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Effect of Income Tax Outcome Revenue Based on Digitization of Bangladesh

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Abstract— **Bangladesh as a developing country is committed to increasing tax revenues and achieving fiscal discipline with a view to increasing self-reliance. The external environment influencing the tax performance of Bangladesh has changed remarkably as the country more and more integrated with the global economy during the 1990s. In recent years, the Government of Bangladesh has initiated some administrative and policy reforms in the tax system. An improved tax administration in association with some pragmatic policy initiatives has of late resulted in a modest improvement in the tax to GDP ratio. However, the performance is still unsatisfactory as compared to other countries at a similar stage of economic development**

Index Terms— **Income Tax, Outcome Revenue of Bangladesh.**

I. Introduction

The term 'tax' has been derived from the French word '*tax'* which means 'to charge'. Review of different literature suggests that 'tax' was introduced to generate public and state revenues to cope with the situation after major crises like famine, devastation of war etc. Likewise, in the Indian Subcontinent 'tax' was introduced to raise additional finances in order to replenish the revenue deficit caused by the Sappy Mutiny of 1857 (K I Interview)1. Following the Mutiny, the British government took over the rule of India from the East India Company, which was in a bad financial state. To find a way-out, the government appointed a Finance Member in India, named Mr. James Wilson, who introduced a bill to the Indian Legislature entitled "An Act for Imposing Duties on Profits is arising from Property, Professions, Trades and Offices" in1860.

However, the Act did not work well in 1865 and was reintroduced in 1867 as certificate tax, which in turn was converted into regular income tax in 1869. Though the changes over the years improved the tax system in form and coverage, the income tax was altogether abolished in 1873-74 when there was a comfortable budgetary surplus (Bala Swapan Kumar 2009)2. However, in 1879-80 taxes ware raised in the form of license taxes and continued until 1885-86. Meantime, in 1886 the Indian government adopted the Indian Income Tax Act, which was again amended substantially in 1916 and consolidated in the income tax law of 1916. In 1922 the All-India Income Tax Committee was appointed. It recommended a broad-based 'Income Tax Act' and necessary institutional arrangement for tax collection. Based on the recommendations the Indian government adopted the 'Income Tax Act 1922 (Act XI of 1922) and established the Inland Revenue Board as the highest authority for income tax. The very 'Act' tried to address few fundamental issues and peoples' concern, such as the basis for assessing income, profits and gains, the taxpayer's choice, etc., but still it was a continuation of the reactive and centralized tax system of the British ruler and people's views and concerns were not reflected in a structured manner.

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II. Current Revenue Regime

The current fiscal regime of Bangladesh consists of direct and indirect taxation. It is governed by the National Board of Revenue (NBR). Revenue is also generated from non-NBR sectors and under the laws and acts of related ministries. The NBR taxes include Customs Duty, Value Added Tax (VAT), Supplementary Duty (SD), Personal Income Taxes (PIT) and Corporate Income Taxes (CIT). Personal and Corporate Income Tax, the single largest source of direct tax, is governed by the Income Tax Ordinance, 1984 (XXXVI of 1984). The income tax laws consist of the following statutes (apart from the main statute) (Bala, Swapan Kumar 2009):

- Income Tax Ordinance 1984 – the parent statute;
- Income Tax Rules 1984;
- S.R.O. (Statutory Rules and Order)/Gazette Notification;
- Income Tax Circular;
- General or Special Order;
- Explanation/Office Memorandum;
- Verdicts of Appellate Tribunal for equivalent fact;
- Verdicts of the High Court Division on question of law; and
- Verdicts of the Appellate Division on judgment of the High Court Division.

