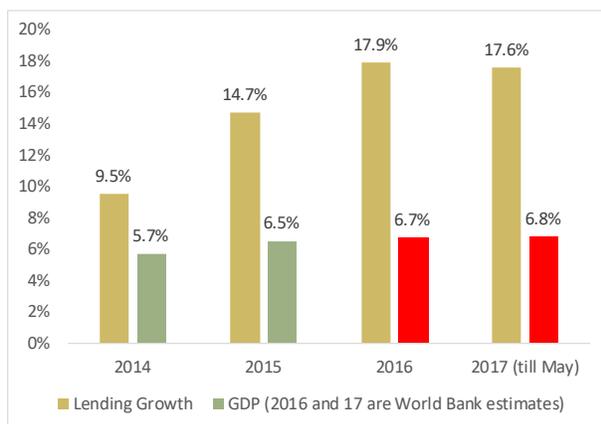
## Bhutan Economic Update<sup>1</sup>

### Hydropower Sector Clouds Macroeconomic Prospect

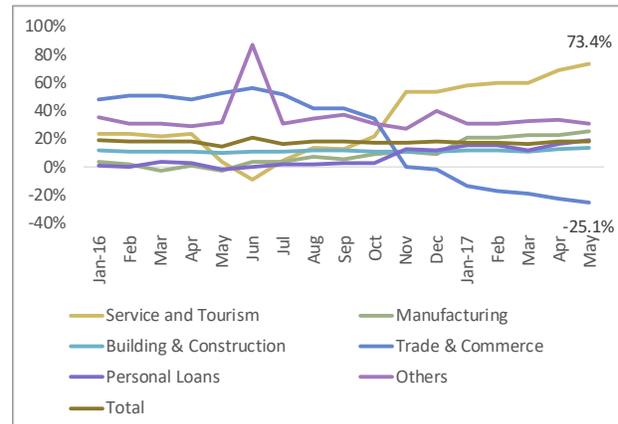
Bhutan maintained solid growth and macroeconomic stability in the first half of 2017. However, delays in hydropower construction cloud macroeconomic prospects in the coming years. Given the size and importance of hydropower projects in the economy, delays are likely to have significant negative impact on growth, revenues and exports. Therefore, growth projections have been scaled back, although the economy is still expected to expand by 6.9 percent in 2018.

**Real sector.** The latest national account data for 2015 show that the economy grew by 6.5 percent. The national account data are published annually with 9–10-month lags (2016 data will be published in October). Thus, we have to rely on frequent data such as lending to measure economic activities. The correlation between lending and gross domestic product (GDP) growth rates suggests that growth was solid till the first half of 2017 (figure 1). The data show that growth rates of lending outstanding remained high until May 2017. However, lending growth is different among major sectors (figure 2). While lending to services and tourism kept accelerating, lending growth to trade and commerce turned negative in November 2016. On the latter, the timing is coincided with the introduction of India’s demonetization and thus may be related to its impact on Bhutan’s trade with India.

**Figure 1. Lending Growth Suggests Solid Growth Performance in 2016 and 2017 (Annual Growth Rate)**



**Figure 2. Different Trends between Service and Tourism and Trade and Commerce (YoY Growth Rate)**



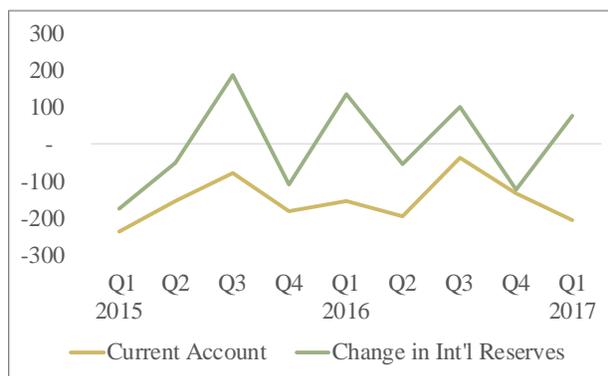
Source. Royal Monetary Authority (RMA).

