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WHO BEARS THE BURDEN OF TAXES IN DEVELOPING COUNTRIES?
A Case of Income Taxation in Bangladesh

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Abstract. The heavy reliance on indirect taxation has been treated as one the main obstacles in attaining economic development in developing countries. The problem arises mainly due to the fact that only a few taxpayers share the burden of direct taxes. This article reviews the incidence of income taxation in Bangladesh tax system. The main purpose of the study is to determine how the burden of personal and corporation income taxes is allocated among taxpayers of different income groups. The results of this study show that in case of personal income taxes only 13 percent taxpayers pay around 73 percent of tax revenue. In case of corporation income taxes the study shows similar results. For privately owned unlisted companies only 25 percent of them pay about 84 percent and about 13 percent companies pay nothing to the exchequer in the form of income taxes. Among the listed companies only 1.15 percent of them pay about 53.28 percent taxes and the top 40 percent of them pay about 96.56 percent taxes earned through this sector. The reasons identified behind such eccentric burden of taxes are, unlimited tax exemptions and tax holidays, poor tax base, inequality of taxing urban and rural sectors, special privileges to the public sectors, repeated tax amnesty etc. This study gives some recommendations, which could act as remedies for a better income tax system in Bangladesh.

I. INTRODUCTION

BACKGROUND OF THE STUDY

Bangladesh, like many other developing countries, is trying drastically to reform its tax structure through structural adjustment and growing demands have been placed on it to suggest towards a desirable tax system. A huge

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segment of the population living in acute poverty and disparity is also evident in income distribution. Tax burden is ultimately shared by a limited number of individual taxpayers and corporations. Thus, attaining a broad based and optimal income tax system is a much desirable task for the government. This study tries to keep forward such an endeavor by analyzing the distribution of burden of income taxation in Bangladesh.

Taxes are the major source of mobilizing internal resources of an economy. Bangladesh revenue structure has been burdened by taxes from indirect sources for long time and usually characterized by heavy import and excise duties. To cope with the challenge due to globalization, government of developing countries has to cut down such duties and levies. As a result, governments of developing countries have to collect more revenue either through value added tax (VAT) or from direct taxes. In Bangladesh, VAT was introduced in 1991 by replacing the sales taxes still known as the vital reform of Bangladesh revenue structure. The remaining potential sector is the income taxes which shares almost all taxes collected through direct sources. In Bangladesh having a population of about 133 million the number of registered taxpayers is only 1.25 million (which is only 0.94 percent of the total population). Tax base is too narrow and the tax law is full of exemptions and allowances. Agriculture sector provides employment for around 60 percent of the population contributes only 25 percent of gross domestic product (GDP) and virtually pays little in the form of income taxes. There is always a controversy whether this sector is extra protected or not and, if yes – for how long?

It is widely known that very few people even among the registered taxpayers pay any tax in the form of income taxes in Bangladesh. Major share of income taxes come from the corporate sector and there is always an uneasy feeling having its higher tax rates. It has been said that, about 100 foreign investors pay 60 percent of the total revenue to the exchequer in Bangladesh. Taxes imposed are usually in progressive rates and major tax collection is carried out under withholding tax system. In Bangladesh, income tax for government employees is deemed paid by the employer that is by the government, considering the fact that they are under paid. However, in case of private sectors, such payments are considered income, which creates additional tax burden for the employee of the private firms. This is discriminatory, that encourages employees of private firms to avoid or evade taxes.

So, in reality a few people share the burden of income taxes in Bangladesh and it is a real problem for the government to distribute the tax burden among different types of taxpayers in a fair manner. Thus, such a study is important for designing a fair tax system for Bangladesh, which would be of interest to similar developing countries context.

DATA AND METHODS

A variety of information of diverse nature and sources has been used for the study. The study uses a time series data on both personal and corporation income taxes from FY 1991 to FY 2001 for calculating the revenue trend and marginal and average tax rates over the years. Cross sectional data of FY 1999-2000 is used to determine the sector wise tax burden. First of all, taxpayer's information and revenue yield in each sector was collected. National Board of Revenue (NBR) annual reports are considered as main indirect source in that aspect. Year-wise revenue collection and statistics is important to forecast the revenue trend, also based on such reports. To analyze the tax incidence in each sector, it is important to measure the progressivity of taxes and hence to calculate the marginal and average tax rates in different income year. Sector-wise tax collection data has been collated to analyze the revenue trend and their respective contribution over the years.

This article is organized into five sections. Section I tries to analyze the justification of such a study in the context of Bangladesh income tax system. Section II briefly reviews a theoretical framework of the study and the methods used to calculate the vital statistics. Section III tries to review the overall revenue system and tax structure in Bangladesh. Sectoral tax incidences are calculated in section IV. Finally section V provides a brief summary and concluding remarks of the study.

II. THEORETICAL FRAMEWORK FOR INCIDENCE ANALYSIS

The incidence of taxes is a fundamental question in public economics. The study of tax incidence is, broadly defined, the study of the effects of tax policies on the distribution of economic welfare (Kotlikoff and Summers, 1987). It is the study of who bears the economic burden of tax. Broadly put, it is the positive analysis of the impact of taxes on the distribution of welfare within a society (Fullerton and Metcalf, 2002). It begins with the very basic insight that the person who has the legal obligation to make a tax payment may not be the person whose welfare is reduced by the presence of the tax. The statutory incidence of tax refers to the distribution of tax payments based on the legal obligation to remit taxes to the government. It indicates who is legally responsible for paying the tax. Economists, quite rightly, focus on the economic incidence, which measures the changes in economic welfare in society arising from tax. The economic incidence of a tax is the change in the distribution of private real income produced by a tax. It differs from the statutory incidence because of changes in behavior and consequent changes in equilibrium prices. This study has tried to estimate the tax incidence by calculating the degree of progressivity of taxes borne by the different income groups represented as registered taxpayers in Bangladesh income tax system.

The average and marginal tax rates for different income groups show the degree of progressiveness of any tax system. Many reasonable alternatives have been proposed to find out the ratios. Formby, Smith and Skye's (1986) two methods are used here for the calculation of the vital ratios for Bangladesh tax structure. The first method says that the greater the increase in average tax rates as income increases, the more progressive the system. Algebraically, let T_0 and T_1 be the tax liability of income levels I_0 and I_1, respectively (assumption, I_1 is greater than I_0). The measurement of progressiveness, V_1, is

$$V_1 = \frac{\dfrac{T_1}{I_1} - \dfrac{T_0}{I_0}}{I_1 - I_0}$$

Once the analyst has found the economic incidence of the tax as embodied in T_1 and T_0, the tax system with the higher value of V_1 is said to be more progressive.

