VAT Compliance Costs and VAT Evasion of Small and Medium Enterprises (SMEs) Sectors in Bangladesh: Is there a Link?

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Abstract

Empirical evidence shows that, in any country, higher compliance costs can lead to increased tax avoidance and evasion (Barbone et al., 2012; Coolidge, 2012; Shome, 2004). Although SMEs constitute some 90% of all businesses in Bangladesh (Alam & Ullah, 2006) and play an important role in the country’s economic growth and employment (Mintoo, 2004), SMEs appear to be under-represented in terms of their registration for VAT and their contribution to VAT revenue collected.

The purpose of this study is to explore whether there are links between VAT compliance costs and VAT evasion by SMEs in Bangladesh and, if so, the extent of those links. One reason why SMEs may be under-represented in terms of their contribution to VAT revenue collection could be compliance costs (cf. McKercher, 2003), whether actual or perceived by Bangladeshi SMEs. These compliance costs could be the result of tax system complexity—again, whether real or perceived; inefficient tax administration; or other factors. Another reason could be that SMEs either intentionally or unintentionally evade VAT (National Board of Revenue, 2009-2010; Bangladesh Economic Review, 2010).

This study will make four key contributions to the literature. Firstly, most of the empirical studies on compliance costs and tax evasion in developing countries have dealt with personal income tax, rather than indirect taxes such as a VAT. Secondly, there has to date been no in-depth empirical research into potential links between VAT compliance costs and VAT evasion by SMEs in Bangladesh. Thirdly, nor has there to date been any in-depth empirical research into whether, or to what extent, VAT evasion in developing countries such as Bangladesh is intentional or unintentional. Fourthly, the findings of this research have practical policy implications, in that they can assist policy makers and administrators in their understanding of the potential links between VAT compliance costs and VAT evasion by SMEs, not only in Bangladesh but also in similar developing economies.
1. Introduction

The small and medium scale enterprises (SMEs) can be described as the engines of economic growth in developing countries. SMEs create large scale and low-cost employment opportunities using mainly locally available inputs and technologies (Bangladesh Economic Review, 2010). SMEs develop entrepreneurship by mobilising small and scattered private savings (BSCIC Annual Report, 1997-98). Due to the importance of SMEs sector to a country’s economy, governments around the world have emphasised the importance of a healthy SME sector and also introduced a multitude of policies for the development and growth of small and medium sized business (Hansford et al., 2003).

Bangladesh, which is a labor abundant but capital scarce country, SMEs can have a major role to develop labour intensive industries rather than capital intensive industries (Mintoo, 2004). In Bangladesh 79,754 SMEs establishments (ADB, 2004) account for about 45% of manufacturing value addition and they also account for 80% of industrial employment, about 90% of total industrial units and about 25% of total labor force (Bangladesh Bank’s Annual Report, 2006-07). However SMEs contribution to tax revenue, especially in Value Added Tax (VAT) is questionable, only 11% of total VAT revenue and revenue collected from turnover tax is 0.03% of total VAT revenue (Annual report of National Board of Revenue, 2009-2010).

In relation to the SMEs sector of Bangladesh a number of studies (Uddin, 2008; Chowdhury, 2007; Miah, 2007) have highlighted features of SMEs and the major constraints of SMEs development in Bangladesh. The major constraints for SMEs are lack of adequate investment and modern technology, high rate of interest on bank loans, irregular/inadequate supply of power, poor physical infrastructure, high transportation cost, poor information about market opportunities and requirements, inadequate availability of raw materials, lack of skilled professionals, aggressive competition with large firms, credit constraints, low access to business services, low lobbying capacity and rapid changes in policy environment. To date there has been no study about the low representation of SMEs in taxation. This proposed study will be an attempt to address this gap. The next section will provide an overview about VAT in Bangladesh.

2. Overview of VAT in Bangladesh

The rise of the VAT around the world has been one of the most important tax developments in the recent century (Bird, 2007). VAT is considered to have advantages compared to other form of sales taxes, as it eliminates cascading, allows for zero rating of exports, and it is broad based and reasonably difficult to evade (Le, 2003). The origin of the VAT can be traced as far back as the writings of F Von Siemens, who proposed it in 1918 as a substitute for the then newly established German Turnover Tax. Since then numerous economists have recommended it in different contexts. However it is broadly accepted that VAT was first introduced in France in 1954 being the first European country to implement VAT on an extensive scale (Purohit, 1993). After that, more than 130 countries in the world have adopted a VAT of some kind. Although the specific reasons for adopting the VAT differ from one country to another, the main argument is that properly designed VAT raises more revenue than other broad based taxes. Also it is argued that, VAT does not influence the methods of doing business and ensures neutrality in international trade by freeing exports of tax, treats

1 Manufacturing sector- “Medium Industry” means an industry in which the value/ replacement cost of durable resources other than land and factory building is between 15 million to 100 million taka. “Small Industry” means an industry in which the value/ replacement cost of durable resources other than land and factory building is under 15 million taka. Non-manufacturing sector- “Medium Industry” means an industry in which 25 to 100 workers work. “Small Industry” means an industry in which fewer than 25 workers work (unlike family members in a cottage industry).

2 VAT raises about 20% of the world’s tax revenue and is affecting about 4 billion people (Keen & Lockwood, 2007).
import and domestic goods the same. Furthermore, VAT avoids most of the negative features of the sales tax and excise taxes. It removes cascading, allowing the tax content of any product to be known with a greater degree of certainty and thus leading to better resource allocation decisions as the investment decisions can be taken independent of the tax policies. However, VAT is also criticised for its deficiencies such as expensive compliance and high regressiveness.

