

VAT COMPLIANCE COST FOR SMEs IN ALGERIA

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VAT COMPLIANCE COST FOR SMEs IN ALGERIA

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(International Accounting).**

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ABSTRACT

Every organization tries to maximize its earnings by stringent cost control measures; however, only some costs are controllable, i.e., material, labor, etc., while others are not, i.e., taxes. In a country like Algeria, the overall tax rate is up to 30% for corporations, and these corporations, on average, spend 451 hours/year on tax compliance. Such a huge amount of time is spent for compliance due to the complex and ever-changing nature of the tax structure in Algeria. As SMEs are the main economic drivers for the Algerian economy, these SMEs are responsible for around 60% of Algerian's gross domestic product and employ 1.86 million people. This study is an attempt to explore the VAT compliance cost for the SMEs operating in the Adrar State of Algeria.

For this purpose, 360 questionnaires were distributed among SMEs operating in the Adrar State of Algeria, and 327 fully completed questionnaires were received. Descriptive statistics and cross-tabulation were applied to extract useful information. The researcher found that out of the 327, only 122 firms hire external advisors for tax compliance; of the 122 firms (38.3%) which hire external experts, they either utilize the services of different accounting firms or individual consultants. In addition, firms in Algeria spend 4,165,000 DZD in terms of external compliance cost. On the other hand, accounting and tax department's employees of sample SMEs, on average, spend 24,244 hours, for accounting and tax matters only. Out of the total hours, the value is 2,967,313 DZD (22.48%). Similarly, SMEs based on different categories (number of employees, number of years established and turnover) unanimously report that high tax compliance cost is significant and an extra burden on the company's earnings, which might discourage investors investing in SMEs, which are vital sources of employment and revenue.

Keywords: VAT, Compliance cost, Internal compliance cost, External compliance cost, SMEs, Algeria

ABSTRAK

Setiap organisasi cuba untuk memaksimumkan pendapatan dengan mengetatkan langkah-langkah kawalan kos ; Walau bagaimanapun, hanya beberapa kos boleh dikawal, iaitu, bahan, tenaga kerja, dan lain-lain, manakala yang lain tidak dapat dikawal seperti cukai. Di negara seperti Algeria, kadar cukai keseluruhan menjangkau 30% bagi syarikat, dan syarikat-syarikat ini secara puratanya menghabiskan 451 jam / tahun mengenai pematuhan cukai. Ini menunjukkan syarikat menghabiskan jumlah masa yang banyak bagi tujuan pematuhan ini kerana sifat kompleks dan sentiasa berubah-ubah struktur cukai di Algeria. Sektor SMEs (Perusahaan Kecil dan Sederhana) merupakan pemacu ekonomi utama bagi ekonomi Algeria, SMEs menyumbang kepada kira-kira 60% daripada keluaran dalam negara kasar Algeria dan menghasilkan tenaga kerja seramai 1.86 juta orang. Kajian ini adalah suatu percubaan untuk meneroka kos pematuhan VAT bagi SMEs yang beroperasi di Adrar sebuah Negeri Algeria.

Bagi tujuan kajian ini, 360 soal selidik telah diedarkan di kalangan SMEs yang beroperasi di Adrar sebuah negeri di Algeria, dan hasilnya 327 borang soal selidik yang lengkap diisi telah diterima. Statistik deskriptif dan merentas penjadualan telah digunakan untuk mendapatkan maklumat yang berguna. Penyelidik mendapati bahawa daripada 327, hanya 122 syarikat menyewa penasihat luar untuk pematuhan cukai; daripada 122 syarikat (38.3%) yang mengupah pakar-pakar luar, mereka sama ada menggunakan khidmat firma perakaunan yang berlainan atau perunding individu. Di samping itu, syarikat-syarikat di Algeria menghabiskan 4,165,000 DZD dari segi kos pematuhan luaran. Manakala bagi Jabatan perakaunan dan percukaian dalam skop SMEs secara purata menghabiskan 24,244 jam, atau kira-kira 10% daripada jumlah waktu kerja mereka hanya untuk menguruskan perkara perakaunan dan cukai sahaja. Daripada jumlah jam, nilai adalah 2,967,313 DZD (22.48%). Berdasarkan kategori yang berbeza dalam SMEs (bilangan pekerja, beberapa tahun ditubuhkan dan perolehan) sebulat suara melaporkan bahawa kos pematuhan cukai yang tinggi adalah penting dan beban tambahan ke atas pendapatan syarikat itu yang mungkin tidak menggalakkan pelabur melabur dalam SMEs yang amat penting sumber pekerjaan dan pendapatan.

