



# **State of the Bangladesh Economy in FY2015-16**

## *First Reading*

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CENTRE FOR POLICY DIALOGUE (CPD)  
B A N G L A D E S H  
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# CPD IRBD 2016 Team

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*Professor Mustafizur Rahman*, Executive Director, CPD and *Dr Debapriya Bhattacharya*, Distinguished Fellow, CPD were in overall charge of preparing this report as the Team Leaders.

Lead contributions were provided by *Professor Mustafizur Rahman* (Section V) *Dr Fahmida Khatun*, Research Director (Section IV), *Dr Khondaker Golam Moazzem*, Additional Research Director (Section VII), *Mr Towfiqul Islam Khan*, Research Fellow (Sections II and III) and *Dr Subir Bairagi*, Research Fellow, CPD (Section VI).

Valuable research support was received from *Mr Kishore Kumer Basak*, Senior Research Associate; *Mr Md. Zafar Sadique*, Senior Research Associate; *Ms Shahida Pervin*, Research Associate; *Mr Mostafa Amir Sabbih*, Research Associate; *Mr Estiaque Bari*, Research Associate; *Mr Mahtab Uddin Ahmed*, Research Associate; *Mr Muntaseer Kamal*, Research Associate; *Mr Shashish Shami Kamal*, Research Associate; and *Ms Ummah Salma*, Programme Associate.

*Mr Towfiqul Islam Khan* was the Coordinator of the CPD IRBD 2016 Team.

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|                                  |   |
|----------------------------------|---|
| <i>Mr Faisal Ahmed</i>           | Senior Economic Advisor to the Governor<br>Bangladesh Bank  |
| <i>Dr Salehuddin Ahmed</i>       | Former Governor<br>Bangladesh Bank  |
| <i>Mr Abrar A. Anwar</i>         | Chief Executive Officer (CEO)<br>Standard Chartered Bank  |
| <i>Dr M Asaduzzaman</i>          | Professorial Fellow<br>Bangladesh Institute of Development Studies (BIDS)   |
| <i>Mr Zahid Hossain</i>          | Former Chief Economist<br>ADB Bangladesh Resident Mission   |
| <i>Dr A B Mirza Azizul Islam</i> | Former Advisor to the Caretaker Government<br>Ministries of Finance and Planning  |
| <i>Dr Rizwanul Islam</i>         | Independent Economist and Former Special Advisor on Growth,<br>Employment and Poverty Reduction<br>ILO-Geneva                 |
| <i>Mr Arastoo Khan</i>           | Former Member, Planning Commission<br>Ministry of Planning  |
| <i>Dr Ahsan Habib Mansur</i>     | Executive Director, Policy Research Institute of Bangladesh and<br>Former Division Chief<br>International Monetary Fund (IMF) |
| <i>Dr Biru Paksha Paul</i>       | Chief Economist<br>Bangladesh Bank  |
| <i>Dr Mohammed Helal Uddin</i>   | Director, Economic Research Group and<br>Associate Professor<br>Department of Economics, University of Dhaka                  |

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*The CPD IRBD 2016 Team alone remains responsible for the analyses, interpretations and conclusions presented in this report.*

# State of the Bangladesh Economy in FY2015-16

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## *First Reading*

### **SECTION I. INTRODUCTION**

The present report is the first reading of the State of Bangladesh Economy in FY2016, prepared under the flagship programme of the Centre for Policy Dialogue (CPD) titled *Independent Review of Bangladesh's Development* (IRBD). The purpose of this report is to present an assessment of the performance of key sectors of the Bangladesh economy and to track trends in major macroeconomic variables during the first half of FY2016. The review examines quality of macroeconomic management and underlying strengths and weaknesses of the economy, at the halfway mark of the ongoing fiscal year. The report considers latest available data and information from domestic and international sources, as well as insights gleaned from key informants.

*First*, this report revisits macroeconomic trends in FY2015 so as to establish the benchmarks to assess the performance in FY2016 in Section II. *Second*, the report reviews the performance of key macroeconomic correlates during the early months of the current fiscal year. In Section III, a review of the public finance management in FY2016 has been carried out. Section IV deals with inflation and banking sector, while performance of external sector is examined in Section V. In Sections VI and VII detailed analyses of two key sectors of the economy, viz. power and energy and manufacturing sectors, from the perspectives of economic growth and private investment have been presented. Finally, the report ends with some concluding remarks.

## SECTION II. REVISITING MACROECONOMIC TRENDS IN FY2015

### 2.1 Growth and Investment

Provisional estimates from the Bangladesh Bureau of Statistics (BBS) showed that the growth of gross domestic product (GDP) increased by 0.4 percentage points, to 6.5 per cent in FY2015, from the 6.1 per cent in FY2014. However, this was well off the track when compared to the ambitious GDP growth target of 7.3 per cent. This growth was estimated by taking into account data for six to eight months, a period that passed through a deteriorating political situation, particularly in the first two months of calendar year 2015. Interestingly, as distinct from the agriculture sector, both industrial (9.6 per cent) and services (5.8 per cent) sectors were shown as registering higher growth in FY2015 compared to that of FY2014, while manufacturing registered the highest growth (10.3 per cent) since FY2008.

According to the BBS data, private investment's share in GDP remained almost unchanged- 22.1 per cent of GDP in FY2015 compared to 22.0 per cent in FY2014. Data for proxy indicators for the last quarter (April-June) indicated that private investment has continued to remain sluggish. For example, growth of credit to the private sector stood at 13.2 per cent at the end of June 2015 as against the target ceiling of 15.5 per cent. On the other hand, public investment has increased by 0.4 percentage points to 6.9 per cent of GDP in FY2015. However, expenditure against Revised Annual Development Programme (RADP) for FY2015 fell short of the target; hence, the final estimate for public investment may also be lower.

### 2.2 Fiscal Framework

CPD in its immediate reaction to the budget for FY2016 found that the quality of planning concerning the fiscal framework in Bangladesh was rather wanting. At the end of the FY2015, both from income and expenditure sides, the ambitious targets set for FY2015 were far off the budget and revised budget targets. As it turned out, growth of both revenue generation and spending on development programmes were significantly disrupted in FY2015.

Revenue mobilisation target for the National Board of Revenue (NBR) was slashed, for the second consecutive year, by about Tk. 14,693 crore (9.8 per cent of the budgetary target). NBR had put in an extra effort to infuse momentum in revenue collection in the last quarter of FY2015. However, the results were significantly off the mark as the data from the Ministry of Finance (MoF) indicate. In the end, NBR fell short of even its revised target by Tk. 11,069 crore. Interestingly though, NBR's own estimates were rather better, close to the revised target. Indeed, this discrepancy in the data presented by the NBR and the MoF is worrying, more so because the margin of discrepancy has been on the rise over the past several fiscal years – in FY2015 this was to tune of Tk. 12,765 crore (Box 2.1). One may recall that, CPD in its third interim report on the state of the economy in FY2015 estimated the possible revenue earnings shortfall (against the original budget target) to be around Tk. 30,000 crore (CPD 2015a). According to MoF data, overall revenue earnings (i.e. NBR tax, non-NBR tax and non-tax) in FY2015 experienced a shortfall of about Tk. 36,997 crore. Consequently, total revenue mobilisation registered an insignificant growth of 4 per cent in FY2015 (Table 2.1).

**Table 2.1: Fiscal Framework for FY2015: Target vs Reality of Growth (%)**

| Sources                              | Target Budget FY15 | Target Revised Budget FY15 | FY15 CPD Projection over FY14 Actual | Actual FY15 over FY14 |
|--------------------------------------|--------------------|----------------------------|--------------------------------------|-----------------------|
| <b>Revenue Collection</b>            | <b>30.3</b>        | <b>16.4</b>                | <b>9.0</b>                           | <b>4.0</b>            |
| NBR Tax Revenue                      | 34.4               | 21.2                       | 15.5                                 | 11.3                  |
| Non-NBR Tax                          | 14.8               | -2.1                       | -16.3                                | -24.0                 |
| <b>Total Expenditure</b>             | <b>33.1</b>        | <b>27.3</b>                | <b>10.0</b>                          | <b>8.2</b>            |
| Annual Development Programme (ADP)   | 45.2               | 35.6                       | 22.9                                 | 7.7                   |
| Non-ADP                              | 28.1               | 23.9                       | 4.6                                  | 8.4                   |
| <b>Overall Deficit (excl. Grant)</b> | <b>41.2</b>        | <b>59.5</b>                | <b>13.0</b>                          | <b>20.5</b>           |
| Net Foreign Borrowing and Grants     | 150.1              | 122.4                      | 23.6                                 | -32.4                 |
| Domestic Borrowing                   | 13.5               | 43.4                       | 10.3                                 | 33.9                  |

Source: Calculated from MoF data.

**Box 2.1: Data Paradox: NBR vs MoF**

In recent years, discrepancy between data provided by the NBR and the Integrated Budget and Accounting System (iBAS) reported by the MoF has become a common phenomenon. What is also to be noted is that, it has widened significantly as can be seen from Table 2.2. At the end of FY2015, the discrepancy was as high as 10.3 per cent of the reported figure by the MoF. Such discrepancy has an adverse impact on the quality of fiscal and budgetary policymaking and planning. CPD has repeatedly urged the policymakers for a quick reconciliation and consolidation between the two estimates for the sake of ensuring efficacy of public finance management.

**Table 2.2: NBR Revenue Collection Reporting by Two Sources**

| Year | MRFP, Finance Division, MoF | NBR, MoF | Difference | % Departure from MRFP |
|------|-----------------------------|----------|------------|-----------------------|
|      | <i>In crore Tk.</i>         |          |            |                       |
| FY10 | 59,396                      | 62,042   | 2,646      | 4.5                   |
| FY11 | 76,248                      | 79,403   | 3,155      | 4.1                   |
| FY12 | 91,595                      | 95,059   | 3,464      | 3.8                   |
| FY13 | 103,332                     | 109,152  | 5,820      | 5.6                   |
| FY14 | 111,421                     | 120,513  | 9,092      | 8.2                   |
| FY15 | 123,959                     | 136,724  | 12,765     | 10.3                  |

Source: Estimated from NBR and MoF data.

Note: MRFP refers to Monthly Report on Fiscal Position which is published on the website of Ministry of Finance ([www.mof.gov.bd](http://www.mof.gov.bd)).

On the other hand, actual budgetary expenditure remained much lower compared to the target set for FY2015. In the end, the government could spend only about 81.3 per cent of the public expenditure earmarked for FY2015. Thanks to lower commodity prices at global level, the demand for subsidy expenditure was much lower in FY2015. More importantly, public investment was far off the budget target. According to MoF data, ADP expenditure was only 74.2

per cent of the original allocation in FY2015.<sup>1</sup> Indeed, final figures of both income and expenditure under the fiscal framework were worse than the CPD projections.

Low level of attainment of budgetary targets for FY2015 eventually resulted in lower budgetary deficit. With the target of budget deficit having been set at 4.4 per cent of GDP, FY2015 closed with a much lower budget deficit of 3.8 per cent of GDP. Heavy reliance on domestic sources continued till the end of the fiscal year, contributing about 88.6 per cent of total financing of the fiscal deficit. However, financing structure of the budget deficit had changed significantly favouring non-bank borrowing. Government's income from programmed sources such as sales of National Savings Bond (NSD) certificates had increased notably and surpassed the revised target by Tk. 7,710 crore.<sup>2</sup> Moreover, the government relied on other non-banking sources rather than going for borrowing from banking sources. At the end, government borrowed Tk. 22,003 crore as loan from 'Others' sources of non-bank financing and kept borrowing from banking sources well below the planned limit. The government borrowed only Tk. 373 crore from banking sources while the programmed level was Tk. 31,221 crore. Net foreign borrowing and foreign grants combinedly contributed to only 11.4 per cent of total budget deficit (excluding grants).

### **2.3 Crop Production**

FY2015 was comparatively a much better year for crop production.<sup>3</sup> Except for Aus which had a very insignificant growth of 0.1 per cent, all other major crops registered strong production growth figures. Overall, paddy production was 1.0 per cent higher compared to FY2014. Upsurge in production was observed in case of maize (7.0 per cent), wheat (3.4 per cent), potato (3.4 per cent) and onion (22.9 per cent) (Figure 2.1). However, apart from onion, all the previously mentioned crops registered a reduced growth compared to FY2014. At the same time, large growth in the import of rice and wheat was observed in FY2015. During FY2015, about 5.27 million metric tonne (MT) of foodgrains were imported, which was 76.2 per cent higher than FY2014. On the flip side, public sector heavily relied on imported sources for replenishing the food stock. As a result, food stock at the end of FY2015 stood at 1.29 million MT which was about 0.14 million MT higher than the closing stock of FY2014. Curiously, distribution of rice and wheat saw a negative growth (-17.2 per cent), while import, procurement and stock all saw a strong growth, partly thanks to lower commodity prices.

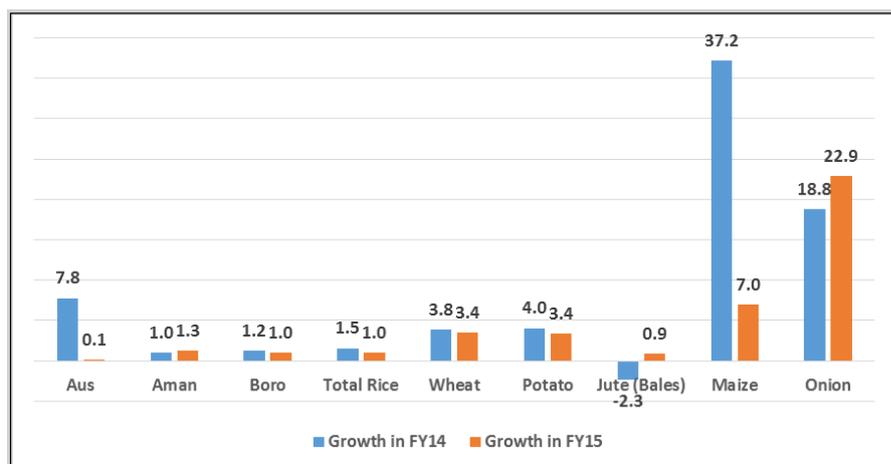
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<sup>1</sup> Implementation Monitoring and Evaluation Division (IMED) reports that actual ADP implementation was 85.3 per cent of original allocation. The discrepancy between the two reported figures (by the IMED and the MoF) was about Tk. 9,000 crore.

<sup>2</sup> While preparing the revised budget for FY2015 the target for NSD sales was raised by Tk. 11,944 crore. Net sales of NSD certificates reached Tk. 28,709.8 crore in FY2015.

<sup>3</sup> Performance of crop sector in Bangladesh is often affected by natural disasters. To understand the economic cost of natural disaster in Bangladesh agriculture, see Box 2.2.

**Figure 2.1: Growth of Major Crop Production (%)**



Source: Calculated from BBS data.

### Box 2.2: Economic Cost of Natural Disasters in Bangladesh Agriculture

Agriculture sector in Bangladesh experiences supply-side shocks of various intensity and degrees on a regular basis owing to natural calamities (flood, cyclone and storm). The impacts on the economy vary according to the severity of such disasters. Some of the earlier studies (Majumder 2013, Dewan *et al.* 2003, Ahmed *et al.* 2000, Dasgupta *et al.* 2010, and CPD 2004, 2007) have tried to quantify the associated economic costs; however, these attempts were limited to only major climatic stress-events (i.e. 1988 flood, 1998 flood, 2004 flood, and 2007 cyclone). BBS<sup>4</sup> and DAE report that crops and vegetables suffer some types of damage almost every year due to natural calamities. Quantifying the economic costs of natural calamities in Bangladesh's agriculture sector, particularly the crop sector, during 1972-2015 period, is the focus of interest here.

The agricultural damage,  $AD$ , is estimated as,  $AD_t = \sum_{i=1}^N p_{it} q_{it} + \sum_{j=1}^M p_{jt} v_{jt}$ , where,  $q_{it}$  is the quantity of  $i$ -th crop damaged due to the flood or cyclone at time  $t$ ; and  $v_{jt}$  is the quantity of  $j$ -th vegetable damaged at time  $t$ ;  $p$  is the harvest price (Tk./MT) of the corresponding produce of the respective time. The damage values are then deflated with the GDP deflator<sup>5</sup> and regressed against these following exogenous variables: percentage of affected areas to the total areas, frequencies of climatic stress-events in each year, variability of climatic variables (water level, temperature and precipitation), ODA, and a time index. The dummy for major floods is also included. A Bayesian regression model is solved using the MCMC package in R language<sup>6</sup>.

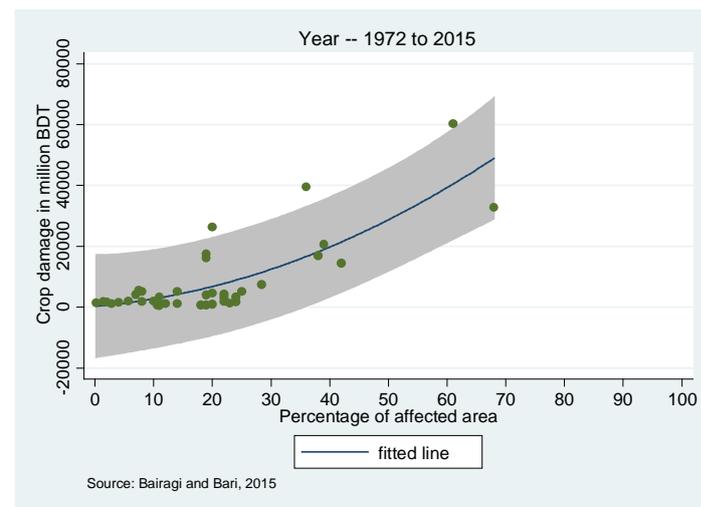
The fitted damage curve along with 95 per cent confidence interval is reported in Figure B2.1. This damage curve can be used as a guideline to check for robustness of the future damage estimation. The estimated damage in 2015 is about Tk. 5,096 million (in constant 2005-06 prices), which is equivalent to about 0.5 per cent of the agricultural GDP. The results of parameter estimates show that economic cost of climatic stress-events significantly increase at 10 per cent level with the flood-affected areas. The parameter of time index is negatively related to agricultural damage, which implies that over time the rate of flood has decreased.

<sup>4</sup> Difference issues of the Agricultural Statistical Yearbook of Bangladesh, BBS, and personal communication of the Department of Agricultural Extension (DAE).

<sup>5</sup> Human Development Index (HDI), World Bank, 2015.

<sup>6</sup> Detailed methodology and results of the analysis can be found in Bairagi and Bari (2015), *Economic cost of natural calamities in Bangladesh agriculture: A Bayesian analysis* (forthcoming).

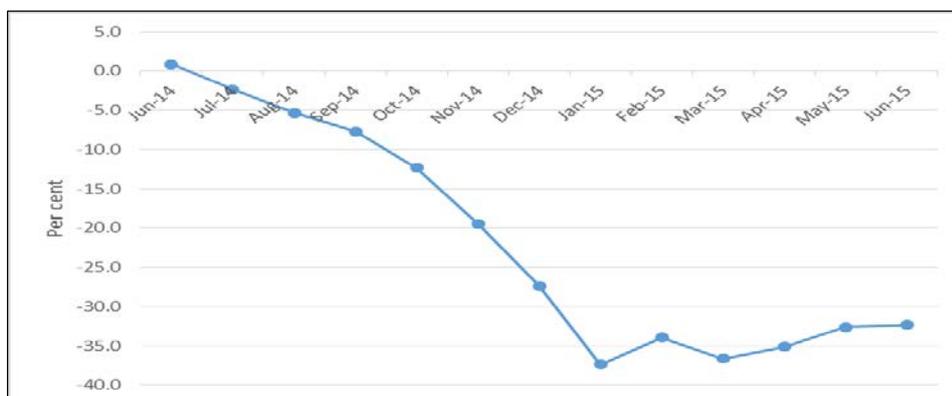
**Figure 2.2: Fitted agriculture damage curve: 1972-2015**



## 2.4 Inflation

Inflationary trend experienced a consistent decline in the first seven months of FY2015. This was followed by a rising trend when inflation reached its peak during February-April period when supply chains were disturbed due to violence, strikes and blockades. However, it was tamed to some extent during the last two months of FY2015. The annual average inflation in June 2015 was 6.4 per cent, which remained lower than the target of 6.5 per cent. Lower global commodity prices, stable exchange rate of the Taka and restrained growth of broad money supply in the backdrop of slow growth of domestic demand contributed to falling inflation. Indeed, the global prices of almost all commodities, including food and fuel, declined considerably throughout FY2015. In June, 2015, the International Monetary Fund’s (IMF) global commodity price index was 35 per cent lower than it was in June 2014 (Figure 2.3). In the domestic market, while food inflation followed a declining trend, non-food inflation increased by a small margin. Annual average food inflation decreased from 8.6 per cent in June 2014 to 6.7 per cent in June 2015. In contrast, non-food inflation increased to 6.0 per cent in June 2015 from 5.5 per cent in June 2014.

**Figure 2.3: Changes in the Monthly Commodity Price Index (Y-on-Y, %)**



Source: Calculated from the International Monetary Fund IMF data.

A decomposition of non-food inflation figures from July 2014 to June 2015, reveals that, average inflation has been consistently increasing for expenses related to medical care and health and transport & communication. This has led to the overall increase of non-food inflation.

On a positive note, in June 2015, annual average growth rate of wage index (base year 1969-70) was steady at 9.9 per cent while a decomposition indicates that wages for agriculture and manufacturing increased by 11.7 per cent and 9.8 per cent respectively.

## 2.5 Monetary Growth and Financial Institutions

The growth rates of the monetary aggregates in the elapsed fiscal year remained rather subdued as against their respective targets, except for net foreign assets. Growth rate of broad money fell well short off the target limit of 16.5 per cent and could reach only 12.4 per cent at the end of June 2015 (Table 2.3). Similarly, growth of credit to the public sector was the lowest since FY2010 which attained a negative growth of (-) 6.2 per cent at the end of June 2015 due to limited bank borrowing requirements by the Government to underwrite fiscal deficit. Under low domestic demand scenario, growth of credit to the private sector reached its peak at 13.2 per cent in June 2015 while the target was set at as high as 15.5 per cent. This trend in the growth of monetary aggregates, however, was accompanied by strong flow of net foreign assets which posted a growth rate of 18.2 per cent against the target of 3.6 per cent for the mentioned period. Indeed, robust accumulation of foreign exchange reserve, to keep the exchange rate of Bangladesh Taka (BDT) stable against United States Dollar (USD), contributed towards this strong growth.

**Table 2.3: Growth of Monetary Indicators (Outstanding as of June 2015)**

| Indicator                    | June 2014 (Actual) | June 2015 (Target) | Jun 2015 (Actual) |
|------------------------------|--------------------|--------------------|-------------------|
| Net Foreign Assets           | 41.2               | 3.6                | 18.2              |
| Net Domestic Assets          | 10.3               | 20.2               | 10.7              |
| Domestic Credit              | 11.6               | 17.4               | 10.0              |
| Credit to the Public Sector  | 6.7                | 12.9               | -6.2              |
| Credit to the Private Sector | 12.3               | 15.5               | 13.2              |
| Broad Money                  | 16.1               | 16.5               | 12.4              |

Source: Bangladesh Bank data.

Bangladesh's banking sector has been entrenched with large and uneven interest rate spreads, high non-performing loans (NPLs) and uneven competition in recent years. A lot of attention has been drawn to the challenges confronting the state-owned commercial banks (SCBs) as also specialised banks (SBs). Financial discipline of these banks were undermined by scams, high NPLs and inadequate capital adequacy followed by repeated recapitalisation (CPD, 2015a). In the backdrop of slow growth in private investment, classified loans in banking sector increased during the third quarter of FY2015 (to 10.5 per cent of total outstanding loans) but declined in the fourth quarter (to 9.7 per cent of total outstanding loans). Despite the decline in classified loan at the end of the fiscal year, the SCBs faced capital deficit which in turn created additional fiscal pressure for the government. Government doled out Tk. 2,617.0 crore for recapitalisation of SCBs in FY2015. Due to the moderately surplus liquidity in the banking system, and thanks to falling inflation, both the lending rate and deposit rate declined marginally during this period, from 13.1 per cent and 7.8 per cent in June 2014 to 11.7 per cent and 6.8 per cent respectively in

June 2015. At the end of June, the interest rate spread remained at 4.87 per cent in June FY2015 which is the lowest since FY2009.

## 2.6 External Sector

Export earnings registered a growth rate of 3.4 per cent in FY2015, missing by a significant margin the target of 10.0 per cent growth set for FY2015. Indeed, export performance was showing sluggish trends throughout the fiscal year apart from the first month of FY2015 when it registered a 24 per cent growth. The growth of readymade garment (RMG) exports was only 4.1 per cent during this period, while export earnings from non-RMG products could attain a growth rate of only 0.4 per cent which is the lowest since FY2012 (Table 2.4).

**Table 2.4: Growth of Export Earnings (%)**

| Product             | Actual Growth FY14 | Growth Target FY15 | Actual Growth FY15 |
|---------------------|--------------------|--------------------|--------------------|
| <b>RMG</b>          | <b>13.8</b>        | <b>9.8</b>         | <b>4.1</b>         |
| Knit                | 15.0               | 9.7                | 3.1                |
| Woven               | 12.7               | 10.0               | 5.0                |
| <b>Non-RMG</b>      | <b>3.3</b>         | <b>10.7</b>        | <b>0.2</b>         |
| Raw Jute            | -45.0              | 0.5                | -11.7              |
| Leather             | 26.5               | 23.6               | -21.4              |
| Home Textiles       | 0.1                | 7.3                | 1.5                |
| Frozen Food         | 17.3               | 14.6               | -11.0              |
| <b>Total Export</b> | <b>11.7</b>        | <b>10.0</b>        | <b>3.4</b>         |

Source: Calculated from the Export Promotion Bureau (EPB) data.

After registering high growth during the first half of the current fiscal year (18.3 per cent), import payments slowed down to some extent (2.5 per cent) in the third quarter, but it rebounded once again in the fourth quarter (13.0 per cent). High import growth in FY2015 was largely driven by extraordinary growth payments made against the import of five product groups: rice (394.3 per cent), crude petroleum (337.1 per cent), petroleum, oil and lubricants (POL) (40.7 per cent), fertiliser (42.3 per cent) and capital machinery (17.8 per cent). These five product groups together accounted for about two-thirds of total incremental import payments during FY2015.

Net foreign aid disbursement was about USD 2.2 billion in FY2015; it had seen certain amount of volatility throughout FY2015 and finally ended up with a 20.1 per cent growth. Inflow of remittance returned to its positive growth trend in FY2015 after experiencing a major setback in FY2014. Remittance inflow recorded a moderate 7.7 per cent growth during FY2015 compared to (-) 1.6 per cent growth in FY2014. Overseas employment also registered a strong 13.0 per cent growth after experiencing negative growth in the previous two fiscal years. The reopening of the Saudi market in 2015 may have served as a lifeline for Bangladeshi workers.