<sup>1</sup> The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views of the World Bank Board of Executive Directors or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this report. For more information about the World Bank and its activities in Bhutan, please visit <http://www.worldbank.org/en/country/bhutan>. For questions and comments about this publication, please contact Yoichiro Ishihara ([yishihara@worldbank.org](mailto:yishihara@worldbank.org)) and Tenzin Lhaden ([tlhaden@worldbank.org](mailto:tlhaden@worldbank.org)).

## External sector

- **Balance of payments.** For Bhutan, where the current account deficits are closely related to capital goods imports for hydropower construction, the overall balance of payments is more important than the current account to measure macroeconomic stability. Most capital goods imports for hydropower construction are financed by the Government of India. Bhutan maintained an adequate level of international reserves, although large current account deficits persisted. As of May 2017, gross international reserves exceeded US\$1 billion equivalent to 10 months of imports of goods and services. Quarterly current account deficits (US\$150–200 million or about 10 percent of GDP) are largely financed by loans from India. Therefore, the overall balance of payments was mostly positive (figure 3).

**Figure 3. Loans from India Financed Current Account Deficits (US\$, millions)**



Source. RMA.

- **External debt.** The loans from India led to an increase in external debt from US\$2.3 billion (119 percent of GDP) in June 2016 to US\$2.5 billion (122 percent of GDP) in March 2017. The increase in external debt requires careful monitoring, although the most recent debt sustainability analysis shows that Bhutan faces a moderate risk of external debt distress (annex 1).
- **Non-debt financing.** Going forward, diversifying exports and increasing non-debt financing are critical to maintain the sustainability of the external sector. Recent development is positive in both. In the first half of 2017, tourist arrivals and tourism-related revenues increased by 19 percent and 14 percent (year on year [yoy]). The Government and the RMA (the central bank) jointly introduced RemitBhutan for the nonresident Bhutanese to remit their saving into the country. Since its introduction in October 2016, US\$1 million was remitted till May 2017.

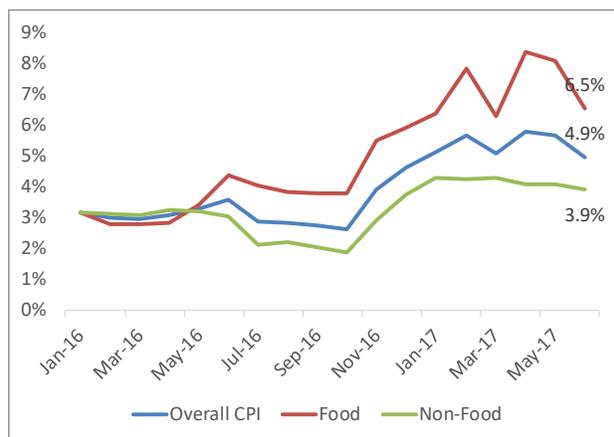
**Monetary sector.** In the coming months, price movement requires careful watch, though other indicators show stability in the monetary sector.

- **Consumer Price Index (CPI).** CPI started to accelerate in November 2016 and has reached 4.9 percent (yoy) in June 2017. The acceleration was primarily driven by food prices (figure 4). Bad weather caused the increase in food prices, especially of vegetables.
- **Exchange rates.** The Bhutanese ngultrum, pegged to the Indian rupee, has been stable since the second half of 2016. After having depreciated against the U.S. dollar in nominal terms in the first half of 2016, the nominal exchange rate has been mostly stable in the past few months. The real effective exchange rate (REER) has also been stable, reflecting the peg<sup>2</sup> (figure 5).

<sup>2</sup> India accounts for about 90 percent of Bhutan's international trade.