Kata Kunci: VAT, kos Pematuhan, kos pematuhan Dalaman, kos pematuhan Luar, SMEs, Algeria

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LIST OF ABBREVIATIONS

Abbreviation	Description of Abbreviation
GDP	Gross Domestic Product
SD	Standard Deviation
SPSS	Special Package for Social Sciences
CFIB	Canadian Federation of Independent Business
FIAS	Foreign Investment Advisory Service
FBT	Fringe Benefit Tax
GST	Goods and Services Tax
IFC	International Finance Corporation
IRD	Inland Revenue Department
NAO	National Audit Office
OECD	Organisation for Economic Co-operation
PAYE	Pay As You Earn
SBP	Small Business Project
USA	United States of America
VAT	Value Added Tax

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In many developed and developing countries, tax has become an important source of income. Bhatia (2009) regards taxes as revenues which governments of many countries for collector the purpose of providing infrastructural facilities and smoother public utilities. In addition, taxes are essential instruments required by the government; however, experience has shown that most taxpayers are not willing to comply voluntarily (Lucie, Chow & Halbesma, 2008). In this respect therefore, the government, at various levels, has taken it up as a challenge to find a solution for the purpose of ensuring that taxes are maintained as one of the adequate sources of revenue (Akinboade, 2014). Importantly, the compliance costs of taxation are the amount of resources expended by taxpayers, in addition to the amount of tax they are required to pay, in conforming to the requirements of the relevant tax legislation. The compliance costs are not only incurred by taxpayers, but by all the agents/parties involved in making possible the transfer of funds from the private sector to the government department that controls public money (Eragbhe & Omoye, 2014). In line with this, Blumenthal (1996) asserts that compliance cost at the corporate and larger entity level in a developed country like the United States of America (USA) is relatively low when compared to individual income taxpayers. Since the compliance cost constitutes an additional cost to taxpayers over and above the actual amount due to the government, it is likely that it is a burden and that most

taxpayers want to evade tax by not declaring their true financial position and revenue (Nahida, 2013).

Vaillancourt et al. (2008, page 3) defines tax compliance costs as:

“Those expenses incurred by individuals, families and businesses to comply with tax regulations. These include the time and expenses incurred by individuals and businesses to maintain proper records, undertake tax planning, file necessary reports and calculate required remittances. They include both the costs incurred by individuals and businesses, as well as fees paid to tax professionals, such as accountants and lawyers. Costs incurred by businesses include collecting, managing and remitting taxes paid by employees (for example, Employment Insurance and Canada/Quebec Pension Plans premiums) to the government, the costs of paying the businesses own taxes and in providing tax-related information to governments (statement of earned financial income, transactions, and so on)”.

This proves that although the definition of tax compliance costs is not cut-and-dry, some common features do exist. For instance, Vaillancourt. et al. (2008), maintain that the time spent for the purpose of understanding the tax system has made the tax system an important concept to be studied. They also assert that for business organizations, the cost being incurred while collecting and remitting the taxes on behalf of the government, is another way of defining tax compliance costs. Moreover, the issue of costs, such as the fees paid to tax experts for advice, also seems to be a significant factor.