VAT was introduced in Bangladesh from July, 1991 with the aim to achieve sound development of the overall economy by mobilising more internal resources, to bring about consistency in the Tax-GDP (gross domestic products) ratio and to bring transparency in the taxation system (Annual Budget Speech, 1992). VAT replaced the excise duty on domestically produced goods and services and sales tax on the importation of goods. VAT is chargeable on all goods and services both imported into Bangladesh and produced in Bangladesh at every stage at a rate of 15%. Exports are zero rated. There have VAT exemptions on most of the food grains and essential products. In addition to this, the firms which have the threshold of Bangladesh’s currency taka 6 million (US$ 73,350) are liable for the payment of 4% turn-over taxes on their declared and annual turnover.

VAT has now been in place for 21 years in Bangladesh and collecting on an average 35 percent of total tax revenue in last 15 years. Although the introduction of VAT in Bangladesh has proved to be successful in terms of increasing tax revenues as well as expanding the tax base (Salehin, 2012), some evidence suggests that there have room for improvement.

For example, the tax base is narrow in Bangladesh compared to other developing countries and the tax revenue in Bangladesh is still very low as a share of GDP. In 2005, the average tax/GDP ratio in the developed world was approximately 35 %, in developing countries it was equal to 15% and in the poorest of these countries, the low income countries tax revenue was 12% of GDP (Fuest and Riedel, 2009). In 2005, the tax/GDP ratio was less than 10% in Bangladesh and in 2009-1010 the ratio was 11% (Bangladesh Economic Review, 2010). Still now the gap between potential VAT revenue and actual VAT revenue is more than 40% (Faridy, 2011). Compared to other low-income countries the estimated tax effort and C-efficiency ratio is very low in Bangladesh. In low income countries the average estimated tax effort is 77.6% and C-efficiency ratio is 38.0 but in Bangladesh these are only 41.0% and 23.4% (IMF, 2011). The VAT efficiency (or Productivity) ratio is 15.92% in Bangladesh, whereas, according to International Monetary Fund (IMF) the average worldwide VAT efficiency ratio is 34% (Smith, Islam & Moniruzzaman, 2011). Thus VAT was not designed to reduce inequalities among the dissimilar income groups and VAT is fairly regressive in Bangladesh (Faridy, 2011).

The tax expenditures in Bangladesh are 2.52% of GDP in FY 2005-06, in which expenditures in the direct taxes and indirect taxes are 0.28% and 2.24% respectively. The highest tax expenditures are for VAT at domestic stage (1.6% of GDP and more than 60% of total revenue loss, followed by VAT at the import stage (about 0.5% of GDP). In fiscal year 2005-06, tax revenue from VAT (domestic stage) was 51.11 billion taka but tax expenditure was 58.97 billion taka, meaning that the tax expenditure was higher than tax revenue (Mortaza and Begum, 2006).

In the fiscal year 2009-2010, the number of registered VAT payer was 4, 63,212 (0.463 Million). Among them only 64,664 registered taxpayers (13.96%) submitted their monthly VAT return to the

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3 The term excise duty generally refers to taxes on a specific goods or services. The excise duty was a general sales tax in Bangladesh.
4 The ratio of actual revenue to potential revenue( Lotz & Morss,1967).
5 C- efficiency ratio is defined as a share of the VAT in consumption divided by standard VAT rate( IMF, 2000).
6 See, IMF, 2011 “Revenue Mobilisation in Developing Countries”, Prepared by Fiscal Affairs Department.
7 Tax expenditure is the revenue of a government forgoes through the provision of tax laws that allow deduction, exclusions or exemptions from the tax payers taxable expenditure (Business dictionary).
authority. 84.04% taxpayers do not comply with the VAT Law. Only the taxpayers registered to large tax payers unit (LTU) VAT are submitting their returns regularly and nearly 78% of total VAT in Bangladesh is collected by few large taxpayers units (LTUs) from major sectors such as cigarette, leafy tobacco, natural gas, telephone, construction companies and banks (Faridy, 2011). On the other hand, the amount of total outstanding VAT revenue is 60.24 billion taka in FY 2009-2010, which was detected by the audit and other enforcement activities (Annual Report of National Board of Revenue, 2009-2010). In addition to that, there are over 18,000 pending court cases related to VAT and Customs in Honourable High Court Division and about 30 billion taka is blocked due to those cases year after year (Mustafiz, 2012). Therefore Emran and Stiglitz (2005) argue that, given the size of the informal sector VAT may not be effective as firms in the informal sector can avoid paying the VAT. The existence of 38% of informal economy (TIB Report, 2011) in Bangladesh can move the people at the bottom of income distribution to the informal sector which will decrease the regressivity of VAT for them but will reduce the overall VAT revenue, which can have a negative impact to the macroeconomic stability.

Since VAT does have a significant role in the Bangladesh’s Governments finance, the Government should strive to create an efficient, equitable, revenue-productive and simple taxation environment. However, the Government of Bangladesh has been making continuous changes and amendments of the VAT law every year without considering important issues such as VAT compliance costs, the degree of taxpayer’s compliance and the administrative capability of tax authorities. Continuous changes of law could make the VAT law complex to the small VAT payers and this factor might lead to high compliance costs that can create tax avoidance or evasion (Shome, 2004). In addition to this, difficulties with the tax system, with respect to both the level of the tax burden and tax administration processes are the key reasons for SMEs to work in informal economy in many transition and developing countries (Engelschalk, 2004).

