E X P A N D I N G

DIRECT TAX BASE:

PROBLEMS AND PROSPECTS - BANGLADESH PERSPECTIVE

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"Bangladesh on Development Highway: The Time is Ours" is the motivational statement echoed everywhere of late among the masses who envision to be the proud citizen of a middle income country by 2021 and developed country within 2041. The country once stigmatized as bottomless basket and negligently portrayed to the world community as a country of poverty, natural disasters, political unrest, and countless negative connotations has now become the role model of development to many. Apart from seven plus percent Real Gross Domestic Product (RGDP) growth rate in recent years the success and achievement of Bangladesh on various social and economic front is impressive. However, in order to maintain the spur of growth momentum continued as delineated in the Seventh Five Year Plan (SFYP) spanning the period 2016-2020 government expenditure in the form of Annual Development Program (ADP) has to be raised at 21% of GDP by the fiscal year 2020 for meeting growing social spending and infrastructure needs while maintaining debt GDP ratio at or below 5%. This essentially requires augmentation of revenue collection from the current level of around 12% to 16% of GDP as outlined in the SFYP. In particular, the contribution of direct tax has to be raised from 3.2% to 5% of GDP over the period of next five years.

Rigorous analysis reveals that the task of lifting the direct tax as a percentage of GDP from the current level of 3.2% to 5% coupled with more than 7% RGDP growth rate requires direct tax to be grown at the rate of 18% each year over the next five years assuming constant yearly inflation rate of 6%. This fact, nonetheless, raises some obvious questions - does the direct tax system of Bangladesh have the capability and potentiality to grow yearly at 18%, what may be the possible ways and means of harnessing untapped potentiality, what may be the possible impediments in doing so, what are the areas to be focused as a matter of priority? This article attempts to answer some of these issues.

In an effort to explore the potentiality of growth rate of direct tax collection and for that matter to identify the main driver of the growth rate of direct tax collection one may look at the following fundamental relationship that determines the amount of tax collection:

Amount of Direct Tax (DT) collected = (Amount on which Tax Rate is applied * Tax Rate)

Here, Amount on which Tax Rate is applied i.e. the first term of the right hand side of the above equation is essentially the Tax Base (TB). With tax rate denoted as "R" the equation may be reproduced as follows:

$$DT = TB * R$$
$$DT = (TB/GDP) * GDP * R$$
$$DT = (TB/GDP) * (RGDP * \text{Price Level}) * R$$

Applying natural logarithm on both sides of the equation with a few steps algebraic manipulation yields:

Growth rate of DT = Growth rate of (TB/GDP) +

Growth rate of RGDP + Growth rate of Price Level + Growth rate of R

Growth rate of DT = Growth rate of (TB/GDP) + Growth rate of RGDP + Inflation rate + Growth rate of R

It is evident from the above equation that the growth rate of direct tax collection is determined by the growth rate of direct tax base - GDP ratio, RGDP growth rate, inflation rate, and the growth rate of direct tax rate. Hence, for a given RGDP growth rate, and inflation rate the growth rate of direct tax collection critically depends on the growth rate of direct tax base - GDP ratio i.e. the fraction of GDP subject to direct tax or in other words, the fraction of GDP upon which direct tax rate is applied, and the growth rate of direct tax rate. It thus implies that direct tax collection can be augmented by either bringing more fraction of GDP under direct tax net i.e. expanding direct tax base or increasing direct tax rate or increasing both direct tax base and direct tax rate. However, there exists an inverse relationship between tax base and tax rate. Increase in tax rate acts as a disincentive for the existing taxpayers to remain in the tax net and deters would - be or potential taxpayers to enter into the tax base. Thus, increase in tax rate with a view to augmenting tax collection reduces tax base so that the response of further rise in tax rate fuels the race to the bottom resulting in dwindling tax base. Nevertheless, increase in tax rate may not yield higher tax revenue. Because tax base is essentially very much elastic to the increase in tax rate so that a rise in tax rate may reduce the tax base to such extent resulting in less amount of tax revenue collected than that of before.