Although the concept of taxation and its impact are yet to be studied exhaustively, Value Added Tax (VAT) compliance cost is an important element that remains under-analyzed

(Lucie et al., 2008). VAT is a tax that has to be paid by the businesses; and for this, they have to spend some of their resources to calculate this tax. The concept of VAT can be traced back to a German businessman, Von Siemens in the 1920s, whose ideas were developed later 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 (Ebrilln et al., 2001). VAT is the monetary margin that is levied 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 (Nahida, 2013). Notably however, the high cost of compliance of VAT has become a serious burden that is inhibiting VAT collection process with its negative effect on the generation of revenue.

Compliance is a topical policy issue especially in developing countries. This is important since governments across different countries are looking for ways to improve their tax and revenue collection process for the purpose of financing their budgets. Compliance cost for small and medium enterprises (SMEs) is particularly important as SMEs in most developing countries constitute the bulk of business taxpayers. As such, their compliance levels have significant influence on government tax revenue collection (Maseko, 2014). In Algeria for example, SMEs constitute 94% of nationwide businesses network; and more importantly, generate 52% of the total production of the non-oil private sector and nearly 35% of the VAT of the economy (MISMEPI, 2012b). Between 2002 and 2012, SMEs accounted for 99% of all declared investment projects in Algeria (ONS, 2012).

Furthermore, the SMEs engaged over 1.8 million people in 2012, recording a 6% increase in the employment rate against 2011, averaging 2.61 jobs per SME in 2012 (MISMEPI, 2012). Consequently, SMEs have helped in the financing of public infrastructure, especially that its per sector share of private investment revealed that 17% was from the manufacturing sector; 46% from transportation; 35% from building and public works; while fishing and agriculture generated 2% taxes (MISMEPI, 2012b). Alink (2010) emphasizes that the refusal of SMEs to comply with tax regulations, especially in the form of non-registration for tax, improper filing of returns, under-reporting of sales and profit, improper or poor record-keeping, etc., constitute major threats to revenue generation efforts of the government.

Given the important position that SMEs occupy in the Algerian economy, its failure to comply with VAT regulations could cause a great economic distortion as it concerns decision-making for the optimal allocation of resources. For instance, the increased burden on SMEs may discourage new startup businesses, which in turn, can reduce tax revenue (Djankov et al., 2002). Importantly therefore, investors may avoid starting a new business, thus adversely affecting the growth of SMEs.

1.1.1 VAT as an important source of revenue for the government

Historically, the origin of VAT can be traced to France (Shenk & Oldman, 2007). Shenk & Oldman assert that France was the first country to institute VAT in 1954. Accordingly, VAT has therefore become the most significant concept in the tax system in the last half century and has been largely adopted globally (Shenk & Oldman, 2007). The study of

Charlet and Butdens (2012) also shows that VAT was not popular in the late 1960s since less than 150 countries adopted and embraced VAT at that time. Algeria has adopted VAT since 1992; it was one of the first countries in Africa to apply VAT.

VAT, in recent times, has attracted the attention of major stakeholders, especially the business and government entities (Nahida, 2014). VAT is an indirect tax that is often charged on the consumption of goods and services. It is also charged on the value of imported goods and services from one company to another until it reaches the final consumer (Dasalegn, 2014). In addition, Ebrill, et al. (2001, page 2) regard 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*”. Bird (2005) is also of the opinion that VAT serves as the ‘money machine’ which helps the government to generate income to finance infrastructural developments. It is an important source of revenue that is being adopted by countries across the globe and through which government collects sufficient amounts of revenue. Consequently therefore, most political scientists and economists often regard VAT as one of the best and preferable general consumption taxes that has become recently available and which helps to enhance economic growth. Adereti, Sanni and Adesina (2011) equally assert that the most important and main purpose of VAT is ensure that the revenue source of the government is increased and funds are available for developmental projects and economic growth.