In FY2015, Bangladesh's overall balance of payments position was comfortable, posting a surplus of USD 4,373 million. However, the surplus declined by 20 per cent when compared to the previous fiscal year, in part due to the widening trade deficit. The trade deficit increased to 9,927 million in FY2015 from last year's USD 6,806 million (by 45.7 per cent) driven by sluggish export growth in the backdrop of the vibrant growth in import payments (11.3 per cent).

At the same time, high inflow of foreign currencies from the financial account and lack of payment demand resulted in a continuing rise in the foreign exchange reserves. This led to some appreciation in the exchange rate of BDT against all major currencies (CPD 2015b). Indeed, to maintain stability of the exchange rate of Taka (vis-à-vis USD), the central bank continued to use market operation tools to withdraw excess foreign currencies from the market. Hence, foreign exchange holdings of the country rose further by about USD 3.5 billion to 25.0 billion in FY2015. As aggregate demand remained low, the excess money supply arising from accumulation of net foreign assets had a rather negligible impact on inflation. Interestingly, a stronger domestic currency did not have any visible negative implications on the export performance of key Bangladeshi commodities.

In the second half of FY2015<sup>7</sup>, Bangladesh economy experienced formidable challenges as the economy was confronted with severe disruption in production, transport and service delivery. Furthermore, GDP growth was affected by lack of favourable investment environment and uncertainty among private investors in the backdrop of the political turmoil. Indeed, as the Bangladesh economy moved towards the end of FY2015, stagnation in private investment and depressed domestic demand continued to undermine the cause of growth although GDP growth recorded an improved figure compared to the earlier year. ADP implementation also did not post an impressive record. Lapse in attaining revenue targets by the NBR, underutilisation of development programmes, heavy reliance on high-cost non-bank borrowing in financing budget deficits were also identified as pressure points for the Bangladesh economy in FY2015. Lower export growth, with its adverse implications for manufacturing sector, remained a major concern in FY2015 (Annex 2.1).

At the same time, stable exchange rate, increased foreign exchange reserve, signs of revitalised remittance and overseas employment growth and contained inflation indicated signs of macroeconomic stability as the FY2015 moved towards the finishing line. Declining global commodity prices in this period in the face of sluggish demand also helped to maintain this stability. Balance of payment situation remained within the comfort zone despite widening trade deficit. However, investment, the key driver in accelerating Bangladesh's growth, failed to demonstrate any rebound from historic trends. The challenge for FY2016, the first year of the Seventh Five-Year Plan (7th FYP), was to be able to take advantage of the relative macroeconomic stability by infusing momentum in investment in order to attain higher GDP growth as envisaged in the plan.

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<sup>7</sup> This period, as is known, coincided with the first anniversary of the National Elections of 5 January 2014.

## SECTION III. PUBLIC FINANCE

CPD (2015c) had earlier projected that all major parameters of fiscal framework would eventually be required to register higher growth rates to attain the targets for FY2016 compared to those programmed in the budget for the year. As the final figures for the fiscal correlates for FY2015 were being prepared, this apprehension has indeed turned to be the reality. As a matter of fact, for the majority of the indicators, the actual growth target for FY2016 were actually higher than the CPD projections.<sup>8</sup> For example, the revenue growth target for FY2016, which was set at 27.6 per cent based on the revised budget for FY2015, will shoot up to 42.8 per cent (Table 3.1). Net foreign borrowing and grants will need to be 3.5 times higher in FY2016.<sup>9</sup>

**Table 3.1: Fiscal Framework for FY2016: Target vs. Reality Growth (%)**

| Sources                              | Budget<br>FY16 over<br>Revised Budget<br>FY15 | Budget<br>FY16 over<br>FY15 CPD<br>Projection | FY16 over<br>FY15<br>Actual |
|--------------------------------------|---|---|-----------------------------|
| <b>Revenue Collection</b>            | <b>27.6</b>                                   | <b>36.3</b>                                   | <b>42.8</b>                 |
| NBR Tax Revenue                      | 30.6  | 37.0  | 42.3                        |
| Non-NBR Revenue                      | 13.2  | 32.3  | 45.8                        |
| <b>Total Expenditure</b>             | <b>23.1</b>                                   | <b>42.6</b>                                   | <b>44.9</b>                 |
| Annual Development Programme (ADP)   | 29.3  | 42.6  | 62.8                        |
| Non-ADP                              | 20.3  | 42.5  | 37.5                        |
| <b>Overall Deficit (excl. Grant)</b> | <b>13.6</b>                                   | <b>60.3</b>                                   | <b>50.3</b>                 |
| Net Foreign Borrowing and Grants     | 39.6  | 151.1   | 359.2                       |
| Domestic Borrowing                   | 3.3   | 34.4  | 10.6                        |

Source: Estimated from MoF data.

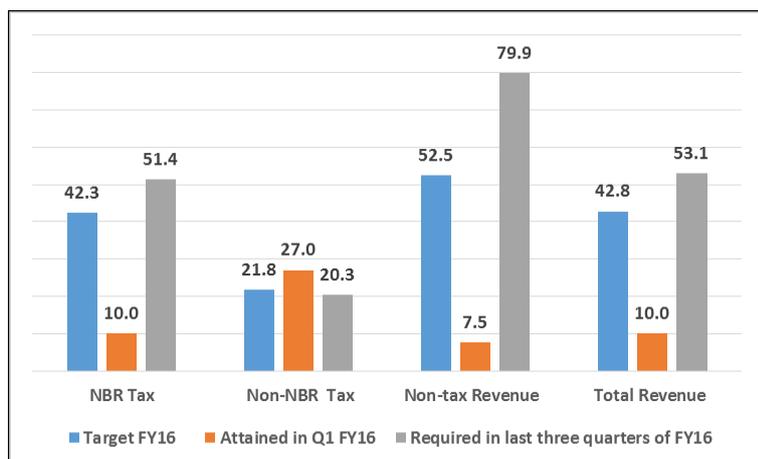
### 3.1 Revenue earnings: A large shortfall is inevitable

It is not difficult to predict that, in FY2016, revenue mobilisation will fall short of the target for the fourth consecutive year; the question is by what margin and what will this entail for public finance management. During the first quarter of FY2016, total revenue mobilisation was 10.0 per cent higher than the corresponding period of the previous fiscal year. In order to meet the revenue target, revenue mobilisation will need to grow at a rate of 53.1 per cent in the remaining three quarters (Figure 3.1); this is highly unlikely. Non-tax revenue collection of NBR, which was expected to account for 12.6 per cent of the total revenue in FY2016, was also not very promising. Growth of revenue earnings from non-tax revenue sources was only 7.5 per cent higher than last year's lacklustre performance. Non-NBR tax collection registered a better growth rate of 27.0 per cent; however, its impact on overall revenue mobilisation will be insignificant as it contributes to only about 2.8 per cent of total revenue.

<sup>8</sup> The exceptions were non-ADP expenditure, budget deficit and domestic borrowing.

<sup>9</sup> CPD (2015b) projected it to be 1.5 times higher.

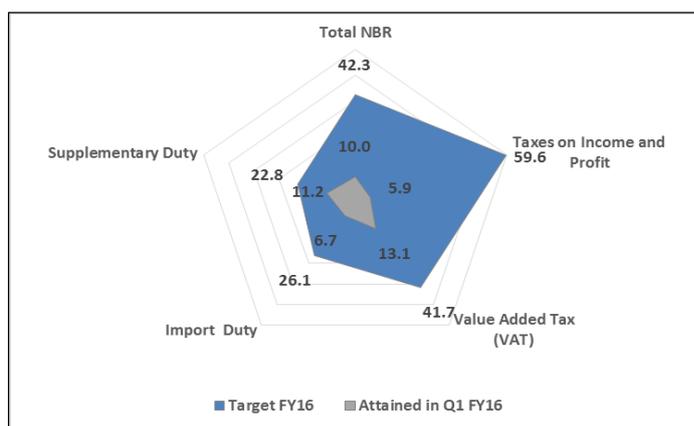
**Figure 3.1: Growth Rates of Revenue Collection Components (%)**



Source: Calculated from MoF data.

Revenue collection by the NBR continued to struggle in the first quarter of FY2016. According to MoF data, during the first three months of FY2016, NBR attained 10.0 per cent growth against the annual target of 42.3 per cent (Figure 3.2). Hence, NBR collection will now need to increase by 51.4 per cent over the last three quarters of FY2016. Among the major heads, income tax collection registered the lowest growth rate of 5.9 per cent during the reported period against the formidable annual target of 59.6 per cent (Figure 3.2). Collection of value added tax (VAT) registered 13.1 per cent for which the annual growth target was to be 41.7 per cent. Import duty collection attained low growth rate of 6.7 per cent while the growth of supplementary duty was to the tune of 11.2 per cent during the reported period.

**Figure 3.2: Growth Rates of NBR Revenue Collection Components (%)**



Source: Calculated from MoF data.

It is of interest to note that, data reported by the NBR shows a somewhat better scenario for total NBR revenue collection during the first quarter of FY2016; indeed the figure is Tk. 1,029 crore higher than the corresponding MoF figure.<sup>10</sup> However, the reported growth figure by NBR was somewhat lower, 9.6 per cent during the first quarter of FY2016; this was the lowest since FY2010 (Table 3.2). There was not much difference between tax collection from external and domestic sources. According to a latest estimate by NBR (unpublished but quoted from the NBR Chair), the

<sup>10</sup> As is known, such discrepancy is not uncommon. For a historical trend, see Box 3.1.

revenue collection in the month of November, on a year-on-year basis, increased by about 24.0 per cent and improved the overall growth to reach 14.0 per cent for the first five months of FY2016<sup>11</sup>. It was further stated that this improvement was largely driven by higher VAT collection. Even after accounting for this, NBR was Tk. 8,300 crore behind the strategic target set for the reported period of the fiscal year. However, the NBR is hopeful to hit the annual target at the end of the fiscal year. Efforts for tax mobilisation will need to be intensified over the coming months of FY2016. The ever widening gap between NBR and MoF reported figures should be a cause for concern and the policymakers (and analysts) will need to keep a sharp eye on this.

**Table 3.2: NBR Revenue Collection Growth in the First Quarter from FY2009 to FY2016 (%)**

| Particulars          | Jul-Sep FY09 | Jul-Sep FY10 | Jul-Sep FY11 | Jul-Sep FY12 | Jul-Sep FY13 | Jul-Sep FY14 | Jul-Sep FY15 | Jul-Sep FY16 |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Import Duty          | 16.8         | -3.3         | 8.1          | 31.6         | -0.6         | -1.5         | 14.8         | 4.5          |
| VAT Import           | 37.9         | -8.7         | 29.3         | -4.6         | 29.0         | 6.5          | 15.3         | 9.7          |
| Supplementary Import | 40.0         | 18.1         | 25.9         | 19.9         | 14.1         | -8.9         | 25.8         | 14.5         |
| <b>Import Total</b>  | <b>27.8</b>  | <b>-3.4</b>  | <b>19.6</b>  | <b>13.5</b>  | <b>12.8</b>  | <b>0.9</b>   | <b>16.5</b>  | <b>8.3</b>   |
| VAT Local            | 27.8         | 18.8         | 34.1         | 14.0         | 16.7         | 22.1         | 13.2         | 9.3          |
| Supplementary Local  | 8.3          | 13.4         | 29.5         | 15.1         | -5.2         | 22.8         | 20.0         | 8.9          |
| <b>Local Total</b>   | <b>19.4</b>  | <b>16.8</b>  | <b>32.3</b>  | <b>14.8</b>  | <b>8.9</b>   | <b>22.1</b>  | <b>15.3</b>  | <b>9.9</b>   |
| Income Tax           | 12.2         | 25.8         | 30.7         | 25.0         | 26.9         | 28.3         | 15.3         | 10.8         |
| <b>Total NBR</b>     | <b>20.9</b>  | <b>9.1</b>   | <b>26.6</b>  | <b>16.5</b>  | <b>15.0</b>  | <b>15.8</b>  | <b>15.9</b>  | <b>9.6</b>   |

Source: Calculated from NBR data.

One may highlight a number of reasons behind the aforesaid below par performance in the area of revenue mobilisation. *First*, it needs to be acknowledged that, the target figures were set at an overambitious level, particularly in view of lacklustre revenue collection performance in FY2015. This was flagged in CPD's reaction to the national budget for FY2016 (see CPD (2015c)). *Second*, international prices fell significantly for a number of imported commodities, while exchange rates of BDT against currencies of major trading partners somewhat appreciated. As a result, revenue collection at import stage experienced some decline. *Third*, a number of tax breaks (incentives) provided in the national budget, including lower corporate income tax rate for publicly traded companies, significant reduction in custom duties and supplementary duties, adjustments as regards income tax rate at source for all export items from the originally proposed rate of 1.0 per cent (to 0.6 per cent for both RMG<sup>12</sup> and non-RMG exports) and withdrawal of the proposed 2.0 per cent advanced income tax (AIT) on import of essential commodities. It was reported later that, due to last minute adjustments relating to relaxation of the proposed income tax at source on export and import, the government would have to forgo tax to the tune of about Tk. 2,200 crore.<sup>13</sup> Regrettably, this was not reflected in the final fiscal framework which did not change from the proposed one. To be true, this has become a common feature informing Bangladesh's budgetary planning process. Although every year several proposed fiscal measures are amended, they are not reflected subsequently in the final fiscal framework passed by the National Parliament. This is a major weakness in the fiscal policy design in Bangladesh. *Fourth*, administrative capacity and revenue collection effort did not see any major improvement and the

<sup>11</sup> This was reported in several print and electronic media. For example see: <http://www.thedailystar.net/business/tax-receipts-rise-24pc-183940>

<sup>12</sup> It may be noted that in the process income tax at source for RMG export was increased from 0.3 per cent to 0.6 per cent.

<sup>13</sup> This was mentioned in a media report. See: <http://old.thefinancialexpress-bd.com/2015/07/28/101835>

reform agenda failed to gain any visible momentum. It is still not clear how the disagreement<sup>14</sup> between the Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) and the NBR will be resolved over the implementation of the forthcoming VAT and SD Act which was originally planned to be settled by February 2015. No significant progress has been made either as regards the new Direct Tax Act and Customs Act. NBR, as has been reported, has identified a number of strategies to boost revenue mobilisation including building partnerships with business bodies and holding partnership dialogues, enhancing partnership with BBS to collect macro data to find out non-taxpaying people with taxable incomes, conducting regular door-to-door surveys, assigning one designated official to particular office to deal with long-pending cases to speed-up the Alternative Dispute Resolution (ADR) mechanism and continuing efforts towards administrative capacity building.

In view of lack of urgent remedial measure(s), a CPD projection based on MoF data estimates overall revenue shortfall in FY2016 being as high as Tk. 40,000 crore as against the ambitious budget target. It needs to be acknowledged that NBR has indeed taken several administrative steps to improve revenue collection. In view of this, the projection assumes that NBR's revenue collection will improve during the next nine months and will reach close to around historical growth trend. Much will also depend on Bangladesh Telecommunication Regulatory Commission's (BTRC) success to hold the auction for mobile spectrum fee for 2G and 3G and subsequently its ability to collect the installments by the end of this fiscal year. It may be noted that the auction was expected to be held in April 2015. As it appears, revenue collection will remain a major concern all through the rest of FY2016.

### 3.2 ADP expenditure against allocation is the lowest in recent years

Expenditure for ADP did not mark any significant breakthrough as yet in FY2016. Indeed, the performance has deteriorated and registered the lowest growth in recent fiscal years. According to first five months data, actual spending under ADP was 16.8 per cent of originally planned allocation of Tk. 97,000 crore (Table 3.3). This is the lowest level of expenditure in the last seven years (since FY2008). Both taka (18.5 per cent) and project aid component (13.6 per cent) of the expenditure was the lowest in the recent past (since FY2008 and FY2012 respectively).

**Table 3.3: Expenditure (July-November) over original ADP in the last 10 years**

| FY           | Taka | Project Aid | Total |
|--------------|------|-------------|-------|
| Jul-Nov FY07 | 20.0 | 21.1        | 20.4  |
| Jul-Nov FY08 | 15.2 | 16.7        | 15.7  |
| Jul-Nov FY09 | 19.8 | 15.3        | 17.7  |
| Jul-Nov FY10 | 22.7 | 22.6        | 22.6  |
| Jul-Nov FY11 | 24.1 | 14.8        | 20.4  |
| Jul-Nov FY12 | 25.3 | 12.8        | 20.2  |
| Jul-Nov FY13 | 27.2 | 20.8        | 24.7  |
| Jul-Nov FY14 | 21.7 | 17.0        | 20.0  |
| Jul-Nov FY15 | 19.3 | 20.7        | 19.8  |
| Jul-Nov FY16 | 18.6 | 13.6        | 16.8  |

Source: Authors' calculation based on IMED data.

<sup>14</sup> The important areas of concern included: (i) single rate and abolition of truncated value base; (ii) discontinuation of package VAT; (iii) significant expansion of documentation requirement; and (iv) vesting of additional powers to recover tax arrears, including freezing a tax debtor's bank accounts.

Analysis of the top 10 ministries/divisions that account for 73.8 per cent of the total ADP allocation in FY2016 suggests that the expenditure in July-November was the lowest due to below par performance of particularly six ministries/divisions, viz. Bridges Division (12.5 per cent), Road Transport and Highways Division (14.2 per cent), Ministry of Railway (13.1 per cent), Ministry of Health & Family Welfare (15.9 per cent), Ministry of Water Resources (10.0 per cent), Energy and Mineral Resources Division (15.0 per cent).

Expenditure data (during the July-November period) over the last four years also indicates that the rate of implementation against allocation of the top t10 ministries/divisions (according to allocation earmarked for FY2016) have been declining consistently every year and reached 18.4 per cent in FY2016 (Table 3.4). Indeed, five among the top ten ministries/divisions, viz. Local Govt. Division, Road Transport and Highways Division, Ministry of Primary & Mass Education, Ministry of Education, and Energy and Mineral Resources Division, are to be particularly mentioned in this connection. Consequently, overall ADP implementation rate has been falling. Nevertheless, implementation rate of the top 10 Ministries was higher than the corresponding average figure for all ministries.

**Table 3.4: Implementation of Top 10 Ministries (Jul-Nov, %)**

| Ministries/Divisions                              | FY13        | FY14        | FY15        | FY16        |
|---|-------------|-------------|-------------|-------------|
| Local Govt. Division (Including Block Allocation) | 29.8        | 30.9        | 27.6        | 26.6        |
| Power Division                                    | 38.9        | 13.2        | 18.3        | 18.8        |
| Bridges Division                                  | 3.9         | 2.4         | 10.2        | 12.5        |
| Road Transport and Highways Division              | 32.4        | 20.3        | 17.4        | 14.2        |
| M/O Railway                                       | 12.8        | 25.2        | 9.7         | 13.1        |
| M/O Health & Family Welfare                       | 15.1        | 16.6        | 18.2        | 15.9        |
| M/O Primary & Mass Education                      | 36.4        | 30.4        | 29.2        | 21.1        |
| M/O Education                                     | 30.4        | 25.4        | 23.5        | 17.5        |
| M/o Water Resources                               | 22.0        | 22.3        | 4.4         | 10.0        |
| Energy and Mineral Resources Division             | 25.6        | 36.8        | 34.8        | 15.0        |
| <b>Top Ten Ministry</b>                           | <b>22.0</b> | <b>21.1</b> | <b>19.8</b> | <b>18.4</b> |
| <b>Grand Total</b>                                | <b>24.3</b> | <b>20.0</b> | <b>19.8</b> | <b>16.8</b> |

Source: Authors' calculation based on IMED data.

In view of low level private investment and significant infrastructure deficit, better (in terms of quality) and timely implementation of the ADP, particularly that of growth enhancing infrastructure projects, will remain a policy priority. CPD (2015b) selected a set of 26 projects under the ADP for FY2015 which were supposed to help boost growth and employment. CPD's second interim review of the state of the Bangladesh economy in FY2015 (CPD 2015d) urged for close scrutiny and tracking of progress of these projects. Share of allocation for these projects in the ADP for FY2016 was 17.6 per cent. Fourteen of these 26 projects were supposed to be completed in FY2015 (or even earlier). Cost and completion deadline of number of these projects were revised; for a few more than once. Among these 14 projects, only one, 'Construction of Haripur 412MW Combined Cycle Power Plant and Associated Substation', was completed by FY2015. The remaining 13 projects were not completed in FY2015 and were carried forward in the ADP for FY2016 (CPD, 2015c). Analysis of the progress of these 25 priority projects also suggests that majority of these will not be completed within FY2016. The projects that posted good cumulative progress and could perhaps be completed by FY2016, are mainly carryover

projects; however, their respective implementation (or expenditure) rates during the first four months were not promising (see Annex Table 3.1 for details). Further cost and time overruns for these priority projects may be a possibility unless these are put under the radar screen and special policy and administrative attention is given to speed up their implementation.

On a positive note, actual combined spending for these 25 projects was better (16.2 per cent during July-October of FY2016) compared to that for all ADP projects (11.5 per cent during the same period). However, within this group performance varied.<sup>15</sup> Only eight projects had more than 11.5 per cent implementation rate while 6 projects<sup>16</sup> had zero implementation rate up to October 2015. Only seven<sup>17</sup> projects are closer to being completed.<sup>18</sup> But, apart from 'Dhaka-Chittagong Railway Development Project' and 'Augmentation of Gas Production under Fast Track Program' project, the remaining five projects had below average implementation rate during July-October FY2016 period. It is to be noted that, five out of these seven (could be completed) projects were already in the 'carryover' list.<sup>19</sup> Further, the much waited Padma Bridge project had a cumulative progress rate of 30.3 per cent until October 2015. Regrettably, only 6.7 per cent of the total allocation for this project in FY2016 could be spent during the first four months.

Considering the allocation that was made for FY2016, there are at least five projects (Dhaka-Chittagong 4-Lane, Joydebpur-Mymensingh Road Development, Construction of Bypass Road in Shatkhira town connecting Bhomra Land Port, Shahjalal Fertilizer Project, and Augmentation of Gas Production under Fast Track Program) which could perhaps be completed if a 'final push' could be given for their completion. In all likelihood, however, some of these projects may require additional time extension.

Regrettably, ability to implement ADP projects, in a timely manner and within initial estimates, remained elusive. Because of this lack of capacity, the possible 'crowd-in' effect as regards private investment remained unrealised. It may be noted that, in FY2014 only 14.2 per cent of the total 'to be completed projects' were actually completed within the stipulated time and planned allocation. This is the lowest since FY2001. Around half (48.9 per cent) of the completed projects experienced time overrun which is also the highest since FY2001 (CPD, 2015b). Such time overrun led to 51.1 per cent increase in the average cost of all completed projects which is the highest in the last eight years.

In view of the emergent situation, it is important to formulate a task force for timely implementation of the priority projects. A revamped reform agenda may be designed as part of

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<sup>15</sup> The standard deviation of these 25 projects is 49.1 which suggest large variance among the execution rate of these projects.

<sup>16</sup> These are: Construction of Bypass Road in Satkhira town connecting Bhomra Land Port, Construction of Bibiana-3,400 MW Combined Cycle Power Plant, Chapainawabganj 100 MW HFO based Power Plant, Shahjalal Fertilizer Project, Production of Electricity by Co-generation and Establishment of North Bengal Sugar Mill, and Mubarakpur Oil/Gas Well Exploration Project.

<sup>17</sup> These are: Dhaka-Chittagong 4-Lane, Joydebpur-Mymensingh Road Development, Construction of Third Karnaphuli Bridge (Revised), Dhaka-Chittagong Railway Development Project, Construction of Bypass Road in Satkhira town connecting Bhomra Land Port, Shahjalal Fertilizer Project and Augmentation of Gas Production under Fast Track Program

<sup>18</sup> Considering cumulative completion rate being more than 75 per cent.

<sup>19</sup> These projects were scheduled to be completed within FY2015 as per the project timeline. The 'Production of Electricity by Co-generation and Establishment of North Bengal Sugar Mill' project had registered more than 100 per cent cumulative progress rate and exceeded its project cost before the timeline and received allocation again under the ADP FY2016. However, there has been no financial progress in FY2016.

which project completion obstacles would be re-examined and regulatory and public procurement system would be revised. For majority of the projects, inability to ensure timely initiation and sound preparatory work are common phenomena. Towards this, measures should be taken so that prior actions as regards land acquisition and procurement process could be initiated at the earliest. It is also important that the Parliamentary Standing Committees and Public Accounts Committee take more responsibility for monitoring the timely completion of the priority projects.

### **3.3 Public expenditure will be lower than the target**

According to data available for the first quarter of FY2016, total public expenditure (including both development and non-development expenditure), recorded a marginal growth of 1.6 per cent, well below the annual target of 44.9 per cent. This weak growth was mainly attributable to lower non-development expenditure which was (-) 0.4 per cent lower than the corresponding figure of the previous fiscal year. Within non-development expenditure, net non-development revenue expenditure in the first quarter of FY2016 increased by only 5.7 per cent, while the annual target was set at 38.3 per cent. 'Pay and allowances' however recorded about 15.4 per cent growth during the reported period. As is known, the recently announced new pay scale for government employees has not come into effect yet.<sup>20</sup> Considering the required resources, 56.5 per cent higher allocation was earmarked for servicing 'pay and allowances' for the government employees (over the actual expenditure in FY2015). Interest payments increased by 10.4 per cent in July-September period of FY2016 compared to the corresponding period of FY2015. Lower level of international prices brought some respite as regards subsidy expenditure.<sup>21</sup> However, overall public expenditure is expected to rise significantly during the second half of fiscal year when the new pay scale for government employees will be implemented and ADP expenditure, following historical trends, is likely to accelerate. The final public expenditure outcome will largely depend on the government's decision as regards the subsidy package (i.e. decisions on adjustments of administered prices), expenditure for social safety net programmes and recapitalisation of SCBs. As was mentioned above, ADP expenditure is expected to be much lower than the planned allocation. Public expenditure is expected to be lower than the planned budget size.

### **3.4 Financing the budget deficit: Need to improve the mix**

As is the case, in the first quarter of each fiscal year, Bangladesh's budget balance tends to remain at the comfort zone. Indeed, in FY2016, at the end of the first three months, budget balance was surplus – to the tune of Tk. 1,157 crore. Both net foreign and domestic borrowing figures were negative, implying that the government repayment of earlier loans was higher than borrowing fresh ones. Curiously, during the reported period, within the domestic sources, net borrowing from banking sources stood at Tk. 7,048 crore (Table 3.5); about 18.3 per cent of annual target for FY2016. Net sales of NSD certificates during the first quarter was similar to last year (Tk. 6,795

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<sup>20</sup> The announced pay scale has been decided to be implemented in two phases in FY2015 and FY2016. It has been estimated that an additional Tk. 13,000 crore will be required in FY2016 for provisioning additional pay and allowances; which is about 28.8 per cent of total allocation for the mentioned expenditure head.

