

**Curtin Business School  
School of Economics and Finance**

**The Compliance Costs of Value Added Tax for Businesses in  
Botswana**

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**This thesis is presented for the Degree of  
Doctor of Philosophy  
of  
Curtin University**

**November 2014**

## **DECLARATION**

To the best of my knowledge, this thesis is original and contains no material that has been previously published by another person(s) except where due acknowledgement has been made. This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Signature:

Date:

## ABSTRACT

This thesis is the first research study into tax compliance costs in Botswana, a diamond rich developing country in southern Africa. The author is not aware of any major comprehensive research study on tax compliance costs in the context of Botswana. The only available studies are those that have been conducted by the International Finance Corporation (IFC). The IFC studies estimated the tax compliance time of a hypothetical medium-sized business. This study thus qualifies as an original contribution to the tax compliance costs literature.

Value Added Tax (VAT) was first introduced in July 2002 at a rate of ten per cent, and this was increased to twelve per cent in April 2010. This study analyses the composition and distribution of gross and net VAT compliance costs and sets the findings in an international context. The VAT recurrent compliance costs for businesses in Botswana are derived for the financial years 2009/10 and 2010/11 based on questionnaire surveys. Average (gross) compliance costs are estimated to be P6,902 and P7,201, and aggregate compliance costs at P110 million and P169 million, for 2009/10 and 2010/11, respectively. Indicatively, these estimates are roughly around US\$1,000 per business and US\$17–23 million in aggregate. Overall, VAT compliance costs represent around 0.1 per cent of Gross Domestic Product (GDP) for both years and approximately 2.9 per cent and 3.6 per cent of VAT revenue in 2009/10 and 2010/11, respectively.

The research confirms the findings of international studies that the VAT compliance costs are inversely related to the business size. As a proportion of annual turnover, the average VAT compliance costs range from around 0.02 per cent for large businesses to 0.93 per cent for smaller businesses in both financial years. The VAT compliance costs of small businesses in Botswana are around 45 times those of larger businesses in both years. When the small business category is segregated further, the VAT compliance costs fall from 3.17 per cent for small enterprises (with an annual turnover below P500,000) to 0.02 per cent for larger ones (with an annual turnover above P5 million) in 2009/10, and range from 0.02 per cent for large businesses to 3.30 per cent for small businesses in 2010/11. In this case, the VAT compliance costs

of small businesses in Botswana become 159 and 165 times those of large businesses in the financial years 2009/10 and 2010/11, respectively.

Aggregate cash flow benefits are estimated at P61 million and P69 million for the financial years 2009/10 and 2010/11, respectively. These estimates represent around 0.6 per cent of GDP and about 1.6 per cent of VAT revenue for both years. Aggregate managerial benefits have been estimated at P79 million for 2009/10 and 95 million for 2010/11 representing around 0.8 per cent of GDP and about 2 per cent of VAT revenue for both years. After considering offsetting benefits, net VAT compliance costs for businesses in Botswana are estimated at negative P30 million for 2009/10 and P5 million for 2010/11. The findings of the study confirm the usual regressive pattern of tax compliance costs.

As regards policy recommendations, the government of Botswana should consider introducing an online VAT filing system to reduce queuing time and associated costs. In addition, the Botswana government should increase VAT return filing centres, especially in the outskirts of Gaborone, in order to reduce taxpayer travelling costs and congestion at the main Gaborone office. The frequency of VAT filing in Botswana is also a concern, especially for small businesses. Thus, a reduction of VAT filing frequency for small businesses, from bimonthly to quarterly would reduce their VAT compliance costs. Further, an increase in the registration threshold from its current P500,000 (US\$61,500) could be considered by policy-makers if reducing VAT compliance costs still further is seen as a policy priority, although the effects of such a measure on VAT revenue would have to be carefully assessed.

# **DEDICATION**

## **To my sons**

Ofile Makara  
Keatlegile Makara

## **To my mother**

Siodorah Ntika Makara

## **To my late father**

Solomon Tshepe Makara

## **ACKNOWLEDGEMENTS**

I thank the Almighty God for enabling me to complete this thesis. I am grateful for the hand of God upon my life, which has kept me going during very difficult times.

I would also like to express my deepest gratitude to the people who are special to me and who have encouraged me throughout my doctorate study season. To my sons, Ofile and Keatlegile and my mother Siodorah, your love and inspiration have made this possible. To my late father, Solomon, thank you for instilling in me the desire to learn and to achieve great things. To my namesake, my late grandmother, thank you for teaching me from an early age that nothing is impossible if I put my heart and energy into it.

A special acknowledgement and expression of gratitude goes to my supervisor, Professor Jeff Pope, who gave me exceptional guidance in researching and writing up this thesis. Thank you for being patient with me during a personally challenging season and encouraging me to complete this study.

To my aunt, Dr Nthathi Rametse, not only did you encourage me to undertake a doctorate study way back in 2006, you also supported me during my research and during difficult times. The support of your family is greatly appreciated.

The author of this thesis has co-authored a journal article, as the first named author, with Professor Jeff Pope. The contribution of this publication to this thesis is acknowledged and has been referenced accordingly. Any errors are the responsibility of the first named author. This publication is as follows:

Makara, T. & Pope, J. (2013). Estimates of the compliance costs of value added tax in Botswana. *New Zealand Journal of Taxation Law and Policy*, vol 19(3), pp. 183–221.

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## LIST OF ACRONYMS

ADBG	African Development Bank Group
AEO	African Economic Outlook
ATAX	Australian Taxation Studies Program, University of New South Wales
ATO	Australian Taxation Office
BCCS	Business Compliance Cost Statement
BIDPA	Botswana Institute for Development Policy Analysis
BURS	Botswana Unified Revenue Service
CEE	Census of Enterprises and Establishments
CEP	Coordinated Examination Program
CFIB	Canadian Federation of Independent Business
CIA	Central Intelligence Agency
CPA	Certified Public Accountant
CSO	Central Statistics Office
CUR	Customs Union Receipts
EU	European Union
FIAS	Foreign Investment Advisory Service
FBT	Fringe Benefit Tax
GAO	Government Accountability Office
GDP	Gross Domestic Product
GST	Goods and Services Tax
IFC	International Finance Corporation
IMF	International Monetary Fund
IRD	Inland Revenue Department
ITD	International Tax Dialogue
LTU	Large Taxpayer Unit
NAO	National Audit Office
OECD	Organisation for Economic Co-operation and Development
PAYE	Pay As You Earn
PST	Provincial Sales Tax
QST	Quebec Sales Tax

RIS	Regulated Impact Statement
SACU	Southern African Customs Union
SBP	Small Business Project
SSA	Sub-Saharan Africa
SME	Small and Medium Enterprise
SMLE	Small, Medium and Large Enterprise
SMME	Small, Medium and Micro-sized Enterprise
SPSS	Statistical Package for Social Sciences
TDM	Total Design Method
UB	University of Botswana
UBS	Upstart Business Strategy
UK	United Kingdom
USA	United States of America
USDT	United States Department of Treasury
VAT	Value Added Tax

# CHAPTER 1

## INTRODUCTION

### 1.1 FOREWORD

Botswana is a land-locked country situated in the southern part of Africa. It shares borders with South Africa, Namibia, Zambia and Zimbabwe. Its capital city, Gaborone, is located in the south east part of the country. Botswana has a population of just over two million people (Central Statistics Office [CSO], 2011, p. 1), which makes it one of the smallest countries in Africa.

Botswana has moved from being one of the world's poorest countries to an upper middle income country, becoming Africa's success story since its independence from being a British colony in 1966 (World Bank, 2010, p. 3). Through sound macro-economic policies, the jewel of Africa, as it is commonly referred to, has maintained one of the world's highest economic growth rates over the past four decades, achieving a per capita GDP of US\$ 16,300 in 2011 (Central Intelligence Agency [CIA], 2012).<sup>1</sup> Botswana is cited as the only African country that has sustained rapid economic growth over an extended period (World Bank, 2000, p. 1), with an average growth rate of nine per cent (World Bank, 2007, p. 3). Its Gross Domestic Product (GDP) for the years 2009, 2010 and 2011 was around P82,548 million,<sup>2</sup> P101,258 million and P120,541 million, respectively (CSO, 2012, p. 7).

As one of the world's leading diamond producers, with a global market share of about 20 per cent (International Monetary Fund [IMF], 2010, p. 11), Botswana's economy leans heavily on mining revenue and payments from the common customs

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<sup>1</sup> See also <https://www.cia.gov/library/publications/the-world-factbook/geos/bc.html> (as at 9 April 2013). The per capita GDP estimate provided by the CIA is significantly smaller, and probably more realistic, than the one given by the Bank of Botswana of P59 million for 2011 (Bank of Botswana, 2011, p. 8). See also <http://83.143.28.95/assets/uploaded/BOB%20Annual%20Report%202011%20web%20Stats%20only.pdf> (as at 27 November 2012).

<sup>2</sup> The national currency for Botswana is the 'Pula', often abbreviated as 'P' or 'BWP' (CSO, 2011, p. 1). This study uses 'P' to denote the currency of Botswana.

pool of the Southern African Customs Union (SACU),<sup>3</sup> (World Bank, 2007, p. 9). Botswana's mining revenue (mainly from diamonds) accounted for 27 per cent of GDP in 2009 and 32 per cent in both 2010 and 2011 (CSO, 2012, p. 7).

The business market in Botswana is very small and populated predominantly by Small and Medium Enterprises (SMEs). The SMEs sector is very important to the economy of Botswana as it accounts for around 50 per cent of private sector employment and 15–20 per cent of GDP (Botswana Institute for Development Policy Analysis [BIDPA], 2004, p. 1). The census of enterprises and establishments conducted by CSO (2009, p. 4), reveals that there were 16,556 enterprises/establishments as at July 2008; however, only 8,613 businesses provided data concerning the profiles of their businesses. The distinction of businesses by size is often based on the number of employees, turnover or a combination of the two. Small businesses in Botswana are defined as enterprises employing between 5 and 25 people with an annual turnover of around P60,000–P1,500,000. Medium-sized businesses employ between 26 and 100 people and have an annual turnover of between P1 million and P5 million. Large enterprises are characterised by a turnover that exceeds P5 million and an employee pool of over 100 people (BIDPA, 2004, p. 1). This thesis uses the annual turnover to distinguish business sizes.

Businesses in Botswana have to comply with a variety of regulations imposed by the government. The most common governmental regulation imposed upon businesses is taxation. Taxation is an important source of public finance for most countries, especially developing ones. While taxation is vital to ensure the provision of infrastructure and public services, compliance with its requirements often leads to additional costs over and above the tax amount. These costs, referred to as tax compliance costs, are borne by the taxpayers.

Value Added Tax (VAT)<sup>4</sup> in Botswana was introduced at a rate of 10 per cent in July 2002. The VAT rate was increased to 12 per cent in April 2010. Prior to this study, the VAT's associated compliance costs in Botswana remained hidden, making this

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<sup>3</sup> The SACU is made up of five countries namely Botswana, Lesotho, Namibia, South Africa and Swaziland. The mandate of SACU is to facilitate efficient trade and an equitable distribution of the trade benefits between the Member States.

<sup>4</sup> Value Added Tax (VAT) is known as the Goods and Services Tax (GST) in some countries such as Australia, New Zealand and Singapore. These terms are used interchangeably in this study.

study an original contribution. To this end, this research study estimates the gross and net recurrent compliance costs of VAT for businesses in Botswana for the financial years April 2009/March 2010 and April 2010/March 2011. Two years are used in this study in order to capture the compliance costs effects of the 2010 VAT amendments made by the Botswana Unified Revenue Service (BURS) which included increases in the VAT registration threshold and VAT rate.

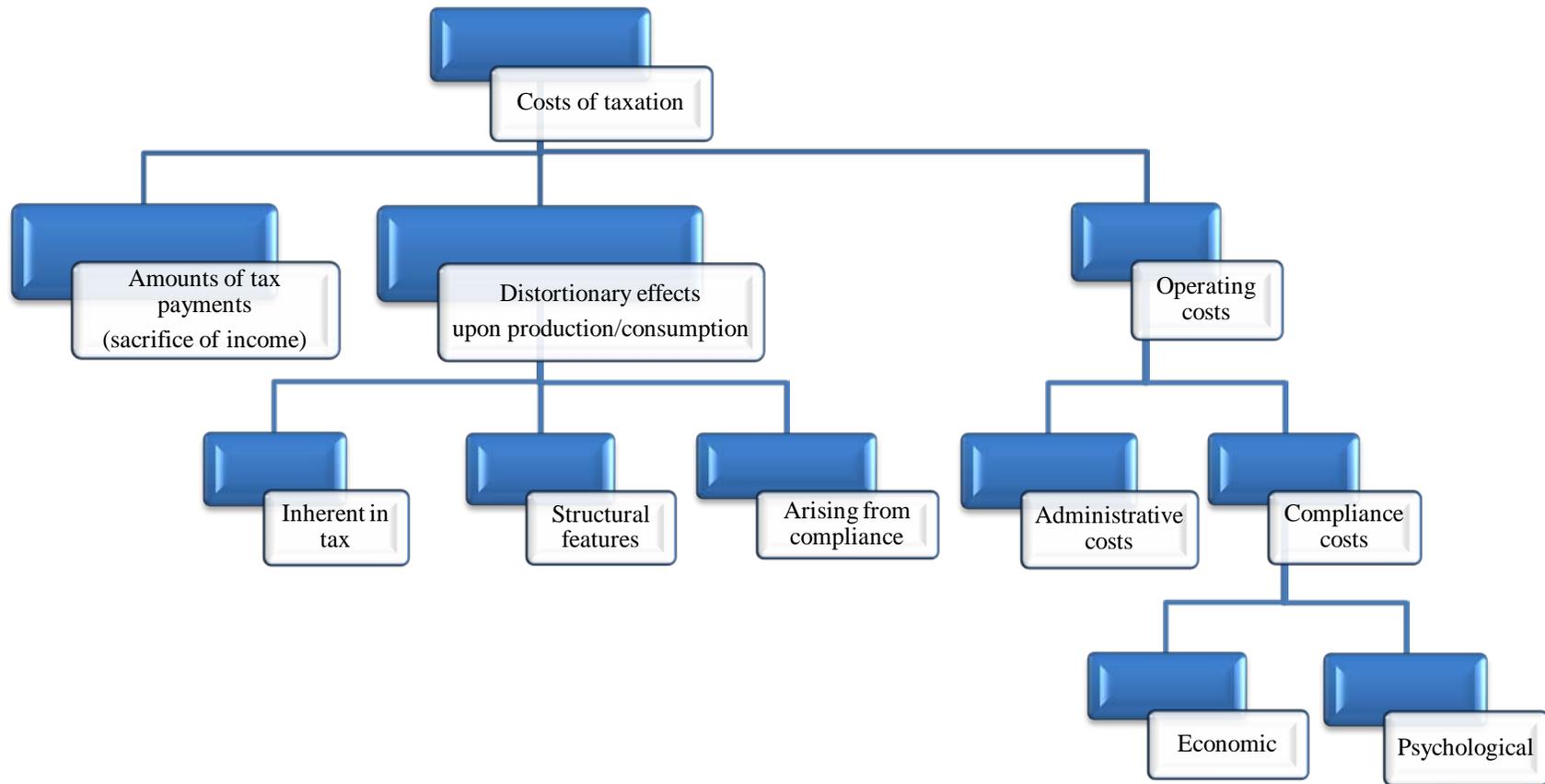
The aim of this chapter is to provide an overview of this thesis. Section 2 discusses the different costs of taxation while Section 3 presents the tax compliance costs framework. The main objectives of this thesis are outlined in Section 4, followed by an overview of the significance of this research study in Section 5. Finally, the structure of this thesis is discussed in Section 6.

## **1.2 THE COSTS OF TAXATION**

The existence of any tax system results in costs which are incurred by the government and taxpayers. Pope (1993a, p. 4) identifies three different types of taxation costs as shown in Figure 1.1. These are: the amount of the tax payment itself; the distortionary effects upon production and/consumption; and the administrative and compliance costs of the tax system.

The time and money expended by the tax authority while running the tax system are referred to as tax administrative costs or public sector costs (Sandford, Godwin & Hardwick, 1989, p. 6). These costs are also referred to in the literature as collection costs (Ebrill, Keen, Bodin & Summers, 2001, p. 52). Tax compliance costs are the costs incurred by the taxpayers in their efforts to adhere to the requirements imposed by the tax system. These are costs over and above the tax liability. The tax administrative and compliance costs constitute the operating costs of the tax system.

**Figure 1.1: The Costs of Taxation**



Source: Pope (1993a, p. 4).

It has been argued that there is a trade-off between administrative and compliance costs, which suggests that a tax with high administrative costs has low compliance costs and vice versa (Haig, 1935). As administrative and compliance costs of taxation can be shifted between the public and private sectors, there is a risk that, in order to reduce the tax administrative costs, a government may place its tax collection responsibilities on the businesses (Sandford et al., 1989, p. 23), and use them as unpaid tax collectors (Pope, 2001a, p. 3). However, Evans, Ritchie, Tran-Nam and Walpole (1997, p. 3) disagree and maintain that tax administrative and compliance costs often follow a similar trend, as tax simplification measures are likely to reduce both costs.

Likewise, Bird and Zolt (2008, p. 77) argue that the trade-off between administrative and compliance costs does not always exist as both costs may increase when, for instance, a more sophisticated tax administration requires more information from taxpayers and undertakes more audits. Due to the possibility of a trade-off between administrative and compliance costs, Sandford et al. (1989, p. 23) advise that it is imperative to consider administrative and compliance costs together. It was the desire of the researcher to conduct a joint investigation of administrative and compliance costs; however, the lack of data has precluded the estimation of administrative costs in this study.<sup>5</sup>

## **1.3 OVERVIEW OF TAX COMPLIANCE COSTS**

### **1.3.1 Tax Compliance Costs Definition**

The review of the literature indicates that there is no uniform definition of tax compliance costs. Sandford et al. (1989, p. 10) emphasise the ambiguity of the 'compliance costs' terminology, suggesting that this term can be taken to refer to the costs of administering a tax (or the costs of ensuring compliance) as well as the costs of complying with the tax system. Similarly, it is conceptually difficult to define what comprises tax compliance costs and what should be included in tax compliance activities (Evans, Ritchie, Tran-Nam & Walpole 1996, p. 10; Evans, 2008, p. 451).

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<sup>5</sup> Several attempts (which continued for a period of three years) to obtain administrative costs data from BURS were unsuccessful.

Broadly, tax compliance costs are:

“The costs incurred by taxpayers, or third parties such as businesses, in meeting the requirements laid upon them in complying with a given tax structure” (Sandford et al., 1989, p. 10).

The components included in business tax compliance costs have been outlined by Sandford et al. (1989, pp. 11-12) as follows:

- 1) Money costs: Costs of collecting, remitting and accounting for tax. These may take the form of: salaries and wages of the business’s internal employees; fees of external employees such as tax advisors and tax accountants; costs of travel, communication, stationery, postage, computer hardware and software as well as accommodation and costs of acquiring sufficient knowledge to enable the employees to meet the requirements of the tax. These include staff training costs and material costs;
- 2) Time costs: Imputed costs of time spent by unpaid helpers such as family members or friends in complying with tax requirements;
- 3) Psychic<sup>6</sup> costs that arise from the stress and anxiety experienced by taxpayers when dealing with the tax legislation, and;
- 4) Costs incurred by representative bodies (paid for by their members) in making presentations and lobbying for tax changes.

Pope, Fayle and Chen (1994, p. 26) narrow Sandford et al.’s (1989) definition of business tax compliance costs by excluding the costs of taxpayers’ representative bodies that they incur when making presentations and lobbying for tax changes. Their definition of business tax compliance costs comprises: the cost of time spent by a taxpayer and unpaid helpers on, maintaining tax information throughout the year; completing tax forms or preparing information for the taxpayer’s adviser; the fees paid to a professional adviser and; the psychological costs being the apprehension and frustration caused by tax compliance.

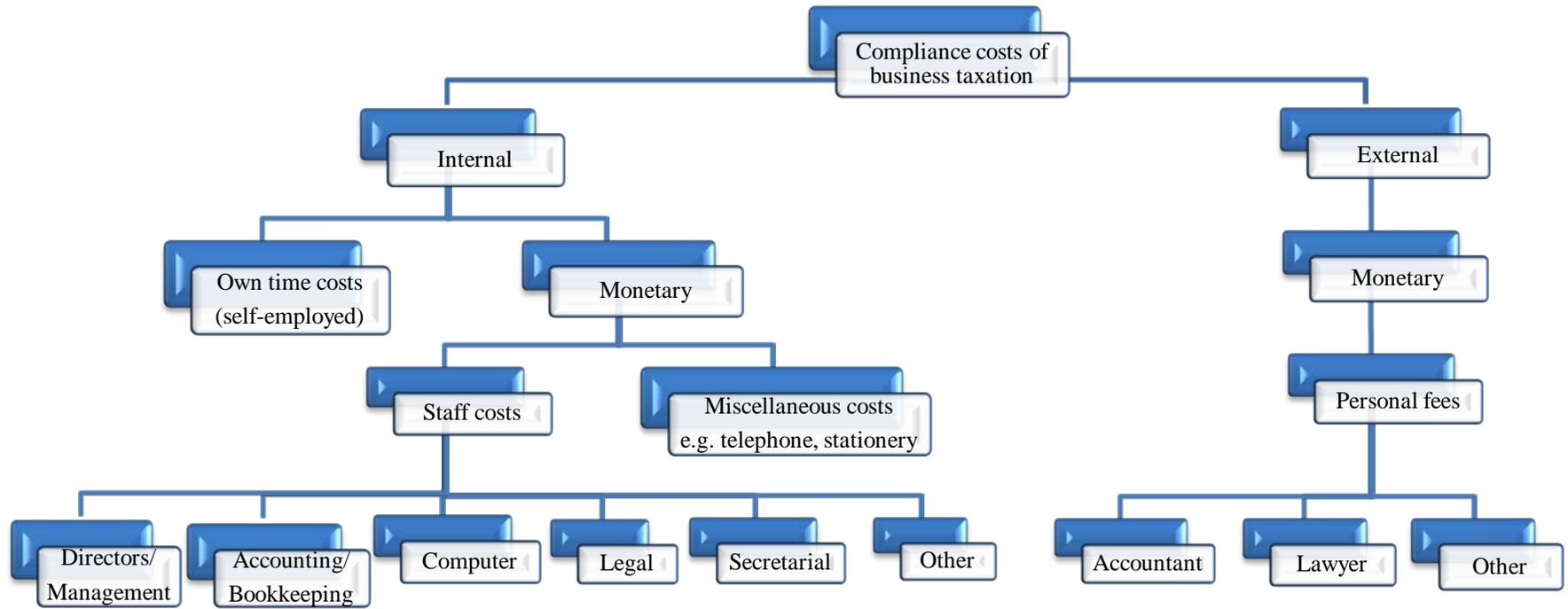
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<sup>6</sup> Sandford referred to the stress associated with tax compliance as psychic costs; however, the term psychological costs is now preferred and used in this study.

Similarly, Sandford et al.'s (1989) definition of business tax compliance costs is abridged by the ATAX team, led by Evans, to derive what they term 'pure' compliance costs (Evans et al., 1996, p. 11). Evans et al. (1996) group these costs into four major categories: own labour costs; costs of external advisers; computing costs and incidental costs. In a subsequent study, the ATAX team categorise tax compliance costs into three major groups: taxpayers' own labour costs, unpaid helper and internal staff costs; costs of external adviser use and incidental or overhead costs (Evans et al., 1997, p. 3).

Tax compliance costs comprise economic and non-economic costs (Pope, 1993a, pp. 1–2). This research study focuses on the economic costs of VAT compliance in Botswana. Economic costs incorporate the monetary and time costs expended in keeping records to the standard required by the tax authorities and filing the tax returns. The economic costs of business taxation as identified by Pope (1993a, p. 6) are displayed in Figure 1.2.

**Figure 1.2: Economic Compliance Costs of Business Taxation**



Source: Pope (1993a, p.6).

Non-economic costs are psychological costs, and refer to the stress, worry and anxiety experienced by taxpayers, particularly the elderly, retired and widowed, arising from complying with the tax requirements or tax investigation (Sandford et al., 1989, p. 18). The literature seems to be divided when it comes to the issue of whether or not to include psychological costs in the estimation of tax compliance costs. Psychological costs 'inclusion proponents' maintain that these costs are important and should be considered in the estimation of tax compliance costs (Sandford et al., 1989, p. 18). However, the research by the ATAX team excludes psychological costs from their definition of tax compliance costs, arguing that these costs cannot be measured reliably (Evans et al., 1997, p. 3). Tran-Nam (2001, p. 55) also affirms that these costs should be 'consistently excluded' in tax compliance costs empirical studies.

Although psychological costs are recognised, they cannot be quantified due to a lack of a dependable methodology of measuring them. To this day, only a few studies (e.g. Diaz & Delgado, 1995; Woellner, Coleman, McKerchar, Walpole & Zelter, 2001, 2005; Colmar Brunton, 2005) have investigated psychological costs of tax compliance. However, none of them have been able to quantify them. Diaz and Delgado used four indicators namely, how taxpayers perceive the time dedicated to tax compliance; what part of this fiscal obligation is most disliked; the state of mind upon finishing the complete process and the conversational time occupied by the topic of filing tax returns (Diaz & Delgado, 1995, p. 220). Colmar Brunton uses a seven-point scale to examine the perceptions of taxpayers towards the stress associated with meeting the Inland Revenue Department (IRD) requirements (Colmar Brunton, 2005, p. 12).

Woellner et al. developed a methodology, "which goes some way to providing a reliable method of measuring psychological tax compliance costs" (Woellner et al., 2005, p. 269). The methodology incorporates the use of a case study, questionnaire and behavioural coding. The behaviour or reactions of taxpayers are investigated by videotaping the participant/s whilst solving a tax problem (Woellner et al., 2005, p. 270). While this methodology provides a significant step towards measuring psychological costs of tax compliance, it is still unreliable. Moreover, the methodology does not provide a reliable way of quantifying psychological costs. In

the context of Botswana, due to the challenges of getting people to participate in surveys and the difficulty of exploring a nebulous area, psychological costs are unfortunately beyond investigation.

### **1.3.2 Commencement, Transition and Recurrent Tax Compliance Costs**

The introduction of a new tax results in one-off costs, commonly referred to as commencement costs. These costs arise due to the procurement of new computer systems and software as well as time and money spent on the training of new bookkeepers and staff to operate the new tax. Sandford et al. (1989, p. 16) emphasise that, since commencement costs are mainly of a capital nature and benefit businesses over a period, they should be spread rather than be considered a cost solely at the time incurred. Temporary or transition costs are additional costs borne by both the tax departments and the taxpayers during the learning phase. Such costs, also referred to as learning curve costs, arise during the transition period, whilst taxpayers are getting used to the new requirements and are developing the best ways of meeting them (Sandford & Hasseldine, 1992, p. 6).

The final category of costs, known as recurrent, regular or on-going costs, is the main focus of this study. They are the costs incurred in running a tax system without the additional temporary elements of a tax change. It must be noted that if governments change the tax system repeatedly, compliance costs will always carry, at any time, some element of temporary costs (Sandford et al., 1989, pp. 16–17). Even when a tax has been running unchanged for a period, so that the compliance costs can all be considered regular costs, taxpayers which enter the tax system for the first time or those that take on their first employees, will be experiencing start-up and temporary costs. Thus, the regular tax compliance costs will always include elements of start-up and temporary costs associated with normal changes in the taxpayer population (Sandford & Hasseldine, 1992, p. 7). As such, it is vital to distinguish between commencement, temporary and regular costs for their proper categorisation. To avoid the possibility of including start-up or temporary costs in the recurrent VAT compliance costs estimates, this study excludes the businesses that have been operating or VAT registered for less than a year.

### **1.3.3 Tax Compliance Benefits**

It is clear that tax compliance costs may not always be disadvantageous. There are some gains that generally accrue to businesses (and reduce tax compliance costs) as a result of compliance with the tax system. These benefits come in the form of tax deductibility benefits, cash flow benefits and/or managerial benefits. Tax deductibility benefits are the gains that accrue to taxpayers whose taxable income is reduced by legitimate tax compliance expenses. Cash flow benefits represent the financial gains that accrue to third parties from withholding the tax collected for a period of time before it becomes payable to the tax authority. Conversely, cash flow costs can arise, especially when businesses have to pay tax revenue to the tax authority before collecting it from the final consumers. Managerial benefits stem essentially from improved record keeping instigated by compliance with the requirements imposed by the tax authority. This study only considers cash flow and managerial benefits, and these are discussed in detail and estimated in Chapter 7 of this thesis.

### **1.3.4 Gross and Net Costs**

In the same way, tax compliance costs can be broken down into gross and net costs (Evans et al., 1997, p. 4). Net costs of tax compliance are made up of the difference between the gross costs and the tax compliance offsets. As mentioned earlier, tax compliance offsets arise due to benefits gained while complying with the requirements of the tax system. Sandford et al. (1989, pp. 13–14) suggest that because of the difficulty of valuing other benefits, net compliance costs are generally compliance costs minus the value of the cash flow benefit. However, two recent major studies successfully estimate the managerial benefits of tax compliance (Rametse, 2006; Lignier, 2008). This study estimates the cash flow benefits as well as managerial benefits to arrive at the net compliance costs of VAT in Botswana.

Largely, the measurement of tax compliance costs remains problematic. Evans et al., (1996, p. 10) highlight the absence of a unanimous precise meaning of tax compliance costs and also the difficulty of measuring such costs. Thus, considerable care has to be taken when estimating tax compliance costs (e.g., Sandford et al.,

1989, p. 9; Sandford & Hasseldine, 1992, p. 5). In this study, extreme caution is exercised to ensure that questions are asked in a manner that minimises the problems associated with the estimation of tax compliance costs.

### **1.3.5 Tax Compliance Costs Research**

The literature traces research on tax compliance costs to the seminal work of Adam Smith (cited in Sandford et al., 1989, pp. 24–25) which accentuates the impact of tax operating costs on the tax system. Smith laid out the four cornerstones of a good tax system namely Equity, Certainty, Convenience and Economy. Of these four canons, the last three establish the significance of tax compliance costs. However, while governments have generally recognised the existence of tax administrative costs and measured them (Evans, 2003, p. 64), tax compliance costs were overlooked for a long time and treated as hidden costs of the tax system (Tran-Nam, Evans, Walpole & Ritchie, 2000, p. 229).

Tran-Nam et al. suggest the possible reasons for the neglect of tax compliance costs. These include the fact that compliance costs may be perceived to be insignificant. The lack of a formal model for tax compliance costs minimisation also contributes to the neglect. Moreover, the estimation of these costs is onerous as it requires the collection of massive data from the taxpayers. Such data is usually not available from published sources (Tran-Nam et al., 2000, p. 230).

The neglect of tax compliance costs has since become a thing of the past in many countries as research on these costs has flourished since the 1980s led by Sandford in the UK. It is argued that the growth in tax compliance costs research has been encouraged by changes in technology which has enabled large scale computer based surveys; the introduction of the VAT in many countries, which resulted in significant compliance costs; the growth of the small business sector and the increasing complexity of the tax system (Tran-Nam et al., 2000, p. 230).

Pope (1993b, pp. 71–73) identifies six phases relating to the development of tax compliance costs in an Australian context. The first stage pertains to the period of lack of interest in the subject, where tax compliance costs are hidden. In the second

phase, the tax compliance costs are recognised by different professional bodies such as tax practitioners and academics. The estimation and evaluation of tax compliance costs follow in the third stage while the fourth phase is the policy recognition phase where the government recognises the economic, social and political importance of tax compliance costs as an issue and act on it publicly. The fifth stage is centred on the development of effective tax compliance costs reduction policy measures. Finally, the sixth phase is one in which the tax compliance costs, as well as tax administrative costs, are monitored on a continual basis. In the context of Botswana, the development of tax compliance costs is currently at phases two and three. Prior to the commencement of this study, the monetary costs of tax compliance in Botswana remained at the first stage.

### **1.3.6 Nature of Tax Compliance Costs**

Sandford et al. (1989, p. xiii) recognise the burden, size and importance of tax compliance costs, and state that they are the equivalent of a large industry and offer considerable scope for resource saving. They assert that the size of compliance costs make them important to every aspect of tax-policy making, hence consideration of such costs should form part of every tax policy-making debate. Furthermore, they highlight the value in the distribution of tax compliance costs and maintain that these costs are frequently inequitable in their incidence and fall with disproportionate severity on small firms (Sandford et al., 1989, pp. 200–201).

The International Finance Corporation (IFC) affirms that “tax compliance costs could be considered an additional tax that companies must pay” (IFC, 2009a, p. 11). In addition, taxation compliance costs hamper the competitiveness of businesses both against imports and on the world market. Small businesses operate at a competitive disadvantage, relative to large businesses, which dissuades investment and the formation of new Small and Medium Enterprises (SMEs) (IFC, 2009b, p. 16; 2010b, p. 7). Moreover, smaller businesses, when faced with significant increases in tax compliance costs, are likely to take steps to remain under the registration threshold, which results in a distortion in the behaviour of businesses (IFC, 2012b, p. 14).

In a review of the linkage between tax compliance and tax compliance costs research, Hasseldine (2001, p. 3) asserts that tax compliance costs are an important element that impacts the levels of voluntary tax compliance. These costs are significant and can, in fact, help to drive small businesses out of specific economic sectors (Sandford et al., 1989, p. 200). Tax compliance costs can actually cause some businesses, particularly small ones that resent them, to evade taxes (Sandford et al., 1989, p. xiii). Equally, tax complexity and high compliance costs can be viewed as a significant part of the problem of tax non-compliance (Hasseldine, 2001, p. 11).

Tax compliance costs are reported to be higher with respect to taxes collected from smaller firms (Bird & Zolt 2008, p. 77). In developed countries, these costs are alleged to be around two to six times higher than the administrative costs incurred by the governments (Evans, 2003, p. 71), while in developing countries, it is claimed that tax compliance costs are about ten times larger than in developed countries (Chattopadhyay & Das Gupta, 2002b). Evidence from developing countries (especially in Africa) is, however, presently thin. The contribution of this study to the African tax literature is, thus, timely.

Evidence based on an overview of tax operating costs undertaken by Evans (2003, p. 72) indicates that tax compliance costs are perceived to be a very significant issue for most business and non-business taxpayers. Small businesses, particularly, are often administratively under-equipped to handle major taxes such as GST (Glover & Tran-Nam, 2005, p. 238), which carry a heavier compliance cost burden. They lack specialist skills, which amplifies the burden of tax upon them. To counter the problem of resource constraints, small businesses often have to outsource special expertise from external advisors (Coolidge, Ilic & Kisunko, 2009, p. 25), which magnifies their compliance cost burden (Hansford, Hasseldine & Howorth, 2003, p. 483). This inequality often makes it hard for small businesses to compete with the larger ones operating in the same market as it conflicts with the aim of establishing a 'level playing field' between all types and sizes of business (Pope, 2001a, p. 1).

To offset the burden of tax compliance on the small business sector, many countries have incorporated 'small business special treatment clauses' in their tax policies. Pope (2008, p. 14) affirms that "...in many countries, small businesses expect and

generally receive special treatment, concessions or arrangements regarding taxation compared with medium and large business”. In Botswana, special treatment comes in the form of high registration thresholds that are aimed at excluding some very small businesses from the tax system and also tax filing periods that are not as frequent as those of large businesses.

## **1.4 MAIN OBJECTIVES**

### **1.4.1 Overview**

Although VAT was introduced over ten years ago in Botswana, its associated compliance costs remained hidden prior to this study. The review of the literature highlights the absence of tax compliance costs studies in Botswana, making this study the first of its kind in Botswana. To this end, the primary objective in this study is to estimate the gross and net compliance costs of VAT in Botswana for the financial years 2009/10 and 2010/11. In addition, the appropriate policy implications for the government of Botswana are drawn based on these estimates. A comparative analysis of the compliance costs of VAT in Botswana for the two years under review is also undertaken. The findings of this study are also compared with international estimates. Lastly, the possible measures that can enhance the simplicity and efficiency of the Botswana VAT system and the appropriate policy implications for the government of Botswana are identified and recommendations are made. The research questions that have been employed in this study to achieve these objectives are displayed in Table 1.1.

**Table 1.1: Research Questions**

Number	Research Questions
1	What is the burden/size of compliance costs of VAT as a share of VAT revenue, total tax revenue and GDP in Botswana for the financial years 2009/10 and 2010/11?
2	How do the compliance costs for the financial years 2009/10 and 2010/11 compare?
3	What is the size of VAT Cash Flow Benefits in Botswana?
4	Are there any managerial benefits derived by businesses as a result of complying with the VAT requirements in Botswana?
5	What are the attitudes of taxpayers towards VAT in Botswana and how do they affect compliance costs?
6	How do the compliance costs of VAT for businesses in Botswana compare with those of selected other countries (where relevant studies have been undertaken)?
7	How can the VAT compliance costs in Botswana be reduced?

### 1.4.2 Research Approach

This research employs the mixed method approach, which incorporates both the quantitative and qualitative designs to estimate the compliance costs of VAT in Botswana. The data collection process followed the internationally accepted and widely used approach of questionnaire surveys and follow-up interviews. The questionnaires for this study were hand delivered or collected from randomly chosen businesses. As a result of the unreliability of the postal system in Botswana, the questionnaires could not be mailed. Anecdotal evidence, confirmed by the University of Botswana (UB), indicates that previous studies that had attempted to use postal questionnaires in Botswana failed. As such, UB, which sponsored the data collection for this study,<sup>7</sup> was not willing to fund mail questionnaires.

Due to the time consuming and physically strenuous nature of the hand delivery/collection technique, the sample size was reduced from 1000 to 600 businesses, and 300 to 100 businesses, for the years 2009/10 and 2010/11, respectively. Thus, the questionnaires were hand distributed to 600 businesses in the City of Gaborone<sup>8</sup> and surrounding towns and villages in the financial year 2009/10. In the financial year 2010/11, 100 questionnaires were distributed to businesses in

<sup>7</sup> The financial support of the University of Botswana in this research is acknowledged with gratitude.

<sup>8</sup> Gaborone is the Capital City of Botswana. Its population in 2011 was 231,592 (CSO, 2011, p. 1).

the City of Gaborone and neighbouring towns. Financial and time constraints necessitated the exclusion of villages from the 2010/11 survey.

### **1.4.3 Response Rates**

The response rate to a postal questionnaire survey in developing countries typically ranges between 20–30 per cent. In developing countries, this rate is usually lower at around ten per cent.<sup>9</sup> Overall response rates of 23 per cent in 2009/10 and 50 per cent in 2010/11 were obtained after allowing for unusable responses. This provided 137 and 50 usable responses for the tax years 2009/10 and 2010/11, respectively, sufficient to yield reliable results. Although such a response rate is lower than the typical 30 per cent usually cited in developed countries, a 23 per cent response rate for the year 2009/10 is considered very good for a developing country.<sup>10</sup> The analysis of data is performed using the Statistical Package for Social Scientists (SPSS).

### **1.4.4 Interpretation**

While the findings in this study provide an indicative picture of the compliance costs of VAT for businesses in Botswana, they have to be interpreted with caution for several reasons. First, it is possible that these findings may include an element of temporary costs (which are expected to diminish over time) resulting from the 2010 BURS VAT amendments, which include an increase in the VAT rate from 10 per cent to 12 per cent. Second, the results are likely to carry the effects of the Global Financial Crisis (GFC) which started in 2008 and has possibly affected compliance costs by hampering the ability of firms to hire internal or external VAT labour.

Third, the sample size in absolute terms is relatively small, at 137 responses for 2009/10 and 50 responses for 2010/11. However, in percentage terms (23 per cent for 2009/10 and 50 per cent for 2010/11) the response is good for an emergent country.

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<sup>9</sup> Refer to Appendix D for an extensive list of studies, in both developed and developing countries, which employed postal questionnaire surveys together with their response rates.

<sup>10</sup> A doctorate study by Abdul-Jabbar (2009) used a mail survey and obtained a response rate of around 16 per cent in Malaysia. Another recent study by Susila and Pope (2012) used a mail survey with a response rate of 8.2 per cent for Indonesia.

The great practical difficulties of undertaking such survey research of taxpayers in a developing country, such as Botswana, are emphasised, even allowing for the considerable fieldwork efforts of the researcher.

Fourth, and unfortunately, the researcher could not get detailed data concerning the number of VAT registered businesses in each size category (small, medium and large) and the amount of VAT remitted by each category because BURS say such data is not available. Moreover, the researcher could not get the data of VAT registered businesses by their main business activity or place from BURS. Due to this caveat, the grossing-up of VAT compliance costs in this study is restricted to the manner in which BURS classifies the value added taxpayers (i.e., by taxpaying groups).

Last, as cash flow benefits are simply a transfer of resources within the economy, they do not affect gross tax compliance costs. Additionally, the estimated value of cash flow benefits depends on the level of interest rates in the country at the time of the study. Managerial benefits are also difficult to estimate. The difficulty arises from the problem of distinguishing between accounting-induced and tax-induced managerial benefits. In addition, the magnitude of managerial benefits depends on how small businesses value managerial information. To this end, extra caution should be exercised when interpreting the estimates of the VAT compliance benefits in this study.

#### **1.4.5 Exchange Rates**

The VAT compliance costs estimates and all Botswana monetary data throughout this thesis are stated in Botswana Pula (P).<sup>11</sup> As a general guide, one unit of the Pula is equivalent to United States of America (USA) Dollar US\$0.118, Canadian Dollar C\$0.121,<sup>12</sup> Australian Dollar A\$0.130,<sup>13</sup> New Zealand Dollar NZ\$0.147,<sup>14</sup> United Kingdom (UK) Pound Sterling £0.077 and European Euro €0.089 on the 30 July

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<sup>11</sup> See n. 2.

<sup>12</sup> The Botswana Pula to Canadian Dollar exchange rate is retrieved from <http://www.xe.com/currencyconverter/convert/?Amount=1&From=BWP&To=CAD>.

<sup>13</sup> The Botswana Pula to Australian Dollar exchange rate is retrieved from <http://www.xe.com/currencyconverter/convert/?Amount=1&From=BWP&To=AUD>.

<sup>14</sup> The Botswana Pula to New Zealand Dollar exchange rate is retrieved from <http://www.xe.com/currencyconverter/convert/?Amount=1&From=BWP&To=NZD>.

2013 (Bank of Botswana, 2013).<sup>15</sup> Exchange rates for other currencies and years are given in footnotes where applicable.

## **1.5 SIGNIFICANCE OF THIS STUDY**

The VAT system in Botswana imposes a variety of responsibilities upon the taxpayers (e.g., collection of tax from the customers; accounting for tax and proper record keeping; VAT return filing; remittance of collected VAT and claim of overpaid tax). The review of the literature indicates the absence of tax compliance costs studies in Botswana. Thus, there is a gap in the literature as far as the compliance costs of VAT (and other taxes) in Botswana are concerned. This study, therefore, offers a contribution to the body of literature in this area.

Being the first comprehensive study of the compliance costs of VAT in Botswana, this research has theoretical and practical significance. In addition, this study will provide information to the government policy makers, tax administrators, tax agents, business representative bodies as well as individual and business taxpayers in Botswana and elsewhere. Furthermore, the estimates presented in this study provide a benchmark for the compliance costs of VAT in Botswana for the financial years 2009/10 and 2010/11.

Moreover, this research will benefit academics, tax professionals and government policy-makers by providing a benchmark for the costs of VAT in Botswana. Also, the estimates and findings in this study can be used for international comparisons, particularly with developing countries that have similar economic structures as Botswana. Last, the compliance cost estimates and key recommendations in this study can be used to draw policy implications regarding the simplification of VAT in Botswana.

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<sup>15</sup> Exchange rates other than those of the Australian dollar and New Zealand dollar can be viewed at [http://www.bankofbotswana.bw/indicators/tabular\\_exchanges/](http://www.bankofbotswana.bw/indicators/tabular_exchanges/) (as at 30 July 2013).

## **1.6 THESIS STRUCTURE**

This study confines itself to the estimation of the gross and net compliance costs of VAT for businesses in Botswana. The thesis is organised into nine chapters namely introduction; design of VAT and overview of Botswana's tax system; review of tax compliance costs literature; estimation issues and research design; survey response results; VAT compliance costs estimates and findings; tax compliance benefits and net compliance costs of VAT in Botswana; taxpayer attitudes towards VAT in Botswana and last, conclusions and policy recommendations.

The thesis begins with the introduction, which provides an overview of the study, in Chapter 1. Chapter 2 discusses the design of VAT and an overview of Botswana's tax system. The discussion of the design of VAT considers certain features of the VAT system, such as the number of VAT rates, exemptions and zero rating of certain goods and services and the level of the registration threshold and their relation to tax compliance costs.

The review of tax compliance costs literature follows in Chapter 3. Since this is the first research study to investigate the compliance costs of VAT in Botswana, the review of the literature leans heavily on international studies. The estimation issues and research methodology are discussed in Chapter 4. The chapter also discusses the issues and the caveats of collecting data from a developing country whose systems do not fully accommodate the research methodologies that are used in the established systems of developed economies. The chapter draws on the experience of the researcher gained during fieldwork.

Chapter 5 presents a discussion of the sample, response rate and the profiles of the respondents. This is followed by an outline of the compliance times of VAT for businesses for the two years under review as well as the average wage rates of the different personnel responsible for VAT work. The analysis of the monetary costs and the distributional effects thereof, of complying with the VAT system in Botswana, follow in Chapter 6. The chapter begins with a discussion of the estimation of tax compliance costs followed by an analysis of the internal and

external VAT compliance costs. Average<sup>16</sup> gross VAT compliance costs followed by the investigation of aggregate VAT compliance costs are also presented. The amounts that the taxpayers would claim from the government as fair compensation for being used as tax collectors are outlined in this chapter.

The benefits of complying with the VAT system in Botswana are investigated in Chapter 7. The chapter presents the estimates of the VAT cash flow and managerial benefits gained by businesses in Botswana during the financial years 2009/10 and 2010/11. The net compliance costs of VAT for businesses in Botswana are also estimated and presented in this chapter.

Chapter 8 presents the results of the surveys of the attitudes of taxpayers towards VAT in Botswana. First, the chapter presents a synopsis of the measurement of taxpayers' attitudes followed by an outline of the attitudes of taxpayers towards VAT in Botswana. The attitudes of the taxpayers relative to the VAT compliance costs as well as the comments and suggestions concerning how the VAT system in Botswana can be improved are analysed. Chapter 9 summarises the thesis and offers key policy recommendations for the government of Botswana.

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<sup>16</sup> The terms 'average' and 'mean' are synonymous. These terms are used interchangeably in this study.

## CHAPTER 2

### DESIGN OF VALUE ADDED TAX AND BOTSWANA'S TAX SYSTEM

#### 2.1 INTRODUCTION

The aim of this chapter is to present a succinct discussion of the design of a VAT generally and an overview of the tax system in Botswana. The design of a VAT is important as it affects the manner of tax compliance as well as taxpayer compliance costs. Certain features of the VAT, such as the number of VAT rates, exemptions and zero rating of certain goods and services, complicate the VAT system. A complex VAT design has higher compliance costs that burden smaller businesses the most. This chapter does not aim to cover all aspects of VAT design as such an investigation is beyond the scope of this study. Readers interested in an in-depth discussion of the design of VAT are referred to other studies, for example Tait, (1988), Cnossen (1991), Ebrill et al., (2001), International Tax Dialogue [ITD], (2005) and Bird and Gendron (2007).

Section 2 provides a brief background of VAT, followed by a short investigation of the design features of VAT in Section 3. An overview of the tax system in Botswana is outlined in Section 4. The importance of the VAT system in Botswana is presented, in the context of the overall tax system, in Section 5. Section 6 summarises this chapter.

#### 2.2 BACKGROUND

Value Added Tax derives its name from the system which requires the tax to be imposed and collected at every 'value adding' stage of the production process. However, VAT is not a tax on value added.<sup>17</sup> It is a broad-based<sup>18</sup> consumption tax

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<sup>17</sup> Theoretically, a VAT is not supposed to tax value added. However, practically, in a system with many exemptions, a VAT can actually tax the value added of businesses that use exempt inputs.

<sup>18</sup> With the presence of various VAT exempt and zero rated goods and services, VAT in many countries is not broad-based. New Zealand's broad-based VAT makes it an exception.

levied on the supply of goods and services consumed in a country. The VAT is the monetary margin imposed over and above the value of the inputs used in the production of a commodity or service before it is sold to the final consumer. This margin is applied at the ultimate retail or supply stage of the good or service by a VAT registered entity that does not trade in VAT exempt and zero rated supplies.<sup>19</sup> The VAT is classified as an indirect tax because the businesses that collect and remit it are not the final consumers.

Prior literature defines a VAT as:

“A broad-based tax levied on commodity sales up to and including, at least, the manufacturing stage, with systematic offsetting of tax charged on commodities purchased as inputs—except perhaps on capital goods—against that due on outputs” (Ebrill et al., 2001, p. 2).

The conception of VAT is traced to a German businessman, von Siemens in the 1920s, whose ideas were developed by Adams in 1921 through the suggestion of an invoice-credit method. Influential contributions to the development of VAT were made in 1953 and 1957 by Maurice Lauré (Ebrill et al., 2001, p. 4). Value Added Tax was first introduced in France in 1954, and came into full enforcement in 1968. It has, over the last five decades, spread<sup>20</sup> into many countries (both developed and developing).<sup>21</sup> The VAT is the predominant form of consumption tax across the globe (Symons, Howlett & Alcantara, 2010, p. 5) being now implemented by over 150 countries worldwide (e.g., Buydens, 2011, p. 11; Lejeune, 2011, p. 257), as shown in Figure 2.1. It is alleged to be the most important single tax in developing and transitional countries (Bird & Grendon, 2007, p. 1) while in the European Union (EU), it is said to be the cornerstone of tax policy and the economic system (Lejeune, 2011, p. 257). In Africa, the proliferation of VAT has been phenomenal, with the majority of the 54 African countries using a VAT of some sort.

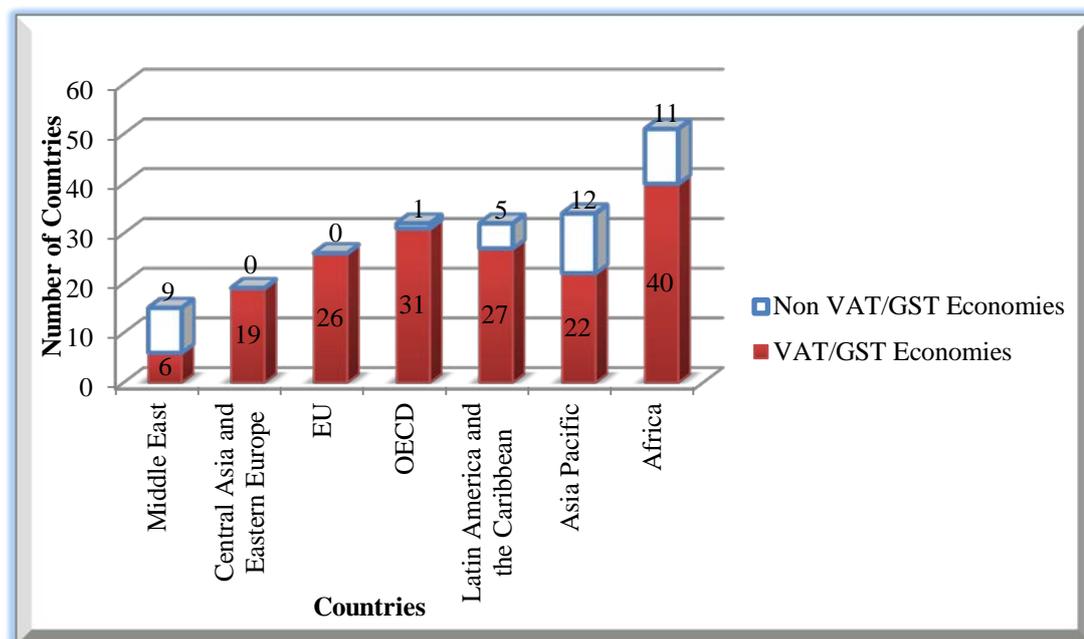
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<sup>19</sup> Value Added Tax exempt goods and services are those that are excluded from the VAT base. Businesses that trade in these goods and services are not eligible for the input VAT refunds. Zero rated goods and services are included in the VAT base and carry a VAT rate of zero. Tax authorities apply the zero rate mainly on exports and basic food products.

<sup>20</sup> The spread of VAT has been influenced by the pressure from international financial organisations such as the International Monetary Fund (IMF).

<sup>21</sup> All Organisation for Economic Co-operation and Development [OECD] countries with the exception of the United States of America (USA) use VAT.

**Figure 2.1: The Number of Countries with/without a Value Added Tax System in 2009**



Source: Symons, Howlett and Alcantara (2010, p. 5).

Martinez-Vasquez and Bird (2010, p. 1) assert that the success of VAT reflects a number of factors. To begin with, VAT has a high revenue raising potential and is relatively simple. In addition, VAT enhances economic efficiency, trade, and growth. Its relatively mild consequences on income distribution and equity may be alleviated with ease. Furthermore, fewer and relatively less complex political economy issues seem to interfere with its introduction and development compared with other potential revenue raising taxes.

In addition, the spread of VAT across most continents signifies its value as a source of revenue in many countries.<sup>22</sup> In the OECD alone, VAT generated 18.6 per cent of total tax revenues in 2007 (Charlet & Owens, 2010, p. 943) and for many countries the VAT yield can be anywhere between less than one per cent and over ten per cent of Gross Domestic Product (GDP) (Ebrill et al., 2001, p. 8). Keen and Lockwood (2007, p. 3) assert that the VAT raises about 20 per cent of the world's tax revenue and also that roughly four billion people are affected by it. Principally, countries that

<sup>22</sup> Ebrill et al. (2001, p. 1) notes that, at the time, many countries had a VAT which raised, on average, 25 per cent of their tax revenue.

have VAT generally have higher government tax revenues than those that do not (Ebrill et al., 2001, p. 8).

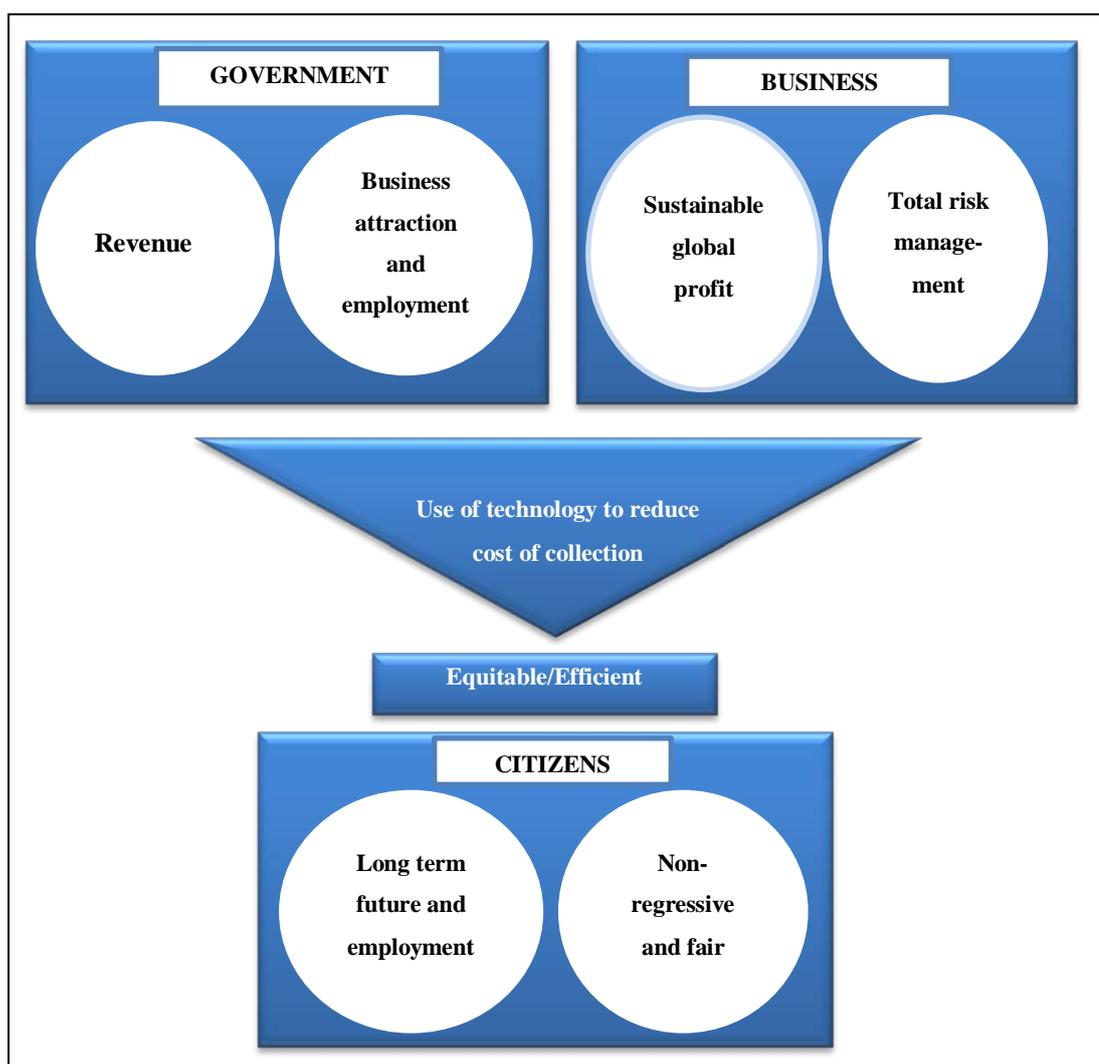
## **2.3 VALUE ADDED TAX DESIGN**

### **2.3.1 Overview**

The design of VAT is important, not only to its success in achieving high compliance and meeting revenue targets, but also to the magnitude of VAT compliance costs incurred by businesses in the process of complying with the VAT system. Good tax design seeks to minimise the real costs to society that are inherent even in the best designed taxes (Bird & Zolt, 2008, p. 76). Krever affirms that “to a very large extent, the potential effectiveness of a VAT depends on the fundamental design of the legislation as well as the way the design is translated into law” (Krever, 2008, p. 9). Complex VAT design leads to significant compliance costs. It also increases the possibility of noncompliance because it gives the taxpayers the incentive to avoid tax by misclassifying goods or services as exempt or zero rated (Government Accountability Office [GAO], 2008, pp. 4–5).

According to Lejeune (2011, p. 264), the design of a best practice VAT requires a balance to be established between the objectives of three stakeholders: the government, businesses and citizens. The government’s principal aim is to increase the revenue necessary to fund public services (essentially: infrastructure, health, welfare security, education), to attract and retain businesses as well as create new jobs and secure existing ones. The objectives of the businesses, on the other hand, are to participate in global competition and maximise profit. Citizens usually seek a non-regressive and non-inflationary tax. This balance is illustrated graphically in Figure 2.2.

**Figure 2.2: Value Added Tax Win-Win Taxation Model**



Source: Lejeune (2011, p. 265).