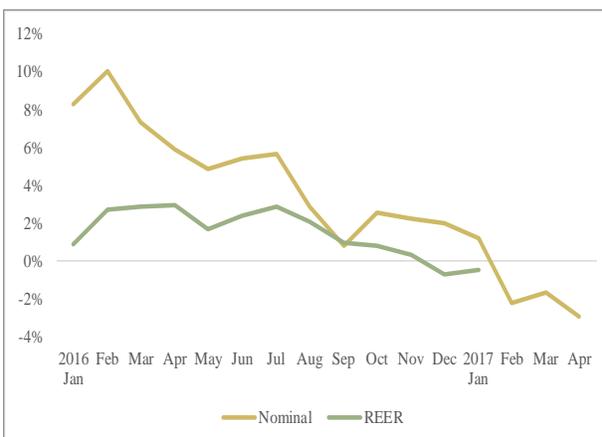
- **Financial sector.** The financial sector remained sound. The risk-weighted capital adequacy ratio increased from 16.4 percent in March 2016 to 17.8 percent in March 2017,<sup>3</sup> although the nonperforming loans increased by 1 percentage point to 12.4 percent during the same period.

**Figure 4. Increase in Food Prices Drove the Increase in the CPI**



Source. National Statistics Bureau (NSB).

**Figure 5. Exchange Rates Were Stable (Both Nominal [against U.S. dollar] and REER) (yoy Change, Positive Means Depreciation)**



Source. RMA.

**Fiscal development.** The 2017/18 budget and accompanying medium-term fiscal outlook suggest that fiscal policy will be more contractionary<sup>4</sup> in the next few years (table 1).

- **Revenues and grants.** They are projected to decline from 28.6 percent of GDP in 2017/18 to 21.6 percent in 2019/20. Domestic revenues are projected to increase to 20.4 percent of GDP in 2018/19 before they decline to 18.1 percent. Among domestic revenues, tax revenues are projected to decline from 13.9 percent of GDP in 2015/16 to 11.9 percent in 2019/20. It is mainly because of the decline in excise duty refund from India starting to take effect in 2018/19. The decline in tax revenues is partly covered by the increase in nontax revenues due to profit transfer from the Mangdechhu hydropower project starting in 2018/19.
- **Outlays.** Although the outlays to GDP ratios in 2017/18 and 2018/19 were revised upward, the ratios are projected to decline from 34.0 percent in 2016/17 to 25.3 percent in 2019/20. Among the outlays, capital expenditures are projected to decline significantly to 9.9 percent of GDP in 2019/20. The decline is consistent with the Government strategy to consolidate past investment in infrastructure and effective use of operations and maintenance expenditures.<sup>5</sup> Also, availability of financing resources would limit capital expenditures from increasing.
- **Fiscal balance.** The fiscal balance in 2015/16 turned to be better than the projection made last year. Actual capital expenditures were more than 3 percentage points below the revised budget. In 2016/17, the Government accelerated disbursements of capital expenditures to

<sup>3</sup> This is mainly due to the decrease in total risk-weighted assets brought by the change in the new regulation on the new risk-weight framework (Financial Sector Performance Review Report, March 2017).

<sup>4</sup> Fiscal policy that increases (decreases) aggregate demand directly through an increase (a decrease) in government spending is typically called expansionary (contractionary).

<sup>5</sup> 12th five-year plan framework paper.

meet the targets in the 11th Five-Year Plan and projects the same in 2017/18 with the capital expenditures to GDP ratio revised upward from 11.2 percent to 16.3 percent. Among capital expenditures, roads and bridges account for about a quarter. In 2016/17, the increase in expenditures is offset by the increase in domestic revenues (mainly due to the increase in excise duty refund from India). In 2017/18, despite the higher-than-projected domestic revenues in the budget (due to, for example, higher revenues from tourism), the budgeted fiscal balance is –2.5 percent of GDP. In the budget, financing sources of the fiscal deficit are not fully identified, which leaves resource gap (the sum of the fiscal balance and financing) at 2.7 percent of GDP in 2017/18.