<sup>21</sup> For details, see Section 6.

crore). High level of borrowings from the banking system and sales of NSD certificates were resorted to in order to repay government's borrowing from other non-bank sources which was astonishingly high during last few months of FY2015. Indeed, net bank borrowing is expected to remain at a high level, unlike the previous fiscal year. However, under the prevailing context, this should not be a big risk for the central bank. A low off-take of net foreign aid remained the major concern from the perspective of financing mix of the budget deficit. Foreign aid disbursement is primarily tied with utilisation of project aid, i.e. implementation of ADP projects with foreign financing component. Without improving implementation of aided ADP projects, budget deficit financing will continue to remain dependent on domestic borrowing. As is known, the government is now in the process of implementing a number of large infrastructural projects (CPD 2015b). Consequently, a large amount of foreign exchange will be required to finance these projects. Under the circumstances, and considering the high level of foreign exchange reserve, it may be a good time to carefully assess the possibility of floating international bonds. This may be done on a limited scale, to underwrite the formidable costs of large-scale infrastructure project.

**Table 3.5: Budget Deficit and Financing (Crore Tk.)**

| Description                               | B FY15         | A FY15         | B FY16         | Jul-Sep FY15  | Jul-Sep FY16  |
|---|----------------|----------------|----------------|---------------|---------------|
| <b>Total Budget Deficit (Excl Grants)</b> | <b>-67,546</b> | <b>-57,659</b> | <b>-86,650</b> | <b>-1,737</b> | <b>1,157</b>  |
| Foreign Grants                            | 6,206          | 2,160          | 5,800          | 70            | 111           |
| Foreign Borrowing-Net                     | 18,069         | 4,403          | 24,335         | -1,699        | -1,075        |
| <i>Foreign Loan</i>                       | 26,519         | 11,484         | 32,239         | 773           | 640           |
| <i>Amortization</i>                       | -8,450         | -7,082         | -7,905         | -2,471        | -1,715        |
| Domestic Borrowing                        | 43,277         | 51,085         | 56,523         | 3,371         | -189          |
| <i>Bank Borrowing (Net)</i>               | 31,221         | 373            | 38,523         | -34           | 7,048         |
| <i>Non-Bank Borrowing (Net)</i>           | 12,056         | 50,713         | 18,000         | 3,406         | -7,237        |
| <i>National Savings Schemes (Net)</i>     | 9,056          | 28,710         | 15,000         | 6,887         | 6,795         |
| Others                                    | 3,000          | 22,003         | 3,000          | -3,482        | -14,032       |
| <b>Total Financing</b>                    | <b>67,553</b>  | <b>57,648</b>  | <b>86,658</b>  | <b>1,743</b>  | <b>-1,152</b> |

Source: MoF data.

Note: B refers to Budget; A refers to Actual.

### 3.5 Need for revisiting the fiscal framework

The fiscal framework for FY2016 needs a serious reexamination and revisit. Both from income and expenditure sides, the final figures will be much lower. Besides, for financing the budget deficit, more contribution will be required from domestic sources, while amount to be received from foreign sources will likely be lower. In this context, MoF should undertake an early assessment of the fiscal framework and go for an early revised budget.

The GoB should also restructure its public expenditure for better utilisation of the policy space, commensurate with its development objectives. Government's policy statements reveal that education, health and other social sectors were to be given the highest priority. Curiously, budgetary allocation and future projection as regards social sector spending of the government does not reflect this. CPD (2015c) revealed that social sector was not receiving adequate share in public investment, as should have been in light of GoB's declared policies. As can be observed from Table 3.6, allocation for six Ministries related to social welfare and security, has experienced persistent decline both as percentage of GDP and of budget. In FY2015, allocation increased

marginally but declined again in FY2016. As per the Medium Term Budgetary Framework (MTBF), this downward trend will continue in the forthcoming two fiscal years (MoF 2015). According to the MTBF, the share of these six ministries in total budget will decline from 19.2 per cent in FY2016 to 15.9 per cent in FY2018. As a share of GDP, the allocation is expected to decline from 3.3 per cent to 3.1 per cent. Indeed, such a trend is consistent neither with the targets set out in the 7FYP, nor with the commitments of the GoB as part of the Sustainable Development Goals (SDGs).

**Table 3.6: Ministry wise Allocation as % of GDP and Allocation for Total Public Expenditure**

| Ministries                                     | FY13A        | FY14A        | FY15A        | FY16A        | FY17P        | FY18P        |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <i>As % of GDP</i>                             |              |              |              |              |              |              |
| Ministry of Education                          | 0.97         | 0.98         | 1.03         | 1.00         | 0.95         | 0.92         |
| Ministry of Primary and Mass Education         | 0.82         | 0.89         | 0.90         | 0.84         | 0.82         | 0.79         |
| Ministry of Health and Family Welfare          | 0.78         | 0.71         | 0.74         | 0.74         | 0.72         | 0.69         |
| Ministry of Social Welfare                     | 0.17         | 0.16         | 0.19         | 0.19         | 0.18         | 0.17         |
| Ministry of Women and Child Affairs            | 0.11         | 0.11         | 0.10         | 0.10         | 0.09         | 0.09         |
| Ministry of Disaster and Relief                | 0.49         | 0.49         | 0.48         | 0.43         | 0.42         | 0.41         |
| <b>Total Six Ministries</b>                    | <b>3.33</b>  | <b>3.33</b>  | <b>3.45</b>  | <b>3.30</b>  | <b>3.17</b>  | <b>3.07</b>  |
| <b>Allocation for Total Public Expenditure</b> | <b>15.99</b> | <b>16.56</b> | <b>16.55</b> | <b>17.19</b> | <b>18.50</b> | <b>19.30</b> |
| <i>As % of Budget</i>                          |              |              |              |              |              |              |
| Ministry of Education                          | 6.0          | 5.9          | 6.2          | 5.8          | 5.1          | 4.8          |
| Ministry of Primary and Mass Education         | 5.1          | 5.4          | 5.5          | 4.9          | 4.4          | 4.1          |
| Ministry of Health and Family Welfare          | 4.9          | 4.3          | 4.5          | 4.3          | 3.9          | 3.6          |
| Ministry of Social Welfare                     | 1.1          | 1.0          | 1.2          | 1.1          | 1.0          | 0.9          |
| Ministry of Women and Child Affairs            | 0.7          | 0.7          | 0.6          | 0.6          | 0.5          | 0.4          |
| Ministry of Disaster and Relief                | 3.0          | 2.9          | 2.9          | 2.5          | 2.3          | 2.1          |
| <b>Total Six Ministries</b>                    | <b>20.8</b>  | <b>20.1</b>  | <b>20.8</b>  | <b>19.2</b>  | <b>17.1</b>  | <b>15.9</b>  |

Source: Calculated from MTBF, MoF.

Note: A refers to allocation and P refers to projection.

Allocation for social safety net also failed to receive adequate attention in the budgetary framework in recent years (CPD 2015c). Over the last five years, allocation for social safety net programmes, which also include pension-related expenditures for government employees, remained about 2 per cent of the GDP. In the Sixth Five Year Plan, the government targeted to raise the allocation to 3 per cent of the GDP. As is known, the General Economic Division (GED) of the Planning Commission has recently prepared a National Social Security Strategy (NSSS). The strategy document has put emphasis on the need for a strong social security system in Bangladesh by following a 'life-cycle' approach (GED 2015). In order to attain this target, the strategy document proposes to increase both allocation and coverage over the next five years (FY2016-2020). However, the budgetary targets did not consider proposals set out in the NSSS. For example, the allowance for Old Age Scheme was Tk. 1,440 crore in FY2016 and will remain the same in the coming two fiscal years (Table 3.7). In contrast, the NSSS targets are Tk. 2,010 crore, 3,530 crore and 3,740 crore for FY2016, FY2017 and FY2018 respectively. This departure is also reflected in case of per month allocation. While the target spelt out NSSS is to distribute Tk. 500 per month to the beneficiaries under the Old Age Scheme, it is currently affixed at Tk. 300 per month. Ministry of Social Welfare is expecting to raise the allowance to Tk. 400 per month which will be still lower than the NSSS target. In contrast, outlay on account of the government pension scheme has been increasing at a fast pace – even faster than what is envisaged in the NSSS. It will increase further as soon as the new pay scale comes into play from January 2016.

**Table 3.7: Budgetary Allocations and Projections vs. NSSS targets for Major Social Safety Net Programmes**  
(Tk. in crore)

| Programmes  | Budget |       |        | NSSS Target | Projection (MTBF vs. NSSS) |           |           |           |
|---|--------|-------|--------|-------------|----------------------------|-----------|-----------|-----------|
|   | FY14   | FY15  | FY16   | FY16        | MTBF FY17                  | NSSS FY17 | MTBF FY18 | NSSS FY18 |
| Old Age Allowance   | 980    | 1,307 | 1,440  | 2,010       | 1,440                      | 3,530     | 1,440     | 3,740     |
| Pension for Retired Government Employees and their Families | 6,692  | 8,482 | 11,584 | 7,600       | N/A                        | 8,000     | N/A       | 8,500     |
| Child School (Primary and Secondary) Stipend                | 1,000  | 971   | 1,159  | 3,870       | 0                          | 6,830     | 0         | 7,240     |
| Allowances for the Widowed, Deserted and Destitute Women    | 364    | 486   | 534    | 1,150       | 534                        | 2,040     | 534       | 2,160     |
| Vulnerable Group Feeding (VGF)                              | 1,327  | 1,419 | 1,453  | N/A         | 1,575                      | N/A       | 1,719     | N/A       |
| Employment Generation Programme for Poor                    | 1,400  | 1,500 | 1,500  | N/A         | 1,600                      | N/A       | 1,700     | N/A       |

Source: Calculated from MoF (2015) and GED (2015).

Note: N/A refers to Not Available.

Government efforts for social safety net programmes are not only inadequate in monetary terms but also from the perspective of coverage. For example, although the NSSS had proposed to raise the coverage of the beneficiaries under the Old Age Scheme to 55 lakhs by FY2018, according to MTBF, it is expected to remain at 30 lakhs in FY2018 (Table 3.8). Similar, scenarios can be observed in case of Child School Stipend as well as Allowance for Vulnerable Women programme.

**Table 3.8: Coverage of Major Social Safety Net Programmes (MTBF vs. NSSS)**

(Lakh/Man Month)

| Programmes  | Budget |                  |                  | Projection (MTBF vs NSSS) |           |           |
|---|--------|------------------|------------------|---------------------------|-----------|-----------|
|   | FY14   | FY15             | FY16             | MTBF FY17                 | MTBF FY18 | NSSS FY18 |
| Old Age Allowance   | 27     | 27               | 30               | 30                        | 30        | 55        |
| Pension for Retired Government Employees and their Families | 5      | 5                | 6                | N/A                       | N/A       | 6         |
| Child School (Primary and Secondary) Stipend                | 78     | 78               | 88               | 78                        | 0         | 179       |
| Allowances for the Widowed, Deserted and Destitute Women    | 10     | 10               | 11               | 11                        | 11        | 32        |
| Vulnerable Group Feeding (VGF)                              | 85     | 65               | 65               | N/A                       | N/A       | N/A       |
| Employment Generation Programme for Poor                    | 0      | 8.27 (Man month) | 8.27 (Man month) | N/A                       | N/A       | N/A       |

Source: Calculated from MTBF, MoF and GED (2015).

Lack of resources is often cited as a major reason for GoB's inability to provide adequate allocations for social safety net programmes directed to relatively more vulnerable and marginalised groups of the population. Curiously, over the last five years, between FY2011 and FY2015, the budget never reached the target level. For example, in FY2015, the budget deficit was Tk. 9,893 crore lower than the target. The amount was 32.3 per cent higher than revised allocation for all social safety net programmes. Indeed, at a time when global recovery is tepid

and domestic demand needs to be stimulated, to put the economy on a higher growth trajectory, the government needs to utilise its resources to the fullest. Reorganising and raising expenditure for the social sectors, including social safety net programmes for the marginalised people, will help the government both in short and medium terms in this respect. Implementation of large-scale infrastructure projects will also call for deployment of higher resources. In the short-run, the aggregate domestic demand will get a boost from higher government expenditure which will be helpful for the attainment of higher rates of growth and higher employment generation. Again, such expenditure is critical for the attainment of development objectives stated in the 7th FYP and the SDGs in the medium term by developing productive human resources. In view of this scenario, the government should not remain hostage to the compulsion of maintaining the budget deficit within 5 per cent of the GDP. Increase of budget deficit beyond this traditional threshold of 5 per cent will be needed for stimulating investment and growth. However, it is important that the resources are well-spent. To ensure this, the government will need to strengthen efficacy of delivery and monitoring mechanisms and ensure good governance. At the same time, government's efforts to raise government revenues must continue to maintain financial sustainability of the aforesaid proposal.

## SECTION IV. INFLATION AND BANKING SECTOR

### 4.1 Benefits from tamed inflation have to be reaped further

Since FY2010, for the first time, inflation rate is probably going to meet the target set out in the Monetary Policy Statement (MPS) of the central bank. As of November 2015, inflation rate had reached 6.2 per cent, the target affixed for FY2016 (Table 4.1).

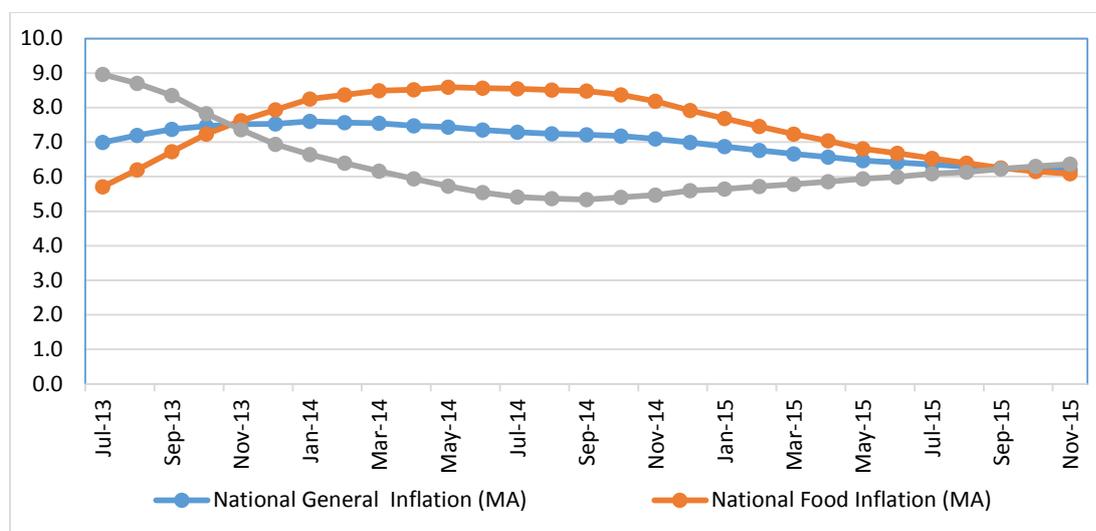
**Table 4.1: Target and actual inflation (%)**

| Year | Inflation    | Inflation target (MPS) |
|------|--------------|------------------------|
| FY10 | 7.3          | 6.5                    |
| FY11 | 8.8          | 7.0                    |
| FY12 | 10.6         | 7.5                    |
| FY13 | 7.7          | 7.5                    |
| FY14 | 7.4          | 7.0                    |
| FY15 | 6.4          | 6.5                    |
| FY16 | 6.2 (Nov 15) | 6.2                    |

Source: BBS Consumer Price Index (CPI) and MPS (various issues).

The decline in general inflation has been spurred mainly by lower food inflation that continues to prevail since June 2014. Non-food inflation, though relatively low at present, is showing an increasing trend since November 2014 (Figure 4.1). Lower prices of rice made significant contribution to keep overall food inflation at a lower level. Indeed, with a view to protect the interest of the paddy farmers the government raised the import duty twice in recent months. CPD has undertaken an analysis to measure the impact of the aforesaid rise in import duty on rice market, which is presented in Box 4.1. Indeed, in the context of maintaining a desired balance between the interests of farmers and producers, an earlier CPD report on the state of the economy (CPD 2015a) proposed to set up a Bangladesh Agricultural Costs & Prices Commission (BACPC). The mandate for the aforesaid commission is presented below in Box 4.2.

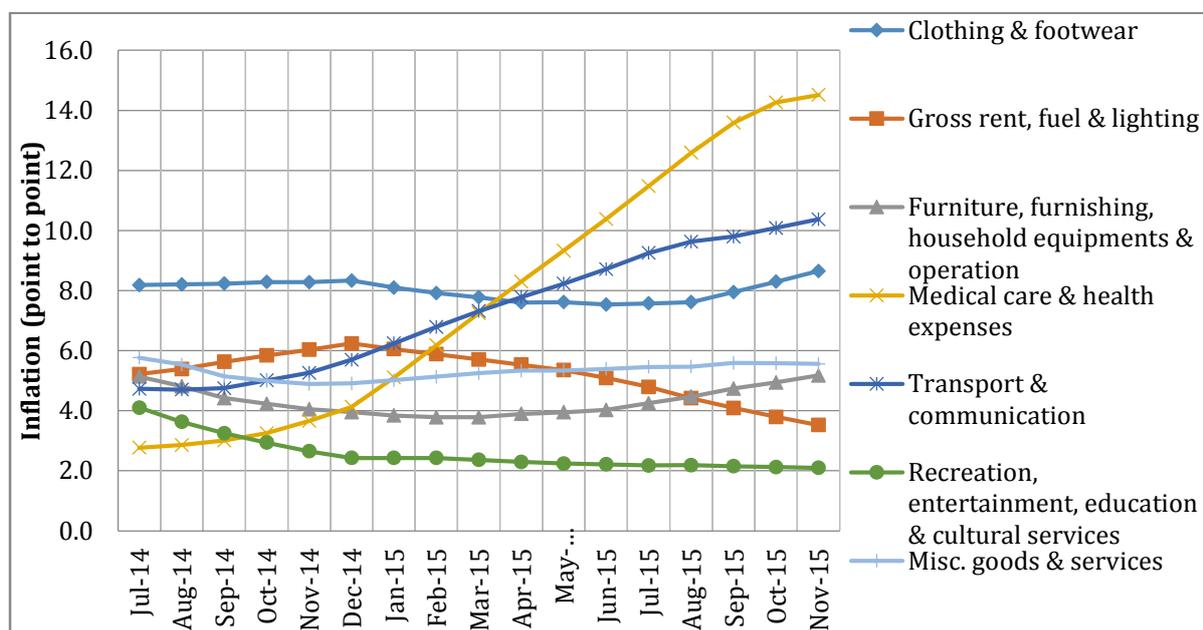
**Figure 4.1: Annual Average Inflation Rate (%)**



Source: Calculated from BBS data.

A decomposition shows that, transport and communication and medical care and health expenses have been major sources of non-food inflation in recent months (Figure 4.2).

**Figure 4.2: Composition of Non-food Average Inflation (%)**



Source: Calculated from BBS data.

#### Box 4.1: Impact of 20 Per Cent Import Duty on Rice Market

Rice prices have been on the decline in the backdrop of, among other factors, cheaper imports from India. As is known, the middlemen are important stakeholders in the supply chain of rice with considerable market power. When price of rice comes down, they are able to pass the burden on to the producers. When the reverse happens, they pass the burden on to the consumers. On its part, the government also intervenes in the rice market through various tools. To ensure fair price for paddy farmers, the Government of Bangladesh (GoB) has recently imposed a 10 per cent custom duty in addition to the existing 10 per cent regulatory duty in December and May of this year, respectively. An attempt has been made here to estimate the welfare impact of this cumulative 20 per cent duty using a comparative statics model (Bairagi 2015<sup>22</sup>). The comparative statics model consists of a set of log linearised supply and demand equations and equilibrium conditions along with the policy parameter. This allows to estimate the changes in equilibrium prices and quantities due to the effect of imposition of import duty. Producers' and consumers' welfare was calculated based on the estimated changes in prices and quantities from the initial equilibrium points. In the estimation process three stakeholder groups were considered: rice consumers, rice millers and paddy farmers. Preliminary analysis reveals that local paddy price would increase by about 14 per cent due to the introduction of the 20 per cent duty on rice import. The quantity supplied by the private importers will decrease as import will be relatively more expensive than before the intervention. Due to the introduction of rice import duty, it will be the paddy farmers who will enjoy highest surplus gain among the beneficiaries. The estimated annual welfare gain for paddy farmers in 2015 prices would be about Tk. 411 crore (USD 53 million), about 2 per cent of the initial returns to land. However, as would be expected, consumers will suffer loss due to this fiscal measure.

<sup>22</sup> Bairagi, S. (2015). Welfare Impact of Import Duty in Rice Markets of Bangladesh. (Forthcoming).

**Table 4.2: Comparison of rice prices (USD/MT) in Bangladesh, India and Thailand markets**

| Price category                    | Without intervention period | With intervention period | Change (%) |
|-----------------------------------|-----------------------------|--------------------------|------------|
|                                   | June-Dec 2014               | June-Dec 2015            |            |
| Paddy price in Bangladesh         | 268                         | 223                      | -16.9      |
| Rice price in Bangladesh          | 477                         | 410                      | -14.1      |
| Wholesale rice price in India     | 390                         | 379                      | -2.7       |
| BPL rice price in India           | 128                         | 128                      | 0.0        |
| Thailand's rice price (5% broken) | 424                         | 373                      | -11.9      |

Source: BBS data.

Notes: Prices are national average. Data sources are as follows: Bangladesh's prices are estimated based on the district-wise monthly wholesale prices reported by the Department of Agricultural Marketing (DAM), GoB; Indian wholesale prices are gathered from the Department of Consumer Affairs, New Delhi, Government of India; The BPL (below poverty line) prices are from the Department of Food and Public Distribution, Government of India; Thailand's rice prices are from The Pink Sheet Monthly Data, The World Bank. Following rates are considered to convert the local currencies to USD: 1 USD =77 BDT; 1 USD = 65 Indian Rupees.

#### **Box 4.2: Bangladesh Agriculture Costs & Prices Commission (BACPC)**

In the earlier series of CPD's state of the economy reports, five independent Commissions were proposed to be set up for attaining the targeted goals planned for 7FYP period. One of these was the setting up of Bangladesh Agricultural Costs & Prices Commission (BACPC). Such a Commission will be mandated to provide strategic guidelines to ensure food security of Bangladesh, suggesting incentive/subsidy to producers, giving guidelines for price signals in the market and for procurement, reduce the gap between farm-gate and retail prices of agri-products, balance consumer-producer interests and guarantee fair price for farmers. Such a commission may be a one-off endeavour, or a permanent body provide ongoing recommendations to the policymakers. It is to be noted that, this type of commission has been established in India and Pakistan. The proposed BACPC's main goal will be to safeguard farmer's interests as 'the key actors in the supply chain'. The commission may be constituted as an independent body, with representations of key stakeholder groups including farmers' associations. The BACPC could produce four reports: (i) enterprise budgeting reports: Boro, Aman, Raw Jute, Vegetable (Rabi and Kharif), and poultry; (ii) fiscal-incentive-guidelines reports; (iii) price guideline reports; and (iv) statistical database reports.

Depressed global commodity prices have been a key driver for lowering Bangladesh's inflationary trend, as has been the case for many other countries. Particularly, it was the falling global oil prices that have contributed to the decrease in Bangladesh's inflation in recent times. In addition, restrained growth of broad money supply (Table 4.3) and stable exchange rate between BDT and US dollar (discussed in Section 5) have also contributed to this downward trend.

**Table 4.3: Growth of Monetary Variables (%)**

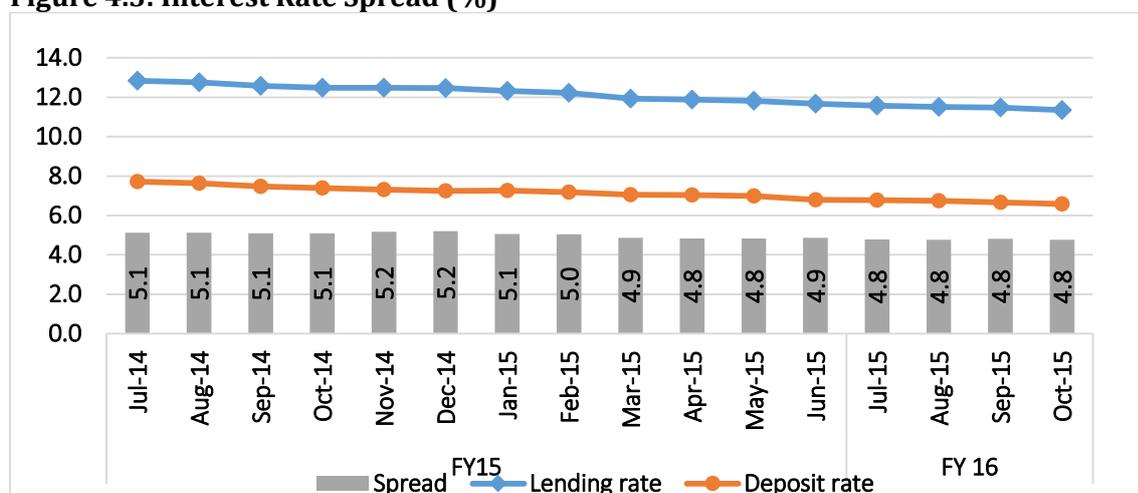
| Variable                  | Latest 2015 | Target (BB) (Dec 15) | FY10 | FY11 | FY12 | FY13  | FY14 | FY15 |
|---------------------------|-------------|----------------------|------|------|------|-------|------|------|
| Inflation (Fiscal Target) | 6.1 (Nov)   | 6.2                  | 7.3  | 8.8  | 10.6 | 6.8*  | 7.4* | 6.4* |
| Reserve Money Growth      | 17.1 (Oct)  | 16.5                 | 18.2 | 21.0 | 9.0  | 15.0  | 15.5 | 14.3 |
| Broad Money Growth        | 13.8 (Oct)  | 15.0                 | 22.4 | 21.3 | 17.4 | 16.7  | 16.1 | 12.4 |
| Net Foreign Asset         | 23.4 (Sep)  | 17.5                 | 41.3 | 5.3  | 11.7 | 43.9  | 41.2 | 18.2 |
| Net Domestic Assets       | 10.3 (Sep)  | 14.3                 | 18.8 | 25.0 | 18.5 | 11.8  | 10.3 | 10.7 |
| Domestic Credit           | 10.1 (Oct)  | 13.1                 | 17.8 | 27.5 | 19.5 | 11.0  | 11.6 | 10.0 |
| Credit to Public Sector   | -2.5 (Oct)  | 7.9                  | 17.3 | 32.3 | -9.5 | -38.4 | 34.7 | 30.9 |
| Credit to Private Sector  | 13.2 (Oct)  | 14.3                 | 24.2 | 25.8 | 19.7 | 10.8  | 12.3 | 13.2 |

Source: Bangladesh Bank.

Note: \* refers to new base.

Lower inflationary trend has had a diverse range of impacts on the various sectors of the economy. Consumers have enjoyed a breathing space through higher purchasing power, with higher real return on deposits. However, investors may not have enjoyed a commensurate benefit. There have been attempts by commercial banks to lower their lending rates and also reduce interest rate spread as advised by Bangladesh Bank. Average lending rate of banks has declined to 11.3 per cent in October 2015 compared to 12.5 per cent in October 2014. However, in spite of the lower inflation rate, the real lending rate has not reduced significantly. On the other hand, interest rate spread, though still within the suggested limit of 5.0 per cent, has not experienced a significant reduction during the first four months of FY2016 (Figure 4.3).

**Figure 4.3: Interest Rate Spread (%)**



Source: Bangladesh Bank.