Key factors, namely VAT rates, zero rating, exemptions, as well as registration threshold, are the cornerstones of VAT design. These factors determine: how much government revenue will be raised from VAT (after considering the administrative costs); the magnitude of compliance costs borne by taxpayers (businesses); and the regressivity of the VAT upon final consumers (citizens). The elements of a conceptually simple VAT, as suggested by GAO (2008, pp. 12–13), are displayed in Table 2.1. Ideally, a conceptually simple VAT would have a single rate, a zero threshold, be inclusive of all goods and services, with the exception of exports (at zero per cent), and use invoices for sales/purchases verification.

**Table 2.1: Elements of a Conceptually Simple VAT System**

<b>Element</b>	<b>Definition</b>
Single tax rate.	One rate applies to the base.
Broad, non-exclusionary tax base.	All goods and services are subject to the VAT, including financial transactions and real estate.
All business, government, and non-profit entities are taxed.	All entities are subject to paying VAT on purchases and required to charge VAT on qualifying sales of goods and services.
Destination principle.	Goods and services are subject to taxation in the jurisdiction in which they are consumed. Therefore, imports are subject to VAT in the importing country, and exports (taxed at zero per cent) are excluded from the domestic tax base.
Credit invoice mechanism.	Tax calculations are based on valid invoices and sales receipts for each transaction by subtracting the taxes paid on all input purchases from taxes collected on all output sales.

Source: GAO (2008, pp. 12–13).

### **2.3.2 Value Added Tax Rate(s)**

The rate, or number of rates, at which VAT is imposed is a significant element in the design of the VAT. Tax administrations generally levy more than one VAT rate (being the standard rate and reduced rate(s)) on goods and services. The most common type of reduced rate is a zero rate, commonly applied on exports, and certain basic goods and services that are usually consumed by the poor and the less well-off.<sup>23</sup> The application of a zero rate on exports ensures that the VAT is borne entirely by the final consumer in the country where consumption takes place, and is not recoverable in a foreign jurisdiction (often referred to as the destination principle of the VAT).

In terms of the goods and services consumed by the ‘poor’, the use of the lower or zero rate(s) is intended to reduce the regressivity of the VAT on such consumers (equity considerations).

<sup>23</sup> In Botswana, zero rated goods and services include: millet grain, millet meal, wheat grain, maize cobs, flour, sugar, maize meal and Setswana beans, in their natural state and not mixed with other products.

It has, however, been argued that the use of lower or zero rates for redistribution purposes is practically limited, because the rich generally spend more in absolute terms on the rate reduced commodities. Thus, the rate decrease benefits the rich more than the poor (ITD, 2005, pp. 14–15). Additionally, where there are other income redistribution instruments, it is less likely that social benefits will be derived from setting more than one rate of VAT (Ebrill et al., 2001, p. 74). Ebrill et al. (2001) maintain that personal income tax provides a more effective way of redistributing income.

Furthermore, having several VAT rates in a country complicates the VAT and increases its complexity (Cnossen, 1991, p. 82) and resultant compliance costs, especially for small traders (e.g., Casanegra de Jantscher, 1986, p. 3; Krever, 2008, p. 19). As the number of rates increases, tax forms become more complicated and compliance costs tend to increase considerably. Moreover, a VAT system with many rates distorts consumer and producer choices. The basic rule in VAT design is to have as few tax rates as will satisfy the preference of politicians (Tait, 1988, p. 42). Similarly, Cnossen (1991, p. 83) suggests that the differentiation of VAT rates should be kept to a minimum. However, others propose that a conceptually simple VAT should have a single rate that applies to all goods and services (e.g., GAO, 2008, p. 12; Bird & Gendron, 2007, p. 108).

Applying a single rate of VAT to all goods and services (with the exception of exports, at a zero rate) generally simplifies compliance (Ebrill et al., 2001, p. 78). The reason a single rate reduces the burden compliance is because: it makes record keeping easier by eliminating the need to separate goods and services into different categories. Also, a single rate removes the incentive to intentionally misclassify items (Ebrill et al., 2001, pp. 78–79).

With regard to the magnitude of the VAT rate, a high rate is seen to be more effective than a low one. Tait (1988, p. 39) maintains that levying a VAT at a low rate below 10 per cent might be considered a poor allocation of resources. In terms of increasing the VAT rate, as is common with many countries,<sup>24</sup> Buydens (2011, p. 15)

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<sup>24</sup> Botswana increased the VAT rate from 10 per cent to 12 per cent on the 1<sup>st</sup> April 2010. Many other countries, for example, South Africa, Ghana and Singapore, have increased their VAT rates. In the OECD, 12 countries

advises that countries should consider the efficiency of rate increases compared with broadening the VAT base and decreasing the number of reduced rates. He suggests that reducing the number of exemptions to broaden the VAT base would enhance the efficiency and neutrality of the tax. Basically, this offers an effective alternative to increasing VAT rates.

### 2.3.3 Exemptions

Value Added Tax exemptions<sup>25</sup> refer to the complete exclusion of certain goods and/or services from the tax base. Exemptions contradict the principle of neutrality which requires VAT to be a broad-based tax (Buydens, 2011, p. 15), and lead to breaks in the VAT chain (Ebrill et al., 2001, p. 85) by denying the businesses that trade in exempt supplies to claim the input VAT. Other problems of exemptions include tax revenue effects, distortion of input choices, an incentive to self-supply, disruption of the destination principle, an incentive to import VAT exempt inputs, strenuous record keeping for partially exempt traders, and exemption creep (Ebrill et al., 2001, pp. 83–90).<sup>26</sup>

Value Added Tax exemptions also result in the imposition of tax-on-tax (cascading) and introduces inequities in the VAT system which distorts production decisions (e.g., Tait, 1988, p. 50; ITD, 2005, p. 8). In addition, the exclusion of some goods and services from the tax base distorts consumer choices and reduces the tax revenue (Cnossen, 1991, p. 78). Tait (1988, p. 50) asserts that the more exempt goods and traders there are, the greater the possibility that value added is unintentionally taxed at different rates. Moreover, increased exemptions could possibly entice other traders to claim exemption for themselves and thereby erode the tax base. Accordingly, theoretically and practically, exemptions should be kept to a minimum (Tait, 1988, p. 50) and limited to basic health, education and financial services (e.g., Cnossen, 1991, p. 83; ITD, 2005, p. 15).

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(Chile, Germany, Greece, Iceland, Mexico, Netherlands, New Zealand, Norway, Portugal, Slovenia, Switzerland and Turkey) have increased their VAT rate since 2000 (Buydens, 2011, pp. 72-74).

<sup>25</sup> Value Added Tax exemptions often include basic education services, basic health service, financial services, real estate and construction (Ebrill et al., 2001, pp. 91–99). The different VAT exemptions by OECD countries are outlined in the recent OECD study of consumption tax trends (Buydens, 2012, pp. 86–88). In Botswana, the VAT exempt goods and services include accommodation, education services, health services provided by a public medical facility, financial services and supply of domestic passenger transportation.

<sup>26</sup> Exemption creep is a situation whereby exemption creates direct pressure for further exemptions (Ebrill et al., 2001, p. 89).

### 2.3.4 Value Added Tax Registration Threshold

The choice of the registration threshold is very important in the design and implementation of VAT (e.g., Ebrill et al., 2001, p. 113; Keen & Mintz, 2004, p. 559; ITD, 2005, p. 16). Value Added Tax registration thresholds differ from one country to another across the globe. For example, the VAT registration threshold in Australia, New Zealand and South Africa is set at AU\$75,000, NZ\$60,000 and ZAR1 million (US\$100,363),<sup>27</sup> respectively. A low registration threshold requires smaller businesses to adhere to the stringent requirements of the VAT (for example, proper record keeping, VAT collection and remittance, and timely filing of VAT returns). This imposes a disproportionate compliance burden upon the smaller traders.

On the contrary, a high registration threshold results in differential treatment of businesses, which in turn leads to distortions in competition in favour of small businesses below the registration threshold. Such distortions, implied by additional costs in the form of the tax liability and compliance costs, affect the VAT registered businesses (Ebrill et al., 2001, p. 120). Indeed the choice of an optimal VAT registration threshold is a very contentious issue (Keen & Mintz, 2004, pp. 559–560).

Essentially, some sort of balance is required when deciding on the level of the registration threshold. Shome (2004, pp. 3–4) maintains that small businesses should be taxed for two reasons. To begin with, the contribution to the tax by small businesses, when combined with the medium-sized taxpayers, can be large at over a quarter of total revenue. Second, there is likely to be a strong effect upon the economic growth emanating from ignoring a large amount of potential tax revenue from particular sectors.

In contrast, Keen and Mintz (2004, p. 562) assert that the revenue that is lost by raising the registration threshold and dropping many small businesses from the tax base, can be traded-off against the compliance costs saved by the taxpayers. Similarly, the ITD (2007, p. 23) affirms that balancing the government's need for revenue against tax compliance costs suggests that it will generally be optimal to

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<sup>27</sup> The South African currency is converted to the United States (US) Dollar by 0.100. See <http://www.xe.com/currencyconverter/convert/?Amount=1000000&From=ZAR&To=USD>.

levy the tax only on taxpayers above some critical size, and entirely exclude all those below it from the tax. With regard to most developing and transitional countries, it is likely wiser to set the registration threshold too high than too low (Bird & Gendron, 2007, p. 3).

### **2.3.5 Value Added Tax Design and Tax Compliance Costs**

As mentioned earlier, the VAT system can be either simple or complex depending on the number of VAT rates, the presence and number of zero rated and exempt goods and services as well as the level of the registration threshold (whether it is relatively high or low). Other factors that affect the nature of the VAT system are the frequency of VAT filings and the system used in VAT filing (whether submitted online or in person).

Many governments often incorporate small business ‘special treatment clauses’ or concessions in their tax policies in an attempt to mitigate the burden of tax compliance which often falls disproportionately upon this sector. In fact, in many countries, small businesses expect, and generally receive, special tax treatment or tax concessions (Pope, 2008, p. 14). However, concessions in the form of lower VAT rates or exemptions lead to considerably higher compliance costs because businesses have to separate their stock at the checkout counter according to the tax treatment. Large businesses can automate this process and amortise the initial setup costs over high volumes of sales. Small businesses, on the other hand, rarely have automated checkout systems. They are, therefore, forced to amortise the costs of compliance over a much smaller sales volume. Thus, the burden of differentiating fully and lower taxed products falls inequitably on small firms (Krever, 2008, p. 19).

Pope (1993b, p. 81) asserts that recurrent tax compliance costs are minimised under a simple tax which incorporates a single rate, a high threshold and a minimum of special exemptions, reliefs and provisions. Tax payment arrangements such as less frequent returns and simplified methods of calculating the GST liability may be made in favour of small businesses to alleviate their burden of GST compliance (Pope, 2001a, p. 16).

The GAO (2008, pp. 12–14) asserts that VAT design choices include whether to exempt certain goods or services from the tax. It maintains that design choices with such concessions lead to decreased tax revenue and increased compliance risks. These compliance risks<sup>28</sup> are delineated in Table 2.2. They appear in the form of missing trader fraud, failed businesses, underreporting cash transactions, import fraud, fraudulent refunds, misclassifying purchases, fictitious or altered invoices, and export fraud.

**Table 2.2: Major Types of Compliance Risks in a Conceptually Simple Value Added Tax System**

<b>Under-collection of taxes due on sales</b>	
Missing trader fraud	A business is created for purposes of collecting VAT on sales and disappears without remitting VAT to the government.
Failed businesses	A business fails or goes bankrupt before remitting VAT collected to the government.
Under reporting cash transactions	A business either charges a lower, VAT-free price for cash transactions or underreports cash sales and retains VAT collected.
Import fraud	A business or individual imports items for personal consumption and undervalues them for VAT purposes.
<b>Over-claiming of tax paid on inputs</b>	
Fraudulent refunds	A business or fraudster submits false returns requesting VAT refunds from the government.
Misclassifying purchases	A business falsely claims input tax credits by misclassifying personal consumption expenses as business expenses.
Fictitious or altered invoices	A business creates or alters invoices to inflate the amount of input tax credits they can claim.
Export fraud	A business creates fraudulent export invoices for goods that are not exported to claim input tax credits.

Source: GAO (2008, pp. 13–14).

## **2.4 OVERVIEW OF BOTSWANA’S TAX SYSTEM**

### **2.4.1 Overview**

The tax system in Botswana is regarded as robust and non-distortionary (African Development Bank Group [ADB], 2012, p. 6) and taxation constitutes a significant

<sup>28</sup> An in-depth discussion of the VAT compliance risks is not attempted here as it is beyond the scope of this research study.

portion of total government revenue. The main contributors to the tax system in Botswana are the income tax, VAT, and the customs and excise duties. In terms of the taxation climate, Botswana's tax system is prudent and may be commended for the country's increased private sector investments. In addition, the tax environment in Botswana is favourable compared with other countries. When compared with the average tax on profit for Sub-Saharan Africa (SSA) and the (OECD) at 68 per cent and 43 per cent, respectively, Botswana ranks lower at 19.5 per cent (ADBG, 2012, p. 9). The IFC (2012a, p. 66), reported that, globally, Botswana stood at 22 in the ranking of 183 economies on the ease of paying taxes for the year 2011.

Taxes in Botswana are administered by the BURS which is charged with the responsibility of assessing and collecting all taxes on behalf of the government (BURS, 2006, p. 6). The BURS was founded in August 2004, in accordance with '*Botswana Unified Revenue Service Act No 17*', to facilitate better and more effective administration of revenue laws and to increase the collection of the revenue due to the government. This venture has been supported by the EU and the United States Department of Treasury (USDT) that generously provided technical and financial assistance. The EU provided funding for a full time resident technical advisor to support the tax administration reform project (in areas such as human resources, budgets and financial procedures, information technology requirements and communication). The USDT provided technical assistance to deal primarily with improving BURS's competence in income tax and VAT administration (BURS, 2006, pp. 6–9).

Prior to the establishment of BURS, the revenue laws in Botswana were administered by the Department of Taxes as well as the Customs and Excise Division under which VAT was operated. The Internal Revenue Division, within BURS, is responsible for the administration of VAT and Income Tax. While BURS has the power to administer taxes, it does not have the authority to interpret tax laws or to issue binding or non-binding public and private ruling on how tax laws will be interpreted (ITD, 2010, p. 16).<sup>29</sup> This may hinder the effectiveness of the tax system in Botswana and hamper voluntary compliance.

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<sup>29</sup> The study by the ITD examined revenue administration in Sub-Saharan Africa and revealed that all surveyed revenue bodies, except Botswana, indicated that they have powers to make tax rulings. Most revenue bodies,

## 2.4.2 Tax Revenue Collections

The total tax collections made by BURS from the year 2005/06 to 2010/11 are displayed in Table 1.2. The biggest contributor to the Botswana government's tax revenue is Income tax, followed by Customs Union Receipts (CUR) and lastly, VAT. Tax revenue data shows that from the financial year 2005/06 to the year 2010/11, the tax revenue doubled. The largest increase over the years came from income taxes.

**Table 2.3: Botswana Tax Revenue Collection by Tax Type (P Million)<sup>a</sup>**

Type of Tax	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
VAT	1,988 (17)	2,221 (14)	2,899 (16)	3,544 (19)	3,845 (19)	4,648 (23)
Income Tax	5,898 (50)	6,875 (44)	7,221 (40)	7,900 (41)	8,229 (41)	9,208 (46)
CUR	3,936 (33)	6,693 (42)	7,839 (44)	7,753 (40)	7,933 (40)	6,207 (31)
<b>Overall<sup>b</sup></b>	<b>11,822</b>	<b>15,814</b>	<b>17,959</b>	<b>19,197</b>	<b>20,007</b>	<b>20,065</b>

a Percentages are in parentheses.

b Totals may not agree due to rounding.

Sources: Derived from Botswana Unified Revenue Service (2006; 2007; 2008; 2009; 2010; 2011).

The contributions of the tax revenue towards the Gross Domestic Product (GDP) and government revenue are displayed in Figure 1.1. The years since 2004/05 have seen a fluctuation in the proportion of total tax revenue collections to GDP. The lowest proportion of 20 percent was recorded in 2004/05 while the highest of 23 percent was recorded in 2006/07. The low tax revenue collected as a proportion of GDP in 2004 was due to the fact that BURS, having been established that same year, was still in its infancy. The proportion declined by one per cent in the years 2007/08 and 2008/09 but was able to improve in the year 2009/10 despite the effects of the Global Financial Crisis (GFC). Botswana Unified Revenue Service suggests that this proportion could be increased by the reduction of the tax gap.<sup>30</sup>

The figures, ranging from 53 per cent to 75 per cent, indicate a gradual increase in the reliance of the government of Botswana on tax revenue. Additionally, the tax contribution of around one fifth of GDP highlights the significance of tax revenue to

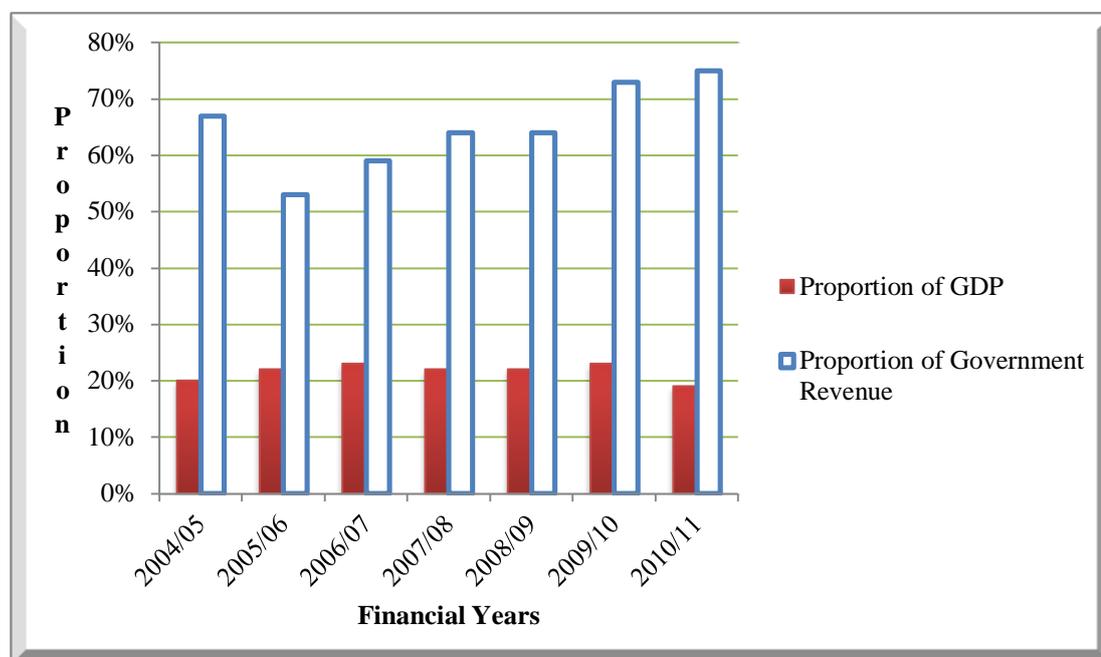
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Botswana included, have powers to remit administrative penalties, establish internal structures, allocate the budget, hire and fire staff and set performance standards. Extensive utilization of these available powers, including the issuance of timely tax rulings and implementation of key institutional reforms, will greatly enhance the effectiveness and transparency of the tax system. This will improve taxpayers' perceptions of the tax system and promote voluntary compliance (ITD, 2010, p. 16).

<sup>30</sup> The tax gap is the discrepancy between the revenue that is actually collected from registered taxpayers and importers and that which ought to be amassed based on the performance of the economy.

the economy as a whole and emphasises the importance of efficient tax administration in Botswana.

**Figure 2.3: Tax Revenue as a Proportion of Gross Domestic Product and Government Revenue**



Sources: Derived from Botswana Unified Revenue Service (2006, p. 12; 2009, p. 15; 2011, p. 15).

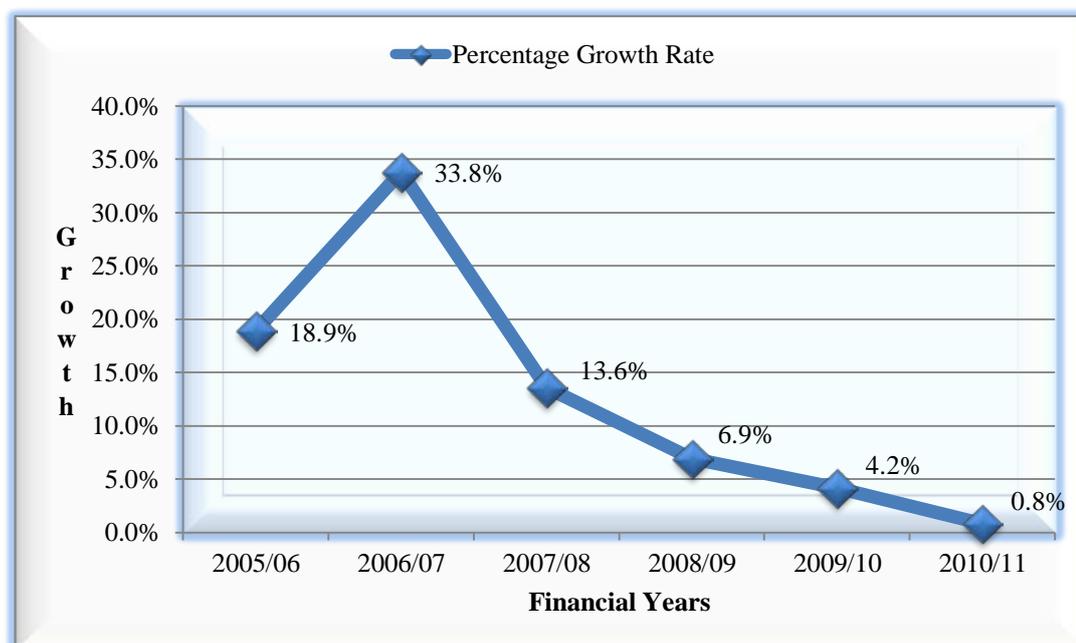
### 2.4.3 Tax Revenue Growth

Botswana Unified Revenue Service faces an array of challenges which include, (but are not limited to), inadequate financial and skilled human resources; global changes and the changing diversity of its taxpayer base; the maintenance of border post facilities across the country and provision of accurate and reliable revenue forecasts by effective estimation of the tax gap and the development of a tax revenue estimation model (BURS, 2010, p. 11). These problems hinder the efficient collection of tax revenue and possibly lead to declining tax revenue growth.

A trend of declining growth in tax revenue collections is illustrated in Figure 1.2. Even though the tax revenue collections have grown considerably over the years, as outlined in Table 1.2, the growth has been at a decreasing rate since 2006/07. The collections grew at 33.8 percent during 2006/07 and slowed down to 4.2 percent in 2009/10. The BURS (2010, p. 15) notes that "...if no new and effective strategies are

introduced to collect more revenues or reduce the tax gap, BURS might continue to register lower growth rates in the near future and subsequently possibly register declines in tax revenue collections”. The BURS registered a low tax revenue growth rate of 0.8 per cent in the year 2010/2011, despite having increased the VAT rate by two per cent in the same year. This is partially explained by a drop of around 22 per cent in the CUR and a decrease in mineral production (BURS, 2011, p. 15).

**Figure 2.4: Total Tax Revenue Percentage Growth Rate**



Source: Botswana Unified Revenue Service (2011, p. 15).

## 2.5 VALUE ADDED TAX IN BOTSWANA

### 2.5.1 Overview

Value Added Tax in Botswana was introduced in July 2002 in line with the *VAT Act No 50:03* (Botswana Customs and Excise, 2001, p. 3). A single-rate VAT of 10 per cent was introduced to replace a 10 percent sales tax.<sup>31</sup> The switch from sales tax to VAT was built on the need to eliminate the problem of double taxation which often occurred with sales tax. In addition, the government of Botswana introduced VAT because it is a fairer system, since the built-in input credit facility ensures that VAT

<sup>31</sup> Sales tax is a consumption tax levied on the turnover of the business. It is a cascade tax because products are taxed multiple times from the manufacturer to the retailer.

itself does not become a business expense<sup>32</sup> (Botswana Customs and Excise, 2001, p. 3). Based on the 2009 recommendations made by the IMF (to strengthen tax administration and to increase the VAT rate and fuel levy to rates of nearby countries), BURS increased the VAT rate to 12 per cent with effect from 1 April 2010 (IMF, 2010, p. 18). The increase is expected to enhance the VAT revenue and possibly reduce Botswana's dependence on mining revenue in the longer term.

### **2.5.2 Value Added Tax Registration**

In Botswana, VAT registration is compulsory for any business that makes taxable supplies of P500,000 (US\$61,500)<sup>33</sup> or more per annum, or expects that this limit will be exceeded during the following 12 months. The VAT registration threshold was P250,000 (US\$ 31,000)<sup>34</sup> prior to 1 April 2010. Compulsory registration is not required if the business can clearly demonstrate that the value of the taxable supplies exceeded P500,000 due to the termination, or significant and permanent reduction in the size or scale, of a taxable activity carried on by the person; or the replacement of capital goods (Price Waterhouse Coopers [PWC], 2011, p. 2). Voluntary registration is open to businesses with a taxable income below P500,000 and this is done at the discretion of the Commissioner General of BURS. The *VAT Act No. 50:03* states that while a business can register voluntarily, the option to de-register can only be exercised two years after the date of registration. Failure to apply for registration when required is an offence that attracts high penalties. The penalties include fines, interest penalty for late payments and imprisonment (Botswana Customs and Excise, 2001, p. 36).

Registered enterprises are entitled to a credit of the VAT paid on business inputs,<sup>35</sup> whether imported or locally produced. Thus, an enterprise which applies VAT to a sale, will collect VAT as an 'output tax'. However, against this, the enterprise will be

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<sup>32</sup> This principle of the VAT only holds in theory. In practice, however, once exemptions are introduced, the VAT becomes a business expense.

<sup>33</sup> The exchange rate of Botswana Pula to American Dollar as at 09/04/2013 is 0.123. XE Currency Converter (2013), see also <http://www.xe.com/currencyconverter/convert/?Amount=500000&From=BWP&To=USD> (as at 09 April 2013).

<sup>34</sup> See n. 33.

<sup>35</sup> This only applies to goods and services that are not VAT exempt.

eligible to offset the VAT paid as an ‘input tax’ on its business inputs.<sup>36</sup> Any excess of output tax charged over input tax paid is payable to the BURS office. Conversely, if the input tax paid exceeds the output tax charged, the difference may be claimed as a refund of overpaid VAT.

The BURS classifies the VAT registered businesses into three groups namely A, B and C. Groups A and B<sup>37</sup> comprise businesses with a turnover below P12 million whereas Group C<sup>38</sup> encompasses businesses that have an annual turnover exceeding P12 million. These groups are also distinguished by the manner in which they file the VAT returns. Group C firms file VAT returns monthly while groups A and B file VAT returns bimonthly on alternate months. Table 2.4 shows the number of VAT registered businesses in each of the BURS classification groups. This study follows BURS’s taxpayer classification to estimate aggregate VAT compliance costs.

**Table 2.4: Value Added Tax Registered Businesses by Botswana Unified Revenue Service Classification**

		2009/10		2010/11	
Groups <sup>a</sup>	Annual Turnover	N	Percentage	N	Percentage
<b>A</b>	Less than P12 million	7,831	49	11,582	48
<b>B</b>	Less than P12 million	7,894	50	11,705	49
<b>C</b>	P12 million and over	215	1	644	3
<b>Overall</b>		<b>15,940</b>	<b>100</b>	<b>23,931</b>	<b>100</b>

<sup>a</sup> There is no difference between groups A and B. These businesses are the same with regard to size. Botswana Unified Revenue Service has segregated these businesses into two groups (filing on alternate months) mainly to ease congestion at the VAT office during the filing period.

Source: The data was obtained by personal enquiry of the researcher to BURS management in 2010 and 2011.

### 2.5.3 Value Added Tax Filing

Large businesses, with a turnover of P12 million (US\$1.5 million)<sup>39</sup> and above, are required to file VAT returns every month<sup>40</sup> while enterprises with a turnover below

<sup>36</sup> Output tax is the tax a company collects from its sales and is payable to the revenue authorities whereas input tax is the tax a company pays on goods and services related to its taxable activity.

<sup>37</sup> The VAT registered businesses with turnovers below P12 million have been classified into two groups (A and B), and file VAT returns bi-monthly on alternate months. This was done mainly to reduce congestion at the VAT office during the VAT returns filing period.

<sup>38</sup> Group C is the Large Taxpayer Unit.

<sup>39</sup> See n. 33.

<sup>40</sup> The BURS recently set up a Large Taxpayer Unit (LTU) to administer the tax affairs of large enterprises that contribute the largest portion of tax revenue.

P12 million have to file every two months (Botswana Customs and Excise, 2001, p. 26). As Botswana is a developing country, taxpayers have to file VAT returns in person at the BURS office. Such a system is likely to increase VAT compliance costs, particularly through increased travel and queuing time, in comparison to advanced countries that have online systems in place.<sup>41</sup> Thus the frequency and manner of VAT filing in Botswana pose a question of the complexity of the country's VAT system and the burden of VAT upon businesses, especially small ones.

#### **2.5.4 Taxable Goods and Services**

The Botswana *VAT Act No. 50:03* defines a taxable activity as one that is carried out regularly as a whole or partially in Botswana (whether or not for financial profit), involving the full or fractional supply of goods or services (other than an exempt supply) to another person for a consideration (Botswana Customs and Excise, 2001, p. 10). Quoted or advertised prices must always be VAT-inclusive. Any price charged by a registered person in respect of a taxable supply is deemed to include the VAT charged on the supply, whether or not the VAT has been included in the price. Output tax is calculated by applying the tax fraction (12/112) to the VAT inclusive price charged (PWC, 2011, p. 4).

The Botswana VAT system allows for certain goods and services to be exempt while others are zero-rated (Botswana Customs and Excise, 2001, p. 41).<sup>42</sup> Value Added Tax exempt goods and services consist primarily of financial, medical, accommodation in a dwelling and educational activities. Zero rated goods and services comprise basic foodstuffs<sup>43</sup> in their natural state, and not mixed with other

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<sup>41</sup> Recently, Botswana established a taxpayer service portal that allows the taxpayers to view their tax information online. While this service is beneficial in terms of reducing travelling to or telephoning BURS to request statements or make enquiries relating to one's tax information, it does not solve the problem of travelling to and queuing at BURS offices during VAT filing periods.

<sup>42</sup> Exempt supplies, such as education services and public medical facilities, are not subject to VAT. They are not counted as part of a business's taxable turnover. Zero rated supplies are those that attract VAT at the rate of zero per cent, such as exports and basic food products. Sections 10 and 11 of the first schedule of the Botswana Value Added Tax Act provide a comprehensive list of exempt and zero rated supplies.

<sup>43</sup> These include foods that are consumed mainly by the poor such as millet grain, wheat grain, maize cobs, flour, sugar, maize meal and millet meal.

products, exports, international transport services and paraffin.<sup>44</sup> The VAT system in Botswana relies heavily on self-assessment and uses invoices for verification of VAT amounts due/payable and amounts claimed as input tax. As such, VAT registered enterprises are required to issue a tax invoice for every taxable supply made to a VAT registered person. The administration of VAT takes the form of desk verification, desk auditing, field inspections, random spot-checking and field auditing with varying levels of intensity.

### 2.5.5 Value Added Tax Revenue

The VAT revenue by source is displayed in Table 2.5. The largest portion of the VAT revenue in all financial years since 2008 emanated from imports, followed by the sale of goods and services produced within the country. The increase of net VAT receipts by around 20 per cent in 2010/11 as opposed to about 10 per cent in 2009/10 is probably because of the two per cent increase in the VAT rate in 2010 and the recovery of business from the GFC.

**Table 2.5: Value Added Tax Revenue by Source (P Million), 2009–2011**

	2008/09	2009/10	2010/11
VAT imports	2,585	2,632	3,459
VAT internal	1,967	2,177	2,705
VAT interests and penalties	38	32	39
Fuel levy	133	150	150
Gross receipts	4,723	4,992	6,354
Less refunds	1,179	1,147	1,705
<b>Net VAT receipts</b>	<b>3,544</b>	<b>3,845</b>	<b>4,648</b>

Source: Botswana Unified Revenue Service (2009; 2010; and 2011).

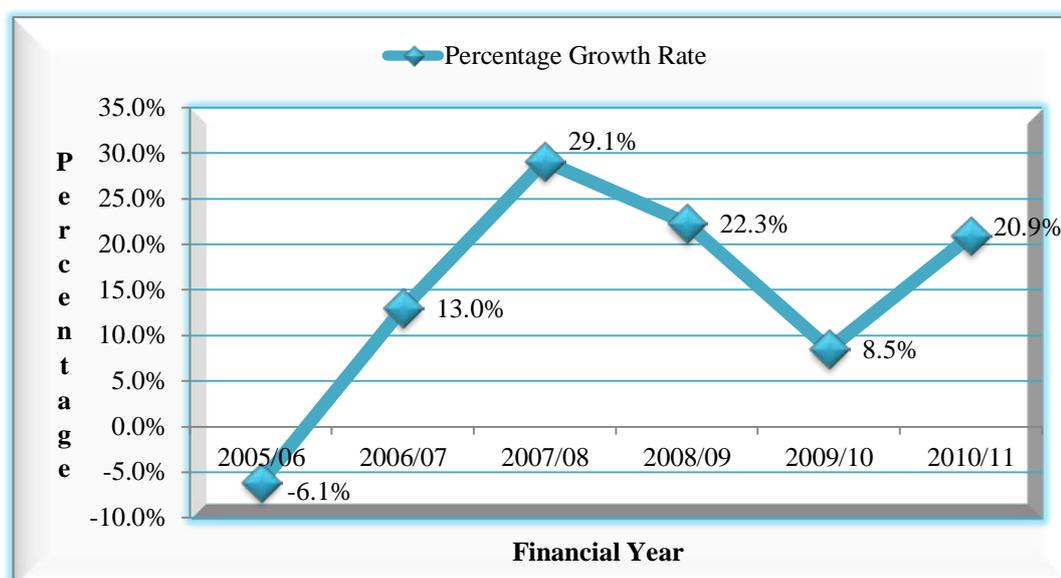
### 2.5.6 Value Added Tax Revenue Growth Rate

The percentage growth rates of the VAT for the financial years 2005/06 to 2010/11 are displayed in Figure 2.5. The growth rates exhibit a fluctuating pattern. Interestingly, the VAT revenue declined in the financial year 2005/06. Botswana

<sup>44</sup> This list is by no means exhaustive. Readers interested in a complete list of zero rated goods and services are referred to Botswana's *VAT Act No 50:03* available from [http://www.burs.org.bw/phocadownload/Revenue\\_laws/CAP%2050-03%20Value%20Added%20Tax%20Act.pdf](http://www.burs.org.bw/phocadownload/Revenue_laws/CAP%2050-03%20Value%20Added%20Tax%20Act.pdf)

Unified Revenue Service (2006, p. 17) note that the fall in the VAT revenue collected in 2005/06 was due to the reduction in the value of imports. The fuel levy also decreased because the 2004/05 amount included the collections for the previous years (BURS, 2006, p. 17). The effects of the GFC are clearly indicated in the low VAT growth rate for the financial year 2009/10. The growth rate improved in 2010/11, possibly due to the combined effects of the two per cent increase in the VAT rate in 2010 and the recovery of the global economy.

**Figure 2.5: Value Added Tax Revenue Growth Rate**



Source: Botswana Unified Revenue Service (2006; 2007; 2008; 2009; 2010; and 2011).

## 2.5.7 Major Value Added Tax Issues in Botswana

### 2.5.7a Non-Compliance

Tax return filing and payment of tax due by the taxpayers in Botswana continues to be problematic (BURS, 2006, p. 8). During the financial year 2009/10, BURS dispatched 120,919 VAT returns and out of these, only 97,333 were filed by the businesses, representing a filing rate of 81 percent and non-compliance rate of 19 percent. The VAT arrears at the end of the 2009/10 financial year were P420 million, around 11 per cent of the net VAT revenue (BURS, 2010, p. 23). Strategies aimed at reducing the tax gap rank among the major challenges faced by BURS.

Non-compliance through non-filing, however, may not always equate to tax evasion. Some of the reasons for non-compliance that have been identified by BURS are: change in address by taxpayers without notifying the tax authorities; closure of businesses; and change of employment (BURS 2006, p. 20). This calls for a continuous process of taxpayer database revision by BURS in order to eliminate non-compliance that is not rooted in tax evasion. Suffice it to say that adopting this approach may enhance the efficiency of the VAT system in Botswana by ensuring that the auditing and investigation resources are focused primarily on tax evasion and not on chasing businesses that no longer exist.

Businesses that evade tax by failing to register (choosing to operate informally), not filing tax returns or under-reporting their income, inflate the tax gap in Botswana. Businesses in Botswana also fail to comply by engaging in fraudulent practices. Fraud in Botswana includes smuggling, non-declaration and under valuation of imported goods. These unlawful activities continue to pose a serious challenge to BURS. They deny the government of much needed revenue for development in the form of unpaid Customs Duties and the VAT (BURS 2009, p. 32). Surveys by the World Bank have found tax compliance to be poor in Botswana despite the country's low tax rates (World Bank, 2007, p. 4). A subsequent study also found that, despite having a favourable tax climate, non-compliance is a challenge in Botswana relative to other middle income countries (World Bank, 2008, p. 3).

#### ***2.5.7b Queuing***

The tax administration in Botswana is still developing and currently lacks sophisticated systems of VAT filing that are commonly used in developed nations such as Australia and New Zealand. In particular, Botswana is deficient of an online VAT filing system. As such, businesses are forced to queue for long hours at the BURS offices to file their VAT returns. Suffice it to say that a situation like this makes VAT compliance very cumbersome for businesses.

## 2.6 CHAPTER SUMMARY

This chapter has provided a succinct overview of the design of VAT as well as an overview of the significance of tax revenue to the economy of Botswana. The design of VAT is important not only to its success in achieving high compliance and meeting revenue targets, but also to the magnitude of VAT compliance costs incurred by businesses in the process of complying with the VAT system. Certain features of the VAT, such as the number of VAT rates, exemptions and zero rating of certain goods and services, complicate the VAT system. A complex VAT design has higher compliance costs that burden smaller businesses the most.

Essentially, recurrent tax compliance costs are minimised under a simple tax which incorporates a single rate, a high threshold and a minimum of special exemptions, reliefs and provisions. Tax payment arrangements such as less frequent returns and simplified methods of calculating the GST liability may be made in favour of small businesses to alleviate their burden of GST compliance (Pope, 2001a, p. 16).

This chapter has also discussed the significance of taxation to the economy of Botswana. The tax revenue as a proportion of government revenue increased from 53 per cent in 2005/06 to 75 per cent in 2010/11. These figures indicate a gradual increase in the reliance of the government of Botswana upon tax revenue. Additionally, the tax contribution of around one fifth of GDP highlights the significance of tax revenue to the economy as a whole and emphasises the importance of efficient tax administration in Botswana.

The VAT was introduced in Botswana with effect from July 2002 in line with the *VAT Act No 50:03*. The VAT was introduced at a rate of 10 per cent, which subsequently increased to 12 per cent on 1 April 2010. Registration for VAT in Botswana is mandatory for all businesses that make taxable supplies of P500,000 (US\$61,500) or more per annum, or expect that this limit will be exceeded during the following 12 months. However, voluntary registration is open to businesses with a taxable income below P500,000. The registration threshold increased from P250,000 (US\$ 31,000) on 1 April 2010. Large businesses, with a turnover of P12 million

(US\$1.5 million) and above, are required to file VAT returns every month while enterprises with a turnover below P12 million have to file every two months.

It is worth noting that, as a developing country, taxpayers in Botswana have to file VAT returns in person at the BURS office. Moreover, the Botswana VAT allows for certain goods and services to be exempt while others are zero-rated. Such a system is likely to increase VAT compliance costs particularly through cumbersome record keeping, increased travel and queuing time, especially in comparison to advanced countries that have online systems in place.

## **CHAPTER 3**

### **REVIEW OF TAX COMPLIANCE COSTS LITERATURE**

#### **3.1 INTRODUCTION**

This chapter reviews the studies of tax compliance costs that have been carried out in developed and developing economies in order to provide a framework for this study. As the main focus of this study is on VAT, this review focuses mainly on studies that have estimated the compliance costs of VAT/GST. The studies that are based on other taxes are examined succinctly, where appropriate. To the best knowledge of the researcher, there is no study in Botswana that has estimated the monetary compliance costs of VAT, or any other tax. Thus this review focuses mostly on international studies.

Section 2 provides a brief overview of tax compliance costs research while Section 3 provides a succinct review of business compliance costs studies of taxes other than VAT/GST. Value Added Tax compliance costs studies are reviewed in Section 4. The studies that investigated the benefits of VAT compliance are reviewed in Section 5. Section 6 reviews the taxpayer attitudes studies while Section 7 summarises the chapter.

#### **3.2 OVERVIEW OF TAX COMPLIANCE COSTS STUDIES**

Studies of tax compliance costs have now been carried out in different countries worldwide. Sandford et al. provide a review that delineates the evolution of tax compliance costs research covering the period between the 1930s and 1980s (Sandford et al., 1989, pp. 34–37). These studies are segregated into three phases: the North American research, undertaken during the period 1930s to 1960s; the European Research, conducted around the 1960s and early 1970s and the Growing International Interest phase. The North American phase was led by Haig (1935). Sandford et al. refer to Haig’s study as the “pioneering expedition into this unexplored territory” (Sandford et al., 1989, p. 27). Haig used a questionnaire to

collect data from members of the American Management Association. While his study is vital to the compliance costs literature, Sandford et al. (1989, p. 27) warn that "...his conclusions must be regarded as suspect because of a low response rate and a bias towards large corporations". Allers (1994, p. 8) also cautioned that due to the use of small and non-representative samples, the majority of the early studies are weak. Moreover, most of them are published in hard-to-find journals or monographs.

Pope (1993a, pp. 15–20) identifies 30 tax compliance costs studies conducted between 1980 and 1993. Similarly, Evans (2003, pp. 64–92) assesses and summarises the literature on compliance costs of taxation from the 1980s until 2003, and updates in 2008 (Evans, 2008, pp. 447–468). Evans (2003, p. 65) reports that there were more than 100 published studies (with over 60 of them occurring since 1980), which focus on tax compliance costs, administrative costs or both since Haig's (1935) ground-breaking study. A comprehensive discussion of the history of tax compliance costs studies is not attempted in this study. Nonetheless, major studies are discussed where appropriate and presented in Appendix C. Readers interested in a detailed discussion of the history of tax compliance costs studies are referred to previous key studies (Sandford et al., 1989; Pope, 1993a; 2009; Evans, 2003; 2008).

The review of tax compliance costs studies by Slemrod and Venkatesh (2002, p. 1) reveals that in the US, hard quantitative evidence about businesses' tax compliance costs is scarce. Slemrod and Venkatesh (2002, p. 1) indicate that, at the time, most estimates came from three major surveys by Blumenthal and Slemrod (1992), Slemrod and Blumenthal (1996) and Arthur D. Little (1985). A more recent study of tax compliance costs in the US, undertaken by DeLuca, Stilmar, Guyton, Lee and O'Hare (2007, p. 180), agree with the findings of earlier research with regard to the magnitude and distribution of tax compliance costs.

In Canada, comprehensive reviews of the tax compliance costs literature were undertaken by Plamondon and Zussman (1998, pp. 764–770) and Vaillancourt and Clemens (2008, pp. 56–66). Overall, research in Canada suggests that the cost of completing a corporate tax return and schedules does not vary significantly by the size of the business with regard to the small business sector. Larger corporations, on

the other hand, seemed to be spending substantially more in preparation of their tax returns (Plamondon & Zussman, 1998, p. 765). Vaillancourt and Clemens (2008, p. 66) emphasise the need for more research on tax compliance costs in Canada and internationally. They also suggest that "...more standardisation is required in the research in order to allow for more accurate inter-tax comparisons..." (Vaillancourt & Clemens, 2008, p. 66).

More recently, extensive reviews on tax compliance costs have been undertaken by Rametse (2006, pp. 18–53), Yesegat (2009, pp. 15–65) and Abdul-Jabbar (2009, pp. 32–46). These reviews highlight the significance and burdensomeness of tax compliance costs. In the same light, an overview of tax compliance and administrative costs by Evans (2008, p. 457) reports three major findings emanating from the literature published in recent years: compliance costs are high and significant; compliance costs are regressive; and compliance costs are not reducing over time. Recent findings by Pope (2009, pp. 621–622) agree with Evans's (2008) first two conclusions. In addition, Pope (2009) emphasises the political sensitivity of tax compliance costs and maintains that some governments offer 'lip service' to the simplicity and efficiency aims of tax policy while doing their best to minimise research and/or publicity on the topic.

### **3.3 TAX COMPLIANCE COSTS STUDIES, 1980s UNTIL 2013<sup>45</sup>**

The pioneering studies into tax compliance costs were conducted in the UK led by Sandford in the 1980s. In 1981, Sandford spearheaded research into the costs and benefits of VAT (also known as the VAT 1 study) in the UK.<sup>46</sup> A succeeding major study by Sandford, known as the VAT 2 study, followed in 1989. In the VAT 2 study, the researchers investigate the administrative and compliance costs of taxation, encompassing major taxes in the UK. Largely, the VAT 2 study found that tax compliance costs were in excess of one per cent of GDP while tax operating costs as a whole were around 1.5 per cent of GDP (Sandford et al., 1989, p. 191). The findings of both the VAT 1 and VAT 2 studies established what has become a

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<sup>45</sup> Some studies focus on a variety of taxes including VAT. The review of the VAT compliance costs segments of those studies is presented in Section 3.4 of this thesis.

<sup>46</sup> This study is reviewed at length in Section 3.4 of this thesis.

common finding in many tax compliance costs studies worldwide; that tax compliance costs are regressive and fall with disproportionate severity on small businesses.

Following the UK research by Sandford, many studies focusing on the compliance costs of taxation emerged around the globe. In Australia, a series of tax compliance costs studies on major Commonwealth taxes was led by Pope from the early 1990s. The chain of studies by Pope began with the estimation of the compliance costs of personal income taxation (Pope, Fayle & Duncanson, 1990), followed by the compliance costs of public companies' income taxation (Pope, Fayle & Chen, 1991). Two major studies, namely the compliance costs of employment related taxation and the compliance costs of wholesale sales tax, were investigated in 1993 (Pope et al., 1993a, 1993b). The compliance costs of companies' income tax concluded this series in 1994 (Pope et al., 1994). Overall, Pope estimates the compliance of Commonwealth taxes at 11.9 per cent of the taxes' revenue and around 2 per cent of GDP (Pope, 1994, p. 92). The findings of these studies confirm the regressive nature of the compliance costs of business taxes.

A subsequent major Australian study was undertaken by Evans et al., (1997). This study, known as the ATAX study, was sponsored by the Australian Taxation Office (ATO) to investigate the compliance costs of Australian personal and business taxes. The taxpayer compliance costs of all Federal taxes for personal and business taxpayers are estimated at 7 per cent of Federal tax revenue and 1.36 per cent of GDP (Evans et al., 1997, p. iix). Overall, the study validates the common trend of the economies of scale reported in tax compliance costs studies.

Still in Australia, a small scale study was conducted by Wallschutzky and Gibson (1993). Their study employed 12 case studies to investigate the compliance issues faced by Australian small businesses. They report that compliance costs are not significant and maintain that these costs have been overstated (Wallschutzky & Gibson, 1993, p. 541). The study by Wallschutzky and Gibson (1993) presents a different investigation approach by deviating from the usual mail surveys. However, the small sample they use makes their study inadequate to draw any valid conclusion about the significance of tax compliance costs for small businesses in Australia.

Subsequent Australian tax compliance costs studies include work done by Rametse and Pope (2002), Certified Public Accountant [CPA] (2003), Glover and Tran-Nam (2005) and Lignier and Evans (2012). Most of these studies focused on small businesses, with GST being the most popular tax.

In New Zealand, tax compliance costs, are found to be very large and regressive. These costs are estimated at around NZ\$1.9 billion and represent 2.5 per cent of GDP (Sandford & Hasseldine, 1992, p. 110). Another New Zealand study by Colmar Brunton (2005) investigates the costs of complying with income tax, GST, PAYE and Fringe Benefits Tax (FBT). Overall average tax compliance costs are estimated at NZ\$4,024 per business, with GST and income tax being the greatest contributors (Colmar Brunton, 2005, p. 10). Colmar Brunton also investigates the psychological costs of complying with the tax system, however, these costs are not converted to monetary terms. Other New Zealand tax compliance costs research includes work done by Klynveld, Peat, Marwick and Goerdeler [KPMG] (2007).<sup>47</sup> The KPMG study estimates the overall regulatory costs at NZ\$29,578, the largest of which is tax compliance costs at 39 per cent (KPMG, 2007, p. 32).

The 2009 New Zealand study by the Inland Revenue Department (2010) investigates tax compliance costs using a sample of 5,000 SMEs. Overall mean tax compliance costs are estimated at NZ\$5,557. These costs increase with the size of business from NZ\$4,138 for businesses with nil employees, to NZ\$9,447. As a percentage of business turnover, tax compliance costs reduce from 13 per cent to 0.3 per cent. The study further reports that compliance with GST requirements is more time consuming when compared with other taxes (IRD, 2010, pp. 6–10).

More recently, tax compliance costs in New Zealand were investigated by Gupta and Sawyer (2014). The study uses an online survey to estimate the costs small businesses incur while complying with the GST, Income tax, Pay As You Earn (PAYE), KiwiSaver and Fringe Benefit Tax (FBT). Gross cost of complying with these taxes is estimated at NZ\$31,096. The study confirms the regressive nature of tax compliance costs and reports that of all taxes surveyed, GST is the most time

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<sup>47</sup> The KPMG began a series of annual compliance costs studies in 2003, covering a number of taxes including PAYE, GST, FBT and provisional tax.

consuming and requires the greatest internal compliance cost (Gupta and Sawyer, 2014, pp. 22–41).

Slemrod and Blumenthal (1996) estimate the income tax compliance costs using a survey of 1,329 of the largest businesses in the United States. Aggregate income tax compliance costs are estimated at US\$2 billion for the Coordinated Examination Program (CEP) businesses and around US\$1 billion for the Fortune 500 businesses (Slemrod & Blumenthal, 1996, p. 418). Aggregate tax compliance costs represent roughly three per cent of the tax revenue (Slemrod & Blumenthal, 1996, p. 421).

Another US study by Slemrod and Venkatesh (2002) seeks to investigate the size and composition of taxation compliance costs of medium-sized businesses. Slemrod and Venkatesh estimate the federal income tax compliance costs at around US\$22 billion, representing approximately 30 per cent of the tax revenue (Slemrod & Venkatesh, 2002, pp. 26–27). Still in the US, DeLuca et al. (2007) report the survey findings of their small business tax compliance costs study. On average, small businesses spend between 236 and 255 hours on tax compliance activities. Total tax compliance costs are estimated to range between US\$15 billion and US\$16.4 billion (DeLuca et al., 2007, p. 164).

In Canada tax compliance costs of small and medium-sized businesses are investigated by Plamondon and Zussman (1998). Average tax compliance costs are estimated at around C\$3,829 per business. This figure represents about 2.6 per cent of an average sales volume (Plamondon & Zussman, 1998, p. 774). These researchers also estimate the overall federal, provincial and territorial tax compliance costs to range between C\$2.3 billion and C\$4.5 billion, with a mid-point of C\$3.4 billion. These costs represent around 0.4 per cent of GDP and 1.5 per cent of tax revenue (Plamondon & Zussman, 1998, p. 784).

More recently, the Canadian Federation of Independent Business (CFIB) examined the hidden tax burden borne by business taxpayers in Canada (CFIB, 2008). The CFIB used the mail and also a password protected website to administer its survey of 8,271 businesses. Total compliance costs are estimated at C\$12.6 billion or 2.7 per cent of tax revenue, with approximately 90 per cent of total compliance costs

incurred by SMEs. The average tax compliance costs for each SME amount to C\$18,321 in 1991 (CFIB, 2008, pp. 15–20). The CFIB affirms that the time it takes to comply with the various taxes does significantly affect the growth of a business (CFIB, 2008, p. 18).

Allers (1994) investigates the administrative and compliance costs of taxation and public transfers in the Netherlands, and popularised the non-response reply postcard procedure which has been used to identify the perceptions of the mail survey non-respondents concerning their tax compliance costs (Allers, 1994, p. 111). Aggregate compliance costs of the Dutch business sector are estimated at Gld7.2 billion or 1.5 per cent of GDP and four per cent of taxes and social security contributions (Allers, 1994, pp. 118–119). Subsequent European tax compliance costs studies were undertaken in Slovenia (Klun, 2004a; 2004b), Croatia (Blažić, 2004), Armenia (Jrbashyan & Harutyunyan, 2006) and Belgium (e.g., Reekmans & Simoens, 2010; Schoonjans, Cauwenberge, Reekmans & Simoens, 2011). These studies confirm the economies of scale and regressive nature of tax compliance costs.

A number of studies of tax compliance costs have been carried out in Asia since 1995. Ariff and Pope (2002) provide a compilation of tax compliance costs studies undertaken between the early 1990s and 2001. A recent study by Abdul-Jabbar (2009, pp. 284–293) also offers an extensive review of tax compliance costs studies in Asia, especially in Malaysia. In India, business tax compliance costs are investigated by Chattopadhyay and Das-Gupta (2002). The majority of the tax compliance costs studies in Asia focus on corporate income tax. Overall, their findings confirm the regressive nature of taxation compliance costs.

The Malaysian tax compliance costs are investigated by Abdul-Jabbar and Pope (2008a). Their study focuses on the corporate income tax of SMEs for the year 2006. Mean compliance costs are estimated at RM9,295, with 52 per cent of these costs being incurred internally. As a percentage of annual turnover the Malaysian corporate income tax compliance costs are regressive, falling from 6.53 per cent for the businesses in the smallest turnover category to 0.04 per cent for the medium-sized businesses in the highest turnover band (Abdul-Jabbar & Pope, 2008a, p. 302).

Recently, Susila and Pope (2012) investigate the tax compliance costs of large corporate taxpayers in Indonesia. The 2010 average compliance costs per company are estimated to be IDR420,933,442. The researchers reported that internal tax compliance costs account for around 73 per cent of total compliance costs. Furthermore, the study confirms the regressive nature of tax compliance costs, demonstrating that tax compliance costs decline with increases in business turnover (Susila and Pope, 2012, pp. 728–733).

In Africa, tax compliance costs were first estimated in Tanzania by Shekidele (1999). Shekidele (1999) uses a questionnaire, based on a very low sample of 14 businesses, to investigate the nature and type of compliance costs of excise duties. Estimated compliance costs are around 16 per cent of excise duty revenue. Shekidele (1999) also reports that compliance costs in less developed countries are relatively high compared to those in developed countries. Additionally, the effect of economies of scale of tax compliance costs is confirmed (Shekidele, 1999, p. 79). Subsequent tax compliance costs studies were conducted in Mauritius, South Africa, Ethiopia and Kenya.<sup>48</sup>

Recently, a comparative study, based on four countries: Australia, Canada, South Africa and the UK, investigates the small business tax compliance costs of GST, income tax and payroll related taxes in those countries (Hasseldine, Evans, Hansford, Lignier, Smulders & Vaillancourt, 2012).<sup>49</sup> The data in their study was collected through electronic surveys, using separate questionnaires (which follow a common structure) for each country. The findings, presented in Table 3.1 show that in three countries: Australia, South Africa and the UK, GST/VAT is the most costly tax. In Canada, income tax is more costly than other taxes (Hasseldine et al., 2012, p. 12).

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<sup>48</sup> Studies from Mauritius, South Africa and Ethiopia are discussed in Section 3.5 of this thesis. The Kenyan study that was conducted by the IFC in 2011 has not been published.

<sup>49</sup> Individual studies used in this project were conducted by: Ebrahimi and Vaillancourt (2011), this study is currently unpublished; Lignier and Evans (2012); Smulders et al. (2012); and Hansford and Hasseldine (2012).

**Table 3.1: Allocation of Internal Compliance Costs<sup>a</sup> to each Tax, Years 2010 and 2011, (Expressed in US\$)<sup>b</sup>**

	<b>Australia (2010)</b>	<b>Canada (2011)</b>	<b>South Africa (2010)</b>	<b>UK (2011)</b>
GST/VAT	12,141	6,600	2,872	9,638
Income Tax	4,570	24,333	2,237	6,935
PAYG/PAYE	3,183	7,280	2,337	5,795
CGT	236	n/a	76	957
Other <sup>c</sup>	749	2,620	20	n/a
<b>All Taxes</b>	<b>20,879</b>	<b>40,833</b>	<b>7,542</b>	<b>23,325</b>

a The years of surveys for each country are displayed in parentheses.

b The average US dollar conversion rates used were obtained from the Australian Taxation Office website: <http://www.ato.gov.au/taxprofessionals/content.aspx?doc=/content/00284996.htm>, see Hasseldine et al., (2012, p.3).

c 'Other' comprises FBT in Australia, Quebec Sales Tax (QST)/Provincial Sales Tax (PST) in Canada and Customs and Excise in South Africa.

Source: Hasseldine et al. (2012, p. 12).

The results in Table 3.2 suggest that in all four countries, small business tax compliance costs are significant. Additionally, in all the countries investigated, internal tax compliance costs represent greater proportions of total tax compliance costs than external costs (Hasseldine et al., 2012, p. 16).

**Table 3.2: Total Tax Compliance Costs, Years 2010 and 2011, (Expressed in US\$)**

	<b>Australia</b>	<b>Canada</b>	<b>South Africa</b>	<b>UK</b>
Internal tax compliance costs	20,448	40,792	7,543	23,324
External tax compliance costs	13,761	9,453	4,755	13,175
<b>Total tax compliance costs</b>	<b>34,209</b>	<b>50,245</b>	<b>12,298</b>	<b>36,499</b>

Source: Hasseldine et al. (2012, p. 16).

The IFC conducted a series of tax<sup>50</sup> compliance costs studies recently, in different countries.<sup>51</sup> The IFC published studies are available for Ukraine, Uzbekistan, Armenia and Nepal. Overall, the findings of the Ukraine study indicate that total annual tax compliance costs for all active private companies and sole proprietors are

<sup>50</sup> The taxes studied include VAT, enterprise profit tax, contributions to the pension fund and other social insurance funds, personal income tax, unified tax, fixed agriculture tax as well as other taxes and duties.

<sup>51</sup> The IFC has also conducted tax compliance costs studies, which have not been published, in other countries such as Vietnam (2007), Yemen (2008), Peru (2009), Kenya (2010), Georgia (2010), and Lao PDR (2011), (Coolidge, 2012, p. 253).

around UAH7.8 billion. Tax compliance costs for all private companies (UAH7.4 billion) constitute one per cent of Ukraine's GDP in 2007 (IFC, 2009a, pp. 11-12). In Uzbekistan, tax compliance and reporting costs are found to be strongly regressive, representing almost 16 per cent of sales for legal entities in the lowest turnover band and 0.06 per cent for companies in the upper turnover band. As a proportion of annual turnover, tax compliance costs are estimated at around 3.7 per cent for the entrepreneurs in the lower turnover band, and 0.15 per cent for those in the upper annual turnover band. Tax compliance and reporting costs of legal entities and individual entrepreneurs are estimated at UZS275.5 billion or 0.75 per cent of GDP in 2008 (IFC, 2010b, pp. 8-9).