A vast treasure of literature supports the aforesaid views. Mogensen, et. al. (1995) argues that tax rate, sanctions from tax authorities, and general moral attitude are important factors for the fraction of the economy to remain outside the tax net. Klovland (1984), Schneider (1986), Schneider (2000) and Johnson, Kaufmann and Zoido-Lobatón (1998) found that direct tax rate, intensity of regulation, complexity of the tax system, extent of bribery encountered by the taxpayers have strong influence on the size of the economy being taxed. Cebula (1997) on the other hand concludes that lower tax rate, higher probability of audit, and higher penalties on the tax dodgers reduce the extent of the economy hidden outside the tax net and thus increase tax base.

Above discussion thus suggests that expanding tax base, not increasing the tax rate, may be the right choice for increasing the magnitude and growth of tax revenue mobilization. In the backdrop of such suggestion let's explore whether Bangladesh economy has the potentiality of expanding tax base. Current direct tax - GDP ratio of 3.2% in Bangladesh implies that 70% of GDP is beyond the scope of taxation assuming the average direct tax rate of 10% and will be more than 70% if the average direct tax rate is applied above 10%. The possible reasons for such bleak scenario may be - (1) excessive exemptions are provided by the statute (2) a sizable fraction of the taxable income is hidden outside the tax net. Reason (2) may be attributed to (1) the taxpayers not at all within the tax net (2) the taxpayers within the tax net but conceal taxable income. To delve in to the matter further we may look at the Report of Household Income & Expenditure Survey 2010 (HIES 2010). Data obtained from HIES 2010 reveals that in the survey year 2010 the total number of income earners in Bangladesh was 4,31,07,474; of them 3,07,14,034 were rural and rest 1,23,93,440 urban. Considering the taxable income of individuals above Taka 165,000/- for the assessment year 2010-11 the total number of income earners having taxable income stands 54,91,374 comprising 22,04,975 rural and 32,86,399 urban. The distribution of yearly income in Taka along with number of earners is detailed in the following table:

Table -1: Distribution of Number of Earners Having Taxable Income, Year 2010

National		Rural		Urban	
No of Earners	Yearly Income	No of Earners	Yearly Income	No of Earners	Yearly Income
2233422	165350	1363897	156682	869525	178946
1258520	201838	697236	199685	561284	204512
961574	252959	525844	230917	435730	279558
2401756	442818	981895	463942	1419860	428209
Taxable income earners: 5491374		Taxable income earners: 2204975		Taxable income earners:3286399	

Source: HIES 2010 and Author's Own Calculation

Table - 1 shows that at aggregate national level 22,33,422 earners have taxable income i.e. yearly income TK. 165,350/-. However, further analysis indicates that of them 13,63,897 earners are rural who have yearly income TK. 156,682/- which is less than taxable income resulting in 869,525 urban earners having taxable income in this category. Nevertheless, it is important to note that out of 54,91,374 total earners of taxable income, 40.15% are rural while 59.85% are urban indicating substantial potentiality of the tax base to expand in the rural areas. More importantly, among the rural earners of taxable income 44.53% belong to the highest income i.e. TK. 463,942/- group who earn more than their urban counterparts. Even though the relevant data for the most recent years are not available we may safely proceed analysis using HIES 2010 data assuming yearly increase in income at an average inflation rate of 6% over last five years so that total earners of taxable income with TK. 250,000/- as threshold of taxable income in recent years will approximately equal to the total earners of taxable income for tax free income of TK. 165,000/- in 2010. Hence, we may reasonably assume that the total number of potential direct taxpayers in Bangladesh in recent years is approximately 55 lakh.

The above analysis thus suggests that with TK. 250,000/- as threshold of taxable income the number of potential taxpayers in Bangladesh is 55 lakh who should pay tax and file tax return. However, as per the annual reports of National Board of Revenue (NBR) the number of taxpayers in 2011-12, 2012-13, 2013-14 is 1821306, 2150672, 2328457 respectively and it is also reported that the total number of e-TIN holders at present is around 30 lakh even though a little fraction of them in essence pay tax and submit tax return. The direct tax system of Bangladesh is thus operating much below its potentiality and hence leaves enough leeway for expanding the tax base. Such inference may be substantiated by the measure of tax effort - the ratio of actual tax collection as a share of GDP to potential tax collection as share of GDP - as described by Mansur, Ahsan H. in a background paper of the SFYP. As per the measure of tax effort, income tax effort in Bangladesh is 0.531 indicating only 53% of the potentiality is realized much below the income tax effort of 1.491 in India, 1.279 in Pakistan, and 1.066 in Bhutan.