In order to step up investment, business community has been consistently demanding a lower interest. Perhaps, now is the time for the central bank to cut rates slightly so that the benefits of low inflation rate could be reaped by the investors. Of course, banks can do this based on their marginal cost of funds, which is regrettably rather high in Bangladesh due to inefficiency.

Given that the global economic outlook does not look promising in the coming year, inflation may decline further. Though the inflation rate seems to be on course to attain the target of 6.2 per cent by June 2016, there is no room for complacency. Urban inflation is much higher than rural inflation; non-food inflation is inching upwards. Therefore, maintaining the sustainability of lower inflationary trend will be an important task for the central bank in FY2016.

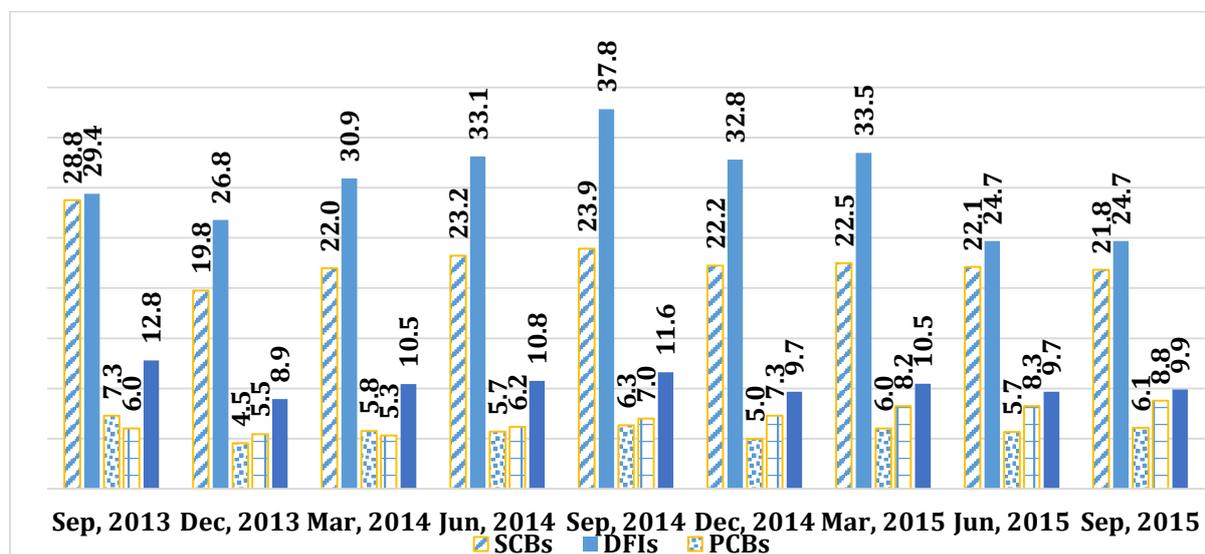
## 4.2 Watershed period for the banking sector has to end fast

The performance of the banking sector continues to be worrying. Data on key performance indicators of commercial banks in the country reflect the poor state of health of banks. Most banks have not been able to show significant improvements on indicators such as capital to risk weighted asset, non-performing loans (NPL), expenditure-income ratio, return on asset, return on equity, liquid asset and excess liquidity despite several measures taken by the central bank.

Since large financial irregularities in Sonali and BASIC banks were discovered, monitoring and inspection by the Bangladesh Bank have intensified. The central bank has also appointed observers in 14 banks and financial institutions, both state-owned and private, towards better management of these banks and improve governance through close supervision. The results, however, are yet to show up in the performance indicators of these banks.

Profitability, measured by return on asset and return on equity, has been negative for the state-owned commercial banks (SCBs). For private commercial banks (PCBs), though the indicators are positive, these are very low. In case of NPLs, similar performance is observed. Though the share of NPL to total loans in SCBs has slightly declined in September 2015 from June 2014, the rate is still as high as 21.8 per cent. On the other hand, NPL in PCBs and foreign commercial banks (FCBs) have increased. Because of high NPL, SCBs are having to make larger provisions. The government has to inject capital into these banks to keep them going. Clearly, implementation of BASEL III requirements that call for capital adequacy ratio to be raised to 12.5 per cent of their risk-weighted assets by 2019 will be challenging for the SCBs. As of September 2015, capital adequacy ratio of SCBs was only 6.2 per cent.

**Figure 4.4 Non-performing Loan in Banks (%)**



Source: Bangladesh Bank.

Lower profits in SCBs are mainly due to bad assets, inefficiency and political interference (for details, Khatun 2013). In case of PCBs, stricter compliance requirements by the central bank and low appetite for credit by the private sector due to sluggish business environment are the major reasons for lower profits. This is reflected through high volume of liquidity the in banks. The advance-deposit ratio has been little over 70 per cent in November 2015 even though banks are allowed to lend up to 80 per cent of their total deposit.

Despite anemic performance of the sector, good governance in banks still remains a distant reality. The Anti-Corruption Commission has been slow to take action against the identified people for embezzlement of money from banks. The Hall Mark group has not returned any money to Sonali Bank till now. More frustrating is that the authorities of Sonali Bank do not even expect to get back the money misappropriated by the Hall Mark group. These incidences have deflated the myth of efficiency of various measures taken to improve the governance of the banking sector.

Flexible measures including loan rescheduling policy favouring powerful people and lack of punishment for fraudulence in banks have worsened the situation. The oversight mechanism has clearly been less effective. CPD has repeatedly suggested that a 'Financial Sector Commission' be set up to come up with concrete recommendations to address the current weakness and give strategic directions for future (Box 4.3). If the economy has to move forward to achieve the growth targets affixed by policymakers, the banking sector has to go through the painful path of reform and restructuring and adhere to stricter policy and legal measures.

#### **Box 4.3: The Case for a Financial Sector Commission**

The banking sector in Bangladesh has achieved considerable success due to the reforms in the 1990s, 2000s and afterwards. However, the sector will have to prepare for the next generation global regulatory framework and meet clients' emerging needs. In the coming days, the banking industry will have to achieve the ability to absorb shocks arising from possible financial and economic stress, improve risk management and governance, and strengthen banks' transparency and disclosures through compliance with Basel III requirements to be implemented by 2019.

Recent shocks in the banking sector and emerging challenges call for further reforms for improvement of governance in the sector. In view of this, there is a need for setting up a Commission for the financial sector. The Commission will scrutinise the overall performance of the sector, assess the need of customers and the economy, identify the current problems and emerging challenges, and suggest concrete recommendations towards prudential banking in the short to medium terms. Considering the emerging needs and in order to build up more transparent and responsible banking sector, the Commission could also include non-bank financial institutions within the remit of its scrutiny, such as insurance companies and capital market, as these are interconnected. The broad terms of reference of the commission will be to critically assess the problems and weaknesses of the banking industry in order to find whether there is any disconnect between demand of the growing economy and the realities of a back-dated financial system that is failing to meet the emerging needs. On the basis of a comprehensive scrutiny, the Commission will prepare guidelines and make recommendations as regards reforms needed, automation, risk-management, real-time scrutiny, checks and balances, in-built good governance mechanisms, internal control, role of various players in banks and other financial institutions.

It may be mentioned here that in 1998, a Commission on Banking and in 2002, a Banking Reform Committee were constituted to make recommendations for the improvement of the performance of banks.

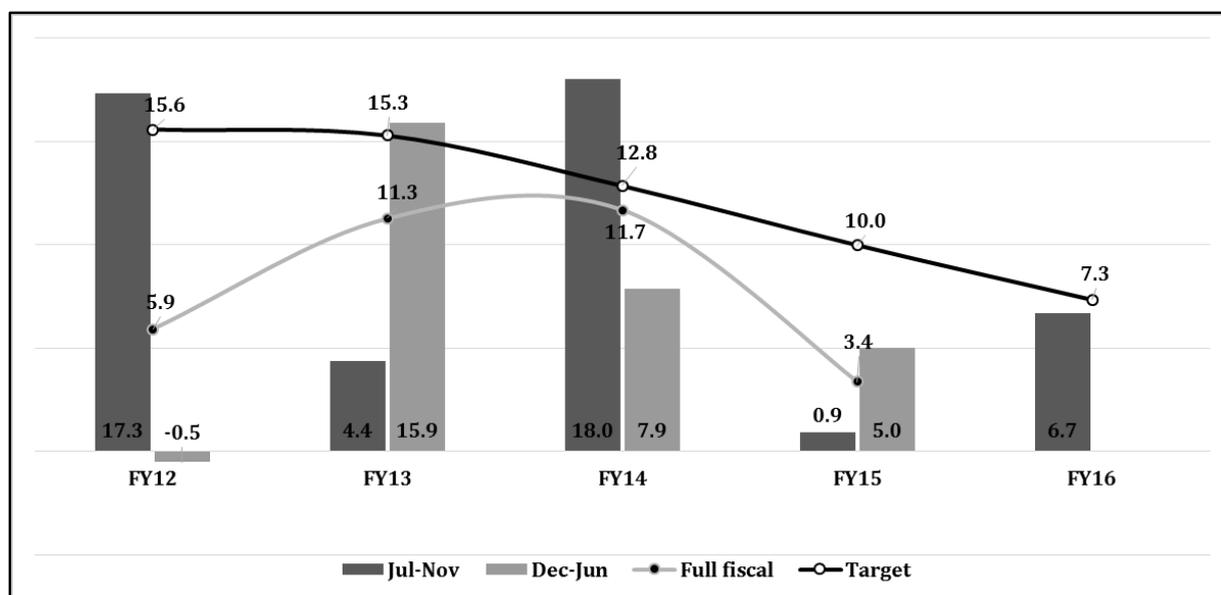
Source: Based on Khatun (2013).

## SECTION V. EXTERNAL SECTOR

### 5.1 Export performance remained subdued in the backdrop of lower targets

In the backdrop of slow global economic recovery, lower uptake in global demand, higher competition in Bangladesh's traditional export markets and new developments in international trade regime, export performance remained subdued in FY2015. In FY2015 export earnings failed to attain the 10.0 per cent target, posting a lowly growth of only 3.4 per cent. Indeed, export earnings had failed to achieve target for the fourth consecutive year since FY2011. A trend growth analysis of export data for the last five years indicates a cyclical pattern of growth performance during the two halves of respective fiscal years. If the growth was robust in the first half of a fiscal year, growth in the second half tended to be low and vice versa; export growth was buoyant against low benchmark growth (growth rate of corresponding half of previous fiscal year) and depressed against high benchmark growth (Figure 5.1). During July-November period, export earning registered a 6.7 per cent growth against the low base of 0.9 per cent growth during the matched period of FY2015. Since the growth in the second half of FY2015 was relatively higher, growth over second half of FY2016 may prove to be more challenging. What is also to be noted is the high volatility in the performance during the first five months of FY2016 (July-November). In key markets (of USA and EU) the price effects and volume effects (in export value growth) experienced diverse fortunes, while an increasing concentration favouring apparels exports became visible in the backdrop of lower export growth of non-RMG products.

**Figure 5.1: Export Growth (%) Targets and Achievements in Recent Years**

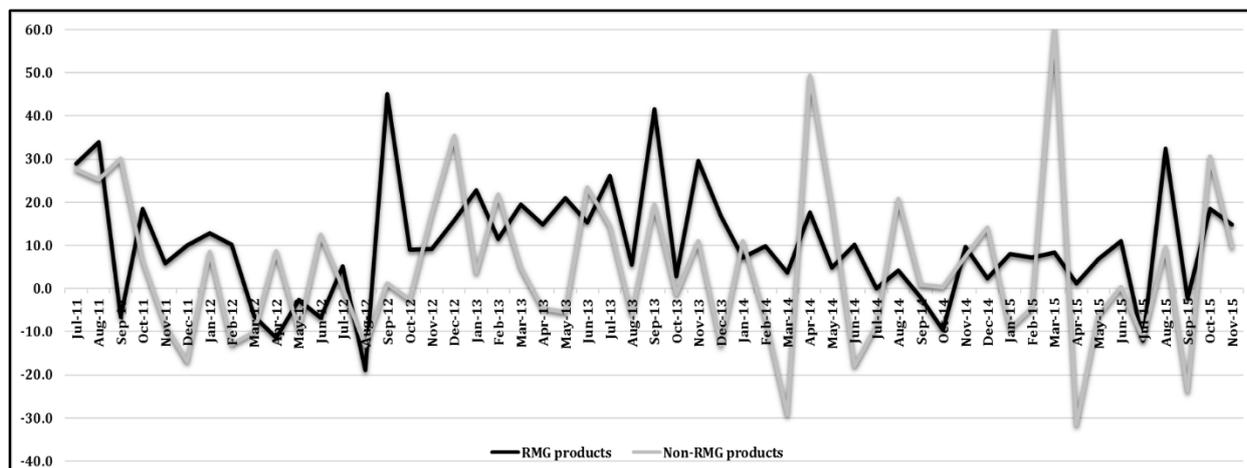


Source: Calculated based on EPB data.

Export performance, as was noted, whilst on track in view of the annual target of 7.3 per cent, experienced significant volatility during the first five months of FY2016. During July-November FY2016, export growth was 6.7 per cent, which was led by RMG sector. Among non-RMG items, export of raw jute was impressive, barring the month of November, while other non-RMG products with export potential such as leather, home textiles and frozen food exports had experienced negative growth. Consequently, non-RMG products posted a rise of a mere 1.6 per

cent while chasing an annual growth target of 7.2 per cent for FY2016. Relatively higher growth of RMG has led to greater export concentration for Bangladesh, favouring RMG. In view of this, greater export diversification is becoming even more challenging. As has been seen from long-term month-on-month export growth data, trend of non-RMG products has been more volatile than the RMG products, and both number of spikes and their intensity have increased significantly in recent years particularly for non-RMG products (Figure 5.2).

**Figure 5.2: Month-on-Month Export Growth (%) of RMG and Non-RMG Products**



Source: Calculated based on EPB data.

Export performance also experienced a high degree of volatility across various key markets over the first five months of FY2016. Export growth in the USA was as high as 16.8 per cent and in Canada it was 13.8 per cent compared to corresponding five months of FY2015. To contrast, export rose only by 2.2 per cent in the EU (Table 5.1). The apprehension that the robust growth potential in the EU, driven by change in *rules of origin* put into effect in 2011 (to one stage, for woven-apparels), will exhaust after the initial positive impact, may have been proven right. The relatively slow recovery in the major European economies may also have contributed to this. In general, Bangladesh's export performance during the rest of FY2016 will hinge critically on the pace of economic recovery in developed country markets. In view of this, the recent lowering of growth projections of these economies by IMF does not augur well for Bangladesh.

**Table 5.1: Monthly Marketwise Export Growth (%) in FY2016**

| Market                        | Jul          | Aug         | Sep          | Oct         | Nov          | Jul-Nov     |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|
| <b>Traditional market</b>     | <b>-13.1</b> | <b>27.3</b> | <b>-5.3</b>  | <b>16.6</b> | <b>14.6</b>  | <b>6.0</b>  |
| Canada                        | -9.1         | 34.1        | 14.5         | 24.7        | 21.5         | 13.8        |
| USA                           | -2.8         | 44.6        | 11.3         | 23.5        | 14.7         | 16.8        |
| European Union                | -16.3        | 21.2        | -11.6        | 14.1        | 14.2         | 2.2         |
| <b>Non-traditional market</b> | <b>-7.9</b>  | <b>30.5</b> | <b>-12.4</b> | <b>34.9</b> | <b>-28.3</b> | <b>-2.2</b> |
| <b>Total export</b>           | <b>-12.0</b> | <b>28.0</b> | <b>-7.0</b>  | <b>21.2</b> | <b>13.7</b>  | <b>6.7</b>  |

Source: Calculated based on EPB data.

As is seen from Table 5.2, both knit and woven growth are driven by volume in the US market indicating increasing pressure on prices. Although a part of this can be explained by falling cotton prices and the consequent lower production cost, growing competitive pressure in US apparels market are evident from discussion with exporters.

**Table 5.2: Growth (%) of RMG Products in US Market during July-October 2015**

| Product    | Growth (%) |        |       |
|------------|------------|--------|-------|
|            | Value      | Volume | Price |
| Knit (61)  | 29.0       | 35.6   | -1.8  |
| Woven (62) | 7.7        | 13.8   | -6.9  |

Source: Calculated based on the International Trade Centre (ITC) data.

China's market share for RMG products (over 40 per cent of USA's total RMG import) in the US market has been on the decline in recent years. China's knit export growth was 2.6 per cent while woven export growth was (-) 2.4 per cent in the US market in FY2015 compared to FY2014. A comprehensive product level CPD analysis of Bangladesh's top 10 knit and top 10 woven products (at 10-digit level) reveals that Vietnam has emerged as a major market competitor in the US market.<sup>23</sup> Vietnam has already emerged as the second largest exporter of both knit and woven products in the US market, after China. Six out of Vietnam's 10 top knit products were same as Bangladesh's top 10 knit items in the US market. In case of woven export, the corresponding number was two. Market share of those products in the US market and their growth during July-October of 2015 has been presented in Annex Table 5.1. Average price of Vietnam's export in the US market was found to be higher<sup>24</sup> (see Annex Table 5.2 for more detail) indicating that even at disaggregated level Vietnam was catering to higher-end market. However, it also appears that Bangladesh and Vietnam are also catering to same product markets as the price range in Table 5.3 indicates. This is particularly important in view of the recently signed Trans-Pacific Partnership (TPP) Accord.<sup>25</sup> If Vietnam is allowed market access at zero tariff, there is high possibility that the price differential will be compensated for Vietnam, for many items, by tariff differentials.

<sup>23</sup>The top 10 knit products (10-digit HS code level) exported by Bangladesh to the US market are: 6110202069, 6110202079, 6109100012, 6105100010, 6108210010, 6108210020, 6107110010, 6107110020, 6110303059 and 6104632006; woven products are: 6203424016, 6203424051, 6205202051, 6204624021, 6203424011, 6203424061, 6205202066, 6203424046, 6203424036 and 6204624011. These are mainly shirts, trousers and shorts made of cotton for both males and females, t-shirts, pullovers, babies' clothes, and the like. The selected items, compiled from USITC data, were the top imports to the US market from Bangladesh during January-December 2014.

<sup>24</sup> Both the countries enjoyed same MFN tariff rates for those products.

<sup>25</sup> The TPP Accord was finalised on 5 October 2015 after about prolonged negotiations. The Accord will now need to be ratified by the partner countries for its operationalisation.

**Table 5.3: Comparative Analysis of Bangladesh and Vietnam's RMG Export in the US market**

| Indicator  | Knit (61)   |             | Woven (62)   |               |
|--|-------------|-------------|--------------|---------------|
|  | Bangladesh  | Vietnam     | Bangladesh   | Vietnam       |
| Value of export in July 2014-June 2015 (Bangladesh's FY15) (million USD)           | 1,285.1     | 5,854.0     | 3,640.5      | 4,002.4       |
| Rank in July 2014-June 2015 (total export in US market)                            | 9th         | 2nd         | 3rd          | 2nd           |
| Value of export in July-October 2015 (million USD)                                 | 604.9       | 2,391.8     | 1,322.6      | 1,673.3       |
| Share (%) in July-October 2015 (of total export in the US market)                  | 3.1         | 12.3        | 9.1          | 11.5          |
| Growth (%) in July-October 2015 (of total export in the US market)                 | 29.6        | 9.9         | 7.5          | 15.0          |
| Weighted average tariff (%) in 2014 (tariff data at 6-digit level)                 | 13.9        | 14.5        | 10.6         | 11.7          |
| Share (%) of Bangladesh's top 10 export items in the US market                     | 4.5         | 17.4        | 18.1         | 6.8           |
| Share (%) of Bangladesh's top 10 export items in respective country's total export | 42.8        | 41.8        | 52.4         | 15.5          |
| Average price of Bangladesh's top 10 export items (USD/dozen)                      | 18.2        | 31.3        | 65.7         | 82.0          |
| Price range of Bangladesh's top 10 export items (USD/dozen)                        | 6.9 to 68.0 | 5.1 to 76.2 | 41.7 to 96.3 | 43.8 to 129.4 |

Source: Calculated based on OTEXA, ITC and USITC data.

As can be seen from Table 5.3, MFN tariffs for both Bangladesh and Vietnam are quite high-averaging about 14 per cent for knitwear and 11 per cent for woven wear. It is also to be noted that although the TPP *rules of origin* stipulates TPP cumulation, Vietnam will enjoy derogation for the first five years.<sup>26</sup> The other challenge for Bangladesh is the WTO MC-10 decision to do away with export subsidies on cotton.<sup>27</sup> This is likely to raise the price of cotton in the international market. The export trends, global growth scenario and changes in global trading regime all indicate a challenging time for Bangladesh in near-term future. It is of importance to note there that, in view of these changes and in the backdrop of the restructuring taking place in Bangladesh during post-Rana Plaza period, CPD is planning to undertake a major study with a view to come up with actionable agendas to advance the interests of Bangladesh's export-oriented RMG sector.

## 5.2 Import payments remained in negative terrain

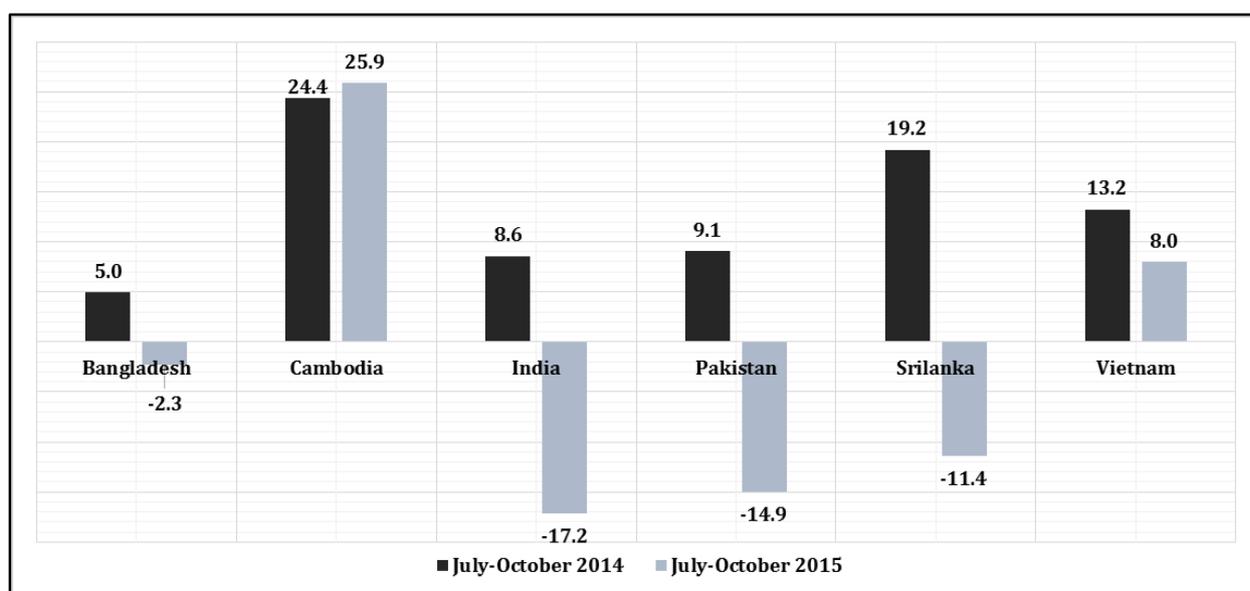
Import growth was not as volatile as export growth the first four months of FY2016; imports rather remained consistent, month-on-month, in the negative terrain. Import growth was negative (-) 2.3 per cent according to the data available for first four months of FY2016. As was observed from data available for 23-item import products published by Bangladesh Bank, 15 of the 23 products had experienced negative growth in July-October of FY2016 compared to matched months of FY2015. Import growth of petroleum products (-11 per cent), industrial raw materials (such as raw cotton, yarn, dyeing materials), fertiliser (-13.4 per cent) and capital machinery (-17.5 per cent) were negative.

<sup>26</sup> Meaning, even if it imports raw materials (cotton, fabrics) from China (which it does quite extensively), for the first five years it will be allowed to enjoy duty-free market access in TPP countries.

<sup>27</sup> Developed countries will eliminate export subsidies on cotton immediately; developing countries by 2017.

The negative growth of import was also experienced by other South Asian economies. Import growth in India was in the negative terrain for last seven consecutive months. Pakistan and Sri Lanka have also faced double digit negative growth during the mentioned period. On the other hand, Cambodia and Vietnam, two of Bangladesh's close competitors in RMG exports, experienced high positive growth of import payments over the high benchmark from corresponding growth in FY2015 (Figure 5.3).

**Figure 5.3: Import growth (%) in July-October 2015 over matched period in 2014 in various countries**



Source: Bangladesh Bank, National Bank of Cambodia, Reserve Bank of India, State Bank of Pakistan, Central Bank of Sri Lanka and Vietnam Customs (Customs Trade Statistics).

Note: 1/ For Cambodia, data was available only for July.

Although in value terms import expenditure has posted negative growth, because of significant fall in unit price of key imported products (i.e. POL, fertiliser, foodgrains, raw cotton, etc.) in the global market, this may not necessarily had corresponding (negative) implications in terms of volume of import. Indeed, as Table 5.4 shows, in concrete terms, Bangladesh has gained through improved terms of trade when price of crude oil, rice and fertiliser is juxtaposed to price of RMG products in US market.

**Table 5.4: Terms of Trade against RMG Export to US Market in October 2015 Compared to October 2014**

| Products              | Knit (kg) | Woven (kg) |
|-----------------------|-----------|------------|
| 1 barrel of crude oil | 1.71      | 1.63       |
| 1 MT of rice          | 1.07      | 1.02       |
| Fertiliser (index)    | 1.03      | 0.98       |

Source: Calculated based on ITC and World Bank data.

However, what is interesting to note is that, a disaggregated analysis of import does not indicate that Bangladesh was able to reap the full benefit of falling POL prices in the global market. Analysis shows that during July-October of 2015 period, price of POL imported by Bangladesh decreased only by 7.2 per cent. It is, thus, to be examined whether BPC is being able to reap the full benefits of the fall in global fuel prices.

Whilst fall in cotton prices have benefitted producers of yarn and fabrics, the fall in capital machineries import by (-) 17.5 per cent is worrying and reflects depressed investment demand in the domestic economy.

From the perspective of investment prospect in the near future, it is to be noted that total letter of credit (L/C) opening for July-October FY2016 period has posted negative growth of (-) 6.9 per cent over corresponding period of FY2015. However, growth of L/C opening for capital machineries import has increased by 15.0 per cent during July-October FY2016. The growth was positive for capital machineries for RMG industries (25.6 per cent), but negative for textile industries (-12.2 per cent). Back-to-back L/C opening growth was also positive at 4.2 per cent in July-October of FY2016, which experienced positive 13.0 per cent growth in the fiscal year FY2015. Growth of import L/C for textile fabrics and garment accessories was 5.9 per cent while for raw cotton and cotton yarn import, the outlook were negative (-18.4 per cent and -13.4 per cent). Thus, the signals for both domestic production and export-oriented industries are rather mixed.