The second possibility is to say that one tax system is more progressive than another if its elasticity of tax revenues with respect to income (*i.e.*, the percentage change in tax revenues divided by percentage change in income) is higher. Here the expression to be evaluated is V_2, defined as

$$V_2 = \frac{\dfrac{T_1 - T_0}{T_0}}{\dfrac{I_1 - I_0}{I_0}}$$

The above equations are used to calculate the degree of progressiveness of income taxation in Bangladesh for this study.

III. AN OVERVIEW OF THE REVENUE SYSTEM OF BANGLADESH

TAX ADMINISTRATION AND REVENUE STRUCTURE

National Board of Revenue (NBR) is the central authority for tax administration in Bangladesh and collects almost 78 percent of total revenue for the country (NBR Annual Report, 2000). As shown in Table 1, the total internal resource generation due to revenue earnings has been accounted for less than 10 percent of GDP of Bangladesh. Tax revenue in general contributed more than eighty percent towards the total revenue earning of the economy.

TABLE 1

Tax and Non-Tax Share of Total Revenue Yield in Bangladesh (1992-93 to 2000-01)

Year	[1]Total Revenue [% of GDP]	[2]Tax Revenue [% of Total Revenue]	[2]Non-Tax Revenue [% of Total Revenue]
1992-1993	9.13	7.26	1.87
1993-1994	9.22	7.07	2.15
1994-1995	9.84	7.90	1.94
1995-1996	9.22	7.29	1.93
1996-1997	9.62	7.89	1.73
1997-1998	9.50	7.69	1.81
1998-1999	9.00	7.36	1.64
1999-2000	8.47	6.78	1.69
2000-2001	9.28	7.80	1.47
2001-2002	9.83	8.09	1.74
Periodic Average			
1992-93 to 1996-97	9.41	7.48	1.93
1997-98 to 2001-02	9.22	7.54	1.67
Periodic Average[3]			
1975-76 to 1979-80	8.8	5.5	1.3
1980-81 to 1994-85	9.2	7.7	1.5

Note: 1. Total revenue as percentage of GDP.
2. Tax and non-tax revenue as a percentage of total revenue.
3. Adapted from Ghafur and Chowdhury (1987)

Source: Finance Division, NBR and BBS (Periodic data compiled by Author).

TAX STRUCTURE IN BANGLADESH

Total taxes in Bangladesh are divided into direct and indirect taxes. Direct taxes in Bangladesh consist of taxes on income (income tax, corporation tax, agricultural income tax etc.) and taxes on property (wealth tax, gift tax, estate duty, capital gains tax, urban property tax, house rent, land revenue, registration and non-judicial stamp etc.). As shown in Table 2, direct taxes in general account for less than a fifth of the total tax revenue of the country in the recent years and the rest is accounted for by indirect taxes.

TABLE 2

Periodic Averages of Direct and Indirect Taxes in Bangladesh
(From 1991-92 to 2000-01 and 1975-76 to 1984-85)

Particulars	1991-92 to 1995-96[1]	1996-97 to 2000-01[2]
1. Direct Taxes	18.30	17.17
Income Taxes	16.62	15.88
Other direct taxes	1.68	1.29
2. Indirect Taxes	81.70	82.83
Taxes on Foreign Trade	55.79	56.38
(*i*) Import Duty	34.47	30.43
(*ii*) VAT (Import)	20.03	20.75
(*iii*) Supplementary Duty (Import)	1.29	5.2
Taxes on Domestic Goods and Services	25.91	26.45
(*i*) VAT (Domestic)	10.18	12.97
(*ii*) Supplementary Duty (Domestic)	10.12	11.91
(*iii*) Excise Duties	5.61	1.57
	1975-76 to 1979-80[3]	1980-81 to 1984-85[4]
1. Direct Taxes	18.0	19.7
Income Taxes	12.6	13.7
Other direct taxes	5.4	6.0
2. Indirect Taxes	82.0	80.3
Taxes on Foreign Trade	55.8	56.0
(*i*) Import Duty	37.4	38.9
(*ii*) Export Duty	2.2	1.0
(*iii*) Sales (Import) Taxes	15.9	15.5
(*iv*) Other Customs Taxes	0.3	0.6

Taxes on Domestic Goods and Services	26.2	24.3
(*i*) Taxes on Domestic Goods	24.2	23.5
(*a*) Excise Duties	22.2	23.2
(*b*) Sales (Domestic) Tax	2.0	0.3
(*ii*) Tax on Domestic Services	2.0	0.8

Note: 1 and 2 after introduction of VAT; 3 and 4 before introduction of VAT.

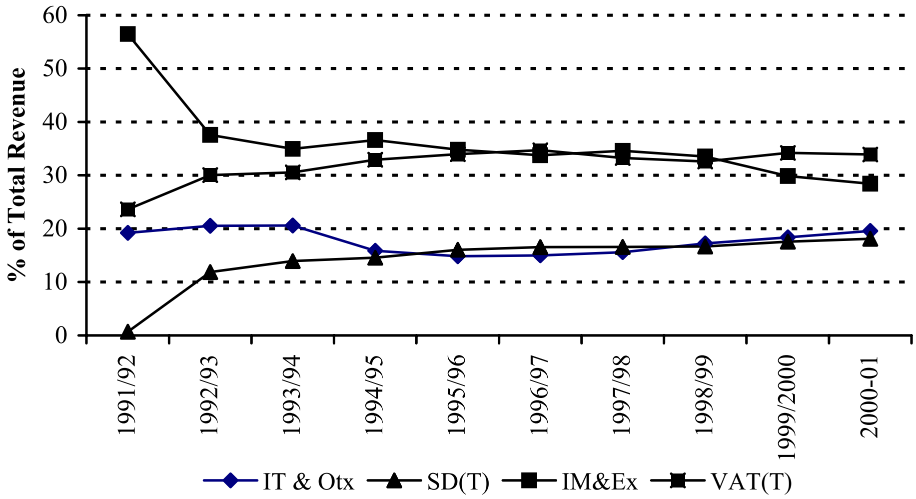
Source: National Board of Revenue (NBR), Bangladesh Bank (BB), Ghafur and Chowdhury (1987) and Chowdhury (1994). (Periodic data for FY 1991-92 to FY 2000-01 compiled by Author.)