Besides fiscal income from direct sources (e.g. income tax) Bangladesh generates a substantial share of its revenue from indirect sources through import and excise duties (customs duties). Customs duties are normally payable on the following goods: a) imported and exported goods; b) goods brought from any foreign country to any customs station and without payment of duties there, transshipped or thence carried to and imported at any other customs station; and c) goods brought in from one customs station to another.
The main legislation relating to customs and excise duties are:
- The Central Excises and Salt Act, 1944;

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- The Protective Duties Act, 1950;
- The Customs Act, 1969;
- The Customs Tariff Act, 1969/2000;

The customs duties were the biggest contributors to the tax revenue until the late 1980s. That is when their decline started, due to reduced rates and levies to comply with the demands of global and globalized trade and the fiscal policies of market liberalization, and also for shifting of economy from trading to local manufacturing. It then became necessary to think of other options for revenue generation. Given the context, in 1986 the World Bank suggested introducing VAT in Bangladesh. With the aim of greater revenue generation for the government and stimulating economic growth, the VAT Bill 1991 was proposed in the National Parliament on 1st June 1991 and a month later the Bill was passed and made into the VAT Act 1991. The VAT Act 1991 contains over 70 laws that guide a business in VAT related issues, from registration to penalties on non-compliance. It also dictates the structure of the VAT authority and the power it may exert on businesses regarding the three taxes within the realm of the Act as the situation demands.

III. Distribution of Tax Burden and Progressivity in Bangladesh

One of the basic concepts of designing and implementing an equitable taxation regime is ‘Broad Basing’, meaning that the taxes should be spread over as wide as possible a section of the population, or sectors of the economy, to minimize the individual tax burden. While indirect taxes (e.g. VAT) levied on goods or services affect the rich and the poor alike, direct taxes may create burdens on a certain income group. Indirect taxation is commonly used to generate tax revenue paid indirectly by the final consumer of goods and services. It is paid by everyone in society, regardless their financial situation.
Hence, indirect taxation can be viewed as regressive as it imposes a greater burden (relative to resources) on the poor than on the rich. In contrast to direct tax, the taxpayer and the tax-bearer are not the same person. Hence, to reduce an individual’s tax burden, the taxation regime should be diverse and broad-based with an equitable balance of both direct and indirect sources. On the other hand, the term "progressive" refers to the way the tax rate progresses from low to high, with the result that an individual on average pays less than the person's marginal tax rate. This also means that people with lower income pay a lower percentage of that income in tax than those with a higher income. Unlike indirect taxes, direct taxes are linked to the taxpayer’s ability to pay, and hence are considered to be progressive.12 In Bangladesh, direct taxes consist of taxes from income tax and other taxes.

The sources of income tax can be classified in 7 categories:

1. Salaries
2. Interest on securities
3. Income from house property
4. Income from agriculture
5. Income from business or profession
6. Capital gains
7. Income from other sources.

Indirect taxes are collected by intermediaries from the person who bears the ultimate economic burden of the tax. The intermediary later files a tax return and forwards the tax proceeds to the government with the return. The major indirect taxes in Bangladesh include: value added tax (VAT), excise duty, trade tax and turnover tax. Nevertheless, the tax structure of Bangladesh is perceived to be regressive as it is heavily dependent on indirect taxes (about 64% in 2014). The gap between direct and indirect tax has reduced since 2005 as the share of direct tax has increased.

IV. Non-Tax Revenue

In Bangladesh, non-tax revenue made up 19.37 and 15.12 percent of total revenue from FY 2005-06 to FY 2014-15. From FY 2011-12 to FY 2014-15 the share of non-tax revenue has decreased gradually. It was above 19% from FY 2005-06 to FY 2011- 12, and decreased to 15.12% in FY 2014-15 .Sources of non-tax revenue include rents, concessions and royalties collected by the state when it contracts out the right to profit from some goods or services to a private corporation. The fiscal framework for the extractive industry in Bangladesh is not very clear and lacks the necessary regulations. In addition, the extractive companies sometimes enjoy lower corporate income tax rates in confidential agreement with the government.

V. Revenue Forgone

In Bangladesh there is no good estimate of revenues forgone due to tax exemptions. At the time of preparing tax incentives, the revenues estimates are also not prepared. As a result, the actual cost benefit accounting is not prepared.