The potentiality of tax base in Bangladesh may be weighed from the standpoint of the structural change of her economy. Bangladesh economy once marked by the major contribution of agriculture to GDP has now replaced by services followed by industry. Such phenomenal change in the structure of the economy has strong bearing on the expansion of tax base as the incomes generating from services and industry are more likely to subject to tax than those from agriculture. The relevant data for the structural change of the economy are presented in the following table.

Table - 2: Structural Change of the Economy (% of GDP)

Structure of the Economy	Year 2010	Year 2015
Agriculture	17.81	15.59
Industry	16.89	27.89
of which Manufacturing	26.14	20.17
Services	56.05	56.42

Source: Bangladesh Bureau of Statistics (BBS)

Apart from structural change Bangladesh economy has much progressed in the measure of per capita income and poverty reduction since her birth. Percentage of poor in the population has just reversed and per capita income has increased manifold in 2015 with reference to 1978 as evident from the table presented below.

Table - 3: Progress in the Measure of Per Capita Income and Poverty Reduction

Year	Per Capita Income (USD)	Head Count Poverty Ratio (%)
1978	111	82.1
2015	1314	24.8

Source: Bangladesh Bureau of Statistics (BBS)

The achievement in other indicators prominently in the measure of the percentage of population using electricity and mobile phone is commendable. as shown the following table.

Table - 4: Percentage of Population Using Electricity and Mobile Phone, Year 2010

Indicator	National	Rural	Urban
Electricity (%)	55.26	42.49	90.10
Mobile Phone (%)	63.74	56.77	82.74

Source: HIES 2010

Data presented in table - 4 are for the year 2010. Even though contemporary relevant data are unavailable we can sense much improvement in these indicators observing spectacular continuous changes around us. It is reported that contemporarily 12.97 crore mobile phone SIMs are active in Bangladesh, and about 7 crore people are using internet. All these upbeat development along with the nature and pattern of expenditure as evident in the contemporary consumerism suggests that other than 24.8% of the population who are poor in the measure of head count poverty, majority of the population has the capability of paying minimum tax TK=3000/- yearly as a symbol of good citizenry and token of participation as well as appreciation in the ongoing development spree of the country. Had it been materialized anyway that would have been a colossal boost to the expansion of direct tax base. However, in view of per capita income and the distribution of income of the earners as may be computed from HIES 2010 tax free income of TK. 250,000/- appears to be high and may be weighed as a stumbling block to the expansion of direct base. Data in this regard for Bangladesh and other countries are presented in the following table.

Table - 5: Tax Free Income and Per Capita Income, Year 2016

Country	Tax Free Income (TFI) in Local Currency	Per Capita Income (PCI) in Local Currency	Direct Tax as a Percentage of GDP (%)	TFI as a Fraction of PCI (TFI/PCI)
Bangladesh	250000	106342	3.2	2.35
India	250000	114666	5.4	2.18
Pakistan	400000	153196	4.1	2.61
Singapore	20000	73168	6.1	0.27
Malaysia	5000	39419	9.1	0.13
Thailand	150000	208538	6.6	0.72
Australi	18200	68589	16.1	0.27

Source: World Development Indicators (WDI)

Column 5 of table 5 shows that Tax Free Income (TFI) limit is more than twice i.e. 235% of Per Capita Income (PCI) in Bangladesh while the corresponding limit is only 13% of PCI in Malaysia. This may to some extent explain why the direct tax - GDP ratio in Bangladesh is much lower than that in Malaysia. In general, there exists an inverse relationship between direct tax - GDP ratio and TFI as a fraction of PCI (TFI/PCI) as portrayed in the following scatter diagram plotted using the data of table 5.