1.1.2 Overview of VAT in Algeria

This study emphasizes VAT collection processes in Algeria by the relevant tax authorities for the purpose of measuring the tax compliance cost among SMEs. In Algeria, VAT is charged on all economic activities, such as commercial and industrial handicraft and other professional activities. Based on this, its compliance with respect to cost-related factors has become an important issue for the SMEs. In Algeria, all goods or services for export by definition are not subject to VAT. However, if VAT is charged under such a situation, the tax is usually refunded. The purpose of this is to stimulate and encourage export activities while imports are discouraged. Broadly, two different types of VAT rates are often applied in Algeria. The first rate is 7% and is applicable to commodities, products, wares, operations and merchandise which are related to materials for agriculture, plants and domestic buildings, printing, plants and domestic animals, products of traditional crafts, etc. The second rate is 17% and is meant for operations that are related to goods and services that are covered or subjected to another rate. Registration generally is required for entities that have an annual turnover of Algerian dinar (DZD) 100,000. A business must register within 30 days of becoming liable. Filing and payment of monthly returns and the tax payable are due by the 20th of the following month (PKF, 2013).

1.1.3 Small and Medium Enterprise (SMEs) in Algeria

Since the late 1980s, the Algerian government has realized that the public sector alone cannot meet the growing economic needs. It is in this context therefore, the SME has become one of the important sectors that is equally contributing to the economic

development of Algeria, especially with its diversity, flexibility and ability to create employment. Consequently, the SMEs now occupy very important position, thereby compensating for the deficit of the large national companies. In order to develop the SMEs therefore, the government has created many agencies and institutions (e.g., Ministry of SME Guarantee Fund) that are saddled with the functions of promoting the SMEs. A series of programs and incentives were instituted for the purpose of promoting the SMEs in the country during the early 1990s.

Entrepreneurship has witnessed a tremendous growth over the last 20 years in Algeria and the whole Southern Mediterranean area. This growth has equally flourished as a result the expansion of Islam to the region. However, this sector of the economy faced a severe decline during the Spanish and French colonial periods and the Ottoman Empire (MEPI, 2009). The SMEs have passed through different periods: of neglect (1962-1982); better recognition (1982-1988); increased recognition (1988-2001); and full support (2001-till date). These periods have made the SMEs an important sector in the Algerian economy, substantially contributing to the development of the country with respect to tax contribution and in other areas.

1.2 Problem Statement

In many countries today, the issue of tax compliance cost and its associated cost has become a common practice that is preventing the governments from generating adequate revenues. In order to reduce compliance cost, taxpayers may deliberately choose not to adhere, either partially or fully, to the tax regulatory system (Nahida, 2013). In addition,

the high cost of compliance that SMEs incur and which is a product of the complexity of the tax system, is making many taxpayers not to comply with the regulatory system without intention (McKerchar, 2002). Keeping this in mind, it is therefore essential to express that the reduction in the compliance cost may boost the level of tax compliance and thereby help to lessen the attitude of non-compliance among the taxpayers, such as SMEs. Consequently, such attempt will help to increase the level of revenue generation for the purpose of financing government expenditure.

There are number of reasons to study tax compliance among the SMEs; one of such reasons is that the level of tax compliance among the SMEs is very low when compared to other taxpayers (Giles and Caragata, 1999). The consequence of such lower level of compliance among the SMEs has negative effects on the amount of tax revenue that is being collected by the government for the purpose of fulfilling economic, fiscal and social objectives (Alley et al., 2004; Chittenden, Kauser & Poutziouris, 2003).

In Algeria, the negative influence of VAT evasion on the economy is very high. In fact, evidence has shown that there are over 7,000 fraudulent taxpayers who are evading taxes with its consequential effects on the economy of Algeria (Algerie-focus, 2013). Additionally, in 2013, there were over 7,010 SMEs tax defaulters that engaged in informal operations. Furthermore, Liberte (2014) disclosed that between 2010 and 2014, over 79,000 SME operators engaged in fraudulent activities that affected the tax collection of the government. Moreover, Horizons_(2013) also made an estimation of 5.17 billion DZD being lost to SMEs and other tax defaulters in the year 2012. Notably,

this practice could be due to the high VAT compliance costs that are incurred by SMEs in Algeria.