### **5.3 Positive current account balance contributed to continued surplus balance of payment**

At the end of FY2015, current account balance was negative for the first time since FY2005, at (-) USD 1,645 million. This was mainly due to low level of growth in export earnings and high growth in import payments. The record trade gap of USD 9.9 billion in FY2015 came down in the first quarter of FY2016, thanks to significant drop in import payments. In July-October FY2016, current account balance remained positive at USD 936 million which was USD 136 million during the same periods of FY2015. The surplus was mainly due to positive export growth and negative growth in import payments. However, component-wise official and private transfers remained central to achieving the positive current account balance.

At the same time, overall balance remained positive at USD 1,936 million during July-October of FY2016<sup>28</sup> - higher than that of the corresponding periods of FY2015 (USD 1,246 million). Significant compositional change was observed in the structure of the financial account. There was about USD 2.3 billion additional financial account surplus in FY2015 over FY2014 because of the large inflow (net) in terms of other investments (which includes medium and long term (MLT) loans, other short term loans, trade credit, etc.). The other investment account increased significantly between end of FY2014 and end FY2015, from USD 444 million to USD 2.8 billion. However, in the first four months of FY2016 this has come down to USD 85 million only from USD 881 for the corresponding period of FY2015. The fluctuating fortunes experienced by financial accounts need to be examined more closely.

### **5.4 Remittance inflow has stagnated despite rising overseas employment**

#### **5.4.1 Migration**

In the first five months of FY2016, about 2.5 lakh workers have migrated from Bangladesh, posting a phenomenal growth of 41.3<sup>29</sup> per cent (the figure was 1.7 lakh in July-November

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<sup>28</sup> Overall balance in FY2015 was USD 4.4 billion – USD 1.0 billion lower than that had been achieved in FY2014 (USD 5.5 billion).

<sup>29</sup> The growth rate is about 57.6 per cent in the Middle East, while 14.1 per cent in other destination countries.

FY2015). On November 2015, about 63.4 thousand migrant workers had departed from Bangladesh which was the highest for a single month since January 2012 (67.7 thousand). Resumption of hiring of Bangladeshi workers by Saudi Arabia, and growing demand for female workers in Middle East countries, particularly by Oman and Jordan, played a key role in this surge. During this period, migration to Saudi Arabia increased significantly (35.5 thousand compared to 3.3 thousand) while Oman (59 thousand) and Qatar (55.8 thousand) remained the top two migrants' destinations. Apart from the Middle East, migration to Malaysia rose more than 13 times during the mentioned period. Growth of female migrant workers was nearly 35 per cent or 17.3 per cent of total migrants. As of July-November of 2015, about 14.3 thousand female migrants left for Saudi Arabia. In contrast, in the traditional markets for female workers such as Lebanon and UAE, a negative growth rate was registered.

#### **5.4.2 Remittances**

In the backdrop of the USD 15.3 billion remittance flows in FY2015, the inward remittance to Bangladesh during the first five months of FY2016 was USD 6.2 billion. This amount meant a negative growth (-0.7 per cent) over the corresponding period (July-November) of FY2015. The share of remittance earnings from Middle East dropped to 57.2 per cent (58.4 in July-November, FY2015) mainly because of negative growth of remittance flow from Saudi Arabia and the UAE. However, Saudi Arabia remained the largest source of remittance (USD 1.25 billion), but the growth was negative (- 4.8 per cent).

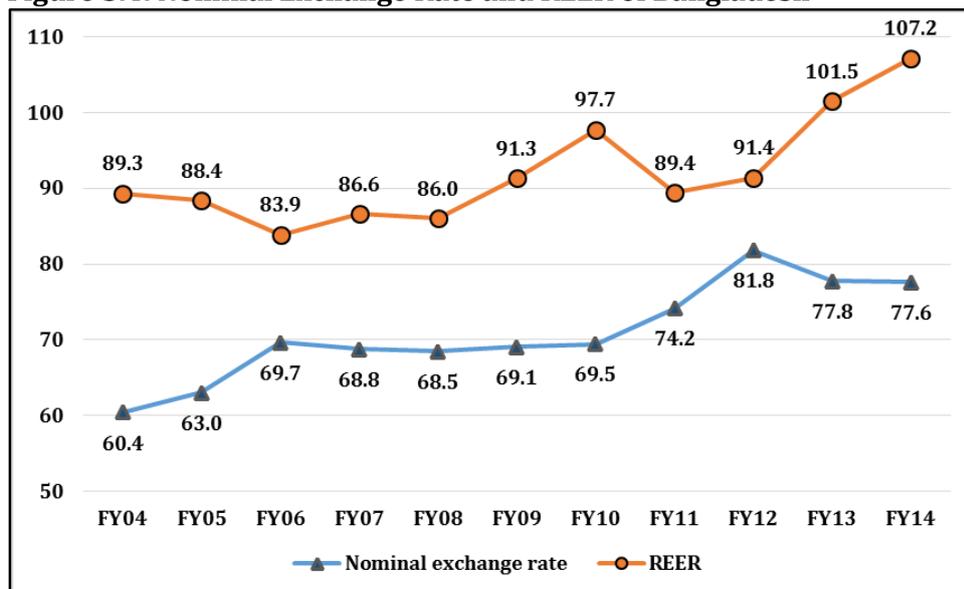
Whilst number of people leaving increased by more than 40 per cent, growth of remittances was negative. This is somewhat puzzling, although benefits of higher numbers leaving would perhaps come with some lag.

A recent CPD study (CPD, 2015e) has drawn attention to the need for comprehensive database of returnee migrant and financial education and financial inclusion of migrant workers. The study also observed that, since the number of female workers are rising, issues of social security and safety ought to be given high priority in negotiations with host countries. Safe migration and migrants' rights have also been recognised in the context of the recently adopted Sustainable Development Goals (SDGs) and Bangladesh's policymakers must to do the needful to ensure coherence of various global processes concerning migration with the SDG implementation process.

#### **5.5 BDT has depreciated marginally against USD**

As the Figure 5.4 indicates, the real effective exchange rate (REER) of BDT has experienced a rise over the past couple of years. However, the nominal exchange rate has remained stable, primarily because of intervention by the Bangladesh Bank (through mopping up USD from the market and preventing Taka from appreciation).

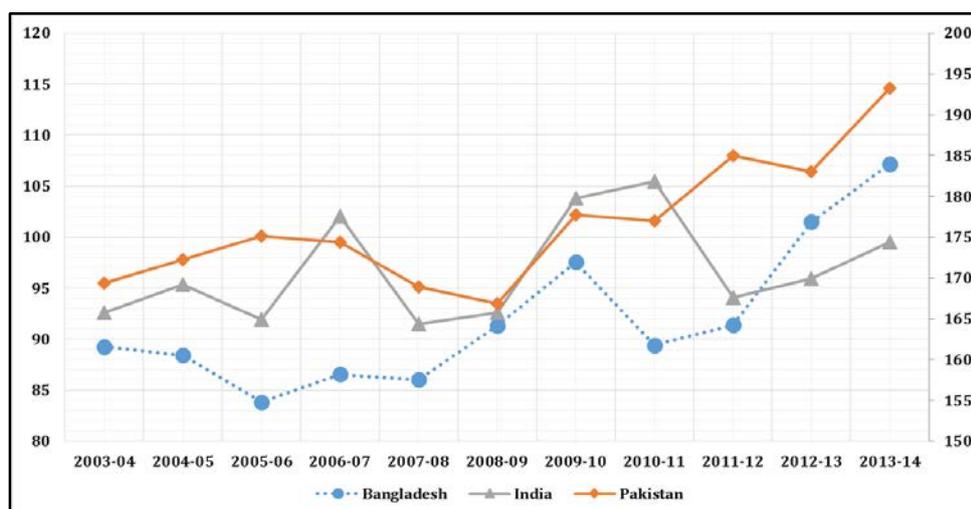
**Figure 5.4: Nominal Exchange Rate and REER of Bangladesh**



Source: Compiled from Bangladesh Bank data.

As Figure 5.5 indicates, REERs of India and Pakistan also indicate that Indian Rupee and Pakistani Rupee remain to be somewhat appreciated.

**Figure 5.5: Trend of real effective exchange rate (Base: 2000-01) in Bangladesh, India and Pakistan**



Source: Compiled from Bangladesh Bank, Reserve Bank of India and State Bank of Pakistan data.

As it stands, there is some scope to let the BDT depreciate to some extent. The implications for various sectors and the overall economy will need to be carefully examined prior to this.

## 5.6 Foreign exchange reserve continued to rise

The increasing momentum of foreign exchange reserve has continued in FY2016. As of 30 December 2015, the reserve stood at USD 27.4 billion which was USD 25.0 billion at the end of FY2015 (30 June 2015). According to the composition of the official reserve data for end November 2015, about 85 per cent of the reserve was in the form of convertible foreign currencies – which included both ‘securities’ and ‘depository to foreign national central banks’.

Strategically, Bangladesh Bank tends to resort to relatively safer options and in recent years, the central bank has relocated reserves from foreign central banks to security deposits. Significant change is also observed in case of keeping reserves in Special Drawing Rights (SDRs) (4.6 per cent of total as of November 2015 which was negligible earlier). Export development fund is among the other options for keeping reserves (6.7 per cent of reserve was kept in this account as of 30 November 2015).

Management of increasingly high forex reserve ought to be given due priority by the Bangladesh Bank. The pros and cons of the rising reserve and its multi-dimensional implications should be closely examined.

## SECTION VI. POWER AND ENERGY SECTOR

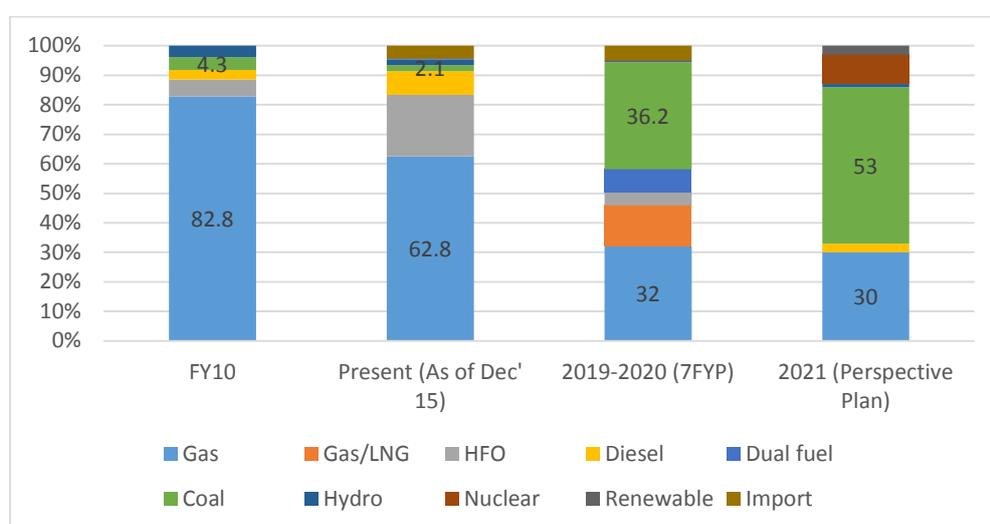
Four types of utilities markets exist in theory: private monopoly, public enterprise natural monopoly, regulated enterprise after privatisation, and fully competitive market (Bradburd 1992, Joskow 2007, NRG Expert 2012, Burger *et al.* 2014, Rubino *et al.* 2015). The electricity market of Bangladesh may be defined as a vertically integrated public enterprise natural monopoly. The market structure and pricing policies concerning the energy sector in Bangladesh are very complex and politically sensitive (Mujeri *et al.* 2014). Even though public enterprises significantly contribute to the national economy, economic performance of the state-owned enterprises (SoEs) in power sector is not satisfactory (Bangladesh Power Development Board (BPDB) and Bangladesh Petroleum Corporation (BPC) are the top two losers among the SoEs) (MoF, 2014). The Government of Bangladesh (GoB) has taken initiatives to involve private sector enterprises in the energy sector and has planned to mobilize private and joint venture investment during the Seventh Five Year Plan (7FYP) period. The key element of the power and energy sector in this plan is to diversify the energy-mix for electricity generation, which could have significant implications for fiscal structure (increase in total subsidy cost and contingencies liability). Consequently, tariff rates of energy-mix may need to be changed. This section attempts to examine the current state of electricity market in Bangladesh, evaluate the trends in tariff rates of electricity and energy-mix, analyse the efficiency and productivity of public-owned electricity generation plants, and identify key determinants of inefficiency concerning selected power plants.

### 6.1 Energy-Mix

To sustain economic growth and development in Bangladesh, energy supply must increase at a fast pace (Mujeri *et al.* 2014, CPD 2015). To achieve rapid growth in electricity generation, the GoB has emphasised five areas in the 7FYP. These are: (i) change the energy-mix; (ii) mobilise private and joint venture investment; (iii) explore electricity trading options with Bhutan, India, Nepal and Myanmar; (iv) develop transmission and distribution (T&D) system in line with generation and reduce T&D losses; and (v) use alternative sources of financing. Till now, electricity generation in Bangladesh has been overwhelmingly dependent on domestically supplied natural gas (Mujeri *et al.* 2014, CPD 2013, ADB 2009). However, it is clear from the plan (Figure 6.1) that the GoB's medium term vision is to move away from gas-based to coal-based electricity generation during the plan period. This ambition is also underwritten by the fact that, the current reserve of gas is likely to be depleted in less than 10 years. During the Sixth Five Year Plan period, the GoB was able to reduce the share of gas in the energy-mix (but not in terms of volume), though reliance on oil and import-based sources had increased over the plan period. Changing the energy-mix in the long-run (beyond five years) may be feasible, but difficult in the short and medium term. The first challenge will be to regulate the average cost pricing of electricity generation. This is so as it is most likely that the new diversified energy-mix will cost more to generate per unit of electricity resulting in higher subsidy if energy price is not revised. The GoB has now decided to focus more on coal-based electricity generation. However, local supply of coal and import of coal from abroad will also be a difficult challenge because this will require significant investment in infrastructure; this may not be feasible in the short-run.

Importing electricity has proved to be a viable option, providing yet another option. Bangladesh has been importing 500 MW electricity from India since FY 14, which will be raised to 1000 MW through an investment of USD 183.2 million (Asian Development Bank: USD 120 million, GoB: USD 63.2 million) by 2018. To develop a SAARC market for electricity, the SAARC Framework Agreement for Energy Cooperation (Electricity) has already been finalised in October 2014. To gain from cross-border trade and to get connected with the proposed SAARC grid, Bangladesh will need to focus on large investment in upgrading transmission lines. The nuclear source is also an option that Bangladesh has opted for, but it will not be added to the energy-mix during this plan period (detailed updates is given in the Box 6.1). The other challenge is to cater to the growing demand for gas from the industry and the households.

**Figure 6.1. Current and Planned Energy-Mix in Bangladesh**



Source: BPDB and Perspective Plan of Bangladesh, 2010-2021.

## 6.2 Electricity Market

Both in the short and long-run, electricity consumption has a positive impact on economic growth in Bangladesh (Khatun and Ahamed 2015, Masuduzzaman 2013, Buysse *et. al.* 2012, Alam and Sarker 2010, Asaduzzaman and Billah 2006). Per capita electricity consumption as well as access to electricity have increased during the Sixth Five Year Plan period. However, these two indicators are still the lowest among the neighbouring countries (Table 6.1); per capita income of Bangladesh still remains lowest among the neighboring countries barring Nepal. Per capita income has a positive impact on electricity consumption in Bangladesh (Mozumder and Marathe 2007). The challenge for the government will be to ensure supply of electricity at adequate and sustained level, as it is expected that demand for electricity would increase with the level of increase in income. Average annual growth of domestic users was about 12 per cent during FY2010 to FY2014, followed by small commercial (10 per cent), small industrial, and large industrial consumers. Thus, all indications are that demand for electricity will rise significantly in future.

**Table 6.1: Access to Electricity in Bangladesh and Other Neighbouring Countries**

| Countries  | Per Capita electricity Consumption (KWh) |      | Access to Electricity (%) |       | Per Capita Income (Real 2005 USD) |
|------------|--|------|---------------------------|-------|-----------------------------------|
|            | 2010*                                    | 2014 | 2010*                     | 2015  | Average 2012-2015*                |
| Bangladesh | 247                                      | 277  | 55.2                      | 61.0  | 714                               |
| Bhutan     | 2420                                     | 2600 | 72.0                      | 95.4  | 1999                              |
| China      | 2944                                     |      | 99.7                      | 100.0 | 3620                              |
| India      | 644                                      | 1010 | 75.0                      | 81.0  | 1167                              |
| Nepal      | 103                                      | 293  | 76.3                      | 76.0  | 411                               |
| Pakistan   | 467                                      | 420  | 91.4                      | 73.0  | 795                               |
| Sri Lanka  | 451                                      | 519  | 85.1                      | 94.0  | 1994                              |

Source: \*indicates data gathered from World Development Indicator (WDI), the World Bank; Access to electricity data in 2015 are from International Energy Agency (IEA); Per capita electricity consumption for 2014 are gathered from (Sri Lanka: Ceylon Electricity Board; Pakistan: Saleemullah 2014; Bangladesh: estimated by authors assuming 158 million population in FY2015; Bhutan: Gyeltshen *et al.* 2015; India: Indian chamber of commerce).

As data shows, electricity generation capacity (derated) has reached 11,467 MW on 27 December 2015, which is about 304 MW higher than in June 2015 (Table 6.2). The targeted generation capacity set in the Power System Master Plan (PSMP) for FY2015-16 has been met already. It is worth mentioning that the generation capacity has almost doubled as of 30 June 2015 compared to that of 30 June 2011. However, there are still significant gaps between the derated capacity and peak and evening utilisation, and these gaps have been widening. One possible reason is that, the power plants are not operating at the minimum point of average cost. Earlier studies have found that these gaps may be due to forced outage (i.e. maintenance activities, fuel constraints, old aged plants), low level of capacity utilisation of Quick Rental Plants (QRPs), system loss, corruption, and inefficient management (Akram 1999, Haque and Rahman 2010, Ahmed 2011, CPD 2013). Seasonal factors may also have played a critical role in this regard as electricity is not storable. Electricity generation capacity by fuel type shows that the share of gas-based generation has decreased over time although not the volume of gas used (Annex Table 6.1). As the number of components in the energy-mix increased, the share of gas-operated electricity generation had come down. The planned targeted demand for capacity of electricity generation has been reset in the 7FYP at 12,584 MW (double than current capacity).

**Table 6.2: Electricity Generation Capacity (MW)**

| Capacity   | 30 Jun-11 | 30 Jun-12 | 30 Jun-13 | 30 Jun-14 | 30 Jun-15 | 27 Dec-15 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Installed Capacity                                   | 5728      | 7074      | 8674      | 10488     | 11758     | 12071     |
| Derated Capacity                                     | 5372      | 6718      | 8156      | 9962      | 11163     | 11467     |
| Actual Peak Day                                      | 4125      | 4665      | 4911      | 5618      | 6116      | 4777      |
| Actual Peak Evening                                  | 4511      | 5327      | 5901      | 6887      | 7802      | 6667      |
| Gap between derated capacity and usable peak load    | 1247      | 2053      | 3245      | 4344      | 5047      | 6690      |
| Gap between derated capacity and usable evening load | 861       | 1391      | 2255      | 3075      | 3361      | 4800      |

Source: Daily generation report, BPDB.

Actual electricity generation in Bangladesh during July-November 2015 was about 21,305 GWh, which is about 13.7 per cent higher than that of July-November 2014 (daily generation reports,

BPDB). During comparable period, quantity supplied of electricity by imports has decreased (12.1 per cent). The analysis of year to year electricity generation by sectors shows mixed results. Electricity generation under private sector has increased because of growing generation under the rental and quick rental plants, though Independent Power Producer's (IPP) generation has remained at the same level. Public sector generation has increased steadily, though it has come down during July-September 2015 compared to July-September 2014 (Table 6.3). It is important to note that, during the previous two years approximately 6-8 per cent of total electricity supply were from private sector imports.

**Table 6.3: Electricity Generation in Bangladesh (GWh)**

| Sector           | FY12         | FY13         | FY14         | FY15         | Jul-Sep, 2014 | Jul-Sep, 2015 | Change (%) |
|------------------|--------------|--------------|--------------|--------------|---------------|---------------|------------|
| Public sector    | 15200        | 17994        | 19645        | 21103        | 6016          | 5925          | -1.5       |
| Private sector   |              |              |              |              | 5984          | 7108          | 18.8       |
| IPPs             | 8707         | 8341         | 7878         | 8470         | 2039          | 3532          | 73.2       |
| Rental and SIPPs | 9489         | 10146        | 10508        | 10785        | 3121          | 2627          | -15.8      |
| Imported         |              |              | 2265         | 3380         | 824           | 949           | 15.2       |
| <b>Total</b>     | <b>33396</b> | <b>36482</b> | <b>40296</b> | <b>43738</b> | <b>12001</b>  | <b>13033</b>  | <b>8.6</b> |

Source: BPDB.

Notes: Electricity generation during July-November 2015: total 21,305 GWh and imported 1,357 GWh; during July-November 2014: total 18,735 GWh and imported: 1,544 GWh.

### 6.3 Gas Market

Gas reserve in Bangladesh is limited. Total extractable gas reserve is approximately 27.12 trillion cubic feet (tcf), of which Bangladesh has already consumed 12.3 tcf by 2014. Reserves are expected to be depleted by FY2023 if the demand for gas rise at 7 per cent per annum (7FYP). To cope with this future supply shock of gas, the government has already planned to change the energy-mix. However, there are also challenges for the GoB to meet the residual demand from households, industry and commercial sector, as it is expected that the country will graduate from LDC group (CPD 2015) and a larger middle income group will emerge (Sen 2015). In FY15, domestic, industrial, captive power, public power and CNG uses have posted some increase compared to FY14 (Table 6.4). This is the time to think of saving the gas that Bangladesh has by reducing transmission and distribution losses, increasing efficiency of power plants, supplying to the end-users in a cost-effective manner and expanding pre-paid metered system (Gas Allocation Policy, FY2015-FY2016).

**Table 6.4: Table. Production and Distribution of Gas (mmcm)**

| <b>Production and Distribution</b> |            | <b>FY12</b>  | <b>FY13</b>  | <b>FY14</b>  | <b>FY15</b>  | <b>Jul-Sep, 2015</b> |
|------------------------------------|------------|--------------|--------------|--------------|--------------|----------------------|
| <b>Total Production</b>            |            | <b>21056</b> | <b>22669</b> | <b>23232</b> | <b>25263</b> | <b>6703</b>          |
| Distribution                       | Power      |              |              |              |              |                      |
|                                    | Public     | 4500         | 5300         | 5451         | 5864         | 1696                 |
|                                    | Private    | 4066         | 4012         | 4103         | 4181         | 1284                 |
|                                    | Fertiliser | 1659         | 1698         | 1523         | 1524         | 250                  |
|                                    | Captive    | 3516         | 3798         | 4071         | 4249         | 1095                 |
|                                    | Industry   | 3633         | 3844         | 4018         | 4183         | 1013                 |
|                                    | Commercial | 241          | 249          | 252          | 257          | 62                   |
|                                    | Tea Estate | 22           | 22           | 23           | 23           | 9                    |
|                                    | CNG        | 1082         | 1137         | 1136         | 1215         | 322                  |
|                                    | Domestic   | 2527         | 2541         | 2875         | 3347         | 972                  |
| <b>Total Distribution</b>          |            | <b>21246</b> | <b>22601</b> | <b>23450</b> | <b>24843</b> | <b>6702</b>          |

Source: MIS report, Petrobangla.

## 6.4 Energy Tariff

### 6.4.1 Electricity (wholesale and retail) tariff

Bangladesh Power Development Board (BPDB) is the sole buyer of electricity in the country. The heterogeneous buying prices, bulk rates (wholesale), and retail prices of electricity are determined by the Bangladesh Energy Regulatory Commission (BERC). Buying prices are determined based on the production costs applicable for different sources used as well as depending on different producers—in accordance with the marginal cost equals price rule. Per unit cost of electricity production from diesel operated plants is most expensive (five times of coal), followed by heavy furnace oil (HFO), coal and gas operated plants (Table 6.5). Exploration and transmission costs are considered only in the estimation of per unit cost of electricity generation. If the opportunity cost of gas is considered (import parity price), then electricity generation from gas-operated plants would not be cost-effective, which is also true for coal-based power plants. If the opportunity cost is reflected in the estimation of per unit cost of electricity generation, then retail tariff rates of electricity may need to be re-adjusted. This pricing policy might attract private sector to invest in the sector. However, the government will have to remember that consumers will be worse off in the backdrop of the increased price policy regime compared to the existing price regime. The BERC has recently changed both the wholesale and retail tariffs of electricity (Annex Table 6.2 and 6.3), effective from September 1, 2015. It is to be noted that, if an increase in retail tariff does not get reflected in the bulk rate, then either the government or the distributors will get the benefit. The bulk tariff rates have been increased lower number of times than the retail tariffs. It is likely that the GoB is signaling the market about the anticipated increase in electricity tariff, as per unit cost of generation from imported sources would be much higher. The GoB estimated that per unit cost of electricity from imported LNG and coal for power, and imported power would be at Tk. 12.2, Tk. 8.1, and Tk. 6.2 per KWh, respectively. A cross-country analysis of per unit cost of electricity generation from coal and nuclear power plants is reported in Annex Table 6.4. It is likely that generation cost from Rooppur Nuclear Power Plant would be close to the generation cost of Russia or Slovak Republic (Tk.5.2-

7.5 per KWh), as similar technology will be used in this plant. Sieed et al. (2015) also estimated that electricity generation cost to be Tk. 7.34 per KWh.

**Table 6.5: Per Unit Electricity Generation/Purchasing Cost (Tk./KWh)**

| Sector  | Source                                | FY12  | FY13  | FY14  |
|---------|---------------------------------------|-------|-------|-------|
| Public  | <b><i>BPDB's own plants</i></b>       |       |       |       |
|         | Water                                 | 0.90  | 0.88  | 1.49  |
|         | Wind                                  |       |       | 25.45 |
|         | Gas                                   | 1.99  | 1.97  | 2.07  |
|         | Coal                                  | 6.52  | 5.70  | 6.30  |
|         | HFO                                   | 16.63 | 17.85 | 17.86 |
|         | Diesel                                | 30.18 | 43.91 | 37.35 |
|         | <b><i>Other public plants</i></b>     |       |       |       |
|         | Gas                                   | 1.85  | 1.97  | 2.10  |
|         | Diesel                                |       |       | 28.24 |
| Private | IPP, HFO                              | 17.27 | 17.70 | 18.69 |
|         | IPP & SIPP, GAS                       | 2.24  | 2.18  | 2.26  |
|         | <b><i>Rental and quick rental</i></b> |       |       |       |
|         | Gas                                   | 5.22  | 4.58  | 4.21  |
|         | HFO                                   | 16.07 | 17.58 | 16.46 |
|         | Diesel                                | 14.62 | 27.24 | 24.76 |
|         | Imported                              |       |       | 5.06  |

Sources: Different issues of annual reports, BPDB.