VI. Defining and Measuring Digitization

We believe the extent of a country digitization can be measured across six key attributes:
Ubiquity – the extent to which consumers and enterprises have universal access to digital services and applications.
Affordability – the extent to which digital services are priced in a rang that makes them available to as many people as possible
Reliability – the quality of available digital services
Speed - the extent to which digital services can be accessed in real time
Usability - the ease of use of digital services and the ability of local ecosystems to boost adoption of these services
Skill - the ability of users to incorporate digital services into their lives and businesses.

VII. Economic Impact

Analysis confirms that digitization has a material economic impact, which we assessed with three variables: growth in per a pita GDP, job creation, innovation. We analyzed 150 countries using a classical production function model to assess economic impact, controlling for a number of variables.

We found that an increase in digitization of 10 percentage point triggers a 0.50 to 0.62 percent gain in per capita GDP. By contrast , previous studies that focused mainly on broadband penetration established that a 10percentage point increase in broadband penetration contributes a gain in per capita GDP of just 0.16 to 0.25 percent. Thus the GDP impact from digitization is more than twice as large as the impact of broadband penetration.

Additionally, the economic impact of digitization accelerates as countries transition to more advanced stages. Constrained digital economies realized a 0.5 percent increase in GDP per capita for every 10percent increase in digitization .while advanced digital economic show a 0.62 percent increase in GDP per capita forever 10 percent digitization increase.

VIII. Bangladesh Data

The research team worked with the Dhaka South Commissioner ate of the Bangladesh National Board of Revenue (NBR) to define market areas that fall under the jurisdiction of a set of pre-selected "circle offices" that firms must visit to pay VAT. Dhaka contains 28 Circle Offices that serve as VAT collection points, and 6 of these fall under the jurisdiction of the Dhaka-South Commissioner. We are working in three of these circle offices. The jurisdiction of each circle office is defined spatially. The project brings together novel data from four sources.

A. *Tax Compliance Patterns: Evidence From The Linked Database*

In our main sample (the set of firms surveyed in the baseline survey), we find that overall compliance is very low: 34.1% of firms are VAT registered; 2.6% of firms paid package VAT in the last year; and 5.7% paid a positive amount of regular VAT in the last quarter. We can also see that a firm becoming registered is not sufficient to ensure payment in practice. There are a substantial number of what NBR refers to as "stop filers": firms that are registered but who do not file or remit taxes. Note that the NBR believes that essentially all firms in these areas should be VAT registered and should be paying regular VAT. There is therefore substantial room to improve compliance even on very basic measures such as registration, filing, and non-zero payment. We see substantial variation in compliance across sectors (Table 1). We also see variation based on firm size, with a very steep gradient in compliance by number of employees (Table 2). We also see a wide range of compliance across geographic areas in the data. Shows registration rates by cluster in our sample areas: in Panel A all clusters are included, and in Panel B the sample is restricted to clusters with more than 10 firms. Note that "0% registered" is the largest category and is omitted from the figure for ease of display. The number of firms falling into the 0% category is given in the figure notes. We could imagine a situation in which geographic areas are either very low compliance or very high compliance; empirically, that is not the case. We observe a wide range of registration shares, indicating substantially heterogeneity within small geographic areas in a given firm's choice of whether to register. We observe similar patterns for tax payment (results available on request).

B. *Experimental Interventions: Research Design*

In this section, we outline a planned field experiment that will directly test the causal effects of various types of social recognition on firm tax compliance. The study is being implemented as a randomized controlled trial, with information about the taxpaying behavior of the peer network being applied at the level of "clusters" of approximately 20-60 firms (on average) in a market area, as described above. Ideally, clusters are groups of two or more businesses where intra-cluster peer interactions are high while inter-cluster interactions and information spillovers are limited. This is important since neighboring clusters may be randomly assigned to treatment and control groups. We will also measure firm interactions directly and ask about informational spillovers in our baseline and end line surveys.