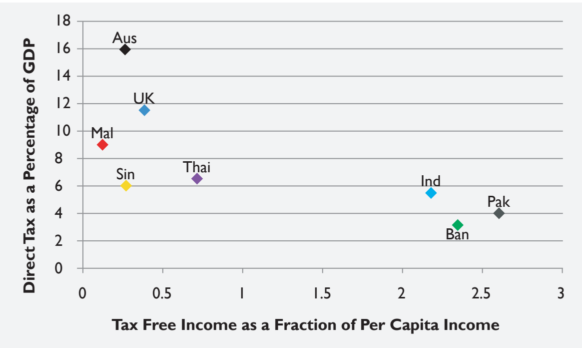

Figure: Scatter Diagram - Direct Tax as a % of GDP against TFI as a Fraction of PCI

If the direct tax - GDP ratio is considered as a measure of direct tax base it may be inferred from our data that TFI in view of PCI has strong negative influence on direct tax base. Hence, relatively high TFI with respect to PCI may be attributed to low direct tax - GDP ratio and for that matter narrow direct tax base in Bangladesh. Essentially, in view of the distribution of income of earners as may be predicted from HIES 2010, TFI limit of TK. 250,000/- precludes huge number of earners from tax net.

Schneider (2002) measures hidden economy of Bangladesh as 35.6% of GDP of the year 2000. Out of more than 70% of GDP lying beyond the scope of taxation if 35.6% is marked as hidden as measured by Schneider (2002) the remaining approximately 34% may be identified as the consequence of exemptions provided by the statute of which a significant share may be ascribed to TFI.

The prospect of expanding the direct tax base in Bangladesh is thus enormous. Keeping aside the issue of interfering with the exemptions, in general, and TFI, in particular, undertaking effective measures for unearthing the huge treasure of hidden economy is highly suggestive as the first and immediate priority. However, the problem lies here is the herculean task of making economic activities and business transactions done through banking channel compelling and popular. Because any transaction effected through banking channel left its mark; hence is easier to detect and bring in to tax net than cash transaction. An economic agent thus weighs the benefit of using banking channel against the cost of paying tax in making the choice between the transaction through banking channel and cash transaction. The efficiency of tax administration along with the efficiency and development of financial sector as well as the interlink between the tax administration and financial sector is important in this regard. Because merely a transaction through banking channel on its own does not ensure that it will be subject to tax and broaden tax base. At the first instance it depends upon the voluntary compliance of the economic agent who evaluates the benefit of not to comply i.e. not to disclose the transaction to tax authority against the risk and cost of being caught and penalized by the tax authority for non compliance. The alacrity of actions taken by the tax authority thus shapes the behavior of the economic agents and provides strong incentives for voluntary compliance that in turn broadens tax base.

The factors that affect direct tax base as suggested by the literature are, among many others, moral attitude of the taxpayers towards paying tax, intensity of regulations, complexity of tax system, extent of bribery encountered by the taxpayers, probability of audit, ensuring imposition of penalties on tax dodgers. Moreover, with the rise of cross border transactions in tandem with increasing international trade and commerce as well as external opening of financial sector the issues of money laundering and transfer pricing may lead to the erosion of tax base. In view of enormous prospect of expanding the direct tax base in Bangladesh all these factors and issues are important and matter of grave concern deserves to be dealt with much prudence. However, the most momentous concurrent backlash often pointed to tax authority by many is the proclivity of the tax authority to "bang on few" or "attempt to the low hanging fruits". At least the nature and pattern of direct tax collection in Bangladesh which, at present, is highly skewed to the collection from Tax Deduction at Source (TDS) - more specifically, TDS from execution of contract, supply of goods, import of goods, and interest on bank deposits lends credence to such view.

> "Bangladesh on Development Highway: The Time is Ours" is the motivational statement echoed everywhere of late among the masses who envision to be the proud citizen of a middle income country by 2021 and developed country within 2041. The country once stigmatized as bottomless basket and negligently portrayed to the world community as a country of poverty, natural disasters, political unrest, and countless negative connotations has now become the role model of development to many.

Since independence, Bangladesh has made long stride on many counts. Along with contemporary RGDP growth rate of more than 7%, per capita income has increased and head count poverty has reduced substantially. But, deplorably, income Gini index - the measure of income inequality has soared from 0.36 in 1973 to 0.46 in 2010 as Matin (2014) reports. This, nonetheless, indicates that direct taxation as a tool of redistribution of income to ensure equity and social justice has failed to prove its effectiveness. Does it continue unabated social disorder and chaos may rise to such proportion that our all developmental efforts and lofty thoughts will end in fiasco. Therefore time ripe now for a wake- up call to all concerned to act and react in line with the target of broadening the tax base bringing all financial and physical assets of the top rich in to tax net.

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