The IFC also reports that in Armenia, tax compliance is burdensome for private businesses, especially for small companies and individual entrepreneurs, which spend an additional 10 per cent of income on tax administration. Businesses spend roughly 2.5 staff months per year to comply with tax procedures. Overall tax compliance costs, estimated at AMD10.24 billion, represent 0.3 per cent of the country's GDP in 2009 (IFC, 2011a, pp. 9–14). In Nepal, overall tax compliance costs are estimated at Nepalese rupees 9,328. As a proportion of annual turnover they represent 3.4 per cent for businesses in the lower turnover band and 0.1 per cent for those in the highest turnover band (IFC, 2012a, pp. 61–62).

### **3.4 STUDIES OF VALUE ADDED TAX COMPLIANCE COSTS**

#### **3.4.1 Overview**

The VAT system imposes a variety of responsibilities upon taxpayers that have to be adhered to in order to fulfil the requirements of the tax system. These responsibilities include the collection of tax from the customers, accounting for the tax collected, proper record keeping, VAT return filing and remittance of collected VAT or claim of overpaid tax. Yesegat (2009, pp. 318–323) identifies 13 VAT compliance costs studies carried out between 1981 and 2003, worldwide. Likewise, Barbone, Bird and Vazquez-Caro (2012) provide a comprehensive review of VAT compliance costs studies which focus mainly on the EU. This study has identified 35 published VAT

compliance costs studies that have been conducted globally,<sup>52</sup> between 1980 and 2014. Of these studies, 29 took place outside Africa, while only six were carried out within African borders. Evans (2008, p. 457) affirms that the compliance costs of taxes (such as personal income tax, corporate income tax and VAT) typically range between two per cent and ten per cent of the revenue yield of those taxes and up to 2.5 per cent of GDP in some countries. In Canada (CFIB, 1991, p. 11) and Slovenia (Klun, 2003, p. 81) the compliance costs of VAT are found to be well over ten per cent of VAT revenue.

### **3.4.2 Value Added Tax Compliance Costs Studies outside Africa, 1980 to 1999**

A growing number of studies have been carried out around the world to estimate the compliance costs of VAT. Among developed countries, these studies have been conducted predominantly in the UK since the early 1980s. The ground-breaking studies by Sandford et al. (1981; 1989; 1992) established the regressive nature of tax compliance costs which is confirmed by most of the studies that follow.

The UK research by Sandford, Godwin, Hardwick and Butterworth (1981), the VAT 1 study, estimates VAT compliance costs at £392 million, representing 9.26 per cent of VAT revenue. As a proportion of turnover, VAT compliance costs are 1.17 per cent for small businesses with annual turnover below £50,000, and 0.04 per cent for those with annual turnover above £1 million. Small businesses with an annual turnover below £50,000 carry 43 per cent of total VAT compliance costs. It is also reported that, the net cash flow benefits, estimated at £73 million, favour the large firms and increase the regressivity of VAT compliance costs. The net VAT compliance costs are estimated at £319, representing 7.53 per cent of VAT revenue. As a percentage of annual turnover, net VAT compliance costs are 1.69 per cent and 0.03 per cent for the smallest and largest businesses, respectively (Sandford et al., 1981, pp. 49–90). Overall, the compliance costs exhibit an extremely regressive pattern.

Similarly, the VAT 2 study by Sandford et al., (1989) emphasises the existence of regressivity (the economies of scale effect) of tax compliance costs. Total VAT

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<sup>52</sup> See Appendix E.

compliance costs and net cash flow benefits are estimated at £791 million and £580 million, respectively. Thus, the net VAT compliance costs are £211 million. As a proportion of VAT revenue, gross and net VAT compliance costs are 3.69 per cent and 0.98 per cent, respectively. Value Added Tax compliance costs as percentages of taxable turnovers range from 1.48 per cent for the smallest firms to 0.05 per cent for the larger ones (Sandford et al., 1989, pp. 114–119). Additionally, some businesses, mainly smaller ones, indicate that they gained managerial benefits. These businesses turned the improved records to financial advantage by: saving on accountants' fees by doing more of their own accounts; improved stock control; claiming discounts more frequently; and reduction in losses from bad debts and in other miscellaneous ways (Sandford et al., 1989, p. 118).

Bannock and Albach (1989) compare the compliance burden of VAT on small firms in Britain and West Germany. They report that the compliance costs for smaller traders are significantly higher in the UK than in Germany. The results seem to indicate that smaller firms on average spend considerably more days on VAT work in Britain than in West Germany. They report that dissatisfaction with the VAT system is much greater among smaller firms in Britain than in Germany, and suggest that this may be explained by the greater propensity of West German firms to outsource VAT work. The estimated compliance costs are regressive in both countries. Average total compliance cost per £1,000 of turnover in each country rises from under one per cent for firms with a turnover of £2 million or more to 2.5–8.0 per cent for firms with a turnover of £15,000 and below.<sup>53</sup> Overall, businesses regard VAT as more costly and troublesome to a greater extent in Britain than in West Germany (Bannock & Albach, 1989, pp. 199–204).

In Canada, the 1991 study by the CFIB employed 25,362 respondents to investigate the impact of, as well as the implementation and on-going costs of, the GST. Total start-up costs are estimated at C\$3 billion while on-going costs are estimated at C\$6.6 billion (CFIB, 1991, pp. 9–10). Around 70 per cent of the respondents indicate that GST has a negative impact on their business, while 85 per cent report increases in costs due to GST implementation. The survey findings also illustrate the regressive nature of the GST in that around 82 per cent of the costs are incurred by

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<sup>53</sup> The German currency was converted to pounds by 0.305 or £1 = DM 3.28.

the firms with less than 20 employees. The CFIB study was conducted less than 12 months after the GST implementation; thus, the on-going costs mostly likely contain some learning curve costs.

In New Zealand, the total compliance costs of GST are estimated at 7.3 per cent of GST revenue, with nearly 60 per cent of these costs falling on businesses with a turnover below NZ\$250,000 (Sandford & Hasseldine, 1992, p. 63). The compliance costs of the smallest firms are estimated as being almost 500 times those of the largest (Sandford & Hasseldine, 1992, p. 64–65). Sandford and Hasseldine (1992) conclude that: compliance costs of business taxes are large and cumulative in their impact; they are several times the administrative costs of the IRD; and, in total, equivalent to about 2.5 per cent of GDP. Furthermore, compliance costs are very regressive, individually and collectively, falling with disproportionate severity on smaller businesses (Sandford & Hasseldine, 1992, p. 110).

Plamondon and Associates Inc. (1993) examine the GST compliance costs for small businesses in Canada. They estimate the gross GST compliance costs at less than 0.5 per cent of business revenue. Their study reveals that participants who use computers in their accounting routine have compliance costs that are 20–40 per cent lower than similar businesses using manual accounting systems (Plamondon & Associates Inc., 1993, p. 5). The study by Plamondon and Associates Inc. does not follow the usual mail survey. Instead, personal interviews were conducted with 200 businesses by specialised accountants. While personal interviews are highly effective in obtaining compliance costs data, the sampling methodology used in the Plamondon and Associates Inc. study renders the findings suspect. The methodology used by Plamondon and Associates Inc. has been analysed and critiqued at length by Wurts (1995, pp. 299–319) and by Sandford (1995a, pp. 392–393).

The UK's National Audit Office (NAO) estimate the compliance costs of VAT compliance costs at £1.6 billion (NAO, 1994, p. 20). Cash flow benefits and managerial benefits are found to be £600 million and £150 million, respectively. The study also reports that 1.4 million traders with a turnover below £500,000 account for 67 per cent of the gross compliance costs. The regressivity of VAT compliance costs is illustrated by the proportions of the costs to annual turnover which fall from 1.5

per cent for the smallest traders to 0.3 per cent for the largest ones. Furthermore, the survey findings show that cash flow and managerial benefits increase the uneven distribution of VAT compliance costs (NAO, 1994, p. 20).

In the Netherlands, VAT is found to be the second most expensive tax to comply with, with its costs of compliance estimated at six per cent of VAT revenue (Allers, 1994, p. 124). Another high costs:revenue ratio for VAT is reported by Malmer (1995). The Swedish VAT compliance costs are estimated at 2.5 per cent of the VAT revenue. Moreover, the average costs of handling VAT are found to be more than twice the costs of complying with preliminary taxes and payroll charges and are also highly regressive (Malmer, 1995, pp. 253–256).

### **3.4.3 Value Added Tax Compliance Costs Studies outside Africa since 2000**

A major Australian study on GST start-up compliance costs for small businesses was conducted by Rametse and Pope (2002). Their findings report the mean estimated gross start-up compliance costs for small businesses at A\$7,600. The start-up compliance costs expressed as a percentage of turnover show substantial economies of scale (Rametse & Pope, 2002, p. 417). Although this study does not focus on recurrent costs, its findings are important as they highlight the regressivity of GST compliance costs upon small businesses.

In the UK, Hasseldine and Hansford (2002) report that the size of the business is the strongest determinant of total tax compliance costs. Additionally, increased VAT compliance costs are associated with factors such as newly registered firms, increased complexity and higher perceived psychological costs. Also, the respondents who report that they have special needs such as disability or impairment have higher compliance costs than other respondents. The study also reports a counter-intuitive finding, that businesses that use computerised systems for VAT record keeping incur higher compliance costs than the businesses that do not (Hasseldine & Hansford, 2002, pp. 382–383).

Blažić, (2004) investigates the VAT compliance costs in Croatia. Blažić (2004) uses the services of a commercial polling agency to conduct face-to-face interviews with a

total of 339 companies. The VAT compliance costs are estimated at HRK968.13 million, which constitutes around 4.5 per cent of VAT revenue. The findings of the study also indicate that out of all the taxes surveyed, VAT is the most costly (Blažić, 2004, pp. 734–735).

In Slovenia, Klun (2003) conducted a survey on a random sample of 750 VAT taxpayers, with an 11 per cent response rate, to estimate the compliance costs of VAT. Aggregate VAT compliance costs are estimated at 25 per cent and 2.5 per cent of VAT revenue and GDP, respectively, when weighted by annual turnover. Klun (2003, p. 78) concludes that the operating costs in Slovenia are increasing, a trend that is opposite to that in most developed countries. The study excludes the compliance costs related to collection of VAT on imports as well as the time spent by friends and family on VAT activities of the business. These exclusions imply that the costs reported by Klun (2003) have been underestimated.

Glover and Tran-Nam (2005) estimate the GST recurrent compliance costs/benefits for small businesses in Australia. The estimated average gross recurrent compliance costs of GST are A\$2,481, while the average net costs amount to A\$1,244. They note that even though the recurrent costs are smaller than the transitional costs estimated in an earlier phase of the project, they are still high for small businesses, indicating that these costs still comprise some elements of transitional costs. In addition, small business taxpayers appear to suffer some psychological costs over and above the monetary costs (Glover & Tran-Nam, 2005, pp. 237–258). The findings in this study are based on a very small number of 22 case studies.

The New Zealand study by Colmar Brunton (2005), commissioned by Inland Revenue, estimates the compliance costs of GST as well as other taxes. The findings of the study indicate that GST is the most time consuming of all taxes surveyed. Mean internal compliance costs of GST are estimated at NZ\$1,852 (Colmar Brunton, 2005, p. 63). With regard to psychological costs, the study finds that owners/partners, managers, clerks and unpaid family or friends report higher levels of stress associated with GST compliance (Colmar Brunton, 2005, p. 71). Similarly, a study by Inland Revenue (2010) found GST to be the most time consuming of all taxes surveyed. Mean GST compliance costs are estimated to be \$2,185 (IRD, 2010, p. 9).

Still in New Zealand, compliance with GST requirements is found to be more time consuming (in terms of hours) than other taxes (income tax, PAYE, KiwiSaver and FBT) in the study by Gupta and Sawyer (2014, p. 15). Furthermore, GST compliance costs are higher than those of other taxes, with mean internal GST compliance costs estimated at NZ\$13,485 (Gupta and Sawyer, 2014, p. 22).

The VAT studies undertaken outside Africa include, *inter alia*, the work done by the IFC. Overall, the findings of these studies indicate that, of all taxes, VAT has the highest compliance costs. The VAT in Ukraine appears to be the most time consuming when compared with other countries. Companies in Ukraine spend, on average, 650 person-hours on VAT functions in 2007 (IFC, 2009a, p. 33). In Uzbekistan, the average time spent on preparing VAT invoices amounts to 94 man-hours per year, which represents a burden of approximately UZS28 billion in terms of labour cost for all legal entities in Uzbekistan (IFC, 2010b, p. 54).

Value Added Tax is found to be the most time consuming of all taxes paid in Armenia, with record keeping being the most onerous VAT activity. An interesting finding is that large companies spend, on average, 108 hours searching, studying and analysing VAT legislation in 2009 (IFC, 2011a, p. 56). This shows that VAT can be very complex. In Nepal, tax compliance costs are found to be high for VAT. Overall average VAT compliance costs are estimated at Nepalese rupees 14,756 (IFC, 2012a, p. 61). Furthermore, VAT compliance costs are found to be high for businesses that partially outsource tax compliance services (IFC, 2012a, p. 90).

More recently, Lignier and Evans (2012) conducted an electronic survey of a sample of 3,500 small businesses, with a response rate of 4.5 per cent, to investigate the tax compliance costs of those businesses. Goods and Services Tax was found to be the most time consuming of all taxes. Internal GST compliance time is estimated at 287 hours, equivalent to AU\$11,950. The compliance costs of VAT are higher than those of other taxes, representing about half of the total internal costs.

A recent UK tax compliance costs study was conducted by Hansford and Hasseldine (2012). The results of the VAT segment of this study indicate that the average annual

time spent on VAT compliance is estimated to be 219 hours. This equates to more than half of the in-house time spent on tax compliance. On average, VAT compliance costs are estimated at £6,062 and represent over 40 per cent of the internal tax compliance costs.

The findings of the VAT compliance costs studies from developed countries established the regressive nature of tax compliance costs which has since been confirmed by research conducted in developing countries outside Africa. Another conclusion drawn from previous studies is that VAT is more onerous than other taxes. Furthermore, partial outsourcing of VAT compliance services appears to lead to higher VAT compliance costs. Overall, VAT compliance costs are high (whether incurred internally or externally) and more burdensome for smaller businesses.

#### **3.4.4 Value Added Tax Compliance Costs Studies in Africa**

The literature on tax compliance costs in Africa is very thin and dominated by studies in South Africa (e.g., Upstart Business Strategies, 2004; Small Business Project, 2005; Foreign Investment Advisory Service, 2007; Coolidge et al., 2009; Smulders et al., 2012). Other African tax compliance costs studies have been carried out in Tanzania,<sup>54</sup> Mauritius and Ethiopia (e.g., Shekidele, 1999; Pillai, 2000; Yesegat, 2009). Rametse (2010, p. 6) asserts that there is a dearth of literature on tax compliance costs in Africa, in particular the compliance costs of VAT, despite the growing number of African countries that have established this consumption tax since 1986. Research on the burden and incidence of VAT in African countries is imperative as most of the 54 countries in Africa have adopted the VAT. This study has identified six studies that investigate the compliance costs of VAT within African borders.

The review of the literature reveals an absence of tax compliance costs studies in Botswana. However, a series of studies have been carried out by the IFC over a number of years to investigate the business climate in Botswana (IFC, 2009b). These studies investigate, among other factors, the ease of paying taxes in Botswana when compared with 182 other countries. The findings include estimates of the number of

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<sup>54</sup> This study has been reviewed earlier in Section 3.4.2.

hours per year necessary to prepare and file tax returns and to pay VAT (and other taxes). The number of annual hours a business spends on VAT activities has been estimated at 72 hours (IFC, 2011b; 2012b). Globally, Botswana stands at 22 in the ranking of the 183 economies on the ease of paying taxes for the year 2011 (IFC, 2012b). According to IFC (2009b, p. 95), the Doing Business estimate is based on a hypothetical, medium-sized manufacturing business located in the largest city of each country and operates entirely domestically. The business is assumed to have 60 employees and a turnover of approximately 1,000 times the per capita income of the country.<sup>55</sup>

Pillai (2000) conducted a research study that estimated the compliance costs of VAT in Mauritius. The study surveyed 82 hotels with a 26.9 per cent response rate. As a proportion of annual turnover, routine costs for small hotels are estimated to be ten times those of large hotels, at 0.40 per cent of turnover and 0.04 per cent, respectively. Suffice it to say that, compliance costs of VAT, as a proportion of total turnover, in the Mauritian hotel industry exhibit severe regressivity (Pillai, 2000, p. 58).

In South Africa, Upstart Business Strategies (as cited in Chamberlain & Smith, 2006) estimates the compliance costs of VAT and Regional Service Council Levies associated with recordkeeping and tax return completion for an average Small, Medium and Micro-sized Enterprise (SMME). The study reports that, on average, an SMME spends approximately ZAR6,027 on two compliance activities associated with VAT namely record keeping and completion of tax returns. Overall, the total VAT compliance costs for an average SMME are estimated to range between ZAR6,000 and ZAR8,000 annually (Chamberlain & Smith, 2006, pp. 29 and 54).

Another South African study on the compliance costs of tax, including VAT, was carried out by the Small Business Project (SBP) in 2005. The SBP's (2005)

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<sup>55</sup> IFC (2009a, p. 95) notes that ...“while the Doing Business methodology allows for international comparisons based on a standard set of assumptions and methodology, it is not necessarily representative of the tax compliance cost burden of the majority of actual companies in any particular country. Individual countries have carried out surveys of companies or tax accountants to get an estimate of the average compliance costs of businesses in actual practice, which are very useful toward achieving a more detailed and accurate picture of the situation within each country”.

nationwide study employed a survey of 1,800 private sector enterprises to estimate the cost of regulatory compliance or 'Red Tape' in South Africa. In addition, the study seeks to unearth the most costly and troublesome regulations for South African firms as well as the impact of regulations on businesses' plans to grow and expand employment. Total regulatory compliance costs are estimated at ZAR79 billion or 6.5 per cent of GDP (SBP, 2005, p. 6). Taxes are reported as the most problematic set of regulations, with VAT cited by 19 per cent of the respondents as the most time-consuming and onerous regulation. The SBP (2005) maintains that VAT is the single most burdensome regulation for all firms except the largest. Average recurring regulatory compliance costs per firm, excluding initial registration, are ZAR105,174, of which ZAR27,298 or 26 per cent represent tax compliance costs. In line with the existing tax compliance costs literature, the estimated tax compliance costs are found to be more onerous for the smallest firms (SBP, 2005, pp. 32–42).

A similar finding is reported by South Africa's Foreign Investment Advisory Service [FIAS] (2007). FIAS surveyed 3,429 tax practitioners in South Africa in order to estimate the average fee the tax practitioners charge their small business clients for preparing, completing and submitting tax returns of Income Tax, Provisional Tax, VAT and Employees' Tax. The results of the study suggest that it costs businesses more to obtain tax practitioner assistance for VAT returns than other taxes. The overall outsourcing costs per business are estimated at ZAR7,030. The cost share of VAT represents 42 per cent of this cost at ZAR2,975 (FIAS, 2007, p. 29).

A recent doctorate study undertaken by Yesegat (2009) seeks to examine the operating costs of, and intentional compliance with, VAT in Ethiopia for the fiscal year 2005/06. The study uses structured interviews to collect data from 193 businesses and 29 tax practitioners in Ethiopia. Recurrent compliance costs of VAT are estimated at 2.04 per cent and 0.13 per cent of VAT revenue and GDP, respectively. The results of the study indicate that the compliance costs of VAT in Ethiopia are low.<sup>56</sup> Nonetheless, their burden falls with disproportionate severity upon small firms (Yesegat, 2009, pp. 210–211).

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<sup>56</sup> The low overall VAT compliance costs in Ethiopia could be attributed to a high VAT registration threshold and a weak Ethiopian tax administration.

The regressive nature of tax compliance costs is confirmed by another recent African study by Smulders, Stiglignh, Franzsen and Fletcher (2012) in South Africa. The study, which is part of an international research project,<sup>57</sup> estimates the mean internal VAT compliance costs at R7,415 (trimmed mean estimated at R2,828). The study also reports that VAT compliance costs are very costly for the taxpayer, representing 38 per cent of internal time costs (Smulders et al., 2012, pp. 201–215).

Overall, the tax compliance costs literature from African based studies confirm the long standing evidence of the regressive nature of tax compliance costs that has been established by earlier tax compliance costs studies. Although in Ethiopia, VAT compliance costs are reported to be low overall (Yesegat, 2009), these costs are still burdensome and inequitably distributed.

### **3.5 STUDIES OF VALUE ADDED TAX COMPLIANCE BENEFITS**

#### **3.5.1 Cash Flow Benefits Studies**

This section reviews the studies that estimate the cash flow benefits of complying with the VAT system. Sandford et al. (1981) conducted a major study which investigates the costs and benefits of VAT in the UK. Since then, several studies have followed a similar pattern of assessing the cash flow benefits over and above the compliance costs. The studies that have investigated the cash flow benefits of complying with the tax system, from the early 1980s to date are presented in Table 3.3. Overall, the findings of prior literature suggest that substantial cash flow benefits accrue to businesses.

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<sup>57</sup> The project comprises four countries: Australia, Canada, South Africa and the United Kingdom. These studies have been reviewed earlier in Section 3.4.2.

**Table 3.3: Estimates of the Value Added Tax Cash Flow Benefits, since 1980<sup>a</sup>**

Author Year	Country	Value of Cash Flow Benefits
Sandford et al. 1981	UK	Aggregate cash flow benefits are estimated at £73 million. Of this value, £0.3 million is gained by the smallest businesses while the largest ones gained £59 million.
Sandford et al. 1989	UK	The value of cash flow benefits is estimated to be £580 million.
Sandford & Hasseldine 1992	New Zealand	The value of the overall cash flow benefits is estimated at NZ\$176 million.
Allers 1994	Netherlands	Aggregate cash flow benefits are estimated at Gld 360 million.
National Audit Office 1994	UK	Cash flow benefits are estimated at £600 million.

a Sandford et al. (1981, p. 87); Sandford et al. (1989, p. 117); Sandford and Hasseldine (1992, p. 73); Allers (1994, p. 136); National Audit Office (1994, p. 20).

### 3.5.2 Studies of Managerial Benefits

The review of the literature reveals that studies of managerial benefits are rare. To this day, only a few studies have investigated the managerial benefits of complying with the VAT system, with only two studies reporting the estimated values of these benefits, as shown in Table 3.4. Largely, the studies confirm that businesses, especially small ones, gain some managerial benefits from record keeping for VAT purposes.

**Table 3.4: Studies of Value Added Tax Managerial Benefits, since 1980<sup>a</sup>**

Author Year Country	Value of Managerial Benefits
Sandford et al. 1981 UK	<ul style="list-style-type: none"> <li>• Thirty-two and 26 per cent of the respondents indicate that their purchase records and sales records, respectively, are better kept. Twenty five percent of the respondents agree that they save money by doing their own accounts.</li> <li>• Other managerial benefits such as improved stock control, frequent claim of discounts and a reduction of losses from bad debts are reported.</li> </ul>
Sandford et al. 1989 UK	<ul style="list-style-type: none"> <li>• Thirty per cent of the respondents agree that record keeping for VAT gives them benefits.</li> </ul>
Sandford & Hasseldine 1992 New Zealand	<ul style="list-style-type: none"> <li>• Forty-seven and forty per cent of the respondents claim that their purchase records and sales records, respectively, are better kept since GST. Forty per cent of the respondents indicate that they save money by doing their own accounts.</li> <li>• Similarly, some businesses report that their stock is better controlled; they claimed discounts more frequently and that losses from bad debt are reduced.</li> </ul>
National Audit Office 1994 UK	<ul style="list-style-type: none"> <li>• Managerial benefits are estimated at £150 million.</li> <li>• Managerial benefits range from £4 million for the smallest firms to £49 million for the larger ones.</li> </ul>
Tran-Nam & Glover 2002 Australia	<ul style="list-style-type: none"> <li>• Small businesses cite additional reporting for GST purposes as a source of fiscal discipline or new information for the conduct of their business.</li> <li>• Greater managerial benefits seem to be experienced by the businesses that were not computerised when the tax reforms were introduced.</li> </ul>
Rametse 2006 Australia	<ul style="list-style-type: none"> <li>• Overall average managerial benefits are estimated at A\$4,639 per small business.</li> <li>• Managerial benefits increase with the size of the firm due to extensive amount of resources expended by the larger firms.</li> </ul>
Lignier 2008 Australia	<ul style="list-style-type: none"> <li>• A larger proportion of the respondents benefit from improvements to their accounting information system.</li> <li>• Improvements to credit management are associated with the presence of tax compliance requirements. Small businesses gain savings on accountancy costs.</li> </ul>

<sup>a</sup> Sandford et al. (1981, p. 87); Sandford et al. (1989, p. 117); Sandford and Hasseldine (1992, p. 76); National Audit Office (1994, p. 20); Tran-Nam and Glover (2002, pp. 365–366); Rametse (2006, pp. 225–259); Lignier (2008, pp. 257–259).

### **3.6 STUDIES OF TAXPAYER ATTITUDES TOWARDS TAXATION**

Sandford et al. (1989), in their study of the administrative and compliance costs of taxation in the UK, also investigate the attitudes of the taxpayers towards VAT. They report that about 51 per cent of the respondents indicate that they mind doing VAT work while roughly 54 per cent feel that VAT is unreasonably complicated. Another UK research on the attitudes of small business owners towards VAT compliance was undertaken by Adams and Webley (2001). They highlight the possibility of the influence of the different ways of mental accounting for VAT money on the compliance as some businesses believe that the VAT money they collect is theirs and, thus, resent remitting it to the tax authorities (Adams & Webley, 2001, p. 208). Additionally, Adams and Webley find that taxpayers resent having to do unpaid work for the government, which leads to negative attitudes as far as tax compliance is concerned (Adams & Webley, 2001, p. 206).

The study by Rametse (2006) shows that the majority of small businesses in Australia (53 percent) find GST to be unreasonably complicated. This may be an explanation of why most of them (45 percent) disagree and strongly disagree with the statement "I do not mind doing GST work". However, even though many Australian small businesses believe that GST is unreasonably complicated, overall, the majority of them support the government tax reform (Rametse, 2006, p. 152). An extension of this study was undertaken by Rametse and Yong (2009) to compare the attitudes of Australian small businesses towards the Australian tax reform and New Zealand's small businesses and tax agents' perceptions to tax compliance. Their study indicates that small businesses in Australia and New Zealand have similar views concerning their tax obligations and tax complexity (Rametse & Yong, p. 102).

Recently, Oberholzer (2008) investigated the attitudes of South African taxpayers towards taxation. He reports that the majority of the respondents do not feel that it is unfair to pay tax, with only 25 per cent agreeing with the statement 'it is unfair to pay tax'. However, 56 per cent of the respondents indicate that tax is very complicated and that they do not know how to calculate their own tax liability. In

addition, all of the respondents feel that there is high wastage and corruption in the government. The majority of these respondents believe that a large proportion of tax is used by the government for worthless purposes. Moreover, taxpayers indicate that there is a lack of information concerning how the government uses the tax revenue (Oberholzer, 2008, p. 62).

In Ethiopia, the attitudes of taxpayers towards VAT were investigated by Yesegat (2009). Yesegat reports that the majority of the respondents (58 per cent) perceive VAT to be a simple method of collecting tax and not unreasonably complicated (53 per cent). This may explain why most of the respondents (74 per cent) indicate that they do not mind doing VAT work. Furthermore, the surveyed taxpayers feel that, based on how much VAT they pay, they do not spend too much time on VAT affairs. In terms of compliance costs, the respondents are almost equally distributed with regards to whether they perceive their VAT compliance costs to be significant (41 per cent) or insignificant (49 per cent) (Yesegat, 2009, pp. 149–152).

Another African study that investigates the attitudes and tax compliance behaviour of taxpayers was undertaken by Marti, Wanjohi and Magutu (2010) in Kenya. Their findings indicate that 66 per cent of the respondents are of the opinion that the Kenyan tax system is unfair. In particular, respondents feel that they are not paying a fair share of tax, that others are not reporting and paying tax honestly and also that tax laws are difficult to understand. In addition, the survey participants disagree with the statements that: taxpayers make high business profits by operating illegal businesses; taxpayers are given rewards; and there is use of informants by the Kenya Revenue Authority (KRA) to report tax evaders (Marti, Wanjohi & Magutu, 2010, p. 116).

More recently, the attitudes and tax compliance behaviour of SME taxpayers in Botswana were investigated by Nkwe (2013). Nkwe reports that the majority of respondents disagree that: they are paying a fair share of tax; their colleagues are reporting and paying tax honestly; the tax laws are easy to understand; the government is achieving its tax objectives as well as fighting corruption; and taxpayers are given rewards. Some respondents agree that they fear paying tax fines and penalties and also that they fear tax audits and prosecution (Nkwe, 2013, pp.

125–126). Overall, most taxpayers view the tax system in Botswana as unfair (Nkwe, 2013, p. 134).

### **3.7 CHAPTER SUMMARY**

This chapter has succinctly reviewed the international literature on tax compliance costs, with particular reference to VAT. The review of the literature indicates that although VAT was introduced in Botswana over ten years ago, there is no study that has attempted to estimate its associated compliance costs upon businesses. The IFC has estimated the average time taken to comply with VAT (and other taxes) in Botswana over a number of years. However, their estimates, which are based on a hypothetical medium-sized business, do not provide an accurate picture of the tax compliance costs in Botswana. Thus, there is a gap in the literature with respect to the compliance costs of VAT (and other taxes) in Botswana.

This chapter has reviewed studies of VAT and non-VAT compliance costs. Around 33 published studies that estimate the compliance costs of VAT since the 1980s until recently are identified. Twenty seven of the studies took place outside Africa, while only six were conducted in Africa. Accordingly, there is a dearth of literature on African VAT compliance costs. Overall, the common finding from the majority of the tax compliance costs studies is that tax compliance costs are high, regressive and fall with disproportionate severity on small firms.

The regressive nature of tax compliance costs has been established by the literature. The common finding of prior tax compliance costs studies is that tax compliance costs are very high. Moreover, these costs are very regressive and fall with disproportionate severity upon small businesses.

The review of studies that investigate tax compliance benefits indicates that all such studies suggest that substantial cash flow benefits accrue to business. In addition, the studies indicate that businesses, especially small ones, gain some managerial benefits from record keeping for VAT purposes. With regard to the attitudes of taxpayers towards taxation, differing taxpayer attitudes are reported by the studies. Overall, the

majority of the studies report that taxpayers find their country's VAT system to be unfair and unreasonably complicated. Thus, they do mind doing their VAT work.

## **CHAPTER 4**

### **ESTIMATION ISSUES AND RESEARCH DESIGN**

#### **4.1 INTRODUCTION**

The purpose of this chapter is to present the estimation issues of compliance costs as well as the research methodology used in this study. In addition, the methods that have been used in previous studies to estimate the costs incurred by the taxpayers in the process of complying with the tax regulations are discussed. Section 2 presents a detailed evaluation of the estimation issues of the methodologies usually employed in tax compliance costs research. Sections 3 and 4 examine the different data collection techniques and the approaches used in tax compliance costs research, respectively. Section 5 discusses the questionnaire design and administration for this study while Section 6 summarises this chapter.

#### **4.2 ESTIMATION ISSUES**

##### **4.2.1 Overview**

The estimation of compliance costs remains problematic in the field of taxation. Of particular concern is the issue surrounding what should be included in the definition of tax compliance costs and their cost components.

This issue is affirmed by Sandford et al. that:

“...complexities and inter-relationships make it difficult if not impossible to define the various costs with absolute precision or in a neat, mutually exclusive, way; moreover operational definitions need to be geared to the data available” (Sandford et al., 1989, p. 3).

Thus, it can be concluded that the issues of compliance costs estimation are mainly centred on the components that should be included in their definition. The difficulty

in defining what constitute tax compliance costs and compliance activities has been stressed by Evans et al. (1996, p. 10). These issues broaden to include methodological shortfalls, sample sizes and response rates, reliability issues and valuation of taxpayers' time. Several issues associated with the measurement of compliance costs have been identified in the literature (e.g., Sandford et al., 1981, pp. 21–23; Sandford et al., 1989, pp. 5–23; Evans et al., 1996, pp. 10–17; Pope, 1993a, pp. 43–47; Allers, 1994, pp 30–42). These matters, discussed succinctly below, should be taken into consideration when estimating the compliance costs of taxation.

#### **4.2.2 Tax Compliance Costs**

The first issue of compliance costs estimation revolves around the 'compliance costs' term itself. Sandford et al. (1989, p. 10) note that this terminology is ambiguous as it can refer equally to two different things: from the position of the government it can mean the costs incurred by the government in collecting the tax, while from the standpoint of the taxpayer it refers to the costs of fulfilling the requirements of the tax system. As mentioned in Chapter 1 of this thesis, tax compliance costs refer to the costs incurred by the taxpayers and their helpers in complying with the requirements of the tax system. These costs include: the monetary costs of collecting, remitting and accounting for tax; imputed costs of time spent by unpaid helpers such as family members or friends in complying with tax requirements; psychological costs that arise from the stress and anxiety experienced by taxpayers when dealing with the tax legislation; and costs incurred by representative bodies (paid for by their members) in making presentations and lobbying for tax changes. The estimation of psychological costs is rather problematic as these costs are difficult to quantify. This study follows the trend of previous compliance costs studies of omitting psychological costs from the estimation of tax compliance costs.

The next issue arises due to the outsourcing of tax help. Many taxpayers, especially small ones, due to lack of accounting/taxation expertise, find it cost effective to outsource the services of tax accountants who handle their tax affairs for them (Coolidge et al., 2009, p. 25). Outsourcing of tax compliance work may result in accounting-taxation overlap. A taxpayer in this position may receive, from their tax accountant, an integrated bill for work done on financial affairs, which may include

taxation. The question is what proportion of this bill represents tax compliance costs? Sandford et al. (1989, p. 14) suggest that the amount to be allocated is a matter of judgement.

In addition to these matters, the literature reveals that the isolation of marginal additions to costs caused by the imposition of a particular tax is problematic (Pope, 1993a, p. 48). It is argued that the marginal cost of an additional tax may be low for companies that have a tax department if the specialist tax staff can handle the additional work. If additional labour can be accommodated within the existing office space, then the marginal cost is simply the extra labour cost. Arguably, the costs of the department would not have been incurred if the whole tax system was not in existence. Most tax compliance costs studies leave the estimation of overhead costs to the respondents, and this is the procedure followed in this research.

Another problem is that of the distinction between commencement, transition and recurrent costs of compliance. As mentioned in Chapter 1 of this thesis, commencement costs arise due to the introduction of a new tax or a major tax change. Temporary or transition costs are additional costs borne by both the tax departments and the taxpayers during the learning phase while recurrent costs incurred in running a tax system without the additional temporary elements of a tax change. It has been argued that if governments change the tax system repeatedly, compliance costs will always carry, at any time, some element of temporary costs (Sandford et al., 1989, pp.16–17). Even when a tax has been running unchanged for a period, so that the compliance costs can all be considered to be regular costs, taxpayers which enter the tax system for the first time or those that take on their first employees, will be experiencing start-up and temporary costs. Thus, the regular tax compliance costs will always include elements of start-up and temporary costs associated with normal changes in the taxpayer population (Sandford & Hasseldine, 1992, p. 7).

Due to the overlapping nature of tax compliance costs categories, these costs may be over-estimated, particularly if they are examined just after the introduction of a new tax or a major tax change. Consequently, it is vital to take considerable care when categorising commencement, temporary and regular costs of compliance.

### 4.2.3 Valuation of Business Taxpayers' Time

The bulk of the tax compliance costs originate mainly from the value of labour time, being the time spent by the business owners, their staff and external advisers on tax compliance activities. The literature indicates that the valuation of taxpayers' time is an intricate issue in the area of tax compliance costs studies (e.g., Sandford et al., 1989, pp. 35–39; Pope, 1993a, pp. 44–48), with no general agreement as to what value should be assigned to time (Sandford et al., 1981, p. 22). This issue is particularly problematic when estimating the value of time spent on tax activities by sole traders (Evans et al., 1997, p. 11). Pope affirms that:

“This remains a particularly ‘thorny’ problem in the literature, and an area where different approaches have been taken by scholars in the field” (Pope, 1993a, p. 44).

Sandford et al. (1989, pp. 35–39) distinguish four different situations related to the valuation of time spent on tax activities: the time of professional advisers; the time of employees doing tax compliance work for an employer; the time of the self-employed doing tax compliance work in connection with their businesses; and the time of individuals doing their own personal tax work in what would otherwise be leisure time. Arguably, the issue of valuation of labour time is particularly problematic when assessing the time of the business owner who is forced to put in additional hours (outside normal working hours), to complete the taxation tasks. This problem arises due to the opportunity cost, being the benefit that would be gained if the additional time taken to complete tax work were to be invested in other productive activities or leisure.

For the businesses that outsource the services of external tax advisers, and receive un-itemised bills for tax work and non-tax accounting and financial advice, the question of how much of that bill represents tax work is problematic. Tait (1988, p. 352) asserts that “while real, business compliance costs are extremely difficult to estimate and assess. The only practical way is to ask those involved to make an informed computation.” Thus, this study uses the values that have been provided by the respondents to estimate compliance costs.

#### **4.2.4 Comparison of Tax Compliance Costs Estimates Across Different Countries**

Comparison of tax compliance costs estimates from different countries is questionable because of the differences in the countries' levels of development, socio-economic environments as well as taxpayer populations and tax systems. To this end, Pope (1999, p. 62) maintains that international comparisons of tax compliance costs findings are fraught with difficulty. Similarly, Sandford (1995b, p. 405) notes that any attempt to compare international tax compliance costs estimates would be more likely to mislead than to enlighten. Moreover, differences in definitions, methodologies, as well as areas of focus can lead to a comparison of apples and oranges (IFC, 2009b, p. 95). Nevertheless, an international comparison has been undertaken in this study mainly to confirm the broad findings of prior tax compliance costs studies and not to identify the differences (Sandford, 1995b, p. 407).

### **4.3 RESEARCH APPROACHES**

#### **4.3.1 Overview**

Research can be conducted using quantitative, qualitative or mixed method techniques. As McKerchar (2010, p. 89) notes, "there is no one perfect approach; instead many possibilities are available for you to consider as you seek the methodology that seems to be 'best fit' for your particular research framework." Quantitative, qualitative and mixed method research techniques are discussed succinctly below. Qualitative and quantitative techniques differ significantly; however, they complement each other (Neuman, 2006, p. 151). Due to the limitations of quantitative and qualitative techniques neither approach could be employed individually in this study. Thus, this research employs the mixed method approach, which incorporates both the quantitative and qualitative designs to estimate the compliance costs of VAT in Botswana.

### **4.3.2 Quantitative Research Technique**

Quantitative research methods are usually numerical and often use close-ended questions. They employ empirical techniques to objectively measure variables and examine hypotheses. Such approaches use hard data (Neuman, 2006, p. 151) to investigate the relationships between variables in order to test theories. The variables in question are then modelled within the confines of specific frameworks and statistically analysed to arrive at conclusions.

McKerchar (2008, p. 10) asserts that quantitative strategies use experiments and surveys and are suitable in cases where research is undertaken with the prime aim of testing for causal relationships in order to make generalisations about the entire population. In addition, for this approach to work, neutrality and separation of the researcher from any subjects under study is required (McKerchar, 2010, p. 91). Those who employ this approach of research use assumptions to test theories deductively. Furthermore, they have to protect against bias and control for other explanations as well as generalise and reproduce the results (Creswell, 2009, p. 4).

The distinctive features of the quantitative research approach are: strict adherence to the methods; statistical generalisations of results; reliability and validity of knowledge claims; the ability to obtain consistent results when the research design is replicated; prescriptive nature of population samples and methods of sample selection; representativeness of research participants and; the degree of generalisation of knowledge claims (McKerchar, 2010, p. 92).

### **4.3.3 Qualitative Research Technique**

Qualitative research design tends to be verbose and use open-ended questions to examine the meaning assigned to a social or human problem by individuals or groups of people. The design process addresses questions and procedures through inductive analysis of data that has been collected in the participant's setting. Inductive analysis builds from particulars to general themes in order to make interpretations of the data and produce a flexible structured final written report (Creswell, 2009, p. 4).

Unlike quantitative approach, which is objective, the reality in qualitative methodology is always subjective. Thus qualitative approach is interpretative in nature. It is not driven by deductive reasoning, hypotheses testing, the study of variables, or the making of statistical generalisations to broader populations. Rather, this research approach focuses on building theories, identifying patterns, and making both meaningful and analytical generalisations that are limited in framework to the population studied (McKerchar, 2010, p. 94).

#### **4.3.4 Mixed Method Approach**

Mixed method research design draws from the strengths of one or more than one research approach. The research design incorporates more than one methodological element, with different elements contributing differing levels of importance to the research (McKerchar, 2010, p. 118). The concurrent use of both quantitative and qualitative methods in a study, as opposed to the sole use of either approach, provides a better understanding of research issues. In addition, the limitations of quantitative and qualitative approaches are offset by the strengths of the mixed method research by answering questions that either method cannot answer on its own.

Furthermore, mixed method research removes the methodology restrictions and allows the researcher to use multiple paradigms and all the tools of data collection, thus providing more comprehensive evidence for studying a research problem. On the negative side, the execution of mixed-method research is difficult, time consuming, and uses a lot of resources to collect and analyse both quantitative and qualitative data. Moreover, it complicates the procedures of research and requires clear presentation if the reader is going to be able to sort out the different procedures (Creswell & Plano Clark, 2007, pp. 5–10).

## **4.4 COMPLIANCE COSTS RESEARCH TECHNIQUES**

### **4.4.1 Overview**

Different techniques have been used in previous studies to estimate the burden of taxes, both from the government's side and taxpayers' realm. While tax compliance costs can be estimated using a variety of methods, the study of administrative costs is limited to just a few, such as document studies and in-depth interviews with the tax authorities. Sandford et al. (1989, p. 52) identify seven major methods of estimating the compliance costs of taxation: highly structured questionnaires and/or interviews; semi-structured or unstructured interviews; time and motion studies; participant observation/action research; other types of case study, such as, studies of the comprehensibility of tax forms; archive research using records held by government departments and tax advisers; and simulation or modelling exercises.

### **4.4.2 Surveys**

Evans et al. (1996, p. 10) maintain that there is no single methodology that is best suited for studies of compliance costs. Previous studies employ different techniques to estimate tax compliance costs; however, surveys have been the most widely used. Surveys are instruments used to collect data from individuals, governments and/or businesses, through well-crafted and sequenced questions. They are inherently quantitative and positivistic (De Vaus, 2002, p. 5). Surveys stand out from other research methods because of their ability to estimate, with significant accuracy, the percentage of a population that has a particular characteristic from a sample of that population (Dillman, 2007, p. 9).

Surveys can be in the form of postal, email or web questionnaires, face-to-face or telephone surveys. The goal of a survey is to obtain data that can be compared across subsets of the chosen sample to uncover similarities and differences. Versatility is the greatest strength of surveys because the act of questioning others can produce information of all sorts. In addition, a few well designed questionnaires can be used to collect data in a shorter time than other techniques (Cooper & Schindler, 2008, p.

215). Moreover, studies that have combined different techniques, such as mail surveys and follow-up interviews, appear to yield better response rates and useful information (Evans et al., 1996, p. 10). The different forms of surveys are discussed below.

#### ***4.4.2a Questionnaire-based Mail Surveys***

The questionnaire-based mail survey has become the leading method of collecting data for tax compliance studies (e.g., Sandford 1995a, p. 378; Tran-Nam, 2001, p. 56), with a typical response rate of 30 per cent (Sandford, 1995a, p. 379) for developed countries. This is because it is relatively cheap (e.g., Sandford, 1995a; Dillman, 1991; Pope, 1993a; Evans et al., 1996) and, thus, allows for large samples to be drawn (e.g., Sandford et al., 1989; Pope, 1993a; Evans et al., 1996). Also, it enables the respondents to search for information not readily at hand (Sandford et al., 1989) and maintain anonymity (Peil, Mitchell & Rimmer, 1982, p. 112). Furthermore, the simplicity of mail survey procedures allows individuals to carry them out without relying on survey research organisations (Dillman, 1991, p. 226). Although unreliable responses may arise from misinterpretation of the question or deliberate exaggeration by the respondents in an attempt to persuade the government to reduce the tax rate, such responses can be easily eliminated through the use of external checks (Sandford et al., 1989, pp. 52–53).

Also, Evans et al. (1996, p. 24) maintain that the questionnaires may be periodically sent out for updating, cross-checking or for follow-up purposes. In addition, statistical reliability improvement is possible given larger samples. The respondents are also able to complete the questionnaire at a time and place suitable to them, which gives them the time to access appropriate files and assistance. Furthermore, questionnaire surveys enable the researcher to obtain both quantitative and qualitative data and the risk of interviewer bias is less. Moreover, stratified random samples that are representative of the population of taxpayers can be chosen with the help of the tax authorities. Thus, sample data combined with other relevant information can be used to make generalisation on the entire economy (Glover & Tran-Nam, 2005, p. 243).

However, mail surveys have limitations of low response rates and non-response bias which hamper the reliability of estimates (e.g., Sandford et al., 1989; Sandford 1995a; Evans et al. 1996); misconception of questions by the respondents; the possibility that the person completing the questionnaire may not be the rightful one who is well informed about the tax affairs (Evans et al., 1996); and not knowing whether the respondents are giving genuine answers, flippant answers or mere guesswork. This problem, particularly, may be augmented where incentives are used to improve response rates, as respondents may answer the questionnaire (even with inaccurate information), just for the sake of being in the running to receive the incentive.

Nevertheless, mail questionnaire surveys have been used successfully to estimate tax compliance costs in the UK (e.g., Sandford, 1973; Sandford et al., 1981; Sandford et al., 1989), Australia (e.g., Pope, 1993a; Pope et al., 1990; 1991; Evans et al., 1996; Evans, 2003; Rametse & Pope 2002), New Zealand (e.g., Sandford & Hasseldine, 1992), USA (e.g., Sommers & Cole, 1981; Slemrod & Blumenthal, 1996; Slemrod & Venkatesh, 2002), Sweden (e.g., Malmer, 1995), Asia (e.g., Ariff, Loh & Talib, 1995; Ariff, Ismail & Loh, 1997; Chan et al., 1999; Hanefah, Ariff & Kasipillai, 2001; Abdul-Jabbar, 2009; Susila & Pope, 2012), India (e.g., Chattopadhyay & Das-Gupta, 2002a; 2002b), Europe (e.g., Allers, 1994; Blažić, 2004; Klun, 2004a, 2004b; Schoonjans, 2011), Mauritius (e.g., Pillai, 2000), Ethiopia (e.g., Yesegat, 2009) and South Africa (e.g., FIAS, 2007).

#### ***4.4.2b Electronic Surveys***

Electronic surveys have increased rapidly in the past decade to replace mail surveys. The use of electronic surveys is effective in that it leads to reduction of research costs and saves time. Recent research on response rates of electronic surveys versus mail surveys produces mixed results. In some studies (summarised in Hoonakker and Carayon, 2009, pp. 352–359), electronic surveys are found to produce the same average response rates as mail surveys. While in other studies (summarised in Saunders, 2012, p. 58) electronic surveys reportedly produce lower response rates than mail surveys. Fan and Yan (2010, p. 137) note that the response rate of electronic surveys is approximately 10 per cent lower than that of mail surveys.

Electronic surveys are not used in this study because the use of technology is still low among SMEs in Botswana.

#### **4.4.3 Interviews**

Interviews fall under qualitative research methodology. They require verbal communication between the researcher and the interviewee. Thus, interviews can be conducted in a face-to-face mode or through telephone. These approaches are discussed below.

##### ***4.4.3a Telephone Interviews***

Telephone interviews have an advantage of being cheap and relatively quick to conduct. In addition, the risk of ambiguity or misinterpretation of the questions is eliminated as the researcher or trained research assistants are available to clarify issues of difficulty on the spot. However, telephone interviews cannot be used for large samples because only a few questions, to which an immediate answer is expected, can be asked (Sandford et al., 1989). In his UK study, Sandford (1973) interviewed professional tax advisers and personal taxpayers to estimate the hidden costs of taxation. The telephone survey by Plamondon and Zussman (1998) in Canada was conducted on 3,082 small businesses while Vaillancourt (2010) hired the services of Leger Marketing to conduct a telephone survey of 2,000 Canadian personal income tax filers in 2008.

##### ***4.4.3b Face-to-Face Interviews***

Face-to-face interviews, when carried out by researchers that are conversant in the research area, provide the best means for obtaining the most reliable data from the interviewees (Sandford et al., 1989, p. 53; Allers, 1994, p. 48). They are the most effective method for gathering detailed information about GST compliance costs (Wurts, 1995, p. 303). This technique enables the researcher to clarify misunderstood questions on the spot, thus increasing the reliability of the responses (Pope, 2002, p. 276). In addition, the rapport that is developed between the researcher and the respondent at the commencement of the face-to-face interview creates a relaxed

atmosphere that allows the respondent to divulge information that they would not normally disclose. Furthermore, the researcher is able to ask additional questions that, due to length constraints, may not be asked in the mail questionnaire or telephone interview. Nonetheless, face-to-face interviews are time consuming to administer and therefore limit the scale of the research and, consequently, hamper the representativeness of the results.

Several studies use face-to-face interviews to estimate taxation compliance costs (e.g., Vaillancourt, 1989; Plamondon & Associates Inc., 1993; Blažić, 2004; SBP, 2005; Yesegat, 2009). The Canadian study by Plamondon and Associates Inc. (1993), estimates the GST compliance costs by using personal interviews of 200 small businesses conducted by specialised accountants. The methodology adopted by Plamondon and Associates Inc. is discussed at length by Wurts (1995, pp. 299–320). In summary, Wurts (1995) notes that while the sample size used by Plamondon Associates Inc. (1993) is small and not representative of the population, the depth of information obtained through the personal interview approach strengthens the conclusions of the study. However, Sandford (1995a, p. 377) suggests that the results of this study are dubious given the speed with which the Plamondon Associates Inc. (1993) results were published as contrasted with the sluggishness with which some other Finance Ministry reports had been published.

#### **4.4.4 Case Studies**

Case studies involve the precise in-depth measurement of costs by the researcher. They may take the form of time and motion studies. In case studies, the researchers use time devices, such as stopwatches, and a uniform cost definition to measure the costs. Alternatively, a predetermined time value may be allocated to the activities that have been categorised into their smallest components to quantify the costs. The same researcher(s) measure the costs according to uniform definitions, making this technique reliable. However, case studies are labour intensive; hence, large samples cannot be used. This caveat negatively affects the representativeness of the results (Sandford et al., 1989, p. 52). Muckler (cited in Allers, 1994, p. 47), cautions that the measurement of work in case studies may affect the process being measured, because most people loathe being watched when they work. Consequently, they may either

slow down or work harder in an attempt to prove themselves, thereby jeopardise the validity of the study.

An Australian study by Wallschutzky and Gibson (1993) employed multiple case studies to obtain information on taxation compliance issues from 12 small businesses. The small number of businesses interviewed, the 'harsh economic' conditions under which the in-depth interviews were conducted, and the use of volunteers instead of randomly selected businesses, render the results of their study unrepresentative. Thus, the findings cannot be generalised across the entire small business population. In addition, the information used in Wallschutzky and Gibson's (1993) study was accepted on its face value and not verified in any way. The study is flawed fundamentally and is, therefore, questionable and cannot be relied upon to draw solid conclusions about the taxation compliance issues of small businesses in Australia. Another Australian study that employed the case study methodology was undertaken by Glover and Tran-Nam (2005) using 31 small businesses.

Richie (2001, p. 305) affirms that the major disadvantage of the case study method is that the findings cannot be generalised to the population, while its key advantage is that researchers are able to get close to the business and track decision-making processes. The study by Richie (2001) commenced with 22 businesses and ended with only 19 at the end of the 12 months. Richie concludes by noting that the use of the case study method does not allow the researcher to draw a picture of total compliance costs and also of the sector under investigation. However, this methodology provides a depth of information as well as disentangled costs that may not be easily obtained by a mail survey.

#### **4.4.5 Validity, Reliability and Representativeness**

The methodological techniques of data collection must be valid, reliable and representative (Allers, 1994, p. 43). Validity refers to the ability of the methodology to measure what the research intends to measure. For it to be valid, the technique must be made operational by defining the theoretical concept in measurable units. In addition, the operational and theoretical definitions should match as closely as possible. The validity of the compliance cost estimates is dependent upon the

perception of respondents as well as the quality of the survey data from the businesses. As such, the survey responses should be checked for validity and the unusable responses should be excluded from the analysis.

Reliability refers to the capacity of the instrument to give a correct measure of the relevant variable by yielding approximately the same results of repeated measurements. The researcher should provide a systematic report of the procedure he followed to enable other researchers to reproduce the results by repeating the measurement in exactly the same fashion. Moreover, the data collection methodology is representative if there is no material difference between the sample and the population with respect to the variables under study. While representativeness cannot be tested directly, because of a lack of whole population data, other variables on which data are available may be used to test for representativeness (Allers, 1994, p. 43).

#### **4.4.6 Response and Non-Response**

People's knowledge, memory and interests affect their responses to questionnaires (Peil et al., 1982, p. 100). The reluctance by a fraction of the selected sample to answer some or all survey questions often leads to low response rates. The usual response rate to a postal questionnaire survey is around 20–30 per cent for developed countries and at least ten per cent for developing economies.<sup>58</sup> It must be noted that response rates have been declining for some time, such that 20–30 per cent would now be considered high in most developed countries, with response rates in the 10–15 per cent (or even lower) being typical.

Sandford argues that the low response is not a problem as long as the sample can sufficiently provide a large absolute number of respondents and if the characteristics of the non-respondents and the respondents can be assumed to be similar. The vital information about the non-respondents may be available and be taken into account in grossing-up. However, the question that remains is whether the attitudes and

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<sup>58</sup> A doctorate study by Abdul-Jabbar (2009) used a mail survey and obtained a response rate of around 16 per cent in Malaysia. Another recent study by Susila and Pope (2012) used a mail survey with a response rate of 8.2 per cent for Indonesia.

behavioural tendencies of the non-respondents in particular sizes and sectors differ from those of the respondents in the same categories in a way that affects their compliance costs (Sandford, 1995a, p. 380).

Tait (1988) maintains that:

“...all such surveys suffer from the problem of self-selection of respondents producing a self-fulfilling prophecy. If you set out to ask a group by mail whether they are unhappy, it is likely that those who reply will be those that are sufficiently unhappy to take the trouble (and suffer the cost) of filling in the survey” (Tait, 1988, p. 352).

Tait (1988) asserts that surveys are prejudiced from the word go because of their tendency to lean towards taxpayers who perceive their compliance costs to be highly burdensome. In addition, the respondents may be inclined to overstate their compliance costs in an attempt to instigate changes in tax policy. This situation introduces an additional bias to the results. To counter this problem, an implied weight to the non-respondents may be applied to the results, based on the assumption that such taxpayers perceive their compliance costs to be less of a burden to worry about.

Sandford et al. (1989, pp. 58–59) refute this claim and argue that, the taxpayers that detest filling in forms, questionnaires included, appear to be the ones most unhappy about compliance costs. In addition, the proprietors/directors of the smaller firms (a category familiar with low response rates) are usually the most displeased with tax compliance costs. Businesses that bear a greater burden of compliance costs tend to be the ones that have the lowest response rates (Sandford, 1995a, p. 380). Thus, any partiality of non-response would skew the compliance costs towards an under-valued estimation.

Arguably, non-response may also be attributed to the time-consuming nature of questionnaires. Most businesses are usually very busy, and filling out a questionnaire (for free, in most cases) is an act that would usually be itemised at the bottom of their ‘to do’ list, often buried under a heap of product and/or service deadlines, daily

business demands and, for some, departmental reports, audits and endless meetings. It does not help if a business is swamped with a myriad of questionnaires from the government and other firms, as is frequently the case. The complexity and intrusive nature of some questions may deter some businesses, particularly those that do not want their business information exposed to external parties, from filling out questionnaires.

Allers (1994, p. 111) maintains that a high absolute number of responses obtained from a large sample, while useful in producing representative results, is insufficient. The nature of non-response should be investigated to determine whether or not it is related to compliance costs. De Vaus (2002, p. 84) also affirms that a large sample size does not solve the problem of non-response. De Vaus (2002) maintains that non-respondents often differ from respondents in fundamental aspects such as age, education and migrant background, and augmenting the sample size does not produce the correct proportions of various segments if some categories do not respond.

Non-response poses a severe threat to representativeness of surveys, known as non-response bias. Non-response bias in surveys arises when there is a significant difference between the perceptions of the respondents and of those who choose not to respond (Allers, 1994, p. 49). It occurs when the researcher fails to either trace the potential participant or encourage that person to participate (Cooper & Schindler, 2008, p. 215). Response rates tend to be lower for small businesses, which generally incur relatively high compliance costs (Allers, 1994, p. 49). Low response rates form part of the inadequate features of mail surveys (Sandford, 1995a, p. 379), as it reduces the sample size and leads to bias (De Vaus, 2002, p. 84).

Non-response bias in questionnaire surveys can be tested using a non-response postcard. Bethlehem and Kersten (cited in Allers, 1994, p. 111) note that one central question generally forms the core of the questionnaire. They suggest that if non-respondents know that they will not be bothered anymore, many can be persuaded to answer just that one question. Such a question, usually printed on a postcard, mainly seeks to uncover the perceptions of the non-respondents concerning their burden of compliance in order to identify the nature of the non-response bias. The same

question is included in the main questionnaire in order to find out the perception of the respondents concerning the burden of their compliance costs. A comparative analysis of the compliance burden perceptions of the respondents and non-respondents should be made to investigate if, and in which way, the results are biased (Allers, 1994, p. 112).

To that effect, the study by Allers (1994) included a single question (which was also asked in the main questionnaire) on a postcard in the final reminder. This procedure allowed Allers (1994) to discover the tax compliance burden perceptions of the non-respondents, which are subsequently compared with those of the respondents to test for non-response bias. The findings indicate that “non-respondents generally consider themselves more heavily burdened than respondents” (Allers, 1994, pp. 120–121). A further analysis demonstrates that the results of the study by Allers (1994) are biased downwards by non-response.

De Vaus (2002, p. 84) offers suggestions on the practices that can be employed to adjust for bias and advises researchers to use any observable information that can be picked about the non-respondents such as their gender, age and ethnic background. In addition, if official records are used to provide the sampling frame, the characteristics of the non-respondents can be obtained from those records. Furthermore, in situations where the characteristics of the population from which the sample is drawn are known, the researcher can compare the attributes obtained in the sample with those of the population. Any differences that stem from the comparison will indicate the areas and extent of bias, and thus allow the researcher to make adjustments during the analysis to neutralise the effect of non-response bias.

#### **4.4.7 Sample Size and Response Rate**

Large samples are usually encouraged because they enhance the statistical reliability and representativeness of the estimates. In addition, a large sample allows for the findings to be generalised to the population (Hair, Money, Samouel & Page 2007, p. 170). The literature reveals that tax compliance costs studies have traditionally employed large samples with over one thousand responses (e.g., Sandford et al., 1981; Sandford & Hasseldine, 1992; Pope, 1993a; Allers, 1994; Evans et al., 1996;

Hasseldine & Hansford, 2002) and some with responses exceeding one hundred but below one thousand (e.g., Slemrod & Sorum, 1984; Sandford et al., 1989; Vaillancourt, 1989; Bannock & Albach, 1989; Slemrod & Venkatesh, 2002; Rametse & Pope, 2002; Abdul-Jabbar, 2009; Susila & Pope, 2012). It must be noted that for most of these studies, large samples were made possible by the financial support of the government or another organisation.