**Table 1. Medium-term Fiscal Outlook**

|                           | 2015/16     |             | 2016/17     |             | 2017/18     |             | 2018/19     |             | 2019/20 |             |
|---------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------|-------------|
|                           | Rev.        | Act.        | Bud.        | Rev.        | Pro.        | Bud.        | Pro.        | Pro.        | Pro.    | Pro.        |
| <b>Revenue and grants</b> | <b>31.2</b> | <b>29.6</b> | <b>26.4</b> | <b>29.9</b> | <b>23.9</b> | <b>28.6</b> | <b>22.7</b> | <b>24.6</b> | —       | <b>21.6</b> |
| Domestic revenue          | 18.8        | 19.7        | 17.3        | 18.2        | 15.4        | 19.3        | 17.9        | 20.4        | —       | 18.1        |
| Grants                    | 12.1        | 10.5        | 9.1         | 11.2        | 8.5         | 9.3         | 4.7         | 4.2         | —       | 3.5         |
| <b>Outlay</b>             | <b>34.3</b> | <b>30.7</b> | <b>31.7</b> | <b>34.0</b> | <b>24.7</b> | <b>31.0</b> | <b>20.6</b> | <b>25.0</b> | —       | <b>25.3</b> |
| Total expenditure         | 35.5        | 31.4        | 32.9        | 35.2        | 25.8        | 32.2        | 23.7        | 26.1        | —       | 25.6        |
| Current                   | 17.1        | 16.1        | 16.1        | 16.1        | 14.6        | 15.9        | 15.5        | 15.9        | —       | 15.7        |
| Capital                   | 18.4        | 15.3        | 16.8        | 19.1        | 11.2        | 16.3        | 8.2         | 10.2        | —       | 9.9         |
| Net lending               | –1.3        | –1.3        | –1.2        | –1.2        | –1.1        | –1.1        | –3.2        | –1.0        | —       | –0.3        |
| <b>Fiscal balance</b>     | <b>–3.0</b> | <b>–1.1</b> | <b>–5.3</b> | <b>–4.1</b> | <b>–0.8</b> | <b>–2.5</b> | <b>2.1</b>  | <b>–0.4</b> | —       | <b>–3.7</b> |
| <b>Resource gap</b>       | —           | <b>–2.0</b> | —           | <b>–3.4</b> | —           | <b>–2.7</b> | —           | <b>0.4</b>  | —       | <b>–3.7</b> |

Source: Ministry of Finance (MoF).

Note: Figures on the left are from the 2016/17 budget document, while figures on the right are from the 2017/18 budget document. Act. = Actual; Bud. = Budgeted; Pro. = Projected; Rev. = Revised.

**Introduction of India’s Goods and Services Tax (GST).** India introduced GST starting in July 2017. As India accounts for about 90 percent of Bhutan’s international trade, GST is likely to affect the economy through trade and revenues.

- **Before the introduction.** Bhutanese products were subject to value added tax (VAT) at the point of sales in India. On products imported from India, excise duties and VAT were levied. Excise duties were later refunded by the Government of India to the Government of Bhutan on an annual basis with a two-year lag (about BTN 2 billion per year or 10 percent of the total domestic revenues), and VAT was refunded to the importer on issuance of landing certificate by Bhutan Customs.
- **After the introduction,**
  - (a) Bhutan’s exports to India are subject to GST both at point of entry and point of sale in India (the same as locally produced products in India); and
  - (b) Bhutan’s imports from India are subject to no GST (India’s export is zero rated) and no excise duty (except for five petroleum products).
- **Impacts.** The combination of (a) and (b), in theory, makes Bhutanese products more expensive and Indian products cheaper. This will potentially lead to an increase in trade deficits. Also, domestic revenues from excise duty refunds will decline. However, actual

impacts will be more complicated. For example, Bhutanese products using import materials from India become more competitive. The impact on excise duty refund has a two-year lag. For example, the Government of India released the excise duty refund claim for 2015 in June 2017.<sup>6</sup>

- **What is ongoing.** Anecdotal evidence shows that there are some confusions about the operationalization of GST, which has adversely affected trade flows.
- **Government’s countermeasures.** The Government of Bhutan quickly reacted against the potential adverse impacts on trade and revenues. The MoF issued a public notification in August 2017. With this notification, sales tax on vehicles is collected at the point of sales rather than at the point of entry. As sales prices include profits and other costs in addition to import prices, this notification has revenue generation impact.