Previous studies have maintained that many SMEs bear the burden of tax compliance costs more than other large companies (Nahida, 2013; Emmanuel & Kennedy, 2014; Lucie et al., 2008). However, this is because most SME operators do not realize those costs as tax compliance costs but as “hidden costs” or indirect burden on the operations of the SME, which prevent them from complying with the tax system, laws and requirements (Lucie et al., 2008).

Even though many studies have been undertaken in developed countries with respect to tax compliance cost, to the best knowledge of the researcher, very limited publications are available in the context of Algeria. Therefore, this study will be the first in Algeria to study VAT compliance costs. The study is aimed at examining and measuring VAT compliance costs of SMEs. Also, as VAT compliance costs become a significant matter to Algeria’s taxpayers and tax authority, there should be more disclosure on its compliance.

1.3 Research Question

This study intends to answer the following research questions:

1. How can the internal labor & non-labor compliance cost of VAT for SMEs in Algeria be measured and identified?

2. How can the external advisors compliance cost of VAT for SMEs in Algeria be measured and identified?

1.4 Research Objectives

The objective of this research is to investigate and measure cost of compliance for SMEs in Algeria with regards to VAT. The specific sub-objectives of this study are:

1. To investigate and measure the internal labor & non-labor tax compliance costs of VAT for SMEs in Algeria.
2. To investigate and measure the external advisors compliance costs of VAT for SMEs in Algeria

1.5 Significance of the study

VAT compliance cost imposes a heavy burden on the taxpayers since it is the requirement of law that the companies and other taxpayers should comply. In Australia and UK evidence has shown that SMEs often incur higher costs of compliance when compared to large businesses (Chris, 2013; Hansford & Hasseldine, 2012). In addition, study conducted in Australia, Uk, canda and South africa by Evans and Hansford (2013) suggest that VAT tax compliance cost consumes the most time and cost compared to other types of taxes.

1.6 Scope of the Study

The scope of this study is limited to the measurement of VAT compliance costs of SMEs in the Adrar state of Algeria. Therefore, the study measures both the internal and external VAT compliance costs of SMEs in the chosen state. However, the justification for choosing the state is that the largest percentage of SMEs in Algeria are located in Adrar as stated by a report prepared by the Ministry charged with SMEs' growth (MISMEPI, 2012b). This location also made the process of collecting accurate and appropriate data from the respondents more easy.

Furthermore, previous and similar studies have been carried out in selected locations of a country and their results have been generalized for the country at large. This study will be helpful to understand the compliance cost dynamics that can be generalized to other parts of the country. An example is the studies of Mansor and Pantamee (2015) and Lutfi (2009) that determined the reasons for tax evasion in Nigeria and Yemen; it were carried out in one state in but the result of the studies was generalized for a whole countries.

1.8 Structure of the thesis

The purpose of this research is to examine VAT compliance costs of SMEs in Algeria. In this regard, the study is divided into five chapters as follows:

Chapter one is the introduction and discusses the background of the study, problem statement, research questions and research objectives. The thesis also discusses the significance and scope of the study.

Chapter two discusses relevant literature in the area of tax compliance. It also discusses empirical studies and other related theories.

Chapter three explains the research method, research design, population of the study, sample size as well as sampling techniques. It also discusses the sources of data collection procedure, instrument used to collect data, reliability and validity of the instrument, model specification and estimation techniques

Chapter four explains the data analysis technique, interpretation of the result, discussion and findings of the study.

Chapter five includes the summary, conclusion and recommendation for future studies.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter reviews previous studies on tax compliance costs that have been carried out in developed and developing economies. 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 (goods and services tax).

2.2 Tax Compliance Costs

Tax compliance costs have been extensively studied globally. Some of the researchers have explained and reviewed the evolution of tax compliance costs over the last 6 decades from the 1930s to 1980s (Sandford, Godwin & Hardwick, 1989). Vaillancourt and Clemens (2008), for instance, carried out a study on tax compliance cost in Canada and argue that more research needs to be conducted for the purpose of curbing the problems that are associated with government revenue generation. The researchers also suggest that “... *more standardization is required in the research in order to allow for more accurate inter-tax comparisons...*” (Vaillancourt & Clemens, 2008).