Many studies, however, have been conducted without the support of the government and with significant financial constraints. For this reason, studies of this nature have been forced to employ small samples as dictated by insufficient funds. In developing countries especially, researchers have estimated tax compliance costs using small samples with low response rates (e.g., Ariff et al., 1997; Loh, Ariff, Ismail & Shamsher, 1997; Chan et al., 1999; Shekidele, 1999; Pillai, 2000; Hanefah et al., 2001). Some studies in developed countries have been carried out using sample sizes below one thousand (e.g., Malmer, 1995; Erard, 1997; Evans, 2003). Bannock (2001, pp. 88, 94) argues that for as long as their limitations are recognised, small scale surveys are valuable in tax compliance costs studies. Arguably, small scale surveys are valuable in countries where little or infrequent compliance assessment has been done.

In situations where a low response rate is expected, large samples are useful in yielding high absolute numbers of responses that are sufficient for analysis (Allers, 1994, p. 111). In some countries, a response rate as low as one per cent has not hindered the analysis because the sample used was large enough to produce a sufficient absolute number of responses (e.g., Chattopadhyay & Da-Gupta, 2002b; Schoonjans et al., 2011). Dillman (1991, p. 229), however, argues that a low response rate does not necessarily involve non-response error. Dillman (1991) asserts that because the distribution of the non-respondents is usually unknown, it is impossible to compare the characteristics of the respondents and non-respondents. Therefore, the response rate is usually used as a proxy for non-response error, with a higher response rate implying a lower potential of non-response error and, consequently, a better survey.

A compilation of the sample sizes and response rates of the VAT compliance costs studies that have been conducted since 1980 is presented in Appendix E. The sample sizes range from as low as 82 businesses to 21,777 businesses. It must be noted, however, that instead of drawing a sample, FIAS (2007) used the entire population (with the exclusion of overseas members) of three major South African tax practitioner databases (FIAS, 2007, p. 10). The response rate ranges from a low of 11 per cent to around 72 per cent. The high response rate of around 72 per cent in the Ethiopian study is attributable to the methodology employed (face-to-face interviews) which is well reputed for producing high response rates.

#### **4.4.8 The Sampling Process**

A sample, commonly defined as a small subset of the population, can be drawn using either probability or non-probability processes. The sampling issues should be carefully considered, regardless of which procedure is used, when selecting a sample (Hair et al., 2007, p. 170). To ensure the selection of a representative sample which can be generalised to the population, probability (random) sampling is necessary (e.g., Foreman, 1991, p. 7; Sarantakos, 2005, pp. 151–162; Hair et al., 2007, p. 170). Probability sampling is usually employed in quantitative research whereas non-probability sampling is typically used in qualitative research.

The sampling frame for the questionnaire used in this study is obtained from the BURS database of VAT registered businesses. Initially, BURS was not willing to provide the list of VAT registered businesses due to reasons of confidentiality. This changed, however, after a series of face-to-face meetings with the BURS management, which ended with them agreeing to provide a list of VAT registered businesses. The list that was provided by BURS for the year 2009/10 contained only the names of the businesses. Based on this information, the Yellow Pages and the Botswana business directory were used to identify the physical addresses of the businesses that made up the randomly selected sample.

#### **4.4.9 Survey Design**

The design of questionnaires for business tax surveys generally seeks to obtain information concerning the characteristics of the business, and the time the directors, partners or proprietors, accounting/bookkeeping and other staff spend on tax matters. In addition, the questionnaire elicits the information on the fees paid to professional advisers and any miscellaneous costs incurred. Furthermore, the nature and associated costs of any difficulties as well as suggestions for improving the taxes may also be investigated (Pope, 2003, p. 80). Care should be exercised when choosing which concepts to include in a questionnaire to avoid bias. Additionally, including multiple items for each concept measured helps in avoiding bias (Hessler, 1992, p. 92). It should be noted that many of the earlier studies are pre-internet. Thus, the survey design discussion focuses on the traditional postal questionnaire.

Pope (2002, p. 276) suggests that, where a survey method is used, the researcher has to decide on the means of contacting the respondents. The information may be collected by mail, telephone or face-to-face, or a combination of these techniques. In addition, the researcher has to ask the relevant questions and obtain an adequate response rate. However, Sandford (1995a) notes that such requirements are likely to be met in an environment characterised by close cooperation between the revenue authorities and researchers as well as adequate funding. Not only do tax officials have incomparable knowledge and experience of the operation of the tax, they also have access to the best database that can be beneficial to the researchers in drawing a representative sample. Furthermore, they may have access to unpublished statistical and other information vital to assessing differential response rates or interpreting results. Thus, cooperation between the tax authorities and researchers is vital to achieving an excellent research outcome. This study took cognisance of the items that have been identified by Sandford (1995a, pp. 378–79) that can be incorporated in the survey design and execution to enhance the response rate and the quality of the responses.

Another approach that is useful in enhancing the questionnaire response rate is the Total Design Method (TDM) first developed by Dillman (1978). The theoretical framework behind this approach maintains that the recipients of the questionnaire are

most likely to respond if their expected benefit to cost ratio is positive. Based on the TDM approach, the questionnaire development and survey implementation should take into consideration the following: (1) the questionnaire should be user-friendly. That is, it should appear to be easier and short; (2) the questionnaire should draw the interest of the respondent through appearance and the use of interesting questions and; (3) official stationery and the support of sponsors should be used to build confidence and trust among the respondents concerning the realisation of the promised rewards (Dillman, 1991, p. 233).

The Total Design Method has since been modified to accommodate the use of technology which has brought about changes in research methodology such as the introduction of mixed-mode surveys. The modification of the TDM led to the Tailored Design Method. While the original TDM used one basic method for all survey situations, the Tailored Design Method endeavours to identify and utilise knowledge of sponsorship, the survey population and the nature of the survey situation to maximise quality and quantity of response. The Tailored Design Method is defined as “the development of survey procedures that create respondent trust and perceptions of increased rewards and reduced costs for being a respondent, which take into account features of the survey situation and have as their goal the overall reduction of survey error” (Dillman, 2007, pp. 26–27). The recommendations of the original TDM have been employed widely in survey studies and are in congruity with the survey suggestions put forward by Sandford (1995a) and Pope (1993a).

Still on the effective design of questionnaires, Pope (1993a, pp. 87–90), based on a series of tax compliance costs surveys conducted in Australia, identified seven factors that may be employed in questionnaire surveys to enhance the response rate and achieve high quality of data. The conduct of a pilot survey and reminder system as well as discussion of the questionnaire with tax officials, accountants, industry/professional groups and academic colleagues is imperative. He warns that the researchers should not yield to requests to lengthen unduly the questionnaire and recommends the use of a questionnaire of four pages of A4 size paper, accompanied by a letter and reply-paid envelope. Respondents should be given the option of giving their name, address and telephone number in order to receive a summary of the survey results in due course and, if willing, to answer further questions. Also, a

five-point or seven-point Likert scale should be employed to investigate the attitudes of taxpayers.

Additionally, researchers should ascertain whether an agent is used for any tax work. If the respondents indicate to having used an agent for tax work, they should be asked for a total fee and also to indicate whether this fee includes work on the specific tax under investigation. The respondents should be requested to itemise the monetary cost of this work and estimate the cost of the specific tax work. The researcher has to decide whether to leave the allocation of overhead costs to the respondent, to draw attention to the overhead costs or to emphasise that the compliance cost question refers only to direct costs or additional costs excluding overheads.

Financial and/or material incentives have been used in different compliance costs studies to enhance the response rate. In the study by Wallschutzky (1995), the participants were each given a pocket electronic phone number organiser/spell checker valued at A\$100. The phone numbers of the researchers were entered in the electronic phone organiser with the incentive of reverse charges to make it easy and costless for the participants to communicate with the researchers. Additionally, the respondents who participated for the entire year had a 1 in 12 chance of winning A\$1,000 (Wallschutzky, 1995, p. 279). Another Australian study undertaken by the ATAX team used an incentive, over and above the actions emphasised by Pope (1993a) above. The survey participants were given the chance to win a 'state of the art' computer to encourage the respondents to submit completed forms by a particular date. In addition, the ATAX team enlisted the assistance of the media and appropriate influential bodies to publicise the survey and emphasise its importance. This action created the "climate of acceptance" within the taxpaying community (Evans et al., 1996, p. 25).

#### **4.4.10 Validation of Responses**

Sandford and Hasseldine (1992, pp. 23–24) affirm that:

“No sample of this kind can be a wholly accurate representation of the total population. Any survey short of the total population involves some element of sampling error, however small. Moreover there are inevitably errors of a different kind where, in respect of a previous twelve month period, respondents are asked for quantitative information some of which is not available in documents and providing which they must rely on recollection and judgement. However, absolute accuracy is not necessary to establish the orders of magnitude for policy decisions...”

To this end, Sandford and Hasseldine (1992, p. 24) suggest three main questions that the researcher has to consider when assessing the validity of the research findings namely how clear and appropriate the questions were, how representative the usable response was and how accurate the responses were.

In tax compliance costs estimation, the respondents can exaggerate the costs in an attempt to influence the government to change the policy. This sort of exaggeration can result in outliers in the responses. It has been proposed in previous studies (e.g., Sandford & Hasseldine, 1992, p. 25; Pope, 1993a, p. 55) that, when identified, the outliers should be assessed against other responses. They should be investigated through follow-up interviews (where contacts have been secured) and removed if extreme. The value of time for the different categories of personnel involved in tax compliance activities and the fees of professional tax advisers may be checked against external data on wage rates. In this study, the collected questionnaires are scrutinised manually to check the validity of the responses. The outliers and responses that highlighted a clear misinterpretation of the questions are eliminated from the analysis. Frequency distributions and measures of central tendency, such as the mean, median, minimum and maximum values, can be used to identify unrealistic figures.

#### **4.4.11 Grossing-up of Tax Compliance Costs Estimates**

Sandford et al. (1989, p. 55) suggest that the survey responses should be grossed-up in a way that would reflect the composition of the sample and differential response

rates in order to obtain aggregate figures. The grossing-up procedure is simply a technique by which the weighted aggregate mean of the compliance costs is computed. The weighing of the mean is vital, particularly in situations where the survey results are biased. Pope (1993a, p. 91) outlined the grossing-up procedure as follows:

“The mean compliance costs for each category are derived from survey data. These are multiplied by the taxpaying population in that category in order to give an estimated aggregate compliance costs figure for the taxpaying population category. The summation of all categories then gives the total overall estimated compliance costs” (Pope, 1993a, p. 91).

Pope also emphasises the importance of deciding upon the means of analysis, which ideally should reflect the size of the business. He further cautions that the manner in which the tax authority categorises the taxpaying population may limit the selection of the preferred measure of size. Different measures have been used in the grossing-up procedure in previous studies. Pope (1993a) notes that the annual tax remittance, being the way in which the tax authority classifies data, is normally used. Other measures include numbers and the response rate in each size/economic category (Sandford et al., 1989, p. 55), number of employees (Allers, 1994, p. 115) and annual turnover (Yesegat, 2009, p. 133).

## **4.5 BOTSWANA QUESTIONNAIRE DESIGN**

### **4.5.1 Survey Issues for Botswana**

Most of the research techniques that are used to collect data in developing countries have been adopted from developed countries. However, Bulmer and Warwick (1993, p. 32) argue that “the social survey is a western product which cannot be straightforwardly exported to the developing world.” While the survey techniques are successful in developed countries, they may be futile in emerging countries due to differences in culture, language and the state of infrastructure. The differences in

culture and infrastructure are considered when designing the questionnaires used in this study. Furthermore, the procedure of questionnaire delivery that is commonly employed in developed countries is modified to accommodate the inadequate infrastructure in Botswana.

Peil et al. (1982, p. 99) caution that “multilingualism poses many difficulties in Africa.” In Botswana, however, this is not an issue as the national language of the country is English. Additionally, the segment of the population which is less educated and deficient in the English language is dominant in the micro enterprise sector of the business population. Most businesses in this sector are not registered for VAT and, hence, do not form part of this study. Therefore, the language used in writing-up the questionnaires for this study is restricted to English.

#### **4.5.2 Questionnaire Contents**

The questionnaires for the two years under investigation follow a similar design with only a slight improvement in the 2010/11 questionnaire.<sup>59</sup> Sections A of the 2009/10 and 2010/11 questionnaires mainly seek to obtain the information on the characteristics of the businesses such as legal structure, main business activity, annual business turnover and length of business operation. Sections B of the questionnaires require the respondents to estimate the time they spent on VAT activities together with the wage rate of the person(s) responsible for VAT work. Businesses that outsource tax compliance work were asked to provide the total fee they paid for all tax work as well as the proportion of that fee that is specifically for VAT work. This was done to guide the respondents to provide the appropriate figures for VAT charges.

The literature indicates that businesses, especially small ones, have a tendency to overstate VAT compliance costs. This is because the majority of these businesses generally never kept proper financial/tax records prior to the introduction of VAT. It follows that these businesses view all tax adviser fees as VAT compliance costs because VAT is the main reason they keep tax records. Additional questions seek the manner in which the businesses keep their accounting records together with the

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<sup>59</sup> See Appendices A and B.

information on whether the tax returns are completed internally, externally (complete outsourcing) or partially. To test for the areas of difficulty in Botswana's VAT system, the respondents who outsource VAT work are asked to indicate the areas where they seek paid advice.

This study uses individual reported values to value time spent on VAT compliance activities to obtain the monetary VAT compliance costs. The questionnaire (Questions 14a and 14b of 2009/10) ask the respondents to estimate the number of hours spent on VAT activities every month and the monthly wage rate(s) of the person(s) responsible for tax work. The hourly wage rates are computed from the monthly wage rates provided by the respondents and multiplied by the annual time spent on VAT activities to arrive at the value of the taxpayers' time. The 2010/11 questionnaire is slightly different in that the respondents are asked (Question 12) to estimate annual hours spent on VAT activities and the hourly wage rate(s) of the person(s) responsible for the VAT work. The questions pertaining to the estimation of time spent on VAT activities in both years are specific about asking the respondents to exclude the usual bookkeeping and overhead costs in order to minimise the problem of overestimation. The estimates provided by the respondents are also used to estimate the cash flow benefits gained by businesses in Botswana.

As discussed in Chapter 2 of this thesis, the VAT system in Botswana zero rates and exempts some goods and services. Zero rating and exempting of some goods and services complicates the VAT system. Accounting for zero rated and VAT exempt items is cumbersome and time consuming (especially in developing countries where businesses use manual systems to account for VAT/GST) as each product/service has to be categorised appropriately in order to apply the correct VAT rate. The more exempt and zero rated goods and services there are, the more tedious the record-keeping and VAT return completions become. Section B of both questionnaires requested the businesses to give approximate percentages of their sales that are classified in the three VAT categories namely standard rated, zero rated and exempt categories. These categories are used to investigate the magnitude of VAT compliance costs for the businesses that trade in zero rated and exempt supplies as opposed to those that do not.

The questionnaires (Questions 20–21 for the financial year 2009/10 and 19 for the financial year 2010/11),<sup>60</sup> investigate the managerial benefits that were possibly gained by the respondents as a result of keeping the VAT records according to the standard imposed by the tax authority. The respondents are asked to state if record keeping for VAT gives them any benefits. The respondents that indicate to having received benefits from record keeping for VAT are asked to estimate the value of such benefits.

Section C of the questionnaires seeks the attitudes of the respondents towards VAT in Botswana. A five-point Likert scale is used to measure these attitudes. The final section of the questionnaires requests comments and suggestions of the businesses concerning the VAT system in Botswana. Additionally, this section contains the question that is also asked in the non-response postcard. The non-response question is included primarily to examine the characteristics of the respondents and non-respondents concerning their perceived level of the VAT compliance burden.

The design of the questionnaires for this study incorporates the survey and questionnaire design elements recommended by Sandford (1995a, pp. 378–379), Pope (1993a, pp. 87–90) and Pope (2003, pp. 79–80). Overall, the factors displayed in Table 4.1 are incorporated in the design of the questionnaire.

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<sup>60</sup> See Appendices A and B.

**Table 4.1: Elements Incorporated in the Questionnaires for Botswana**

The questions are worded carefully using simple and unambiguous language and kept short.
The questions are grouped according to the main topic of investigation to simplify questionnaire completion.
The questionnaire is restricted to four pages of A4 size paper. <sup>a</sup>
The questionnaire is accompanied by a signed cover letter which explains the aim and significance of this study.
It is clearly stated in the cover letter that the University of Botswana is funding this study. The official letter head of the University of Botswana is used in all the survey documents.
The cover letter also includes the telephone (landline), mobile number, e-mail and postal address of the researcher to allow the respondents easy access to the researcher for any inquiries.
The cover letter and the questionnaire promise confidentiality. Furthermore, anonymity is promised verbally when the questionnaires are delivered.
As the questionnaires are hand delivered and hand collected, a non-stamped envelope is enclosed in the questionnaire.
The appropriate timing of the survey is considered.
The questionnaire is pilot tested.
Telephone reminders are used.
Pope (1993a) advises that a five-point or seven-point Likert scale should be employed to measure the attitudes of taxpayers. In this research, a five-point Likert scale is used to that effect. <sup>b</sup>
The respondents that employ full and partial outsourcing of tax work are asked to itemise the fees of the external tax accountants and the internal personnel costs relating to VAT work.
The question relating to overheads is not included in the internal personnel costs. The respondents are asked, separately, to estimate any non-personnel cost relating to VAT work.

a. Limiting the questionnaire to four A4 pages is restrictive and reduces the amount of information that can be gathered and, as such, may not make it feasible to achieve the aims of the study, especially for international comparative research.

b. A five-point Likert scale was used as opposed to the seven-point Likert scale because the two scales do not differ significantly (Dawes, 2008, p. 61).

Source: Adopted from Sandford (1995a, pp. 378–379), Pope (1993a, pp. 87–90) and Pope (2003, pp. 79–80).

## **4.6 BOTSWANA QUESTIONNAIRE ADMINISTRATION**

### **4.6.1 Pilot Test**

Following the tradition of previous tax compliance costs studies, the distribution of the main questionnaires for this study was preceded by a pilot test that was aimed at assessing the simplicity (from a respondent perspective) and validity of the questionnaire. The pilot test was also conducted to identify the areas where the respondents had difficulties or required more explanation. The pilot questionnaire

was sent to ten businesses in Botswana in July 2010. Based on the feedback obtained from the pilot test, the questionnaire was amended to incorporate the suggestions from the businesses.

#### **4.6.2 Distribution of the Questionnaires**

The questionnaires for this study were hand delivered/collected from randomly selected businesses due to the unreliability of the postal system in Botswana. As mentioned earlier, anecdotal evidence, confirmed by the University of Botswana (UB), indicates that previous studies that attempted to use postal questionnaires in Botswana failed. As such, UB, which sponsors the data collection for this study, is not willing to fund mail questionnaires. The literature also confirms that mail questionnaires may not necessarily work for all situations. Peil et al. (1982, pp. 100, 110) maintain that it is convenient to use survey questionnaires in countries with an efficient postal service. They suggest that resistance can occasionally be overcome by a 'personal touch' and if questionnaires are hand delivered, respondents can be encouraged to participate.<sup>61</sup> Moreover, the questionnaires can be checked when they are collected to ensure that all questions have been answered. Electronic surveys could not be used, as the use of technology/internet is not popular among some small businesses in Botswana.

Due to the time consuming and physically strenuous nature of the delivery/collection technique, the sample size was reduced from 1,000 to 600 businesses, and 300 to 100 businesses, for the years 2009/10 and 2010/11, respectively.<sup>62</sup> Thus, the questionnaires were hand distributed to 600 businesses in the city of Gaborone and surrounding towns and villages in the financial year 2009/10. In the financial year 2010/11, 100 questionnaires were distributed to businesses in the City of Gaborone and neighbouring towns. Financial and time constraints necessitated the exclusion of villages from the 2010/11 survey.

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<sup>61</sup> The importance of this study was explained to the respondents when the questionnaires were delivered. This was helpful as the respondents who, initially, were not willing to participate, decided to participate after the value of this research was made clear to them. Consequently, high response rates were obtained in both years.

<sup>62</sup> As mentioned in Chapter 1 of this thesis, two years are used in this study in order to capture the compliance costs effects of the 2010 VAT amendments made by the BURS which included an increase in the VAT rate.

The distribution of the questionnaires for the financial year 2009/10 commenced in October 2010 and continued for a period of four weeks while that of the financial year 2010/11 commenced in the middle of September 2011 and progressed for two weeks. Delivery was made directly to the business owner/manager or tax accountant except for situations where none of these personnel were available and only the secretary was accessible. In some cases, based on a request by the secretaries to 'come back later', several trips were made to some businesses to deliver the questionnaires.

The collection of the questionnaires from the businesses for both years began one week after distribution. This process continued until January 2011 for the 2009/10 questionnaire and November 2011 for the 2010/11 questionnaire. Response rates of 23 per cent and 50 per cent were obtained for the financial years 2009/10 and 2010/11, respectively, after allowing for unusable responses. Although the response rate of 23 per cent is lower than the typical 30 per cent from developed countries, it is considered reasonable for an emerging country.<sup>63</sup> The increase in the response rate by 27 percentage points in the year 2010/11 is attributed to the experience gained while distributing the 2009/10 questionnaires. This experience equipped the researcher with the knowledge of how to approach the businesses in a way that enhanced participation. Unfortunately, due to the time and financial constraints, more businesses could not be included in the 2010/11 sample. It is clear that, based on the increase in the response rate in the year 2010/11, if a larger sample was used, a higher absolute number of responses would have been obtained. It is anticipated that, due to the experience gained through fieldwork, future survey research in Botswana by this author will be greatly enhanced.

#### **4.6.3 Reminder System and Questionnaire Collection**

The traditional reminder system commonly used in compliance costs studies is that of reminder letters which are usually sent two to three weeks after initial postage of the questionnaire (e.g., Sandford et al., 1989; Pope, 1993a; Allers, 1994; Evans et al.,

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<sup>63</sup> See n. 58.

1996; Rametse & Pope, 2002). In this study, telephone reminders are used.<sup>64</sup> The telephone numbers of the businesses were requested when the questionnaires were delivered and some during collection. The respondents were promised confidentiality and informed that the information they provide will be used solely for the purposes of this study and not revealed to any third party. This made contacting the businesses to remind them about the questionnaire prior to collection possible. The telephone reminders were helpful as some businesses were able to obtain clarity of some matters during the call prior to collection. In addition, the businesses that had misplaced/lost the questionnaires (together with the contacts of the researcher) were able to request for copies to be delivered.

The collection of the questionnaires was more tedious than the delivery. This is because many businesses had not completed the questionnaires on the date they had promised to have them ready. Telephone calls were made to the businesses prior to making trips to their offices to confirm whether or not the questionnaires were ready for collection. Approximately 25 per cent of the respondents in each year under investigation completed the questionnaires upon delivery. The businesses that completed the questionnaires on the spot were those that use computerised record-keeping system. This enabled them to get most of the required information at the click of the mouse. The rest of the questionnaires were collected over a period of ten weeks for the 2009/10 financial year and six weeks for the financial year 2010/11. The questionnaire administration was followed by follow-up interviews with twenty and ten respondents in 2009/10 and 2010/11, respectively. This was intended to verify the information provided by the respondents. The follow-up interviews revealed that the data given by the survey participants was correct and no adjustments were necessary.

Non-response bias was tested using the non-response postcard that has been popularised by Allers (1994). The following question, also included in the main questionnaires for both years, was contained in the coded postcards. *Compared with other businesses in your industry, the estimated level of Value Added Tax compliance burden of your business is?* The respondents were given the option to choose

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<sup>64</sup> Reminder letters could not be used due to the unreliability of the postal system in Botswana, as discussed in Section 4.6.2.

between: very high, high, average, low and very low. The analysis of the responses to the postcards is presented in the next chapter.<sup>65</sup>

## **4.7 DATA ANALYSIS**

### **4.7.1 Overview**

Answers to close-ended questions are analysed analysed using the Statistical Package for Social Science (SPSS) while open-ended ones are analysed manually. The SPSS method is commonly used in tax compliance costs studies, usually followed by the grossing-up of raw figures to obtain the compliance costs estimates (Pope, 2003, p. 80). Several tax compliance costs studies have followed this type of analysis (e.g., Pope, 1993a; Rametse, 2006; Abdul-Jabbar, 2009). The mean values obtained for VAT compliance time, VAT compliance costs, as well as cash flow and managerial benefits, for the two financial years under investigation, are analysed and compared. In addition, the attitudes of the businesses toward VAT are examined.

### **4.7.2 Statistical Analysis**

This study uses an independent sample *t* test to investigate whether the means of the two surveys differ significantly. This procedure requires the two surveys and findings to satisfy all the assumptions<sup>66</sup> that underlie independent *t* test analysis (Coakes & Ong, 2011, p. 68). In this study, the values of skewness and kurtosis are used to test for normality of the results. Hair et al. (2007, p. 321) affirm that the distribution is considered normal if the values of the skewness and kurtosis fall within the ranges -1 to 1 and -3 to 3, respectively.

Additionally, for the *t* test to be conducted, the variances of the two samples have to be homogeneous. In this case, the Levene test is used to check for equality of variances. According to this test, the variances are considered unequal if the Levene

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<sup>65</sup> Late and early respondents were not compared to test for non-response bias.

<sup>66</sup> The assumptions are as follows: the data should be at the interval or ratio level of measurement, the scores should be randomly sampled from the population of interest and the scores should be normally distributed in the population.

test is significant ( $p < .05$ ) and homogeneous if the Levene test is not significant ( $p > .05$ ), (Coakes & Ong, 2011, p. 72).

## **4.8 RESEARCH LIMITATIONS**

### **4.8.1 Questionnaire Delivery and Collection**

The usual method of tax compliance costs research which entails the mailing of questionnaires and reminder letters to the selected sample of taxpayers could not be used in this study. As mentioned earlier, the postal system in Botswana is unreliable. Unlike in developed countries, where post boxes are situated at the front of the home or business, post boxes in Botswana are located in selected places such as the post offices or shopping centres. This makes access to the post boxes time consuming as some people/businesses have to travel long distances to collect their mail. In fact, some businesses and organisations employ messengers to collect the mail on their behalf. Suffice it to say that, getting to the post box can take weeks or months, especially for those that cannot afford to employ messengers.

Due to this caveat, the questionnaires in this study had to be hand delivered/collected to ensure that the potential respondents received the questionnaires speedily. As this process is cumbersome and time consuming, not to mention expensive, the business sample had to be reduced from 1,000 to 600 in 2009/10 and 300 to 100 in 2010/11. Reminders were conducted by telephone to the respondents that had provided their telephone numbers. In addition, a stratified random sample could not be used because the questionnaires could not be posted. Therefore, random sampling was viewed as more appropriate for a developing country such as Botswana.

Several trips had to be made to some businesses because they had not completed filling the questionnaires at the appointed time. Some businesses gave excuses that their accountants were away or sick. This process was costly because in the end, many blank questionnaires were collected from the businesses.

#### **4.8.2 Data Limitations from Botswana Unified Revenue Service**

The next difficulty was encountered when seeking data from BURS. The BURS was not able to give the researcher detailed data concerning the number of VAT registered businesses in each size category (small, medium and large) and the amount of VAT remitted by each category because they said such data was not available. Moreover, the researcher could not get the data of VAT registered businesses by their main business activity or place from BURS. This limitation forced the grossing-up of VAT compliance costs in this study to be restricted to the manner in which BURS classifies the value added taxpayers.

Initially, this study set out to estimate the administrative and compliance costs of VAT in Botswana. The investigation of administrative costs had to be aborted mid-way through the study because the BURS was not willing to provide data concerning their VAT collection costs.

#### **4.9 CHAPTER SUMMARY**

This chapter has discussed the estimation issues and the methodologies common to tax compliance costs studies. Accordingly, questionnaire surveys are the most common approach used in the collection of tax compliance costs data. It must be noted, however, that, due to their cost-saving nature, electronic surveys are becoming standard when there is confidence in the electronic infrastructure. The literature has been used to identify the issues that require supreme care and consideration in studies of this nature. These issues include: the definition of tax compliance costs; distinguishing between accounting and taxation costs; the isolation of marginal costs that arise from the imposition of a particular tax and the distinction between commencement, transition and recurrent costs of compliance.

The chapter has also identified the estimation issues peculiar to a developing country such as Botswana, as well as the problems encountered when conducting this research. Suffice it to say that the methodologies that have worked successfully in developed countries do not always work in developing countries where infrastructure

is underdeveloped. To this end, the questionnaires for this research study were hand delivered and hand collected to/from 600 and 100 businesses in the years 2009/10 and 2010/11, respectively. Usable response rates of 23 per cent for 2009/10 and 50 per cent for 2010/11 were obtained. Principally, the data in this study is analysed using the SPSS software. The results of the surveys are presented in Chapters 5 to 8.

## CHAPTER 5

### SURVEY RESPONSE RESULTS

#### 5.1 INTRODUCTION

The VAT survey results for the financial years 2009/10 and 2010/11 are presented in this chapter. This chapter focusses mainly on some of the data that was sought by sections A and B of both questionnaires.<sup>67</sup> The results are analysed in terms of the businesses' profiles and the compliance times expended in VAT activities. This chapter begins with a discussion of the sample including response rates and the profiles of respondents in Sections 2 and 3, respectively. This is followed by an outline of the compliance times of VAT for businesses for the two years under review as well as the average wage rates of the different personnel responsible for VAT work in Section 4. Section 5 summarises this chapter.

#### 5.2 SAMPLE AND RESPONSE RATE

The data for the two financial years being investigated were collected using structured questionnaires. In 2009/10, six hundred (600) questionnaires were hand delivered to the businesses in the city of Gaborone<sup>68</sup> as well as surrounding towns and villages. A total of 504 questionnaires were collected from the businesses, with 367 of them being unusable and 137 usable, giving a response rate of 23 per cent. The outstanding 96 consist of questionnaires that were lost by the businesses. During the year 2010/11, one hundred (100) structured questionnaires were hand delivered to businesses in Gaborone and surrounding towns. Fifty usable questionnaires were collected from the businesses, resulting in a response rate of 50 per cent. The high response rate for the financial year 2010/11 may be attributed, partially, to the smaller sample size and difference in the spread of the sample population. Table 5.1 summarises the usable and unusable responses for both years.

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<sup>67</sup> Refer to Appendices A and B of this thesis.

<sup>68</sup> See n. 8.

**Table 5.1: Survey Responses**

	Number of Respondents	
	2009/10	2010/11
Gross sample frame	600	100
Unusable	367	50
Lost by businesses	96	
<i>Usable responses</i>	<i>137</i>	<i>50</i>
<i>Percentage response</i>	<i>23</i>	<i>50</i>

A complete breakdown of the unusable responses is presented in Table 5.2. Out of the 367 unusable questionnaires for the year 2009/10, 324 are totally blank (with only 102 completed non-response postcards). Forty questionnaires delivered in the year 2009/10 are incomplete with the vital data missing. Three of the respondents indicated that they had been in operation for less than a year; therefore their responses are treated as unusable because they are not able to complete vital questions relating to the VAT compliance costs for the previous twelve months. For the year 2010/11, 50 out of 100 blank questionnaires were collected from the businesses. The two main reasons that were given for not completing the questionnaires, in both years, are ‘lack of time’ and ‘absence of the person responsible for the business’s VAT activities’.

**Table 5.2: Unusable Responses**

	Nature of Unusable Questionnaire Responses			
	2009/10	Percentage	2010/11	Percentage
Blank questionnaires returned	324	88	50	50
Incomplete questionnaires	40	11	0	0
Businesses in operation for less than one year	3	1	0	0
<i>Overall</i>	<i>367</i>	<i>100</i>	<i>50</i>	<i>100</i>

Allers (1994, p. 49) notes that non-response, which is the unwillingness by a fraction of the selected sample to answer some or all survey questions, is a severe threat to representativeness. The refusal to answer some or all survey questions may be due to many factors, such as lack of time, length of questionnaire and difficulty of

questions.<sup>69</sup> To counter the problem of non-response bias, this study follows the approach used by Allers (1994) of the non-response reply postcard.<sup>70</sup> The postcards, containing a question that sought the perception of the businesses concerning the level of their VAT compliance burden,<sup>71</sup> were enclosed in the questionnaires that were delivered to the businesses. Overall, the means of the survey respondents (2.85) and postcard respondents (2.61), presented in Table 5.3, are not significantly different. Thus, non-response bias is not evident in this study.

**Table 5.3: Perception of the Level of Compliance Costs for the Year 2009/10**

	Main Questionnaire		Postcard <sup>a</sup>	
	N <sup>b</sup>	Percentage	N	Percentage
Very high	16	12	11	11
High	23	17	36	35
Average	63	48	40	39
Low	25	19	12	12
Very low	5	4	3	3
	<b>132<sup>c</sup></b>	<b>100</b>	<b>102</b>	<b>100</b>
<b>Overall Mean<sup>d</sup></b>	<b>2.85</b>		<b>2.61</b>	

a No postcards were completed in the year 2010/11.

b N is used to represent the number of respondents and will be used throughout this thesis.

c Five respondents did not state their perception of the level of compliance costs for the year 2009/10.

d Out of five.

The numbers of VAT registered businesses by BURS classification, for the two years under investigation, are displayed in Table 5.4. As at 11 August 2009, there were 15,940 VAT registered businesses in Botswana. This number increased to 23,931 businesses by 10 August 2010. The massive increase in the number of VAT registered businesses over a period of twelve months, from August 2009 to August 2010, reflects the stringent measures undertaken by BURS to uncover non-registered businesses (BURS, 2010, p. 15). The Census of Enterprises and Establishments (CEE) conducted by the Central Statistics Office (2009, p. 4) reveals that there were 16,556 formal enterprises/establishments as at July 2008. This figure also includes businesses that are not registered for VAT.<sup>72</sup>

<sup>69</sup> See Chapter Four of this thesis.

<sup>70</sup> The postcards are contained in Appendices A and B of this thesis.

<sup>71</sup> This question is also asked in the main questionnaire as Question 29 for the year 2009/10 and Question 26 for the year 2010/11.

<sup>72</sup> The data contained in this report are vital in that they provide estimates of the number of formal businesses in Botswana which can be used to check/confirm the estimates of VAT registered businesses. The report also contains data on the different business sectors in Botswana. However, these data could not be employed in this

**Table 5.4: Value Added Tax Registered Businesses by Botswana Unified Revenue Service Classification<sup>a</sup>**

Groups	2009/10		2010/11	
	N	Percentage	N	Percentage
A	7,831	49	11,582	48
B	7,894	50	11,705	49
C	215	1	644	3
<b>Overall<sup>b</sup></b>	<b>15,940</b>	<b>100</b>	<b>23,931</b>	<b>100</b>

a Data obtained by personal enquiry from BURS management in 2010 and 2011.

b Groups A and B businesses have a turnover of up to P12 million while group C businesses have a turnover that exceeds P12 million.

The number of responses by the employment positions of the persons who participated in the questionnaire surveys are shown in Table 5.5. For the financial year 2009/10, the position of employment that dominates the respondents is the 'owner' at 31 per cent followed by the accounting and administrative staff. The year 2010/11 shows a different picture that is monopolised by the accounting staff, followed by the administrative staff, with the managers and other staff trailing behind. The owners comprised just over seven per cent of the respondents.

**Table 5.5: Position of the Person who Undertook Value Added Tax Work**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Owner	60	31	5	7
Manager/Accountants	28	14	7	10
Accounting staff	56	29	33	49
Administrative staff	52	27	16	24
Other	0	0	7	10
<b>Overall<sup>a</sup></b>	<b>196</b>	<b>100</b>	<b>68</b>	<b>100</b>

a The numbers exceed those of respondents because some businesses used combinations of different personnel for VAT activities.

Out of the seven personnel in the 'other' category, four are office assistants while the remaining three are drivers, as illustrated in Table 5.6. Follow-up telephone interviews revealed that the VAT compliance time of these employees is mainly expended in queuing at the revenue office to file the VAT returns. In Botswana,

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study because they are inadequate. Approximately 50 per cent state their business sectors while the remaining percentage of business sectors are unknown.

queuing at BURS offices to file the VAT returns and collect the statements constitutes a significant portion of the VAT compliance time.

**Table 5.6: Position of ‘Other’ Respondents who Undertook Value Added Tax Work, 2010/11**

	<b>N</b>	<b>Percentage</b>
Office Assistants	4	57
Drivers	3	43
<b>Overall</b>	<b>7</b>	<b>100</b>

### 5.3 PROFILE OF RESPONDENTS

This section presents the characteristics of respondents as depicted by legal structure, length of operation, main business activity, the number of years the business has been registered for VAT, the main place of business operation and business turnover. In both 2009/10 and 2010/11, the prominent legal structure of the respondents is ‘company’. The sole traders constitute only 17 per cent and 10 per cent in 2009/10 and 2010/11, respectively, as shown in Table 5.7.

**Table 5.7: Respondents by Legal Structure**

	<b>2009/10</b>		<b>2010/11</b>	
	<b>N</b>	<b>Percentage</b>	<b>N</b>	<b>Percentage</b>
Company	106	78	45	90
Sole trader	23	17	5	10
Partnership	7	4	0	0
Non-Profit Organisation	1	1	0	0
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The majority of the respondents have been in operation for over five years in both years under review as shown in Table 5.8. The percentage of the businesses that have been in operation for over five years is greater in the financial year 2010/11 at 82 per cent while in 2009/10 the share is 51 per cent. The category that follows is that of businesses that have been in operation for 2–5 years. This category is highest in 2009/10 at 29 per cent followed by 2010/11 at 12 per cent. The difference between

the ‘under 2 years’ and the ‘2–5 years’ categories is not as vast as the disparity between the ‘2–5 years’ and ‘over 5 years’ categories.

**Table 5.8: Respondents by Length of Operation**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Under 2 years	28	20	3	6
2–5 years	39	29	6	12
Over 5 years	70	51	41	82
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The main business activities that the respondents are involved in are presented in Table 5.9. This list is by no means exhaustive; however, it represents the major business activities in Botswana.<sup>73</sup> For the years 2009/10 and 2010/11, the Business/Financial Services is the prominent business activity of the respondents at 45 per cent and 48 per cent, respectively. The next common business activity is the Retail Trade/Restaurants at 37 per cent for 2009/10 and 22 per cent for 2010/11. In both years, the manufacturing/farming sectors constitute the lowest response rate.

**Table 5.9: Respondents by Business Activity<sup>a</sup>**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Construction/Property	22	16	9	18
Business/Financial Services	61	45	24	48
Retail Trade/ Restaurants	50	37	11	22
Manufacturing/Farming	4	3	6	12
<b>Overall<sup>b</sup></b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

a The business activities have been combined in this study to cater for inadequate responses in individual economic sectors.

b Some businesses put their answer in the category of ‘other’, but these have been assessed and re-entered into the appropriate categories.

With regard to the number of years that the businesses have been registered for VAT, most enterprises responding to the questionnaire indicate that, at the time of the surveys, they had been registered for VAT for over five years. A minority of these

<sup>73</sup> For a comprehensive list of the economic sectors in Botswana, refer to Appendix C. This list does not contain the number of businesses in the sectors as this information is not publicly available in Botswana. Repeated attempts to obtain this information from BURS and CSO have been futile.

had only been VAT registered for five years and under, as shown in Table 5.10 below. The difference between the ‘0–5 years’ and ‘over 5 years’ categories in the financial year 2009/10 is smaller when compared to the disparity of the same categories in the year 2010/11. This may suggest that the majority of the respondents in the year 2010/11 are more experienced with respect to the fulfillment of VAT requirements.

**Table 5.10: Respondents by Number of Years the Business Has Been Registered for Value Added Tax**

	2009/10		2010/11	
	N	Percentage	N	Percentage
0–5 years	63	46	12	24
Over 5 years	74	54	38	76
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

In terms of the main place of business operation, the majority of the respondents are situated around the capital city, Gaborone, at 71 per cent and 90 per cent for 2009/10 and 2010/11, respectively, as illustrated in Table 5.11. The towns have the lowest responses for both years while villages trail after the capital city. Due to financial and time constraints, the survey could not be carried out in the villages in the financial year 2010/11. The questionnaires were administered mainly in the city of Gaborone, where businesses could be accessed easily, and only a handful in the neighbouring towns.

**Table 5.11: Respondents by Main Place of Business Operation**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Village	23	17	n/a	n/a
Town	17	12	5	10
City	97	71	45	90
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The distribution of the respondents by the business turnover is outlined in Table 5.12. In the 2009/10 financial year, 66 of the enterprises belong to the small business category, followed by the medium-sized category (P1.5 million–P5 million) at a

respondent population share of 21 per cent. Large businesses make up 13 per cent of the respondents. The financial year 2010/11 is quite the opposite of 2009/10 in that the majority of the responses are from the large business category which has a share of 46 per cent. This group is followed by the medium-sized group and the smallest categories of enterprises.

**Table 5.12: Respondents by Annual Business Turnover**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Less than P1.5 million	91	66	15	30
P1.5 million–P5 million	29	21	12	24
Over P5 million	17	13	23	46
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The numbers of the survey respondents by business size classification are presented in Table 5.13. The businesses have been grouped into three size categories: small, medium and large, to mitigate the problems that may arise as a result of a low number of responses in expanded turnover categories. The majority of the respondents, 67 per cent, in the year 2009/10 belong to the small business category, followed by the medium-sized group at 21 per cent. The large business category forms the smallest number of respondents at 12 per cent. The 2010/11 respondent figures show a completely different picture to that of 2009/10 with the large businesses dominating the number of respondents at 46 per cent. This category is followed by the small business category at 30 per cent, followed by the medium-sized group at 24 per cent.

**Table 5.13: Respondents by Business Size Classification**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Small	91	67	15	30
Medium	29	21	12	24
Large	17	12	23	46
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The responses for the two years under investigation are dominated by VAT registrants belonging to groups A and B, as shown in Table 5.14. This is not surprising as group C is the Large Taxpayers Unit (LTU) which makes up only a small proportion of the overall businesses in Botswana. In the financial years 2009/10 and 2010/11, group C constituted four per cent and 20 per cent of the survey participants, respectively.

**Table 5.14: Sample Response by Botswana Unified Revenue Service**

**Classification**

Groups	2009/10		2010/11	
	N	Percentage of Respondents	N	Percentage of Respondents
Groups A and B <sup>a</sup>	132	96	40	80
Group C <sup>b</sup>	5	4	10	20
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

a Groups A and B are the same in terms of size. They file VAT returns bimonthly on alternate months.

b The profile of the respondents, in relation to Group C business taxpayers, differs significantly between 2009/10 and 2010/11. This difference is likely to result in higher VAT compliance costs for the Group C category in 2010/10.

The respondents by financial year-end are outlined in Table 5.15. The financial year-end of the majority of the respondents for the year 2009/10 is July, followed by January and April. For the year 2010/11, most of the respondents have their financial year-end as January, followed by April and July.

**Table 5.15: Respondents by Financial Year-End**

	2009/10		2010/11	
	N	Percentage	N	Percentage
31 January	34	25	14	28
28 February	2	1	2	4
31 March	2	1	1	2
30 April	20	15	10	20
31 May	2	1	0	0
30 June	2	1	1	2
31 July	55	40	10	20
31 August	3	2	3	6
30 September	5	4	2	4
31 October	7	5	5	10
30 November	4	3	2	4
31 December	1	1	0	0
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The number of employees of the businesses taking part in the 2010/11 survey is shown in Table 5.16.<sup>74</sup> The majority of the respondents (60 per cent) employed five to 25 people followed by the businesses that employ 26 to 100 persons at 26 per cent. The rest of the respondents are almost equally distributed among the enterprises that employ less than 5 people and more than 100 people.

**Table 5.16: Respondents by Number of Employees**

2010/11		
	N	Percentage
Less than 5	3	6
5–25	30	60
26–100	13	26
Over 100	4	8
<b>Overall</b>	<b>50</b>	<b>100</b>

Around 96 per cent and 80 per cent of the survey participants in the financial years 2009/10 and 2010/11, respectively, file their VAT returns at the revenue office every two months, as shown in Table 5.17. Only a small number of respondents, in both

<sup>74</sup> Due to an oversight, this category was not included in the 2009/10 survey. This omission is, however, not expected to be detrimental to the findings in this study.

years, file VAT returns monthly.<sup>75</sup> This is to be expected as the monthly filers (businesses with an annual turnover exceeding P12 million) constitute a small proportion of the entire business community in Botswana.

**Table 5.17: Respondents by Frequency of Value Added Tax Return Filing**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Monthly	5	4	10	20
Every two months	132	96	40	80
<b>Overall<sup>a</sup></b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

a The 'other' option is not completed by any respondent in the two surveys.

The survey respondents by classification of sales are presented in Table 5.18. The findings indicate that the majority of the respondents (around 85 per cent) in both years trade in standard rated goods and/or services only. A small number of taxpayers classify their sales in the combined categories of standard rated, zero rated and exempt.<sup>76</sup> This is not surprising, given the small size of the Botswana export market when compared with the entire business market.<sup>77</sup> In the financial years 2009/10 and 2010/11, BURS processed 50,623 and 57,179 export declarations, respectively, whereas the import declarations processed are 596,598 and 605,241 for 2009/10 and 2010/11, respectively.

**Table 5.18: Respondents by Classification of Sales**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Standard rated only	113	85	42	86
Standard rated and zero rated	6	5	7	14
Standard rated and exempt	2	1	0	0
Standard rated, zero rated and exempt	12	9	0	0
<b>Overall<sup>a</sup></b>	<b>133</b>	<b>100</b>	<b>49</b>	<b>100</b>

a Four and one businesses in 2009/10 and 2010/11, respectively, did not provide the data on the classification of their sales.

The analysis of the respondents by classification of purchases in the financial years 2009/10 and 2010/11 displays a similar trend as that of the sales categorisation, as

<sup>75</sup> These are businesses that make up the LTU.

<sup>76</sup> For a list of zero rated and exempt supplies in Botswana, refer to Section 2.3 of this thesis.

<sup>77</sup> The only exempt goods and services reported by the respondents are exports.

detailed in Table 5.19. The purchases of the mainstream respondents, 82 per cent in 2009/10 and 72 per cent in 2010/11, are completely standard rated. Small proportions of respondents trade in a mixture of standard rated, zero rated and exempt inputs.

**Table 5.19: Respondents by Classification of Purchases**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Standard rated only	109	82	36	72
Standard rated and zero rated	7	5	6	12
Standard rated and exempt	3	2	4	8
Standard rated, zero rated and exempt	14	11	4	8
<b>Overall</b>	<b>133<sup>a</sup></b>	<b>100</b>	<b>50</b>	<b>100</b>

a Four businesses in 2009/10 did not provide the data on the classification of their purchases.

The majority of the respondents for the financial year 2009/10 indicated that they process sales and purchases invoices not exceeding 2,499 monthly, as shown in Table 5.20. The proportions of the sales and purchases invoices processed differ slightly in the 'less than 500' category, while those of the '500–2,499' class are similar.

**Table 5.20: Respondents by Number of Monthly Value Added Tax Invoices Processed, 2009/10**

	Sales		Purchases	
	N	Percentage	N	Percentage
Less than 500	53	39	64	47
500–2,499	66	48	64	47
2,500–4,999	8	6	8	6
5,000–7,499	9	7	1	1
7,500–10,000	1	1	0	0
Over 10,000	0	0	0	0
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The results of the 2010/11 survey indicate that 81 per cent and 92 per cent of the respondents process less than 500 sales invoices and purchase invoices, respectively, on a monthly basis, as presented in Table 5.21. Small proportions of 15 per cent and six per cent for sales and purchases, respectively, processed invoices ranging from 500 to 2,499 every month.

**Table 5.21: Respondents by Number of Monthly Value Added Tax Invoices Processed, 2010/11**

	Sales		Purchases	
	N	Percentage	N	Percentage
Less than 500	38	81	44	92
500–2,499	7	15	3	6
2,500–4,999	1	2	0	0
5,000–7,499	0	0	0	0
7,500–10,000	0	0	1	2
Over 10,000	1	2	0	0
<b>Overall</b>	<b>47</b>	<b>100</b>	<b>48</b>	<b>100</b>

In terms of the manner of record keeping, most of the respondents in the 2009/10 financial year keep their accounting records in a partially computerised system, followed by the paper filing system at 26 per cent and a fully computerised system at 20 per cent. In the financial year 2010/11, equivalent proportions of the respondents (44 per cent each) indicate that they keep their accounting records in a fully computerised system and partially computerised systems. The accounting records of seven per cent of the respondents in 2009/10 and two per cent in 2010/11 are kept by external tax advisers as outlined in Table 5.22.

**Table 5.22: Respondents by Manner of Keeping Accounting Records**

	2009/10		2010/11	
	N	Percentage	N	Percentage
In a paper filing system	36	26	5	10
In a fully computerised system	28	20	22	44
In a partially computerised system	64	47	22	44
Kept by tax adviser	9	7	1	2
<b>Overall<sup>a</sup></b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

a The 'other' option was not completed by any respondent in the two years under consideration.

The majority of the respondents, around 80 per cent in both years, indicate that their VAT returns are completed entirely within the firm, followed by around 14 per cent of respondents whose VAT returns are completed entirely by external assistance. Only small proportions of the respondents in the two financial years under review employ partial assistance for VAT return completion, as displayed in Table 5.23.

**Table 5.23: Respondents by Manner of Value Added Tax Return Completion**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Entirely within the firm	107	78	40	80
Partially by external assistance <sup>a</sup>	11	8	4	4
Entirely by external assistance	19	14	6	12
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

a One respondent indicates that he/she sought some 'unpaid' partial external assistance of a friend for VAT work in 2009/10.

In the financial year 2009/10, 21 per cent of the respondents employ the assistance of a tax adviser for VAT, while 79 per cent handle their VAT work without external professional help, as illustrated in Table 5.24. A similar pattern is displayed in the financial year 2010/11 with 26 per cent of the respondents using the services of external tax advisers whereas 74 per cent handle their VAT work without any outsourcing of VAT help.

**Table 5.24: Respondents by Use of External Tax Adviser for Value Added Tax Work**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Used tax adviser for VAT	29	21	13	26
Did not use tax adviser for VAT	108	79	37	74
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

The different reasons for using external tax advisers for VAT work are indicated in Table 5.25. More than half of the respondents in both years use external VAT advisers to ensure compliance with the business's VAT obligations. This is followed by the reasons that outsourcing is perceived to reduce the chance of a VAT audit and lack of time to do VAT activities. Only eight per cent of the respondents in each year use external VAT advisers because the VAT return is too complicated.

**Table 5.25: Reasons for Using External Tax Adviser for Value Added Tax Work**

	2009/10		2010/11	
	N	Percentage	N	Percentage
The VAT return is too complicated	3	8	1	8
I do not have time to do VAT activities	5	14	2	15
A VAT adviser saves my business more time and money	3	8	0	0
I think it will reduce the chance of a VAT audit	6	17	2	15
To ensure compliance with the business' VAT obligations	19	53	7	54
Other	0	0	1	8
<b>Overall<sup>a</sup></b>	<b>36</b>	<b>100</b>	<b>13</b>	<b>100</b>

a The overall number exceeds the number of respondents who use a tax adviser because the respondents are given the option to choose multiple answers.

The specific areas where the respondents need the assistance of a professional tax adviser for VAT are presented in Table 5.26. The reasons given range from the preparation of VAT returns to accounting for VAT on purchases. About a third of the respondents in the financial year 2009/10 indicate that they needed external advice for VAT returns preparation while the rest of the reasons are almost evenly distributed over VAT audits, record keeping for VAT, VAT on sales, legal aspects of VAT and VAT on purchases. With regard to the financial year 2010/11, one fifth of the respondents needed external tax adviser assistance for VAT returns preparation and for legal aspects of VAT, while the remaining respondents are equally spread over the rest of the reasons.

**Table 5.26: Areas Where External Value Added Tax Advice is required**

	2009/10		2010/11	
	N	Percentage	N	Percentage
VAT returns preparation	20	34	9	21
VAT audits	10	17	5	11
Record keeping for VAT	8	14	6	14
VAT on sales	6	10	5	11
Legal aspects of VAT	7	12	9	21
VAT on purchases	7	12	5	11
Other	0	0	5	11
<b>Overall<sup>a</sup></b>	<b>58</b>	<b>100</b>	<b>44</b>	<b>100</b>

a The overall number exceeds the number of respondents who use a tax adviser because the respondents are given the option to choose multiple answers.

The majority of the respondents in both surveys indicate that they did not employ external tax advisers for VAT work. Table 5.27 presents the various reasons the respondents gave for not using external tax advisers for VAT work. The respondents that indicated that they have employees who are qualified to handle their VAT affairs represent a quarter of the respondents in 2009/10 and just over half of the respondents in 2010/11. This is followed with 22 per cent and 14 per cent in 2009/10 and 2010/11, respectively, by those who indicate that their VAT affairs are simple. Almost a similar proportion of the respondents ranging from six per cent to 13 per cent indicate that they receive help from books, friends/relatives and BURS, while some indicate that they could not afford to pay VAT advisers.

**Table 5.27: Reasons for Not Employing External Tax Advice for Value Added Tax**

	2009/10		2010/11	
	N	Percentage	N	Percentage
Our VAT affairs are simple	40	22	7	14
We get help from books/leaflets/guides	18	10	5	10
We cannot afford to pay VAT advisers	23	13	3	6
We receive help from friends/relatives	15	8	2	4
We receive help from BURS	20	11	5	10
We think VAT advisers charge more than their advice is worth	17	9	0	0
We have employees who are qualified to handle our VAT affairs	47	26	27	55
<b>Overall<sup>a</sup></b>	<b>80</b>	<b>100</b>	<b>49</b>	<b>100</b>

a The overall number exceeds the number of respondents who used a tax adviser because the respondents were given the option to choose multiple answers.

The businesses were also asked to indicate whether or not they were visited by the tax officer from BURS during the financial year 2009/10. The survey results show that only 20 per cent of the respondents were visited by a tax officer while 80 per cent were not, as delineated in Table 5.28.

**Table 5.28: Respondents by Tax Officer Visit<sup>a</sup>**

	2009/10	
	N	Percentage
Yes	28	20
No	109	80
<b>Overall</b>	<b>137</b>	<b>100</b>

a The question concerning whether or not the businesses were visited by the tax officers during the financial year was not asked in 2010/11 as it was decided that it is not relevant to the current study. The effect of audits by government tax officers, on VAT compliance costs, is beyond the scope of this study.

## 5.4 COMPLIANCE TIME

This section considers the costs of tax compliance in terms of the number of hours expended by the businesses in fulfilling the VAT requirements. The mean time costs incurred by the different personnel in VAT compliance activities are presented.<sup>78</sup> In

<sup>78</sup> These data are requested from the respondents by Questions 14a of the 2009/10 survey and Question 12 of the 2010/11 questionnaire. Refer to Appendices A and B.

the majority of the responses, queuing at the VAT office to file the VAT return is reported as the most tedious and most time consuming activity of VAT compliance.<sup>79</sup> If BURS had the infrastructure for electronic filing in place, this would reduce compliance costs considerably. This section covers only those businesses whose VAT returns are completed internally or partially within the business and partially by outside professional help.

The time spent on VAT activities by the different business personnel in the financial year 2009/10 is presented in Table 5.29. The results show that the business owners spend more time (considering both the mean and median) on VAT compliance activities than any other personnel. This confirms the evidence presented in earlier studies that business owners (sole proprietors) spend more time on tax activities, usually after working hours or during weekends (Sandford et al., 1989). It is also possible that due to the recent GFC,<sup>80</sup> the owners of the businesses were forced to undertake VAT compliance activities that would normally be done by accounting and administrative staff in an attempt to reduce costs. Accounting staff spend the second highest time on VAT activities, followed by the administrative staff and lastly, managerial staff.

**Table 5.29: Mean Yearly Hours Spent On Value Added Tax Activities by Staff Categories, 2009/10**

	2009/10			
	Mean	Median	Minimum	Maximum
Owner	64	60	2	144
Manager/Director	33	36	2	72
Accounting staff	49	48	6	120
Administrative staff	44	42	12	144
<b>Overall</b>	<b>83</b>	<b>72</b>	<b>6</b>	<b>216</b>

A similar scenario is portrayed in Table 5.30 which reports the mean and median compliance time spent on VAT activities by different business personnel in the financial year 2010/11. The business owners spend an annual average of 48 hours on

<sup>79</sup> This is discussed at length in Chapter 9 of this thesis.

<sup>80</sup> In Botswana, the GFC led to reduced production and a considerable decline in the value of exports (BURS, 2009, p. 26).

VAT compliance activities. This figure, while higher than other personnel categories in this year, is lower than the annual average reported in the 2009/10 results. The rest of the 2010/11 compliance time in other personnel categories are smaller than their 2009/10 counterparts. The overall findings show a decline in compliance time spent on VAT activities between the two financial years under consideration.

**Table 5.30: Mean Yearly Hours Spent On Value Added Tax Activities by Staff Categories, 2010/11**

	2010/11			
	Mean	Median	Minimum	Maximum
Owner	48	24	6	104
Manager/Director	32	40	5	72
Accounting staff	40	36	6	120
Administrative staff	34	30	3	90
Other staff	31	30	3	60
<b>Overall</b>	<b>59</b>	<b>60</b>	<b>5</b>	<b>124</b>

The mean compliance time of the different business personnel analysed by the business turnover is shown in Tables 5.31. The findings indicate that the owners of the smallest businesses spend more time on VAT compliance activities than any other category. In the year 2009/10, medium-sized businesses spend more hours, overall, on VAT compliance activities than other business sizes, followed by the smallest business category. The largest businesses spend the lowest number of hours on VAT activities. Generally, large businesses spend less time on tax compliance activities because they have expert employees and efficient accounting systems.

**Table 5.31: Personnel Mean Compliance Time (Hours) by Business Turnover, 2009/10<sup>a</sup>**

Personnel	Business Size (Annual Turnover)			Average
	Less than P1.5 million	P1.5 million– P5 million	Over P5 million	
Owner	68 (45)	54 (12)	52 (5)	<b>64 (62)</b>
Manager/Director	32 (16)	39 (7)	23 (3)	<b>33 (26)</b>
Accounting staff	53 (27)	52 (15)	39 (14)	<b>49 (56)</b>
Administrative staff	43 (30)	49 (16)	36 (6)	<b>44 (52)</b>
<b>Overall</b>	<b>83 (75)</b>	<b>92 (27)</b>	<b>64 (17)</b>	<b>83 (119)</b>

a The numbers of responses are presented in parentheses.

In the year 2010/11, the findings are suggestive of a direct relationship between tax compliance time and business turnover. In this case, large businesses spend the highest number of hours on VAT activities compared with other business sizes. It is assumed that the 2010 VAT amendments which included, *inter alia*, an increase in the VAT rate from 10 per cent to 12 per cent, compelled the large businesses to spend more time on VAT, updating their software to accommodate the new VAT rate as shown in Table 5.32.