**Outlook and risks.** Given the developments in the hydropower sector, the World Bank has revised its growth forecast. The 2017 growth projection was revised down from 9.9 percent to 6.8 percent, and the 2018 growth projection was revised down from 11.7 percent to 7.7 percent (table 2). In addition, downside risks to growth emerge primarily from the following:

- **Further delays in hydropower construction.** The geological problem that caused the delay in Punatsangchhu I has not yet been fully resolved. Further delays will negatively affect macroeconomic prospects in the medium term (box 1).
- **Financing budget.** The delays in hydropower construction and the increase in expenditures have left a resource gap in the budget unidentified. Unless financing sources are identified, the resource gap will lead to cut in expenditures, which will negatively affect growth and development.
- **Impact of India’s GST.** If the trade disruptions caused by India’s GST continue, they are likely to have a negative impact on the economy.
- **Natural disasters.** Bhutan is vulnerable to natural disasters such as floods and landslides. Heavy rains have resulted in landslides and domestic connectivity is affected.

**Table 2. Macroeconomic Projection**

|   | 2014/15 | 2015/16 | 2016/17 | 2017/18 | 2018/19 | 2019/20 |
|---|---------|---------|---------|---------|---------|---------|
|   | a       | e       | e       | f       | f       | f       |
| <b>Real GDP growth</b>                    | 6.1     | 6.7     | 6.6     | 6.7     | 6.9     | 7.6     |
| Agriculture                               | 3.5     | 3.9     | 3.9     | 3.6     | 3.6     | 2.8     |
| Industry                                  | 6.0     | 7.7     | 5.7     | 5.4     | 5.2     | 12.1    |
| Services                                  | 8.3     | 8.3     | 8.9     | 10.5    | 11.1    | 5.0     |
| <b>Inflation (CPI)</b>                    | 8.3     | 4.5     | 6.0     | 5.0     | 5.0     | 5.0     |
| <b>Current account balance (% of GDP)</b> | -28.3   | -29     | -22.9   | -18.5   | -13.0   | -8.3    |
| <b>Fiscal balance (% of GDP)</b>          | 1.5     | -1.1    | -4.0    | -2.5    | -4.2    | -2.5    |

Note: a = Actual; e = Estimated; f = Forecasted.

<sup>6</sup> <http://www.mof.gov.bt/excise-duty-refund-27-jun-2017/>.

### Box 1. Impact of the Hydropower Sector on the Economy

The large hydropower projects have a sizeable impact on the economy (for example, the construction cost of Punatsangchhu I is estimated at US\$1.5 billion, about 55 percent of the projected GDP in 2017/18). In 2018–2021, the Government plans to start operating three hydropower projects (total about 3,000 MW against the current capacity of 1,600 MW). However, the completion of Punatsangchhu I and II is likely to be delayed by one—two years (table B1.1), which will affect the economy in the following way (assuming there is no escalation of costs): a one-year delay in the completion will reduce GDP growth rate by 3–4 percentage points, exports by US\$250–300 million (about 50 percent of the current exports), and revenues by 0.5–1.0 percent of GDP (table B1.2).