In developing countries much revenue tends to be collected from large taxpayers, the medium taxpayers may remain relatively small, while small taxpayers may be a good potential source of collectible revenue (Shome, 2004). Then if the small taxpayer would benefit from tax simplification, it may bring good result for the tax administration by raising tax revenue and declining tax evasion or avoidance from this group (Bahl & Bird, 2008; Shome, 2004). In general, in the context of Bangladesh, the burden of taxes, particularly VAT in terms of compliance costs and the resultant impact on the compliance decisions of taxpayers appears to be unknown. There have been no study yet about VAT compliance costs and about VAT evasion. Only selected current literature pointed out that the excise/turnover type VAT, a narrow tax base; a relatively small number of VAT taxpayers, a large informal economy, a general lack of awareness and a weak monitoring system are the main reasons behind this picture (Saleheen, 2012; Smith et al, 2011).

At that point some questions arise which are still unanswered in Bangladesh: Why the SMEs are not interested to join to the VAT net? Is the VAT law very complex? Is the VAT rate high in Bangladesh? Is the enforcement low? What about the compliance costs of VAT for SMEs taxpayers? Are compliance costs of VAT for SMEs taxpayers very high in Bangladesh? Why VAT evasion and VAT noncompliance are higher in Bangladesh? Is there a link between VAT compliance costs and VAT evasion for SMEs? What are the tax authorities’ attitude about VAT compliance costs and VAT evasion of SMEs in Bangladesh? Therefore the present situation of VAT in Bangladesh along with the gap in the literature with respect to VAT compliance costs and VAT evasion in developing countries,

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8 Every manufacturer or producer or trader of taxable goods or renderer of taxable service shall have to submit return in form ‘Mushak-19’ for each tax period within 14 working days of the next month after tax period (Section-35 of The Value Added tax Law 1999, Bangladesh).


Bangladesh in particular, call for extensive research. Thus the proposed study has the following objectives:

- considering whether there is link between complexity of the VAT law and VAT compliance costs of SMEs in Bangladesh;
- assessing the nature of VAT evasion (both intentional and unintentional) of SMEs in Bangladesh;
- examining the potential link between VAT compliance costs and VAT evasion of SMEs in Bangladesh;
- considering whether higher compliance costs lead to SMEs taxpayers’ to increase tax evasion or there are other factors influencing VAT evasion.

3. Related literature

3.1 Complexity and Compliance Costs

Economists and social philosophers, from Adam Smith on, have propounded what requirements should be in a good tax system, which must satisfy four principles- simplicity, equity, ability to pay and efficiency (Lewis, 1982). Simplicity means, a tax system or its basics should be understood by the majority of the citizens. It must also be simple to operate, so that the collection of taxes (administrative costs and compliance costs) is inexpensive. Taxpayers should not be subject to frequent changes on rates or bases and the costs of compliance for taxpayers and of collection for the governments should be minimum. Sandford (1993) also supported these four principles of a good tax system. On the principle of simplicity he argued that simplicity is closely related to the cost of collection, or more comprehensively, of tax operation. Sandford explained that the costs of collection include administrative costs and compliance costs. But there are numerous views on the meaning of simplicity. Blough (1952) argued that simplicity means to avoid cumbersome and complicated language of the tax law. He added that, the language should be simple rather than complex and easily understandable for ordinary taxpayer. On the other hand, Tran-Nam (1999) distinguished simplicity with two concepts- describing simple rules as ‘legal’ simplicity and the ease with which the correct tax liability was determined as ‘effective’ simplicity. While legal simplicity would not increase complexity, simple rules might not reduce complexity if they themselves were not its cause. It followed that how best to simplify the system ultimately depended on what the cause of complexity was believed to be.

To designate the importance of simplicity and complexity in a tax system, the report of The Australian Government Tax Road Map (2012, p. 5) quoted, “Simplicity is the major aim of the Governments tax reform. A tax system buried in red tape and complexity will reduce investment, stifle innovation and risk taking and ultimately reduce productivity and economic growth. Complexity in the tax system will reduce the time an individual or company has for other pursuits, and detract from further participation in the work force. It also makes the system unfair, as it imposes a higher burden on lower income households’.

Complexity means the regulations (which included tax law, forms and instructions) are too hard to understand (McKerchar, 2002). Complexity of the tax law should be avoided mainly for three reasons, namely to lower both compliance costs and administrative costs, to reduce uncertainty faced by taxpayers and to improve the level of voluntary compliance (Kasipillai, 2005).

How does a tax law become complex? To reply this query, Miller (1993) stated that the use of highly specific language, the use of mathematical language, the judicial interpretation, the indeterminacy of language and continuous changes in tax law make the law complex to the general taxpayer. According to Miller (1993) three categories of tax complexity exist in a tax system- technical complexity (the pure intellectual difficulty of asserting the meaning of tax law), structural complexity (the ability to
skirt the law by careful planning) and compliance complexity (the difficulty of keeping sufficient records to satisfy the law).

Warskett, Winer & Hettich (1998) indicated that the complexity of a tax system is usually associated with the numbers of tax rates, tax bases and special provisions it includes. In the spirit of this definition, Edmiston, Mudd & Valve (2003) discussed five measures (number of different tax rates, number of lines in description of the tax base, presence of indefinite phrases, number of changes in the tax parameters and number of changes in tax parameters in opposite directions) to determine the complexity of a tax system.