**Table 5.32: Personnel Mean Compliance Time by Business Turnover, 2010/11<sup>a</sup>**

Personnel	Business Size (Annual Turnover)			Average
	Less than P1.5 million	P1.5 million – P5 million	Over P5 million	
Owner	64 (2)	12 (1)	51 (2)	<b>48 (5)</b>
Manager/Director	20 (3)	56 (2)	27 (2)	<b>32 (7)</b>
Accounting staff	22 (7)	54 (6)	43 (20)	<b>40 (33)</b>
Administrative staff	45 (5)	30 (3)	30 (8)	<b>35 (16)</b>
Other staff	31 (3)	0 (0)	32 (4)	<b>31 (7)</b>
<b>Overall</b>	<b>47 (14)</b>	<b>60 (9)</b>	<b>66 (21)</b>	<b>59 (44)</b>

a The numbers of responses are presented in parentheses.

The respondents are asked to provide the monthly wage rates of the personnel responsible for VAT work. The monthly wage rates supplied by the respondents are converted into hourly wage rates. The resultant average hourly wage rates are displayed in Table 5.33. The respondents' supplied figures indicate that in 2009/10,

business owners earned the highest hourly wage rate followed by managers, accounting staff and last, administrative staff.

**Table 5.33: Average Hourly Wage Rates by Staff Categories, 2009/10**

	2009/10				
	N	Mean (P)	Median (P)	Minimum (P)	Maximum (P)
Owner	62	62	60	17	167
Manager/Director	26	40	38	14	85
Accounting staff	56	30	30	5	142
Administrative staff	52	20	20	5	57
<b>Overall<sup>a</sup></b>	<b>196</b>	<b>68</b>	<b>60</b>	<b>8</b>	<b>250</b>

a The numbers exceed those of respondents because some businesses used combinations of different personnel for VAT activities.

The 2010/11 survey also asks the survey participants to estimate the hourly wage rates of the personnel responsible for VAT. The question is slightly changed (in comparison to 2009/10) in order to eliminate the task of converting the monthly wage rates into hourly wage rates. In this particular year, accounting staff report the highest hourly wage rates, followed by the business owners and the managers, as shown in Table 5.34. The wage rate figures published by Payscale (2013), indicate that the accountants in Botswana earn an annual wage amounting to P296,004 (US\$36,823).<sup>81</sup> This is equivalent to an hourly wage rate of P140. Thus, the estimates provided by the respondents are taken as reliable.

**Table 5.34: Average Hourly Wage Rates by Staff Categories, 2010/11**

	2010/11				
	N	Mean (P)	Median (P)	Minimum (P)	Maximum (P)
Owner	5	118	60	60	350
Manager/Director	7	114	60	30	260
Accounting staff	33	138	120	17	320
Administrative staff	16	71	35	19	250
Other staff	7	39	22	12	100
<b>Overall<sup>a</sup></b>	<b>68</b>	<b>167</b>	<b>109</b>	<b>17</b>	<b>350</b>

a The numbers exceed those of respondents because some businesses used combinations of different personnel for VAT activities.

<sup>81</sup> The exchange rate for U.S. Dollar to Botswana Pula was 0.124 as at 21/02/13.

## 5.5 CHAPTER SUMMARY

This has collates and presents the samples and response rates for this study. The data is collected using a sample of 600 businesses in 2009/10. A total of 504 questionnaires are collected from the businesses, with 367 of them being unusable and 137 usable, giving a response rate of 23 per cent. The outstanding 96 consists of questionnaires that are lost by the businesses. Out of the 367 unusable questionnaires for the 2009/10 financial year, 324 are totally blank, while three respondents had been registered for VAT for less than 12 months. The 2010/11 data are collected from a sample of 100 businesses. Fifty usable questionnaires are obtained from these businesses, resulting in a response rate of 50 per cent.

Non-response bias is tested using Allers's (1994) non-response postcard. The postcards are completed by 102 respondents (28 per cent of the non-respondents) in the year 2009/10 and none in the year 2010/11. Overall, the means of the survey respondents (2.85) and postcard respondents (2.61) are not significantly different. Thus, non-response bias is not evident in this study. Additionally, the survey respondents are analysed by means of profiles such as annual turnover, legal structure, length of businesses operation, place of operation, the number of years the business has been registered for VAT and the number of employees. The survey participants are also reviewed by the groups that BURS uses to classify the VAT filers.

Furthermore, the average compliance times, together with the mean wage rates of the different personnel responsible for VAT activities, in the two years under review, are discussed and compared. The monetary compliance costs of VAT for businesses in Botswana for the financial years 2009/10 and 2010/11 are analysed and presented in the ensuing chapter.

The mean time costs incurred by the different personnel in VAT compliance activities are presented. The findings of both years show that, on average, the business owners spend more time on VAT compliance activities (64 hours in 2009/10 and 48 hours in 2010/11) than any other personnel. This confirms the

evidence presented in earlier studies that business owners (sole proprietors) spend more time on tax activities, usually after working hours or during weekends. It is also possible that due to the recent GFC, the owners of the businesses were forced to undertake VAT compliance activities that would normally be done by accounting and administrative staff in an attempt to reduce costs. The accounting staff spend the second highest time on VAT activities, followed by the administrative staff and lastly, managerial staff.

## **CHAPTER 6**

### **VALUE ADDED TAX COMPLIANCE COSTS: ESTIMATES AND FINDINGS**

#### **6.1 INTRODUCTION**

This chapter presents the analysis of the monetary costs and the distributional effects thereof, of complying with the VAT system in Botswana. It begins with a succinct discussion of the estimation of tax compliance costs as well as an analysis of internal and external VAT compliance costs in Section 2. Section 3 examines the mean gross VAT compliance costs followed by the investigation of aggregate VAT compliance costs in Section 4. The amounts that the taxpayers would claim from the government as fair compensation for being used as tax collectors are outlined in Section 5 while Section 6 summarises this chapter.

#### **6.2 ESTIMATION OF TAX COMPLIANCE COSTS**

##### **6.2.1 Overview**

Pope (2003, p. 70) highlights the significance of the following factors in determining the monetary cost of GST compliance: size of firm; economies of scale; type of industry; size of the average transaction and number of invoices handled per business; mix of GST rates and borderline issues per business; status (in terms of education and experience) of person completing the GST return; use of accountants by business; type of accounting system; attitudes to GST; number of entities registered (at the aggregate level). In addition, Pope (2003) notes that, when expressing compliance costs as a percentage of tax revenue, the rate of tax is an important factor to be taken into account. However, he affirms that expressing tax compliance costs as a percentage of GDP is preferable, where possible (Pope, 2003, p. 70). The factors outlined by Pope (2003) are taken into consideration in estimating VAT compliance costs in this study.

Compliance costs of VAT comprise the value of time spent by the business owners, their staff and external advisers on VAT compliance activities. This study uses individual reported values to estimate the value of time spent on VAT compliance activities by the respondents.<sup>82</sup> Following the practice by earlier studies (e.g., Sandford et al., 1989; Pope, 1994), this research leaves the estimation and allocation of overhead costs to the respondent.

Sandford and Hasseldine (1992, p. 66) suggest that, of the factors that determine the compliance costs of the GST, the size of the business is by far the most significant. Due to lack of data on the number of VAT registered businesses in specific business turnover or size categories (small, medium or large), the analysis in this study employs the VAT paying groups as defined by BURS.<sup>83</sup> The compliance costs of VAT for businesses in Botswana demonstrate a severe regressive pattern. However, the results for the year 2010/11 should be interpreted with caution as the number of responses is insufficient to draw any firm conclusions of changes between the two years.<sup>84</sup> It must be noted that these compliance figures are not reliable to the last Pula, but are merely estimates of the magnitudes of the economic resources committed to VAT compliance activity. The overall figures in Tables 6.1–6.34 are absolute average figures. Weighted averages for the years 2009/10 and 2010/11 are presented in Tables 6.35 and 6.36.

### **6.2.2 Internal Costs**

The internal costs comprise both the monetary costs of the time spent by the business owners and employees (personnel) on VAT activities and the money spent on things other than personnel such as computers, stationery, telephone, photocopy/fax, and travel. The different cross tabulations of internal costs by the profiles of the respondents are presented in this segment of the thesis. Tables 6.1 and 6.2 show the disaggregation of internal compliance costs in terms of personnel and non-personnel costs for the financial years 2009/10 and 2010/11, respectively.

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<sup>82</sup> Outliers are assessed and removed manually.

<sup>83</sup> See Section 2.5.2 of this thesis.

<sup>84</sup> The estimates derived from one or two respondents are disregarded throughout the chapter as they are statistically insignificant and essentially meaningless.

The surveys seek estimates of the personnel and non-personnel costs of the respondents.<sup>85</sup> The results indicate that in the year 2009/10, more money was spent on non-personnel VAT compliance expenses as opposed to personnel. As for the year 2010/11, the distribution of costs between personnel and non-personnel items is similar. The overall mean, median, minimum and maximum internal VAT compliance costs for both financial years are fairly close.

**Table 6.1: Mean Internal Value Added Tax Compliance Costs, 2009/10<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Minimum (P)</b>	<b>Maximum (P)</b>
Personnel	119	3,282	2,280	205	12,000
Non-Personnel	74	5,402	5,160	240	14,400
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>552</b>	<b>19,200</b>

a. N is the number of businesses that incurred internal personnel and non-personnel costs. Most businesses incurred a combination of internal personnel and non-personnel costs.

**Table 6.2: Mean Internal Value Added Tax Compliance Costs, 2010/11<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Minimum (P)</b>	<b>Maximum (P)</b>
Personnel	44	5,310	4,866	360	18,480
Non-Personnel	11	5,597	5,400	565	15,000
<b>Overall</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>	<b>360</b>	<b>18,900</b>

a. N is the number of businesses that incurred internal personnel and non-personnel costs. Most businesses incurred a combination of internal personnel and non-personnel costs.

### 6.2.3 Distribution of Internal Compliance Costs

The estimated average internal compliance costs for the two years under examination are analysed by staff category, as shown in Table 6.3. The findings indicate that for the year 2009/10, the majority of the internal VAT compliance costs for businesses in Botswana are incurred by the business owners. In 2010/11, these costs are higher for the administrative staff, with the business owners incurring the least internal compliance costs.

<sup>85</sup> These costs were requested using Questions 14a, 14b and 15 of the 2009/10 and Questions 12 and 13 of the 2010/11 questionnaire. See Appendices A and B.

**Table 6.3: Mean Internal Value Added Tax Compliance Costs by Staff Category**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Owner	62	7,125	5,760	5	6,092	5,820
Manager	26	6,518	4,669	7	6,122	3,192
Accounting staff	56	5,445	2,838	33	6,624	6,450
Administrative staff	52	6,399	4,691	16	8,164	7,137
Other staff	n/a	n/a	n/a	7	8,079	6,450
<b>Overall<sup>a</sup></b>	<b>196</b>	<b>6,174</b>	<b>4,920</b>	<b>68</b>	<b>6,560</b>	<b>5,820</b>

a N signifies the total number of personnel involved in activities aimed at complying with the VAT. The totals exceed the number of respondents because some businesses used a combination of different staff categories to handle VAT activities.

The mean internal VAT compliance costs by turnovers of the businesses are presented in Table 6.4. The findings indicate a direct relationship between internal VAT compliance costs and the size of the business for both years. The mean internal VAT compliance costs, for both years, are fairly close across the categories of small businesses and medium ones. The median internal VAT compliance costs are lower than the mean values, suggesting a larger number of businesses that have higher internal VAT compliance costs as opposed to those with lower costs.

**Table 6.4: Mean Internal Value Added Tax Compliance Costs by Annual Turnover<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Less than P1.5 million	91	5,391	4,320	15	5,523	4,165
P1.5 million–P5 million	29	5,700	3,974	12	5,934	4,485
Over P5 million	17	7,907	7,364	23	6,136	5,760
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the annual turnover of the business.

When the mean internal VAT compliance costs are analysed by the manner in which BURS classifies the VAT registered businesses, the proportions change in the year 2009/10, with the larger businesses incurring lower internal VAT compliance costs, as shown in Table 6.5. This is quite surprising as one would expect the larger businesses to pay more for internal accountants than smaller and medium enterprises.

At the same time, it could imply that having VAT experts in their staff means that larger businesses spend less time on VAT compliance activities as opposed to smaller ones. The 2010/11 figures are the same with a direct relationship between the internal VAT compliance costs and the size of the business. The median figures confirm the mean values.

**Table 6.5: Mean Internal Value Added Tax Compliance Costs by Botswana Unified Revenue Service Classification<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Groups A and B	123	6,188	5,040	35	6,172	5,820
Group C	5	5,834	3,608	10	7,918	6,180
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the manner in which Botswana Unifies Revenue Service classifies the businesses.

The distribution of the mean internal VAT compliance costs for businesses in Botswana for both financial years, displayed in Table 6.6, confirms the regressive pattern of tax compliance costs usually reported in tax compliance costs studies. Value Added Tax compliance costs as percentages of annual turnovers are equivalent for both years. These proportions range from 0.74 per cent and 0.18 per cent for small and medium-sized businesses, respectively, to 0.02 per cent for larger businesses. When analysed in terms of the smallest versus the largest businesses, the mean internal VAT compliance costs as a percentage of turnover for the small businesses are 37 times those of larger businesses with a turnover exceeding P5 million. The regressivity of these costs is more severe when the small businesses are segregated further.<sup>86</sup>

**Table 6.6: Mean Internal Costs as a Percentage of Annual Turnover**

	2009/10	2010/11
	Percentage	Percentage
Less than P1.5 million	0.72	0.74
P1.5 million–P5 million	0.18	0.18
Over P5 million	0.02	0.02

<sup>86</sup> Refer to Appendix F. Appendix F is not included in the body of the thesis due to very low response rates.

The analysis of the mean internal VAT compliance costs by the legal structure is presented in Table 6.7. In the year 2009/10, companies and sole traders incur very similar average internal VAT compliance costs. The median compliance costs for sole traders are also close to their mean compliance costs while the median compliance costs for companies indicates that their internal VAT compliance costs are further from the mean. The 2010/11 results show that companies incur significantly higher internal compliance costs of VAT than the sole traders, when both the mean and the median are analysed. The 2010/11 sole trader figures, however, should be interpreted with caution due to the low number of respondents in this category.

**Table 6.7: Mean Internal Value Added Tax Compliance Costs by Legal Structure<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Sole trader	21	6,187	5,760	5	3,287	2,200
Company	99	6,251	4,800	40	6,969	6,525
Partnership	7	5,706	4,080	n/a	n/a	n/a
Non-Profit Organisation	1	1,602	1,602	n/a	n/a	n/a
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the legal structures of the businesses.

The businesses that have been in operation for a period ranging between two and five years, in both financial years, surprisingly incur greater internal VAT compliance costs when compared with the businesses that have been in operation for a shorter period of less than two years, as shown in Table 6.8. As expected, the businesses that have been in operation for over five years in both years had the least internal VAT compliance costs, indicating an inverse relationship between VAT compliance costs and length of business operation.

**Table 6.8: Mean Internal Value Added Tax Compliance Costs by Operation Length<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Under 2 years	27	5,794	4,686	3	8,267	7,200
2–5 years	36	6,829	6,502	6	8,198	8,130
Over 5 years	65	5,970	4,123	36	6,145	5,647
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the number of year the businesses have been in operation.

The findings of the surveys, displayed in Table 6.9, indicate that during the year 2009/10, the businesses in the construction and property industries incur the highest internal VAT compliance costs whereas these costs are less for retail trade firms and restaurants. The construction/property industry (which in Botswana employs mostly blue collar employees) lacks internal accounting experts who can handle their VAT work for them. Most of them undertake their own VAT activities in their spare time. Contrary to the 2009/10 results, the 2010/11 survey analysis suggest that retail trade businesses and restaurants carried the highest internal mean and median VAT compliance costs. These costs are lower for the manufacturing and farming businesses.

**Table 6.9: Mean Internal Value Added Tax Compliance Costs by Main Business Activity<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Construction/Property	22	8,128	6,939	9	7,535	5,760
Business/Financial Services	58	6,128	4,694	20	6,133	6,525
Retail Trade/ Restaurants	45	5,327	4,080	6	10,354	12,420
Manufacturing/Farming	3	5,447	5,760	10	4,261	2,820
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the main activity of the business.

The mean internal VAT compliance costs by VAT registration length are presented in Table 6.10. As anticipated, the mean internal VAT compliance costs for the

businesses that have been registered for VAT for a shorter period (of up to five years) are higher than those that have been registered for over five years. This is not surprising as the compliance costs of businesses that have been registered for VAT for a shorter term usually include some element of transition or learning curve costs.

**Table 6.10: Mean Internal Value Added Tax Compliance Costs by Registration Length<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
0–5 years	59	6,739	5,760	12	8,361	7,470
Over 5 years	69	5,692	3,974	33	5,905	5,534
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the number of years the business has been registered for VAT.

In terms of the place of operation, as depicted in Table 6.11, the results of the year 2009/10 indicate that the businesses that operate in the villages incur the highest internal VAT compliance costs. This is probably because these businesses have to travel longer distances (as opposed to those in the towns and cities) to get to the BURS offices. In addition, the businesses in the remote areas may find it difficult to access the services of external advisers (and this forces them to do the VAT work internally). In the two years under consideration, the businesses in the towns reported the least internal VAT compliance costs.

**Table 6.11: Mean Internal Value Added Tax Compliance Costs by Place of Operation<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
City	90	5,991	4,683	40	6,634	6,135
Town	17	4,210	3,409	5	5,965	4,165
Village	21	8,551	8,208	n/a <sup>b</sup>	n/a <sup>b</sup>	n/a <sup>b</sup>
<b>Overall</b>	<b>128<sup>c</sup></b>	<b>6,174</b>	<b>4,920</b>	<b>45<sup>c</sup></b>	<b>6,560</b>	<b>5,820</b>

a Due to financial and time constraints, the survey for the year 2010/11 was restricted to the City of Gaborone and neighbouring towns.

b n/a shows that villages were excluded from the 2010/11 survey.

c N is the overall number of respondents by the place of operation of the business.

The average internal VAT compliance costs by the number of employees are presented in Table 6.12.<sup>87</sup> The businesses that employ between 26 and 100 people incurred the highest costs when compared with other categories. The low figures used in this analysis suggest that the results could be unreliable and hence should be interpreted cautiously.

**Table 6.12: Mean Internal Value Added Tax Compliance Costs by Number of Employees<sup>a</sup>**

	2010/11		
	N	Mean (P)	Median (P)
Less than 5	2	3,679	3,679
5–25	28	6,409	6,315
26–100	12	7,380	6,105
Over 100	3	6,624	6,600
<b>Overall</b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>

a. N is the overall number of respondents by the number of employees of the business.

#### 6.2.4 External Costs

This section outlines the external costs of compliance being the monetary outlays made by the businesses to professional tax accountants/advisers for the time spent doing VAT activities on their behalf. In the financial years 2009/10 and 2010/11, respectively, 28 and eight businesses used tax advisers for VAT work. Respondents were asked to estimate the fees paid to professional tax advisers used for VAT purposes in both years. These estimates are reported in Table 6.13. The findings possibly suggest that the businesses spent more money on external VAT help in 2010/11 than in 2009/10 when both the mean and median are analysed. The minimum and maximum VAT adviser fees increased significantly probably due to increases in the wage rates of professional VAT advisers.<sup>88</sup>

<sup>87</sup> See n 74.

<sup>88</sup> The distribution of the external costs of VAT in Botswana, by the profiles of the businesses, is presented in Appendix G. Appendix G is not included in the body of the thesis due to very low response rates.

**Table 6.13: Mean Tax Adviser Fees, 2009/10 and 2010/11<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Minimum (P)</b>	<b>Maximum (P)</b>
2009/10	28	5,543	6,000	800	11,900
2010/11	8	8,108	6,750	2,352	18,060

a N is the number of respondents that used tax adviser services for VAT work. The numbers of responses are lower because one and five respondents in 2009/10 and 2010/11, respectively, did not provide the fees they paid to external advisers for VAT work.

### 6.2.5 Compliance Costs Analysis by Internal-External Ratio

This section examines the proportions of the internal and external VAT compliance costs of the businesses, when analysed by the businesses' annual turnovers, as outlined in Table 6.14. The findings of the two financial years show that, in all turnover categories, the internal VAT compliance costs constitute over three quarters of the total VAT compliance costs of the businesses. Overall, four in five portions of the total VAT compliance costs for both years are internal VAT compliance costs, with only one in five constituting external VAT compliance costs.

**Table 6.14: Mean Internal-External Compliance Costs Ratio by Turnover, 2009/10 and 2010/11**

	<b>2009/10</b>		<b>2010/11</b>	
	<b>Internal Costs</b>	<b>External Costs</b>	<b>Internal Costs</b>	<b>External Costs</b>
Less than P1.5 million	77 (83)	23 (25)	82 (15)	18 (1)
P1.5 million–P5 million	94 (28)	6 (3)	79 (9)	21 (3)
Over P5 million	100 (17)	0 (0)	83 (21)	17 (4)
<b>Overall<sup>a</sup></b>	<b>84 (128)</b>	<b>16 (28)</b>	<b>82 (45)</b>	<b>18(8)</b>

a The numbers of responses are displayed in parentheses.

## 6.3 MEAN VALUE ADDED TAX COMPLIANCE COSTS

### 6.3.1 Overview

This section analyses the mean compliance costs of VAT for the two financial years under consideration. The estimation of the mean VAT compliance costs in this study follows the procedure of prior research which combines the internal and external tax

compliance costs to arrive at mean gross tax compliance costs (e.g., Pope, 1993a; Abdul-Jabbar, 2009). While the majority of prior VAT compliance costs studies used the mean, the use of the trimmed mean is also possible (e.g., Colmar Brunton, 2005; Smulders et al., 2012). This study uses the mean and median values to assess the gross VAT compliance costs of VAT in Botswana.<sup>89</sup>

It has been proposed that tax compliance costs are expected to decrease to a minimal amount over time as the businesses become familiar with the requirements of the tax system (Sandford et al., 1989, p. 17). Contrary to this proposition, the overall VAT compliance costs in Botswana do not appear to have decreased over a period of twelve months, as shown in Table 6.15 and Figure 6.1 below. It must be noted, however, that a period of twelve months is insufficient to draw firm conclusions on the behaviour of VAT compliance costs estimates in Botswana, thus interpretations of the findings are cautiously made.

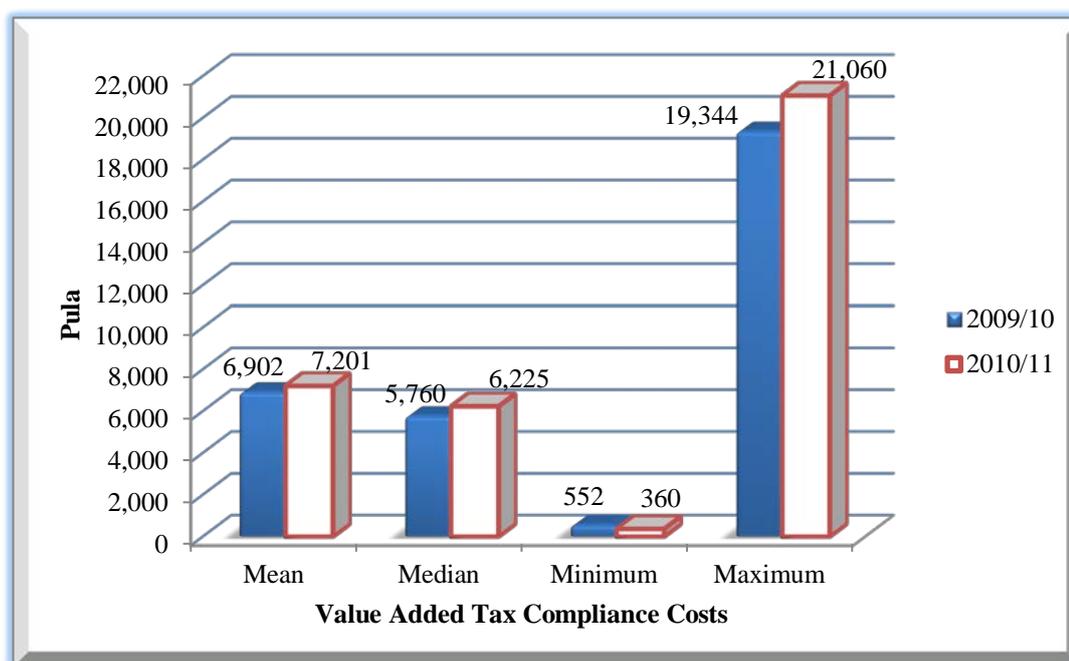
**Table 6.15: Mean Value Added Tax Compliance Costs, 2009/10 and 2010/11<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Minimum (P)</b>	<b>Maximum (P)</b>
2009/10	137	6,902	5,760	552	19,344
2010/11	50	7,201	6,225	360	21,060

a N is the total number of respondents.

<sup>89</sup> The trimmed mean is usually appropriate where outliers are present. In this study, the outliers were assessed and removed manually before analysis.

**Figure 6.1: Value Added Tax Compliance Costs, 2009/10 and 2010/11<sup>a</sup>**



a N is 137 for 2009/10 and 50 for 2010/11.

### 6.3.2 Statistical Comparative Analysis of Means

As indicated earlier,<sup>90</sup> an independent sample *t* test is conducted on the mean values of the two years under review. The values of skewness and kurtosis, presented in Table 6.16, indicate that the distributions of the data for the two financial years in this study are normal.

**Table 6.16: Values of Skewness and Kurtosis for Normality Test**

	2009/10	2010/11
Skewness	0.775	0.960
Kurtosis	-0.429	0.325

The Levene test is used to check for equality of variances, as presented in Table 6.17.<sup>91</sup> The results of the Levene test indicate that the variances of the two samples in this study are homogeneous. Additionally, the results of the ANOVA test ( $F = 0.128$ ,  $p = 0.721$ ) confirm that there is no statistical difference between the variances of the two years.

<sup>90</sup> See Section 4.7.2 of this thesis.

<sup>91</sup> See Section 4.7.2 of this thesis.

**Table 6.17: Levene Test of Homogeneity of Variance**

	2009/10 and 2010/11
Levene Statistic	0.366
Significance	0.546
ANOVA, <i>F</i>	0.128
Significance	0.721

Given that the data of the two surveys in this study satisfy the assumptions of normality and homogeneity of variance, an independent sample *t* test is conducted to check if there is any significant difference between the VAT compliance costs means for the financial years 2009/10 and 2010/11 surveys. The output of the *t* test shows that  $t(185) = -0.357$ ,  $p = 0.721$ . The two-tailed significance indicates that  $p > .05$ , demonstrating that the observed difference in the means of the two surveys is not significant. This implies that there is no appreciable change in the average compliance costs of VAT for the financial years 2009/10 and 2010/11.

### 6.3.3 Distribution of Value Added Tax Gross Compliance Costs

The size of the firm as indicated by the annual turnover is used to analyse the distribution of the mean compliance costs for the two years under investigation, as shown in Tables 6.18 and 6.19. The findings of the VAT compliance costs for businesses in Botswana display a severely regressive pattern. Value Added Tax compliance costs as a percentage of turnover fall from around 0.90 for the smaller businesses to 0.02 for the larger ones in both years.<sup>92</sup> These costs, for the small businesses, are around 45 times those of larger businesses in both years. The results confirm the effect of economies of scale also known as the regressive pattern of compliance costs (Pope, 1994, p. 98). The significant differences in the mean VAT compliance costs within the turnover groups is confirmed by an ANOVA test for 2009/10 ( $F = 1.901$ ,  $p = 0.114$ ) and 2010/11 ( $F = 0.523$ ,  $p = 0.719$ ).

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<sup>92</sup> These costs are much more regressive when the small business category is segregated further.

**Table 6.18: Mean Value Added Tax Compliance Costs by Turnover, 2009/10<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage of Turnover</b>
Less than P1.5 million	91	6,987	5,760	0.93
P1.5 million–P5 million	29	6,043	3,974	0.19
Over P5 million	17	7,907	7,364	0.02
<b>Overall<sup>b</sup></b>	<b>137<sup>c</sup></b>	<b>6,902</b>	<b>5,760</b>	

a. Percentages are calculated using the average of each turnover category. The respondent-given upper turnover for the 'over P5M' category is P60M.

b. The 2010 exchange rate of the Botswana Pula to the American Dollar is 0.155 (Bank of Botswana, 2011, p. 75).

c. N is the total number of respondents.

**Table 6.19: Mean Value Added Tax Compliance Costs by Turnover, 2010/11<sup>a</sup>**

	<b>2010/11</b>			
	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage of Turnover</b>
Less than P1.5 million	15	6,730	4,842	0.90
P1.5 million–P5 million	12	7,473	7,005	0.23
Over P5 million	23	7,367	5,820	0.02
<b>Overall<sup>b</sup></b>	<b>50<sup>c</sup></b>	<b>7,201</b>	<b>6,225</b>	

a. Percentages are calculated using the average of each turnover category. The respondent-given upper turnover for the 'over P5M' category is P60M.

b. The 2011 exchange rate of the Botswana Pula to the American Dollar is 0.133 (Bank of Botswana, 2011, p. 75).

c. N is the total number of respondents.

The distribution of the mean VAT compliance costs by the manner in which BURS classifies the VAT paying population is displayed in Table 6.20. The results show that the mean and median gross VAT compliance costs for businesses in groups A and B, in both years, are stable. The group C businesses, however, seem to have increased by about 35 per cent over a year.

**Table 6.20: Mean Value Added Tax Compliance Costs by Botswana Unified Revenue Service Classification<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Groups A and B	132	6,942	5,760	40	7,022	6,225
Group C	5	5,834	3,608	10	7,918	6,180
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the manner in which the Botswana Unified Revenue Service classifies businesses.

The analysis of the mean VAT compliance costs by legal structure follows in Table 6.21. The mean and median VAT compliance costs for the sole traders and companies are fairly close for the year 2009/10. When these costs are assessed across the two years, the findings are indicative of some stability in the compliance costs of companies.

**Table 6.21: Mean Value Added Tax Compliance Costs by Legal Structure<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Sole trader	23	6,865	5,760	5	3,287	2,200
Company	106	7,010	5,760	45	7,636	6,600
Partnership	7	6,135	4,080	n/a	n/a	n/a
Non-Profit Organisation	1	1,602	1,602	n/a	n/a	n/a
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the legal structure of the business.

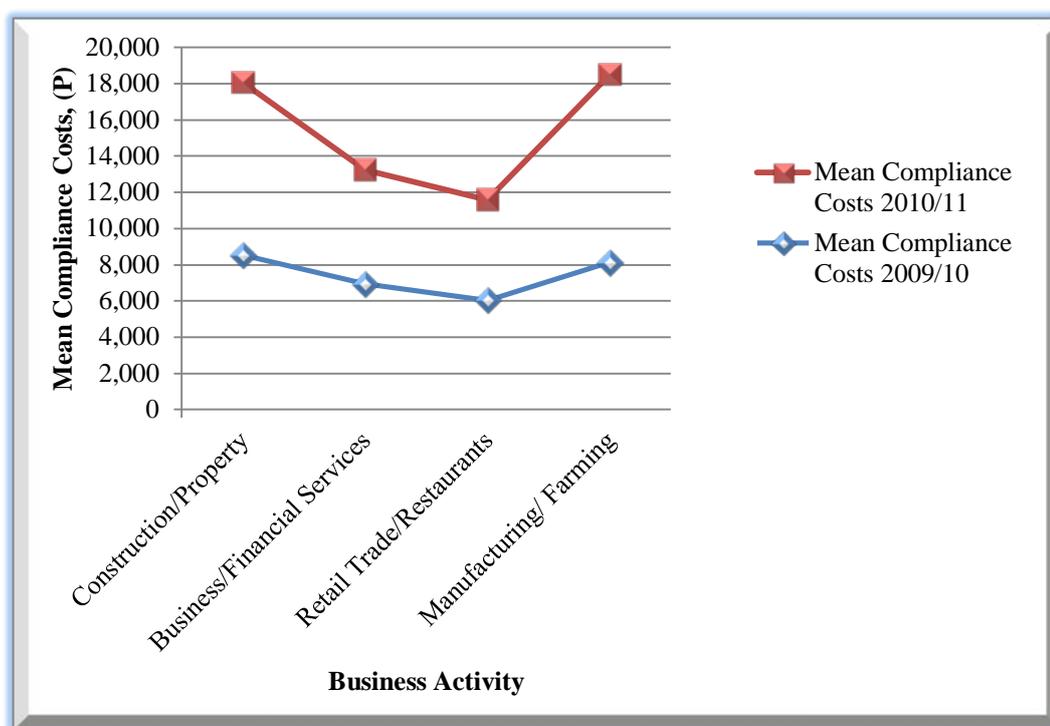
The mean compliance costs of VAT by the main activity of the business are shown in Table 6.22 and Figure 6.2. The VAT compliance costs exhibit a U-shaped graph when examined in terms of the industries in which the businesses operate, indicating that in both financial years, the Business/Financial Services and Retail Trade/Restaurants incur the lowest average compliance costs.

**Table 6.22: Mean Value Added Tax Compliance Costs by Business Activity<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Construction/Property	22	8,537	7,708	9	9,542	7,074
Business/Financial Services	61	6,942	5,665	24	6,291	6,225
Retail Trade/Restaurants	50	6,035	4,606	11	5,554	3,480
Manufacturing/ Farming	4	8,135	7,380	6	10,354	12,420
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the main activity of the business.

**Figure 6.2: Mean Value Added Tax Compliance Costs by Business Activity, 2009/10 and 2010/11**



The analysis of the mean compliance costs by the place of operation, as shown in Table 6.23, indicates that for the year 2009/10, the average compliance costs of VAT for businesses in the villages are nearly twice as much as those in the towns and around 24 per cent more than the ones in the city. This is not surprising as these businesses incur much greater costs from travelling longer distances to BURS. Even telephone rates are higher for those in the remote areas. Moreover, professional VAT

help is not easily accessible in the villages. With regard to the 2010/11 compliance costs of those in the city, the VAT compliance costs for the two years are similar.

**Table 6.23: Mean Value Added Tax Compliance Costs by Place of Operation<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Village	23	8,909	8,208	n/a	n/a	n/a
Town	17	4,857	3,409	5	8,965	8,700
City	97	6,784	5,250	45	7,005	6,000
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the place of operation of the business.

In both the 2009/10 and 2010/11 financial years, the businesses that have been in operation for more than five years report fairly close and lower compliance costs, as shown in Table 6.24. Similarly, the businesses that have been registered for VAT for more than five years, in both financial years, incur comparable and lower VAT compliance costs, as displayed in Table 6.25. This is to be expected as the lengthy period of over five years means that the businesses are accustomed to the requirements of the VAT system. The high costs in the category of less than two years of operation seem to indicate the presence of transitional costs.

**Table 6.24: Mean Value Added Tax Compliance Costs by Business Operation Length<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Under 2 years	28	7,175	4,871	3	14,287	14,600
2–5 years	39	7,725	7,033	6	8,198	8,130
Over 5 years	70	6,334	4,687	41	6,537	5,760
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the number of years the business has been in operation.

**Table 6.25: Mean Value Added Tax Compliance Costs by Value Added Tax Registration Length<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
0–5 years	63	7,889	6,573	12	9,866	8,130
Over 5 years	74	6,061	3,977	38	6,360	5,647
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the number of years the business has been registered for VAT.

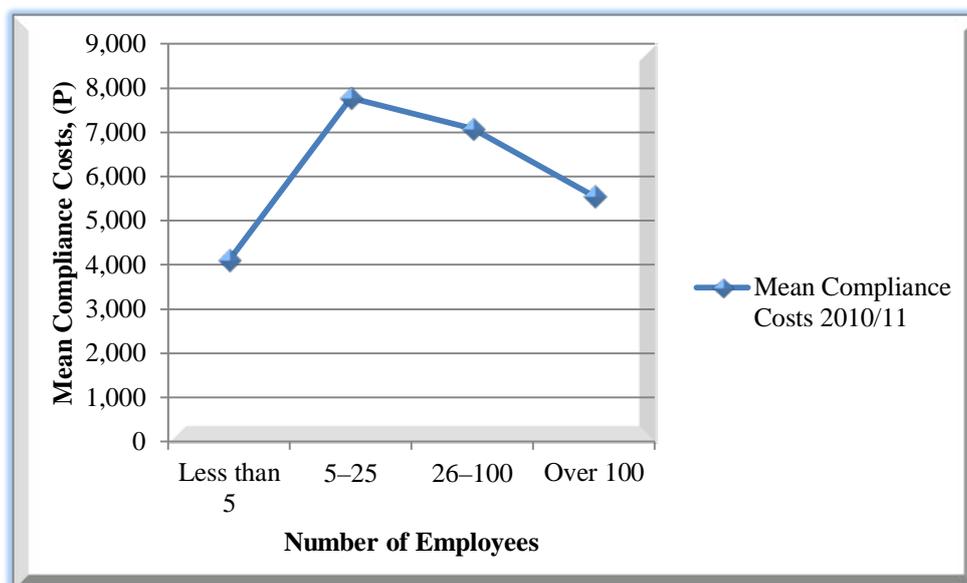
The analysis of the mean VAT compliance costs by the number of employees is presented in Table 6.26 and Figure 6.3. The mean figures exhibit an inverted U-shaped curve. This indicates that small businesses that employ 5–25 people incur the highest compliance costs. Small businesses often lack expertise in tax compliance work. As a result, they spend more time than necessary, hence higher compliance costs, on tax compliance work.

**Table 6.26: Mean Value Added Tax Compliance Costs by Number of Employees<sup>a</sup>**

	2010/11		
	N	Mean (P)	Median (P)
Less than 5	3	4,109	4,165
5–25	30	7,783	6,975
26–100	13	7,080	5,760
Over 100	4	5,556	6,067
<b>Total</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the number of years the business has been in operation.

**Figure 6.3: Mean Value Added Tax Compliance Costs by Number of Employees, 2010/11**



#### **6.3.4 Value Added Tax Compliance Costs by Other Business Traits**

This section analyses the VAT compliance costs by other characteristics of the respondents such as: frequency of VAT returns submission; use of external tax advisers; manner of VAT returns completion; classification of sales and purchases; the number of monthly VAT invoices processed; record keeping manner; and whether the business is visited by tax officers during the year under review or not.

The mean VAT compliance costs by the frequency of VAT return submission are portrayed in Table 6.27. Surprisingly, the monthly VAT remitters (those in group C) incur the lowest mean VAT compliance costs during the year 2009/10. It is, however, proposed that the low mean compliance costs figure in this case is due to the fact that large businesses normally have well established tax accounting systems and are unaffected by frequent VAT return filing. During the year 2010/11, however, and probably due to the effects of the 2010 VAT amendments, the firms in group C incurred the highest mean VAT compliance costs while those of the bimonthly filers remained stable.

**Table 6.27: Mean Value Added Tax Compliance Costs by Frequency of Value Added Tax Returns Submission<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Monthly	5	5,813	3,608	10	8,077	6,067
Every two months	132	6,943	5,760	40	6,983	6,225
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents by the frequency of VAT returns submission.

The analysis of the mean VAT compliance costs by the use of professional tax advisers for VAT work is presented in Table 6.28. The businesses that use external tax advisers for VAT work report the highest mean gross VAT compliance costs of P10,330 for 2009/10 and P8,322 for 2010/11. The firms that complete all their VAT work internally had the lowest mean gross VAT compliance costs of P5,981 during the financial year 2009/10 and P6,807 in the year 2010/11.

These findings seem to suggest that the use of external VAT advisers leads to higher compliance costs. This is possibly due to the fact that many SMEs in Botswana use manual record keeping systems, which forces tax advisers to spend more time reviewing VAT records in order to allocate items to appropriate categories. This, consequently, results in higher fees for taxpayers.

**Table 6.28: Mean Compliance Costs by Use of External Tax Adviser for Value Added Tax Work<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Used tax adviser for VAT	29	10,330	10,788	13	8,322	7,074
Did not use tax adviser for VAT	108	5,981	4,222	37	6,807	5,820
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a. N is the total number of respondents of the businesses that use external tax advisers for VAT work.

With regard to outsourcing of VAT work, the businesses that engage in partial outsourcing of VAT work, in both financial years, incur the highest VAT compliance costs, as shown in Table 6.29. Past research also demonstrates that partial

outsourcing leads to increased tax compliance costs (Coolidge et al., 2009, p. 18). The findings further indicate that the businesses that carry out their VAT work wholly internally have the lowest VAT compliance costs in both years. Indicatively, these findings suggest that businesses in Botswana may find it cost effective to do their VAT work in house and not use external VAT advisers.

**Table 6.29: Mean Value Added Tax Compliance Costs by Manner of Value Added Tax Returns Completion<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Entirely within the firm	107	5,862	4,123	40	6,793	6,135
Partially by external assistance <sup>b</sup>	11	11,330	12,918	4	10,745	12,620
Entirely by external assistance	19	10,191	9,900	6	7,560	5,485
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

a N is the total number of respondents by the manner in which businesses complete their VAT returns.

b One respondent indicated that they sought some 'unpaid' partial external assistance from a friend for VAT work.

The VAT system in Botswana zero rates and exempts some goods and services.<sup>93</sup> The VAT policy requires the value added taxpayers to classify their sales and purchases into appropriate categories of standard rated, zero rated and exempt goods and services when accounting for VAT. Table 6.30 examines the mean gross VAT compliance costs by the classifications of the sales of the businesses in the years 2009/10 and 2010/11. The majority of the respondents (72 per cent for 2009/10 and 86 per cent for 2010/11) stated that they sell standard rated goods and services only. The results show that, in the financial year 2009/10, the businesses that sell a combination of standard rated, zero rated and exempt goods and services, incur the highest average VAT compliance costs of P12,073, while those that trade in a combination of standard rated and exempt sales have the second highest mean VAT compliance costs of P11,764. The firms that sell standard and zero rated goods and services only have the second lowest average VAT compliance costs of P9,278.

Not surprisingly, the businesses that trade in standard rated sales only have the lowest mean VAT compliance costs of P6,367. This clearly implies that the presence

<sup>93</sup> See Section 2.5 of this thesis.

of zero rated and exempt supplies in the VAT system complicates compliance and increases VAT compliance costs. In the year 2010/10, the businesses that responded to the survey indicate that they only trade in either standard rated sales or a combination of standard and zero rated sales. The analysis of their mean gross VAT compliance costs shows that, while the firms that sell a combination of standard and zero rated supplies have higher mean gross VAT compliance costs than those that traded in standard rated sales only, the difference is only small.

**Table 6.30: Mean Value Added Tax Compliance Costs by Classification of Sales<sup>a</sup>**

	2009/10		2010/11	
	Mean (P)	Median (P)	Mean (P)	Median (P)
Standard rated only	6,367 (115)	5,250	7,013 (43)	6,000
Standard rated and zero rated	9,278 (18)	7,772	7,446 (7)	6,450
Standard rated and exempt	11,764 (14)	13,627	0 (0)	0
Standard rated, zero rated and exempt	12,073 (12)	13,627	0 (0)	0
<b>Overall<sup>b</sup></b>	<b>6,902 (159)</b>	<b>5,760</b>	<b>7,201 (50)</b>	<b>6,225</b>

a The numbers of respondents are in parentheses.

b The 2009/10 total exceeds the number of respondents because some survey participants traded in a combination of standard, zero rated and exempt supplies.

A similar situation is presented in Table 6.31, which shows an analysis of the average gross VAT compliance costs by classification of purchases, under different combinations of standard rated, zero rated and exempt inputs. The majority of the survey participants (68 per cent for 2009/10 and 64 per cent for 2010/11) indicate that they use standard rated inputs only. The businesses that have to account for a combination of standard rated, zero rated and exempt purchases for VAT purposes, have the highest average gross VAT compliance costs of P11,650 for the year 2009/10, followed by those that use a combination of standard rated and exempt inputs at P10,320.

The mean VAT compliance costs of the businesses that use a combination of standard and zero rated inputs have the third highest mean gross VAT compliance costs of P9,198. Those that have to account for standard rated inputs only have the lowest mean gross VAT compliance costs of P6,710. In the year 2010/11,

respondents that use a combination of standard rated, zero rated and exempt inputs report the highest mean gross VAT compliance costs of P8,410, followed by the standard rated category at P7,474. The second lowest mean gross VAT compliance costs are reported by the businesses that indicate that they used a combination of standard rated and exempt purchases. The ‘standard and zero rated’ category have the lowest mean gross VAT compliance costs.

**Table 6.31: Mean Value Added Tax Compliance Costs by Classification of Purchases<sup>a</sup>**

	2009/10		2010/11	
	Mean (P)	Median (P)	Mean (P)	Median (P)
Standard rated only	6,710 (113)	5,760	7,474 (39)	6,600
Standard rated and zero rated	9,198 (21)	8,180	6,780 (10)	5,890
Standard rated and exempt	10,320 (17)	9,251	7,272 (8)	6,172
Standard rated , zero rated and exempt	11,650 (14)	13,472	8,410 (4)	8,670
<b>Overall<sup>b</sup></b>	<b>6,902 (165)</b>	<b>5,760</b>	<b>7,201 (61)</b>	<b>6,225</b>

a The numbers of respondents are in parentheses.

b The overall exceed the number of respondents because some survey participants purchased a combination of standard, zero rated and exempt supplies.

This section of the chapter examines the mean gross VAT compliance costs by the number of monthly VAT invoices processed by the businesses. The results show that, for both financial years, the mean gross VAT compliance costs tend to decrease with an increase in the number of VAT invoices processed, as shown in Table 6.32.

**Table 6.32: Mean Value Added Tax Compliance Costs by Number of Monthly Value Added Tax Invoices<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Less than 500	26	7,493	4,683	41	7,094	6,600
500–2,499	72	7,379	6,767	4	3,877	4,507
2,500–4,999	23	4,983	3,974	1	14,700	14,700
5,000–7,499	8	8,106	5,712	0	0	0
7,500–10,000	5	4,323	4,172	0	0	0
Over 10,000	3	6,140	3,240	1	3,480	3,480
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>47<sup>b</sup></b>	<b>7,201</b>	<b>6,225</b>

a N is the number of respondents by the number of invoices processed each month.

b Three respondents did not provide the number of monthly VAT invoices processed in 2010/11.

The mean VAT compliance costs are analysed here by the way in which the businesses keep their VAT records, as shown in Table 6.33. Surprisingly, for both financial years, the businesses that keep their VAT records in paper filing systems have the lowest mean gross VAT compliance costs of P6,157 in 2009/10 and P5,077 in 2010/11. One would expect that the businesses that use partially computerised systems, due to the possibility of duplication, would have the highest mean gross VAT compliance costs; however, in this case, they have the second lowest. The firms that keep their VAT records in fully computerised systems have the second highest mean gross VAT compliance costs of P7,426 and P8,108 for 2009/10 and 2010/11, respectively.

**Table 6.33: Mean Value Added Tax Compliance Costs by Record Keeping Manner, 2009/10<sup>a</sup>**

	2009/10		2010/11	
	Mean (P)	Median (P)	Mean (P)	Median (P)
In a paper filing system	6,157 (36)	5,199	5,077 (5)	6,875
In a fully computerized system	7,426 (28)	5,840	8,108 (22)	5,910
In a partially computerized system	6,774 (64)	5,713	6,639 (22)	5,710
My tax adviser keeps my tax records	9,158 (9)	8,208	10,240 (1)	10,240
<b>Overall</b>	<b>6,902 (137)</b>	<b>5,760</b>	<b>7,201 (50)</b>	<b>6,225</b>

a. The numbers of respondents are in parentheses.

The 2009/10 survey participants are asked to indicate whether or not they were visited by a tax officer from BURS during the course of the financial year in question. The average VAT compliance costs by tax officer visit are displayed in Table 6.34. The findings reveal that the businesses that are visited by tax officers incur higher compliance costs than those who are not visited by tax officers. It could be that businesses spend more time (and possibly more money on external advice) than usual on VAT compliance activities when they know that they will be visited by tax officers for audit purposes.

**Table 6.34: Mean Value Added Tax Compliance Costs by Tax Officers Visit<sup>a</sup>**

Tax Officers Visit	2009/10		
	N	Mean (P)	Median (P)
Yes	28	7,681	6,562
No	109	6,702	5,665
<b>Overall</b>	<b>137<sup>b</sup></b>	<b>6,902</b>	<b>5,760</b>

a. The question concerning whether or not the businesses were visited by the tax officers during the financial year was not asked in 2010/11 in an attempt to reduce the length of the questionnaire.

b. N is the number of respondents that have been visited by tax officers.

## 6.4 AGGREGATE COMPLIANCE COSTS OF VAT

### 6.4.1 Overview

The computation of the weighted mean (grossing up) for this study follows the approach outlined in (Pope, 1993a, pp. 91–93). The compliance costs of VAT for businesses in Botswana are weighted by the number of VAT registrants, using the classification groups (A, B and C) as defined by BURS.<sup>94</sup> The business economic sectors and annual turnovers, as commonly used in other tax compliance costs studies, could not be used in this study due to the lack of data on the number of VAT registered businesses in those categories. Equations 6.1 and 6.2 below are used to calculate the estimates of aggregate VAT compliance costs and their overall weighted means.

<sup>94</sup> See Section 2.5.2 of this thesis.

**Equation 6.1:**

*Aggregate VAT compliance costs = mean compliance costs × number of VAT registered businesses in VAT-paying groups.*

**Equation 6.2:**

*Overall weighted mean = aggregate vat compliance costs ÷ total number of VAT registered businesses.*

Tables 6.35 and 6.36 outline the aggregate compliance costs of VAT by BURS classification for the financial years 2009/10 and 2010/11. The findings indicate that the aggregate compliance costs increased by P59 million or 35 per cent over a period of twelve months. The aggregate VAT compliance costs of the businesses in groups A and B increased by 34 per cent, while those in group C increased by 80 per cent. The overall weighted mean for the 2009/10 is similar to the survey mean which indicates that the findings are not biased to either group. For the year 2010/11, the overall weighted mean is slightly lower than the survey mean which implies that the survey is faintly biased towards large businesses with a turnover exceeding P12 million.

**Table 6.35: Aggregate Value Added Tax Compliance Costs by Botswana Unified Revenue Service Classification, 2009/10<sup>a</sup>**

	2009/10				
	N	Mean (P)	Median (P)	VAT Registrants	Weighted Compliance Costs (P) Million
Groups A and B	132	6,942	5,760	15,725	109
Group C	5	5,834	3,608	215	1
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	<b>15,940</b>	<b>110</b>
<b>Overall weighted mean: P110 million ÷ 15,940 = P6,901<sup>b</sup></b>					

- N is the number of respondents by the way in which Botswana Unified Revenue Services classify businesses.
- Refer to Equations 6.1 and 6.2 of this thesis.

**Table 6.36: Aggregate Value Added Tax Compliance Costs by Botswana  
Unified Revenue Service Classification, 2010/11<sup>a</sup>**

	2010/11				
	N	Mean (P)	Median (P)	VAT Registrants	Weighted Compliance Costs (P) million
Groups A and B	40	7,022	6,225	23,287	164
Group C	10	7,918	6,180	644	5
<b>Overall</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>	<b>23,931</b>	<b>169</b>
<b>Overall weighted mean: P169 million ÷ 23,931 = P7,062<sup>b</sup></b>					

a. N is the number of respondents by the way in which Botswana Unified Revenue Services classify businesses.

b. Refer to Equations 6.1 and 6.2 of this thesis.

#### **6.4.2 Aggregate Value Added Tax Compliance Costs as a Proportion of Gross Domestic Product, Tax Revenue and Value Added Tax Revenue**

Presentation of tax compliance costs findings as a percentage of GDP is a common and internationally accepted way of portraying the weight of such costs on the country's economy. Almost all major prior tax compliance costs studies have followed this approach (e.g., Sandford et al., 1989; Pope, 1994; Evans et al., 1997; Yesegat, 2009; Abdul-Jabbah, 2009). Other means of analysis, such as tax compliance costs as a proportion of total tax revenue and also as a proportion of the revenue of the particular tax in question, have also been employed. However, it has been argued that presenting tax compliance costs as a proportion of tax revenue should be used with caution due to the tax revenues' susceptibility to influence by factors such as a change in tax policy (Sandford & Hasseldine, 1992, p. 2).

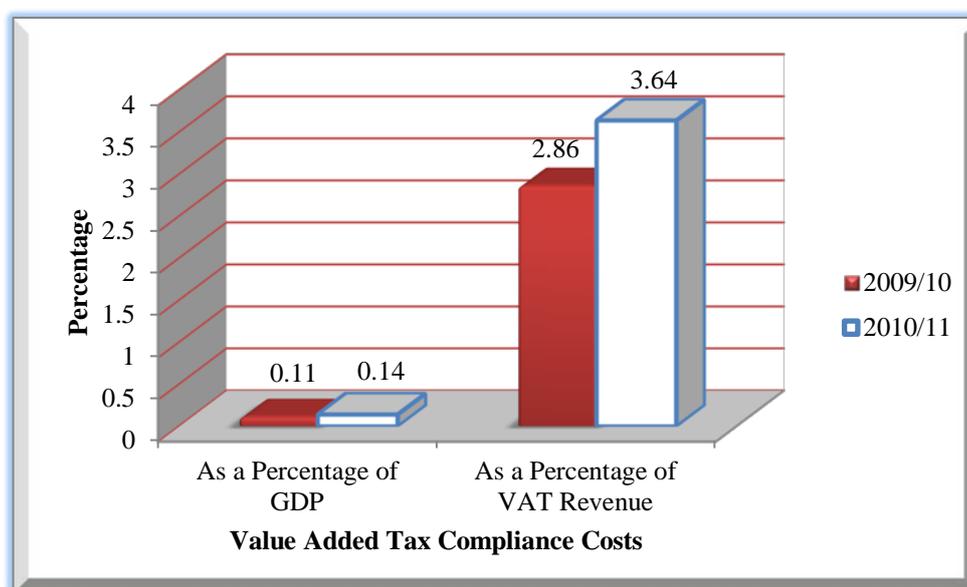
This study has used the GDP and VAT revenue to analyse the weight of VAT compliance costs on Botswana's economy, as outlined in Table 6.37 and Figure 6.2. The proportions of aggregate compliance costs of VAT for businesses in Botswana are, for both years, around 0.1 per cent of GDP. The magnitudes of these costs tend to increase when considered against the total tax revenue and VAT revenue over a period of twelve months. This is because since the financial year 2006/07, Botswana has been experiencing a declining growth in tax revenue collections.<sup>95</sup>

<sup>95</sup> Refer to Figure 2.4 of this thesis.

**Table 6.37: Aggregate Value Added Tax Compliance Costs as a Proportion of Gross Domestic Product and Value Added Tax Revenue**

	<b>2009/10 (P) million</b>	<b>2010/11 (P) million</b>
Aggregate Compliance Costs	110	169
GDP	101,258	120,541
VAT Revenue	3,845	4,648
	<b>Percentage</b>	<b>Percentage</b>
Aggregate Compliance Costs as a Percentage of GDP	0.11	0.14
Aggregate Compliance Costs as a Percentage of VAT Revenue	2.86	3.64

**Figure 6.4: Percentage Proportions of Aggregate Value Added Tax Compliance Costs to Gross Domestic Product and Value Added Tax Revenue**



## **6.5 POSSIBLE FAIR COMPENSATION CLAIMS FROM BOTSWANA UNIFIED REVENUE SERVICE**

In Botswana, not all compliance costs are tax deductible. The VAT on the fees charged by a VAT registered tax adviser is the only portion that is deductible as input tax. Thus compensation of VAT compliance costs may be warranted.<sup>96</sup> To this end, this section examines the estimates that the respondents perceive as fair

<sup>96</sup> It is not known whether any compensation for VAT compliance costs would be taxable to recipients.

compensation claims for the costs they incur while collecting VAT on behalf of the government.

The 2009/10 respondents are asked to estimate the possible amount they would claim from the government as compensation for the time and money they spend on VAT compliance activities. Only 65 survey participants (47 per cent of overall respondents) responded to this question, with the majority (68 per cent) emanating from small businesses, as portrayed in Table 6.38. The overall average possible compensation amount that would be claimed by the businesses is P44,450. The large businesses state the highest average possible claim of P115,828 followed by small businesses at P46,144. The likely claim of P10,928 provided by the medium-sized enterprises is probably more realistic, given the value of the average VAT compliance costs. The possible compensation amounts as a percentage of turnover range from around 0.4 per cent for the larger businesses and medium-sized firms to six per cent for small enterprises. Further analysis reveals that the average possible compensation amount given by the smallest businesses is 15 times those of medium-sized and larger firms.

**Table 6.38: Pula Amounts that would be claimed as Fair Compensation by Turnover, 2009/10<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage</b>
Less than P1.5 million	44	46,144	19,000	6.2
P1.5 million–P5 million	15	10,928	10,000	0.3
Over P5 million	6	115,828	65,000	0.4
<b>Overall</b>	<b>65</b>	<b>44,450</b>	<b>12,000</b>	

a. N is the number of respondents that estimated possible fair compensation amounts.

Similarly, the 2010/11 survey participants are requested to provide the amounts that they would possibly claim from the government as compensation for the time and monetary VAT compliance costs incurred by the businesses. A total of 38 businesses (76 per cent of the overall respondents) responded to this question, with the majority coming from larger businesses, as outlined in Table 6.39. An overall average possible compensation amount of P50,261 is provided by the respondents. The average possible compensation amount is directly proportional to the business

turnover. On average, the possible compensation amounts range from P20,692 for the smaller businesses to P51,375 for the medium-sized enterprises and P72,347 for larger firms. As a percentage of turnover, these amounts range from 0.2 per cent for larger businesses, to 1.6 per cent for medium-sized enterprises and 2.8 per cent for the smallest firms. Closer analysis indicates that the average possible compensation amount given by the smallest businesses is 14 times those of large firms.

**Table 6.39: Pula Amounts that would be claimed as Fair Compensation by Turnover, 2010/11<sup>a</sup>**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage</b>
Less than P1.5 million	13	20,692	10,000	2.8
P1.5 million–P5 million	8	51,375	17,500	1.6
Over P5 million	17	72,347	40,000	0.2
<b>Overall</b>	<b>38<sup>b</sup></b>	<b>50,261</b>	<b>21,000</b>	

a N is the number of respondents, by turnover, that estimated possible fair compensation amounts.

b The estimates with only two responses are disregarded as they are statistically insignificant.

## 6.6 CHAPTER SUMMARY

This chapter analyses the compliance costs of VAT for businesses in Botswana for the financial years 2009/10 and 2010/11. The analysis focuses on the distribution of VAT compliance costs with respect to internal, external and average gross costs. The estimated average compliance costs of VAT for the years 2009/10 and 2010/11 are P6,902 and P7,201, respectively. The median VAT compliance costs are estimated at P5,760 for the year 2009/10 and P6,225 for the year 2010/11. The findings confirm the effect of economies of scale, also known as the regressive pattern of compliance costs, usually reported in tax compliance costs studies. Additionally, an independent sample *t* test is conducted to check if there is any significant difference between the means of the surveys for the financial years 2009/10 and 2010/11. The results of the independent sample *t* test reveal that there is no significant disparity in the average compliance costs of VAT for the financial years 2009/10 and 2010/11.