### Box 6.1: Updates on Rooppur Nuclear Power Plant

The completion period of the Rooppur Nuclear Power Plant has been pushed further back; in the process the cost has almost doubled. However, the generation capacity has been increased to 2,400 MW from 2,000 MW envisaged in the previous plan. The loan provided by the Russian Government was termed neither concessional nor commercial by the Finance Minister. The economic life of the plant has been estimated to be 50 years, but the Russian state nuclear power company, Rosatom, claims this to be 60 years. Based on the levelised cost estimated by the International Atomic Energy Agency (IAEA) (Table 6.5) and Sied *et al.* (2010), electricity generation cost is likely to be Tk. 7.34 per KWh. The new initiative is praiseworthy; however, the hold-up problem (maintain safety and quality standards of nuclear reactors, timely completion, stay within the budget) may arise (GREENPEACE 2014, TIB 2015, Rahman 2015). The TIB has asked for disclosing information to the public on such matters as: a) specific measures provided in the agreement for confirming liability of suppliers in case of any negative incident, b) details about the funding process, c) cost-benefit analysis of this intervention and d) degree of competitiveness of the deal in the context of efficiency, economy, technology and safety.

**Table 6.6: Updates on the Plant**

| Description         | As stated in IRBD FY15   | As of Dec 15  |
|---------------------|--|---|
| Capacity (MW)       | 2000 MW (2*1000 MW)  | 2400 MW(2*1200 MW)  |
| Production (year)   | Unit 1 completion: 2017; Unit 2 completion: 2022   | Unit 1 completion: 2022; Unit 2 completion: 2023  |
| Guidelines          | Guidelines followed by the IAEA  | Guidelines followed by the rules of IAEA  |
| Technology          | VVER-1000 (costing USD 7-8 billion)  | VVER-1200 (costing around USD 10 billion)   |
| Financial Investors | The Russian Government (90 per cent in the fields of procurement of machinery, expert services, research, plant building, manpower) and the GoB (10 per cent; local purchases) | The Russian Government would finance 90 per cent of the total project cost while Bangladesh would bear the remaining 10 per cent                |
| Total Project Cost  | Tk. 52,420 crore   | Tk. 101,200 crore   |
| Plants              | Two units  | Two units   |
| Payments            | Payment periods: 28 years at 3 per cent interest rate, with first 10 years as grace period   | Payment period: 28 years at LIBOR (London Interbank Offered Rate) plus 1.75 per cent, but not more than 4 per cent, with a 10 year grace period |

Source: CPD (2015), Various newspapers

### 6.4.2 Tariff of energy-mix

#### Gas tariff

Natural gas prices for electricity generation has not been changed since 2009 (Tk. 2.82 per cubic meter). It is interesting to note that only 4 per cent of this price is considered as cost of asset (gas), while 50 per cent are supplementary duty/VAT, 17 per cent are price deficit fund (PDF) and gas development fund (GDF), 15 per cent are transmission and distribution cost, and margin for Bangladesh Petroleum Exploration and Production Company (BAPEX) is about 2 per cent (BERC 2015). The highest increase in gas tariff was for captive power, followed by household (36-50 per cent), CNG, and industry and commercial use (Table 6.7). The household gas consumption may be defined as a classic “free-rider problem”, which could be addressed through the pre-paid meter system.

**Table 6.7: Recent Change in Gas Prices (Tk./cubic meter)**

| Consumer                      | Current Price<br>(Effective from 1 September, 2015) | Earlier Price | Change (%) |
|-------------------------------|---|---------------|------------|
| Power                         | 2.82  | 2.82          | 0.0        |
| Captive power                 | 8.36  | 4.18          | 100.0      |
| Fertilizer                    | 2.58  | 2.58          | 0.0        |
| Industry                      | 6.74  | 5.86          | 15.0       |
| Tea Estate                    | 6.45  | 5.86          | 10.1       |
| Commercial                    | 11.36   | 9.47          | 20.0       |
| CNG                           | 35.00   | 30.00         | 16.7       |
| <b>Domestic (residential)</b> |   |               |            |
| Meter-based                   | 7.00  | 5.16          | 35.7       |
| Single burner                 | 600.00  | 400.00        | 50.0       |
| Double burner                 | 650.00  | 450.00        | 44.4       |

Source: BERC.

### **Oil tariff**

BPC, a state-owned monopoly, imports petroleum products (crude oil and refined products) from the international markets and sells it to the local power generating plants and other consumers (agriculture, industry, communication, domestic and others) at a tariff rate set by BPC. Domestic prices of petroleum products have not been adjusted with the declining trend in international prices since January 2013. To contrast, in India local prices have been adjusted regularly with the international prices (Table 6.8). In December 2015, international oil price has reached the record low of USD 36 per barrel over the last decade. If this change in price were to be reflected in the true price at the local market, it would have brought in significant positive impact in terms of economic welfare<sup>30</sup>. There is a strong demand from several stakeholders for reducing petroleum prices in Bangladesh in view of sharp decline in fuel prices in the international market. It may be noted here that, BPC, after incurring loss for fifteen years in a row, earned profit to the tune of Tk. 5,268 crore in FY2015. It may be expected that, with international petroleum price being at the same level and with unchanged selling prices in domestic market, BPC's profit may go up to Tk. 11,000 crore. Bangladesh, as net petroleum importing country, will be a gainer from lower international petroleum prices, which is likely to remain at low level for some more time. Indeed, BPC did not take any (subsidy) support from the government during the first half of FY2016 and is unlikely to seek any support during the rest of the fiscal year. At the same, it needs to be taken into cognisance that BPC is operating with a large debt burden a major part of which is with the SCBs and guaranteed by the government. This profit making is an opportunity for BPC to improve its financial health. It may also be true that lower growth of revenue earnings in FY2016 has also made decision making as regards lowering of domestic fuel prices a difficult choice for the government. Regrettably, as of now, there is no clear reporting on the part of BPC as to the amount of profit being made and the way this profit is being distributed (e.g. repayments of past debt, dividend to government etc.). In the above context, it will be advisable to reduce the administered

<sup>30</sup> A strong relationship can be found in the literature, between oil prices, output, and inflation. Historically, rising inflation and recessions in many countries have followed large jump in oil price (World Bank, 2015). Nine out of ten recessions in the U.S. were underpinned by sharp increase in oil price (Hamilton 2005). De Gregorio *et al.* (2007) found that oil price shocks and inflation in many countries has a strong correlation. Inflation and interest on savings are likely to be low due to a decrease in oil price; consequently this should have positive impact on investment.

prices of petroleum products to some extent and hence in a manner that BPC (and the government) and other stakeholders (producers and consumers) are able to share the benefits from lower global petroleum prices.

CPD, as part of the present study, undertook a Computable General Equilibrium (CGE) exercise to estimate the economy-wide impacts of a possible decline in fuel prices in the domestic market.<sup>31</sup> The simulation examined the impact of cut in the petroleum price by 10 per cent. The results show that this reduced price will lead to a rise in both GDP (at factor cost) and private investment by about 0.3 per cent. Consumer price level (inflation rate) is expected to come down by 0.2 percentage point. However, government savings (deficit as a share of GDP) may deplete by 0.4 percentage points. Export (and that of RMG), on the other hand, may increase by 0.4 per cent. Households are likely be benefited with a rise in consumption (by 0.6 per cent on an average), while firm's income may increase by the same margin. Consumption of households in the rural area is expected to increase more than aforesaid average (by 0.7 per cent). This economy-wide impact assessment implies that, there is a case for revising downward the fuel prices. However, to what extent this will be made should be calibrated by taking into cognisance the revisions of gas and electricity prices, overall impact of the price-change mix on major stakeholder groups and government's subsidy related expenditure and earnings. While adjusting the fuel prices, within the fuel-mix, a differentiated approach will need to be taken as regards petrol and octane (relatively lower reduction in prices), on the one hand, diesel, furnace oil and kerosene, on the other hand. The strategy of monopoly import of fuels by state agency will also need to be revisited to explore the possibilities of deregulating the import regime.

**Table 6.8: Domestic and Import Prices of Crude Oil and Diesel**

| Year      | Bangladesh's import price (USD/bbl) |             | International price | Domestic price |         |      |
|-----------|-------------------------------------|-------------|---------------------|----------------|---------|------|
|           | Crude oil                           | Refined oil |                     | Bangladesh     | India   |      |
|           |                                     |             | Tk./Ltr             | Rs/Ltr         | Tk./Ltr |      |
| 2010-11   | 93.1                                | 113.7       | 92.7                | 56.0           | 41.2    | 68.0 |
| 2011-12   | 113.0                               | 128.3       | 105.4               | 61.0           | 43.5    | 64   |
| 2012-13   | 109.2                               | 127.7       | 102.3               | 68.0           | 50.3    | 66.0 |
| 2013-14   | 109.6                               | 125.3       | 105.5               | 68.0           | 57.9    | 75.0 |
| 2014-15   | 75.2                                | 90.2        | 71.8                | 68.0           | 55.5    | 68.0 |
| 17 Dec-15 | 61.3                                |             | 36.0                | 68.0           | 46.1    | 56.0 |

Source: IndianOil (<https://www.iocl.com/Products/HighSpeedDiesel.aspx>); Prices of crude oil average are gathered from World Bank Commodity Price Data (The Pink Sheet).

### **Coal tariff**

Even though the GoB is keen to move from gas to coal-operated electricity generation, the production of coal has not seen any tangible change (Table 6.9). Only one (Barapukuria) of the six identified coal fields has been producing coal (836 thousand MT in FY2014-15, about 3 per cent lower than the previous year). There are also concerns about the social and environmental impacts of coal exploration. Considering these two factors, a detailed cost-benefit analysis needs

<sup>31</sup> The CGE model is constructed following the International Food Policy Research Institute (IFPRI) standard model which has been adapted for Bangladesh. The Social Accounting Matrix (SAM) for 2007, prepared by the Planning Commission has been used. The 'closures' (assumptions) for the models are: (a) Domestic Price Index (DPI) is fixed and Consumer Price Index (CPI) is flexible; (b) Investment is savings-driven; (c) Exchange rate is fixed while current account balance is flexible; (d) Government savings are flexible, while direct tax rate is fixed; (f) Land is fully employed and activity-specific; (g) Labour (both skilled and unskilled) can be unemployed and are mobile; and (h) Capital is fully employed and activity-specific.

to be done. Changing the energy-mix, the GoB has planned to import 60 million MT of coal per year to implement the coal-based power plants proposed in PSMP 2010. The GoB should give priority of the required infrastructure for importing coal. It is to be noted here that, the international price of coal is cheaper than the domestically produced one (by about half). Thus, it may become feasible for Bangladesh to move on to coal-based power generation. However, environmental concerns should receive due consideration in this regard. Speedy finalisation of National Coal Policy, drafted in 2007, must become a top priority for the GoB.

**Table 6.9: Production and Price of Coal (USD/MT)**

| Year           | Domestic production (MT) |         |        | BPDB's purchase price | Australian coal price |
|----------------|--------------------------|---------|--------|-----------------------|-----------------------|
|                | Public                   | Private | Total  |                       |                       |
| FY12           | 501132                   | 319305  | 820437 | 86-105                | 111                   |
| FY13           | 643978                   | 302946  | 946924 | 105                   | 89                    |
| FY14           | 524143                   | 338618  | 862761 | 105                   | 77                    |
| FY15           | 522918                   | 313405  | 836323 | 105                   | 63                    |
| FY15 (Jul-Sep) | 180209                   | 23940   | 204149 | 130                   | 55                    |

Source: MIS report, Petrobangla; The Pink Sheet, World Bank.

### **6.4.3 Fiscal burden of power and energy sector**

#### **Subsidy**

Total subsidy for electricity, oil, gas, and coal as percentage of GDP is the highest in Bangladesh among the Asian countries. The average subsidisation rate is about 33.6 per cent, which is also highest, while, per capita subsidy remains low (Table 6.10). These subsidies will likely increase substantially because the government has planned to change the energy-mix (import LNG, coal, and oil for power generation) during 7FYP period. In FY2015, electricity subsidy to BPDB reached Tk. 90 billion, which is about 10 times that of FY2010 (Annex Table 6.5). Subsidy to BPC for fuel has declined during the last two fiscal years because of low oil prices in the international market. However in FY 2013 subsidy was about Tk. 136 billion. Approximately 54 per cent of total subsidy are disbursed for electricity generation (43 per cent) and distribution (11 per cent) level, while rest are for petroleum products (Mujeri et al. 2014). Fuel subsidies can be seen as desirable as it may have a significant impact on the poor and is politically expedient but is undesirable from the perspective of high fiscal cost (Coady et al. 2006). The authors estimated that if average price of fuel (gas, diesel, kerosene) is increased by 50 per cent, the real income of lowest quintile group will decrease by 1-3 per cent. In Bangladesh, the lower and upper middle class group will be affected most if there is a rise in the prices of electricity and gas as they consume 36-45 per cent of total electricity and 21 to 53 per cent of total gas, respectively (BIDS and IISD 2012). The study also estimated that the poor people consume about 0.03 per cent and 0.04 per cent of total electricity and gas, respectively. Due to an increase in electrify tariff, poor people will be affected more as the share of electricity expenditure in their budget experience a rise; however, if it is assumed that poor people hardly have access to electricity, then the impact will be insignificant. For a net oil-importing country, fuel subsidy may reduce aggregate welfare, crowding out non-oil consumption. This could lead to inefficient inter-sectoral labour allocation and other distortions in the macroeconomic variable (Plante 2014). Theoretically, lump sum transfers are better than subsidies as this policy increases aggregate welfare significantly. However, in low-income countries such as Bangladesh, many considerations have to be factored into the equation in designing an appropriate energy pricing-strategy.

**Table 6.10: Rate of Average Subsidisation in Bangladesh along with the Neighboring Countries, 2013**

| Country    | Average subsidisation (%) | Subsidy per capita (USD/person) | Total subsidy as % of GDP |
|------------|---------------------------|---------------------------------|---------------------------|
| Bangladesh | 33.6                      | 29                              | 3.2                       |
| China      | 2.6                       | 16                              | 0.2                       |
| India      | 19.9                      | 38                              | 2.5                       |
| Indonesia  | 31.3                      | 117                             | 3.3                       |
| Malaysia   | 15.6                      | 178                             | 1.7                       |
| Sri Lanka  | 6.1                       | 15                              | 0.5                       |
| Thailand   | 6.7                       | 54                              | 0.9                       |

Source: Fossil Fuel Subsidy Database, International Energy Agency (IEA).

### **Contingent liability**

Contingent liabilities of power sector in Bangladesh have been on the rise (doubled by end FY2015 compared to as of FY2013) (Table 6.11); however, for energy sector (BPC) it has decreased, perhaps due to the decrease in oil prices at the international market. The provision of government guarantees may be a crucial condition for the power and energy sector (Llanto 2007). However, an increase of these liabilities may have an adverse impact on fiscal budget, which can be reduced through proper assessment, monitoring and managing of these liabilities.

**Table 6.11. Contingent Liability of Power Sector (Tk. Crore)**

| Period             | Power | Energy |
|--------------------|-------|--------|
| As of 30 June 2013 | 7795  | 34160  |
| As of 30 June 2014 | 10963 | 35148  |
| As of 30 June 2015 | 14466 | 23860  |

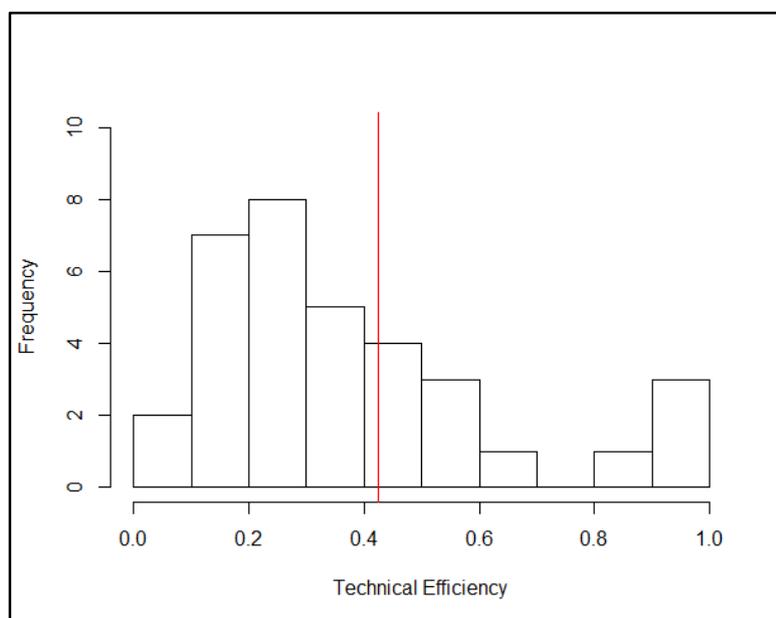
Source: Budget in brief documents, MoF.

### **6.5 Efficiency Analysis of BPDB's Own Plants**

Technical efficiency measures the ability of a firm to obtain maximum output from given input bundles (Coelli *et al.* 2005). In case of BPDB's own power generating plants, this has been estimated for FY2006 to FY2015 period (Bairagi 2015). The Stochastic Frontier Analysis (SFA) method is used with a specification of translog production. Net electricity generation is considered as output, while installed capacity (capital) and personnel cost (wage as proxy of labour) are considered as inputs. Inefficiency related variables are considered as ratio of maintenance cost to the total cost, per unit electricity generation cost, and a dummy variable (diesel-operated plants are equal 1, and 0 otherwise). A time index is included in the production function as a technology parameter. This study finds that the mean efficiency of BPDB's power plants is 0.48 (level of technical efficiency,  $TE_i$  is determined as,  $0 < TE_i \leq 1$ ), which implies that the BPDB's own power plants are half way to the efficient point. Mean technical efficiency of power plants in India and Pakistan are estimated to be between 0.7 and 0.8 (Fatima and Barik 2012, Shanmugam and Kulshreshtha 2005, Meenakumari and Kamaraj 2008, Shanmugam 2005). Efficiency analysis by plants (Figure 6.2) indicates that only four power plants (Baghabari Power Station, Fenchuganj 2x 90 MW, Ghorashal Power Station and Hatiya diesel generator) out of 34 BPDB's plants are technically efficient (TE is above 0.9). The technology parameter is negatively

correlated to output and significant at 5 per cent level, implying that there has not been much improvement in technology of BPDB's plants during the study period. The variable per unit generation cost is positively related with inefficiencies and statistically significant at 1 per cent level, which suggests that efficiency may increase if per unit electricity generation cost could be reduced.

**Figure 6.2. Distribution of Technical Efficiency by Power Plants**



Source: Bairagi (2015).

## 6.6 Summary

Significant progress has been made in terms of electricity generation during the last five years—generation of capacity has indeed been doubled. However, the gaps between the derated capacity and peak and evening utilisation have been widening over time; this cannot be narrowed down because of the sector's existing problems (i.e. forced outage, aged plants, system loss, corruption, and inefficient management). The GoB has planned to adopt a new diversified energy-mix to achieve the targeted electricity generation capacity (double that of current generation) by FY2020. For implementing the new energy-mix policy, a large amount of budgetary support may be necessary because the mix will be expensive. Electricity generation from imported coal will be cheaper than imported LNG. Coal imports will require substantial investment in infrastructure development. Consequently, it may not be achievable in the short-run.

Import of electricity is a viable option—Bangladesh has been importing electricity from India since FY 2014. The SAARC Framework Agreement for Energy Cooperation (Electricity) has been finalised in October 2014, which may help to supply electricity in Bangladesh sustainably. To gain from cross-border trade, Bangladesh should focus more on investment in upgrading transmission lines. The current reserve of gas is likely to be depleted in less than 10 years. The challenge would thus be to address how the gas-operated aged power plants be operated and how to meet the residual derived demand for gas from household, commercial, and industrial consumption due to the increase in income level. There is a need for saving gas and use it efficiently; so implementation of gas allocation policy is a prerequisite. Pre-paid metering system for household

could be expanded; and Combined Cycle Gas Turbines (CCGT) technology for power generation may be introduced to see if the level of inefficiency of aged plants can be decreased. Electricity tariff may once again need to be readjusted to reduce the likely significant fiscal burden due to the adoption of new energy-mix policy. Tariff must not be forced to regulate at the level of minimum average cost pricing; true opportunity cost should be included in the tariff estimation. As was noted earlier, lower fuel prices will have positive impact on private sector investment. There is, thus, a strong case for reducing fuel prices. As contingent liabilities of power and energy sector have been on the rise, necessary steps need to be taken for proper assessment, monitoring and managing of these liabilities, along with price adjustments.

## **SECTION VII. CHALLENGES CONFRONTED BY THE MANUFACTURING SECTOR: REFORMS NEEDED**

Production and investment in the manufacturing sector of Bangladesh are facing increasing challenges because of a number of newly emerging impediments. During last several years, manufacturing production has experienced moderate level of growth (between 8-14 per cent for large and medium industries (LMI) and 3-9 per cent for small scale industries (SSI) during FY2011-FY2015.<sup>32</sup> On the other hand, growth of private investment – a part of which is directed to manufacturing activities – has experienced a somewhat decelerating trend over the same period (from 18.0 per cent in FY2011 to 12.8 per cent in FY2015). This performance trend demonstrated by the manufacturing sector is not in line with what has been targeted for FY2016 under the 7<sup>th</sup> FYP.<sup>33</sup> This section argues that without ensuring visible progress with regard to addressing key bottlenecks that undermine production and investment, growth in the manufacturing sector will continue to lag behind the potential. Government will need to focus on undertaking necessary reforms to stimulate investment, incentivise entrepreneurship and support an enabling business environment in the country.

### **7.1 Production in the Manufacturing Sector**

The growth of production in Bangladesh manufacturing sector is dominated by the growth of production of LMIs.<sup>34</sup> In recent years, slowdown of growth of Quantum Index of Production (QIP) of LMIs has been accompanied by rise of QIP of SSIs; consequently, the gap between the growth of these two categories of industries has narrowed down (Figure 7.1); in fact, growth of SSI has indeed overtaken that of LMI during the first few months of FY2016. More importantly, both these types of industries have experienced lower level of growth during early months of FY2016 compared to that of FY2015 – 5.66 per cent in case of LMI during July-August, 2015 and 6.47 per cent in case of SSI in July-September, 2015. In addition to this, volatility in QIP (measured in standard deviation of growth of production indices) was seen to be higher for the LMIs (overall: 4.1) compared to the SSIs (2.2) for the period between FY2011 and FY2015. Higher growth volatility in LMIs and moderately stable SSIs indicate that performance of industries belonging to these two categories is driven by different set of factors.

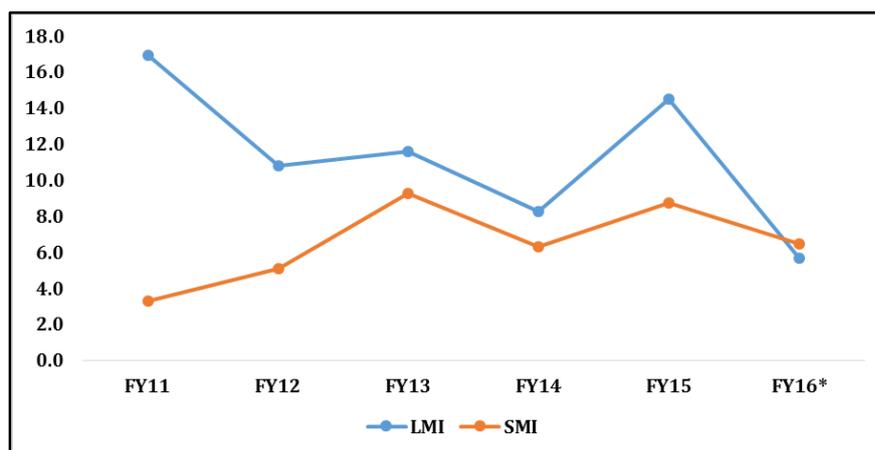
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<sup>32</sup> A comparative analysis of growth of manufacturing sector of major competing countries indicate that Bangladesh has been able to maintain a modest level of growth during FY2010 to FY2015.

<sup>33</sup> Growth targets for production and investment for FY2016 are 10.3 per cent and 21.9 per cent respectively.

<sup>34</sup> According to the Survey of Manufacturing Industries (2012), LMIs accounted for 72.6 per cent of gross output of manufacturing production in 2012, while small scale industries (SSIs) had a share of 27.4 per cent.

**Figure 7.1: Comparison of Growth of QIPs of LMIs and SMIs**



Source: Based on BBS data.

Production of LMIs and SMIs depend, to a significant extent, on imported raw materials and intermediate products. Growth of import of these products reflects the same downward trend. During first quarter of FY2016 (July-September, 2015), overall import of raw materials (as seen from L/C opening, settlement and outstanding figures) experienced negative growth compared to that of the previous year. Major industrial raw materials such as raw cotton and cotton yarn have registered negative growth in all three categories of L/Cs while negative or only marginal growth in import was registered in case of synthetic fibre, yarn, pharmaceutical raw materials, chemical and chemical products, etc. Import of textile fabrics and edible oil was somewhat higher during this period. A part of the rise in import of steel and BP sheet was perhaps accounted for by lower import of scrap vessels in recent years which has traditionally been a major source of steel and related products in the country.<sup>35</sup>

Deceleration in import growth is, to some extent, related to reduction in the unit value of import of some of the materials during July-October, 2015 compared to that in July-October, 2014 (Table 7.1). During this period, average unit value of minerals (HS Codes: 25-27) came down by 17.3 per cent, textiles related articles (HS codes 50-60) by 28 per cent and base metal related articles (HS codes 72-83) by 20.6 per cent. The exception here is chemical products (HS code: 28-33) price of which has posted a small rise of 2.1 per cent.

**Table 7.1: Changes in Average Value of Selected Imported Products**

| HS codes (starting with)            | FY15 (July-October)      | FY16 (July-October)      | % Changes between FY15 and FY16 |       |                          |
|-------------------------------------|--------------------------|--------------------------|---------------------------------|-------|--------------------------|
|                                     | Average value (value/kg) | Average value (value/kg) | Volume (Kg)                     | Value | Average value (value/kg) |
| 25 to 27 (minerals)                 | 14.32                    | 11.84                    | -0.67                           | -7.80 | -17.34                   |
| 28 to 38 (chemical products)        | 49.74                    | 50.79                    | -1.92                           | -1.27 | 2.10                     |
| 50 to 60 (textile and articles)     | 165.50                   | 119.02                   | 15.18                           | -7.24 | -28.08                   |
| 72 to 83 (base metals and articles) | 62.45                    | 49.62                    | 34.93                           | 6.78  | -20.55                   |

Source: NBR data.

<sup>35</sup> Slowdown in import of scrap vessels is perhaps related to strict environment and safety-related compliance guidelines imposed by the EU and other countries associated with sales of scrap vessels abroad; this has increased the purchase price of the scrap vessels.

## 7.2 Private Investment: Manufacturing Sector

Growth of private investment in Bangladesh during the last several years could be termed 'average' compared to that of her major competing countries – private investment-GDP ratio in Bangladesh has been hovering around 22 per cent level during FY2011-FY2015 and is below the level of some her comparator countries. Because of higher growth of public investment, overall investment has maintained a rising trend during this period. During the last 5 years, year-on-year growth of private investment has decelerated- from 18 per cent in FY2011 to 12.8 per cent in FY2015. The situation did not improve during the first half of FY2016 – various indicators related to private investment rather indicates a subdued situation for this period. It is highly unlikely that the target level of private investment will be achieved in FY2016 (23.7 per cent of GDP or USD52.3 billion).