Complexity has been cited as the most serious problem for the United States income tax payer (Oveson, 2000). Excessive complexity increases filing and administrative costs and it has impact on voluntary compliance (e.g., Collins, Milliron & Toy, 1992; Vogel 1974) though several studies have failed to document such a relation (e.g., Porcano, 1988; Yankelovich & White, 1984). Complexity may affect taxpayers’ perception of the equity of the tax system (Yankelovich & White, 1984) and it may also affect intentional noncompliance (Cuccia, 1994; Franzoni, 1999). Kaplow (1996) did a study about the relationship between complexity, taxpayer’s behaviour and achieving the goals of the tax system. Kaplow argued that increasing complexity led to higher compliance costs, which in turn could change taxpayers’ compliance behaviour. That is, if compliance cost burden was too high, the taxpayer would reach a trade-off position, become noncompliant and therefore the equity would not be achieved. McKerchar’s (2003) findings of Australian personal taxpayers about the impact of complexity upon tax compliance are (p. 206):

“The effect of complexity was directly related to compliance costs. Increasing complexity caused compliance costs to rise and decreasing complexity, such as experienced by taxpayers in receipt of government benefits or who did not have work-related deductions to claim, caused compliance costs to fall and both increasing complexity and increasing compliance costs did have a negative impact on taxpayers’ commitment to compliance”.

McKerchar’s study was limited to personal taxpayers in Australia. So the relevance of findings is unknown for other types of taxpayer in Australia and overseas.

Gratez (1997) suggests that simplifying the tax system may be the most effective route to reduce the compliance complexity. Complexity affects the SMEs sectors taxpayers more than the large taxpayers. Slemrod (1989) hypothesized that complexity increases the cost of complying with tax laws and therefore increases the non-compliance. Evans (2003) also stated that, change of tax rate and complexity in the tax law are the major causes of high compliance costs.

Sandford (1995, p. 1), who is considered one of the leading experts about compliance cost studies, defines compliance costs as follows:

“Tax compliance costs are the costs incurred by taxpayers in meeting the requirements laid on them by the tax law and the revenue authorities. There are costs over and above the actual payment of tax and over and above any distortion costs inherent in the nature of the tax. These costs would disappear if the tax law was abolished. They include the costs of collecting, remitting and accounting for tax on the products and profits of the business and on the wage and salaries of its employees, and also the costs of acquiring and updating the knowledge to enable this work to be done, including knowledge or legal obligations and penalties”

Compliance costs include three major components, namely monetary costs, time costs and psychological costs to the taxpayers (Pope et al., 1991; Sandford et al., 1989). Monetary costs include money spent on tax professionals and expenses relating to taxation guides, books, communication and other incidental costs. Time costs are incurred by the taxpayer mainly on record keeping for tax purposes, completing the tax return and preparation of tax details for the tax authorities or for tax professionals. Psychological costs comprise costs such as the anxiety of handling tax matters. Evans (2003) stated that compliance costs will include:
- the costs of labour/time consumed in completion of tax activities. For example, the time taken by a businessman to acquire appropriate knowledge to deal with tax obligations such as Pay as You Earn (PAYE) or VAT; or the time taken in compiling receipts and recording data in order to be able to complete a tax return;

- the costs of expertise purchased to assist with completion of tax activities (typically, the fees paid to professional tax advisers); and

- incidental expenses incurred in completion of tax activities, including computer software, postage, travel etc.

-Psychological costs- the costs of anxiety and stress that taxpayers experience when dealing with tax legislation.

Sandford (1995) identifies a number of reasons for the growth in interest in compliance cost issues. These include-

- changes in technology (facilitating large-scale computer driven surveys)

- the introduction of VAT in a number of countries (with high and visible compliance costs)

- the growth of enterprise cultures involving the small business sector (where compliance costs are particularly onerous)

- the increasing complexity of the tax systems.

In addition to that, the regressive nature of compliance cost and its adverse effect on voluntary compliance concerned the governments to take the compliance cost issue seriously in western countries.

The first modern study of compliance cost was conducted by Haig (1935) in the United States about the federal taxes separated from the states and local government taxes. Sandford (1973) first identified the inequality of the compliance costs and the importance of psychological costs in taxation. Since the introduction of VAT in most countries, the compliance costs have significantly increased. Vaillancourt, who made a review of the literature on compliance costs for businesses, indicated that taxes levied on transactions (sales taxes, VAT) have higher compliance costs than the other types of taxes (Vaillancourt, 1987). VAT was also cited as the largest source of tax compliance costs in 8 out of 11 OECD countries that were surveyed (Pope, 2001). VAT compliance costs compass mainly record keeping for VAT-purposes only, preparation and filling of VAT returns, checking accounts, obtaining information about new procedures for filling VAT returns, changes in the law and other relevant information (Cléroux, 1992; Klun, 2004; O’Keefe & O’Hare, 2008).

The first reasonably comprehensive study on the compliance costs of VAT was also conducted by Sandford et al. (1981) for the year 1977-78 in the UK. The aims of that study was estimating the total compliance costs (and operating costs as a whole), and assessing the attitudes of VAT registered traders. Evidences suggest that compliance costs according to VAT are a relatively higher burden for small business (Cnossen, 1994; Rametse & Pope, 2002). From Sandford et al. (1981) to Coolidge (2012), many studies about VAT compliance costs have increased general interest, especially from the government and the business sector. Therefore, the important factor that influence compliance cost studies of VAT/GST (in monetary term) are- the complexity of the tax system, business size, the nature of business, the number of transactions performed, the number and type of categories applied to inputs and outputs (in the case of VAT), the length of time the business has been operating and also registered for the tax, general education and book keeping training of business owners and staff preparing returns, accounting system employed and socio demographic factors (Pope, 2003; Yesegat, 2008). These empirical findings suggest that compliance costs show great variation among different types of taxes. Compliance costs are quite high and significant. These costs are not falling over time
and the burden of compliance costs fell disproportionately heavier on smaller businesses (Evans, 2008).