Furthermore, the mean VAT compliance costs for the two years are grossed-up to arrive at the aggregate VAT compliance costs. The grossing-up is done using the value added taxpayer classification groups (A, B and C). Other usual means of

aggregation such as business turnovers and business economic sectors are not possible in this study due to data limitations. Aggregate compliance costs of VAT for businesses in Botswana are estimated at P110 million and P169 million for the financial years 2009/10 and 2010/11, respectively. As proportions of GDP and VAT revenue, the VAT compliance costs estimated in this study are 0.11 per cent, 0.55 per cent and 2.86 per cent, respectively for 2009/10 and 0.14 per cent, 0.84 per cent and 3.64 per cent, respectively for 2010/11. The overall average possible compensation amounts provided by the businesses are P44,450 for the year 2009/10 and P50,261 for 2010/11. The VAT compliance benefits/costs for businesses in Botswana for the financial years 2009/10 and 2010/11 are examined in the following chapter.

## CHAPTER 7

### TAX COMPLIANCE BENEFITS AND NET COMPLIANCE COSTS OF VALUE ADDED TAX

#### 7.1 INTRODUCTION

The tax system and its requirements may not always lead to an outward flow of cash from the incomes of the taxpayers. In many respects, the payment of tax is beneficial. To begin with, the tax helps to finance the expenditure of governments such as the development of infrastructure and the provision of public services. All these are beneficial to the taxpayers and non-taxpayers at large. In addition, the adherence to the requirements of the tax system may produce other benefits for the taxpayers, referred to as tax compliance benefits. Pope (2001a, p. 14) asserts that it is important for researchers, small business owners, lobby groups and policy makers to recognise the benefits of complying with the GST. As stated in Chapter 1 of this thesis, three offsetting benefits namely: cash flow benefits, managerial benefits<sup>97</sup> and tax deductibility benefits, may accrue to taxpayers who comply with the requirements of the tax system. This chapter estimates the cash flow and managerial benefits that accrued to the businesses while complying with the regulations of VAT in Botswana during the financial years 2009/10 and 2010/11.<sup>98</sup>

It has been argued that of all the compliance benefits possible in the tax system, managerial benefits, due to their elusive nature, appear to be the most difficult to estimate (Sandford et al., 1981, p. 96). Consequently, net compliance costs generally comprise gross compliance costs minus the value of the cash flow benefits (Sandford et al., 1989, p. 14). To this end, managerial benefits are rarely investigated in tax compliance costs save for a few major studies (Sandford et al., 1981; Sandford et al., 1989; Sandford & Hasseldine, 1992; NAO, 1994; Tran-Nam & Glover, 2002; Rametse, 2006; Lignier, 2008).

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<sup>97</sup> It must be noted that managerial benefits are less relevant for large businesses as they generally have sophisticated accounting systems used in their daily business affairs, with or without tax.

<sup>98</sup> Tax deductibility benefits are not investigated here as they are considered not to be relevant to recurrent VAT compliance costs.

Being the first research study of VAT compliance costs in Botswana, this study has attempted to estimate managerial benefits because SMEs are important to the economy of Botswana. The findings are tentative and should be viewed in that light. The estimates of managerial benefits in this study are indicative for policy makers in Botswana.

Section 2 of this chapter presents an overview of cash flow benefits followed by a brief outline of the measurement of cash flow benefits in Section 3. The estimates of the VAT cash flow benefits that were gained by the businesses in Botswana during the two financial years under review are presented in Section 4. Section 5 provides a succinct background of managerial benefits, while section 6 examines the gains that businesses in Botswana received as a result of complying with the VAT record keeping requirements. The net compliance costs of VAT for businesses in Botswana are delineated in Section 7. Section 8 summarises the chapter.

## **7.2 CASH FLOW BENEFITS/COSTS**

### **7.2.1 Background**

“An assessment of the compliance costs of taxation upon business must consider, in particular, the effect of the value of cash flow benefits arising from the timing of tax payments” (Pope, 2001b, p. 304).

Cash flow gains to the businesses result from the lawful delay in the remittance of tax collected on behalf of the government to the revenue authority. Equally, businesses, especially those who trade in zero rated goods and services and those with longer credit settlement periods, may incur cash flow detriments. This ‘interest-free loan’ from/to the government, represents an offset/increase to the compliance costs incurred by the taxpayers (Sandford et al., 1989, p. 13; Pope, 1993a, p. 70; Pope et al., 1994, p. 70).

The cash flow benefits and costs constitute ‘a zero sum game’ in that when the economy is taken as a whole, the gains and losses resulting from the leads and lags in tax payment cancel out (Sandford & Hasseldine, 1992, p. 7; Pope, 1993a, p. 70). Hence cash flow benefits are redistributive in nature and do not provide savings to the economy as a whole (Pope, 2001b, p. 304; Pope et al., 1993b, p. 51). Nevertheless, to those who gain and those who lose, the benefits and costs are real and may significantly affect the financial position of the taxpayers, particularly during economic downturns (Pope, 1993a, p. 71). Furthermore, the values of the cash flow benefits and cash flow costs may not completely cancel out because governments and taxpayers borrow and lend on different terms (Sandford et al., 1989, p. 23).

The cash flow benefit estimates should be treated cautiously due to their sensitivity to the level of interest rates. While cash flow benefits reduce the compliance costs of the taxpayers, they do nothing to reduce the regressiveness of tax compliance costs. If anything, cash flow benefits widen the disproportionate gap in the distribution of tax compliance costs between smaller and larger businesses. Cash flow benefits may lead to negative compliance costs for larger businesses, while those of smaller firms remain positive and substantial. The existence of cash flow benefits actually increases the regressive impact of compliance costs (Sandford et al., 1989, p. 200).

## **7.3 ESTIMATION OF CASH FLOW BENEFITS**

### **7.3.1 Overview**

The issue of the value of the cash flow benefits for business is complex. This value varies from one company to another and depends on factors such as the size of the business, the industry in which it operates, its competitive position and its credit arrangements with suppliers and customers. Thus, the estimates of the value of cash flow benefits are exactly that, and depend on the assumptions made. Nevertheless, these estimates provide a good indication of the order of magnitude of cash flow benefits to business which should be offset against gross compliance costs (Pope, 2001b, p. 309).

The estimation of the value of cash flow benefits incorporates a number of factors such as the amount of tax payable by the taxpayer, the time lag between the receipt of income and the payment of tax, the use of cash flow benefits and the bank's average business indicator rate (Evans et al., 1997, p. 14) or the published base lending rate (Sandford & Hasseldine, 1992, p.11).

### **7.3.2 Estimation of Cash Flow Benefits of Value Added Tax for Businesses in Botswana**

As discussed in Section 2.4, of this thesis, value added taxpaying businesses in Botswana are categorised into three groups, namely groups A, B and C.<sup>99</sup> Businesses in groups A and B are required to remit VAT collected to the revenue department every two months within a grace period of 25 days. However, it is open to these businesses to submit VAT returns monthly if they so wish. Such businesses may choose to file their VAT returns more frequently than required in order to obtain refunds quickly. Even so, businesses eligible for a refund may decide to submit VAT returns less frequently in order to minimise compliance costs (Sandford & Hasseldine, 1992, p. 71). Larger businesses in group C have to file their VAT returns on a monthly basis. They have a VAT collection period of one month and a grace period of 25 days. The following simplifying assumptions, adopted from Pope, et al. (1993a, p. 114), are used to calculate the cash flow benefits derived by value added taxpayers in Botswana.

1. The VAT is paid to Botswana Unified Revenue Service on the last day possible.
2. The sales of the business are evenly spread throughout each month.
3. The grace period is assumed to be 0.8 of a month, representing 24 days out of a typical month of 30 days.
4. Each business's VAT is received on payment of the appropriate invoice.
5. The overall VAT figure for each business per collection period is derived in proportion to the business's percentage of sales falling into each of the five time-period categories for settlement, as shown in Table 7.2.

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<sup>99</sup> The VAT registered businesses with annual turnovers below P12 million have been classified into two groups (A and B), and file VAT returns bi-monthly on alternate months, while those with annual turnovers of P12 million and above are categorised as group C and file VAT returns monthly.

6. Where a business receives payment of invoices more than two months after invoicing, this is assumed to be paid after three months.
7. Monthly remitters contribute 40 per cent of the total VAT revenue while bimonthly remitters contribute 60 per cent.<sup>100</sup>

The equations that have been used to calculate the cash flow benefits derived by value added taxpayers in Botswana<sup>101</sup> are displayed in Table 7.1.

**Table 7.1: Equations<sup>a</sup> for Estimating Cash Flow Benefits<sup>b</sup>**

Monthly Remitters	Bimonthly Remitters
$= [(C + G - S)/12]T \times r$	$= [(C + G - S)/12]T \times r$
$= [(1.0 + 0.8 - S)/12]T \times r$	$= [(2.0 + 0.8 - S)/12]T \times r$
$= [(1.8 - S)/12]T \times r$	$= [(2.8 - S)/12]T \times r$

a *Cash flow benefit = VAT liability × Time held*

b Where:  $T$  = VAT payments during the financial year;  $C$  = collection period in months;  $G$  = grace period in months;  $S$  = settlement date in months and  $r$  = bank interest rate.

Source: Pope (1993a, p. 232).<sup>102</sup>

This study defines five time periods during which settlement for the goods supplied is made. The settlement time periods range from cash sales to money being collected more than two months after invoicing. For the purposes of these calculations the maximum settlement period is assumed to be three months. As mentioned earlier, there are two types of VAT remitters in Botswana being monthly and bimonthly remitters. Thus ten factors are derived in order to calculate the cash flow benefits of VAT in Botswana, and these are presented in Table 7.2. This study uses the Bank of Botswana's benchmark three month deposit rates<sup>103</sup> of 5.8 per cent for 2009/10 and 5.5 per cent for 2010/11 (Bank of Botswana, 2010, pp. 84–85) to estimate the overall cash flow benefits in Botswana.

<sup>100</sup> Personal enquiry to BURS management by the author revealed that group C businesses contribute around 40 per cent of the VAT revenue while businesses in groups A and B contribute 60 per cent. This is probably due to the fact that many large businesses with turnovers ranging between P5 million and P12 million are in the group AB category.

<sup>101</sup> Due to the lack of information pertaining to the VAT payments made by businesses throughout the year, this study uses the annual VAT that has been collected by BURS to calculate the value of the cash flow benefits. Thus, the cash flow benefits are calculated as aggregates from the onset.

<sup>102</sup> In simple terms, the value of the cash flow benefit, expressed in months, can be calculated as:  $(C/24 + G/12)T.r$  (Sandford & Hasseldine, 1992, p. 72). Another alternative approach to obtaining the value of cash flow benefits is to use the number of days. Although this approach is more accurate (Pope, 2001b, p. 306), it is never used as it is cumbersome.

<sup>103</sup> These are the interest rates that businesses would have received if they chose to deposit the VAT collected prior to remitting it to the tax authority.

**Table 7.2: Factors for Calculating Value Added Tax Cash flow Benefits**

Settlement Period	Monthly Remitters	Bimonthly Remitters
Cash sales	$[(1.8 - 0.5)/12]T$ = $(1.3/12)T$ <b><u><math>\equiv 0.108T</math></u></b>	$[(2.8 - 0.5)/12]T$ = $(2.3/12)T$ <b><u><math>\equiv 0.192T</math></u></b>
Settlement within one week	$[(1.8 - 0.75)/12]T$ = $(1.05/12)T$ <b><u><math>\equiv 0.088T</math></u></b>	$[(2.8 - 0.75)/12]T$ = $(2.05/12)T$ <b><u><math>\equiv 0.171T</math></u></b>
Settlement within one month	$[(1.8 - 1.5)/12]T$ = $(0.3/12)T$ <b><u><math>\equiv 0.025T</math></u></b>	$[(2.8 - 1.5)/12]T$ = $(1.3/12)T$ <b><u><math>\equiv 0.108T</math></u></b>
Settlement within two months	$[(1.8 - 2.5)/12]T$ = $(-0.7/12)T$ <b><u><math>\equiv -0.058T</math></u></b>	$[(2.8 - 2.5)/12]T$ = $(0.3/12)T$ <b><u><math>\equiv 0.025T</math></u></b>
Settlement within three months	$[(1.8 - 3.5)/12]T$ = $(-1.7/12)T$ <b><u><math>\equiv -0.142T</math></u></b>	$[(2.8 - 3.5)/12]T$ = $(-0.7/12)T$ <b><u><math>\equiv -0.058T</math></u></b>

Source: Author: Equation derived from Pope (1993a, p. 232).

## 7.4 CASH FLOW BENEFITS FOR BUSINESSES IN BOTSWANA

### 7.4.1 Outline

This study provides indicative estimates of the value of cash flow benefits gained by businesses during the financial years 2009/10 and 2010/11. The cash flow benefit values cannot be disaggregated because of lack of data.<sup>104</sup> During the financial years 2009/10 and 2010/11, BURS collected around P3,845 million and P4,648 million, respectively, from businesses (BURS, 2010, p. 16, 2011, p. 15). Taking into account assumption number seven above, the contribution towards VAT made by businesses in groups A and B are taken to be P2,307 million for 2009/10 and P2,789 million for 2010/11. The contribution by larger businesses is taken to be P1,538 million in 2009/10 and P1,859 million in 2010/11.

<sup>104</sup> Communication with BURS management by the researcher reveal that BURS does not have detailed components of VAT revenue. The only available figures are the annual VAT revenues that have been collected by BURS. This is not surprising as the problem of limitations regarding the available information kept by the tax authorities is as old as the tax itself (Sandford et al., 1989, p. 6).

The values of the VAT cash flow benefits and costs incurred by businesses in Botswana, in terms of settlement periods, are displayed in Table 7.3. The findings indicate that the businesses in groups A and B, who trade in cash sales, gained the most cash flow benefits of P26 million in 2009/10 and P29 million in 2010/11. This is not surprising as cash sales allow the businesses to hold the VAT revenue for a longer period than those with lengthier settlement periods.<sup>105</sup> As expected, the businesses in groups A and B that have settlement periods exceeding two months incur a cash flow cost of P8 million and P9 million for 2009/10 and 2010/11, respectively.

Larger businesses in group C gain lower cash flow benefits<sup>106</sup> of P10 million in 2009/10 and P11 million in 2010/11. Group C businesses with settlement periods exceeding two months, incur cash flow costs of P13 million and P15 million in 2009/10 and 2010/11, respectively. Overall, group C businesses gain cash flow benefits of only three per cent of all cash flow benefits as opposed to the 97 per cent that accrue to group A and B businesses in both years.

**Table 7.3: Cash Flow Benefits and Costs for Businesses in Botswana<sup>a</sup>**

	2009/10 Cash Flow Benefits/Costs (P) million		2010/11 Cash Flow Benefits/Costs (P) million	
	Groups A and B	Group C	Groups A and B	Group C
Cash sales	26	10	29	11
Settlement within one week	23	8	26	9
Settlement within one month	14	2	17	3
Settlement within two months	3	-5 <sup>b</sup>	4	-6
Settlement within three months	-8	-13	-9	-15
<i>Cash flow benefits</i>	<i>58 (97)<sup>c</sup></i>	<i>2 (3)</i>	<i>67 (97)</i>	<i>2 (3)</i>
<i>Overall cash flow benefits</i>	<i>60 (100)</i>		<i>69 (100)</i>	

a The Bank of Botswana's benchmark three month deposit rates are 5.8 per cent in 2009/10 and 5.5 per cent in 2010/11 (Bank of Botswana, 2010, pp. 84-85).

b A negative figure is a cost.

c Percentages are in parentheses.

<sup>105</sup> As mentioned earlier, the proportions of cash flow benefits by group A and B businesses are greater than those of group C ones because groups A and B include large businesses with turnovers between P5 million and P12 million.

<sup>106</sup> See n. 105.

The proportions of the cash flow benefits towards aggregate VAT compliance costs are displayed in Table 7.4. The results show a big difference between the cash flow benefit proportions of groups AB and C businesses. The findings for the year 2009/10 confirm Sandford et al.'s (1981, p. 100) claim that cash flow benefits lead to negative compliance costs for larger businesses, while those of smaller firms remain positive and substantial. Indeed the existence of cash flow benefits essentially increases the disproportionate burden of tax compliance costs upon smaller firms.

The cash flow benefits as a proportion of aggregate VAT compliance costs for businesses in 2010/11 are close. During this year, the VAT compliance costs for group A and B businesses increases substantially by 50 per cent while the corresponding cash flow benefits increase only by 14 per cent. Group C businesses incur an increase of 400 per cent in aggregate VAT compliance costs while their cash flow benefits remain unchanged. The increase in VAT compliance costs for both business groups is probably triggered by the 2010 increase in the VAT rate by two percentage points. This increase possibly compelled the businesses to hire expert external help to adjust their VAT computer programs/software or to spend extra time themselves to make these adjustments.

**Table 7.4: Cash Flow Benefits as a Proportion of Aggregate Value Added Tax Compliance Costs**

	2009/10		2010/11	
	Groups A and B (P) million	Group C (P) million	Groups A and B (P) million	Group C (P) million
Aggregate VAT compliance costs	109	1	164	5
Cash flow benefits	59	2	67	2
<i>Net compliance costs<sup>a</sup></i>	<i>50</i>	<i>-1</i>	<i>97</i>	<i>3</i>
<i>Cash flow benefits as a percentage of aggregate VAT compliance costs</i>	<i>54</i>	<i>200</i>	<i>41</i>	<i>40</i>

a. Net compliance costs are the aggregate VAT compliance costs minus cash flow benefits.

The proportions of the overall cash flow benefits towards the Gross Domestic Product (GDP) and the VAT revenue are delineated in Table 7.5. The equivalent proportions of the cash flow benefits to the GDP and VAT revenue show that the GDP and the VAT revenue increase by similar magnitudes over a 12 month period.

A key finding is that the cash flow benefits proportions towards GDP and VAT revenue are stable.

**Table 7.5: Cash Flow Benefits as a Proportion of Gross Domestic Product and Value Added Tax Revenue**

	<b>2009/10 (P) million</b>	<b>2010/11 (P) million</b>
Cash Flow Benefits	<i>61</i>	<i>69</i>
GDP	<i>101,258</i>	<i>120,541</i>
VAT Revenue	<i>3,845</i>	<i>4,648</i>
	<b>Percentage</b>	
Cash Flow Benefits as a Percentage of GDP	<i>0.6</i>	<i>0.6</i>
Cash Flow Benefits as a Percentage of VAT Revenue	<i>1.6</i>	<i>1.5</i>

## **7.5 OVERVIEW OF MANAGERIAL BENEFITS**

This section discusses the managerial benefits derived by VAT registered businesses in Botswana during the financial years 2009/10 and 2010/11. The record keeping requirements imposed by the tax system may result in managerial benefits for the businesses. Managerial benefits are a significant issue, particularly for small businesses. These gains are generally resource savers (Sandford & Hasseldine, 1992, p. 76) and provide a basis for improved business or individual decision making (Tran-Nam et al., 2000, p. 232). Managerial benefits have long been recognised and discussed extensively from a theoretical point of view in the tax compliance costs literature, however, their empirical evidence remains sparse.

The main reason why many tax compliance costs researchers shy away from estimating managerial benefits is because these gains are difficult to measure. Sandford et al. (1989, p. 118) maintain that managerial benefits are significant in offsetting tax compliance costs, but caution that it is impossible to get an accurate value of such gains. It is also suggested that while these benefits theoretically exist, they are normally excluded from tax compliance costs studies due to the difficulty in their estimation (Tran-Nam, et al., 2000, p. 232).

The difficulty of measuring managerial benefits arises from the accounting-taxation overlap issues in tax compliance costs (Tran-Nam, 2001, p. 55). The problem of distinguishing between accounting induced and tax induced managerial benefits mirrors the tricky issue of separating accounting costs and tax compliance costs. Another concern relates to the fact that the magnitude of managerial benefits depends on how small businesses value managerial information. Tran-Nam (2001) notes that as small businesses tend to value managerial information less than large businesses, the aggregate value of GST induced managerial benefits to business taxpayers may not be very high (Tran-Nam, 2001, p. 55).

## 7.6 PERCEIVED MANAGERIAL BENEFITS

### 7.6.1 Overview

The respondents are asked<sup>107</sup> to indicate if they receive any benefits from record keeping for VAT. The responses to these questions are presented in Table 7.6. The proportions of the businesses that indicate that they have received managerial benefits and those that did not are fairly close. This is surprising as around 80 per cent of the respondents in both years indicate that their VAT returns are completed entirely within the firm. The researcher expected that businesses that did more of their own accounts and gave less accounting work to external professional accountants would save money. It is even more surprising that over 50 per cent of the small business respondents reported that they did not benefit from VAT record keeping.

**Table 7.6: Record Keeping Benefits by the Size of the Business**

	2009/10			2010/11		
	Yes	No	Overall	Yes	No	Overall
	N	N	N	N	N	N
Less than P1.5 million	40 (44)	51 (56)	91 (100)	7 (47)	8 (53)	15 (100)
P1.5 million–P5 million	16 (55)	13 (45)	29 (100)	7 (58)	5 (42)	12 (100)
Over P5 million	10 (59)	7 (41)	17 (100)	9 (39)	14 (61)	23 (100)

Percentages are in parentheses.

<sup>107</sup> See Questions 21a and 19b of the 2009/10 and 2010/11 questionnaires, respectively, in Appendices A and B.

The number of businesses that perceive managerial benefits by the manner in which BURS classifies the VAT registered businesses are presented in Table 7.7. In both years, the proportions of the businesses in groups A and B that agreed and disagreed to receiving benefits from record keeping for VAT are close. Contrary to intuition, some larger businesses indicate that they receive benefits from record keeping for VAT. Further analysis reveals that the two group C businesses that receive gains from record keeping for VAT are in the retail trade/restaurants industry. This is surprising as larger businesses in this industry normally have sophisticated accounting systems that can handle rigorous record keeping requirements.

**Table 7.7: Perceived Managerial Benefits by Botswana Unified Revenue Service Classification**

	2009/10			2010/11		
	Yes	No	Overall	Yes	No	Overall
	N	N	N	N	N	N
Groups A and B	64 (48)	68 (52)	132 (100)	18 (45)	22 (55)	40 (100)
Group C	2 (40)	3 (60)	5 (100)	5 (50)	5 (50)	10 (100)

Percentages are in parentheses.

The businesses that disagreed to gaining benefits from record keeping for VAT have higher average VAT compliance costs, as presented in Table 7.8. It could be that these businesses do not adhere to the stringent record keeping requirements of VAT which may explain their higher VAT compliance costs. Also, it is possible that these businesses dislike having to act as unpaid tax collectors for the government which prevents them from perceiving any managerial benefits.

**Table 7.8: Compliance Costs by Perception of Record Keeping Benefits**

	2009/10		2010/11	
	N	Mean (P)	N	Mean (P)
Benefits Received	66 (48)	6,600	23 (46)	7,034
No Benefits Received	71 (52)	7,182	27 (54)	7,344
<b>Overall</b>	<b>137 (100)</b>	<b>6,902</b>	<b>50 (100)</b>	<b>7,201</b>

Percentages are in parentheses.

The respondents who indicate that they receive benefits from stringent record keeping for VAT purposes are requested to put a monetary value to their perceived

gains. The estimated average values of managerial benefits are presented in Table 7.9. The 2009/10 findings indicate that small businesses valued managerial benefits at nearly P4,000 (around 50 per cent) more than medium-sized ones and by twice as much as larger businesses. This appears to counter the claim by Tran-Nam (2001, p. 55) that small businesses tend to value managerial benefits less than larger ones.

**Table 7.9: Mean Estimates of the Value of Managerial Benefits by the Size of the Business**

	2009/10		2010/11	
	N	Mean (P)	N	Mean (P)
Less than P1.5 million	27 (64)	11,810	8	9,261
P1.5 million–P5 million	11 (26)	8,047	4	9,500
Over P5 million	4 (10)	6,250	7	5,814
<b>Overall</b>	<b>42 (100)</b>	<b>10,295</b>	<b>19</b>	<b>8,041</b>

N is the number of respondents that provided estimates of perceived managerial benefits. Percentages are in parentheses.

The estimates of the managerial benefits reported by the businesses are segregated according to the manner in which BURS categorises VAT registered, as displayed in Table 7.10. Only 31 per cent and 38 per cent<sup>108</sup> of the businesses in 2009/10 and 2010/11, respectively, give estimates of their perceived managerial benefits. The results indicate that the perceived value of managerial benefits in Botswana reduce by 14 per cent over a twelve month period, from P10,461 to P9,006, most probably because a 36 per cent decrease in the number of small business respondents (from 66 per cent to 30 per cent).<sup>109</sup>

<sup>108</sup> These percentages are obtained by dividing the number of businesses that provide their estimates of managerial benefits by the total of respondents in each year.

<sup>109</sup> See section 5.3.1.

**Table 7.10: Value of Managerial Benefits by Botswana Unified Revenue Service Classification**

	2009/10		2010/11	
	N	Mean (P)	N	Mean (P)
Groups A and B	41	10,461	15	9,006
Group C	1	3,500	4	4,425
<b>Overall</b>	<b>42</b>	<b>10,295</b>	<b>19</b>	<b>8,041</b>

N is the number of respondents that provided estimates of perceived managerial benefits.

### 7.6.2 Aggregate Values of Managerial Benefits

In 2009/10, only 64 businesses in groups A and B and two group C firms report receiving benefits from record keeping for VAT. The proportions of these businesses with respect to overall respondents are obtained by dividing the number of such businesses by the overall respective group respondents. Thus in 2009/10, 48 per cent of group A and B businesses and 40 per cent of group C businesses perceive managerial benefits.<sup>110</sup> In 2010/11, 18 group A and B businesses and five group C businesses report that they gain managerial benefits from VAT. These figures represent 45 per cent of the respondents in groups A and B and 50 per cent of the group C businesses in 2010/11.<sup>111</sup> Using Equations 7.1 and 7.2, the aggregate estimates of managerial benefits and the weighted average managerial benefits for businesses in Botswana are computed, as shown in Table 7.11.

#### Equation 7.1:

*Aggregate value of managerial benefits = mean managerial benefits × number of VAT registered businesses in VAT-paying group.*

#### Equation 7.2:

*Overall weighted average managerial benefits = aggregate managerial benefits ÷ total number of VAT registered businesses that perceive managerial benefits.*

<sup>110</sup> As discussed in Section 2.4 of this thesis, there are 15,725 VAT registered group A and B businesses while group C had 215 businesses in 2009/10. The VAT registered businesses increase to 23,287 group A and B businesses and 644 group C businesses in 2010/11.

<sup>111</sup> See n. 110.

Overall, group A and B businesses estimate the aggregate managerial benefits at P79 million for 2009/10 and for P94 million 2010/11, respectively. Although the overall estimates for 2010/11 exceed those of 2009/10 (because of a 28 per cent increase in the number of VAT registered businesses), the weighted average managerial values show that the 2010/11 respondents value managerial benefits less than the 2009/10 respondents. As mentioned above, the number of small business respondents<sup>112</sup> reduced by 36 per cent, which possibly leads to a fall in the figure of perceived managerial benefits.

**Table 7.11: Aggregate Values of Managerial Benefits for Businesses in Botswana**

	2009/10			2010/11		
	N	Mean (P)	Weighted Managerial Benefits (P) million	N	Mean (P)	Weighted Managerial Benefits (P) million
Groups A and B	7,548	10,461	79	10,479	9,006	94
Group C	86	3,500	0.3	322	4,425	1
<b>Overall</b>	<b>7,634</b>	<b>10,295</b>	<b>79</b>	<b>10,801</b>	<b>8,041</b>	<b>95</b>
<i>Overall weighted mean, 2009/10: P79 million ÷ 7,634 = P10,348</i>						
<i>Overall weighted mean, 2010/11: P95 million ÷ 10,801 = P8,795</i>						

The aggregate managerial benefit values as percentages of the GDP and VAT revenue, displayed in Table 7.12, show that businesses gain more in the form of managerial benefits than they do in cash flow benefits. Overall, the findings are indicative of stable ratios of managerial benefits over a twelve month period.

<sup>112</sup> Small businesses generally value managerial benefits more than larger ones because they normally lack a sophisticated record keeping system.

**Table 7.12: Overall Managerial Benefits as a Proportion of Gross Domestic Product and Value Added Tax Revenue**

	<b>2009/10 (P) million</b>	<b>2010/11 (P) million</b>
Managerial Benefits	79	95
GDP	101,258	120,541
VAT Revenue	3,845	4,648
	<b>Percentages</b>	
Managerial Benefits as a Percentage of GDP	0.8	0.8
Managerial Benefits as a Percentage of VAT Revenue	2	2

### 7.6.3 Qualitative Managerial Benefits Responses

The survey participants who agree to receiving benefits from record keeping for VAT are also asked to explain how they benefit from such record keeping. Their responses are grouped into common categories, as outlined in Table 7.13. Most of the respondents report that their benefit comes from not having to employ tax accountants to complete their VAT returns. Thus they save the money that would have paid for such services. Some businesses also gain from savings in VAT return filing time, better management of the business and finances.

**Table 7.13: How Record Keeping for Value Added Tax Benefits Businesses in Botswana**

<b>Managerial Benefit Received</b>	<b>2009/10</b>		<b>2010/11</b>	
	<b>N</b>	<b>Percentage</b>	<b>N</b>	<b>Percentage</b>
Saves accountant costs	47	44	8	32
Business management	23	21	5	20
Saves time when filling VAT returns	21	20	6	24
Financial management	16	15	6	24
<b>Overall</b>	<b>107</b>	<b>100</b>	<b>25</b>	<b>100</b>

The overall number exceeds the number of respondents agreeing/disagreeing to benefiting from record keeping for VAT because some respondents give multiple answers.

### 7.6.4 Key Qualitative Managerial Benefit Responses

This section provides some of the qualitative responses that are given by the respondents to explain how record keeping for VAT benefits them. Due to the

similarities in most of the responses, only a few key representative ones are listed. This list includes major responses given by the survey participants in both years.

### **1) Saving of Accountant Costs**

*Small Business A and B*, in the Finance and Insurance sector, report that record keeping for VAT helps them to do their VAT returns in-house and hence “save accountant fees”.

*Medium Business A*, in the Property sector, says that “record keeping for VAT saves me time and money when compiling VAT returns. Outside advisers charge a lot of money for this”.

*Small Business C*, in the Manufacturing industry, reports that they already employ an external accountant and record keeping for VAT gives him all the information needed to file the VAT return without any additional cost on their part. Without stringent record keeping requirements for VAT, the external accountant would have to spend more time searching for financial information which would cost the business more money.

*Medium Business B*, in the Construction industry, reports that “our employees are exposed to doing the VAT work themselves. This boosts their experience as well as reducing costs since outside workers are very expensive”.

### **2) Business and Financial Management**

A small business trader in the Business Services sector, *Small Business D*, states that they are able to know the monthly financial position without the help of an external professional accountant. *Small Business E*, also in the Business Services industry, indicates that they benefit from record keeping for VAT by “having all the financial information at hand”.

*Small Business F*, a Security company, reports that “record keeping for VAT gives us a clear picture of the whole accounting concept and makes management of the business easier”.

Another firm, *Small Business G*, in the Property sector, says that “it helps us to keep proper records. If there is a problem, then we will have easy access to our records”.

*Medium Business C*, in the Insurance and Finance sector, maintains that “record keeping for VAT helps us keep our fingers on the business and extends tax literacy for the staff”.

In the Retail Trade industry, *Small Business H* reports that record keeping for VAT helps them to maintain the records for all the months which in turn enables them to gauge their performance.

*Small Business I* notes that “we have the correct information about our accounts and therefore manage our business better”.

### **3) Value Added Tax Return Filing**

*Small Business J and Small Business K*, in the Manufacturing industry, both note that “it saves time during VAT filing and during an audit” and “it helps us to offset the correct input VAT amount”.

*Small Business L*, a Trade Union, mentions that “we have all the documents at hand and it is very easy when we are audited by BURS”.

## **7.7 NET COMPLIANCE COSTS**

### **7.7.1 Overview**

This section considers the net VAT compliance costs for businesses in Botswana. As discussed in Chapter 1 of this thesis, net tax compliance costs are the gross tax compliance costs less offsets. These offsets are cash flow benefits, managerial

benefits and tax deductibility benefits. This study only considers cash flow benefits and managerial benefits, as tax deductibility benefits are not applicable to recurrent VAT compliance costs. The net VAT compliance costs for the financial years 2009/10 and 2010/11 are presented in Table 7.14.

Interestingly, businesses in Botswana incur net VAT compliance costs of around a negative P30 million in the year 2009/10. This shows that the businesses gain more than what they lose from complying with the requirements of the VAT system in 2009/10. In the year 2010/11, however, businesses bear overall net VAT compliance costs of a positive P5 million in 2010/11. Tax compliance costs tend to reduce over time to some minimal amount (if there are no changes in the tax system), as businesses get accustomed to the requirements of the tax system. Hence the increase in the net VAT compliance costs clearly reflects the costly nature of tax reforms whether major or minor. In the case of Botswana, the 2010 tax reform included an increase of two percentage points in the VAT rate, which required businesses to modify their accounting systems to suit the new rate at their own financial and/or time cost.

**Table 7.14: Net Value Added Tax Compliance Costs for Businesses in Botswana**

	2009/10		2010/11	
	Groups A and B (P) million	Group C (P) million	Groups A and B (P) million	Group C (P) million
Aggregate VAT compliance costs	109	1	164	5
Cash flow benefits	-59	-2	-67	-2
Managerial benefits	-79	-0.3	-94	-1
<i>Net compliance costs</i>	<b>-29</b>	<b>-1.3</b>	<b>3</b>	<b>2</b>
<i>Overall net compliance costs</i>	<b>-30.3</b>		<b>5</b>	

A negative figure is a cost.

## 7.8 CHAPTER SUMMARY

This chapter discusses the concepts of the benefits of VAT compliance with a particular focus on cash flow and managerial benefits. Cash flow and managerial benefits have long been recognised and discussed extensively from a theoretical

point of view in the tax compliance costs literature, however, their empirical evidence remains scanty. Being the first research of VAT compliance costs in Botswana, this study attempts to estimate managerial benefits over and above the cash flow benefits because SMEs are important to the economy of Botswana. The estimates of cash flow and managerial benefits in this study are indicative for policy makers in Botswana. This study also provides broader estimates of the value of the cash flow benefits gained by value added taxpaying businesses in the financial years 2009/10 and 2010/11. The cash flow benefit estimates could not be disaggregated by the size of the business due to lack of data, especially the amounts of VAT remitted by the different business sizes. Thus the findings are tentative and should be viewed in that light.

Simplifying assumptions are used in the estimation of cash flow benefits. The findings indicate that the businesses in groups A and B who receive cash for their sales gain the most cash flow benefits of P26 million in 2009/10 and P29 million in 2010/11. This is not surprising as cash sales means the businesses get to hold the VAT revenue for a lengthier period than those with longer settlement periods. The businesses in groups A and B that have settlement periods exceeding two months incur cash flow costs of P8 million and P9 million for 2009/10 and 2010/11, respectively. Larger businesses in group C gain lower overall cash flow benefits of three per cent as opposed to the 97 per cent gained by group A and B businesses in both years. This high proportion mirrors the fact that groups A and B include large businesses with turnovers between P5 million and P12 million. Overall aggregate cash flow benefits are estimated at P61 million and P69 million for the financial years 2009/10 and 2010/11, respectively, while aggregate cash flow benefits are estimated at around 0.6 per cent of GDP and about 1.6 per cent of VAT revenue for both years.

With regard to managerial benefits, it is noted that of all the tax compliance benefits, these benefits are the most difficult to estimate. However, as mentioned earlier, managerial benefits are a significant issue for businesses, particularly small ones, and thus should be estimated where possible. Surprisingly, the proportions of the businesses that indicate receiving managerial benefits and those that did not are fairly close. One would expect the majority of businesses that complete their VAT returns

internally should benefit from record keeping for VAT, especially by saving professional accountants' fees.

The businesses that disagreed to gaining benefits from record keeping for VAT have higher average VAT compliance costs. It could be that these businesses do not adhere to the stringent record keeping requirements of VAT which may explain their higher VAT compliance costs. Also, it is possible that these businesses dislike having to act as unpaid tax collectors for the government which hinders them from perceiving any managerial benefits. Overall aggregate managerial benefits are estimated at P79 million for 2009/10 and 95 million for 2010/11, while aggregate managerial benefits are estimated at around 0.8 per cent of GDP and about 2 per cent of VAT revenue for both years.

After offsetting the cash flow benefits and managerial benefits from the aggregate VAT compliance costs, the net VAT compliance costs are estimated at negative P30 million in 2009/10 and positive P5 million in 2010/11. As recurrent tax compliance costs are expected to decrease to some minimal amount over time, as businesses become familiar with the tax system, this increase in the net VAT compliance costs over a period of 12 months reflects the costs that businesses incur in 2010/11 due to the amendments in the VAT system. Suffice it to say that, if there are legislative or administrative changes, these are likely to increase compliance costs, at least initially in the short term, as taxpayers become familiar with them and adjust their systems. Hopefully such changes will be designed in a manner to lower compliance costs in the medium term, if not earlier.

## **CHAPTER 8**

# **TAXPAYER ATTITUDES TOWARDS VALUE ADDED TAX IN BOTSWANA**

### **8.1 INTRODUCTION**

In any event, compliance costs are one measure of the complexity of any tax, with high costs implying a complex tax regime and vice versa (Pope, 1993b, p. 70).

Many factors, such as the size, location and legal structure of the business, influence tax compliance costs. Where it is not possible to incorporate all factors into the measurement of compliance costs, taxpayer attitudes may serve as a proxy for many factors (Sandford et al., 1981, p. 108). This is because negative attitudes to taxes can overstate the perceptions of the compliance costs involved (Wallschutzky & Gibson 1993, p. 541). More specifically, taxpayers' attitudes can be a significant reflection of the simplicity/complexity of the tax system. Hence the knowledge of the attitudes of taxpayers towards tax is crucial and should be integrated in tax policy decision making. Oberholzer (2008, p. 46) notes that in addition to influencing government policy regarding taxation, the determination of taxpayers' perceptions towards taxation will also allow the government to be efficient in how it markets itself and its services to the public.

Value Added Tax registered businesses incur a heavy compliance burden, which comes from being used by the government as unpaid tax collectors (Pope, 2001a, p. 1). High VAT compliance costs may evoke negative attitudes from business taxpayers, which in turn, can hamper compliance. Essentially, small businesses that resent their tax compliance costs may engage in tax evasion acts (Sandford et al., 1989, p. xiii). Indeed taxpayers who feel that their compliance costs are unfairly high may be reluctant to comply with the tax regulations. In particular, they may understate their sales in order to reduce the VAT due to the government. Some may

even falsely classify their goods and services as zero rated or exempt (GAO, 2008, pp. 4–5).

This chapter presents the results of surveys of the attitudes of taxpayers towards VAT in Botswana for the financial years 2009/10 and 2010/11. First, the chapter presents a synopsis of the measurement of taxpayer attitudes in Section 2. Section 3 outlines the attitudes of taxpayers towards VAT in Botswana followed by the assessment of the attitudes of taxpayers relative to compliance costs in Section 4. The attitudes of taxpayers in relation to the profiles of the businesses are discussed in Section 5. Section 6 delineates the taxpayer comments about VAT as well as suggestions of how the VAT system in Botswana can be improved. Section 7 summarises this chapter.

## **8.2 MEASUREMENT OF ATTITUDES**

### **8.2.1 Overview**

As mentioned in Section 4.5.7 of this thesis, the attitudes of taxpayers towards VAT in Botswana are investigated using a five-point Likert attitude scale. Oppenheim (cited in Sandford et al., 1981, p. 108) defines a Likert attitude scale as “an attempt to produce a single measure which sums up attitudes to a particular phenomenon. The scale is based on responses to a wide range of statements which have been expressed as unambiguously as possible”. In this study, the respondents were presented with various statements and asked to express their perceptions by ticking the box that best describes their opinion of VAT. The perceptions of the taxpayers are captured by their level of ‘agreement’ or ‘disagreement’ which are assigned values as follows: strongly agree (1), agree (2), neutral (3), disagree (4) and strongly disagree (5).<sup>113</sup> The attitudes of the value added taxpayers in Botswana are measured by Question 23 of the 2009/10 questionnaire and Question 22 of the 2010/11 questionnaire.<sup>114</sup>

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<sup>113</sup> ‘Strongly agree’ and ‘agree’ will, hereafter be combined and termed ‘agree’. Likewise, ‘strongly disagree’ and ‘disagree’ will be joined and termed ‘disagree’.

<sup>114</sup> See Appendices A and B, respectively.

The statements that have been used in this study to investigate the attitudes of taxpayers in Botswana towards VAT are delineated in Table 8.1. Overall, the statements seek to find out how the taxpayers perceive the VAT requirements laid upon them by the government as well as their opinion of the possible benefits of complying with the VAT system.

**Table 8.1: Attitudinal Statements<sup>a</sup>**

No.	Attitudinal statements	Item measured
1	VAT is unreasonably complicated.	Burdensome 1
2	My VAT compliance costs are very high.	Burdensome 2
3	Other business duties are affected because I spend too much time on VAT.	Burdensome 3
4	The burden of VAT discourages me from fulfilling my VAT obligations.	Burdensome 4
5	Other taxes are easier than VAT.	Burdensome 5
6	Value Added Tax requirements are easy to fulfill.	Simple 1
7	I do not mind doing my VAT work.	Simple 2
8	My VAT compliance costs are insignificant.	Simple 3
9	VAT helps improve my business record keeping.	Benefit 1
10	Value Added Tax helps to improve my business management.	Benefit 2

<sup>a</sup> Although statements one up to eight collectively investigate whether the VAT system in Botswana is complex or not, they were separated into two categories, namely 'burdensome' and 'simple' in order to enhance the internal consistency of the responses.

### 8.2.2 Assessment of Reliability

The internal consistent reliability of the responses to the attitudinal statements in Table 8.1 is measured using Cronbach's alpha. The alpha coefficient ranges and their strengths of association are displayed in Table 8.2. An alpha coefficient that falls within the acceptable range indicates that the respondents answered the questions in a consistent manner (Hair et al., 2007, p. 245).

**Table 8.2: Rules of Thumb about Cronbach-Alpha Coefficient Size<sup>a</sup>**

Alpha Coefficient Range	Strength of Association
Less than 0.6	Poor
0.6–0.7	Moderate
0.7–0.8	Good
0.8–0.9	Very good
0.9 and above	Excellent

a If alpha is greater than 0.95, the items should be inspected to ensure that they measure different aspects of the concept.

Source: Hair et al. (2007, p. 244).

The results of Cronbach's alpha test for the attitudinal aspects of taxation in Botswana are set out in Table 8.3. The internal consistency of the responses in this study is considered satisfactory because it falls within the acceptable ranges. The highest mean scores of 6.23 and 5.70 in the financial years 2009/10 and 2010/11 respectively, are obtained under the VAT burden item. This implies that the majority of the respondents in both years find the VAT regime to be burdensome. The mean score of those who perceive VAT in Botswana to be simple are fairly close for both years. With regard to the benefits of complying with the VAT requirements, the mean scores of 2.87 for 2009/10 and 3.04 for 2010/11 indicate that gains in the form of improvement in record keeping and management accrued to some taxpayers.

The attitudinal statement namely 'the burden of VAT discourages me from fulfilling my VAT obligations' is deleted when computing the coefficient alpha in both years as it is negatively correlated with other attitudinal statements. It is possible that the respondents are not truthful about their attitudes regarding this statement in fear of exposing some likely non-compliance behaviour, hence the inconsistency in responses.

**Table 8.3: Internal Reliability of Responses to the Attitudinal Statements**

Attitudinal item	No. of items measured		Cronbach's alpha		Mean score	
	2009/10	2010/11	2009/10	2010/11	2009/10	2010/11
Tax burden <sup>a</sup>	4	4	0.835	0.825	6.23	5.70
Tax simplicity	3	3	0.821	0.755	4.94	4.62
Benefit	2	2	0.778	0.768	2.87	3.04

a One item was deleted in order to obtain an acceptable alpha.

## **8.3 TAXPAYER ATTITUDES TOWARDS VALUE ADDED TAX IN BOTSWANA**

### **8.3.1 Overview**

This study investigates the attitudes and perceptions of businesses, over and above compliance costs, towards the VAT system in Botswana. In Tables 8.4 to 8.19, 'N' represents the number of respondents who provided answers to attitudinal statements presented in the questionnaires. Some businesses, especially in 2009/10 did not answer this particular section of the questionnaire, hence missing numbers. The missing numbers represent around seven per cent of the total 2009/10 respondents. Thus, they do not affect the findings in this section.

The survey results suggest that the majority of taxpayers in Botswana find VAT to be burdensome, as illustrated in Table 8.4. In fact, most of the respondents, in both financial years, indicate that they mind doing their VAT work, as shown in Table 8.5. The respondents also point out that their VAT compliance costs are high and many disagree with the statement that their compliance costs are insignificant. In addition, the majority of the 2009/10 survey participants agree that other business duties suffer because they spend too much time on VAT. Furthermore, VAT taxpayers in Botswana seem to be of the opinion that other taxes are easier than VAT. Overall, the findings appear to suggest that most value added taxpayers in Botswana perceive the VAT to be complex and costly.

**Table 8.4: Taxpayer Attitudes towards Value Added Tax in Botswana (Burden Aspect)**

	2009/10		2010/11	
	N	Percentage	N	Percentage
<b>VAT is unreasonably complicated</b>				
Agree	68	54	30	60
Neutral	5	4	0	0
Disagree	54	42	20	40
<b>Overall</b>	<b>127</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>My VAT compliance costs are very high</b>				
Agree	69	55	31	62
Neutral	5	4	0	0
Disagree	52	41	19	38
<b>Overall</b>	<b>126</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>Other taxes are easier than VAT</b>				
Agree	66	52	30	60
Neutral	5	4	0	0
Disagree	55	44	20	40
<b>Overall</b>	<b>126</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>Other business duties are affected because I spend too much time on VAT</b>				
Agree	59	47	23	46
Neutral	13	10	0	0
Disagree	54	43	27	54
<b>Overall</b>	<b>126</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>				
Agree	35	28	7	14
Neutral	24	20	4	8
Disagree	65	52	39	78
<b>Overall</b>	<b>124</b>	<b>100</b>	<b>50</b>	<b>100</b>

Some businesses in the year 2009/10 did not provide their attitudes towards VAT compliance, hence the missing responses.

**Table 8.5: Taxpayer Attitudes towards Value Added Tax in Botswana  
(Simplicity Aspect)**

	2009/10		2010/11	
	N	Percentage	N	Percentage
<b>Value Added Tax requirements are easy to fulfil.</b>				
Agree	59	47	27	54
Neutral	3	3	0	0
Disagree	63	50	23	46
<b>Overall</b>	<b>125</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>My VAT compliance costs are insignificant</b>				
Agree	46	36	19	38
Neutral	6	5	0	0
Disagree	75	59	31	62
<b>Overall</b>	<b>127</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>I do not mind doing my VAT work</b>				
Agree	41	32	23	46
Neutral	4	3	0	0
Disagree	82	65	27	54
<b>Overall</b>	<b>127</b>	<b>100</b>	<b>50</b>	<b>100</b>

Some businesses in the year 2009/10 did not provide their attitudes towards VAT compliance, hence the missing responses.

Although most of the respondents feel that VAT is burdensome, its associated costs are, to some extent, mitigated by the benefits that accrue to the taxpayers in the form of better management and record keeping. Sixty-four per cent of the survey participants in 2009/10 indicate that they benefit from improved management as a result of VAT while 69 per cent gain from better record keeping, as displayed in Table 8.6.

**Table 8.6: Taxpayer Perceptions in Relation to Tax Compliance Benefits**

	2009/10		2010/11	
	N	Percentage	N	Percentage
<b>Value Added Tax helps to improve my business management</b>				
Agree	81	64	27	54
Neutral	12	9	0	0
Disagree	34	27	23	46
<b>Overall</b>	<b>127</b>	<b>100</b>	<b>50</b>	<b>100</b>
<b>Value Added Tax helps to improve my business record keeping</b>				
Agree	87	69	21	42
Neutral	13	10	0	0
Disagree	27	21	29	58
<b>Overall</b>	<b>127</b>	<b>100</b>	<b>50</b>	<b>100</b>

Some businesses in the year 2009/10 did not provide their attitudes towards VAT compliance, hence the missing responses.

## 8.4 ATTITUDES IN RELATION TO COMPLIANCE COSTS

### 8.4.1 Overview

The compliance costs of the taxpayers by the attitudes towards VAT are presented in Table 8.7. The overall figures provided in the following tables are the absolute average compliance costs for the businesses that provided their attitudes towards tax compliance work. The explanations of compliance costs by the different attitudes of the businesses are provided in the body above the tables. The attitudinal statements ‘my compliance costs are high’ and ‘VAT requirements are easy to fulfill’ are not included in the analysis, from this point forward, as they are similar to the statements ‘my VAT compliance costs are insignificant’ and ‘VAT is unreasonably complicated’. Not surprisingly, the respondents who agree with the statement that ‘VAT is unreasonably complicated’, and those who disagreed that their VAT compliance costs are insignificant, had higher average and median VAT compliance costs.

Value added taxpayers in Botswana have to file their VAT returns in person at the BURS office. This process involves costly travelling to and queuing at BURS. It is, thus, not surprising that the businesses that disagree with the statement ‘I do not

mind doing my VAT work' have higher compliance costs. In the same way, the respondents who agree with the statement 'other business duties are affected because I spend too much time on VAT' report higher compliance costs for 2009/10. In both years, the respondents who agree that 'other taxes are easier than VAT' report higher compliance costs.

**Table 8.7: Taxpayer Compliance Costs by Attitudes**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
<b>VAT is unreasonably complicated</b>						
Agree	68	8,231	7,362	30	8,099	7,128
Neutral	5	8,734	8,180	0	0	0
Disagree	54	5,190	3,876	20	5,855	5,400
<b>Overall</b>	<b>127</b>	<b>6,958</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>
<b>My VAT compliance costs are insignificant</b>						
Agree	46	5,314	3,943	19	5,200	5,000
Neutral	6	10,502	8,904	0	0	0
Disagree	75	7,682	6,000	31	8,428	7,3080
<b>Overall</b>	<b>127</b>	<b>6,958</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>
<b>I do not mind doing my VAT work</b>						
Agree	41	5,831	4,080	23	7,322	5,820
Neutral	4	8,104	8,904	0	0	0
Disagree	82	7,465	5,760	27	7,099	6,875
<b>Overall</b>	<b>127</b>	<b>6,958</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>
<b>Other business duties are affected because I spend too much time on VAT</b>						
Agree	59	8,198	7,364	23	6,821	6,875
Neutral	13	6,229	4,701	0	0	0
Disagree	54	5,842	4,206	27	7,525	5,820
<b>Overall</b>	<b>126</b>	<b>6,985</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>
<b>Other taxes are easier than VAT</b>						
Agree	66	8,591	8,208	30	8,085	6,843
Neutral	5	8,521	9,627	0	0	0
Disagree	55	5,558	3,974	20	5,877	5,020
<b>Overall</b>	<b>126</b>	<b>6,999</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>						
Agree	22	8,705	7,549	7	7,976	6,000
Neutral	25	7,799	6,240	4	7,842	7,797
Disagree	75	5,910	4,091	39	6,997	5,820
<b>Overall</b>	<b>126</b>	<b>6,999</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

Around 10 respondents, in 2009/10, did not provide their attitudes towards VAT compliance work, hence, the missing responses.

Surprisingly, the taxpayers that agree to benefitting from the VAT system in the form of improved business management report higher average and median VAT compliance costs, as outlined in Table 8.8. This shows that the VAT compliance

costs have little or nothing to do with the business management, as the bulk of the costs are incurred through other tasks such as record keeping, VAT return filing, travelling and queuing at the BURS office. As anticipated, the respondents who indicate benefitting from improvements in record keeping have lower compliance costs. Stringent record keeping enables the business to have all their invoices at hand, which saves them time and money when filing their VAT returns.

**Table 8.8: Taxpayer Compliance Costs by Perceptions of Benefits**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
<b>Value Added Tax helps to improve my business management</b>						
Agree	81	6,884	5,760	27	7,583	6,810
Neutral	12	9,077	7,570	0	0	0
Disagree	34	6,385	5,512	23	6,754	5,534
<b>Overall</b>	<b>127</b>	<b>6,958</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>
<b>VAT helps improve my business record keeping</b>						
Agree	87	6,473	5,040	21	7,161	6,810
Neutral	13	9,350	8,180	0	0	0
Disagree	27	7,366	7,364	29	7,231	5,820
<b>Overall</b>	<b>127</b>	<b>6,958</b>	<b>5,760</b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>

Ten businesses, in the year 2009/10, did not provide their attitudes towards VAT compliance, hence the missing responses.

## **8.5 THE ATTITUDES OF TAXPAYERS BY OTHER ASPECTS OF THE BUSINESS<sup>115</sup>**

### **8.5.1 Attitudes by Size**

The attitudes of the taxpayers by the size of the business are presented in Table 8.9. The findings show that the majority of small businesses find VAT to be unreasonably complicated. With regard to the statement, “my VAT compliance costs are insignificant”, most of the businesses across all sizes disagree, implying that they perceive their VAT compliance costs to be significant. Most businesses have

<sup>115</sup> The ‘neutral’ column and associated figures have been excluded from the ensuing tables due to very low numbers and also, to enhance the presentation of the results.

indicated that they find other taxes to be easier than VAT, which may explain why they do mind doing their VAT work.

**Table 8.9: Taxpayer Attitudes by the Size of the Business**

Business size	Less than P1.5 million		P1.5 million–P5 million		Over P5 million	
	2009/10	2010/11	2009/10	2010/11	2009/10	2010/11
<b>VAT is unreasonably complicated</b>						
Agree	54 (65)	14 (93)	8 (35)	7 (58)	6 (40)	9 (39)
Disagree	29 (35)	1 (7)	15 (65)	5 (42)	9 (60)	14 (61)
Overall	83 (100)	15 (100)	23 (100)	12 (100)	15 (100)	23 (100)
<b>My VAT compliance costs are insignificant</b>						
Agree	29 (35)	1 (7)	13 (57)	5 (42)	4 (27)	13 (57)
Disagree	53 (65)	14 (93)	10 (43)	7 (58)	11 (73)	10 (43)
Overall	82 (100)	15 (100)	23 (100)	12 (100)	15 (100)	23 (100)
<b>I do not mind doing my VAT work</b>						
Agree	26 (31)	2 (13)	12 (52)	7 (58)	3 (20)	14 (61)
Disagree	58 (69)	13 (87)	11 (48)	5 (42)	12 (80)	9 (39)
Overall	84 (100)	15 (100)	23 (100)	12 (100)	15 (100)	23 (100)
<b>Other business duties are affected because I spend too much time on VAT</b>						
Agree	47 (59)	12 (80)	7 (41)	3 (25)	5 (31)	8 (35)
Disagree	32 (41)	3 (20)	10 (59)	9 (75)	11 (69)	15 (65)
Overall	79 (100)	15 (100)	17 (100)	12 (100)	16 (100)	23 (100)
<b>Other taxes are easier than VAT</b>						
Agree	42 (50)	14 (93)	14 (64)	6 (50)	10 (67)	10 (43)
Disagree	42 (50)	1 (7)	8 (36)	6 (50)	5 (33)	13 (57)
Overall	84 (100)	15 (100)	22 (100)	12 (100)	15 (100)	23 (100)
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>						
Agree	28 (42)	4 (31)	5 (25)	1 (8)	2 (17)	2 (10)
Disagree	39 (58)	9 (69)	15 (75)	11 (92)	10 (83)	19 (90)
Overall	67 (100)	13 (100)	20 (100)	12 (100)	12 (100)	21 (100)

Percentages are in parentheses.

Many small businesses and some medium ones often lack sophisticated business management and record keeping systems. While this makes tax compliance more onerous for these sectors, many of them usually benefit from the rigorous VAT requirements. Thus, it is not surprising that the majority of the businesses in this study that agree that they gain improvements in business management and record keeping are SMEs, as shown in Table 8.10.

**Table 8.10: Taxpayer Perceptions of the Benefits by the Size of the Business**

Business size	Less than P1.5 million		P1.5 million–P5 million		Over P5 million	
	2009/10	2010/11	2009/10	2010/11	2009/10	2010/11
<b>Value Added Tax helps to improve my business management</b>						
Agree	58 (72)	13 (87)	15 (65)	9 (75)	8 (73)	5 (22)
Disagree	23 (28)	2 (13)	8 (35)	3 (25)	3 (27)	18 (78)
Overall	81 (100)	15 (100)	23 (100)	12 (100)	11 (100)	23 (100)
<b>VAT helps improve my business record keeping</b>						
Agree	63 (77)	13 (87)	20 (91)	7 (58)	4 (40)	1 (4)
Disagree	19 (23)	2 (13)	2 (9)	5 (42)	6 (60)	22 (96)
Overall	82 (100)	15 (100)	22 (100)	12 (100)	10 (100)	23 (100)

Percentages are in parentheses.

### 8.5.2 Attitudes by Botswana Unified Revenue Service Classification

As mentioned in Section 2.5.2 of this thesis, BURS classifies the value added taxpayers into three groups namely A, B and C. Groups A and B are similar in terms of size, and have annual turnovers below P12 million. They file their VAT returns bimonthly on alternate months. Group C comprises businesses with annual turnovers that exceed P12 million. These businesses file their VAT returns every month. The frequency of VAT filing by small and medium enterprises, coupled with a lack of efficient accounting and record keeping systems, makes compliance for these businesses cumbersome. Although large businesses in group C file their VAT returns monthly, they have superior systems in place which simplify such frequent VAT return filing.

The attitudes of the value added taxpayers by the BURS classification are displayed in Table 8.11. The majority of the respondents that agreed that VAT is unreasonably complicated are those in groups A and B, which are predominantly small and medium in size. In the same way, most of the businesses that report that their compliance costs are not insignificant and also that they mind doing their VAT work are from groups A and B. It is possible that having to file VAT returns six times a year makes the businesses in groups A and B feel that VAT is unduly complicated and probably discourages some of them from fulfilling their VAT obligations. However, the majority of the businesses in groups A and B do benefit from complying with the VAT system, as shown in Table 8.12.

**Table 8.11: Taxpayer Attitudes by Botswana Unified Revenue Service**

**Classification**

BURS classification	Groups A and B		Group C	
	2009/10	2010/11	2009/10	2010/11
<b>VAT is unreasonably complicated</b>				
Agree	68 (58)	27 (68)	0 (0)	3 (30)
Disagree	50 (42)	13 (32)	3 (100)	7 (70)
Overall	118 (100)	40 (100)	3 (100)	10 (100)
<b>My VAT compliance costs are insignificant</b>				
Agree	46 (40)	13 (32)	0 (0)	6 (60)
Disagree	70 (60)	27 (68)	4 (100)	4 (40)
Overall	116 (100)	40 (100)	4 (100)	10 (100)
<b>I do not mind doing my VAT work</b>				
Agree	41 (35)	16 (40)	0 (0)	7 (70)
Disagree	77 (65)	24 (60)	4 (100)	3 (30)
Overall	118 (100)	40 (100)	4 (100)	10 (100)
<b>Other business duties are affected because I spend too much time on VAT</b>				
Agree	58 (54)	22 (55)	1 (25)	1 (10)
Disagree	50 (46)	18 (45)	3 (75)	9 (90)
Overall	108 (100)	40 (100)	40 (100)	10 (100)
<b>Other taxes are easier than VAT</b>				
Agree	63 (54)	24 (60)	3 (75)	6 (60)
Disagree	54 (46)	16 (40)	1 (25)	4 (40)
Overall	117 (100)	40 (100)	4 (100)	10 (100)
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>				
Agree	35 (36)	6 (16)	0 (0)	1 (11)
Disagree	61 (64)	31 (84)	3 (100)	8 (89)
Overall	96 (100)	37 (100)	3 (100)	9 (100)

Percentages are in parentheses.

