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## **Two Decades of Tax Revenue Dynamics: Bangladesh Panorama**

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## **Two Decades of Tax Revenue Dynamics: Bangladesh Panorama**

### **Abstract**

This paper aims to analyze the dynamics of Bangladesh Tax System for the last two decades. This paper also intends to bring out the salient features of the existing tax structure to provide some relevant policy recommendations. Despite having impressive story of progress with its resilient and steady GDP growth of more than 6% for a number of years, Bangladesh has one of the lowest tax to GDP ratios in the world many years (it has stood 9.8 percent in the year 2016-17), which is one of the lowest among its neighboring countries and similar economies. Tax revenues has been contributing more than 80% of the total government revenue for the last two decades with a dominance of indirect tax contribution, although it has witnessed a decreasing trend in the last decade. Although direct tax contribution is around 37% of the tax revenue, it is collected from less than 1% of the population of the country with an indication of dissatisfactory compliance behavior of the taxpayers. Such performance places Bangladesh in 152<sup>nd</sup> position among 190 economies in the Paying Taxes 2018 study, as well as 148<sup>th</sup> position among 157 economies as per the Commitment to Reducing Inequality (CRI) Index 2018. Two decades of comparative study reveals that necessary reform measures should be taken to address the non-compliance problem with an expectation to improve the tax performance through an optimal and balanced tax system, that may reduce the degree of inequality in society.

**Keywords:** Tax, Tax-GDP Ratio, Direct Tax, Indirect Tax.

## **1. Introduction**

To perform the obligatory and social welfare duties and functions, any government requires large amount of resources that they mostly collect from public revenues. Of those, tax revenues are one of the major and important income sources for governments in most countries. Furthermore, the collection of suitable tax revenues can help to alleviate the economy by ensuring less dependency on government borrowing and foreign donations and grants (Yalama and Gumus, 2013). A good number of literatures reveals that generating taxation is a key tool for inducing a sustained and dynamic welfare and accelerating development in the least developed countries (Moore, 2007, Besley and Persson, 2010). Generally, tax can only be imposed by the government and in relation to the scope of taxation, Section 152(1) of the Constitution of the People's Republic of Bangladesh states, taxation includes the imposition of any tax, rate, duty or impost, whether general, local or special, and tax shall be construed accordingly. In Bangladesh, public revenues are broadly classified into two categories, namely tax revenue and non-tax revenue. Tax revenue contributes almost 86 percent of government revenue in Bangladesh, of which only around 36 percent is from direct tax. The National Board of Revenue (NBR) is the central authority for the overall tax administration in Bangladesh. NBR collects almost 96% of total tax revenue of the country (Bangladesh Economic Review, 2017).

## **2. Problem Statement**

Bangladesh witnessed an average GDP growth rate of 6.6% in the last decade (2009 – 2018), while the developing economies' average GDP growth was 5.1 per cent. Per capita income increased from US\$759 to US\$1,752 and the size of budget grew from Tk. 89,000 crore to Tk. 4,64,573 crore during the same period (BMOF, 2018). Despite such achievements, the Tax-GDP ratio in Bangladesh has increased from 3.41% (1972-73) to 9.8% (2016-17) only, which is one of the lowest among the developing countries as well as similar economies (Bangladesh Economic Review, 2017). Such tax performance has prompted the uncertainty of not achieving the government's 7<sup>th</sup> Five-Year Plan Target Tax-GDP ratio of 14.1 by 2020. Kaldor (1963) argues that for a country to become "developed," it needs to collect taxes at 25-30 per cent of GDP.

International empirical evidence on Tax-GDP ratio has 40 per cent, 25 per cent and 18 per cent as the average tax ratios for high, middle and low-income countries respectively (Gallagher, 2005). In a country of 153.6 million people, only 1.6 million submitted their income tax return in the year 2017-18, which is less than 1% of its total population (National Board of Revenue, 2018). Although the government made many reforms to improve the tax performance of Bangladesh, the improvement was not significant. Such circumstances justify a thorough study of the Bangladesh Tax System to reveal the key issues.

### **3. Literature Review**

The term “tax” has been derived from the French word “taxe” and Latin word “taxare” which means “to charge”. Taxes are non-penal but compulsory and unrequited transfer of resources from private to public sector, levied on the basis of predetermined criteria. Such contribution made by the taxpayers, i.e., individuals and corporate bodies, to the government of a country is generally the prime source of government revenue (Shil et. al. 2018). For the poor and developing countries, taxation is often considered as the oldest and ultimately the only sustainable source of development finance (Cobham, 2005). In response to their contribution, the taxpayers generally expect to have the benefit of living in a reasonably educated, healthy and safe society (Fagbemi, *et al.*, 2010).