In addition, extensive reviews of tax compliance costs have been also conducted by Rametse (2006); Yesegat (2009); and Abdul-Jabbar (2009), for the purpose of reviewing and specifying the importance and burdensomeness of tax compliance costs. Evans (2008) also carried out an overview of administrative and tax compliance costs; his study

revealed three important findings that arise from the literature: compliance costs are regressive; compliance costs are high and significant; and compliance costs are not reduced over time. Furthermore, the recent findings of Pope (2009) are also aligned with Evans's (2008) first two conclusions. In addition, Pope (2009) emphasizes the political sensitivity of tax compliance costs and asserts that many governments of the world do not give serious commitment to the efficiency and simplicity of tax policy and do their best to minimize research and/or publicity on the topic.

2.2.1 Tax Compliance Costs Studies

The studies on tax compliance costs have been conducted across developed and developing countries of the world. Some of the prominent studies from developed countries include those that were carried out in USA, Australia, Canada, the United Kingdom (UK), New Zealand and the Netherlands; while those carried out in developing countries include, for example, Malaysia, Indonesia, Tanzania and South Africa.

The study of Slemrod and Blumenthal (1996) was conducted in the USA using a survey of 1,329 of the largest businesses in there. In their study, they affirm that the total income tax compliance costs was around US\$2 billion for the Coordinated Examination Program (CEP) businesses and estimated at US\$1 billion for the Fortune 500 businesses (Slemrod & Blumenthal, 1996). Accordingly, the aggregate tax compliance costs roughly represent 3% of the tax revenue (Slemrod & Blumenthal, 1996).

In addition, another study by Slemrod and Venkatesh (2002) investigated the size and composition of tax compliance costs among the medium-sized businesses in the USA. These authors estimated that around US\$22 billion is the federal income tax compliance costs and this represents approximately 30% of the tax revenue in the USA (Slemrod & Venkatesh, 2002). In line with previous authors, DeLuca et al. (2007) report the findings of their survey of small business tax compliance costs and reveal that 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).

A study carried out in Australia by Evans et al. (1997) investigated the compliance costs of Australian business and personal taxes. In this study, it is estimated that the compliance costs of all federal taxes for business and personal taxes is around 7% of federal tax revenue and 1.36% of GDP (Evans et al., 1997). In general, the study authenticates the usual trend of the economies of scale reported in tax compliance cost studies.

In addition to the study of Evans et al. (1997), a small-scale study was conducted by Wallschutzky and Gibson (1993) and employed 12 case studies for the purpose of investigating the compliance issues faced by small businesses in Australia. Their study reveals that compliance costs are not significant and they equally assert that such costs

are often overstated (Wallschutzky & Gibson, 1993). However, the small sample they employed render the results of their study to be limited in terms of generalization as well as inadequate to draw any valid conclusion about the significance of tax compliance costs for small businesses in Australia. Later, many other compliance costs studies were carried out and this include studies of Rametse and Pope (2002); Certified Public Accountants [CPA] (2003); Glover and Tran-Nam (2005); and Lignier and Evans (2012). Most of these studies have focused on small businesses, with GST being the most studied.

In Canada, Plamondon and Zussman (1998) carried out a study on tax compliance costs among small and medium businesses. According to their study, average tax compliance cost is estimated at C\$3,829 per business approximately. This figure represents about 2.6% of an average sales volume (Plamondon & Zussman, 1998). These scholars also estimated the total provincial, federal and territorial tax compliance costs to range between C\$2.3 billion and C\$4.5 billion, with an average of C\$3.4 billion. These costs represent around 0.4% of GDP and 1.5% of tax revenue (Plamondon & Zussman, 1998).