The regressivity in tax compliance costs hinders the competition of SME businesses with large businesses as small businesses may have compliance cost around 2% of their total turnover, where as it is a fraction of the annual turnover for the large businesses (Pope, 2001). In general, in terms of the VAT compliance costs, the above discussion indicated that the higher burden of the VAT compliance costs upon SMEs businesses may adversely affect their compliance behaviour. The following section thus reviews the compliance behaviour issues.

Higher compliance costs and complex tax legislations can discourage voluntary compliance and encourage tax evasion. Franzoni (1999) identified that companies will create a kind of resentment against tax authorities too high levies and too complex tax systems. This will inspire tax evasion or intentional non-compliance activities to the taxpayers. Furthermore, because of the complexity of the tax system, the companies often need to rely on the expert tax professionals to assist them to sophisticated tax minimisation engineering and will minimize tax payments.

Tax non-compliance particularly intentional non-compliance may be partly triggered by high tax compliance costs burden. That is, taxpayers, in an effort to reduce their compliance costs burden may deliberately opt not to comply either totally or partly with the requirements of the tax system. Furthermore, due to high compliance costs burden (caused by a complex tax rule) taxpayers may be unintentionally non-compliant (McKerchar, 2002). In this context, it is possible to assume that reduction in compliance costs could decrease the level of non-compliance of both intentional and unintentional nature.

3.2 Tax Evasion

The term “tax evasion” refers to illegal and intentional actions taken by individuals or firms to reduce their legally due tax obligations (Alm, 2012). Individuals can evade income taxes by underreporting of incomes; by overstating deductions, exemptions, or credits; by failing to file appropriate tax returns or even by engaging in barter.

In case of VAT, traders can fail to register for the tax, they may under-report sales or, where different goods are subject to tax at different rates, they may reduce their tax payments by misclassifying sales into the category subject to a lower rate (or zero rate) of tax or evade VAT by abusing the credit and refund mechanism (Keen, 2007). In particular, the gradual cumulation of the tax at each stage of the chain of production and distribution may reduce the amount tax at stake at each stage, and hence the gains to be made from making untaxed sales. Firms can present fraudulent invoices that allow them to understate their tax liabilities, or sometimes individuals even seek to register a firm to disguise their own personal consumption as purchased inputs.

Tax evasion is a regular practice and frequently used in all countries. It reduces total tax collections and creates misallocation in resource use when individuals alter their behaviour to cheat on their taxes, such as in their choices of hours to work, occupations to enter and investments to undertake (Alm, 2012). Tax evasion on a large scale increases socio-economic inequality by imposing heavier tax burden to common people and makes the tax structure more regressive. TIB said that an amount of BDT11 210 billion in taxes were “evaded” or “defalcated” in fiscal year 2009-10 which was 2.8% of the country’s national income and one-third of tax revenues collected during the year. TIB, in its research findings noted, the National Board of Revenue (NBR) could have collected 34 per cent more revenues than what it did in fiscal 2009-10 if it realized the ‘tax-evaded’ or ‘defalcated’ amount of money. The TIB identified tax evasion as a major reason for the country’s poor tax-GDP ratio.

Tax evasion has been studied by researchers from many social sciences disciplines, most typically economics and sociology. Economists presume that tax behaviour is produced by underlying self-

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11 BDT in Bangladesh’s currency (85 BDT = 1 USD)
interest through the analysis of the consequences of behaviour. Sociologists tend to focus on individually and socially constructed interpretations, values and norms. However, over the last forty years, a considerable body of literature has developed in the area of tax evasion.

Why do people evade taxes? The most familiar answer would be “for greed”. But Economists assumption is that people will commit an offence to maximize their utility (Webley et al., 1991). Becker (1968) argues that people become criminals not because their motivations are different from others’ but because their cost and benefits differ. Applied to this tax situation, this treats people as rational amoral decision makers whose aim, in this as in all other areas, is simply to maximize utility. The classical models (Allingham & Sandmo, 1972; Cowell, 1985) assume that behaviour is influenced by factors such as tax rate (which determines the benefits of evasion) and the penalties for fraud and the probability of detection (which determines the cost). Individuals have a choice of how much income to declare and how much to not. However, the main objective is to maximize the utility of the taxpayer. Allingham and Sandmo (A-S) model predicts that both probability of detection and the severity of penalties will affect evasion; if detection is likely and penalties are severe people. Allingham and Sandmo argued that, tax authority can control evasion by two substitute enforcement strategies, increasing either the penalty rate or the probability of being detected.

In addition to Allingham and Sandmo model, there were other early models including the works of Srinivasan (1973), Kolm (1973) and Yitzhaki (1974). According to McKerchar (2003) these earlier models are very much similar to the underlying principles of the Allingham and Sandmo economic deterrence model. However, Allingham and Sandmo model had limitations including: the model was simplistic (as acknowledged by Allingham and Sandmo) in that it ignored the other factors for compliance decision. It reduced human behaviour into a mathematical formula, which could be changed by manipulating the variables of interest. Further, the model, among others, did not incorporate the impact of compliance costs on tax compliance decisions and it focused on direct tax non-compliance.