The first half of the Table 2 shows that the share of taxes on domestic goods and services hovered around a quarter of total tax revenue. Excise taxes declined very sharply as taken over by VAT since early 1990s. Import duty has been declined throughout the last decade though still maintaining major share of taxes on foreign trade and more than 30 percent of the total tax revenue. VAT at import stage earning an average of 20 percent tax revenue, however, the total revenue from VAT is increasing steadily which seems the only positive sign for the country. The share of income taxes contributes the entire direct taxes. The collection from income taxes is increasing for last few years but still insignificant compared to the total tax revenue. The later half of the Table 2 is adopted from the study of Ghafur and Chowdhury (1987) and Chowdhury (1994). The scenario is similar with 1990s in sharing indirect taxes for the tax revenue. However, share of direct taxes has averaged a little improvement but not attained expected consistency as needed. Thus, to combat with the upcoming challenges of globalization and expected rapid shrinking of tariffs, it seems now to overhaul the tax structure and to concentrate more on widening the tax base for VAT and income taxes.

Figure 1 depicts a pictorial sketch analyzing a time series data for major taxes in Bangladesh. It shows that income tax first started increasing in early 1990s but sharply declined in the middle and still trying to get its way back. A major reform of tax administration in the history of Bangladesh happened that time and a democratic government took over the paddle of the economy after a long military rule. No study has been done to measure the effect of democratic environment on the revenue administration and governance for Bangladesh; however, it could be inferred that the sudden increase was due to the result of a transition towards good governance and major extension of income tax department. This analysis of revenue structure of Bangladesh shows that indirect taxes contribute the lion's share in the overall revenue earnings and in fact, it accounts for more than sixty percent of the total revenue receipts. In other words, indirect taxes are still the primary source of generating internal resources for Bangladesh.

FIGURE 1

Trend of Tax Revenue in Bangladesh (1991-92 to 2000-01)



Note: IT&Otx = Income Tax and Other direct taxes; SD(T) = Supplementary Duty (Domestic and Import); IM&Ex = Import and Excise Taxes; and VAT (T) = Value Added Tax (Domestic and Import).

Source: National Board of Revenue (NBR), *Annual Reports* (1997 to 2000).

TAX EXEMPTIONS AND TAX HOLIDAYS IN BANGLADESH

In the interest of industrialization and investment, tax holiday has been continuing in the tax regime of Bangladesh since her liberation in 1971. There are forceful arguments for and against continuing this facility. At present more than 2000 industries are enjoying tax holiday. The existing tax law allows extension unit of an industry to be entitled to receive tax holiday. Such facilities of granting tax holiday have been found ineffective. A mechanism of internal transfer pricing could be arisen as a vehicle for perpetual tax holiday. As observed, the present income tax act is full of rebates and exemptions (Hussain, 1999). It is now needed to minimize and to come straight to a threshold of income, which is taxable. The present scheme of granting tax holiday has not been a very good experience. In FY 1999-2000, total number of tax holiday cases were 1531 and the estimated loss of revenue was about 250 crore taka (1 crore is 10 million) that was estimated as about 9.6 percent of total income-tax earning of that year. The benefits of the tax holiday are being enjoyed mainly by the garment industries. However, it is believed that the growth of this has been enhanced due to external factors. Even if the incentive of tax holiday were not given, the garment industry would have grown up and the state would have earned quite a substantial amount of revenue from the industry. Thus, the revenue foregone does not appear to be fiscally efficient (Waresi, 1998). However, this has not been able to foster industrial growth in different regions of the country. Such a perpetuating provision for tax holiday creates distortion in taxation mechanism and against the norms of equity and neutrality. Thus, it is important to restrict such unbound opportunities for the sake of a better tax system in Bangladesh. Under the present arrangement any income accruing from poultry, fishery, livestock etc. is exempted from income taxes until June 30, 2005. This provision is being abused indiscriminately. A lot of black money is being laundered into the market through this mechanism. One potential remedy should be to allow an initial support to this sector then bringing back them under the purview of taxation.

IV. DISTRIBUTION OF TAX BURDEN FOR PERSONAL AND CORPORATION INCOME TAXES IN BANGLADESH

TYPES OF TAXPAYERS IN BANGLADESH

Taxpayers in Bangladesh can be categorized into three main groups. Table 3 shows the scenario in detail. The elite group consists of corporate taxpayers those are about 3.02 percent of the total taxpayers. The next group consists of salaried taxpayers and shares about 18.81 percent of the total taxpayers. The largest and the last group consist of other taxpayers and mainly those who have income from business and profession and shares about 78.17 percent.

TABLE 3

Types of Taxpayers in Bangladesh
(as of FY 1999-2000)

Types	Number of Taxpayers	Percentage
Corporate Taxpayers	24,770	3.02
Salaried Taxpayers	154,245	18.81
Other Taxpayers	640,795	78.17
Total	819,810	100.0

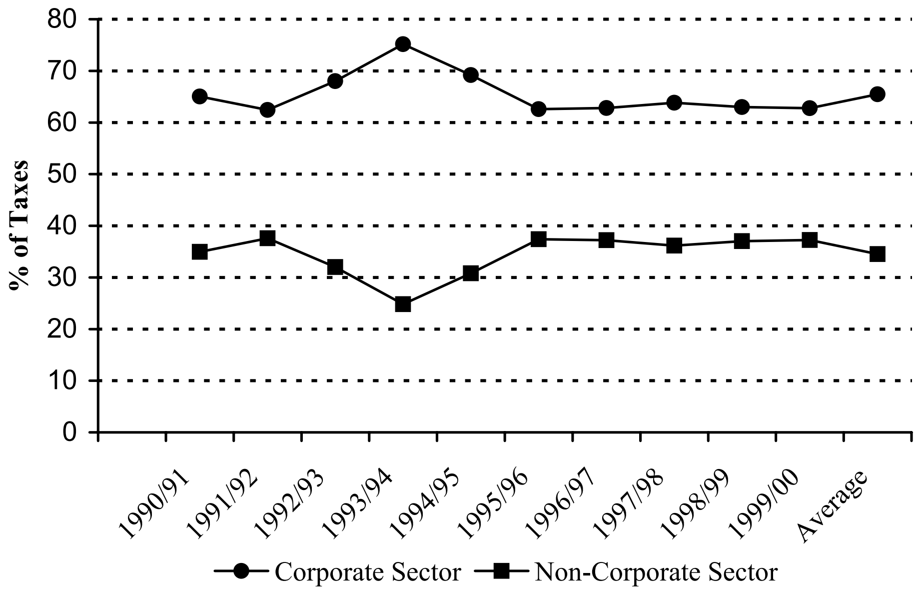
Source: *NBR Annual Report* 1999-2000.

SHARES OF INCOME TAXES

Corporate sector though has a poor number of taxpayers paying almost two third of total income taxes. From FY 1990-91 to FY 1999-2000, this sector has contributed an average of 65.48 percent of total taxes from direct sources. Again about 60 percent of the corporate income taxes come from a small number of foreign companies in Bangladesh. Figure 2 shows the continuing trend of income tax collection from the two major sectors for the period of FY 1990-91 to FY 1999-2000.