**Table 8.12: Perceptions of the Benefits by Botswana Unified Revenue Service****Classification**

BURS classification	Groups A and B		Group C	
	2009/10	2010/11	2009/10	2010/11
<b>Value Added Tax helps to improve my business management</b>				
Agree	79 (71)	24 (60)	2 (67)	3 (30)
Disagree	33 (29)	16 (40)	1 (33)	7 (70)
Overall	112 (100)	40 (100)	3 (100)	10 (100)
<b>VAT helps improve my business record keeping</b>				
Agree	86 (77)	20 (50)	1 (33)	1 (10)
Disagree	25 (23)	20 (50)	2 (67)	9 (90)
Overall	111 (100)	40 (100)	3 (100)	10 (100)

Percentages are in parentheses.

### **8.5.3 Attitudes by the Sale of Standard, Zero Rated and Exempt Goods and Services**

The VAT system in Botswana zero rates and exempts some goods and services (Government of Botswana, 2001, pp. 72–83).<sup>116</sup> It has long been argued that exemptions and zero rates complicate the VAT (e.g., Casanegra de Jantscher, 1986, p. 3; Tait, 1988, p. 50; Cnossen, 1991, p. 82; Krever, 2008, p. 19; Bird & Gendron, 2007, p. 108; GAO, 2008, p. 12). As expected, most (77 per cent in 2009/10) of the businesses that trade in exempt and zero rated goods and services agree that VAT is unreasonably complicated, while 81 per cent disagree that their VAT compliance costs are insignificant, as displayed in Table 8.13. The majority (76 per cent) also report that they mind doing their VAT work while 64 per cent are of the opinion that other taxes are easier than VAT.

<sup>116</sup> See n. 23 and n. 25, respectively.

**Table 8.13: Taxpayer Attitudes by Value Added Taxable and Tax Free Sales**

Years	Standard rated sales		VAT-free sales	
	2009/10	2010/11	2009/10	2010/11
<b>VAT is unreasonably complicated</b>				
Agree	51 (50)	26 (60)	27 (77)	3 (43)
Disagree	50 (50)	17 (40)	8 (23)	4 (57)
Overall	101 (100)	43 (100)	35 (100)	7 (100)
<b>My VAT compliance costs are insignificant</b>				
Agree	43 (43)	16 (37)	6 (19)	4 (57)
Disagree	58 (57)	27 (63)	26 (81)	3 (43)
Overall	101 (100)	43 (100)	32 (100)	7 (100)
<b>I do not mind doing my VAT work</b>				
Agree	36 (35)	20 (47)	8 (24)	4 (57)
Disagree	66 (65)	23 (53)	26 (76)	3 (43)
Overall	102 (100)	43 (100)	34 (100)	7 (100)
<b>Other business duties are affected because I spend too much time on VAT</b>				
Agree	45 (48)	19 (44)	20 (74)	5 (71)
Disagree	49 (52)	24 (56)	7 (26)	2 (29)
Overall	94 (100)	43 (100)	27 (100)	7 (100)
<b>Other taxes are easier than VAT</b>				
Agree	58 (59)	26 (60)	13 (36)	4 (57)
Disagree	41 (41)	17 (40)	23 (64)	3 (43)
Overall	99 (100)	43 (100)	36 (100)	7 (100)
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>				
Agree	29 (34)	3 (8)	7 (32)	1 (14)
Disagree	56 (66)	33 (92)	15 (68)	6 (86)
Overall	85 (100)	36 (100)	22 (100)	7 (100)

Percentages are in parentheses.

#### 8.5.4 Attitudes by Location

The taxpayers in the villages usually find it much more time consuming and costly to travel to BURS office to file their VAT returns when compared to those in the city and towns. Thus, it is counter intuitive to find out, in this study, that the businesses in the city and towns constitute the majority of those that find VAT unreasonably complicated, with significant compliance costs, as shown in Table 8.14. This discussion is largely limited to the 2009/10 year as villages were not included in the 2010/11 year, creating a minor limitation to the discussion of findings.

**Table 8.14: Taxpayer Attitudes by the Location of the Business**

Business location	Village		Town		City	
	2009/10	2010/11	2009/10	2010/11	2009/10	2010/11
<b>VAT is unreasonably complicated</b>						
Agree	11 (55)	0 (0)	11 (73)	3 (60)	46 (53)	27 (60)
Disagree	9 (45)	0 (0)	4 (27)	2 (40)	40 (47)	18 (40)
Overall	20 (100)	0 (0)	15 (100)	5 (100)	86 (100)	45 (100)
<b>My VAT compliance costs are insignificant</b>						
Agree	7 (37)	0 (0)	3 (20)	2 (40)	36 (42)	17 (38)
Disagree	12 (63)	0 (0)	12 (80)	3 (60)	50 (58)	28 (62)
Overall	19 (100)	0 (0)	15 (100)	5 (100)	86 (100)	45 (100)
<b>I do not mind doing my VAT work</b>						
Agree	8 (38)	0 (0)	4 (25)	3 (60)	29 (34)	20 (44)
Disagree	13 (62)	0 (0)	12 (75)	2 (40)	56 (66)	25 (55)
Overall	21 (100)	0 (0)	16 (100)	5 (100)	85 (100)	45 (100)
<b>Other business duties are affected because I spend too much time on VAT</b>						
Agree	11 (52)	0 (0)	9 (60)	0 (0)	39 (51)	23 (51)
Disagree	10 (48)	0 (0)	6 (40)	5 (100)	37 (49)	22 (49)
Overall	21 (100)	0 (0)	15 (100)	5 (100)	76 (100)	45 (100)
<b>Other taxes are easier than VAT</b>						
Agree	10 (50)	0 (0)	8 (50)	2 (40)	48 (56)	28 (62)
Disagree	10 (50)	0 (0)	8 (50)	3 (60)	37 (44)	17 (38)
Overall	20 (100)	0 (0)	16 (100)	5 (100)	85 (100)	45 (100)
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>						
Agree	5 (26)	0 (0)	6 (43)	1 (20)	24 (36)	6 (15)
Disagree	14 (74)	0 (0)	8 (57)	4 (80)	42 (64)	35 (85)
Overall	19 (100)	0 (0)	14 (100)	5 (100)	66 (100)	41 (100)

Percentages are in parentheses.

### 8.5.5 Attitudes by Value Added Tax Registration

The businesses that are newly VAT registered essentially spend valuable time and money learning the VAT regulations or employing tax experts. It is thus not surprising that over 60 per cent of the businesses that have been VAT registered for less than five years agree that VAT is unreasonably complicated, as presented in Table 8.15. In principle, compliance with the VAT requirements should become easier over time if there are no major changes to the VAT regulations. In this study, around 50 per cent of the businesses that have been VAT registered for more than five years agree that VAT is unreasonably complicated. This implies that, for some

taxpayers in Botswana, the VAT regulations do not get easier with time, which is possibly why most of the businesses that have been operating for over five years indicate that they mind doing their VAT work.

**Table 8.15: Taxpayer Attitudes by the Number of Value Added Tax Registration Years**

Years	0 – 5 years		Over 5 years	
	2009/10	2010/11	2009/10	2010/11
<b>VAT is unreasonably complicated</b>				
Agree	36 (63)	8 (67)	32 (50)	22 (58)
Disagree	21 (37)	4 (33)	32 (50)	16 (42)
Overall	57 (100)	12 (100)	64 (100)	38 (100)
<b>My VAT compliance costs are insignificant</b>				
Agree	22 (39)	3 (25)	24 (38)	16 (42)
Disagree	34 (61)	9 (75)	40 (62)	22 (58)
Overall	56 (100)	12 (100)	64 (100)	38 (100)
<b>I do not mind doing my VAT work</b>				
Agree	18 (31)	5 (42)	23 (36)	18 (47)
Disagree	40 (69)	7 (58)	41 (64)	20 (53)
Overall	58 (100)	12 (100)	64 (100)	38 (100)
<b>Other business duties are affected because I spend too much time on VAT</b>				
Agree	29 (54)	7 (58)	30 (52)	16 (42)
Disagree	25 (46)	5 (42)	28 (48)	22 (58)
Overall	54 (100)	12 (100)	58 (100)	38 (100)
<b>Other taxes are easier than VAT</b>				
Agree	30 (53)	10 (83)	36 (56)	20 (53)
Disagree	27 (47)	2 (17)	28 (44)	18 (47)
Overall	57 (100)	12 (100)	64 (100)	38 (100)
<b>The burden of VAT discourages me from fulfilling my VAT obligations</b>				
Agree	21 (43)	5 (45)	14 (28)	2 (6)
Disagree	28 (57)	6 (54)	36 (72)	33 (94)
Overall	49 (100)	11 (100)	50 (100)	35 (100)

Percentages are in parentheses.

## 8.6 COMMENTS AND SUGGESTIONS CONCERNING BOTSWANA'S VALUE ADDED TAX SYSTEM

The surveys used in this study also incorporate open-ended questions in which participants were asked, among other things, to indicate whether they perceive the resources provided by the government to support value added taxpayers to be adequate or not. Although the majority of the respondents answer 'yes' to this question, as displayed in Table 8.16, many also criticised the VAT system in Botswana, as shown in Table 8.17. The most popular complaint about the VAT system in Botswana pertains to the long queues at the BURS office during VAT filing periods. The respondents also complain about the competency of the tax officers and the high frequency of VAT filing.

**Table 8.16: Adequacy of Government Resources in Support of Value Added Taxpayers**

Resource Adequacy	2009/10		2010/11	
	N	Percentage	N	Percentage
Yes	75	55	27	54
No	62	45	23	46
<b>Overall</b>	<b>137</b>	<b>100</b>	<b>50</b>	<b>100</b>

**Table 8.17: If Resources are not Adequate, what is Lacking? (Critical Comments)**

Comments	2009/10		2010/11	
	N	Percentage	N	Percentage
Long queues at BURS office	36	23	19	28
Inefficient BURS personnel	27	17	4	6
BURS does not educate taxpayers	26	17	11	16
High frequency of VAT filing	21	13	10	15
Poor customer service by BURS offices	12	8	8	12
Inadequate BURS offices	12	8	6	9
Inadequate personnel	11	7	8	12
VAT refunds delay	7	5	1	2
High travelling costs to BURS offices	3	2	0	0
<b>Overall</b>	<b>155</b>	<b>100</b>	<b>67</b>	<b>100</b>

The overall number of responses in both years exceeds the number of survey respondents because some respondents gave more than one comment.

Some respondents give positive comments regarding VAT in Botswana, as presented in Table 8.18. The prevalent positive comment is that the BURS officers are efficient. This seems to contradict the view of other respondents concerning the competency of BURS officers. It is possible that the respondents who feel that BURS officers are incompetent are those that resent being used as unpaid tax agents or those who resent VAT.

**Table 8.18: Favourable Comments on Value Added Tax**

Comments	2009/10		2010/11	
	N	Percentage	N	Percentage
BURS officers are efficient	22	46	15	42
VAT requirements are reasonable	15	31	11	31
BURS officers are helpful	7	15	7	19
BURS has a good penalty system	4	8	3	8
<b>Overall</b>	<b>48</b>	<b>100</b>	<b>36</b>	<b>100</b>

The respondents were also asked to give suggestions of how they think the VAT system in Botswana can be improved. The majority of the survey participants suggested that the government should introduce an online VAT system, as displayed in Table 8.19. Indeed, an online VAT system will reduce queues at the BURS office and simplify compliance. Moreover, the VAT compliance costs may be reduced. Some also suggested that the government should increase taxpayer education and reduce the VAT filing frequency.

The use of internet enables businesses to “...operate their business and provide professional services across the country to enable communication with other business branches...” (Olatokun and Moremedi, 2011, p. 290). Botswana’s technology infrastructure has been developing rapidly over the past decade, well enough to enable the introduction of online VAT filing. The use of internet has spread widely among individuals, government organisations and businesses at large. Banks in Botswana have since introduced mobile banking, and many other businesses, especially medium and large ones, use internet regularly.

Online VAT filing will greatly benefit large businesses and some medium sized firms. With regard to small businesses, educational workshops will be required to

train small businesses on the use of such technology. In addition, it may be worthwhile for the government to subsidise the purchase of computers and possibly internet subscriptions to encourage SMEs to embrace technology.” has been added to Section 8.6 of the thesis.

**Table 8.19: Taxpayer Suggestions for the Improvement of Value Added Tax**

Suggestions	2009/10		2010/11	
	N	Percentage	N	Percentage
Introduce online VAT system	23	35	36	62
Reduce VAT filing frequency	14	22	5	9
Increase taxpayer education	11	17	3	5
Increase BURS offices	9	14	8	14
Improve service delivery at BURS	8	12	6	10
<i>Overall</i>	<i>65</i>	<i>100</i>	<i>58</i>	<i>100</i>

## 8.7 CHAPTER SUMMARY

This chapter presents the attitudes of taxpayers towards VAT in Botswana. The reliability of the responses towards the attitudinal statements in this study is tested using Cronbach’s alpha. Most of the responses fall within the acceptable alpha range, indicating that the internal consistency of the answers is reliable. The findings also indicate that the majority of the respondents perceive the VAT system in Botswana to be unreasonably complicated. Most also feel that their VAT compliance costs are not insignificant. Thus, the majority of the survey participants resent doing their VAT work. The results also show that some value added taxpayers are of the opinion that other taxes are easier than VAT. However, the burden of VAT is mitigated by the benefits that accrue to most value added taxpayers, especially small ones, in the form of improvements in their business management and record keeping.

The assessment of taxpayers’ attitudes by their compliance costs reveals that taxpayers’ perceptions of the VAT burden are positively related to the compliance costs. The respondents who agree with the statement ‘VAT is unreasonably complicated’ and those who disagree that their VAT compliance costs are insignificant incur higher average and median VAT compliance costs. Similarly, the compliance costs of the businesses that disagree with the statement ‘I do not mind

doing my VAT work’, and those that agree with the statement ‘other business duties are affected because I spend too much time on VAT’, are higher. This is probably due to the high frequency of VAT filing, the presence of various zero rated and exempt goods and services as well as the tedious process of travelling to, and queuing at, the BURS office to file the VAT returns.

The respondents also gave some critical and favourable comments concerning the VAT as well as suggestions of how the VAT system in Botswana can be improved. Predominantly, respondents criticise the system of manual VAT filing which results in long queues at the BURS office during VAT filing periods. In terms of how the VAT system in Botswana can be improved, most responses suggest that the government should introduce an online VAT filing system and reduce the VAT filing frequency, for example, to six months. In some countries, such as New Zealand, small businesses file VAT returns on a six monthly basis.

## CHAPTER 9

### CONCLUSIONS AND POLICY RECOMMENDATIONS

#### 9.1 INTRODUCTION

This final chapter presents conclusions concerning the overall recurrent gross and net VAT compliance costs estimates for businesses in Botswana. The findings of this study are used to draw major policy recommendations for the government of Botswana. The major finding is that the recurrent VAT compliance costs for businesses in Botswana are high and regressive.

It must be noted that the VAT compliance cost estimates in this study are exactly that, estimates, and not precise to the last Pula. The findings in this study provide an indicative picture of the compliance costs of VAT for businesses in Botswana. The estimates should be viewed cautiously, in the light of the caveats reiterated below.

The first caveat is that, it is possible that these findings may include an element of temporary costs (which is expected to diminish over time) resulting from the 2010 BURS VAT amendments, which include an increase in the VAT rate from 10 per cent to 12 per cent. Second, the results are likely to carry the effects of the GFC,<sup>117</sup> which possibly affected compliance costs by hampering the ability of firms to hire internal or external VAT labour.

Third, this study uses samples which are small in absolute terms, at 137 and 50 responses for 2009/10 and 2010/11, respectively. However, in percentage terms (23 per cent for 2009/10 and 50 per cent for 2010/11) the response rates are good for an emergent country. The great practical difficulties of undertaking such survey research of taxpayers in a developing country such as Botswana are emphasised, even allowing for the considerable efforts of the researcher during fieldwork.

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<sup>117</sup> As mentioned in Section 1.4.3, the GFC started in 2008 and is still ongoing.

Fourth, the researcher could not get detailed data concerning the number of VAT registered businesses in each size category (small, medium and large) and the amount of VAT remitted by each category because BURS said such data is not available. Moreover, the researcher could not get the data of VAT registered businesses by their main business activity or place from BURS. Due to this limitation, the grossing-up of VAT compliance costs in this study is restricted to the manner in which BURS classifies the value added taxpayers (i.e., by taxpaying groups).

Last, as cash flow benefits are simply a transfer of resources within the economy, they do not affect gross tax compliance costs. Additionally, the value of cash flow benefit estimates depends on the level of interest rates in the country at the time of the study. Managerial benefits are also difficult to estimate. The difficulty arises from the problem of distinguishing between accounting induced and tax induced managerial benefits. In addition, the magnitude of managerial benefits depends on how small businesses value managerial information. To this end, extra caution should be exercised when interpreting the estimates of the VAT compliance benefits in this study.

The next section outlines this study's research followed by a presentation of major findings of this study in relation to the objectives set out in Chapter 1 of this thesis. A comparison of the estimates of VAT compliance costs in Botswana with international findings is then cautiously undertaken. This is followed, in the last section, by a summary of key policy recommendations for the government of Botswana, emanating from the findings in this study.

## **9.2 OVERVIEW OF THIS STUDY'S RESEARCH**

The principal objective (*Objective no. 1*) in this study is to estimate and compare the recurrent gross and net compliance costs of VAT for businesses in Botswana for the financial years 2009/10 and 2010/11.<sup>118</sup> This study follows the internationally accepted methodology of using questionnaire surveys that has been used widely in tax compliance costs estimation studies. Due to the unreliability of the postal system

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<sup>118</sup> For a discussion of all the objectives in this study, refer to Section 1.4 of this thesis.

in Botswana, the questionnaires for this study were hand delivered to, and later hand collected from, 600 (randomly selected) businesses in 2009/10 and 100 businesses in 2010/11. Usable response rates of 23 per cent and 50 per cent were obtained in 2009/10 and 2010/11, respectively. These response rates are reasonable for a developing country and fall within the ranges of other developing countries. The responses are representative of businesses in Botswana in terms of annual turnover.

Non-response bias is tested using Allers' (1994) non-response postcard. The means of the survey respondents (2.85) and postcard respondents (2.61) are not significantly different indicating that non-response bias is not evident in this study. The absence of non-response bias makes this study more reliable. Answers to close-ended questions are analysed using the Statistical Package for Social Science (SPSS) while open-ended ones are analysed manually.

Being the first research study of VAT compliance costs in Botswana, this study estimates the benefits of VAT compliance namely cash flow and managerial benefits. Managerial benefits are estimated because SMEs are important to the economy of Botswana.<sup>119</sup> It is reiterated that these findings are tentative and should be viewed in that light. The estimates of managerial benefits in this study are indicative for policy makers in Botswana. This study adopts Pope's (1993a) approach of estimating cash flow benefits as well as simplifying assumptions to measure the value of cash flow benefits. The lack of detailed VAT revenue data from BURS hinders the disaggregation of cash flow benefits by the size of the business. Businesses are asked if they receive managerial benefits from stringent record keeping for VAT. Those that agree to gaining benefits are requested to put a monetary value on such gains.

In order to compare the findings in this study with international estimates, a comprehensive review of the tax compliance costs literature is undertaken, with particular focus on VAT (*Objective no. 2*). Although VAT was introduced in Botswana over ten years ago, there is no previous study that attempts to estimate its associated compliance costs for businesses.<sup>120</sup> The only studies are those that have

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<sup>119</sup> As mentioned in Section 1.1 of this thesis, SMEs in Botswana account for around 50 per cent of private sector employment and 15–20 per cent of GDP (BIDPA, 2004, p. 1).

<sup>120</sup> This is the first study to estimate the compliance costs of VAT in Botswana. Key estimates in this study are already published. See Makara and Pope (2013).

been undertaken by the IFC, which estimate the average time taken to comply with VAT (and other taxes) in Botswana over a number of years. The IFC estimates are based on a hypothetical medium-sized business and focus only on time costs. Hence they do not provide any picture of the monetary tax compliance costs in Botswana. Thus, there is a gap in the literature with respect to the compliance costs of VAT (and other taxes) in Botswana.

Around 35 published studies that estimate the compliance costs of VAT since the 1980s until recently are identified. Twenty nine of these studies take place outside Africa, while only six are conducted in Africa.<sup>121</sup> Accordingly, there is a dearth of literature on African VAT compliance costs. Largely, the common finding from the majority of the tax compliance costs studies is that tax compliance costs are high, regressive and fall with disproportionate severity on small firms. In addition, there are significant cash flow benefits that accrue to businesses. Furthermore, businesses, especially small ones, benefit from improved record keeping for VAT purposes.

This study also investigates the attitudes of businesses towards VAT in Botswana (*Objective no. 3*), using a five-point Likert scale. In this final chapter, the policy implications for the government of Botswana, and possible measures that can reduce the compliance costs of VAT in Botswana, are identified and recommendations made (*Objective no. 4*).

## **9.3 OVERVIEW OF KEY FINDINGS**

### **9.3.1 Gross Compliance Costs Estimates**

It must be noted that the compliance costs estimates in this study do not include any figure for estimating the psychological costs of tax compliance. The average VAT compliance costs are estimated at P6,902 and aggregate compliance costs at P110 million for the financial year 2009/10. These costs are estimated at P7,201, and P169 million, for 2009/10 and 2010/11, respectively, as shown in Table 9.1. Indicatively, these estimates are roughly around US\$1,000 per business and US\$17–23 million in

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<sup>121</sup> See Appendix E.

aggregate. There is no significant difference between the average VAT compliance costs of the two years under review. Thus, the findings of the financial year 2010/11 confirm those of the preceding year.

**Table 9.1: Aggregate Value Added Tax Compliance Costs by Botswana Unified Revenue Service Classification, 2009/10**

	2009/10			2010/11		
	N	Mean (P)	Weighted Compliance Costs (P) million	N	Mean (P)	Weighted Compliance Costs (P) million
Groups A and B	132	6,942	109	40	7,022	164
Group C	5	5,834	1	10	7,918	5
<b>Overall</b>	<b>137</b>	<b>6,902</b>	<b>110</b>	<b>50</b>	<b>7,201</b>	<b>169</b>
<i>Overall weighted mean for 2009/10: P110 million ÷ 15,940 = P6,901</i>						
<i>Overall weighted mean for 2010/11: P169 million ÷ 23,931 = P7,062</i>						

The overall weighted mean for the 2009/10 is similar to the survey mean which indicates that the findings are not biased to either group. For the year 2010/11, the overall weighted mean is slightly lower than the survey mean which implies that the survey is faintly biased towards large businesses with a turnover exceeding P12 million.

When viewed in the context of GDP and VAT revenue, the overall aggregate VAT compliance costs represent around 0.1 per cent of GDP for both years and approximately 2.9 per cent and 3.6 per cent of VAT revenue in 2009/10 and 2010/11, respectively, as outlined in Table 9.2. The findings of the study suggest that the VAT compliance costs in Botswana are significant, especially when viewed as a proportion of VAT revenue.

**Table 9.2: Aggregate Value Added Tax Compliance Costs as a Proportion of Gross Domestic Product and Value Added Tax Revenue**

	2009/10 (P) million	2010/11 (P) million
Aggregate Compliance Costs	110	169
GDP	101,258	120,541
VAT Revenue	3,845	4,648
	<b>Percentage</b>	<b>Percentage</b>
Aggregate Compliance Costs as a Percentage of GDP	0.11	0.14
Aggregate Compliance Costs as a Percentage of VAT Revenue	2.86	3.64

Further analysis of the mean VAT compliance costs by the frequency of VAT return submission indicate, surprisingly, that the monthly VAT remitters (those in group C) incur the lowest mean VAT compliance costs during the year 2009/10. This suggests that as large businesses generally have well established tax accounting systems they are unaffected by frequent VAT return filings. During the year 2010/11, however, and probably due to the effects of the 2010 VAT amendments, the firms in group C incur the highest mean VAT compliance costs while the bimonthly filers had lower costs. The advanced accounting systems are highly technical and possibly required expensive expert labour to adjust in 2010 to accommodate the VAT amendments.

In terms of record keeping practices, the businesses that keep their VAT records in paper filing systems have the lowest mean gross VAT compliance costs of P6,157 for 2009/10 and P5,077 for 2010/11. This goes against intuition as one would expect that the businesses that use partially computerised systems, due to the possibility of duplication, would have the highest mean gross VAT compliance costs; however, in this particular case, they have the second lowest. The firms that keep their VAT records in fully computerised systems have the second highest mean gross VAT compliance costs of P7,426 and P8,108 for 2009/10 and 2010/11, respectively. The main implication of these findings, in order to minimise the compliance costs of VAT in a developing country such as Botswana, is that it may be better for firms to consider retaining manual tax systems and not rushing into using information technology.

The study also finds that the businesses that do not use tax advisers for VAT work incur lower compliance costs than those that do. Additionally, the businesses that engage in partial outsourcing of VAT work incur the highest VAT compliance costs while those that carry out their VAT work wholly internally have the lowest VAT compliance costs. In terms of record keeping, the businesses that keep their VAT records in paper filing systems have the lowest VAT compliance costs as opposed to those that use computerised systems. As a policy implication, businesses should consider doing all of their VAT work in-house in order to reduce the VAT compliance costs. In addition, businesses should refrain from partial outsourcing of VAT work in order to avoid duplication.

As noted at the beginning of this thesis, the VAT system in Botswana zero rates and exempts some goods and services. The VAT policy requires the value added taxpayers to classify their sales and purchases into appropriate categories of standard rated, zero rated and exempt goods and services when accounting for VAT. Seventy-two per cent of the respondents in 2009/10 and 86 per cent in 2010/11 state that they sell standard rated goods and services only. This indicates that the majority of businesses in Botswana do not have to deal with complicated record keeping and accounting for zero rated and exempt goods and services. The results show that, in the financial year 2009/10, the businesses that sell a combination of standard rated, zero rated and exempt goods and services incur the highest average VAT compliance costs of P12,073, while those that trade in a combination of standard rated and exempt sales have the second highest mean VAT compliance costs of P11,764. The firms that sell standard and zero rated goods and services only have the second lowest average VAT compliance costs of P9,278.

Not surprisingly, the businesses that trade in standard rated sales only have the lowest mean VAT compliance costs of P6,367. This clearly implies that the presence of zero rated and exempt supplies in the VAT system complicates compliance and increases VAT compliance costs. In the year 2010/10, the businesses that responded to the survey indicate that they only trade in either standard rated sales or a combination of standard and zero rated sales. The analysis of their mean gross VAT compliance costs shows that, while the firms that sell a combination of standard and zero rated supplies have higher mean gross VAT compliance costs than those that traded in standard rated sales only, the difference is only a small one.

Similarly, the majority of the survey participants (68 per cent and 64 per cent for 2009/10 and 2010/11, respectively) indicate that they use standard rated inputs only. The businesses that have to account for a combination of standard rated, zero rated and exempt purchases for VAT purposes have the highest average gross VAT compliance costs of P11,650 for the year 2009/10, followed by those that use a combination of standard rated and exempt inputs at P10,320.

Businesses that use a combination of standard and zero rated inputs have the third highest mean gross VAT compliance costs of P9,198. Those that have to account for

standard rated inputs only have the lowest mean gross VAT compliance costs of P6,710. In the year 2010/11, respondents that use a combination of standard rated, zero rated and exempt inputs report the highest mean gross VAT compliance costs of P8,410, followed by the standard rated category at P7,474. The second lowest mean gross VAT compliance costs are reported by the businesses that indicated to have used a combination of standard rated and exempt purchases. The standard and zero rated category have the lowest mean gross VAT compliance costs.

The 2009/10 survey participants are asked to indicate whether or not they were visited by a tax officer from BURS during the course of the financial year in question. The findings reveal that the businesses that are visited by tax officers incur higher compliance costs than those that are not visited. It could be that businesses spend more time (and possibly more money on external advice) than usual on VAT compliance activities when they know that they will be visited by tax officers for audit purposes.

### **9.3.2 Economies of Scale Effect**

This study also investigates the economies of scale of VAT compliance for the two financial years under review. The research confirms the findings of international studies that the compliance costs of VAT are inversely related to the business size. As a proportion of annual turnover, the average VAT compliance costs range from around 0.02 per cent for large businesses to 0.93 per cent for small enterprises in 2009/10 and 0.02 per cent for large businesses to 0.90 per cent for small businesses in 2010/11, as shown in Table 9.3. The VAT compliance costs of small businesses in Botswana are 47 and 45 times those of large businesses in the financial years 2009/10 and 2010/11, respectively. The regressivity of VAT compliance costs in Botswana is more pronounced when the small business category is segregated further, falling from 3.17 per cent and 3.30 for small businesses in 2009/10 and 2010/11, respectively, to 0.02 per cent for large ones in both years.

**Table 9.3: Mean Value Added Tax Compliance Costs by Turnover, 2009/10<sup>a</sup>**

	2009/10			2010/11		
	N	Mean (P)	Percentage	N	Mean (P)	Percentage
Less than P1.5 million	91	6,987	0.93	15	6,730	0.90
P1.5 million–P5 million	29	6,043	0.19	12	7,473	0.23
Over P5 million	17	7,907	0.02	23	7,367	0.02
<b>Overall<sup>b</sup></b>	<b>137</b>	<b>6,902</b>		<b>50</b>	<b>7,201</b>	

a Percentages are calculated using the average of each turnover category. The respondent-given upper turnover for the ‘over P5 million’ category is P60 million.

b The exchange rates of the Botswana Pula to the American Dollar are 0.155 and 0.133 in 2010 and 2011, respectively, (Bank of Botswana, 2011, p. 75).

### 9.3.3 Possible Fair Compensation

Survey participants are asked to estimate the possible amount they would claim from the government as compensation for the time and money they spend on VAT compliance activities. The overall average possible compensation amount that would be claimed by the businesses is P44,450 in 2009/10. Large businesses state the highest average possible claim of P115,828 followed by small businesses at P46,144. Medium-sized enterprises provide the lowest average likely claim of P10,928, which is probably more realistic given the overall average VAT compliance costs. The possible compensation amounts, as a percentage of turnover, range from 0.4 per cent for large businesses and medium-sized firms, to 6.2 per cent for small enterprises. Further analysis reveals that the average possible compensation amount given by the smallest businesses is about 20 times those of medium-sized and large firms.

On average, the 2010/11 possible compensation amounts range from P20,692 for the smaller businesses to P51,375 for the medium-sized enterprises and P72,347 for the large firms. As a percentage of turnover, these amounts range from 0.2 per cent for larger businesses, to 1.6 per cent for medium-sized enterprises, and 2.8 per cent for the smallest firms. Closer analysis indicates that the average possible compensation amount given by the smallest businesses is 14 times those of large firms.

### **9.3.4 Cash Flow and Managerial Benefits**

This study provides indicative estimates of the values of cash flow and managerial benefits gained by businesses during the financial years 2009/10 and 2010/11. Not surprisingly, the findings suggest that businesses in groups A and B who receive cash for their sales gain the most cash flow benefits of P26 million in 2009/10 and P29 million in 2010/11. Indeed cash sales allow the businesses to hold the VAT revenue for a longer period than those with lengthier settlement periods. The businesses in groups A and B that have settlement periods exceeding two months incur cash flow costs of P8 million and P9 million for 2009/10 and 2010/11, respectively. Larger businesses in group C gain lower cash flow benefits of around P10 million in 2009/10 and P11 million in 2010/11, but higher cash flow costs of P13 million and P15 million in 2009/10 and 2010/11, respectively. Overall aggregate cash flow benefits are estimated at P61 million and P69 million for the financial years 2009/10 and 2010/11, respectively. These estimates represent around 0.6 per cent of GDP and about 1.6 per cent of VAT revenue for both years.

Although around 80 per cent of the respondents in both years indicated that their VAT returns are completed entirely within the firm, the proportions of the businesses that report receiving managerial benefits and those that do not, are close. The researcher expected that businesses that do more of their own accounts and give less accounting work to external professional accountants would have saved money. The findings also suggest that some large businesses in Botswana benefit from stringent record keeping for VAT purposes. Also, the businesses that disagree that they gain benefits from record keeping for VAT have higher average VAT compliance costs. Aggregate managerial benefits are estimated at P79 million for 2009/10 and 95 million for 2010/11, representing around 0.8 per cent of GDP and about 2 per cent of VAT revenue for both years.

### **9.3.5 Net Compliance Costs**

The net VAT compliance costs in this study are obtained by offsetting the cash flow benefits and managerial benefits from the aggregate VAT compliance costs. The net VAT compliance costs are estimated at negative P30 million for 2009/10 and

positive P5 million for 2010/11, as shown in Table 9.4. Given that recurrent tax compliance costs tend to decrease over time to some minimal amount (assuming no changes in the tax system), as businesses become familiar with the requirements of the tax system, the increase in the net VAT compliance costs over a period of 12 months possibly reflects the additional costs that businesses incur in 2010/11 due to the 2010 amendments in the VAT system, which include an increase in the VAT rate by two percentage points.

**Table 9.4: Net Value Added Tax Compliance Costs for Businesses in Botswana**

	2009/10		2010/11	
	Groups A and B (P) million	Group C (P) million	Groups A and B (P) million	Group C (P) million
Aggregate VAT compliance costs	109	1	164	5
Cash flow benefits	(59)	(2)	(67)	(2)
Managerial benefits	(79)	(0.3)	(94)	(1)
<i>Net compliance costs</i>	<b>-29</b>	<b>-1.3</b>	<b>3</b>	<b>2</b>
<i>Overall net compliance costs</i>	<b>-30.3</b>		<b>5</b>	

### 9.3.6 Taxpayers' Attitudes

The analysis of the attitudes of taxpayers<sup>122</sup> suggests that the majority of taxpayers in Botswana find VAT to be burdensome. This is clearly indicated by 65 per cent and 54 per cent of the respondents in 2009/10 and 2010/10, respectively, who report that they do not like doing their VAT work. The respondents also point out that their VAT compliance costs are high and the majority disagree with the statement that their VAT compliance costs are insignificant. In addition, the majority of the 2009/10 survey participants agree that other business duties suffer because they spend too much time on VAT. Furthermore, taxpayers in Botswana report that they find other taxes to be easier than VAT. Overall, the findings appear to suggest that most value added taxpayers in Botswana perceive the VAT to be complex and costly.

While the VAT system is perceived to be complex and costly by many taxpayers, most of them receive benefits which mitigate their VAT compliance costs. To this

<sup>122</sup> See Chapter 8 of this thesis.

end, 64 per cent of the survey participants in 2009/10 indicated that they benefit from improved management as a result of VAT, while 69 per cent gain from better record keeping. The findings also show, not surprisingly, that the respondents who agree with the statement 'VAT is unreasonably complicated' and those who disagree that their VAT compliance costs are insignificant, have higher average VAT compliance costs.

Botswana has not yet introduced an online VAT filing system. As such, value added taxpayers in Botswana have to file their VAT returns in person at the BURS office. This process involves costly travelling to, and queuing at, BURS. It is, thus, not surprising that the businesses that disagree with the statement 'I do not mind doing my VAT work' have higher compliance costs. In the same way, the respondents who agree with the statement 'other business duties are affected because I spend too much time on VAT' report higher compliance costs in 2009/10.

The taxpayers that agree that they benefit from the VAT system in the form of improved business management report higher average and median VAT compliance costs. This probably shows that VAT compliance costs have little or nothing to do with business management, as the bulk of the costs are incurred through other tasks such as record keeping, VAT returns filings, travelling and queuing at the BURS office. As anticipated, the respondents who indicate that they benefit from improvements in record keeping have lower compliance costs. Stringent record keeping enables the business to have all their invoices at hand, which saves them time and money when filing their VAT returns.

Many small businesses and some medium-sized ones often lack sophisticated business management and record keeping systems. While this makes tax compliance more onerous for these sectors, many of them usually benefit from the rigorous VAT requirements. To this end, the majority of the businesses in this study that agree to gaining improvements in business management and record keeping are small firms, as expected from previous literature.<sup>123</sup>

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<sup>123</sup> See Sandford and Hasseldine (1992, p. 76).

The VAT system in Botswana exempts and zero rates some goods and services. It has long been argued that exemptions and zero rates complicate the VAT. In line with this, 77 per cent of the businesses that trade in exempt and zero rated goods and services, in 2009/10, agree that VAT is unreasonably complicated, while 81 per cent disagree that their VAT compliance costs are insignificant. Seventy six per cent of the respondents also indicate that they mind doing their VAT work while the majority of the respondents are of the opinion that that other taxes are easier than VAT.

The survey participants were asked to indicate whether they perceive the resources provided by the government to support value added taxpayers to be adequate or not. Although the majority of the respondents answered 'yes' to this query, many also gave critical comments regarding the VAT system in Botswana. The most popular complaint about the VAT system in Botswana pertains to the long queues at the BURS office during VAT filing periods. The respondents also complained about the competency of the tax officers and the high frequency of VAT filing.

Some respondents gave positive comments regarding VAT in Botswana. The common positive comment is that the BURS officers are efficient. This seems to contradict the view of other respondents concerning the competency of BURS officers. It is possible that the respondents who feel that BURS officers are incompetent are those that resent being used as unpaid tax agents or those who resent VAT.

With regard to the question of how the VAT system in Botswana can be improved, most of the survey participants suggest that the government should introduce an online VAT filing system. Indeed, an online VAT filing system would reduce queues at the BURS office and simplify compliance. Moreover, VAT compliance costs would be reduced. Some also suggest that the government should increase taxpayer education and reduce the VAT filing frequency.

## 9.4 INTERNATIONAL COMPARISONS

A comparison of the compliance costs of VAT for businesses in Botswana with international estimates is questionable, owing to the disparities in the countries' levels of development, socio-economic environments, as well as taxpayer populations and tax systems. Pope (1999, p. 62) affirms that international comparisons of tax compliance costs findings are fraught with difficulty while Sandford notes that, "...any such attempt would be more likely to mislead than enlighten" (Sandford, 1995b, p. 405). Moreover, differences in definitions, methodologies, as well as areas of focus can lead to a comparison of apples and oranges (IFC, 2009b, p. 95). Nevertheless, a comparison of this study with other studies is cautiously made.<sup>124</sup> When placed on an international platform,<sup>125</sup> the findings of the current study confirm the regressive nature of VAT compliance costs that has been established in prior literature.

Evans (2008, p. 457) notes that the compliance costs of taxes (such as personal income tax, corporate income tax and VAT) typically range between two per cent and ten per cent of the revenue yield of those taxes, and up to 2.5 per cent of GDP. In some countries, however, the compliance costs of VAT are found to be well over ten per cent of VAT revenue. For example, in Canada, the GST ongoing compliance costs are estimated to be around 40 per cent of GST revenue in 1991 (CFIB, 1991, p. 11) while in Slovenia they are estimated at around 25 per cent of VAT revenue (Klun, 2003, p. 81). In Botswana, the aggregate compliance costs of VAT for businesses are estimated to be around 0.1 per cent of GDP. In terms of VAT revenue, the proportions are about 2.9 per cent for 2009/10 and 3.6 per cent for 2010/11. Thus, these figures fall within the range of most estimates provided in the international literature.

The VAT compliance costs in Botswana are fairly close to those of studies conducted in the UK,<sup>126</sup> Ethiopia and Sweden. The UK study pioneered by Sandford estimates

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<sup>124</sup> Some studies such as those conducted in the 1980s and 1990s are dated. Thus, a comparison with these studies necessitates extreme caution.

<sup>125</sup> See Appendix E. This comparison is by no means exhaustive; it is merely intended to examine how the estimates from Botswana look when placed in an international context.

<sup>126</sup> See n. 124.

VAT compliance costs to be around 3.7 per cent of VAT revenue (Sandford et al., 1989, p. 119). In Ethiopia, Yesegat (2009, p. 209) reports that the VAT compliance costs are approximately 0.1 per cent of GDP and 2 per cent of VAT revenue while in Sweden (Tax Board, 2006, p. 36) these costs are found to be approximately three per cent of VAT revenue. By contrast, the Botswana VAT compliance costs appear to be significantly lower than those estimated by the Canadian and Slovenian studies. The New Zealand (Sandford & Hasseldine, 1992, p. 1) and Netherlands (Allers, p. 1994, p. 124) studies also report higher GST compliance costs than those in Botswana, roughly double, at around seven per cent of GST revenue and six per cent of VAT revenue, respectively.

In terms of distribution, VAT compliance costs appear to be more regressive in Botswana than in Ethiopia. As a proportion of annual turnover, the VAT compliance costs in Botswana fall from 0.93 per cent for smaller businesses to 0.02 per cent for larger ones in 2009/10. In 2010/11, these costs ranged from 0.02 per cent for larger businesses to 0.90 per cent for smaller ones. In Ethiopia (Yesegat, 2009, p. 137), proportionate VAT compliance costs range from 0.4 per cent for the businesses in the highest turnover category to 6.5 per cent for those in the smallest turnover category.

## **9.5 VALUE ADDED TAX SIMPLIFICATION AND MINIMISATION OF COMPLIANCE COSTS**

### **9.5.1 Incidence of Taxation**

The compliance costs of VAT and other taxes do not affect businesses equally. As a result of the fixed cost nature of tax compliance costs, small businesses carry a burden of these costs that is not proportional to their size. The regressivity of tax compliance costs puts small firms at a competitive disadvantage (Godwin & Sandford, 1983, p. 281) and leads to a competition policy concern by conflicting with the aim of establishing a 'level playing field' between all types and sizes of business (Pope, 2001a, p. 1). The issue of the incidence of taxation revolves around the question of the final bearer of tax compliance costs. Large businesses usually

pass most of their compliance costs on to customers while small businesses have far greater difficulty passing compliance costs on to their customers. The following section discusses the possible policy measures that can be incorporated to minimise the unfair distribution of VAT compliance costs upon small businesses.

### **9.5.2 Key Policy Recommendations for the Reduction of Tax Compliance Costs**

Major policy recommendations, based on the empirical findings of the VAT compliance costs in Botswana are made. Currently, taxpayers in Botswana file VAT returns in person at the BURS office. Therefore, as a key policy recommendation, the government should consider introducing an online VAT filing and payment system. This will reduce the queuing time at the BURS office and the associated costs. Additionally, the government of Botswana should consider increasing the number of VAT offices, especially in the outskirts of Gaborone, in order to reduce taxpayer travelling costs and congestion at the main Gaborone office. The prospect of increasing VAT offices, while feasible, is very expensive and needs to be assessed against introducing an online VAT system. The latter is more appropriate as it embraces global a language, technology, which will enable VAT returns to be filed at a taxpayer's convenience.

In addition, the author suggests that the government should consider subsidising external professional VAT help for small businesses. This can be done on a pro-rata basis which is benchmarked against the turnover of the business or the amount of VAT remitted. This will relieve small businesses, especially sole traders, of the hassle of having to learn complex VAT laws and the time costs they incur while undertaking VAT compliance activities.

Furthermore, for businesses in remote areas, the government can consider releasing tax officials to meet the taxpayers in a central area in each rural area. These meetings can be spread across a few weeks of the VAT filing period, especially in cases where there is a shortage of tax officials. In addition to saving the businesses travelling costs (in the form of time and money), some small businesses will gain cash flow benefits (and hence reduce VAT compliance costs) from holding the tax revenue for a few more days or weeks.

The frequency of VAT filing in Botswana is also a concern, especially for small businesses. Small and medium-sized businesses (and some large businesses) in groups A and B file their VAT returns every two months while larger businesses in group C file VAT returns monthly. A reduction of VAT filing frequency for small businesses, from bimonthly to six monthly will reduce their VAT compliance costs. Small businesses in other countries, such as New Zealand, file VAT returns every six months.

Further, an increase in the registration threshold from its current P500,000 (US\$61,500) to P1 million (US\$123,000), such as in South Africa, could be considered by policy-makers, if reducing VAT compliance costs still further is seen as a policy priority, although the effects of such a measure on VAT revenue would have to be carefully assessed.

### **9.5.3 Future Tax Compliance Costs Studies**

The estimates in this study provide a benchmark for the compliance costs of VAT in Botswana for the years 2009/10 and 2010/11. As this is the first comprehensive study of VAT compliance costs in Botswana, the need for further research in this area is identified. Future studies in Botswana may investigate the compliance costs of specific taxes. If funding permits, a comprehensive study of all taxes, similar to the study by Pope (1993a) in Australia, is highly recommended.

## **9.6 SUMMING UP**

This is the first research study to estimate the compliance costs of VAT in Botswana. The estimates of this study have been placed in an international context and also in the context of Botswana's taxation policy. As tax compliance costs of VAT (and other taxes) were hidden in Botswana prior to this study, it is hoped that this research study will make some contribution to the government of Botswana's recognition of tax compliance costs.

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## APPENDICES

## **APPENDIX A**

### **2009/10 QUESTIONNAIRE AND ACCOMPANYING LETTER**



UNIVERSITY OF BOTSWANA  
FACULTY OF BUSINESS

Department of Accounting & Finance

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### Survey of the Compliance Costs of Value Added Tax for Businesses in Botswana for the Financial Year 2009/2010

Thank you for taking time to read this letter. Your business is invited to participate in a survey of the compliance costs of Value Added Tax (VAT) for businesses in Botswana for the financial year 2009/2010. Notably, businesses are important to the economy of Botswana as they generate both employment output. International evidence indicates that businesses incur additional costs over and above the VAT itself as a result of the VAT requirements. It is thus important to assess this compliance burden and how it may be reduced, both in the short and long term.

This study is undertaken under the supervision of Professor Jeff Pope, at Curtin University of Technology in Western Australia. The University of Botswana is funding this research as I am one of its academic staff members.

Your business was selected from a random sample of businesses registered for VAT in Botswana. This study is the first of its kind in Botswana and your response is highly valuable as it will enhance the reliability of the survey results. The results from this survey could influence government policy. Consequently, the weight of the survey results is dependent upon accurate completion of the questionnaire.

Your questionnaire responses will be treated with strict confidentiality and will only be used for the purpose of this study. If you are willing to participate in this study, please complete the enclosed questionnaire. The researcher will collect the completed questionnaire from your business after 7 days from the date you receive it.

Participation in this study is voluntary. If you decide to participate, you can withdraw at any time with no penalty. Thank you in advance for your cooperation.

Yours sincerely,

Tshepiso K. Makara  
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[www.ub.bw](http://www.ub.bw)





**Survey of the Compliance Costs of Value Added Tax for Businesses in Botswana for the financial year 2009/2010**

Note:

- All questions relate to the year of assessment 2009/2010
- All responses will be kept strictly confidential and anonymous
- Please tick one box or fill in the appropriate details as requested
- BURS refers to Botswana Unified Revenue Service

**SECTION A: GENERAL INFORMATION**

**1. Please indicate the legal structure of your business.**

- Sole trader <sub>1</sub> Company <sub>2</sub>  
 Partnership <sub>3</sub> Trust <sub>4</sub>  
 Non-profit organisation <sub>5</sub> Public sector <sub>6</sub>

**2. How long has your business been operating?**

- Under 2 years <sub>1</sub> 2-5 years <sub>2</sub> Over 5 years <sub>3</sub>

**3. What is your main business activity?**

- Accommodation <sub>1</sub> Business Services <sub>2</sub>  
 Construction <sub>3</sub> Farming <sub>4</sub>  
 Manufacturing <sub>5</sub> Property <sub>6</sub>  
 Restaurants <sub>7</sub> Retail Trade <sub>8</sub>  
 Transport <sub>9</sub> Finance and Insurance <sub>10</sub>  
 Other <sub>11</sub>

(Please specify) \_\_\_\_\_

**4. In what year was your enterprise's main business activity registered for VAT?**

**5. Is the main place(s) of your business in the**

- Village <sub>1</sub> Town <sub>2</sub> City <sub>3</sub>

**6. What was your business's last accounting year?**  
(Please state month)

From  to

**7. What was your business turnover for the year 2009/2010?**

- Less than P500,000 <sub>1</sub> P500,000 - P749,999 <sub>2</sub>  
 P750,000 - P999,999 <sub>3</sub> P1,000,000 - P5,000,000 <sub>4</sub>  
 Over P5,000,000 <sub>5</sub>

**SECTION B: TAX COMPLIANCE COSTS**

**8. In the 2009/2010 financial year, approximately what percentage of your sales is classified in each of the following VAT categories?**

- a. Standard rated (12 per cent)  <sub>1</sub>  
 b. Zero rated (0 per cent)  <sub>2</sub>  
 c. Exempt from VAT  <sub>3</sub>  
 Total 100%

**9. In the 2009/2010 financial year, approximately what percentage of your purchases is classified in each of the following VAT categories?**

- a. Standard rated (12 per cent)  <sub>1</sub>  
 b. Zero rated (0 per cent)  <sub>2</sub>  
 c. Exempt from VAT  <sub>3</sub>  
 Total 100%

**10. Are your VAT return forms completed:**

- a. Entirely within the firm?  <sub>1</sub>  
 b. Partly by the firm and partly by outside assistance?  <sub>2</sub>  
 c. Entirely by outside assistance?  <sub>3</sub>

**11. If you have ticked answer (b) or (c),**

**a. For the 2009/2010 financial year, what was your tax adviser/accountant's fees for A.I.L. tax work?**

P

**b. If the above fee includes work on VAT, please estimate in percentages:**

VAT  % <sub>1</sub> Other Taxes  % <sub>2</sub>

12a. Did you employ a tax adviser/accountant for your VAT work in the financial year 2009/2010?

YES <sub>1</sub> NO <sub>2</sub> Go to question 13

12b. If 'YES', why do you need the assistance of a tax adviser/accountant for your VAT work? (Multiple answers possible)

- The VAT return is too complicated <sub>1</sub>
- I do not have time to do VAT related activities <sub>2</sub>
- Hiring a VAT adviser saves my business more time and money than if I did the VAT work myself <sub>3</sub>
- I think it will reduce the chance of a VAT audit <sub>4</sub>
- To ensure compliance with the business' VAT obligations <sub>5</sub>
- Other (Please specify) <sub>6</sub>

12c. In which area(s) do you seek paid advice? (Multiple answers possible)

- VAT returns preparation <sub>1</sub> VAT audits <sub>2</sub>
- Record keeping for VAT <sub>3</sub> VAT on sales <sub>4</sub>
- Legal aspects of VAT <sub>5</sub> VAT on purchases <sub>6</sub>
- Other (Please specify) <sub>7</sub>

13. If 'NO' to question 12a, which of the following statements apply to you? (Multiple answers possible)

- Our VAT affairs are very simple <sub>1</sub>
- We get help from books/leaflets/guides <sub>2</sub>
- We cannot afford to pay VAT advisers <sub>3</sub>
- We receive help from friends/relatives <sub>4</sub>
- We receive help from BURS <sub>5</sub>
- We think VAT advisers charge more than their advice is worth <sub>6</sub>
- We have employees who are qualified to handle our VAT affairs <sub>7</sub>
- Other (Please specify) <sub>8</sub>

14a. In the financial year 2009/2010, how many hours did the following people spend working solely on VAT (exclude usual book keeping and overhead costs)? Please estimate the MONTHLY hours.

- Owner  <sub>1</sub>
- Managers  <sub>2</sub>
- Accounting staff  <sub>3</sub>
- Administrative staff  <sub>4</sub>
- Other (Please specify)  <sub>5</sub>

14b. Please estimate MONTHLY wage rates of the following people.

- Owner  P <sub>1</sub>
- Manager/Accountants  P <sub>2</sub>
- Accounting staff  P <sub>3</sub>
- Administrative staff  P <sub>4</sub>
- Other (Please specify)  P <sub>5</sub>

15. Please estimate your MONTHLY cost of complying with the VAT requirements other than personnel / tax adviser costs in the financial year 2009/2010.

- P <sub>1</sub>
- Computer /data processing  P <sub>1</sub>
- Stationery  P <sub>2</sub>
- Copying and faxes  P <sub>3</sub>
- Postage and telephone  P <sub>4</sub>
- Travel  P <sub>5</sub>
- Other (Please specify)  P <sub>6</sub>

16. Please estimate the number of VAT invoices you process in a month.

Sales  <sub>1</sub> Purchases  <sub>2</sub>

17. How often do you submit VAT returns?

- Monthly <sub>1</sub> Every two months <sub>2</sub>
- Other (Please specify) <sub>3</sub>

18. Excluding bad debts, approximately what percentage of your 2009/2010 sales and purchases (by value) was settled within each of the following periods after invoicing?

Settlement made:	% value of:	
	Sales	Purchases
For cash	<input type="text"/>	<input type="text"/>
Within 1 week	<input type="text"/>	<input type="text"/>
Between 1 week and 1 month	<input type="text"/>	<input type="text"/>
Between the 1 <sup>st</sup> and 2 <sup>nd</sup> month	<input type="text"/>	<input type="text"/>
More than 2 months after invoicing	<input type="text"/>	<input type="text"/>
Total	100%	100%

19a. How much did you remit to BURS as VAT for the financial year 2009/2010 (Please exclude penalties)? P

19b. How much did you receive from BURS as input tax for the financial year 2009/2010? P

19c. How much, if any, have you paid in late payment penalties for the financial year 2009/2010? P

20. How do you keep your accounting records?

- a. In a paper filing system \_1
- b. In a fully computerised system \_2
- c. In a partially computerised system \_3
- d. My tax adviser keeps my tax records \_4
- e. Other (Please specify) \_5

21a. Does record keeping for VAT give you any benefits e.g. saving money by doing more of your own accounts and giving less work to outside advisers?

YES \_1, NO \_2 Go to question 22a

If 'YES', please describe \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

21b. If 'YES' to question 21a, please estimate the value of the benefit: P

22a. Have you been visited by a VAT officer?

YES \_1, NO \_2 Go to question 25

22b. If 'YES', when was the last time you were visited by a VAT officer?

22c. How long did the visit last?  hours

22d. Please write your comments on the visit below

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

(Please continue on a separate page if necessary)

**SECTION C: PERCEPTIONS AND OPINIONS**

23. Kindly indicate with a tick your opinion regarding the statements below:

Strongly agree (1) Agree (2) Neutral (3) Disagree (4) Strongly Disagree (5)

- a. VAT is unreasonably complicated \_1 \_2 \_3 \_4 \_5
- b. My VAT compliance costs are insignificant \_1 \_2 \_3 \_4 \_5
- c. I do not mind doing my VAT work \_1 \_2 \_3 \_4 \_5
- d. VAT requirements are easy to fulfil \_1 \_2 \_3 \_4 \_5
- e. VAT helps to improve my business management \_1 \_2 \_3 \_4 \_5
- f. Other business duties are affected because I spend too much time on VAT \_1 \_2 \_3 \_4 \_5
- g. Other taxes are easier than VAT \_1 \_2 \_3 \_4 \_5
- h. My VAT compliance costs are very high \_1 \_2 \_3 \_4 \_5
- i. VAT helps improve my business record keeping \_1 \_2 \_3 \_4 \_5
- j. The burden of VAT discourages me from fulfilling my VAT obligations \_1 \_2 \_3 \_4 \_5

24. Has the increase in the VAT rate affected your compliance costs?

YES \_1, NEGLIGIBLE \_2, NO \_3

If 'YES', please explain \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

25. Has the increase in the VAT registration threshold affected your registration for VAT?

YES \_1, NO \_2

If 'YES' please explain \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

26. As a taxpayer in a developing country, do you find the resources provided by your government to support Value Added Taxpayers adequate?

YES \_1, NO \_2





**UNIVERSITY OF BOTSWANA**  
FACULTY OF BUSINESS

**Department of Accounting & Finance**

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Pvt Bag UB 00701, Gaborone, Fax: [267] 318 5102  
Botswana E-mail: [accfinance@mopipi.ub.bw](mailto:accfinance@mopipi.ub.bw)

Single Question Postcard Survey

**Survey of the Compliance Costs of Value Added Tax for Businesses in Botswana for the Financial year 2009-2010**

Dear Sir or Madam

If you do not wish to complete the survey questionnaire, I would be very grateful if you could respond to a single question as follows:

Compared with other businesses in your industry, the estimated level of Value Added Tax compliance burden of your business is:  
(Please tick on box)

Very High	<input type="checkbox"/>	1
High	<input checked="" type="checkbox"/>	2
Average	<input type="checkbox"/>	3
Low	<input type="checkbox"/>	4
Very Low	<input type="checkbox"/>	5

Thank you for your kind contribution.

Tshepiso K. Makara  
University of Botswana  
Accounting & Finance  
Tel: 76079388  
Email: [tshepiso.makara@postgrad.curtin.edu.au](mailto:tshepiso.makara@postgrad.curtin.edu.au)



**APPENDIX B**

**2010/11 QUESTIONNAIRE AND ACCOMPANYING LETTER**



UNIVERSITY OF BOTSWANA  
FACULTY OF BUSINESS

Department of Accounting & Finance

Corner of Notwane and Mobuto Road, Tel: [267] 355 2239  
Pvt Bag UB 00701, Gaborone, Fax: [267] 318 5102  
Botswana E-mail: [accfinance@mopipi.ub.bw](mailto:accfinance@mopipi.ub.bw)

### Survey of the Compliance Costs of Value Added Tax for Businesses in Botswana for the Financial Year 2010/2011

Thank you for taking time to read this letter. Your business is invited to participate in a survey of the compliance costs of Value Added Tax (VAT) for businesses in Botswana for the financial year 2010/2011. Notably, businesses are important to the economy of Botswana as they generate both employment output. International evidence indicates that businesses incur additional costs over and above the VAT itself as a result of the VAT requirements. It is thus important to assess this compliance burden and how it may be reduced, both in the short and long term.

This study is undertaken under the supervision of Professor Jeff Pope, at Curtin University of Technology in Western Australia. The University of Botswana is funding this research as I am one of its academic staff members.

Your business was selected from a random sample of businesses registered for VAT in Botswana. This study is the first of its kind in Botswana and your response is highly valuable as it will enhance the reliability of the survey results. The results from this survey could influence government policy. Consequently, the weight of the survey results is dependent upon accurate completion of the questionnaire.

Your questionnaire responses will be treated with strict confidentiality and will only be used for the purpose of this study. If you are willing to participate in this study, please complete the enclosed questionnaire. The researcher will collect the completed questionnaire from your business after 7 days from the date you receive it.

Participation in this study is voluntary. If you decide to participate, you can withdraw at any time with no penalty. Thank you in advance for your cooperation.