Most of the governments in developing countries face great challenges in mobilizing sufficient tax revenues, which causes a gap between potential revenue and actual revenue (Mascagni, Moore and McCluskey, 2014) and low tax mobilization is a key hindrance to development (Besley and Persson, 2013). Due to the rampant tax avoidance and evasion, foreign aid in the form of grants usually mitigate the revenue gap in developing countries, hence negatively related with tax revenue (Gupta, 2007). Nevertheless, it was also found that in some cases foreign aid in the form of grants is helpful to improve the tax-to-GDP ratio of developing countries (Clist and Morrissey, 2011). Davoodi and Grigorian (2007) conducted a study on Armenia and found that institutional quality, urbanization and shadow economic activities are the main factors behind low tax-to-GDP ratio. The role of tax revenue towards the financing of government activities is becoming greater over time, as the income from non-tax revenue sources is not stable anymore (Damayanti, Sutrisno, Subekti and Baridwan, 2015).

There is a positive and significant relationship between tax capacity and the level of development, trade, and education (Pessino and Fenochietto, 2010).

While tax evasion and noncompliance are more serious in developing countries, it is not specific to the developing countries alone—it is also a problem for developed countries and is an issue encountered worldwide (Chau and Leung, 2009). In many cases most of the taxes in developing countries are easy to evade (Avi-Yonah and Margalioth, 2006; Bird and Zolt, 2008). It is not uncommon that half or more of potential income tax remains uncollected (Bird, 2008). Moreover, the informal sector accounts for a significant part of the economic activity of many developing countries from which no tax revenue is collected (Olken and Singhal 2009). Successful resource mobilization depends on the efficiency of a tax system. OECD (2007) developed a set of principles for the design of a tax system which include simplification, fairness, removal of tax obstacles to growth, and an efficient tax base.

As the world economy becomes progressively more mutually dependent with rapid globalization, a corresponding need surfaces for all the countries to modify their national tax system fitting to international competitive circumstances (Boadway, 2005).

#### **4. Objective of the Study**

The general objective of this study is to analyze the most recent two decades of the tax system in Bangladesh to reveal the stylized facts and dynamics. To achieve the general objective, the following specific objectives will be addressed:

- Evaluate the status of the tax system in Bangladesh
- Identify the most recent two decade's comparative tax performance in Bangladesh
- Identify the key factors relevant to the current tax performance, and
- Draw an overall concluding remark and its implications.

#### **5. Methodology**

The study is descriptive and exploratory in nature. To fulfill the research objectives this study has considered the most recent two decade’s (i.e. Fiscal Year 1997-98 to 2016-17) tax system in Bangladesh. The study is based on secondary data and archival resources. Tax performance data and other relevant information were collected from different editions of Bangladesh Economic Review, National Board of Revenue Annual Reports, Bangladesh Statistical Yearbooks and Bangladesh Bank Annual Reports. Descriptive statistics and tabular analysis have been used to do the comparative study. Guidance of the experts in the field was also considered for carrying out the study.

## 6. Analyses and Findings

### 6.1. Composition and Comparative Analysis of Revenue, Tax and Non-Tax GDP Ratio

**Table 1: Revenue-GDP ratio of Bangladesh (1997-98 to 2016-17)**

Decade –	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
	9.5	9.0	8.5	9.6	10.2	10.4	10.6	10.6	9.3	9.0
Average	<b>9.67</b>									
Decade –	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
	9.6	9.8	10.0	10.4	10.9	11.6	11.7	10.8	10.2	11.2
Average	<b>10.62</b>									

Source: Bangladesh economic review

Table 1 depicts that throughout the period there was a mixed trend in the revenue-GDP ratio in Bangladesh. Bangladesh witnessed revenue-GDP ratios from the lowest 8.5 (1999-00) to the highest 11.7 (2013-14) during the most recent two decades and there was no consistency in the trend. The average revenue-GDP ratio was higher in Decade 2 with 10.62 (2007-08 to 2016-17) comparing to the Decade 1 with 9.67 (1997-98 to 2006-07). Considering the twenty years’ time span, the performance was almost stagnant.

**Table 2: Tax-GDP ratio of Bangladesh (1997-98 to 2016-17)**

Decade –	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
	7.7	7.4	6.8	7.8	7.8	8.3	8.5	8.6	7.5	7.1
Average	<b>7.75</b>									

Decade –	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
	7.6	7.9	8.0	8.6	9.1	9.7	9.6	9.3	9.0	9.8
Average	<b>8.86</b>									

Source: Bangladesh Economic Review

**Table 3: Tax-GDP ratio in South Asian (SAARC) Countries - 2015 (% of GDP)**

<b>Bangladesh</b>	India	Pakistan	Sri	Nepal	Maldives	Bhutan	Afghanistan
<b>8.6</b>	16.6	11.0	12.4	16.1	26.4	13.0	6.5

Source: Heritage 2017 Index of Economic Freedom

Table 2 depicts that throughout the period there was a mixed trend in the tax-GDP ratio in Bangladesh. Bangladesh witnessed tax-GDP ratios from the lowest 6.8 (1999-00) to the highest 9.8 (2016-17) during the most recent two decades and there was no consistency in the trend. The average tax-GDP ratio was higher in Decade 2 with 8.86 (2007-08 to 2016-17) comparing to the Decade 1 with 7.75 (1997-98 to 2006-07). Considering the twenty years' time span, the performance was almost stagnant. Moreover, from Table 3, it is clear that the Tax -GDP ratio of Bangladesh is the 2<sup>nd</sup> lowest among the SAARC countries.