FIGURE 2

Major Divisions of Collection of Income Taxes in Bangladesh (From 1990-91 to 1999-2000)



Source: *NBR Annual Report* 1991-2000.

PERSONAL INCOME TAX

The nature and extent of tax incidence due to personal and corporation income taxes are different. In case of personal income taxes, the burden is unevenly distributed among the registered taxpayers. In reality a major portion of taxes is paid by a small group of taxpayers with higher marginal tax rates. A number of registered taxpayers always remain in lower income groups for either due to mainly more available tax incentives or tax exemptions and share a little burden of taxes often at lower marginal rates. In case of Bangladesh, such taxpayers are of small and medium traders and manufacturers. A lot of investment a remains untaxed due to tax amnesty and is a problem for Bangladesh tax system as well. Substantial amount of taxpayers having business income remain in losses those are subject to set off such losses for several years thus remain outside actual tax net. In that sense, the wage earners seems rightly taxed as such taxes are withheld by employer and paid by them.

It is widely known that to clean the tax base, it is important to reduce the tax exemptions as much as possible. It makes a group of taxpayers always better off while the burden of tax usually shifts to someone else. As stated the question arises whether the agriculture sector in Bangladesh will remain untaxed or not. Simply, in a country having its sixty percent population under the profession, if kept untaxed for eternal time will be undoubtedly impeding broadening the tax base. Since the land distribution is widely unequal, one way might be to bring the top landowners under the tax net with major tax exemptions under some presumptive tax rates. Other way could be to reconsider their income as per their statement or estimating their income based on landownership and market rates. Table 4 shows the result of an analysis of personal income tax scenario in Bangladesh based on income classification. It shows that about 73 percent of personal income taxes shared by only 13 percent taxpayers. Interestingly, about 46.58 percent taxpayers pay almost 99.92 percent of taxes. It depicts the peculiarity of Bangladesh tax structure where about 53.42 percent of registered taxpayers share very insignificant (only 0.08 percent) tax liability.

TABLE 4

Types of Taxpayers on the Basis of Individual Income Taxes (as of FY 1999-2000)

Income Classification (in Taka)	Number of Individual Taxpayers	% of Total Taxpayers in Each Category	Collection of Tax Revenue (Million Taka)	Payment of Taxes by Each Group in %
0 – 75,000	371,172	53.42	4.10	0.08
75,001 – 125,000	233,910	33.67	1,403.30	27.31
125,000 – 250,000	60,463	8.71	1,606.60	31.27
Above 250,000	29,177	4.20	2,124.60	41.34
Total	694,722	100.00	5,138.60	100.00

Source: *NBR Annual Report* 1999-2000.

TABLE 5
Incidences of Personal Income Tax in Bangladesh Tax System (1992 to 2002)

Year	Tax Exemption Limit (Taka)	Income (Slabs) (Figures denote Total Income) Taka	Statutory Tax Rates	Minimum Alternative Tax Payable (Taka)	Average Tax Rate (%) for 100, 200, 300, 400, 500 and 1,000 ('000) Taka Income	Marginal Tax Rate (%) for 100, 200, 300, 400, 500 and 1,000 ('000) Taka Income	Tax Liability for Income 1,000,000 (Taka)
1992	40,000 (5)* {510,000}♣	On first 40,000 On next 20,000 On next 150,000 On next 300,000 On balance income	0 15 20 25 30	No such Rule	11.00 15.50 18.50 20.13 21.10 23.05	18.33 20.00 24.50 25.00 25.00 25.00	230,500 NA
1993	50,000 (4) {250,000}	On first 50,000 On next 50,000 On next 150,000 On balance income	0 15 20 25	No such Rule	7.50 13.75 16.67 18.75 20.00 22.50	15.00 20.00 22.50 25.00 25.00 25.00	225,000 ↓ (2.39%)♠
1994 and 1995	55,000 (4) {290,000}	On first 55,000 On next 75,000 On next 160,000 On balance income	0 15 20 25	No such Rule	6.75 12.63 15.25 17.69 19.15 22.08	15.00 18.50 20.50 25.00 25.00 25.00	220,750 ↓ (1.89%)
1996	60,000 (4) {510,000}	On first 60,000 On next 75,000 On next 160,000 On balance income	0 15 20 25	No such Rule	6.00 12.13 14.83 17.38 18.90 21.95	15.00 18.25 20.25 25.00 25.00 25.00	320,750 ≡

1997 and 1998	60,000 (5) {300,000}	On first 60,000 On next 40,000 On next 50,000 On next 150,000 On balance income	0 10 15 20 25	1,000	4.00 10.75 13.83 16.63 18.30 21.65	10.00 17.50 20.00 25.00 25.00 25.00	216,500 ↓ (1.93%)
1999	75,000 (4) {250,000}	On first 75,000 On next 50,000 On next 125,000 On balance income	0 10 18 25	1,000	2.50 9.25 12.17 16.25 18.00 21.50	10.00 16.00 18.00 28.50 25.00 25.00	215,000 ↓ (0.69%)
2000 and 2001	100,000 (4) {300,000}	On first 100,000 On next 50,000 On next 150,000 On balance income	0 10 18 25	1,000	0 7.00 10.67 14.25 16.40 20.70	0 14.00 18.00 25.00 25.00 25.00	207,000 ↓ (3.72%)
2002	75,000 (5) {625,000}	On first 75,000 On next 150,000 On next 150,000 On next 250,000 On balance income	0 10 15 20 25	1,200	2.50 6.25 8.75 10.63 12.50 18.13	10.00 10.00 13.75 16.25 20.00 23.75	181,250 ↓ (12.44%)

Note: * The Figures within parentheses () show the number of tiers of Income Tax Structure for Individual Income, ♣ within parenthesis {} show the highest income slab, ♠show the decrease (↓) or increase (↑) with preceding year, ≡no change; FY = Financial Year (July-June) and Assessm ent Year is next to income; NA = Not Available.

Source: *NBR Annual Reports* (Official data compiled by Author).

TAX LIABILITIES FOR PERSONAL INCOME TAXES IN BANGLADESH

This study considers the tax rates and tax liability for personal income taxes in Bangladesh from FY 1992 to FY 2002. Tax liability for different income groups/slabs are calculated with respective average and marginal tax rates in each year. For the simplicity and homogeneity of the analysis taxpayers are kept within six broad categories of income (100, 200, 300, 400, 500 and 1,000 thousands Taka respectively). In some consecutive financial years, tax rates and statutes were similar hence shows same tax liabilities and effective tax rates. Average tax rates show the actual trend of progressiveness of each year and also represent as the effective tax rates for respective income slabs. Marginal tax rates on the other hand are calculated with a comparison of tax-exempted limit for the respective financial years. It shows the real increase of tax burden for a unit of income changes. The political outlook of any government in a democratic society very much influences the tax reforms and fiscal policies. The analyses cover tax measures taken by two different governments formed by two mainstream political parties in Bangladesh show rather slow reforms and found very insignificant changes over the years.