In a study by the Canadian Federation of Independent Business (CFIB) , total compliance costs were estimated to be 2.7% of tax revenue or C\$12.6 billion, with approximately comprise 90% of total compliance costs incurred by SMEs. The average tax compliance costs for each SME amounted to C\$18,321 in 1991 (CFIB, 2008). CFIB affirms that the

time it takes to comply with the various taxes does significantly affect the growth of a business (CFIB, 2008).

The study of Sandford and Hasseldine, (1992) in New Zealand found that tax compliance costs are very large and regressive. The costs were estimated at around NZ\$1.9 billion indicating 2.5% of GDP. In another study by Brunton (2005), the costs of compliance was investigated with respect to GST, income tax, fringe benefits tax (FBT) and PAYE. In totality, the average tax compliance costs were estimated at NZ\$4,024 per business, with GST and income tax being the greatest contributors. In addition, Brunton also studied the psychological costs of complying with the tax system; however, these costs were not converted into monetary terms. Other studies that were carried out in New Zealand on tax compliance costs include the works of Klynveld, Peat, Marwick and Goerdeler [KPMG] (2007). KPMG's study estimates the overall regulatory costs at NZ\$29,578, the largest of which is tax compliance costs at 39%.

In addition to the above studies, a study that was carried out by the New Zealand Inland Revenue Department (2010) examined tax compliance costs among 5,000 SMEs in New Zealand. This study estimates that NZ\$5,557 is the compliance costs being borne by SMEs in New Zealand. These costs increase with the size of business from NZ\$4,138 for businesses without employees to NZ\$9,447 for businesses with employees. As a percentage of business turnover, tax compliance costs reduce from 13% to 0.3%. The

study further reports that compliance with GST requirements is more time consuming compared to other taxes (IRD, 2010).

Recently, tax compliance cost in New Zealand was also investigated by Gupta and Sawyer (2014). The study used an online survey to estimate the costs small businesses incur while complying with the income tax, GST, PAYE, FBT and KiwiSaver. It was estimated that the gross cost the businesses incur while complying with these taxes is NZ\$31,096. The study also confirms that tax compliance cost is regressive and reports that of all taxes surveyed, GST is the most time consuming and requires the greatest internal compliance cost (Gupta and Sawyer, 2014).

Allers (1994) also investigated the compliance and administrative costs of taxation and public transfers in the Netherlands. The study also made the non-response reply postcard procedure to be popular. In this study, the total compliance costs of the Dutch business sector were estimated to be Gld7.2 billion or 1.5% of GDP and 4% of taxes and social security contributions. Subsequent European tax compliance costs studies have also been carried out in Armenia (Jrbashyan & Harutyunyan, 2006); Croatia (Blažić, 2004); Slovenia (Klun, 2004a; 2004b); and Belgium (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 on tax compliance costs have been carried out in Asia since 1995. Ariff and Pope (2002) compiled tax compliance costs studies that had been conducted between the early years of 1990s and 2001. The study of Abdul-Jabbar (2009) also did an extensive review of tax compliance costs studies in Asia, especially in Malaysia. In India, business tax compliance costs were also investigated by Chattopadhyay & Das-Gupta (2002). Importantly, the majority of these studies in Asia have concentrated on corporate income tax. Overall, their findings confirm the regressive nature of taxation compliance costs.

Furthermore, the Malaysian tax compliance costs were also investigated by Abdul-Jabbar & Pope (2008a). The focus of their study was the corporate income tax of SMEs for the year 2006. In this study, the average compliance cost was estimated at RM9,295, while 52% of these costs represented internally generated cost. On average, the annual percentage turnover of the Malaysian corporate income tax compliance costs are regressive, falling from 6.53% for the businesses in the smallest turnover category to 0.04% for the medium-sized businesses in the highest turnover band (Abdul-Jabbar & Pope, 2008a).