**Table B1.1. Delay in Hydropower Construction**

| Project          | MW    | Planned Completion Year |                   |                   |
|------------------|-------|-------------------------|-------------------|-------------------|
|                  |       | In 2015/16 budget       | In 2016/17 budget | In 2017/18 budget |
| Punatsangchhu I  | 1,200 | 2019                    | <b>2019</b>       | <b>2021</b>       |
| Punatsangchhu II | 1,020 | 2018                    | <b>2018</b>       | <b>2019</b>       |
| Mangdechhu       | 720   | 2018                    | 2018              | 2018              |

Source: MoF.

**Table B1.2. Impact of a Delay in Hydropower Construction (1-year Delay in Puna I or II Project)**

| Subject                  | Source of Impact   | Net Impact  | Remarks   |
|--------------------------|--|---|---|
| GDP (production account) | Decline in forecast electricity sub-sector growth        | About 3–4 percentage points of GDP growth                                     | Increase in the construction sub-sector could partly offset the impact. |
| Exports                  | Decline in forecast export growth                        | About US\$250–300 million a year (about 50 percent of actual exports in 2015) | —   |
| Government revenues      | Decline in forecast corporate tax, dividend, and royalty | About 0.5–1 percent of GDP  | Sum of corporate tax, dividend, and royalty                             |

Source: World Bank staff estimates.

## Annex 1: How Much Should Bhutan Worry about Its Public Debt?

There are heated debates on an accumulation of public debt in Bhutan. One concern is that the accumulation of public debt may lead to a debt crisis. A key question is how much Bhutan should worry about its current level of public debt. This note attempts to address the question with a debt sustainability analysis.

**Definition and measurements of debt sustainability.** Debt sustainability refers to a country's ability to pay its debt obligation in the long term without a liquidity problem. A debt to GDP ratio is a useful indicator to measure the size of debt relative to a country's economy. Simple debt dynamics are that if the interest rate of debt is less than GDP growth, the debt to GDP ratio tends to decline. The World Bank and the International Monetary Fund (IMF) work together to support their client countries to achieve their development goals without creating future debt problems through the Debt Sustainability Analysis (DSA).

A DSA compares debt services (that is, the sum of principal and interest payments) and debt stock with various measures of a country's repayment capacity such as GDP, exports, and revenues. To assess debt sustainability, these indicators are compared to indicative debt-burden thresholds and place the country into four categories of risk of debt distress—low, moderate, high, and in debt distress. The Debt Sustainability Framework (DSF) is a useful framework to consider debt sustainability in Bhutan.

**Level and structure of Bhutan's public debt.** As of March 2017, the total public debt was BTN 171 billion, equivalent to 107 percent of GDP. The public debt consists of domestic debt (BTN 13 billion, 8 percent of GDP) and external debt (BTN 158 billion, 99 percent of GDP). The external debt is further disaggregated by borrowers and purposes (table A1.1). Hydropower accounts for about 80 percent of the external debt (77 percent of GDP), while non-hydropower accounts for about 20 percent (22 percent of GDP).

**Table A1.1. External Debt Disaggregation (BTN, billions, % of GDP)**

| Purpose           | Borrowers        |                 | Total            |
|-------------------|------------------|-----------------|------------------|
|                   | Hydropower       | Non-Hydropower  |                  |
| Government        | 0 (0%)           | 22 (14%)        | 22 (14%)         |
| State enterprises | 124 (77%)        | 6 (4%)          | 130 (81%)        |
| RMA               | 0 (0%)           | 7 (4%)          | 7 (4%)           |
| <b>Total</b>      | <b>124 (77%)</b> | <b>35 (22%)</b> | <b>158 (99%)</b> |

Source: MoF.

The disaggregation is important, because each category has different characteristics. Non-hydropower government debt is borrowing from multilateral and bilateral agencies for socioeconomic development, including World Bank financing. This financing is highly concessional. For example, the latest World Bank financing term is 1.25 percent interest rate with 25-year repayment period. Non-hydropower debt by the Royal Monetary Authority (RMA) is small and for balance-of-payment support purpose. The largest external debt category is hydropower debt by state enterprises (including on lending from the Government).