1. Summary of the Analysis

Table 5 shows the results of the analysis considering the tax measures taken by revenue department and came through the finance acts from FY 1992 to FY 2002.

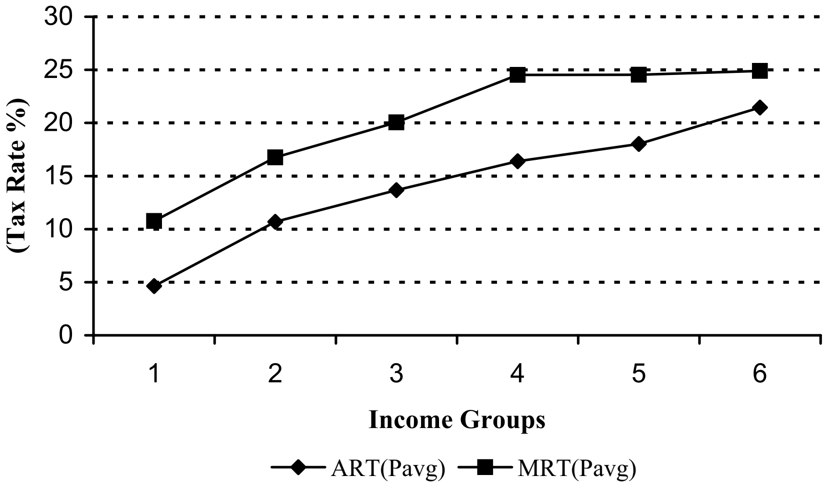
The analysis depicts that the marginal rate of taxes increases sharply at progressive rate for the lower to middle income groups and for the top income earners it become flat at proportionate rate although average rate of taxes is always in progress. It implies those with higher incomes not only should pay more but should pay a larger fraction of their income in taxes (Rosen, 1995). Figure 3 shows the periodic average of both the vital ratios for different income groups for FY 1992 to FY 2002.

CORPORATE INCOME TAX

There remains a controversy, where the corporation tax rate exceeds the highest personal income tax rates by a substantial amount. That usually happens in many countries including in Bangladesh. This study shows that this is almost ten percent higher in case of corporation income for the last ten years. The reason identified as government has to rely on it to collect required tax revenue without affecting the lower income groups. Controversy

FIGURE 3

Average and Marginal Rate of Taxes in Bangladesh
(Periodic Average 1992 to 2002)



Note: ART (Pavg) = Average Rate of Tax (Periodic Average), MRT (Pavg) = Marginal Rate of Tax (Periodic Average); Income Groups 1, 2, 3, 4, 5 and 6 for total income 100, 200, 300, 400, 500 and 1,000 ('000) Taka.

Source: *The Income Tax Manual*, Part I, pp. 266-294. Official data compiled by Author.

also remains that who actually pays the corporation income tax – its incidence; as we shall see, many economists believe that the tax is actually borne largely by consumers and workers, not by the owners of the corporation. Indeed, one of the reasons why the tax remained so controversial is this widespread debate about who bears the tax. In case of Bangladesh, this study has found a steady effort by the revenue authority to soften the tax burden for this sector, however, that does not meet with the expectation.

1. Corporate Income Taxes in Bangladesh

Unlike personal income taxes, corporate incomes are taxed under flat rates for different types of corporations. This study tries to summarize the tax rates from FY 1999 to FY 2002. The existing trend shows that the rates are declining very slowly and almost stagnated during FY 1997 to FY 2001. Corporations are categorized into three groups. The first and major group consists of publicly traded companies or companies listed to the stock markets. Considering its capital inflows and impact on shareholders the tax rate is lower and at present reached at 30 percent. The second group consists of other non-listed corporations and liable to pay tax at the rate of 35 percent. Banks, insurance company and financial institutions are included into third category and usually pays higher tax rate of 40 percent. Table 6 shows the trend of corporate tax rates for the three groups over the years.

TABLE 6

Corporate Tax Rates in Bangladesh (FY 1992 to FY 2002)

Year	Types of Corporation	Tax Rates (%)
1992	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	40.00 45.00 55.00
1993	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	40.00 45.00 50.00
1994	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	37.50 42.50 50.00
1995	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	35.00 40.00 47.50
1996	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	35.00 40.00 45.00
1997 to 2001	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	35.00 40.00 40.00
2002	Publicly Traded Company Non-Publicly Traded Company Bank, Insurance, Financial Institution etc.	30.00 35.00 40.00

Source: *NBR Annual Reports* (FY 1992 to FY 1999) and Ministry of Finance (2002).

Listed companies usually enjoy some extra privileges and in case of Bangladesh such companies are entitled to 10 percent tax abatement if they declare dividend at 20 percent or higher. It has been experienced in Bangladesh that a number of companies are reluctant in paying dividend to the shareholders so regularly rather retain their earning for tax purposes. As a result, not only the shareholders are deprived, the general investors are also discouraged from investing in capital market. It seems government might have to use some tax instruments to cope with such problem. It is really necessary to reduce the corporate tax rates to level for improved tax compliance and also to promote investment and industrialization. The challenge is, thus, now to obtain an optimal rate of taxes for the corporate sector that might not be hindering the countries economic growth.

2. Incidence of Corporation Income Taxes in Bangladesh

Incidence of corporation taxes shows the similar nature as the distribution of personal income taxes in Bangladesh. As stated the contribution of corporate taxes is always higher than other sectors in the direct tax revenue. In FY 1999-2000 the ratios were 62.77 percent and 37.23 percent respectively. Again the burden of corporation taxes is shared among the different sub-sectors. Table 7 shows the tax burden shared by different groups of privately limited companies (including both industrial and non-industrial) for the FY 1999 – FY 2000.