The depressed private investment scenario in the manufacturing sector in the first half of FY2016 is reflected in the performance of a number of relevant indicators. Both disbursement and recovery of industrial term loan has experienced negative growth (-0.86 per cent and -5.47 per cent respectively) during Q1 of FY2016 compared to the same period of FY2015. The exceptionally high growth of term loan in FY2015 (41.3 per cent), which was the highest since 2007, may partly have had an effect on the overall growth rate obtained in Q1 in FY2016.<sup>36</sup> Given the significant concentration of term loan to a limited number of large group of companies, growth in private investment is largely dictated by these companies' interest to invest in new ventures, capacity to make additional investment, their debt and liability situation, and overall performance experience, etc.

Advances to the SMEs has experienced a big drop (growth was 2.7 per cent) during the first quarter (July-September) of FY2016 compared to the same period of FY2015 (20.7 per cent). Despite this slow growth, total disbursement of SME loan during January-September, 2015 (Tk. 81,953.9 crore, which was 70.1 per cent of the targeted amount) indicates a near-to-reach the target at the end of the calendar year, 2015 (target is Tk. 116,640 crore). Analysis of cumulative advances reveal a slow compositional change where share of trade finance has decelerated since Q3 of 2012 against a rise in the share of advances to industry as well as also of consumer finance and agricultural credit. Sustainability of this trend will depend on whether advances in the industrial sector will rise in the upcoming quarters.

Recent rise in inward flow of foreign direct investment (FDI) is accounted for more by the existing investors than by new investors. Share of reinvestment earnings and intra-company loan has gone up significantly compared to that of equity capital (the ratio of equity capital, reinvestment earnings and intra-company loan has changed from 1:0.2:0.4 in 2000 to 1:3.5:0.9 in 2014). If the composition of FDI remained the same, high growth of FDI in FY2015 (23.9 per cent) led by existing investments will likely have positive impact on growth in FDI flow in FY2016; this is observed for Q1 in FY2016 (35.6 per cent). On the other hand, this also indicates that new investors (investing in the form of 'equity') are facing increasingly difficulties in undertaking actual investment despite registering their investment proposals with the appropriate authorities Board of Investment (BOI), Bangladesh Export Processing Zone Authority (BEPZA), etc.). The number of proposed projects registered under BOI is higher during Q1 of FY2016 (total

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<sup>36</sup> Significant rise in import during FY2015 was flagged in CPD (2015). It was cautioned that this could happen owing to fictitious reporting as regards import of capital machineries. The CPD report noted that this could be a means of capital flight through 'trade mispricing'.

372 projects) compared to FY2015. However the amount of proposed investment is 27.7 per cent less compared to the previous year.

Number of new initial public offerings (IPOs) in the capital market has also come down in the FY2016. Only 3 new IPOs have been listed in the capital market during July-November, 2015 whereas the number was 10 during the same period of 2014. The market price of newly traded companies reveal that most of the companies have reached the 'highest' price in 2015 within a short period of time following their launching at the Dhaka and Chittagong Stock Exchanges and dropped to the 'lowest' price level afterwards. The price had even dropped below the offered price in a number of cases (Table 7.2). A major reason behind such price trend is because of sale of bonus shares mainly by sponsor directors in the absence of any lock-in period for sale of those shares. Recently, the Securities and Exchange Commission (SEC) has put in place a lock-in period for bonus share as applicable to ordinary shares. On the other hand, this has raised doubt about the quality of IPOs allowed by the SEC to be floated in the market – whether this has taken place due to procedural weaknesses of selecting IPOs or for weakness in monitoring transactions of shareholders in the secondary market, ought to be examined by the SEC.

**Table 7.2: Changes in Share Price of Newly Enlisted Companies**

| Company    | Initial Trading Date | Face Value per share | Offer Price per share | Highest Price | Date of highest price | Lowest price | Date                | % change <sup>1</sup> | % change <sup>2</sup> |
|------------|----------------------|----------------------|-----------------------|---------------|-----------------------|--------------|---------------------|-----------------------|-----------------------|
| SIMTEX     | Nov 23, 2015         | 10                   | 20                    | 26.7          | November Last week    | 18.6         | Middle of December  | 34                    | -7                    |
| KDSALTD    | Oct 15, 2015         | 10                   | 20                    | 89.6          | December first week   | 62.8         | November First week | 348                   | 214                   |
| AMANFEED   | Sep 01, 2015         | 10                   | 36                    | 98.2          | September first week  | 42.1         | Middle of November  | 173                   | 17                    |
| OAL        | Jun 25, 2015         | 10                   | 10                    | 66.6          | Middle of July        | 29           | Middle of November  | 566                   | 190                   |
| TOSRIFA    | Jun 17, 2015         | 10                   | 26                    | 35.7          | End of June           | 16.4         | Middle of December  | 37                    | -37                   |
| BSRMLTD    | Apr 27, 2015         | 10                   | 35                    | 137.0         | End of September      | 47.1         | End of May          | 291                   | 35                    |
| ZAHEENSPIN | Mar 25, 2015         | 10                   | 10                    | 32.6          | Middle of October     | 16.3         | Middle of December  | 226                   | 63                    |
| ATCSLGF    | Mar 31, 2015         | 10                   | 10                    | 9.5           | Middle of July        | 5.7          | Early May           | -5                    | -43                   |
| SHASHADNIM | Mar 05, 2015         | 10                   | 35                    | 48            | End of July           | 33.9         | Middle of October   | 37                    | -3                    |
| IFADAUTOS  | Feb 5, 2015          | 10                   | 30                    | 125.7         | Early March           | 51.1         | Early November      | 319                   | 70                    |
| CNATEX     | Jan 21, 2015         | 10                   | 10                    | 26.2          | Early February        | 10.1         | Middle of December  | 162                   | 1                     |
| NFML       | Jan 19, 2015         | 10                   | 10                    | 42.5          | End of January        | 17           | Middle of October   | 325                   | 70                    |

Source: Based on data collected from the DSE website.

Note: 1. % change between highest price and offer price

2. between lowest value and offer price.

Capital market has continued to bear the burden of the market crash in 2010. Commercial bank's over exposure to the capital market beyond the stipulated limit is yet to be brought down, Central bank has extended the relevant timeline several times in order to create space for making adjustment in view of overexposure of banks in the capital market. The time limit for the currently

existing provision is to expire in July 2016. Due to pressure from different corners, the central bank has undertaken a number of measures in the recent past to reduce individual bank's exposure limit. This includes allowing commercial banks to invest additional Tk. 200 crore from their SPV account, this will not be considered as 'equity' participation in the market. Besides, central bank has provided another directive in December 2015 allowing commercial banks' loan to its subsidiaries as 'non-equity' loan, thereby creating space for reducing banks' exposure in the capital market. These decisions of the central bank need to be carefully examined. While these decisions will create scope for the commercial banks to reduce their exposure in the capital market, it may also create opportunities for the commercial banks (particularly those which have invested below the exposure limit) to make additional advances to its subsidiaries since these would not be considered as bank's equity participation in the market and would not be accounted for under the 'exposure limit'. In view of the depressed investment situation investment in the real economy, this type of directive was likely to encourage banks to channel a part of their unutilised deposit to the capital market. This would transmit the wrong signals to the market.

### **7.3 Factors Responsible for Production and Investment Slowdown**

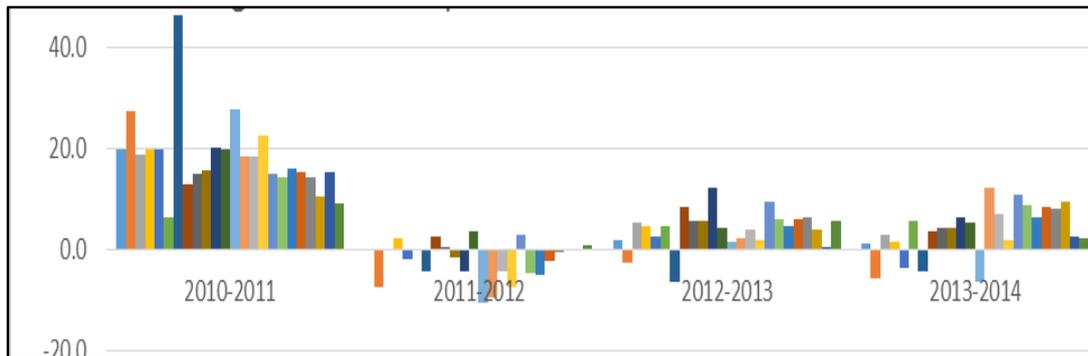
The growth of the manufacturing sector is being undermined by a diverse range of constraints, both from the demand and supply sides. LMIs and SMIs in Bangladesh tend to have distinct market orientation<sup>37</sup> - LMIs are mainly export-oriented industries whereas SMIs tend to mainly cater to the domestic market. This distinction is reflected also in the demand side and supply side factors that inform their performance.

The demand side factors are related to slow growth in global demand underwritten to a large part by sluggish GDP growth and slow rise in employment in major developed and some of the advanced developing countries. Growth of global import of different products, where Bangladesh has export interest, has experienced slow rise during the 2010 to 2014 period; this is likely to continue in 2015 (Figure 7.2). Except apparels, import of other products has registered either slow or negative growth during the said period. Even in case of import of apparels and some other products, lower growth of import by major buying countries is seen in recent years compared to that in 2011. This weak global demand for import is likely to affect not only Bangladesh but also other exporting countries with similar set of export basket. On the other hand, SSIs which constitute largely domestic market-oriented enterprises are likely to suffer due to slow rise in demand in the domestic market. A part of low demand in the domestic market is related to deceleration in the growth of per capita income in recent years (in case of GDP, GNI and NNI in constant term) which is also related to timid growth of inward flow of remittance.

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<sup>37</sup> Apparels, textiles and food products comprise 59.7 per cent of total weight of LMIs; on the other hand, food, beverage, tobacco, wood and furniture and fabric and metal products comprise 81.4 per cent of total weight of SMIs.

**Figure 7.2: Changes in Global Import of Selected Products with Bangladesh's Export Interest**

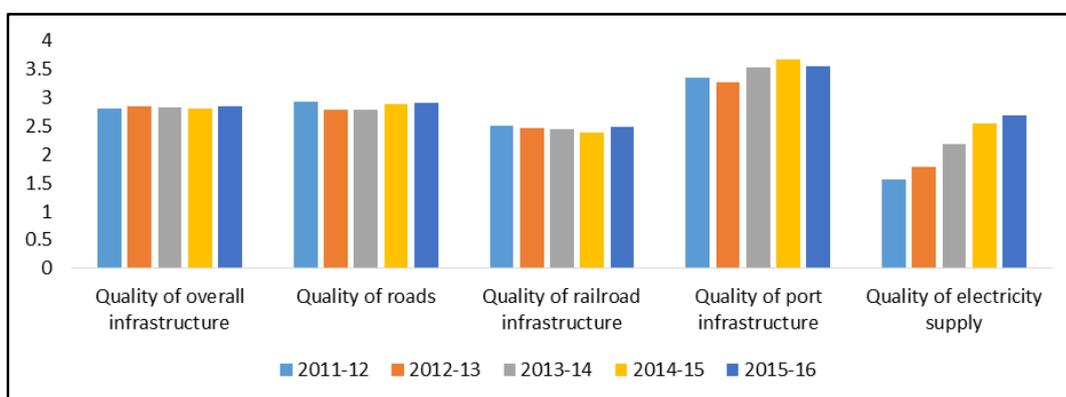


Source: Trade Map.

A number of supply side factors also affect production of both domestic and export-oriented industries. First, slow growth of export of apparels is partly because of the reduced export orders given to non-compliant factories that are located mainly in shared buildings. Second, appreciated cross-exchange rate of Taka vis-à-vis those of competing economies such as India, Vietnam and Indonesia may have undermined Bangladesh's competitiveness. Third, reduced supply and low pressure of gas has compelled industries located in gas-starved regions to lower their production levels; dyeing units and captive power plants have suffered most. Many enterprises have resorted to using alternate energy (e.g. diesel used by steel re-rolling mills); but this has led to cost escalation. Unless availability of gas could be ensured, the problem could become an endemic one in the coming days, with serious consequences.

Entrepreneurs' decision to invest is seriously affected by lack of adequate infrastructure facilities. Various surveys conducted in the recent past, such as World Economic Forum's (WEF) Global Competitiveness Report (GCR) 2015-16 and World Bank's Doing Business 2014, reveal that investment in Bangladesh suffers most due to lack of adequate infrastructure facilities. According to CPD (2015), based on the GCR 2015-16, perception of entrepreneurs with regard to infrastructure facilities being a key constraint did not change much during the last several years – other than perception about the availability and quality of electricity, views about none of the other infrastructure-related facilities including roads, rails and ports demonstrated any visible change as regards improvement (Figure 7.3). Scarcity of suitable land for setting up factories was mentioned as yet another key constraint to new investment.

**Figure 7.3: Perception of Entrepreneurs as regards Infrastructure Quality of Bangladesh**



Source: Various issues of Global Competitiveness Report.

Note: 1=worst, 7=best.

Although public investment for infrastructure development has increased over the years, from 29.0 per cent of RADP in FY2011 to 34.1 per cent of RADP in FY2015, this is yet to have a significant crowd in effect on private investment. According to CPD (2012), public investment had significant relationship with private investment, particularly in case of the industrial sector, with a lagged effect of two years.<sup>38</sup> As a result, overall investment efficiency had not seen visible progress; rather it appears to have come down (incremental capital output ratio (ICOR) in FY2011 and FY2015 was 4.24 and 4.45 respectively). Because of sluggish growth in the pace of implementation of important infrastructure-related projects (see CPD (2015) on status of implementation of fast-tracked projects) and the consequent cost escalation, potential benefits to private sector will be both delayed and limited.

For the industrial sector, benefits of additional generation of electricity and gas during the first months of FY2016 (8.6 per cent of electricity during July-September, 2015 and 10.5 per cent of gas during July 2015) has been rather limited. The sector did not receive energy as per the proportionate rise in generation. For example, share of gas supplied to industry has further declined from 16.8 per cent in FY2015 to 15.1 per cent in July-September, 2015. Getting gas connection for new industries has become increasingly difficult.

High rate of interest (both inflation-adjusted and not-adjusted) for commercial borrowing is another major concern for industries despite the fact that interest rates have gradually declined in recent months. Average weighted interest rate (inflation adjusted) for all kinds of lending has come down from 6.33 per cent in September 2013 to 5.11 per cent in September 2015. Despite this, private investment growth has remained subdued. Initiatives for reduction of interest rate need to continue further, perhaps through further efforts to bring down the spread between lending and deposit rates.

Given the slow growth in global and domestic demand, performance of the manufacturing sector, both in terms of production and investment, will likely suffer in the near-term, even though some improvement in the availability of better infrastructure facilities can be ensured. Whilst global recovery pattern and pace will need to be carefully examined, Bangladesh will need to take energetic steps towards institutional strengthening and policy reforms and development of infrastructure, to stimulate investment and manufacturing production.

#### **7.4 Need to Undertake ‘Next Generation Reform’ Measures**

In the backdrop of changing competitiveness scenarios concerning local, regional and global levels, Bangladesh needs to focus more on improvement of institutional efficiency to reignite private investment. This would call for more emphasis on the ‘second generation reforms’ along with implementation of the remaining issues of ‘first generation reforms’. In operational term, institutional reforms need to focus beyond the broad macro policies and put more emphasis on sectoral and micro level policies, acts, rules, regulations as well as upgradation of business processes.

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<sup>38</sup> Most significant positive causal relationship is found in case of agriculture, transport, physical planning and housing, public administration, health and social welfare.

Following discussion on institutional reform is based on informal discussion with the business leaders and proposals submitted earlier by the trade bodies to the government. These reforms include policy, rules and regulatory issues, operational issues and institution-related issues.

#### **7.4.1 Measures concerning Policies/Acts/Rules/Regulations related issues**

A number of investment and business-related policies need to be amended and upgraded in order to make them functional, modern and effective in the current and future contexts. These include Customs Act 1969, Foreign Private Investment (Promotion and Protection) Act 1980, Companies Act 1994, Trade Mark Act 1940, Mine Act, 1923, Port Act, 1908, Export and Import Control Act 1950, Patent and Design Act, 1921 and Inland Shipping Act, 1976, Weight and Measurement Act, 1961, Acquisition and Requisition of Immovable Properties Act, 1982. Besides a number of new laws/acts are required in order to make businesses more functional and efficient which include Business Organization Act and Anti-Dumping and Countervailing Act, among others.

A number of rules and regulations related to different laws and acts need to be upgraded/amended/added which include rules for Investment Act, Port rules, PSI Order 2000, Import, Export and Indentors' Registration Order 1979, Patent and Design rules, Pre-shipment Inspection Order 2000 and Import, Export and Indentors' Registration Order 1979.<sup>39</sup> A number of new policies need to be adopted in order to facilitate private investment in manufacturing and related service sectors which include Coal Policy and Shipping Policy.

#### **7.4.2 Operational issues**

Entrepreneurs often complain about requirements of large number of documents, lengthy approval process and significant cost that they have to incur particularly at pre-establishment phase of investment. Necessary changes in the process of approval of businesses and other services will not only reduce requirement of documents but also reduce time and cost. This is also likely to discourage rent-seeking and corruption. A major operational innovation ought to relate to introduce online-based processing of business-related documents, getting their updates and paying necessary fees through online payment platforms. This will reduce the hassles quite perceptibly. The objective should be to make the process of getting access to different business-related services simple, transparent and hassle-free.

Entrepreneurs often suffer owing to lack of clarity of various rules and regulations. New investors, particularly the SMEs entrepreneurs are not aware about different procedural requirements in order to carry on their respective businesses. Given the differences in the business processes, there should be authorised public domains where necessary documents and related formalities will be put on the website. Lack of clarity as regards business processes also discourage foreign investors. Anecdotal information shows that foreign investors' get better guidance from publicly available documents in India regarding investment opportunity, modalities for registration and process of approval from different public entities despite the fact that investment regime in India is stringent compared to that in Bangladesh. Clearly spelt out public documents as regards business processes should be made easily available (preferably on

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<sup>39</sup> Under the new agreement titled 'Bangladesh, Bhutan, India and Nepal Motor Vehicle Agreement (BBIN MVA)' for cross-border movement of motor vehicles, there may need to amend a number of trade-related rules in order to facilitate the movement of vehicles, goods and persons between these countries. Similar kinds of agreement may be signed in the future by South Asian countries with other neighbouring countries which include SAARC MVA and BIMSTEC MVA and transport corridor under BCIM EC, and therefore need to amend necessary laws, acts and rules. In these cases, the provision related to monitoring of the containerised vehicles to be traded for third country may need to be amended in the Import Policy Order.

dedicated website) so that investors have a sound understanding about the entire range of business processes.

There is a large gap between adopted policies/rules/regulations and their implementation at the business level. For example, a number of incentives and support measures have been announced under the Industrial Policy 2012, Export Policy 2015 and SME Policy Framework 2005, for different categories of sectors/industries such as ‘booster sector’, ‘thrust sector’ and ‘high-priority’ sector etc. However, the procedures, eligibility and documentation to avail those incentives have not been spelt out in a clear and transparent manner. Neither are these readily available. Since these incentives are mentioned in the policies, but not in acts/laws, there is no binding requirement to provide these services to the entrepreneurs. Unless these incentives are included in the finance bill, there is no guarantee that investors will actually get those benefits. Also, there should be coherence as regards policy/measure between different ministries and departments. Besides, proper implementation of different rules/regulations/policies should receive due priority from relevant public institutions.<sup>40</sup>

Foreign investors often face problems both at pre- and post-establishment phases of investment. Although officially foreign investors are welcome for investment in any sector without limit except the few ‘reserved’ sectors, functionally they are confronted with a variety of ‘hidden’ barriers. Cases of non-cooperation from various agencies and institutions are also not unknown. This contradicts with stated policies and Acts in Bangladesh. Foreign investors often do not have access to industry-related information such as market size, major market players and their market shares, major risks, sources of raw materials and information on major suppliers in the supply chain. Better access and availability of all related information concerning the different sectors will provide better knowledge and predictability about the market segment to the investors and encourage investment.

### **7.4.3 Institutional reforms**

Institutional reforms are urgent to raise efficacy of public institutions, particularly in view of the changing nature of demand for the public services. For example, a number of organizations under different Ministries act as facilitators for private investment which include Bangladesh Investment Development Authority (BIDA) (previously BOI), BEPZA, Bangladesh Small and Cottage Industries Corporation (BSCIC), Bangladesh Economic Zones Authority (BEZA) and different local authorities. Given that the nature of work is similar, there is a need for clear division of focus and labour of these institutions.

The Ministry of Industry needs to refocus its overall objectives and activities. Despite the fact that the Ministry is supposed to play a broader role in the context of Bangladesh’s industrialisation, till date it has played only a very limited role in this respect. The Ministry should be developed as the focal point for all types of industries (both domestic market-oriented and export-oriented), to act as a repository of industry-related information, providing technical support and ensuring businesses facilitation. Strengthening the associate institutes including National Productivity Organisation (NPO), Patent, Design and Trade Mark Division, Bangladesh Institute of Management (BIM) and Bangladesh Standards and Testing Institute (BSTI) is also of critical importance in this regard.

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<sup>40</sup> Anecdotal information indicates that individual entrepreneurs face trouble at the micro-level where the business case has been dealt by a particular desk officer.

Government should rethink about the loss-making SoEs; these are managed under the Ministry of Industry and Ministry of Jute and Textiles. There is a scope for further rationalisation of operation of some of the SoEs. Government should design an appropriate policy to lease out the additional land of the SoEs to the private sector for establishment of new enterprises.

Ensuring strong crowd in impact on the part of public investment is urgently needed. This will require timely implementation of major infrastructure-related projects. As is known eight fast-track projects have been particularly specified. These relate to generation and distribution of gas and electricity and development of special economic zones with necessary infrastructural facilities and development of major trade and supply-chain linked highways and other roads.

There is a need for more interaction between the public and the private sector, at present this is done only on a limited scale. A 'Private Sector Development Policy Coordination Committee (PSDPCC)' was constituted in 2013 under the office of the Prime Minister; however, scope of work of this committee appears to be limited. In order to better facilitate the workings of the private sector, it is important to set up a Commission to identify institutional bottlenecks both at macro and micro levels. The Commission will come up with concrete suggestions for respective Ministries and Departments to undertake necessary measures in a time bound manner. These recommendations could include both laws and regulations as also operational tools and modalities, documentation and procedures.

#### **Box 7.1: The Issue of Further Relaxing Outward FDI from Bangladesh**

During 2012-13, central bank's research division prepared a draft note on 'Road map' for liberalisation of foreign exchange regime towards greater capital account openness. Under this 'Road Map', a total of 17 measures have been suggested for implementation by 2017. The roadmap suggested the withdrawal of restrictions on capital account inconvertibility as a phased approach by 2017 to help Bangladeshis to invest abroad. It is important to examine the rationale of this plan in the current context and the status of implementation of the measures.

Outward FDI from Bangladesh has started to rise in recent years although it is still very low- from 15.4 million in 2010 outward flows have increased to USD48.4 million in 2014 (Table 7.3). As a matter of fact, Bangladesh is far behind some of the developing countries in terms of outward FDI (as also in terms of outward FDI-GDP ratio): Vietnam (USD1.1 billion), Sri Lanka (USD67 million), Pakistan (USD116 million), India (USD9.8 billion in 2014) and China (USD116 billion). Interestingly, the data reported by the Bangladesh Bank as 'outward FDI' during FY2013-FY2015 shows that all investment was realised only in banking and mining-related activities in different countries (Table 7.3).

This contradicts with the anecdotal information available as regards outward investment from Bangladesh in different sectors; these include apparels, pharmaceuticals and food processing, etc. According to Foreign Exchange Regulation Act (FERA) (amended in 2015), outward transfer of foreign exchange is permissible for exporters under 'export retention quota' up to 15 per cent for products with high import contents, up to 60 per cent for exporters of high domestic value added merchandise and export of services (FE Circular No.05, 27.05.15). Besides, remittances of up to USD30 thousand or equivalent may be made annually to meet current expenses of such offices opened abroad by a commercial or industrial concerns.

In the backdrop of restricted regime of outflows of resident-owned capital for investment abroad, central bank has cautiously granted permission, on a limited scale, with exceptions to: (i) domestic banks to set up exchange houses abroad for attracting inflows from workers abroad; and (ii) business houses to set up offices abroad for export promotion and inputs sourcing. Hence, capital account transactions made by banking and mining sectors are reported as 'outward investment'. On the other hand, most of the transaction done by exporters of other sectors (either current or capital account) under foreign

exchange retention quota which are not accounted for as ‘outward investment’ in the Bangladesh Bank’s account. It is still unclear why these investors are not encouraged to report their capital account transactions as ‘outward investment’ – whether or not this is because of procedural complexity in transferring required amount of capital (supposed to be higher than the allowable limit) as it needs lengthy approval process remains unclear.

In the backdrop of lack of clarity about rules and regulations, outward investment from Bangladesh are not, perhaps, being properly reported and reflected in national accounts. More importantly, if it is conceded that a significant part of the capital flight takes place through trade mispricing and other means and a part from this is invested abroad, the total amount of ‘actual’ investment abroad would be much higher.<sup>41</sup> Despite the fact that a number of monitoring and overseeing measures have been undertaken in the recent past, capital flight remain a continuing concern for Bangladesh. In this backdrop, it is important to examine the scope of further widening of the opportunity for outward investment from Bangladesh. Whether this investment will have assured attractive return and whether these will be repatriated back are important questions that need to be addressed. Present study examines the cross-country experiences relating to the objectives of allowing outward FDI, necessary pre-conditions and provisions that are put in place to guide and put under discipline this type of investment. The idea is to explore whether further relaxation of the rules guiding outward investment from Bangladesh is a feasible option or not under the current circumstances.