**Applying the DSA to Bhutan.** The World Bank–IMF joint DSA in 2016 is still relevant, because the development of debt dynamics until now does not deviate from the DSA. All external debt indicators (for example, the external debt to GDP ratio) indicate that Bhutan is in high risk of debt

distress. Despite these indicators, the DSA concludes that Bhutan has a moderate risk of debt distress due to the country's hydropower debt.

The dominance of hydropower external debt means that debt sustainability is closely related to the sustainability of hydropower external debt. About 90 percent of hydropower external debt is financed by India with interest rates at 9–10 percent for the Punatsangchhu I and II and Mangdechhu projects. The first interest and principal payments are expected in 2018. This timing is earlier than the scheduled commissions of Punatsangchhu I and II. Also, construction costs are increasing. The delays and cost escalations raise concerns. However, “the Government of India 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” (World Bank/IMF Joint Debt Sustainability Analysis, June 2016). As long as the 15 percent net return is secured, while the delays affect economic growth, government revenues, and repayment capacity of non-hydropower debt, hydropower external debt is considered sustainable. Hydropower external debt is, therefore, unlikely to lead to a debt crisis.

Non-hydropower external debt is low at 22 percent of GDP. Also, the high proportion of concessional financing (low interest rate with long repayment period) and sustainable growth (exceeding 7 percent) in the past few decades suggest that non-hydropower external debt is sustainable.

Currency composition, average maturity period, and financing terms are also important to measure debt risks. On the current composition of external debt, about three-quarters are denominated with the Indian rupee related to hydropower projects followed by the U.S. dollar (20 percent), the euro (3 percent), and the Japanese yen (2 percent). As of May 2017, gross international reserves in the U.S. dollar were about US\$700 million, equivalent to more than 130 percent of non-hydropower external debt. Average maturity period is 10.2 years with 5.2 percent of the total external debt (US\$125 million) maturing within a year. Compared with gross international reserves (US\$1.1 billion including both the Indian rupee and the U.S. dollar), reserves were eight times higher than external debt maturing within a year. On financing terms, weighted average interest rate was 7.7 percent. However, this is mostly due to financing for hydropower projects (9–11 percent). Others are mostly concessional financing from the World Bank and Asian Development Bank (ADB).

In addition to the level and structure of public debt, debt management is essential for debt sustainability. Thus, debt policy/management is 1 of 16 indicators of the World Bank Country Policy and Institutional Assessment (CPIA). Among 73 low-income/lower-middle-income IDA countries, Bhutan's score is the ninth highest in this indicator. The 2016 Public Expenditure and Financial Accountability (PEFA) assessment by the World Bank also shows that debt management is reasonably good, although there is room to improve the debt management strategy. The adoption of the Public Debt Policy 2016 is an important achievement. The policy defines the legal framework and institutional arrangement, establishes a mechanism for risk assessment and monitoring, and sets a debt threshold. For example, non-hydropower external debt to GDP is set at 35 percent (the current non-hydropower external debt to GDP ratio is 22 percent).

**Conclusion.** While Bhutan should carefully monitor its public debt, the DSA does not suggest an immediate risk of a debt crisis. To maintain debt sustainability, we would like to highlight the following:

- **Ensuring hydropower external debt sustainability.** The current arrangement—a 15 percent net return—ensures sustainability of hydropower external debt. Maintaining this arrangement is critical.
- **Effective implementation of debt-financed project with maximizing concessional financing.** Debt sustainability of non-hydropower external debt is subject to economic growth rate and cost of financing. On economic growth, debt has to be used for productive purposes such as infrastructure and investment in health and education. On financing cost, maximizing access to concessional financing (low interest rate) ensures sustainability.
- **Maximizing non-debt financing.** Financing for development is not limited to debt financing. Maximizing access to non-debt financing such as foreign direct investment (FDI) and remittances ensures stable financing for development and less reliance on debt financing.