TABLE 7

Types of Taxpayers on the Basis of Corporate Income Taxes for Private Limited Companies (as of FY 1999-2000)

Category	Income Classification (in Taka)	Income Tax Cases for Corporations (Pvt. Ltd. only)			Taxpayer in Each Category (%)	Tax Revenue (Million Taka)	Payment of Taxes by Each Group in %
		Industrial Company	Non-Industrial Company	Total			
1	Loss Cases	1,009	1,366	2,375	13.06	0.00	0.00
2	1 – 100,000	3,090	3,929	7,019	38.59	125.90	3.28
3	100,001 – 250,000	854	1,483	2,337	12.85	179.70	4.68
4	250,001 – 500,000	864	987	1,851	10.18	319.30	8.32
5	500,001 – 1,000,000	744	977	1,721	9.46	448.90	11.71
6	Above 1,000,000	1,560	1,326	2,886	15.86	2,762.20	72.01
Total		8,121	10,068	18,189	100.00	3,836.00	100.00

Source: *NBR Annual Report*, 1999-2000.

The analysis depicts that in case of Bangladesh about 15.86 percent of taxpayers under privately owned companies are paying the major share of 72.01 percent taxes. The top 25 percent of them pays almost 84 percent, however, about 52 percent taxpayers paying only 3.25 percent. Interestingly it shows that about 13 percent taxpayers paying no taxes for the government and showing negative income and revealed as loss cases. About 60 percent of such losses incurring companies are non-industrial. This seems really a major concern for the government that how those corporations can be brought into the ambit of taxation. This study has tried to find out the causes and loopholes to do away with the prevailing scenario. It shows that such corporation those are in transition enjoying some extra protection in the form of tax incentives and exemptions repeatedly that makes them better off not to pay any single taxes to the exchequer.

TABLE 8

Tax Burden among Different Types of Corporate Taxpayers (Only Listed Companies for FY 1999-2000)

Income Classification (Taka)	*No. of Tax-payers	% in Each Group	No. of Cor-pora-tions	% in Each Group	Amount of Taxes (Million Taka)	Tax Payment by Each Group in %
0 – 50,000	7,086	44.06	8,690	38.36	110.328	1.25
50,001 – 100,000	2,444	15.20	3,703	16.34	107.343	1.21
100,001 – 150,000	1,077	6.70	1,130	4.99	86.385	0.98
150,001 – 200,000	835	5.19	2,122	9.37	99.805	1.13
200,001 – 300,000	879	5.47	1,057	4.66	200.261	2.26
300,001 – 500,000	803	4.99	1,340	5.91	158.577	1.79
500,001 – 1,000,000	1,194	7.43	1,766	7.80	344.860	3.89
1,000,001 – 5,000,000	1,128	7.01	1,690	7.46	744.379	8.40
5,000,001 – 10,000,000	263	1.64	475	2.10	616.478	6.96
10,000,001 – 100,000,000	240	1.49	421	1.86	1,669.254	18.85
100,000,001 – 500,000,000	120	0.75	240	1.06	2,786.204	31.45
Above 500,000,000	11	0.07	21	0.09	1,933.872	21.83
Total	16,080	100.00	22,655	100.00	8,857.746	100.00

Source: *NBR Annual Report* (Available data compiled by Author).

*Number of taxpayers is 16,080 for 22,655 company cases.

An endeavor of one stroke cleaning up of all possible income- tax exemptions including the standard deductions followed by reduced tax rates might be a potential option for the government (Slemrod and Bakija, 1998). Table 8 shows similar results regarding tax payment scenario by listed companies in Bangladesh for FY 1999-2000. The analysis shows that about 1.15 percent corporations paying about 53.28 percent taxes. About 60 percent corporations paying only 3.44 percent and, thus, rest 40 percent corporations are heavily burdened to pay the remaining 96.56 percent taxes.

V. SUMMARY AND CONCLUSIONS

Attaining an optimal income tax system is a difficult and unenviable task, but nevertheless critical for revenue generation required for accelerating growth and to improve the quality of life of the citizens. A long-term sustainable solution to enhance transparency, promote growth, improve tax compliance and, thus, to increase tax to GDP ratio is an ever increasing important task for many developing countries, including in Bangladesh. Historically Bangladesh's direct taxes have been heavily skewed against salary-earners and corporate sector. Small business, services and farm incomes manage to slip through the tax net effortlessly. This study unveils the present scenario of tax incidence among different income groups, in case of personal and corporation income taxes in Bangladesh tax system. The findings and policy recommendations presented below could be important to carry on future tax reforms and to make Bangladesh tax structure more broad based more revenue buoyant and equitable.

PERSONAL INCOME TAXES

In case of personal income taxes this study has found a number of problems in Bangladesh tax system and suggested measures are recommended as follows:

1. Progressivity of Tax Rates

This study has analyzed the tax liability and degree of progressiveness of different levels of income for personal income taxes since FY 1992 to FY 2002. It seems that both the rates are decreasing over the years for the lower and middle-income earners but remain static for the higher income groups. The results of periodic average of the two indicators also resemble the same. The sudden shifting of income exemption limit for FY 2000 and FY 2001 were very unusual that entirely escaped the lower income people that might lead them to be out of the purview of taxation. Both the rates found zero at the initial level of income, which will be thought to be far above the average tax exempted level even in neighboring south Asian countries. The effect in the context of Bangladesh is twofold. First, it will obviously work against broadening the much-desired income tax net. Second, it might lead to shift the tax liability only to a limited number of taxpayers of middle and higher-income groups. Since FY 1992 to FY 1999 it seems there were always a common effort to reduce the average tax rates for especially the lower income people but for the middle and high-income earners it affected too slowly. However, for marginal rate of taxes it remains very proportional for the middle and high-income earners. An effort has only been taken in FY 2002 to reinstate the tax-exempted limit as earlier that might help the government to keep those taxpayers within the ambit of taxation. It is, thus, recommended to soften the tax burden among all the taxpayers in such a manner that might reduce the average tax rates of middle and higher income people.

2. Narrow Tax Base

The tax-to-GDP ratio in Bangladesh is the lowest among the developing countries. An improvement in this ratio turns out to be a crucial condition for achieving an accelerated economic development. The low per capita income and the existing structure of GDP in Bangladesh impose serious limitation of raising tax revenue. In fact the present income-tax base is one of the lowest even among the developing countries. In terms of population only 0.54 percent of the population were within the tax net in 1999 and the ratio was only 0.25 percent in 1977 (Hussain, 1999; Taxation Inquiry Commission Report, 1979). In the year 2002 the ratio has only raised into 0.94 percent (Budget Speech, 2002). It denotes how slowly the tax net is widening. Introduction of spot assessment system and simplification of self-assessment system played pivotal role in the process. Use of modern computer technology in tax system and taxpayer services seems very important in endeavoring better income tax administration. As stated earlier, the tax base is admittedly very low measured in terms of the number of taxpayers. Apart from the administrative deficiencies responsible for the low base, there is also a legal and conceptual limitation of the term ‘income’ which contributes to the diminution of the tax base (Taxation Enquiry Commission Report 1979, p. 79). Survey of potential taxpayers is one of the most effective tools in the developing countries to expand the tax base. To be successful in such task a coordinated action plan is needed including different sectors of government, banks and financial institutions and local government.