Yours sincerely,

Tshepiso K. Makara  
University of Botswana  
Accounting & Finance  
Tel: 76079388

Email: [tshepiso.makara@postgrad.curtin.edu.au](mailto:tshepiso.makara@postgrad.curtin.edu.au)

[www.ub.bw](http://www.ub.bw)





**Survey of the Compliance Costs of Value Added Tax for Businesses in Botswana for the Financial Year 2010/2011**

Note:

- All questions relate to the year of assessment 2010/2011
- All responses will be kept strictly confidential and anonymous
- Please tick one box or fill in the appropriate details as requested
- BURS refers to Botswana Unified Revenue Service

**SECTION A: GENERAL INFORMATION**

1. Please indicate the legal structure of your business.

- Sole trader <sub>1</sub> Company <sub>2</sub>  
 Partnership <sub>3</sub> Trust <sub>4</sub>  
 Public sector <sub>5</sub> Non-profit organisation <sub>6</sub>

2. How long has your business been operating?

- Under 2 years <sub>1</sub> 2-5 years <sub>2</sub> Over 5 years <sub>3</sub>

3. What is your main business activity?

- Mining <sub>1</sub> Business/financial Services <sub>2</sub>  
 Farming <sub>3</sub> Construction/Property <sub>4</sub>  
 Manufacturing <sub>5</sub> Restaurants <sub>6</sub>  
 Retail Trade <sub>7</sub> Other <sub>8</sub>  
 (Please specify)

4. The main place of your business is in the

- Village <sub>1</sub> Town <sub>2</sub> City <sub>3</sub>

5. What was the last accounting year of your business? (Please state **MONTH**)

From:  To:

6. What was your business turnover for the year 2010/2011?

- Less than P500,000 <sub>1</sub> P500,000–P749,999 <sub>2</sub>  
 P750,000–P999,999 <sub>3</sub> P1,000,000–P5,000,000 <sub>4</sub>  
 Over P5,000,000 <sub>5</sub>

If your turnover was more than P5,000,000 in 2010/2011, please estimate below

P

7. How many employees did you have in 2010/2011?

8. In what year was your business registered for VAT?

- 2002/03 <sub>1</sub> 2003/04 <sub>2</sub> 2004/05 <sub>3</sub>  
 2005/06 <sub>4</sub> 2006/07 <sub>5</sub> 2007/08 <sub>6</sub>  
 2008/09 <sub>7</sub> 2009/2010 <sub>8</sub> 2010/2011 <sub>9</sub>

**SECTION B: TAX COMPLIANCE COSTS**

9. In the 2010/2011 financial year, approximately what percentages of your sales & purchases are classified in each of the following VAT categories?

	Sales	Purchases
a. Standard rated (12 per cent)	<input type="text"/>	<input type="text"/>
b. Zero rated (0 per cent)	<input type="text"/>	<input type="text"/>
c. Exempt from VAT	<input type="text"/>	<input type="text"/>
Total	100%	100%

10. How are your VAT return forms completed?

- a. Entirely within the firm? <sub>1</sub>  
 b. Partly within and partly outside the firm <sub>2</sub>  
 c. Entirely by outside assistance? <sub>3</sub>

11. If you have ticked answer (10b) or (10c):

a. For the 2010/2011 financial year, what was your tax adviser/accountant's fees for **ALL** tax work?

P

b. If the above fee includes work on VAT, please estimate in percentages:

VAT %<sub>1</sub> Other Taxes %<sub>2</sub>

12. Please estimate the time spent by the following people entirely on VAT (exclude usual book-keeping and overhead costs).

Number of hours	<u>Hourly wage rate /</u> value of this time
--------------------	---

a. By the owner and family or by partners in the business.

hours/year	P                      per hour
------------	---------------------------------

b. By the directors and managers of the company.

hours/year	P                      per hour
------------	---------------------------------

c. By accounting staff.

hours/year	P                      per hour
------------	---------------------------------

d. By administrative staff.

hours/year	P                      per hour
------------	---------------------------------

e. By other staff.

hours/year	P                      per hour
------------	---------------------------------

13a. Did you incur any other REGULAR costs in complying with the VAT system in 2010/2011 not previously mentioned?

Yes  <sub>1</sub>                      No  <sub>2</sub> Go to question 14a

13b. If "YES", please describe them briefly

13c. Please give an estimate of these costs:

P

14a. Have you had any SPECIAL problems with the VAT in the financial year 2010/2011?

YES  <sub>1</sub>                      NO  <sub>2</sub> Go to question 15

14b. If "YES", please describe them briefly

14c. Please estimate the MONETARY COST of these special problems

P

15. Excluding bad debts, approximately what percentage of your 2010/2011 sales (by value) was settled within each of the following periods after invoicing?

Settlement made:	% value of Sales		
For cash	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">%</td> </tr> </table>		%
	%		
Within 1 week	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">%</td> </tr> </table>		%
	%		
Between 1 week and 1 month	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">%</td> </tr> </table>		%
	%		
Between the 1 <sup>st</sup> and 2 <sup>nd</sup> month	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">%</td> </tr> </table>		%
	%		
More than 2 months after invoicing	<table border="1" style="width: 100%;"> <tr> <td style="width: 80%;"></td> <td style="width: 20%; text-align: center;">%</td> </tr> </table>		%
	%		
Total	100%		

16a. How much did you remit to BURS as VAT for the financial year 2010/2011 (Please exclude penalties)?

P

16b. How much did you receive from BURS as input tax for the financial year 2010/2011?

P

16c. How much, if any, have you paid in late payment penalties for the financial year 2010/2011?

P

17. Please estimate the number of VAT invoices you process in a month.

Sales  <sub>1</sub>                      Purchases  <sub>2</sub>

18. How often do you submit VAT returns?

Monthly  <sub>1</sub>                      Every two months  <sub>2</sub>  
Other (Please specify)  <sub>1</sub>

19a. How do you keep your accounting records?

- a. In a paper filing system  <sub>1</sub>
- b. In a fully computerised system  <sub>2</sub>
- c. In a partially computerised system  <sub>3</sub>
- d. My tax adviser keeps my tax records  <sub>4</sub>
- e. Other (Please specify)  <sub>5</sub>

19b. Does record keeping for VAT give you any benefits e.g. saving money by doing more of your own accounts and giving less work to outside advisers?

YES \_1 NO \_2 Go to question 20a

If 'YES', please describe

19c. If 'YES' to question 19b, please estimate the MONETARY value of the benefit:

P

20a. Did you employ a tax adviser/accountant for your VAT work in the financial year 2010/2011?

YES \_1 NO \_2 Go to question 21

20b. If 'YES', why do you need the assistance of a tax adviser/accountant for your VAT work? (Multiple answers possible)

- The VAT return is too complicated \_1
- I do not have time to do VAT related activities \_2
- Hiring a VAT adviser saves my business time and money than if I did the VAT work myself \_3
- I think it will reduce the chance of a VAT audit \_4
- To ensure compliance with the business' VAT obligations \_5
- Other (Please specify) \_6

20c. In which area(s) do you seek paid advice? (Multiple answers possible)

- VAT returns preparation \_1 VAT audits \_2
- Record keeping for VAT \_3 VAT on sales \_4
- Legal aspects of VAT \_5 VAT on purchases \_6
- Other (Please specify) \_7

21. If 'NO' to question 20a, which of the following statements apply to you? (Multiple answers possible)

- Our VAT affairs are very simple \_1
- We get help from books/leaflets/guides \_2
- We cannot afford to pay VAT advisers \_3
- We receive help from friends/relatives \_4
- We receive help from BURS \_5
- Our employees are qualified to do our VAT work \_6
- Other (Please specify) \_7

### SECTION C: PERCEPTIONS AND OPINIONS

22. Kindly indicate with a tick your opinion regarding the statements below:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	N/A
	1	2	3	4	5	6
VAT is too complicated	<input type="checkbox"/>					
My VAT compliance costs are insignificant	<input type="checkbox"/>					
I do not mind doing my VAT work	<input type="checkbox"/>					
VAT requirements are easy to fulfil	<input type="checkbox"/>					
VAT helps to improve my business management	<input type="checkbox"/>					
Other business duties are affected because I spend too much time on VAT	<input type="checkbox"/>					
Other taxes are easier than VAT	<input type="checkbox"/>					
My VAT compliance costs are very high	<input type="checkbox"/>					
VAT helps improve my business record keeping	<input type="checkbox"/>					
The burden of VAT discourages me from fulfilling my VAT obligations	<input type="checkbox"/>					

23. As a taxpayer in a developing country, do you find the resources provided by your government to support Value Added Tax adequate?

YES <sub>1</sub> NO <sub>2</sub>

If 'NO', what is lacking?

24. Developing countries have been said to have poor VAT administration. Do you think this is the case with Botswana? YES <sub>1</sub> NO <sub>2</sub>

Please comment

25. If your business could claim from the government as compensation for the time and money spent on VAT affairs, how much would you claim for the financial year 2010/2011?

P

#### SECTION D: COMMENTS AND SUGGESTIONS

26. Compared with other businesses in your industry, the estimated level of VAT compliance burden for your business is: (Please tick one box)

Very high <sub>1</sub> High <sub>2</sub>  
Similar <sub>3</sub> Low <sub>4</sub>  
Very low <sub>5</sub>

27. Please state any comments/suggestions that you may have for improving VAT.

(Please continue on a separate page if necessary)

If you are willing to answer additional questions arising from this questionnaire, please provide your contact details. Your answers will be treated with strict confidentiality and will only be used for the purpose of this study.

Name \_\_\_\_\_

Company Name \_\_\_\_\_

Telephone \_\_\_\_\_

E-mail Address \_\_\_\_\_

Thank you for using your valuable time to complete this questionnaire. Please post the completed questionnaire in the enclosed reply paid envelope to:

**Tshepiso Ketsoeletse Makara**  
**University of Botswana**  
**Faculty of Business**  
**Accounting and Finance Dept.**  
**Private Bag UB 00701**  
**Gaborone**



**UNIVERSITY OF BOTSWANA**  
FACULTY OF BUSINESS

**Department of Accounting & Finance**

Corner of Notwane and Mobuto Road, Tel: [267] 355 2239  
Pvt Bag UB 00701, Gaborone, Fax: [267] 318 5102  
Botswana E-mail: [accfinance@mopipi.ub.bw](mailto:accfinance@mopipi.ub.bw)

Single Question Postcard Survey

**Survey of the Compliance Costs of Value Added Tax for Businesses in Botswana for the Financial year 2010-2011**

Dear Sir or Madam

If you do not wish to complete the survey questionnaire, I would be very grateful if you could respond to a single question as follows:

Compared with other businesses in your industry, the estimated level of Value Added Tax compliance burden of your business is:  
(Please tick on box)

Very High	<input type="checkbox"/>	1
High	<input type="checkbox"/>	2
Average	<input checked="" type="checkbox"/>	3
Low	<input type="checkbox"/>	4
Very Low	<input type="checkbox"/>	5

Thank you for your kind contribution.

Tshepiso K. Makara  
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## **APPENDIX C**

### **THE NUMBER OF ENUMERATED ESTABLISHMENTS BY ECONOMIC ACTIVITY**

### The Number of Enumerated Establishments by Economic Activity

<b>Economic Activity</b>	<b>Number of businesses</b>	<b>Percent</b>
Agriculture	62	0.7
Mining and Quarrying	6	0.1
Manufacturing	940	10.9
Electricity, Gas and Water	50	0.6
Construction	233	2.7
Wholesale and Retail Trade	3,426	39.8
Hotels and Restaurants	887	10.3
Transport, Storage and Communication	137	1.6
Financial Intermediaries	238	2.8
Real Estate, Renting and Business Activities	750	8.7
Education	204	2.4
Health and Social Work	322	3.7
Other Community and Personal Services	807	9.4
International Organisations	6	0.1
Not Stated	545	6.3
<b>Total</b>	<b>8,613</b>	<b>100</b>

Source: Central Statistics Office (2009, p. 21).

**APPENDIX D**

**SUMMARY OF BUSINESS TAX COMPLIANCE COSTS  
STUDIES, 1980 UNTIL 2013**

## Summary of Business Tax Compliance Costs Studies, 1980s until 2013<sup>a</sup>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
Sandford, Godwin and Hardwick UK (1989) CIT	Mail survey n/a 139 n/a	<ul style="list-style-type: none"> <li>Aggregate CIT compliance costs are estimated at £300 million or 2.2 per cent of the CIT revenue.</li> <li>Roughly half of these costs are fees to external advisers.</li> <li>As a percentage of annual turnover, CIT compliance costs fall from 0.48 per cent for the smallest businesses to 0.01 per cent for larger firms.</li> </ul>
Pope and Fayle Australia (1991) CIT	Mail survey 1,860 314 (17)	<ul style="list-style-type: none"> <li>Estimated total compliance costs are AU\$3,246 and represent around 23 per cent of companies' income tax revenue.</li> <li>Cash flow benefits are estimated at AU\$1,194 or around eight per cent of companies' tax revenue.</li> </ul>
Sandford and Hasseldine New Zealand (1992) Business income tax	Mail survey 9,541 2,594 (31)	<ul style="list-style-type: none"> <li>Combined compliance costs of sole proprietors, partnerships, public and private companies and trusts for business income is estimated at \$1,226 million and represent 19.6 per cent of a proxy revenue figure.</li> <li>The compliance costs as a percentage of annual turnover for sole proprietors and partnerships range from 8.33 per cent for the smallest businesses to 0.90 for the largest ones while those of private companies range from 13.15 per cent for the smallest companies to 0.03 per cent for the largest ones.</li> </ul>
Pope, Fayle and Chen Australia (1993b) WST	Mail survey 3,034 593 (24)	<ul style="list-style-type: none"> <li>Estimated total compliance costs of WST are \$179 million and represent 1.9 per cent of WST revenue.</li> <li>Estimated cash flow benefits for WST are negative \$22 million, or negative 0.2 per cent of WST revenue.</li> </ul>
Wallschutzky and Gibson Australia (1993) Business taxes	Case studies 12 12 (100)	<ul style="list-style-type: none"> <li>Most small businesses face problems with tax and sales tax is the most problematic tax.</li> <li>The importance and cost of these problems might have been overstated.</li> </ul>
Allers Netherlands (1994) Business taxes	Mail survey 5,252 1,053 (20)	<ul style="list-style-type: none"> <li>Aggregate compliance costs of the Dutch business sector are estimated at Gld 7.2 billion, representing 1.5 per cent of GDP, three per cent of the wage sum and four per cent of taxes and social security contributions.</li> <li>As a percentage of annual turnover, aggregate compliance costs fall from almost two per cent for small firms to only 0.006 per cent for very large firms.</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
Malmer Sweden (1995) Business taxes	Mail survey 936 608 (65)	<ul style="list-style-type: none"> <li>Total compliance costs were estimated at SEK 9,288 million. This represented 1.32 per cent of tax revenue.</li> <li>Compliance costs of VAT were higher than those of other taxes.</li> </ul>
Ariff, Loh and Talib Singapore (1995) CIT	Mail survey 200 47 (24)	<ul style="list-style-type: none"> <li>Overall total compliance cost per \$1,000 of turnover is \$0.42. The cost ranges from \$0.55 for the smallest companies to \$0.39 for the medium and \$0.19 for the largest.</li> <li>In terms of tax revenue, the overall compliance costs were 0.4 per cent.</li> </ul>
Slemrod and Blumenthal USA (1996) Business taxes	Mail survey 1,329 365 (28)	<ul style="list-style-type: none"> <li>Aggregate federal corporate tax compliance costs were estimated at just over US\$2 billion, representing roughly three per cent of the corporate tax revenue.</li> <li>Around 85 per cent of the costs were incurred internally (55 per cent and 30 per cent for personnel and non-personnel respectively) while 15 per cent was incurred due to outsourcing of tax help.</li> </ul>
KPMG UK (1996) CIT	Mail survey 1,200 266 (22)	<ul style="list-style-type: none"> <li>Tax compliance costs of listed companies were estimated at £265 million.</li> </ul>
Evans et al. Australia (1997) Business taxes	Mail survey 7,496 n/a (33)	<ul style="list-style-type: none"> <li>Social compliance costs for business taxpayers were estimated at AU\$8,874 million.</li> <li>Net compliance costs for the businesses were AU\$4,647 million, representing 9.4 per cent of tax revenue and one per cent of GDP.</li> </ul>
Erard Canada (1997) Business taxes	Mail survey 250 59 (24)	<ul style="list-style-type: none"> <li>Average compliance costs were estimated at C\$507,000.</li> <li>Combined federal-provincial income and capital tax compliance burden for the top 500 Canadian non-financial corporations in 1995 amounted to C\$250 million. This represented about five per cent of tax paid.</li> </ul>
Ariff, Ismail and Loh Singapore (1997) CIT	Mail survey 234 46 (20)	<ul style="list-style-type: none"> <li>The results show that, for every \$1,000 of turnover, tax compliance costs decreased with size from \$0.4 for the smallest group of companies to \$0.1 for the largest group of companies. The compliance costs of the smallest group of companies were 4.76 times higher than those of the largest group of companies.</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
Loh, Ariff, Ismail, Shamsher and Ali Malaysia (1997) CIT	Mail survey 300 48 (16)	<ul style="list-style-type: none"> <li>Estimated average compliance costs per RM1,000 sales turnover are RM0.25. The compliance costs per RM1,000 sales turnover decrease as company size increases. The cost ranges from RM0.36 for the smallest group of SMEs, RM0.17 for the medium group and RM0.11 for the largest group of SMEs.</li> </ul>
Plamondon and Zussman Canada 1998 Business taxes	Interviews 3,082 1,507 (49)	<ul style="list-style-type: none"> <li>Federal, provincial and territorial tax compliance costs are estimated to range between C\$2.3 billion and C\$4.5 billion, with a mid-point of C\$3.4 billion. These costs represent around 40 per cent of one per cent of GDP and 1.5 per cent of tax revenue.</li> </ul>
Chan, Cheung, Ariff and Loh Hong Kong (1999) CIT	Mail survey 496 58 (12)	<ul style="list-style-type: none"> <li>Estimated average compliance cost per \$1,000 of sales is \$1.26. As the sales increase, the compliance cost per \$1,000 of sales decrease, with \$5.41 for the smallest businesses, \$1.17 for the medium-sized firms and \$0.21 for the largest businesses.</li> <li>The average compliance cost per unit of sales value for the smallest businesses is 5 times that of the medium-sized firms and 26 times that of the largest businesses.</li> </ul>
Shekidele Tanzania (1999) Excise taxes	Hand-delivered questionnaires and interviews 14 9 (75)	<ul style="list-style-type: none"> <li>Compliance costs in developing countries are found to be relatively higher than those in developed countries.</li> <li>Total tax compliance costs are estimated at Tshs 10,828.4 million, equivalent to 3.05 per cent of annual sales and 15.57 per cent of excise duty revenue.</li> </ul>
Hanefah, Ariff and Kasipillai Malaysia (2001) CIT	Mail survey 300 67 (22)	<ul style="list-style-type: none"> <li>Average compliance costs are estimated at RM21,964 per SMEs.</li> <li>Tax compliance costs are four times more burdensome for SMEs when compared with those of exchange listed firms.</li> </ul>
Slemrod and Venkatesh US (2002) CIT	Mail survey a. Taxpayers: 2,499 b. Tax professionals 1,824 a. 225; b. 225 (a. 9; b. 12)	<ul style="list-style-type: none"> <li>Federal income tax compliance costs are estimated at around US\$22 billion, representing roughly 29 per cent of the tax revenue.</li> <li>Around three quarters of the costs are internal.</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
Bertolucci Brazil (2002) CIT	Mail and e-mail survey 211 25 (12)	<ul style="list-style-type: none"> <li>Compliance costs are estimated at around R\$7.2 billion. Roughly 80 per cent comprise internal costs.</li> </ul>
Chattopadhyay and Das-Gupta India (2002a) CIT	Mail survey 3,913 45 (1)	<ul style="list-style-type: none"> <li>Social compliance costs of corporate income tax are estimated to lie between 5.6 per cent and 14.5 per cent of corporate tax revenue.</li> <li>Major factors contributing to the compliance costs of companies are delays in payment of refunds and uncertainty associated with ambiguity and uncertainty of tax provisions as well as frequent changes to the tax code.</li> </ul>
Hansford, Hasseldine and Howorth UK (2003) VAT	Mail survey 4,796 1,202 (25)	<ul style="list-style-type: none"> <li>Firm size is the strongest determinant of VAT compliance costs.</li> <li>SMEs using computers for VAT record keeping incurred higher compliance costs than those that do not.</li> <li>The use of external advisers is positively related to higher compliance costs.</li> <li>Difficulty of determining VAT liability is a significant factor in compliance costs.</li> </ul>
Certified Public Accountant Australia (2003) Business taxes	Interviews a. 701; b. 105 a. 701; b. 105 (100)	<ul style="list-style-type: none"> <li>The time taken to complete the annual tax return and the BAS returns increases for about a third of the small businesses over the past two years.</li> <li>Around 25 per cent of small businesses have difficulty with income tax returns.</li> <li>About 62 per cent of small businesses resent the time taken to meet tax obligations while 41 per cent feel swamped by paperwork.</li> </ul>
Mors, Bucher, Kosonen, Cattoir, Koevoets and Vanborren European Union (2004) CIT and VAT	Electronic survey 2,141 700 (33)	<ul style="list-style-type: none"> <li>Weighted total compliance costs are estimated at €1,460,000 for large companies. This is equivalent to 1.9 per cent of taxes paid and 0.02 per cent of sales.</li> <li>Weighted total compliance costs are estimated at €203,000 for SMEs. This is equivalent to 30.9 per cent of taxes paid and 2.6 per cent of sales.</li> <li>Compliance costs are higher for companies with at least one subsidiary in another European Union (EU) Member State compared with those that do not have subsidiaries in another Member State.</li> </ul>
Klun Slovenia (2004) CIT	Mail and interview surveys 200 126 (64)	<ul style="list-style-type: none"> <li>Average compliance costs per taxpayer are estimated at SIT1,507.</li> <li>Compliance costs represent 4.2 per cent of tax revenue and one per cent of GDP in 2002.</li> </ul>
Blažić Croatia (2004) CIT	Interviews 1,200 339 (28)	<ul style="list-style-type: none"> <li>Aggregate tax compliance costs for all taxes are estimated at around HRK2 billion, representing one per cent of GDP.</li> <li>Compliance costs are higher for VAT as opposed to other taxes.</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
Kauser et al. UK (2005) CIT	Mail and e-mail surveys 8,000 131 n/a	<ul style="list-style-type: none"> <li>Aggregate compliance costs for SMEs are £608 million. More than 50 per cent represent costs incurred internally.</li> </ul>
Alexander, Bell and Knowles New Zealand (2005) Business taxes	Interviews and diaries 25 18 n/a	<ul style="list-style-type: none"> <li>Businesses spend an average of just over one hour per week on tax compliance.</li> <li>Total average tax compliance costs are estimated at NZ\$6,827 and 1.5 per cent of annual turnover.</li> </ul>
Colmar Brunton New Zealand (2005) Business taxes	Mail survey 3,486 1,659 (48)	<ul style="list-style-type: none"> <li>An average business spends roughly 77 hours per year on tax activities.</li> <li>Overall average tax compliance costs are estimated at NZ\$4,024 per business, with GST and income tax being the greatest contributors.</li> <li>Tax compliance costs as a percentage of annual turnover fall from 21 per cent for businesses in the lowest turnover category to 0.2 per cent for those in the highest turnover category.</li> </ul>
Small Business Project South Africa (2005) Regulation	In-depth interviews 1,794 1,794 (100)	<ul style="list-style-type: none"> <li>Taxes emerge as the most problematic set of regulations, with VAT being the most troublesome.</li> <li>Average recurring regulation compliance costs are estimated at R105,174 per firm, with tax compliance costs being the largest element (at ZAR27,298 or 26 per cent).</li> <li>Tax compliance costs as a proportion of turnover range from 34.7 per cent for the firms in the smallest annual turnover band to 11.5 per cent for businesses in the highest annual turnover band.</li> </ul>
Jrbashyan and Harutyunyan Armenia (2006) Business taxes	Face-to-face interviews 1,300 328 (25)	<ul style="list-style-type: none"> <li>Overall tax compliance costs are estimated at AMD13,538 million or 1.1 per cent of GDP for the year 2003.</li> <li>As a proportion of total tax revenue, tax compliance costs are around 11.5 per cent.</li> </ul>
Foreign Investment Advisory Service South Africa (2007) Business taxes	Web Survey 21,777 3,429 (16)	<ul style="list-style-type: none"> <li>The tax practitioners charge small businesses an annual average fee of ZAR7,030 to ensure that the tax returns for income tax, provisional tax, VAT and employees' tax are prepared, completed and submitted as required by SARS.</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
DeLuca et al. US (2007) CIT	Mail and telephone surveys 17,932 6,740 38	<ul style="list-style-type: none"> <li>▪ Average tax compliance time is estimated as a range between 236 and 255 hours.</li> <li>▪ Average tax compliance costs are estimated to range between US\$2,068 and 2,266</li> </ul>
Vaillancourt, Clemens and Palacios Canada (2008) Business taxes		<ul style="list-style-type: none"> <li>▪ Business tax compliance costs are estimated at C\$13 billion in 2005, or one per cent of GDP.</li> <li>▪ Tax compliance costs calculated by a top-down approach are roughly C\$19 billion in 2005.</li> </ul>
Abdul-Jabbar and Pope Malaysia (2008a) CIT	Mail survey	<ul style="list-style-type: none"> <li>▪ Average compliance costs are around RM9,300 per company. Compliance costs as a percentage of business size decrease from 6.5 per cent for the smallest category of SMEs to 0.04 per cent for the largest category of SMEs.</li> <li>▪ Findings indicate a 58 per cent decrease in the compliance costs when compared with earlier Malaysian studies.</li> </ul>
CFIB Canada (2008) Business taxes	Mail and web surveys n/a 8,271 n/a	<ul style="list-style-type: none"> <li>▪ Total compliance costs are estimated at C\$12.6 billion or 2.7 per cent of tax revenue.</li> <li>▪ Roughly 90 per cent of total compliance costs are incurred by SMEs.</li> </ul>
International Finance Corporation Ukraine (2009b) Business taxes	Face-to-face Interviews a. 2,082; b. 1,004 n/a a. 26; b. 43	<ul style="list-style-type: none"> <li>▪ The overall costs of tax compliance for all active private companies are estimated at UAH7.4 billion, which constitute about 1 per cent of Ukraine's 2007 GDP.</li> <li>▪ Total annual tax compliance costs of all active private companies and sole proprietors are estimated at UAH7.8 billion.</li> </ul>
Inland Revenue New Zealand (2010) Business taxes	Mail survey 5,000 1,728 (35)	<ul style="list-style-type: none"> <li>▪ Overall mean tax compliance costs are estimated at NZ\$5,557.</li> <li>▪ These costs increase with the size of business from NZ\$4,138 for businesses with nil employees, to NZ\$9,447. As a percentage of business turnover, tax compliance costs reduce from 13 per cent to 0.3 per cent.</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
International Finance Corporation Uzbekistan (2010b) Business taxes	Interviews a. 2,746; b. n/a a. 1,280; b. 143 a. 47; b. 83	<ul style="list-style-type: none"> <li>Tax compliance and reporting costs of legal entities and individual entrepreneurs are estimated at UZS275.5 billion (208 million) in 2008, and equivalent of 0.75 per cent of GDP.</li> </ul>
International Finance Corporation Armenia (2011b) Business taxes	Face-to-face interviews 1,000 n/a (12)	<ul style="list-style-type: none"> <li>Overall tax compliance costs, estimated at 10.24 billion (USD 28.2 million), represent 0.3 per cent of the country's GDP in 2009.</li> <li>Businesses spend 2.5 staff months per year to comply with tax procedures.</li> </ul>
Schoonjans et al. Belgium (2011) Business taxes	Web survey 10,300 184 (1.8)	<ul style="list-style-type: none"> <li>Average compliance costs per SME are estimated at €26,231.</li> <li>Total tax compliance costs are equivalent to around two per cent of total assets and seven per cent of gross value added.</li> </ul>
Hansford and Hasseldine UK (2012) Business taxes	Email survey 9,380 41 n/a	<ul style="list-style-type: none"> <li>On average, 434 hours are spent on tax compliance activities. More than 50 per cent of this time is spent on VAT work.</li> <li>Total internal tax compliance costs are estimated at £14,671.</li> <li>External tax compliance costs are estimated at £5,485.</li> </ul>
Lignier and Evans Australia (2012) Business taxes	Electronic survey 3,500 159 4.5	<ul style="list-style-type: none"> <li>The average gross cost of complying with all taxes is estimated at A\$32,389. This figure comprises internal compliance costs estimated at A\$20,127 per business and external tax services being A\$12,262 per business.</li> <li>Compliance with GST accounts for around 50 per cent of internal compliance costs.</li> </ul>
Smulders et al. South Africa (2012) Business taxes	Electronic survey 88,057 5,865 (7)	<ul style="list-style-type: none"> <li>Small businesses spend an average of 255 hours on tax compliance work.</li> <li>Gross internal tax compliance costs are estimated at around R53,357.</li> <li>External tax compliance costs are estimated to be R9,982.</li> <li>The most time-consuming activity for all taxes is recording information. This activity represents 52 per cent of total internal time.</li> </ul>
International Finance Corporation Nepal (2012b) Business taxes	Face-to-face interviews 1,000 n/a	<ul style="list-style-type: none"> <li>Overall average tax compliance costs are estimated at Nepalese rupees 9,328.</li> <li>Tax compliance costs, as a proportion of annual turnover, represent 3.43 per cent for businesses in the lower turnover band and 0.10 per cent for those in the highest turnover band.</li> <li>The cost of outsourcing VAT related work is higher than other taxes (Nepalese rupees 9,378).</li> </ul>

<i>Author(s) Country (Year) Tax</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
International Finance Corporation Nepal (2012b) Business taxes	Face-to-face interviews 1,000 n/a	<ul style="list-style-type: none"> <li>▪ Overall average tax compliance costs are estimated at Nepalese rupees 9,328.</li> <li>▪ Tax compliance costs, as a proportion of annual turnover, represent 3.43 per cent for businesses in the lower turnover band and 0.10 per cent for those in the highest turnover band.</li> <li>▪ The cost of outsourcing VAT related work is higher than other taxes (Nepalese rupees 9,378).</li> </ul>
Susila and Pope Indonesia (2012) Business taxes	Mail survey 3,000 246 (8)	<ul style="list-style-type: none"> <li>▪ Gross tax compliance costs are estimated around IDR12.3 trillion, representing 3.16 per cent of tax revenue and 0.19 per cent of GDP in 2010.</li> <li>▪ Cash flow benefits and tax deductibility benefits each represent about a quarter of the gross compliance costs.</li> </ul>
Gupta and Sawyer New Zealand (2014) Business taxes	Online survey 4,400 118 (2.68)	<ul style="list-style-type: none"> <li>▪ Gross cost of complying with business taxes is estimated at NZ\$31,096.</li> <li>▪ Mean internal tax compliance costs are estimated at NZ\$22,859.</li> <li>▪ The study confirms the regressive nature of tax compliance costs and reports that of all taxes surveyed, GST is the most time consuming and requires the greatest internal compliance cost.</li> </ul>

a Some studies also investigate VAT compliance costs. The findings pertaining to VAT compliance costs are contained in Appendix E and are not repeated here.

b The IFC also conducted tax compliance costs studies, which have not been published, in other countries such as Vietnam (2007), Yemen (2008), Peru (2009), Kenya (2010), Georgia (2010) and Lao PDR (2011).

**APPENDIX E**

**SUMMARY OF VALUE ADDED TAX COMPLIANCE COSTS  
STUDIES SINCE 1980**

## Summary of Value Added Tax<sup>a</sup> Compliance Costs Studies since 1980<sup>b</sup>

	<i>Author(s) Country (Year)</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
<b>1</b>	Sandford et al. UK (1981)	Postal survey 9,094 2,799 (31)	<ul style="list-style-type: none"> <li>▪ Total measurable VAT compliance costs are estimated at 9.26 per cent of VAT revenue.</li> <li>▪ The VAT compliance costs as a proportion of turnover are 1.17 per cent for small businesses with annual turnover below £50,000 and 0.04 per cent for those with annual turnover above £1 million.</li> </ul>
<b>2</b>	Sandford et al. UK (1989)	Postal survey 3,000 680 (24)	<ul style="list-style-type: none"> <li>▪ The VAT compliance costs are estimated at £791 million, representing 3.69 per cent VAT revenue.</li> <li>▪ Value Added Tax compliance costs as a percentage of taxable turnover range from 1.48 per cent for the smallest firms to 0.05 per cent for the large ones.</li> </ul>
<b>3</b>	Bannock and Albach Germany and UK (1989) <sup>c</sup>	Postal survey 800 and 600 197 and 262 (25) and (44)	<ul style="list-style-type: none"> <li>▪ The GST compliance costs of small traders are found to be significantly higher in UK than in Germany.</li> <li>▪ Estimated GST compliance costs are regressive in both countries.</li> </ul>
<b>4</b>	CFIB Canada (1991)	Postal survey n/a 25,362 n/a	<ul style="list-style-type: none"> <li>▪ Recurrent compliance costs are estimated at CAN6.6 billion, representing around 40 per cent of GST revenue.</li> <li>▪ The GST implementation costs are estimated at CAN\$3 billion, of which the larger proportion is incurred by the small businesses.</li> </ul>
<b>5</b>	Sandford and Hasseldine New Zealand (1992)	Postal survey 9,541 2,954 (31)	<ul style="list-style-type: none"> <li>▪ Estimated GST compliance costs are found to be regressive.</li> <li>▪ The GST compliance costs are estimated at 7.3 per cent of GST net revenue.</li> <li>▪ As a proportion of GDP, GST compliance costs are equivalent to 2.5 per cent.</li> </ul>
<b>6</b>	Plamondon and Associates Canada (1993)	Interviews 200 200 (100)	<ul style="list-style-type: none"> <li>▪ The GST compliance costs are estimated at 0.5 per cent of business revenue.</li> <li>▪ Taxpayers who use computers in their accounting routines have lower compliance costs than those who use manual accounting systems.</li> </ul>
<b>7</b>	Allers Netherlands (1994)	Postal survey 5,252 1,053 (20)	<ul style="list-style-type: none"> <li>▪ The VAT compliance costs are estimated at 6 per cent of the tax revenue.</li> <li>▪ The VAT is reported to be the second most expensive tax (after payroll taxes) to administer, constituting 29 per cent of the aggregate Dutch tax compliance costs.</li> </ul>

	<i>Author(s) Country (Year)</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
<b>8</b>	National Audit Office UK (1994)	Questionnaire n/a n/a n/a	<ul style="list-style-type: none"> <li>▪ The VAT compliance costs are estimated at £1.6 billion.</li> <li>▪ Cash flow benefits and managerial benefits are estimated at £ 600 million and £150 million respectively.</li> </ul>
<b>9</b>	Malmer Sweden (1995)	Postal survey 936 608 (65)	<ul style="list-style-type: none"> <li>▪ As a percentage of VAT revenue, VAT compliance costs are estimated at 2.5 per cent.</li> <li>▪ Two thirds of the VAT compliance costs are incurred by businesses that employ less than 10 people.</li> </ul>
<b>10</b>	Pillai Mauritius (2000)	Postal and Face-to-face Surveys 82 n/a (27)	<ul style="list-style-type: none"> <li>▪ As a proportion of annual turnover, recurrent VAT compliance costs for small hotels are ten times those of large businesses.</li> <li>▪ Respectively, the VAT compliance costs of small and large hotels are 0.40 per cent and 0.04 per cent.</li> </ul>
<b>11</b>	Hasseldine and Hansford UK (2002)	Postal survey 6,232 1,449 (23)	<ul style="list-style-type: none"> <li>▪ Increased VAT compliance costs are associated with increased turnover, newly registered businesses, increased complexity and higher perceived psychological costs.</li> <li>▪ Businesses that used computerised record keeping systems incur higher compliance costs than those that do not use computers for record keeping.</li> </ul>
<b>12</b>	Rametse and Pope Australia (2002)	Postal survey 3,199 868 (27)	<ul style="list-style-type: none"> <li>▪ Mean GST start-up compliance costs, estimated at A\$7,626, show substantial economies of scale.</li> <li>▪ Businesses with an annual turnover of \$50,000–\$99,999 incur costs nearly five per cent of their annual turnover, while those with an annual turnover of \$100,000–\$499,999 incur under two per cent in setting up for the GST.</li> </ul>
<b>13</b>	Hansford et al. UK (2003)	Postal survey 4,796 1,202 (25)	<ul style="list-style-type: none"> <li>▪ Firm size is the strongest determinant of VAT compliance costs.</li> <li>▪ SMEs using computers for VAT record keeping incur higher compliance costs than those that do not.</li> <li>▪ Use of external advisers is positively related to higher compliance costs.</li> </ul>
<b>14</b>	Klun Slovenia (2003)	Postal and interview surveys 750 n/a (11)	<ul style="list-style-type: none"> <li>▪ Aggregate VAT compliance costs are estimated at 25 per cent and 2.5 per cent of VAT revenue and GDP, respectively, when weighted by annual turnover.</li> <li>▪ Compliance costs are found to be high and changes in taxes present an additional tax burden on taxpayers.</li> </ul>

<i>Author(s) Country (Year)</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
<b>15</b> Mors, Bucher, Kosonen, Cattoir, Koevoets and Vanborren European Union (2004)	Electronic survey 2,141 700 (33)	<ul style="list-style-type: none"> <li>▪ The VAT compliance costs increase with company size as well as the degree of cross-border activity.</li> <li>▪ Compliance costs are high for companies that undertake activities in other EU Member States without having a permanent establishment there and companies that incur VAT on inputs in other EU Member States.</li> </ul>
<b>16</b> Upstart Business Strategies South Africa (2004)	Interviews n/a 50 n/a	<ul style="list-style-type: none"> <li>▪ Average record keeping and VAT return filing costs are estimated at ZAR6,027.</li> <li>▪ Businesses that outsource record keeping and VAT return filing services incur the highest costs at R9,051 as opposed to R1,476 for those that use tax software for record keeping and VAT filing.</li> </ul>
<b>17</b> Vitek, Pavel and Krbova Czech Republic (2004)	Interviews 27 27 (100)	<ul style="list-style-type: none"> <li>▪ Total VAT compliance costs associated with external supply of tax counselling are estimated at CZK167,900, while average costs are CZK11,993 per taxpayer.</li> <li>▪ Total external VAT compliance costs represent around 1.9 per cent of VAT revenue.</li> </ul>
<b>18</b> Blažić Croatia (2004)	Interviews 1,200 339 (28)	<ul style="list-style-type: none"> <li>▪ Compliance costs of VAT are estimated at HRK968.13 million.</li> <li>▪ Out of all the taxes surveyed, VAT is the most costly.</li> <li>▪ The VAT compliance costs are around 4.5 per cent of VAT revenue.</li> </ul>
<b>19</b> Colmar Brunton New Zealand (2005)	Postal survey 3,486 1,659 (48)	<ul style="list-style-type: none"> <li>▪ Average annual time spent on GST activities is around 44.2 hours and valued at \$1,852.</li> <li>▪ Mean GST compliance costs as a proportion of annual turnover range from 0.00 per cent for businesses with an annual turnover above \$1.3 million to 15.1 per cent for businesses with an annual turnover up to \$19,999.</li> </ul>
<b>20</b> Glover and Tran-Nam Australia (2005)	Case Studies 53 31 (59)	<ul style="list-style-type: none"> <li>▪ Gross and net recurrent GST compliance costs are estimated at A\$2,481 and A\$1,244, respectively.</li> <li>▪ Small business taxpayers appear to suffer some psychological costs over and above the monetary costs.</li> </ul>
<b>21</b> Small Business Project South Africa (2005)	In-depth interviews 1,794 1,794 (100)	<ul style="list-style-type: none"> <li>▪ The VAT is reported to be the single most troublesome regulation for all firms except the largest.</li> <li>▪ Value Added Tax is cited by 19 per cent of the respondents as the most time-consuming and problematic regulation.</li> </ul>

<i>Author(s) Country (Year)</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
<b>22</b> Tax Board Sweden (2006)	Postal and telephone surveys 3,965 and 1,463 1,699 and 378 (43) and (57)	<ul style="list-style-type: none"> <li>▪ The VAT compliance costs, estimated at SEK 6.3 thousand million, represent three per cent of VAT revenue.</li> <li>▪ Businesses with 0–4 employees incur 73 per cent of total compliance costs, amounting to SEK 4.5 thousand million, while those with more than 500 employees carry only four per cent of total compliance costs.</li> </ul>
<b>23</b> Foreign Investment Advisory Service South Africa (2007)	Web survey 21,777 3,429 (16)	<ul style="list-style-type: none"> <li>▪ Average VAT outsourcing costs per business are estimated at ZAR2,975.</li> <li>▪ Registering and preparing, completing and submitting VAT returns take the longest and cost the most. This could potentially be one of the reasons why small businesses decide not to register for VAT.</li> </ul>
<b>24</b> International Finance Corporation Ukraine (2009b) <sup>d</sup>	Interviews 2,082 and 1,004 n/a (26) and (43)	<ul style="list-style-type: none"> <li>▪ The VAT represents the largest share (39 per cent) of total tax compliance costs at UAH1,900.</li> <li>▪ Companies spend on average 650 person-hours on VAT functions in 2007.</li> <li>▪ Preparing VAT invoices is found to be the most time consuming activity, taking 313 hours per year on average.</li> </ul>
<b>25</b> Yesegat Ethiopia (2009)	Interviews 269 193 (72)	<ul style="list-style-type: none"> <li>▪ Recurrent VAT compliance costs are estimated at 2.04 per cent and 0.13 per cent of VAT revenue and GDP respectively.</li> <li>▪ The estimates of VAT operating costs range between 2.7 and 2.84 per cent of VAT revenues.</li> </ul>
<b>26</b> Inland Revenue New Zealand (2010) Business taxes	Mail survey 5,000 1,728 (35)	<ul style="list-style-type: none"> <li>▪ Goods and Services Tax is found to be most time consuming of all taxes surveyed.</li> <li>▪ Mean GST compliance costs are estimated to be \$2,185.</li> </ul>
<b>27</b> International Finance Corporation Uzbekistan (2010b)	Interviews 2,746 and - 1,280 and 143 (47) and (83)	<ul style="list-style-type: none"> <li>▪ Only 5.5 per cent of legal entities pay VAT on produced goods, however, 61.7 per cent of legal entities issued VAT invoices in 2008.</li> <li>▪ The average time spent on preparing VAT invoices amounts to 94 man-hours per year, representing a burden of around \$21 million in terms of labour cost for all legal entities in Uzbekistan.</li> </ul>
<b>28</b> International Finance Corporation Armenia (2011b)	Interviews 750 and 250 n/a (12)	<ul style="list-style-type: none"> <li>▪ The VAT is the most time consuming of all taxes paid in 2009. Companies and individual entrepreneurs spend an average of 53.1 hours and 13.6 hours, respectively, on VAT compliance. Large companies spend on average 108 hours searching, studying and analysing VAT legislation in 2009.</li> </ul>

	<i>Author(s) Country (Year)</i>	<i>Methodology Sample Size Respondents Response rate (%)</i>	<i>Key Findings</i>
<b>29</b>	Schoonjans et al. Belgium (2011) Business taxes	Web survey 10,300 184 (1.8)	<ul style="list-style-type: none"> <li>Compliance costs of VAT for SMEs constitute around 50 per cent of the total compliance costs.</li> </ul>
<b>30</b>	Smulders et al. South Africa (2012)	Electronic survey 88,057 5,865 (6.7)	<ul style="list-style-type: none"> <li>Mean internal VAT compliance costs are estimated at R7,415 (trimmed mean estimated at R2,828). These costs represent 38 per cent of internal time costs.</li> <li>Out of all taxes surveyed, VAT is the most time consuming tax for small businesses.</li> </ul>
<b>31</b>	Hansford and Hasseldine UK (2012)	Email survey 9,380 41 n/a	<ul style="list-style-type: none"> <li>The average time spent on VAT compliance is estimated to be 219. This equates to more than half of the in-house time spent on tax compliance.</li> <li>On average, VAT compliance costs are estimated at £6,062 and represent over 40 per cent of the internal tax compliance costs.</li> </ul>
<b>32</b>	Lignier and Evans Australia (2012)	Electronic survey 3,500 159 (4.5)	<ul style="list-style-type: none"> <li>The internal VAT compliance time is estimated at 287 hours, equivalent to AU\$11,950.</li> <li>The VAT compliance costs represent about half of the total internal costs.</li> </ul>
<b>33</b>	International Finance Corporation Nepal (2012b)	Face-to-face interviews 1,000 n/a n/a	<ul style="list-style-type: none"> <li>Of the three major types of taxes, compliance cost is highest for VAT at Nepalese rupees 14,756.</li> <li>Partial outsourcing is highest for tasks related to VAT (51.3 per cent).</li> <li>Complete outsourcing for tax accounting is highest for VAT (19.7 per cent).</li> </ul>
<b>34</b>	Susila and Pope Indonesia (2012)	Postal survey 3,000 246 (8.2)	<ul style="list-style-type: none"> <li>As a percentage of annual turnover, VAT compliance costs range from 4.11 per cent for the businesses in the lowest turnover category to 0.03 per cent for businesses in the upper turnover category.</li> <li>Out of all the taxes investigated, VAT requires the most resources.</li> </ul>
<b>35</b>	Gupta and Sawyer New Zealand (2014)	Online survey 4,400 118 (2.68)	<ul style="list-style-type: none"> <li>Compliance with GST requirements is more time consuming (in terms of hours) than other taxes.</li> <li>Mean GST compliance costs are estimated at NZ\$13,485.</li> </ul>

- a Value Added Tax is known as the Goods and Services Tax (GST) in some countries (e.g., Australia, Canada and New Zealand). These terms are used interchangeably in this study.
- b This summary includes studies that also focus on other taxes over and above Value Added Tax. The results for other taxes are not included here.
- c The study by Bannock and Albach (1989) compares the VAT surveys of two countries, Germany and UK. The sample and response rate for Germany and UK are 800 and 25 per cent and 600 and 44 per cent, respectively.
- d The IFC also conducted tax compliance costs studies, which have not been published, in other countries such as Vietnam (2007), Yemen (2008), Peru (2009), Kenya (2010), Georgia (2010) and Lao PDR (2011).

## **APPENDIX F<sup>127</sup>**

### **MEAN INTERNAL VALUE ADDED TAX COMPLIANCE COSTS BY ANNUAL TURNOVER**

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<sup>127</sup> Appendices F, G and H were not included in the main body of the thesis because of the very low response rates contained in these appendices.

## Appendix F

The distribution of the mean internal VAT compliance costs for businesses in Botswana for the financial year 2009/10, displayed in Table F.1, confirm the regressive pattern of tax compliance costs usually reported in tax compliance costs studies. Value Added Tax compliance costs as a percentage of turnover for small businesses with a turnover below P500,000 are 2.65 per cent, followed by 0.70 per cent for those with a turnover range between P500,000 and P749,999. As for the businesses with turnovers ranging from P750,000 to P999,999, the VAT compliance costs as a percentage of turnover is 0.62 per cent, while that of the businesses in the P1 million to P5 million category is 0.20 per cent. The VAT compliance costs, as a percentage of turnover for businesses with turnovers exceeding P5 million, is 0.02 per cent. When analysed in terms of the smallest versus the largest businesses, the mean internal VAT compliance costs as a percentage of turnover for the small businesses are 133 times those of large businesses with a turnover exceeding P5 million.

**Table F.1: Mean Internal Costs as a Percentage of Turnover, 2009/10**

	N	Mean (P)	Median (P)	Percentage
0–P499,999	49	6,624	5,760	2.65
P500,000–P749,999	18	4,364	3,262	0.70
P750,000–P999,999	16	5,467	3,556	0.62
P1 million–P5 million	28	5,904	4,612	0.20
Over P5 million	17	7,907	7,364	0.02
<b>Overall</b>	<b>128</b>	<b>6,174</b>	<b>4,920</b>	

The distribution of the average internal VAT compliance costs as a percentage of turnover for the financial year 2010/11 is presented in Table F.2. A similar picture of the regressivity of VAT compliance costs is demonstrated. The VAT compliance costs as a percentage of turnover is as follows: 2.50 for businesses with turnovers below P500,000; 0.75 for firms with turnovers ranging between P500,000 and P749,999; 0.49 for enterprises with P750,000 to P999,999 turnover; 0.26 for those with P1 million to P5 million turnover; and 0.02 for businesses with turnovers exceeding P5 million. When large businesses are compared with the small ones, the

mean internal VAT compliance costs of VAT for small businesses are 125 times those of large businesses.

**Table F.2: Mean Internal Costs as a Percentage of Turnover, 2010/11**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage</b>
0–P499,999	9	6,253	4,165	2.50
P500,000–P749,999	2	4,696	4,696	0.75
P750,000–P999,999	4	4,303	4,017	0.49
P1 million–P5 million	9	7,911	7,200	0.26
Over P5 million	21	6,720	5,820	0.02
<b><i>Overall</i></b>	<b>45</b>	<b>6,560</b>	<b>5,820</b>	

## **APPENDIX G**

### **DISTRIBUTION OF EXTERNAL COSTS**

## Appendix G

For the financial year 2009/10, the large businesses did not employ the services of external tax advisers, as shown in Table G.1. This is not surprising as large businesses often have established accounting departments that handle all tax matters. However, in the financial year 2010/11, four large businesses report using the services of professional tax advisers. It is assumed that these businesses sought the expertise of external tax advisers in order to update their systems/software to accommodate the 2010 VAT rate increase.

**Table G.1: Mean External Value Added Tax Compliance Costs by Turnover**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
0–P499,999	17	6,113	6,000	1	18,060	18,060
P500,000–P749,999	4	4,216	4,000	n/a	n/a	n/a
P750,000–P999,999	4	6,125	7,000	n/a	n/a	n/a
P1 million–P5 million	3	3,311	1,833	3	6,157	6,000
Over P5 million	n/a	n/a	n/a	4	7,083	5,490
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

Table G.2 shows that, for the year 2009/10, 89 per cent of the businesses that outsourced VAT compliance assistance are small businesses, with only 11 per cent being for the medium-sized category. As for the year 2010/11, the majority (50 per cent) of those who use external tax professionals are large businesses, followed by medium-sized businesses at 38 per cent.

**Table G.2: Mean External Value Added Tax Compliance Costs by Business Size**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Small	25	5,811	6,000	1	18,060	18,060
Medium	3	3,311	1,833	3	6,157	6,000
Large	n/a	n/a	n/a	4	7,083	5,490
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

The analysis of the mean external VAT compliance costs by the manner in which BURS classifies VAT registered businesses, as outlined in Table G.3, shows that only those businesses that belong to groups A and B use professional tax advisers for VAT work in both years. Not surprisingly, the large businesses belonging to the group C category (businesses with a turnover exceeding P12 million) do not outsource professional tax help for VAT purposes during the two years under consideration.

**Table G.3: Mean External Value Added Tax Compliance Costs by Botswana Unified Revenue Service Classification**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Groups A and B	28	5,543	6,000	8	8,108	8,108
Group C	n/a	n/a	n/a	n/a	n/a	n/a
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

The distribution of the external VAT compliance costs as a percentage of turnover for the businesses in Botswana for the financial year 2009/10, as displayed in Table G.4, shows some economies of scale. External VAT compliance costs as a percentage of turnover for small businesses with a turnover below P500,000, are 2.45 per cent, followed by 0.67 per cent for those with a turnover range between P500,000 and P749,999. With regard to the businesses with turnovers ranging from P750,000 to P999,999, their VAT compliance costs as a percentage of turnover is 0.7 per cent, while that of the businesses in the P1 million to P5 million category is 0.11 per cent. The businesses with turnovers exceeding P5 million do not use the services of external tax advisers. The findings reveal that the external VAT compliance costs as a percentage of turnover for the small businesses are 22 times those of businesses with a turnover in the category of P1 million to P5 million.

**Table G.4: Mean External Value Added Tax Compliance Costs as a Percentage of Turnover, 2009/10**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage</b>
0–P499,999	17	6,113	6,000	2.45
P500,000–P749,999	4	4,216	4,000	0.67
P750,000–P999,999	4	6,125	7,000	0.7
P1 million–P5 million	3	3,311	1,833	0.11
Over P5 million	n/a	n/a	n/a	0
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	

External VAT compliance costs as a percentage of turnover for the financial year 2010/11 are displayed in Table G.5. The businesses in two turnover categories, P500,000 to P749,999 and P750,000 to P999,999, answer ‘No’ to the question that asks whether they use a tax adviser for VAT purposes or not. The external VAT compliance costs of medium-sized businesses as a percentage of turnover are 11 times those of large businesses.

**Table G.5: Mean External Value Added Tax Compliance Costs as a Percentage of Turnover, 2010/11**

	<b>N</b>	<b>Mean (P)</b>	<b>Median (P)</b>	<b>Percentage</b>
0–P499,999	1	18,060	18,060	7.22
P500,000–P749,999	n/a	n/a	n/a	0
P750,000–P999,999	n/a	n/a	n/a	0
P1 million–P5 million	3	6,157	6,000	0.21
Over P5 million	4	7,083	5,490	0.02
<b>Overall</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>	

The mean external VAT compliance costs by legal structure are presented in Table G.6. The sole traders report the lowest estimates of external VAT compliance costs in the financial year 2009/10. As for the year 2010/11, the firms in the category of ‘company’ are the only ones that report using the services of professional tax advisers for VAT work. When compared with the estimates provided by their 2009/10 counterparts, the companies in 2010/11 incur the highest external VAT compliance costs. However, the medians of the companies for the two years do not differ largely. The overall averages of the two years show a significant difference in the external VAT compliance costs. The discrepancy in these costs could be

attributed to the increases in the wage rates of tax advisers over a twelve month period.

**Table G.6: Mean External Value Added Tax Compliance Costs by Legal Structure**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Sole trader	6	4,664	3,000	n/a	n/a	n/a
Company	21	5,916	6,000	8	8,108	6,750
Partnership	1	3,000	3,000	n/a	n/a	n/a
<b>Overall<sup>a</sup></b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

a The 'non-profit organisation' respondent indicated that they did not use the services of an external tax adviser for the year 2009/10.

With regard to the operation length, the businesses operating for less than two years in 2009/10 incur the highest external VAT compliance costs, followed by those operating for over five years, as shown in Table G.7. In the years 2010/11, no business in the '2–5 years' category use professional tax advisers for VAT. The 2010/11 average of the 'over 5 years' category is higher when compared with its 2009/10 counterpart.

**Table G.7: Mean External Value Added Tax Compliance Costs by Operation Length**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Under 2 years	7	6,352	6,000	1	18,060	18,060
2–5 years	11	5,038	5,000	n/a	n/a	n/a
Over 5 years	10	5,533	6,000	7	6,686	6,000
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

When analysed by the main business activity, the results indicate that, for the financial year 2009/10, the businesses in the retail trade/restaurants categories incur higher external adviser fees than those in the business/financial services sectors, as presented in Table G.8. In 2010/11, no business in the manufacturing/farming sectors used external tax advisers for VAT work. A comparison of the two financial years

reveals a small discrepancy in the average external cost of the businesses in the business/financial services sectors.

**Table G.8: Mean External Value Added Tax Compliance Costs by Main Business Activity**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
Construction/Property	2	4,500	4,500	1	18,060	18,060
Business/Financial Services	13	5,231	5,000	5	5,664	6,000
Retail Trade/ Restaurants	11	5,638	6,000	2	9,240	9,240
Manufacturing/Farming	2	8,100	8,100	n/a	n/a	n/a
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

The mean external VAT compliance costs, analysed by the number of years the business has been registered for VAT, are outlined in Table G.9. The results show that, in the financial year 2009/10, the businesses registered for VAT for a period not exceeding five years incur higher external compliance costs than those registered for over five years. The findings further indicate a difference of P1,612 in the external tax adviser fees paid by the businesses in the over five years categories of the two years under investigation.

**Table G.9: Mean External Value Added Tax Compliance Costs by VAT Registration Length**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
0–5 years	17	5,847	6,000	1	18,060	18,060
Over 5 years	11	5,074	6,000	7	6,686	6,000
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

Table G.10 examines the mean external VAT compliance costs by the place of operation. For the year 2009/10, the businesses in the city incur the highest mean professional tax adviser fees, with those in the villages having the lowest external costs. A comparison of the two years indicates that the businesses spend more money

on tax professionals' fees in 2010/11 when compared with their 2009/10 counterparts.

**Table G.10: Mean External Value Added Tax Compliance Costs by Place of Operation**

	2009/10			2010/11		
	N	Mean (P)	Median (P)	N	Mean (P)	Median (P)
City	20	5,944	6,000	7	7,123	6,000
Town	2	5,500	5,500	1	15,000	15,000
Village <sup>a</sup>	6	4,222	3,000	n/a	n/a	n/a
<b>Overall</b>	<b>28</b>	<b>5,543</b>	<b>6,000</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

<sup>a</sup> Due to financial and time constraints, the survey for the year 2010/11 was restricted to the City of Gaborone and neighbouring towns.

With regard to the number of employees in the business, the mean external VAT compliance costs are high for businesses that have employees ranging between five and 25 persons, as presented in Table G.11. This analysis uses a very small number of responses and the interpretation, thereof, requires extreme caution.

**Table G.11: Mean External Value Added Tax Compliance Costs by Number of Employees**

	2010/11		
	N	Mean (P)	Median (P)
Less than 5	1	4,970	4,970
5–25	5	10,812	7,500
26–100	1	3,480	3,480
Over 100	1	2,352	2,352
<b>Overall</b>	<b>8</b>	<b>8,108</b>	<b>6,750</b>

## **APPENDIX H**

### **MEAN GROSS VALUE ADDED TAX COMPLIANCE COSTS AS A PERCENTAGE OF ANNUAL TURNOVER**

## Appendix H

The size of the firm as indicated by the annual turnover is used to analyse the distribution of the mean gross compliance costs for the two years under investigation, as shown in Tables H.1 and H.2 below. The findings of the VAT compliance costs for businesses in Botswana display a severe regressive pattern. Value Added Tax compliance costs, as a percentage of turnover for the small businesses with a turnover below P500,000, are 159 times those of large businesses with a turnover exceeding P5 million for the year 2009/10. As for the year 2010/11, the VAT compliance costs as a percentage of turnover for small businesses with a turnover under P500,000 are 165 times those of large businesses with a turnover exceeding P5 million.

**Table H.1: Mean Gross Value Added Tax Compliance Costs by Turnover, 2009/10<sup>a</sup>**

	N	Mean (P)	Median (P)	Percentage
0–P499,999	54	7,935	6,335	3.17
P500,000–P749,999	20	4,771	3,262	0.76
P750,000–P999,999	17	6,586	4,123	0.75
P1 million–P5 million	29	6,043	3,974	0.20
Over P5 million	17	7,907	7,364	0.02
<b>Overall<sup>b</sup></b>	<b>137</b>	<b>6,902</b>	<b>5,760</b>	

a Percentages were calculated using the average of each turnover category. The respondent-given upper turnover for the 'over P5M' category is P60M.

b The 2010 exchange rate of the Botswana Pula to the American Dollar is 0.155.

**Table H.2: Mean Gross Value Added Tax Compliance Costs by Turnover, 2010/11<sup>a</sup>**

	2010/11			
	N	Mean (P)	Median (P)	Percentage
0 – P499,999	9	8,260	6,875	3.30
P500,000 – P749,999	2	4,696	4,696	0.75
P750,000 – P999,999	4	4,303	4,017	0.49
P1 million – P5 million	12	7,473	7,005	0.25
Over P5 million	23	7,367	5,820	0.02
<b>Overall<sup>b</sup></b>	<b>50</b>	<b>7,201</b>	<b>6,225</b>	

a Percentages were calculated using the average of each turnover category. The respondent-given upper turnover for the 'over P5M' category is P60M.

b The 2011 exchange rate of the Botswana Pula to the American Dollar is 0.133.