Both empirical evidences and experimental studies look less convincing that tax evasion is not only influenced by economic factors but non-economic factors also. Thus the literature emphasises the significance of assessing compliance in the context of non-economic factors. This leads to the social and psychological models. The purpose of social psychology model is to develop an understanding of human behaviour and attitudes, whereas fiscal psychology models describe an area of research within public finance with the “psychic background of financial activities”. Social and psychological insights suggested to be important in understanding the observed level of tax compliance (see, for example Alm et al. (1999); Cullis & Lewis (1982); McKerchar (2002)). In these models taxpayers’ stance is influenced by many factors, including their disposition towards public institutions, the perceived fairness of the taxes and prevailing social norms. Similarly, tax compliance is influenced by a range of factors including attitudes, perceptions, beliefs, personality traits and interactions among the actors. Specifically, in the case of fiscal psychological models, as McKerchar (2002) stated, such models, generally, view tax enforcement as a behavioural problem that can be resolved by co-operation between taxpayers and tax collectors. To obtain this co-operation the role of the tax system in providing the positive stimulus was emphasised, for example, by lowering the tax rates or decreasing penalties. These actions in turn were expected to generate a more positive attitude in taxpayers that would then affect their compliance decisions (McKercher, 2002).

Tax evasion is widespread, always has been, and probably always will be (Alm, 2012). Tax evasion would be the first topic in a full history of taxation. Empirical evidences about tax evasion literature were directly related to informal economy and measuring the tax gap, rather than finding the cause of tax noncompliance. From the 80s tax evasion is considered as a social phenomenon, which cannot be understood just by considering the incentives of a single individual, one also has to consider the interaction between taxpayers in a social setting (Sandmo, 2005). Lewis’s (1979) survey results also exposed complexity was a contributing factor for tax evasion. Increasing complexity could increase negative feelings, which in turn could reduce a person’s willingness to pay tax.
Bordignon (1993) stated that, taxpayers are always motivated by considerations on fairness with respect to the services that the government provides in exchange for their tax payments as well as the tax structure and the prevalence of evasion by other taxpayer. So when people are asked about possible justifications for engaging in tax evasion, a common answer is that they are being treated unfairly by the tax system. Alternatively, Barth, Cappelen and Ogendal (2005), observed that, people who working long hours with lower wage rate are always assumed themselves unfairly treated than people who work short hour with higher wage rate. So the former group justifies themselves in evading taxes.

Based on all previous literature Kirchler (2007) and Loo (2006) identified the factors that influence tax evasion and tax compliance as:

- Structure of the tax system: tax rates, tax audits, complexity, simplicity of the tax forms and returns, Tax authority’s attitude and efficiency;
- Attitude and perceptions: perceptions of fairness, ethics and attitude, perception of government spending with tax money; poor influence;
- Socio demographic characteristics: age, income level, education and gender.

Most of the literature on tax evasion has mainly been concerned with direct taxes; the analysis of indirect tax evasion largely ignored (Sandmo, 2005; Mirreli, 1984). Mirreli’s (1984) study considered the evasion of ad valorem tax and the result suggests that, the evasion and tax shifting decisions are independent to one another as long as the audit possibility is constant. Here, the amount of evasion by each firm is shown to depend, apart from the enforcement parameters, on the degree of collusion and on market shares. Gordon (1990) offers an interesting insight on sales tax evasion. He suggests that under-the-counter cash sales tax may serve as a means of price discrimination; cash discounts are the best pricing strategy when the demands for cash purchases are highly elastic.

VAT is a neglected area for the compliance behaviour and tax evasion research area. One reason for the absence of VAT for evasion studies, as there is a common belief that VAT has a self-policing property in that buyers of intermediate goods have opposing interests to the sellers, and thus reduces the scope for VAT evasion (Keen & Smith, 2007). However, in practice VAT in several countries has not achieved its objective of raising the intended revenue as VAT is open to fraud and evasion like other taxes (Keen, 2007). For these reasons Hemming & Kay (1981) questioned the “self-enforcing” power of VAT as both seller and buyer gain by evasion in a context in poor control and auditing capacity of tax administration (as cited in Barbone et al., 2012, p. 42).

VAT fraud and VAT evasion was recognised as an objective problem and made part of EC strategy and in 2007 the fight against VAT evasion became a major concern of European Communities (EC) strategic thinking (Barbone et al., 2012). So a large and growing apprehension about VAT associated fraudulent in Europe demands the true scenario of VAT compliance and VAT evasion studies in developing countries.

To the knowledge of the author there is no in-depth study to explore the potential link between the VAT compliance cost and VAT evasion in developing countries. Most of the literature based on tax compliance costs and tax evasion treats tax evasion separately from compliance costs. Jenkins and Forlemu (1993) argued that, reducing compliance costs through simplification of the tax system and enhanced taxpayer services would reduce the level of taxpayer non-compliance and would increase voluntary compliance. But to date no empirical study has been operated in case of VAT to support this argument of Jenkins and Forlemu. However, the link between VAT evasion and VAT compliance costs of SMEs is still unknown. Moreover, most of these studies used mail survey as their principal way of gathering data which led to a low response rate and non-response bias. Most of the previous studies drew their samples from sources other than tax authorities’ database and mainly focused on personal income tax. These gaps lead to the main research questions of the study:
Does complexity affect the VAT compliance costs for the SMEs in Bangladesh? Does increased compliance costs of VAT raise VAT evasion of SMEs in Bangladesh? Does tax enforcement (audit and penalty rates) influence VAT evasion in Bangladesh?