**Table 4: Non-Tax-GDP ratio of Bangladesh (1997-98 to 2016-17)**

Decade –	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
	1.8	1.6	1.7	1.8	2.4	2.1	2.1	2.0	1.8	1.9
Average	<b>1.92</b>									
Decade –	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
	2.0	1.9	1.9	1.8	1.8	1.9	2.0	1.5	1.3	1.3
Average	<b>1.74</b>									

Source: Bangladesh Economic Review

Table 4 depicts that the non-tax GDP ratio is also not very significant and in most of the years it was almost stable in around 2.0. The average Non-Tax-GDP ratio was lower in Decade 2 with 1.74 (2007-08 to 2016-17) comparing to the Decade 1 with 1.92 (1997-98 to 2006-07).

## 6.2. Tax as Percentage of Total Revenue in Bangladesh

**Table 5: Tax as a % of total revenue in Bangladesh (1997-98 to 2016-17)**



Decade	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
	79.8	80.4	80.0	80.6	79.2	80.1	79.9	81.5	80.6	79.3
Averag	<b>80.19</b>									
Decade	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
	79.3	80.2	80.4	83.0	83.8	83.6	83.0	86.1	87.6	87.9
Averag	<b>83.53</b>									

Table 5 depicts that tax revenues have been contributing more than 80 percent of the government revenues in Bangladesh. The average contribution has increased from 80.19% in Decade 1 to 83.53% in Decade 2 with a significant increase in the most recent three years, which is up to 88%.

### 6.3. Yearly Growth of Tax Revenue (%) in Bangladesh

**Table 6: Yearly growth of tax revenue (as a %) in Bangladesh (1997-98 to 2016-17)**

Decade	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
	6.59	5.69	7.83	14.0	12.5	12.1	13.4	12.9	13.2	8.49
Averag	<b>10.68</b>									
Decade	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
	22.3	15.6	15.1	23.6	21.8	21.3	11.4	8.07	10.4	23.7
Averag	<b>17.36</b>									

Source: Author’s calculation based on data from Bangladesh Economic Review (2017)



**Figure 1: Yearly growth of tax revenue in Bangladesh**

From Table 6 and Figure 1 it has been observed that the yearly growth in total tax revenue was uneven and inconsistent for the last twenty years. The average growth was significantly higher in Decade 2 with 17.36% comparing to Decade 1 with 10.68%. Due to the several reform measures taken by the government in the last decade, the growth rate has improved.

#### **6.4. Composition of Major Taxes in Total Tax Revenue (%)**

**Table 7: Composition of major taxes in total tax revenue (%) in Bangladesh (1997-98 to 2016-17)**

Decade	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
Income	14.0	14.7	17.4	18.4	18.7	19.1	18.6	18.3	19.2	22.7
VAT	31.2	30.2	31.6	31.4	31.7	32.3	30.3	33.1	34.2	34.8
Custom	29.7	29.9	26.5	24.4	24.4	23.5	25.8	25.0	22.7	21.0
Supp.	15.8	16.0	15.5	17.2	17.5	17.6	19.1	17.5	17.6	15.5
Avg.	<b>Income tax (18.14); VAT (32.13); Customs (25.34); Supp. Duty (16.98)</b>									
Decade	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
Income	22.9	24.3	25.8	27.9	29.1	30.2	34.0	34.5	33.3	32.6
VAT	35.4	36.2	35.6	35.7	35.6	34.6	35.2	35.2	34.6	35.7
Custom	19.3	17.2	16.3	13.8	13.1	12.4	10.3	10.7	11.0	11.2
Supp.	16.6	16.4	16.3	17.1	16.8	17.0	14.7	7.00	16.1	15.3
Avg.	<b>Income tax (29.51); VAT (35.42); Customs (13.57); Supp. Duty (15.37)</b>									

Source: Author's calculation based on data from Bangladesh Economic Review (2017)