All firms in the sample will be sent a letter on NBR letterhead containing firms' own registration and remittance information based on the baseline administrative records. This will both allow firms the opportunity to correct any mistakes regarding their status and demonstrate to firms that NBR can match tax information to firms, giving credibility to the intervention. Some of the initial letters will contain additional information, depending on which treatment group the firm's cluster has been randomized into. Treated firms will receive some combination of the following treatments:

1) Recognition cards. Firms will be told that based on registration and payment in the coming quarter, they will be eligible for a card recognizing them as a compliant taxpayer. These cards will have different "levels": ex: bronze for registration, silver for paying package VAT, and gold for paying regular VAT above a given threshold.

Importantly, a firm will be eligible for a given type of card if they themselves meet the criteria and also if a set share of firms in their cluster meet the criteria. This creates direct incentives for firms to care about the compliance of their neighbors.

Having different levels allows the same type of recognition to be "marginal" for different clusters at different levels. Thus, a "slum" area with low registration levels may find the bronze card relevant, while in a formal shopping center, the bronze card will not carry much status and firms may care about showing that they are gold card holders. The cards will not currently be associated with tangible benefits other than status, although such benefits could be associated with the cards in the future.

2) Announcement of "peer group recognition." Firms are told that they will receive a subsequent letter that has information on registration, filing, and payment status of all of the firms in their cluster.

Tale 1: Tax Compliance by Sector

Penal A: broad	Nonpayer's %	Regular %	Package %	registered %
Clothing and shoes	23.6	15.4	56.8	32.4
Health	6. 1	18.8	8.2	8.4
Food	13.9	13.5	0.8	6.1
Electronics,	17.2	14.3	17.9	20.4
Construct and autos	3.6	1.1	1.1	2.1
White collar and se	13.4	15.7	2.8	11.7
Misc/uncategorized	22.1	21.1	12.4	18.8

Penal B: Specific	Nonpayer's %	regular %	package %	registered %
Non-gendered cloth	0.7	0.0	1.7	0.7
Female clothing	7.3	5.3	28.1	11.5
Male clothing	7.1	7.6	16.7	13.2
Shoes	2.1	0.6	9.0	3.5
Accessories	1.0	0.2	0.9	1.1
Jewelry	2.3	16.0	4.4	5.7
Lodging	0.0	1.1	0.0	0.2
Tailors and sewing	5.3	1.7	0.3	2.4
Meat and veg sellers	3.2	0.1	0.0	0.1
Restaurant	2.1	8.7	0.0	2.7
General store	8.7	4.8	0.8	3.2
Beauty and cosmetics	3.8	2.8	3.8	2.7
Health and child car	4.2	2.3	0.2	2.1
Printing, books, News	5.6	2.2	0.5	2.8
Ele & cell phones	12.3	2.7	12.4	13.9
White collar	3.4	3.8	0.0	3.2
Construction	1.9	0.5	0.9	1.0
Autos and rickshaw	1.7	0.6	0.2	1.1
HH furnishing	4.9	11.6	5.5	6.4
Hobbies	2.8	7.0	2.4	4.6
Education	1.6	2.8	0.0	1.1
Misc/ uncategoriz	17.9	17.7	12.3	16.6

IX. Conclusion

Taxation is indispensable in order to support the basic function of a sustainable state and to create the context for economic growth. An improved tax system is the key to financing public services, reducing inequality, making government more accountable and helping to improve self-reliance. Over time, the NBR has had major achievements as it invested time and efforts to achieve its objectives and to reform the tax system. The tax system in Bangladesh is gradually improving, raising more revenue and reducing the dependency on aid. However, Bangladesh is still a low tax effort country with a high buoyancy ratio, implying that the policy-makers of Bangladesh have the scope and potential to opt for greater revenue mobilization through internal resources in order to meet the budgetary deficit. This report analyzed seven areas of the tax system: tax system in general; distribution of the tax burden and progressivity; revenue sufficiency and tax leakages; tax exemptions; effectiveness of the tax administration; government spending and transparency and accountability. With the objectives of looking into the complex character of tax systems in order to evaluate the fairness of a tax system under review. The report reveals the situation in Bangladesh and provides a set of recommendations at the end of every chapter for a better understanding by readers. The recommendations indicate that fair taxation is possible if the government follows standard norms of policy implementation and if it improves the transparency and accountability based on participatory approaches.