3.3 The complexity, compliance costs and VAT evasion model

SMEs in Bangladesh are subject to income tax as individual or as corporate taxpayers, depending on the business establishments and VAT or turnover taxes depending on yearly sale and threshold. A person or a firm has to register with VAT or turnover tax before starting any business. These entities must have to maintain all invoices and registers, have to deposit right share of taxes according to VAT law and to submit return for every tax period. Moreover, a taxpayer must be aware of the tax law to take the full advantage and to avoid penalties imposed by the tax authority according to law.

Compliance to the above regulatory requirements is mandatory in nature, placing a huge burden and costs upon the SME sector. In addition to this, changes in tax laws, rules and rates in every national budget create the VAT law complex to SMEs. Therefore to understand the tax law, to coup up with the assessment system, to fix up the tax liability, to fill the tax form, to submit the tax returns and to maintain the registers SME taxpayers have to deploy additional staff and have to outsource the tax professionals. These may raise the VAT compliance costs and encourage them to evade VAT. In the light of the above adopting McKerchar’s (2002) complexity-compliance model and Yesegat’s (2008) compliance costs and compliance model the following relationship between complexity, compliance costs and VAT evasion could be shown below

Fig 3.1: A model of the relationship between complexity, compliance costs and Evasion

![Diagram](attachment:Fig_3.1.png)


The relationship of complexity, compliance costs and VAT evasion of SMEs in Bangladesh, in its simplistic form is presented in above. Though the model is simple, its assumptions and predictions are untested in case of Bangladesh and in other developing countries.
4. Research Methods

A mixed methods research approach will best facilitate the main research objectives. The purpose of using such a mixed methods approach is to gather data that could not be obtained by adopting a single method and to triangulate the findings from multiple approaches. In the case of tax compliance costs and tax evasion, most of the earlier studies used the quantitative research approach. Recently there have been some tax compliance and compliance behaviour studies were done by using mixed methods. These studies include Ritchie (2001), Tran-nam & Glober (2002), McKerchar (2003), Glober & Tran-Nam (2005), Loo (2006) and Yesegat (2008). In light of the research questions, the quantitative method will be predominantly used. However to have a better insight and gain a comfortable understandings about the compliance costs and VAT evasion the quantitative method will be supplemented by the qualitative method of inquiry.

4.1 Data Collection Methods:

Stanford, Godwin & Hardwick (1989) have identified seven major methods of estimating the compliance costs of taxation:

1. Highly structured questionnaires and/or interview schedules.
2. Semi-structured or unstructured interviews.
3. Time and motion studies.
4. Participant observation/action research.
5. Other types of case study, e.g. studies of the comprehensibility of tax forms.
6. Archive research, using records held by government departments, tax advisors etc. and
7. Simulation or modelling exercises.

Among all these methods, contacts with taxpayer through time study and face-to-face interviews is generally considered to produce more reliable data as any ambiguities or queries between the researcher and any respondent can be settled immediately ‘on the spot’ (Pope, 2003). One of the main advantage of face-to-face interview, is that the researcher can adapt the questions as necessary, clarify doubts and ensure that the question as are properly understood by repeating or rephrasing the questions and face-to-face interview may be more effective where literacy level is not so high (Sekaran, 1992). Fowler (1984) also noted that respondents who are not very well educated may find an interview survey easier than filling out a mail questionnaire. But such interviews are time consuming and expensive to administer. Yesegat (2008) conducted a survey with face-to-face interviews of 193 tax payers and tax practitioners about the operating costs of VAT in Ethiopia which was time consuming and costly but was effective with a better response rate. In respect of response rates, as the tax compliance costs literature shows, the response rates for face-to-face interviews are better than other data collection methods.

The data used for most of the earlier studies on tax compliance costs were collected through mail surveys supplemented by follow up interviews. This method has the advantage of reaching large geographical territory with low cost. But the response rates were typically not as high as might be desired. With low response rates it is difficult to establish the representativeness of the sample because those who responded the survey may be different from the population they were intended to represent (Sekaran, 1992). Web-based survey could be another alternative to collect data, which is less expensive and for easier data analysis (McKerchar, 2010) but in a developing country like Bangladesh most of SME sector VAT payers have not the access to internet and literacy level is not high.
On the other hand, surveys of tax evasion and tax evaders are complicated by the sensitive nature of topic. The threat of penalties, prosecution and stigmatization can induce individuals either to lie about their tax evasion behaviour, or to refuse to take part in the study because they wish to avoid answering sensitive questions (Houston & Tran, 2001). So when the issues are sensitive, surveys that are self-administered (for example, by mail or web-based) are more likely to increase the likelihood of honest responses compared to telephone surveys or those conducted in persons, as is providing explicit guarantees of anonymity and confidentiality (Neuman, 2006). But when the respondents are provided clear and concise instructions during face-to-face interview and they feel that their contribution is valued and appreciated and the survey will be done only for academic purpose, it may bring better response rate (McKerchar, 2010). The problem facing the researchers during tax evasion studies is how to encourage participants to respond and then to provide truthful response in surveys. There are two techniques, one is randomised response (RR) technique and another one is direct questioning (DQ) technique. This research will use direct questioning (DQ) technique during face to face interview with the VAT payers.