3. Inequality of Taxing Urban and Rural Sectors

There is a common belief that the tax structure in Bangladesh is biased against the poorer class, especially in the rural areas. On the other hand, there is also the view often expressed by a section of the community, particularly in the urban sector, that the present tax structure weighs heavily against the business and entrepreneur class. It is due to the fact that the effective tax rate is higher in the urban sector than in the rural sector because of the difference in the nature of tax and the intensity at which such tax is imposed on the two sectors, and the structure of consumption and income between urban and rural sectors. The commission's report presented the relative tax burden of the two sectors from direct taxes. The average burden of direct taxes on urban sector was 0.31 percent as against 0.14 percent in the rural sector. It shows that the effective tax rate in the urban sector was 2.21 times higher than that of the rural sector in 1979. Over the years the situation remains the same and in fact still the extreme majority of taxpayers are urban people. This happens because the urban sector is more monetized and the government has more control over the urban sector. Such an inequality should be resolved and taken into account in future tax reforms.

4. Inequality in taxing Wages between Private and Public Sector

In Bangladesh, income tax for government employees is deemed paid by their employer that is government. However, if a private employer pays income tax for its employees, such payments are considered income, which creates additional tax burden for the employee of the private firm. This seems discriminatory, that encourages employees of private firms to avoid or evade taxes. Such discriminations create social inequality and distortion in the tax system of the country with negative impact on her tax-GDP ratio and hindering the expansion of tax base as well. Since governments of the developing countries solely run the development activities, the bureaucrats hold extra power that enhance abuse of power and lead them to corruption. The recent corruption index published by the UNDP (2002) resembles the same for Bangladesh. When such public servants are kept outside the purview of taxation it works as some sort of incentive for them to become corrupted. The problem obviously lies unresolved due to the existing poor salary structure of the government employees that usually not frequently adjusted with the current higher inflation rate. Improving existing salary structure as a means to protect corruption has been adopted by many other developing countries as China and India (The Economist, May 2002). Government of the Peoples Republic of Bangladesh might have to coincide with the standard as to expect good governance and transparency among civil servants. In that case rightsizing the government with maximizing salary level is much desired.

5. Cleaning up of all Income Tax Exemptions

Exemptions, deductions, and allowances play an important role in the tax system in providing incentives for saving and capital formation in the private sector. They also meet other socio-economic needs of the community. Nevertheless, they erode the tax base, which often necessitates the application of high marginal rates of tax. This in turn dampens the spirit of work and enterprise among the people, and also encourages evasion of tax and thereby undermines public morality. In view of this, the study recommends a broad-based tax system with lower rate schedule but having only fewer exemptions and deductions, rather than a system having a narrow base with steep marginal rates.

6. Tax Amnesty

Tax amnesties usually raise funds that revenue collectors would otherwise have found difficult or impossible to capture. It is presumed that there is significant amount of 'untaxed income' in Bangladesh (Budget Speech, 2002). Thus, one of the goals of the tax policy is always to direct investment to socially and economically desirable sectors. In the context of Bangladesh repeated opportunities have been provided for tax amnesty on 'untaxed income' but failed to generate desired response from the public due to absence of proper direction of tax policy. The recent finance act again proposed to accept any amount of undeclared income or black money unconditionally until June 2005. It might have some positive effect by enhancing private investment and through resolving unemployment to little extent. But such practice when goes perpetually could have detrimental impact on the society as a whole. By definition, the underground economy exists because of government's so many taxes and regulation. Therefore, it seems to make sense that the more the taxes and regulation, other things being equal, the larger the underground economy is likely to be (Brooks, 2001). Lying with the principle government might be so cautious not to provide such scope for longer time rather should simplifying laws and regulations as to do away with such provisions.

7. Taxing Farm Income

Agriculture is still the largest sector in most developing countries. Thus, taxation of the agricultural sector has historically served as an important policy instrument in the process of development for many countries .The incentive and distributional use of taxation may be utilized to redirect agricultural production, encourage the more efficient use of the land, accomplish changes in the land tenure, promote new productive investment in agriculture, and stimulate movement of redundant labor from agriculture to non-agriculture employment (Bird, 1974). Agricultural taxation is, thus, the chosen instrument charged with the vital task of transferring surplus food, labor and capital to the non-agriculture sector, as well as with reallocating resources within agriculture to increase the transferable surplus. Taxes on agriculture are also needed to restrain a rise in rural food consumption which would increase urban food prices and hence the rate of inflation. The current tax burden on agricultural income in Bangladesh has been estimated as 0.25 percent (Taxation Inquiry Commission, 1979). However, over time the situation remains the same. Though the majority of the rural population is on subsistence farming, there are yet a good number of well-to-do farmers who can and, on equity ground, should pay taxes. It is also found that the effective rate of taxes is more progressive in the urban sector than in the rural sector because of the character of the dominant tax in each sector – a proportional land tax in agriculture and a progressive income tax in the urban sector. It seems the dominance of land tax in the agricultural sector and income tax in the urban sector needs to be overcome as quickly as possible so that the tax burden is equitably shared by the rural and urban sectors. This study reveals that agriculture should be taxed on the basis of potential income preferably as a kind of presumptive tax. The recent taxation reform commission has recommended the same for the context of India (Kelkar Tax Commission Report, 2002).

Another alternative to introduce such tax would be based on an international method of taxing agriculture followed by Agriculture Income Standard (AIS) as adopted by the Japanese tax system. This follows a tax filing standard for the farmers designed to give convenience in calculating agriculture income to farmers having difficulties in computing balance on books. The method of balance computation could be the principle for agricultural income calculation.

Where, *Taxable Income* = (*Gross Revenue – Necessary Expenses*)

In determining the standard, taxes could be based on both land area and/or revenue earned through agriculture. There might have some problem in its implementation, however, if such revenue could be handed back to the district level or local governments that would supplement necessary their development activities.

CORPORATION INCOME TAXES

1. Higher Corporate Tax Rate

It is always necessary to reduce the corporate tax rate to a tolerable level for improved tax compliance and also to promote investment and industrialization. The average effective corporate tax rate in Bangladesh is still so high. The rate was about 40 percent in 1992 and reduced to percent in 1995 and continued until FY 2001. Recently in FY 2000, corporate tax rate for listed companies has been declined to 30 percent, for non-listed companies 35 percent and for the banks and financial institutions the rate is unchanged at 40 percent. Since corporations pay taxes in flat rates no question arises due to its degree of progressiveness. Rather it urges the distribution of tax burden among different corporate taxpayers or types of corporations. The analysis in chapter five shows detail scenario of the above. It depicts that in case of private limited companies, only 25 percent of them paying about 84 percent taxes from this sector, 52 percent of them paying only 3.25 percent and interestingly about 13 percent of them paying nothing in the form of taxes. The analysis shows that about 60 percent of such taxes escaping companies are of non-industrial.