The study finds that there remains a lot to improve in terms of the tax collection to achieve the desired tax to GDP ratio. Tax exemptions and tax evasion in general also contribute to the low revenue mobilization. However, tax reform is an overwhelmingly political challenge as vested interests strongly resist reform. Furthermore, the tax system continues to suffer from unfair enforcement, widespread corruption and the failure to translate the tax revenues into public services. Greater political leadership and commitment is needed to overcome the prevailing challenges. Therefore, the role of civil society must be to generate broad-based political pressure for reform by actively engaging a wide public constituency, while the government must be willing to adopt fair tax policies and practices. The construction of institutions that are independent and easily monitored is an important strategy for curbing corruption and abuse. This should include clear processes and regulations, accompanied by dedicated enforcement capacity. Transparency and inclusiveness are essential in fair tax systems. This implies that citizens should have detailed information about how taxes are assessed, how much tax revenue is collected and how that revenue is used. Measures to enable citizens to monitor the fairness of tax collection efforts and expenditure are crucial. To conclude, SUPRO believes that the report covers the major areas of the tax system in Bangladesh and that it provides valuable recommendations for policy-makers and citizens. If the tax system is Bangladesh is to be improved on the basis of equity, these recommendations must be implemented at all levels of the tax administration.

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AUTHOR'S PROFILE

Dr Mir Mohammad Azad was born in Village – Korer Betka; Post Office – Mirrer Betka; Police Station - Tangail; District - Tangail, Bangladesh on 10th October, 1982.He received PhD in Computer Science, 2008 from Golden State University, Master of Computer Application, 2006 from Bharath Institute of Higher Education and Research Deemed University (Bharath University) and Bachelor of Computer Application, 2004, Bangalore University, India. **He is pursing Bachelor of Law (LL.B) from National University of Bangladesh**. He was working as a **lecturer** and **head of computer science** in various colleges in Bangalore and also worked as an **Assistant professor** and **Vice Principal** in different colleges in Bangalore during the year (2005-2009).He worked as an **Assistant Professor** and **Head of CSE & CSIT** at **Shanto Mariam university of Creative Technology (2010-2014).** He is having **19** publications in international journal in various countries like UK, USA, FRANCE, KOREA, PAKISTAN and INDIA. At present he is working as an **Associate Professor**, Department of **Computer Science and Engineering & Computer Science and Information Technology** in **Shanto Mariam university of Creative Technology**, Uttara, Dhaka, Bangladesh**.** His areas of interest include Computer Architecture, E-commerce, Digital Image processing, Computer Network, Wireless communication, MIS and Law.

Syeda Shajia Sharmin was born in Village: Khashipur,Post office: Daulatpur, Police Station: Khalishpur, District: Khulna, Bangladesh on 09 December, 1983. She passed her childhood in the city of Khulna as well as she achieved her Secondary School Certificate (S.S.C) and Higher Secondary School Certificate (H.S.C) respectively from Rotary School and Khulna Govt. Girls College,Khulna, Educational Board Jessore,Bangladesh. She has obtained Bachelor of Laws LL.B (Hon's)in the year of 2004 andMaster of Laws (LL.M) in the year of 2005 from University of Rajshahi, Bangladesh. She practiced as an Advocate at Dhaka Judges Court from 01-06-2006 to 31-03-2008 and also worked as a Lecturer of Department of Law, DarulIhsan University, 9/A Dhanmondi, Dhaka, Bangladesh from 21-04-2008 to 31-10-2013.She is also enlisted as an Advocate of Bangladesh Supreme Court in the year of 2013. At present she is working as a Lecturer of Law Department, Shanto-Mariam University of Creative Technology, Bangladesh. Her arenas of interests include as a subject and object in Law and Law related premises.

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