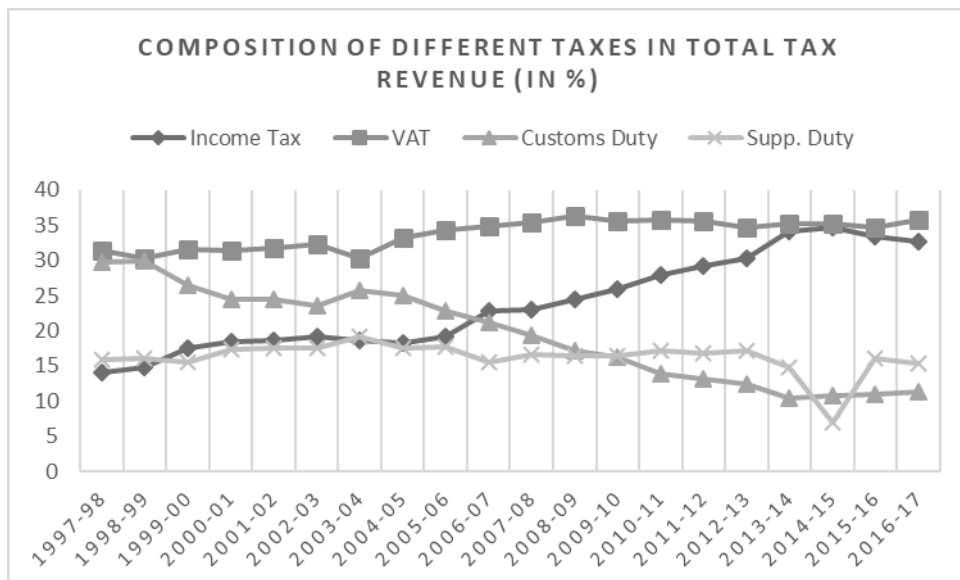


Figure 2: Composition of different taxes in total tax revenue of Bangladesh

From Table 7 and Figure 2, it has been observed that the contribution of VAT was highest during this period with a contribution of 30% to 36% on a consistent basis. The contribution of income tax has been increased from 14% to around 35%, with a tremendous growth. Whereas, Bangladesh witnessed a significant fall in the contribution of customs duty from 30% to around 10%. The contribution of supplementary duty was almost consistent during this period with 15% to 18% contribution. The increasing trend in the contribution of income tax indicates government’s efforts to reduce the dominance of indirect tax in the tax structure. On an average, the contribution of income tax and VAT was higher in Decade 2 and for customs and supplementary duty it was in Decade 1.

### 6.5. Composition of Direct and Indirect Taxes in Total Tax Revenue (%)

Table 8: Composition of direct and indirect taxes in Total Tax (as %) in Bangladesh (1997-98 to 2016-17)

Decade	97-	98-	99-	00-	01-	02-	03-	04-	05-	06-
Direct	14.0	14.7	17.4	18.4	18.7	19.1	18.6	18.3	19.2	22.7
Indirect	86.0	85.2	82.5	81.5	81.3	80.8	81.3	81.6	80.7	77.2

Average	<b>Direct tax (18.14); Indirect Tax (81.86)</b>									
Decade	07-	08-	09-	10-	11-	12-	13-	14-	15-	16-
Direct	22.9	24.3	25.8	27.9	29.1	30.2	34.0	34.5	33.3	32.6
Indirect	77.0	75.6	74.1	72.0	70.8	69.7	65.9	65.4	66.6	67.3
Average	<b>Direct Tax (29.51); Indirect Tax (70.49)</b>									

Source: Author's calculation based on data from Bangladesh Economic Review

Table 8 depicts that Bangladesh's tax structure is dominated by the indirect taxes, although the dominance of indirect tax has been reduced to an average of 70.49% in decade 2 than an average 81.86% in decade 1.

## 7. Conclusion and Managerial Implications

The study uncovered the reality that despite having impressive story of progress with steady GDP growth of more than 6% for a number of years, almost 40 million people in Bangladesh still live below the national poverty line (Oxfam, 2018). Bangladesh has one of the world's lowest tax to GDP ratios for many years. Among SAARC countries it has the second lowest figure, although tax contributes more than 85% of the government revenue in Bangladesh. In contrast, the contribution of non-tax revenue to GDP is also less than 2%. Indirect taxes have its dominance in the Bangladesh tax structure with the highest contribution of VAT, which is almost one-third of the total tax revenue. The contribution of income tax is also almost one-third of the total tax revenue, which has been increasing during last twenty years. Such dynamics put Bangladesh in 152<sup>nd</sup> position among 190 economies in the Paying Taxes 2018 Study (World Bank Group, 2018). Moreover, according to the Commitment to Reducing Inequality (CRI) Index 2018, Bangladesh was ranked 148<sup>th</sup> position among 157 economies in terms of overall CRI and 103<sup>rd</sup> in terms of CRI rank on taxation policies (Oxfam, 2018). The study revealed the fact that necessary reform measures are required to improve the overall tax performance of the country, despite having some progress in the last twenty years.

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