**Table 7.3: Outward Investment from Bangladesh**

| Destination | FY13    |        | FY14    |        | FY15    |        | Total (FY2013-15) |        |        |
|-------------|---------|--------|---------|--------|---------|--------|-------------------|--------|--------|
|             | Banking | Mining | Banking | Mining | Banking | Mining | Banking           | Mining | Total  |
| Australia   | 0.26    | 0.00   |         |        | 0.06    | 0      | 0.32              | 0.00   | 0.32   |
| Belgium     |         |        |         |        | 0.02    | 0      | 0.02              | 0.00   | 0.02   |
| Greece      | 0.28    | 0.00   |         |        | 0.06    | 0      | 0.34              | 0.00   | 0.34   |
| Hong Kong   | 1.08    | 0.00   | 9.51    | 0.00   | 19.03   | 0      | 29.62             | 0.00   | 29.62  |
| India       | 1.76    | 6.36   | 1.71    | 9.07   | 3.17    | 8.41   | 6.64              | 23.84  | 30.48  |
| Malaysia    | 0.61    | 0.00   | 0.31    | 0.00   | 0.69    | 0      | 1.61              | 0.00   | 1.61   |
| Maldives    | 0.69    | 0.00   | 0.1     | 0.00   | 0.42    | 0      | 1.21              | 0.00   | 1.21   |
| Nepal       | 0.83    | 0.00   | 15.67   | 0.00   | 3.43    | 0      | 19.93             | 0.00   | 19.93  |
| Oman        | 0.52    | 0.00   | 0.26    | 0      | 0.36    | 0      | 1.14              | 0.00   | 1.14   |
| Pakistan    |         |        | 0.04    | 0      | 0.54    | 0      | 0.58              | 0.00   | 0.58   |
| Singapore   | 1.25    | 0.00   | 0.2     | 0      | 1.4     | 0      | 2.85              | 0.00   | 2.85   |
| Sri Lanka   | 3.69    | 0.00   | 1.88    | 0      |         |        | 5.57              | 0.00   | 5.57   |
| UAE         | 2.64    | 0.00   | 3.55    | 0      | 3.63    | 0      | 9.82              | 0.00   | 9.82   |
| UK          | 6.48    | 0.00   | 4.41    | 0      | 5.64    | 0      | 16.53             | 0.00   | 16.53  |
| USA         | 1.54    | 0.00   | 0.33    | 0      | 0.45    | 0      | 2.32              | 0.00   | 2.32   |
| Total       | 21.63   | 6.36   | 37.97   | 9.07   | 38.9    | 8.41   | 98.50             | 23.84  | 122.34 |

Source: Bangladesh Bank.

**Rationale:** Global experience shows that countries pursue different objectives and motives in allowing outward FDI as part of broader goal of gradually opening of their capital accounts. A major thrust for outward investment from developing countries is to penetrate new markets by escaping government regulations, accessing and acquiring technology/brand names (in case of investors of India, Mexico, Singapore), escaping high cost and difficult labour markets at home (South Korea), specific interest for investment in potential sectors such as banking, transport (Malaysia) and investment for accessing regional markets (Thailand, Brazil). In most of those cases, ‘pull’ factors dominate over ‘push’ factors with regard to allowing outward investment. Bangladesh’s situation is perhaps somewhere between the two positions. Pull factors related to Bangladesh’s outward investment include: increasing demand for

<sup>41</sup> According to Global Financial Integrity Report (December, 2015), on average about USD5.59 billion has been transferred from Bangladesh every year during 2004 - 2013.

investment in forward and backward linkage parts of the value chain which are in most cases located abroad in order to ensure better control over the chain and to ensure better margin for investment; demand for undertaking market-seeking and efficiency-seeking investment in strategic sectors; investment in other LDCs which have the necessary infrastructure and human resources in order to enjoy the benefits of preferential market access as the benefit of market access for Bangladesh would be limited/ended in the near future (preferably by 2024, when it is likely to graduate from the LDC status). On the other hand, the 'push' factor includes making more profit by investing in suitable ventures abroad when scope of investment at home is limited (CPD, 2015); the substantial foreign exchange reserves that create an opportunity for long-term investment abroad by the private sector. Hence there are reasons considering which central bank may allow further investment abroad. However, the decision will have to be carefully considered and examined.

**Preconditions:** Developing countries need to pursue prudent policies for opening up their capital accounts. According to Schneider (2000), a successful capital account opening usually need to fulfill a number of benchmark macroeconomic preconditions which include: a) reductions in inflation levels to those prevailing in industrialised countries b) reductions in the gross fiscal deficit to gross domestic product ratio; c) sufficiency of foreign exchange reserves; d) sustainable current account deficits; e) a stable and competitive exchange rate regime; and f) development of indirect instruments of monetary policy.<sup>42</sup> Apparently, Bangladesh is able to meet only one or two criteria among the above ones. Thus, it is not an easy choice for her. In case of India, a special committee was formed titled 'Committee on Capital Account Convertibility', commonly known as the 'Tarapore Committee' which studied cross-country experiences, and came up with the suggestion favouring capital account opening, but only on a limited scale, and in a staggered manner. Indeed, the transition from one phase to the next was made, only when certain preconditions were met.<sup>43</sup>

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<sup>42</sup> The study reviewed the experiences of developing countries including India, Kenya, Malaysia, Colombia, Argentina, Peru and Chile.

<sup>43</sup> The preconditions were reduction of fiscal deficit, keeping the inflation within a 3-5 per cent range and reforming the financial sector, including reduction of non-performing assets.

## SECTION VIII. CONCLUDING REMARKS

Performance of the Bangladesh economy in FY2016 will be critical in terms of setting the stage for implementation of the 7FYP. As the Bangladesh economy moves into the second half of FY2016, a number of challenges have emerged, addressing of which will be crucial to realising the potentials of the Bangladesh economy. Inability to take advantage of the relative macroeconomic stability to stimulate private sector investment remains an enduring concern. The present study has suggested a policy package in the short run in this context. The analysis presented in this report shows that, the fiscal framework of FY2016 has come under severe strain in the early months. Both resource mobilisation and resource utilisation are likely to be significantly off the mark compared to FY2016 targets. The paper, in this context has argued for a moderately expansionary and restructured public expenditure stance favouring the social sectors. Diverse approaches that continue to inform the discourse on implementation of the proposed VAT and SD Act will also need to be reconciled on an urgent basis. Important ADP projects which are close to completion, should receive heightened attention from the policymakers. And utilisation of foreign aid needs to be prioritised. These steps are critical to energising and stimulating private sector investment by taking advantage of the crowd-in impacts of public investment.

Thankfully, inflation has come down in the recent past with concomitant positive implications for the interest rate. In line with the falling inflation, the central bank will need to consider revisiting the policy rates to ease cost of funds for the commercial banks. This may contribute to lowering lending rate, which will reduce cost of capital for the private investors. Low global commodity prices, particularly of fuel, and the attendant fiscal space, provide an opportunity for making use of the saved resources. Benefits of these will need to be shared among key stakeholders (e.g. government, consumers and entrepreneurs). External sector was able to demonstrate notable resilience, though declining flow of remittance and volatility in export earnings emerged as a concern. In view of the movement of the REER, exchange rate of BDT may be depreciated by a small margin to maintain export competitiveness of Bangladesh vis-à-vis its competitors.

Lack of movement in undertaking and implementing the needed reforms is emerging as a major impediment to steering the economy to higher growth trajectory. The government will need to rigorously pursue a set of institutional and policy reforms (including in the areas of financial sector, revenue mobilisation, public expenditure management, PPP, privatisation etc.) by taking bold steps, to yield the aspired results. In the coming days, success in the economic arena will also hinge on the state of political predictability and effectiveness in addressing the overall public safety and security concerns in the country.

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## ANNEXURE

**Annex Table 2.1: Macroeconomic Situation in FY2015 and Targets for FY2016**

| Indicators                                 | Actual FY14 | Target FY15                 | Actual FY15 | Target FY16                   |
|--|-------------|-----------------------------|-------------|-------------------------------|
| GDP Growth (%) (2005-06 base)              | 6.1         | 7.3                         | 6.5 (P)     | 7.0                           |
| Public Investment (as % of GDP)            | 6.6         | 7.5<br>(MTMF 2016-2018)     | 6.9 (P)     | 7.3<br>(MTMF 2016-2018)       |
| Private Investment (as % of GDP)           | 22.3        | 22.2<br>(MTMF 2016-2018)    | 22.1(P)     | 22.8<br>(MTMF 2016-2018)      |
| Domestic Savings (as % of GDP)             | 22.1        | 23.0<br>(MTMF 2015-2017)    | 22.3 (P)    | N/A                           |
| National Savings (as % of GDP)             | 29.2        | 28.1<br>(MTMF 2015-2017)    | 29.0 (P)    | 29.1<br>(7 <sup>th</sup> FYP) |
| NBR Revenue Growth (as % of GDP)           | 8.3         | 9.8 (MTMF 2016-2018)        | 8.2         | 10.3                          |
| Non-Development Expenditure (as % of GDP)  | 9.0         | 11.1<br>(MTMF 2016-2018)    | 8.6         | 11.5<br>(MTMF 2016-2018)      |
| Annual Development Programme (as % of GDP) | 4.1         | 5.2<br>(MTMF 2016-2018)     | 3.9         | 5.7<br>(MTMF 2016-2018)       |
| Budget Deficit (% of GDP)                  | 3.6         | 4.4<br>(MTMF 2016-2018)     | 3.8         | 5.0                           |
| Money Supply Growth (%)                    | 16.1        | 16.5<br>(MPS, January 2015) | 12.4        | 15.6<br>(MPS, July 2015)      |
| Private Sector Credit Growth (%)           | 12.3        | 15.5<br>(MPS, January 2015) | 13.2        | 15.0                          |
| Inflation (2005-06) Moving Average         | 7.4         | 6.5<br>(MPS, January 2015)  | 6.4         | 6.2<br>(MPS, July 2015)       |
| Export Growth (%)                          | 11.7        | 10.0                        | 3.4         | 7.3                           |
| Import Growth (%)                          | 8.9         | 10.0<br>(MTMF 2016-2018)    | 11.3        | 11.5<br>(MTMF 2016-2018)      |
| Remittances Growth (%)                     | (-) 1.6     | 10.0<br>(MTMF 2016-2018)    | 7.6         | 10.0<br>(MTMF 2016-2018)      |
| Forex Reserve (billion USD)                | 21.5        | 17.9                        | 25.0        | N/A                           |

Source: Author's compilation from various official sources.

Note: MPS: Monetary Policy Statement; MTMF: Medium Term Macroeconomic Framework; P: Provisional.

**Annex Table 3.1. Implementation Status of 25 Priority Projects under ADP for FY2016**

| Sl. No | Sector         | Project Name   | Project Cost | Allocation FY16 | Implementation rate Jul-Oct FY16 | Cumulative Progress up to October 2015 | Allocation sufficiency | End date |
|--------|----------------|--|--------------|-----------------|----------------------------------|--|------------------------|----------|
| 1      | Transportation | Padma Multipurpose Bridge project  | 28,793       | 7,400           | 6.7                              | 30.3                                   | 54.3                   | 31/12/18 |
| 2      |                | Dhaka-Chittagong 4-Lane  | 3,190        | 915             | 4.0                              | 72.4                                   | 99.9                   | 31/12/14 |
| 3      |                | Joydebpur-Mymensingh Road Development                                    | 1,815        | 271             | 9.1                              | 86.3                                   | 99.9                   | 30/06/15 |
| 4      |                | Construction of Third Karnaphuli Bridge (Revised)                        | 651          | 50              | 4.8                              | 72.1                                   | 79.4                   | 31/12/15 |
| 5      |                | Support to Dhaka Elevated Expressway PPP Project                         | 3,217        | 1,471           | 0.7                              | 14.5                                   | 59.9                   | 30/06/15 |
| 6      |                | Dhaka-Chittagong Railway Development Project                             | 3,190        | 125             | 190.9                            | 75.7                                   | 72.1                   | 30/06/16 |
| 7      |                | Construction of Bypass Road in Satkhira town connecting Bhomra Land Port | 117          | 25              | 0.0                              | 73.1                                   | 94.4                   | 30/06/14 |
| 8      | Power          | Ashuganj 450 MW CCGP   | 3,400        | 660             | 48.4                             | 32.6                                   | 42.6                   | 30/06/15 |
| 10     |                | Construction of Bibiana-3,400 MW Combined Cycle Power Plant              | 3,358        | 384             | 0.0                              | 1.7                                    | 13.1                   | 31/12/15 |
| 11     |                | Construction of Ghorashal 365 MW Combined Cycle Power Plan               | 2,512        | 570             | 0.5                              | 14.0                                   | 36.6                   | 30/06/16 |
| 12     |                | Siddhirganj 335 MW PP  | 4,239        | 520             | 10.0                             | 55.0                                   | 66.0                   | 30/06/15 |
| 13     |                | Shahjibazar 330 MW Combined Cycle Power Plant                            | 2,844        | 350             | 66.0                             | 42.6                                   | 46.7                   | 31/12/15 |
| 14     |                | Shikalbaha Dual Fuel 225 MW Combined Cycle Power Plant                   | 2,022        | 730             | 3.9                              | 9.3                                    | 44.0                   | 30/06/16 |
| 15     |                | Bhola 225 MW Combined Cycle Power Plant                                  | 2,001        | 400             | 160.1                            | 61.1                                   | 49.1                   | 30/06/15 |
| 16     |                | Chapainawabganj 100 MW HFO based Power Plant                             | 1,113        | 557             | 0.0                              | 0.4                                    | 50.5                   | 30/06/15 |
| 17     |                | Veramara Combined Cycle Plant (360 MW) Development                       | 4,140        | 580             | 67.9                             | 22.5                                   | 27.0                   | 30/06/15 |

| Sl. No | Sector                           | Project Name   | Project Cost | Allocation FY16 | Implementation rate Jul-Oct FY16 | Cumulative Progress up to October 2015 | Allocation sufficiency | End date |
|--------|----------------------------------|--|--------------|-----------------|----------------------------------|--|------------------------|----------|
| 18     |                                  | Providing Electricity Connection to 18 lakh clients through Rural Electricity extension  | 6,426        | 1,020           | 13.1                             | 60.2                                   | 74.0                   | 31/12/15 |
| 19     | Industry                         | Shahjalal Fertilizer Project   | 4,874        | 165             | 0.0                              | 94.1                                   | 97.5                   | 30/06/15 |
| 20     |                                  | Production of Electricity by Co-generation and Establishment of North Bengall Sugar Mill   | 73           | 38              | 0.0                              | 117.8                                  | 170.4                  | 31/12/16 |
| 21     |                                  | Tannery Industrial Estate, Dhaka (Second Revised)  | 1,079        | 506             | 2.6                              | 30.0                                   | 75.7                   | 30/06/16 |
| 22     | Oil, Gas and Mineral Resources   | Mubarakpur Oil/Gas Well Exploration Project  | 89.26        | 6               | 0.0                              | 63.0                                   | 69.8                   | 30/06/15 |
| 23     |                                  | Augmentation of Gas Production under Fast Track Programme  | 1,301        | 200             | 69.3                             | 92.6                                   | 97.3                   | 30/06/14 |
| 24     |                                  | Establishment of Gas Compressor Station in Ashuganj and Elenga   | 1,494        | 50              | 3.8                              | 65.1                                   | 68.3                   | 30/09/15 |
| 25     | Rural Development & Institutions | Construction of 950m long PC Guarder Bridge over Dharla River at Phulbari Upazila of Kurigram District                           | 227          | 50              | 5.1                              | 18.7                                   | 39.6                   | 30/06/15 |
| 26     |                                  | Construction of 520m long bridge in Nagarpur-Mirzapur via Mokna over Dhaleswari River under Nagarpur Upazila of Tangail District | 76           | 15              | 25.1                             | 35.0                                   | 49.9                   | 30/06/16 |

**Annex Table 5.1: Growth Rate and Market Share of Bangladesh's Top 10 Knitwear and Woven Wear during July-October 2015**

| HS code                   | Bangladesh      |                        |            | Vietnam         |           |            |
|---------------------------|-----------------|------------------------|------------|-----------------|-----------|------------|
|                           | Value (mln USD) | Share <sup>1</sup> (%) | Growth (%) | Value (mln USD) | Share (%) | Growth (%) |
| <i>Top ten knitwear</i>   |                 |                        |            |                 |           |            |
| 6110202069                | 63.5            | 5.8                    | 28.1       | 134.8           | 12.3      | 9.0        |
| 6110202079                | 37.6            | 2.5                    | 23.5       | 304.3           | 20.2      | -8.7       |
| 6109100012                | 31.3            | 6.0                    | 35.8       | 12.6            | 2.4       | -9.2       |
| 6105100010                | 14.9            | 4.6                    | 5.8        | 59.7            | 18.6      | 7.5        |
| 6108210010                | 32.4            | 15.7                   | 78.2       | 18.4            | 8.9       | -19.7      |
| 6108210020                | 19.0            | 32.7                   | 67.0       | 5.9             | 10.1      | 61.1       |
| 6107110010                | 15.1            | 5.2                    | 23.8       | 78.9            | 27.1      | -10.4      |
| 6107110020                | 11.3            | 19.7                   | 23.0       | 14.0            | 24.4      | 3.5        |
| 6110303059                | 25.6            | 1.9                    | 14.7       | 268.7           | 20.2      | 27.1       |
| 6104632006                | 8.1             | 2.3                    | -24.8      | 102.4           | 28.6      | 54.6       |
| <i>Top ten woven wear</i> |                 |                        |            |                 |           |            |
| 6203424016                | 187.1           | 24.2                   | 14.4       | 40.1            | 5.2       | 6.6        |
| 6203424051                | 23.3            | 37.7                   | 2.7        | 2.7             | 4.4       | -55.8      |
| 6205202051                | 126.1           | 28.5                   | -0.9       | 36.0            | 8.1       | 11.2       |
| 6204624021                | 55.3            | 8.7                    | 10.3       | 78.4            | 12.4      | 10.8       |
| 6203424011                | 56.3            | 8.1                    | -20.8      | 17.6            | 2.5       | -8.6       |
| 6203424061                | 8.0             | 42.1                   | 24.0       | 3.9             | 20.4      | -42.2      |
| 6205202066                | 53.4            | 18.0                   | -4.2       | 24.4            | 8.2       | -21.3      |
| 6203424046                | 61.4            | 37.3                   | 14.3       | 15.3            | 9.3       | 15.5       |
| 6203424036                | 55.9            | 44.1                   | -2.8       | 5.9             | 4.7       | -40.2      |
| 6204624011                | 66.3            | 10.6                   | 42.3       | 35.1            | 5.6       | 21.1       |

Source: Computed from OTEXA data.

Note: 1. represents the share of the corresponding country's product to the total import of that product in US market. Products are sorted in descending order of Bangladesh's (product group) export share

**Annex Table 5.2: Unit Price and MFN Tariff<sup>1</sup>**

| HS code                   | Bangladesh         | Vietnam            | Price difference (%) | MFN tariff (% , at 8 digit level) |
|---------------------------|--------------------|--------------------|----------------------|-----------------------------------|
|                           | Price (USD /dozen) | Price (USD /dozen) |                      |                                   |
| <i>Top ten knitwear</i>   |                    |                    |                      |                                   |
| 6110202069                | 33.1               | 35.7               | 7.8                  | 16.5                              |
| 6110202079                | 32.4               | 40.7               | 25.4                 | 16.5                              |
| 6109100012                | 18.0               | 26.1               | 44.9                 | 16.5                              |
| 6105100010                | 49.0               | 69.3               | 41.3                 | 19.7                              |
| 6108210010                | 10.4               | 9.0                | -13.2                | 7.6                               |
| 6108210020                | 6.9                | 5.1                | -27.0                | 7.6                               |
| 6107110010                | 19.9               | 14.3               | -28.0                | 7.4                               |
| 6107110020                | 9.4                | 9.0                | -5.2                 | 7.4                               |
| 6110303059                | 52.1               | 50.0               | -4.1                 | 32                                |
| 6104632006                | 68.0               | 76.2               | 12.0                 | 28.2                              |
| <i>Top ten woven wear</i> |                    |                    |                      |                                   |
| 6203424016                | 33.1               | 35.7               | 7.8                  | 16.6                              |
| 6203424051                | 32.4               | 40.7               | 25.4                 | 16.6                              |
| 6205202051                | 18.0               | 26.1               | 44.9                 | 19.7                              |
| 6204624021                | 49.0               | 69.3               | 41.3                 | 16.6                              |
| 6203424011                | 10.4               | 9.0                | -13.2                | 16.6                              |
| 6203424061                | 6.9                | 5.1                | -27.0                | 16.6                              |
| 6205202066                | 19.9               | 14.3               | -28.0                | 19.7                              |
| 6203424046                | 9.4                | 9.0                | -5.2                 | 16.6                              |
| 6203424036                | 52.1               | 50.0               | -4.1                 | 16.6                              |
| 6204624011                | 68.0               | 76.2               | 12.0                 | 16.6                              |

Source: Computed from OTEXA and ITC data.

Note: 1. year ending data, October 2014 to September 2015.

**Annex Table 6.1: Electricity Generation Capacity (Mw) by Fuel Type**

| Fuel         | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | Dec' 2015 |
|--------------|---------|---------|---------|---------|---------|-----------|
| Gas          | 82.8    | 73.2    | 66.9    | 67.1    | 61.3    | 62.8      |
| Furnace Oil  | 5.8     | 10.1    | 21.6    | 22.0    | 20.9    | 21.0      |
| Diesel       | 3.2     | 9.9     | 6.3     | 6.0     | 8.4     | 8.0       |
| Power Import | NA      | NA      | NA      | NA      | 5.1     | 4.2       |
| Hydro        | 3.9     | 3.5     | 2.7     | 2.6     | 2.3     | 1.9       |
| Coal         | 4.3     | 3.3     | 2.5     | 2.3     | 2.0     | 2.1       |
| Total        | 100.0   | 100.0   | 100.0   | 100.0   | 100.0   | 100       |

Source: BPDB

**Annex Table 6.2: Bulk Rate of Electricity (TK./KWh)**

| Category | Distributors        | Range | As of Sep 2012 | As of Sep 2015 |
|----------|---------------------|-------|----------------|----------------|
| G1       | DPDC                | 132KV | 5.33           | 5.68           |
|          |                     | 33KV  | 5.41           | 5.85           |
| I1       | BREB/PBS            | 132KV | 5.33           | 4.17           |
|          |                     | 33KV  | 4.03           | 4.23           |
| I2       | DESCO               | 132KV | 5.33           | 5.68           |
|          |                     | 33KV  | 5.41           | 5.85           |
| I3       | WZPDCL              | 132KV | 5.33           | 8.58           |
|          |                     | 33KV  | 4.43           | 4.64           |
| I4       | BPDB                | 132KV | 5.33           | 5.06           |
|          |                     | 33KV  | 4.98           | 5.12           |
|          |                     | 230KV | -              | 4.98           |
| I5       | NWZPDCL             | 132KV | 5.33           |                |
|          |                     | 33KV  | 4.98           |                |
| I6       | Future distributors | 132KV | 5.33           |                |
|          |                     | 33KV  | 4.98           |                |

Source: BERC.

**Annex Table 6.3: Retail Price of Electricity (Tk./KWh)**

| Consumer Category        | Range     | As of Sep 2012 |           | As of March 2014 |             | As of Sep 2015 |
|--------------------------|-----------|----------------|-----------|------------------|-------------|----------------|
|                          |           | Distrib-1      | Distrib-2 | Distrib-1        | Distrib-2   | Distrib-1      |
| Life line (Domestic)     | 1-50      | 3.33           | 3.36-3.87 | 3.33             | 3.36-3.87   | 3.33           |
| Domestic                 | 1-75      | 3.33           | 3.36-3.87 | 3.53             | 3.87        | 3.8            |
|                          | 76-200    | 4.73           | 4.05-4.63 | 5.01             | 5.01        | 5.14           |
|                          | 201-300   | 4.83           | 4.18-4.69 | 5.19             | 5.19        | 5.36           |
|                          | 301-400   | 4.93           | 6.88-7.30 | 5.42             | 5.42        | 5.63           |
|                          | 401-600   | 7.98           | 7.18-7.62 | 8.51             | 8.51        | 8.7            |
|                          | Above 601 | 9.38           | 9.38      | 9.93             | 9.93        | 9.98           |
| Agri. Pumping            | Flat      | 2.51           | 3.39-3.96 | 2.51             | 3.39-3.96   | 3.82           |
| Small Industries         | Flat      | 6.95           | 6.95      | 7.42             | 7.42        | 7.66           |
|                          | Peak      | 5.96           | 5.96      | 6.64             | 6.64        | 6.9            |
|                          | Off-Peak  | 8.47           | 8.47      | 9.00             | 9.00        | 9.24           |
| NR light & elect.        | Flat      | 4.53           | 4.45-4.54 | 4.98             | 4.98        | 5.22           |
| Commercial               | Flat      | 9.00           | 9.00      | 9.58             | 9.58        | 9.8            |
|                          | Off-Peak  | 7.22           | 7.22      | 8.16             | 8.16        | 8.45           |
|                          | Peak      | 11.85          | 11.85     | 11.85            | 11.85       | 11.98          |
| Medium Voltage 11KV      | Flat      | 6.81           | 6.81      | 7.32             | 7.32        | 7.57           |
|                          | Off-Peak  | 5.96           | 5.96      | 6.62             | 6.62        | 6.88           |
|                          | Peak      | 9.33           | 9.33      | 9.33             | 9.33        | 9.57           |
| Extra High Voltage 132KV | Flat      | 6.16           | -         | 6.96             | No consumer | 7.35           |
|                          | Off-Peak  | 5.57           | -         | 6.35             |             | 6.74           |
|                          | Peak      | 8.67           | -         | 9.19             |             | 9.47           |
| Extra High Voltage 230KV | Flat      | -              | -         | Not categorised  | No consumer | 7.25           |
|                          | Off-Peak  | -              | -         |                  |             | 6.66           |
|                          | Peak      | -              | -         |                  |             | 9.4            |
| High Voltage 33KV        | Flat      | 6.48           | 6.48      | 7.2              | 7.2         | 7.49           |
|                          | Off-Peak  | 5.87           | 5.87      | 6.55             | 6.55        | 6.82           |
|                          | Peak      | 9.14           | 9.14      | 9.28             | 9.28        | 9.52           |
| Street Lights & Pumps    | Flat      | 6.48           | 6.48      | 6.93             | 6.93        | 7.17           |

Source: BERC.

Note: The new tariff rates of type 1 distributors (PDB/DPDC/DESCO/WZPDCL) and type 2 distributors (BREB, PBS) are same but life line domestic consumer (3.36-3.87).

**Annex Table 6.4: Electricity Generation Cost (Tk./KWh) from Coal and Nuclear Operated Power Plants on the World**

| Country         | Nuclear | Coal |
|-----------------|---------|------|
| Belgium         | 8.4     | 7.7  |
| Czech republic  | 8.9     | 8.8  |
| France          | 7.1     |      |
| Germany         | 6.4     | 6.7  |
| Hungary         | 9.4     |      |
| Korea           | 3.2     | 5.5  |
| Mexico          |         | 7.1  |
| Netherlands     | 8.1     | 7.7  |
| Slovak republic | 7.5     | 10.9 |
| Switzerland     | 6.9     |      |
| United states   | 6.0     | 6.8  |
| Brazil          | 8.1     | 6.1  |
| China           | 3.4     | 2.6  |
| Russia          | 5.2     | 5.0  |
| South Africa    |         | 4.2  |
| Bangladesh      | 5.2-7.5 | 6.3  |

Source: Projected Costs of Generating Electricity 2010 Edition, IEA, NEA, OECD

Note: 1 USD = 77 BDT; Levelised cost of the cheapest available technology was considered at 10 per cent discount rates.

**Annex Table 6.5: Subsidy Disbursement (in Billion Tk.)**

| Year | Electricity (PDB) | Fuel (BPC) |
|------|-------------------|------------|
| FY10 | 9.9               | 9.0        |
| FY11 | 40.0              | 40.0       |
| FY12 | 63.6              | 85.5       |
| FY13 | 44.9              | 135.6      |
| FY14 | 61.0              | 73.5       |
| FY15 | 90.0              | 6.0        |

Source: MoF (2015).