4.2 Sample Size

The size of the sample can impact upon the credibility of the findings, particularly where the size of the sample is less than 150 (McKerchar, 2010). Fowler (2009) argues that the most appropriate way to determine sample size is to consider the subgroups and then work backwards taking into account the likely response rate and the degree of accuracy. Fowler concludes that a sample of 150 people would describe a population of either 15,000 or 15 million with virtually the same degree of accuracy. In this study, the targeted population are the SMEs sectors VAT payers. According to ADB (2004) report the number of SMEs in Bangladesh are 79, 224. There is a primary plan of the researcher to select 300 potential taxpayer by random selection from the eligible list of VAT registered SMEs in Bangladesh. The list will be collected from tax authority’s published and un-published data by following official norms and procedures. Half of the participants will be taken from the VAT evaders (who had evaded VAT and who had been caught and penalised for doing so) and the other participants group will be non-evaders, who have no evasion history and registered with VAT for last three years.

4.3 Pilot Survey

A pilot usually means asking a small group of respondents to complete the survey as a part of trial or pre-test to identify any problems that could be arise in either the collection or analysis of data (McKerchar, 2010). It can be a useful means for identifying any miscomprehensions that can be addressed so that the survey instrument can be refined and its internal validity improved. At the beginning of this study, a pilot survey will be done with focus group to know what they think about the VAT evasion and VAT operating costs. Effective pilot testing can improve the wording of survey instruments; increase the likeness of the meaning of questions for both the researcher and the respondent and help to obtain high reliability of response (Robson, 2002).

4.4 Documentary Analysis

Documentary analysis will be conducted using documents which may take a variety of forms such as public documents (NBR Annual Reports, Bangladesh Bank Annual Reports), mass media outputs, administrative document, and formal study reports, published and unpublished data of tax authorities. Examination of documents including reports and other published and unpublished records aims to assess the nature of VAT evasion by SMEs taxpayers in Bangladesh and to identify the VAT evading SMEs and their underlying problems.

4.5 In-depth interviews with tax officials

Casanegra de Jantscher (1990) stated that in Developing countries, tax administration is the tax policy (as cited in Bird, 2012, p.10). Thus in-depth interview with the tax officials is one of the dynamic part and strength of this research. Very few tax evasion studies in developing countries have taken the
view of tax authority and their observation about the causes of tax evasion. In this research, in-depth interviews will be conducted with the tax officials using an unstructured questionnaire. The purpose of these interviews were to seek clarifications of the published and unpublished data and to collect useful facts especially about VAT evasion, complexity of VAT law and compliance costs, which are not available from other sources. The opinion of the tax officials will help to suggest effective policy recommendations. There is a plan to take interviews of 20 tax officials of different positions, from field level officials to top level officials.

4.6 Questionnaire design and data analysis

Questionnaire design for VAT surveys typically elicit information on the characteristics of the business, the time spent on the tax affairs by directors, partners and proprietors, accounting/bookkeeping and other stuff, fees paid to the professional advisers; and any miscellaneous costs incurred. The nature and associated additional costs of any difficulties, the knowledge about the VAT law, tax morale, tax evasion, perception about tax authorities (e.g., competence, fairness, consistency, integrity) and suggestions for improving the taxes may also be investigated. The method of data analysis to obtain the survey results would usually be a statistical package such as the Statistical Package for Social Sciences (SPSS).

4.7 Psychological cost

There is no generally agreed definition in tax literature about psychological cost. According to Stanford et al. (1989), psychological costs are the stress, anxiety and frustration experienced by taxpayers, especially the old, retired and widowed in dealing with their tax affairs. Pope et al. (1994) gave the same definition about psychological cost. It is difficult to identify and quantify. Brain Nolan ATO’s (Australian Taxation Office) Senior Assistant Commissioner stated that over 70 percent of taxpayer use the services of a professional advisor. So psychological costs could be the price people are ready to pay in order to get rid of the trouble of interpreting and applying the law (Evans et al., 2001). This is quantified psychological costs. For qualitative approach, to identify psychological costs face to face interview was conducted to Spanish taxpayers by Diaz & Delgado (1995). This enabled them to learn whether issues such as the level of sullenness tax compliance obligations generated in taxpayers were as high as they anticipated.

A number of different types of scales are often used in survey design, the Likert scale being the most commonly used format in contemporary questionnaire design (Babbie, 2007). To find out the answer of one of the research questions “What do the VAT payers think about the psychological cost? Is it very high or not?” the survey will include a Likert chart such as “strongly agree”; “agree”; “neither agree nor disagree”; “disagree”; and “strongly disagree”. To draw some insight into the psychological costs of compliance with the VAT, the following general questions may be asked to the taxpayers, “If you could have claimed to the VAT office for the time, money spent on VAT compliance or your stress or anxiety in the year 2012-2013, how much would you have claimed?” Yesegat (2008) used similar type of question in her tax payers and tax officials’ survey about operating costs of VAT of Ethiopia and identified psychological costs as a significant cost of tax compliance.

Conclusion

A fundamental difficulty in analysing anything with tax evasion is the lack of reliable information on taxpayer compliance. As tax evasion is illegal, individuals and firms have strong incentives to conceal their cheating thus getting reliable information is very hard. Alm (2012) stated that in the last 40 years we have learned a lot about tax evasion but still a long gap exists in our understanding and future research should contribute on other taxes like sales tax, value-added tax and corporate income taxes. In Bangladesh and in other developing countries in-depth empirical studies and research should

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be conducted on VAT evasion to know about its nature and to control it. The author’s research on VAT compliance costs and VAT evasion of SMEs in Bangladesh is just the beginning. It is expected that the proposed research will provide valuable insight about the compliance costs and VAT evasion in Bangladesh. The findings of this research will assist policy makers and administrators in Bangladesh and in other developing countries to design an effective VAT system which will reduce both the compliance costs and the VAT evasion.

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