The results obtained resemble more or less same scenario for the listed companies who are actually the main sector of corporate taxpayers. It shows that only 1.15 percent of corporations (shared by only 0.82 percent taxpayers) paying about 53.28 percent taxes in this sector and about 54.70 percent corporations (shared by 59.26 percent taxpayers) paying very insignificant amount of taxes (only 2.46 percent). Unlimited tax exemptions and incentives are vital reasons for such eccentric distribution of tax burden. Manipulation in accounting information is also another way by which corporations showing their low level of income. Since majority of the taxpayers in corporate sector paying insignificant amount of taxes, it is really a challenge for the government to reduce the existing level of corporate tax rate further. Cleaning the tax base by reducing the tax exemptions might be important policy measure to cope with such problem.

2. Taxing new Industrial and Extension Units

In the interest of industrialization and investment, tax holiday has been continuing in the tax regime of Bangladesh since her liberation. The number of industries enjoying tax holidays is above two thousand and the existing provision gives incentives for the said industries a perpetual tax holiday for the extension unit of an industrial undertaking. It is said that the current facility of granting tax holiday to extension unit has been grossly abused. In many cases such tax holiday facility was availed for an artificially created extension unit without really setting up a new unit, by merely showing transfer of machineries of the existing unit to the said artificial unit. In some instances industrial undertakings on expiry of tax holiday usually set-up new extension units under tax holiday, where they divert their income of the taxable unit through a mechanism of internal transfer pricing in a bid to use the system as a vehicle for perpetual tax holiday. Since entire withdrawal of tax holiday and incentives for such new and extended units might be difficult for the government in the interest of rapid industrialization, their might have trade off in taxing such industrial undertakings at reduced rate.

FINAL COMMENTS

This article has tried to analyze the existing situation of tax incidence of income taxation in Bangladesh. Like many other developing countries, the administration of income taxation in Bangladesh is very poor. There is rampant evasion and allegation of corruption is widespread. We should understand the fact that any tax reform must go hand in hand with cutting wasteful government consumption; so that taxpayers do not feel they are sitting ducks for the exchequer to rip them off. Thus, the government must be very cautious in taxing people so that the burden of taxes could be justified.

REFERENCES

Auerbach, A. J., J. Gokhale and L. J. Kotlikoff (1991), Generational accounts: A meaningful alternative to deficit accounting. *Tax Policy and the Economy*, Volume 5, pp. 55-110.

Bangladesh, *The Two-Year Plan of Bangladesh*, 1978-1980. Planning Commission, Ministry of Planning, Government of the Peoples Republic of Bangladesh.

Bangladesh, *Financial Report of the Taxation Inquiry Commission*, April 1979, Part One. Ministry of Finance, Internal Resources Division, Government of the Peoples Republic of Bangladesh.

Bangladesh, *Annual Reports*. National Board of Revenue (NBR), 1999-2000.

Bangladesh, *Income Tax Manual*, Part I, *The Income Tax Ordinance*, 1984 (XXXVI of 1984). Government of the Peoples Republic of Bangladesh. Published by Bangladesh Government Press, Dhaka, 1999.

Bangladesh, *Economic Review 2002*. Published by Economic Advisor's Wing, Finance Division, Ministry of Finance, Government of the Peoples Republic of Bangladesh.

Bird, R. M. (1974), *Taxing Agricultural Land in Developing Countries*. Harvard University Press, Cambridge, Massachusetts, USA.

Chowdhury, O. H. (1994), Incidence of Indirect Taxation in Bangladesh, 1984-85, *Research Monograph* 16. Bangladesh Institute of Development Studies (BIDS), Dhaka.

Economist (2002), China's civil service – The strategy behind pay rise: A Case in China. *The Economist*, May 25, 2002.

Feldstein, Martin (1995), The effect of marginal tax rates on taxable income: A panel study of the 1986 Tax Reform Act. *The Journal of Political Economy*, Volume 103, No. 3, pp. 551-572.

Formby, J. P., W. J. Smith and D. Sykes (1986), Intersecting tax concentration curves and the measurement of tax progressivity: A comment. *National Tax Journal*, Volume 39, No. 1, pp. 115-118.

Fullerton, D. and Gilbert E. Metcalf (2002), Tax incidence, NBER working paper series. *Working Paper* No. 8829, Cambridge, MA 02138.

Ghafur, A. and Chowdhury, O. H. (1987), *Financing Public Sector Development Expenditure in Bangladesh*. Asian Development Bank, Manila, Philippines.

Hussain, S. (1999), Taxation in Bangladesh: Measures for Improving the Income Tax System. Unpublished.

India (2000), *The Kelkar Tax Plan and Consultation Paper*: *Recommendations on Direct Taxes*. Ministry of Finance, Government of India.

James, S. and C. Nobes (2000), *The Economics of Taxation*: *Principles, Policy and Practices*, 7th edition. Prentice Hall.

Kotlikoff, L. J. and Summers, L. H. (1987), Tax incidence. *Handbook of Public Economics* edited by A. J. Auerbach and M. Fledstein, North Holland, Chapter 16, pp. 1043-1092.

McLure C. E. (1988), *Lessons for LDCs of US Income Tax System*. Stanford-Hoover Institution, pp. 1-63.

Rahman, S. H. and Shilpi, F. H. (1996), *A Macro Econometric Model of the Bangladesh Economy*: *Model, Estimation, Validation and Policy Simulation*. Bangladesh Institute of Development Studies, Dhaka.

Sarker, T. K. and Kitamura, Y. (2002), Technical assistance in fiscal policy and tax administration in developing countries: The state of nature in Bangladesh. *Asia-Pacific Tax Bulletin*, Volume 8, No. 9, pp. 278-288.

Slemrod, J. and Bakija, J. (1998), *Taxing Ourselves*: *A Citizens Guide to the Great Debate Over Tax Reform*, 2nd edition. MIT Press, Cambridge, Massachusetts 02142.

Waresi, S. A. (1998), Tax holiday as a fiscal incentive in Bangladesh. *Tax Chronicle*, Special Edition, Volume 3, Issue 5, Dhaka, Bangladesh.

World Bank, Governance and Public Sector, *Tax Policy and Administration* Home Page, http://www.worldbank.org/publicsector/tax (accessed: 23 November 2002).