Recently, Susila & Pope (2012) also investigated big corporate taxpayers in Indonesia. It was discovered in this study that the average tax compliance costs per company were IDR420,933,442. The researchers also report that the internal tax compliance costs

constitute 73% of total compliance costs. In addition, the study also confirms that tax compliance cost is regressive in nature, indicating that tax compliance costs decline with increases in business turnover.

In Africa, tax compliance costs were first investigated in Tanzania by Shekidele (1999). The study made use of questionnaire and a very low sample of 14 businesses to examine the type and nature of compliance costs of excise duties. It was estimated that compliance costs revolve around 16% of excise duty revenue. The researcher also discovered that compliance costs in developing countries are relatively high when compared to those of developed countries. The study, in addition to this, confirms the influence of economies of scale of tax compliance costs. Further studies on tax compliance costs have been carried out in Mauritius, South Africa, Mauritius, Kenya and Ethiopia.

Furthermore, a comparative study that is based on four countries, i.e. Canada, Australia, the UK, and South Africa has been conducted. The study investigated the SMEs' tax compliance costs of income tax, GST and salary related taxes in the four countries (Hasseldin et al., 2012). The researchers collected the data of their study using electronicsurveys and separate questionnaires (which follow a common structure) per country. The findings, presented in Table 2.1 below show that in three countries, i.e., Australia, South Africa and the UK, GST/VAT is the most costly tax. In Canada, income tax is more costly than other taxes.

Table 2.1

*Allocation of Internal Compliance Costs to Each Tax for the Years 2010 and 2011
(Expressed in US\$)*

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

Source: Hasseldine et al. (2012,p.3).

Table 2.2 suggests that in all the four countries, small business tax compliance costs are significant. In addition, internal tax compliance costs represent greater size of total tax compliance costs than the external costs in all the countries that were investigated (Hasseldine et al., 2012).

Table 2.2

Total Tax Compliance Costs for the Years 2010 and 2011 (Expressed in US\$)

	Australia (2010)	UK (2011)	South Africa (2010)	Canada (2011)
Internal tax compliance costs	20,448	23,324	7,543	40,792
External tax compliance costs	13,761	13,175	4,755	9,453
Total tax compliance costs	34,209	36,499	12,298	50,245

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

The International Finance Corporation (IFC) (2009) conducted a number of tax compliance costs studies in different countries, such as Uzbekistan, Ukraine, Nepal and Armenia. Overall, the Ukraine, study reveals that a sum of UAH7.8 billion is the total annual tax compliance costs for all sole proprietors and all other active private companies. A sum of UAH7.4 billion of tax compliance costs for all private companies constituted 1% of Ukraine's GDP in 2007 (IFC, 2009a, pp. 11-12). In Uzbekistan, reporting and tax compliance costs were found to be strongly regressive, representing almost 16% of sales for legal entities in the lowest turnover band and 0.06% for companies in the upper turnover band. As a percentage of annual sales, tax compliance cost was estimated to be 3.7% of the enterprises making lower turnover and 0.15% for those with higher sales. Reporting and tax compliance costs of individual entrepreneurs and legal entities are estimated at UZS275.5 billion or 0.75% of GDP in 2008 (IFC, 2010b).

The report of IFC also indicates that tax compliance poses a heavy burden for small enterprises and individual entrepreneurs in Armenia. Accordingly, business organizations spend an average of 2.5 staff months in a year for the purpose of complying with tax procedure. IFC, in this respect, estimates tax compliance costs for Armenia to be AMD10.24 billion or 0.3% of the GDP of the country in 2009 (IFC, 2011a). In Nepal, total tax compliance costs are estimated to be Nepalese rupees 9,328. As a proportion of annual turnover, they represent 3.4% for businesses in the lower turnover band and 0.1% for those in the highest turnover band (IFC, 2012a).

2.3 Value Added Tax (VAT)

The VAT system imposes a number 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 returns filing and remittance of collected VAT or claims of overpaid tax. Yesegat (2009) identifies a number of VAT compliance costs studies that have been carried out between 1981 and 2003 globally. Barbone, Bird and Vazquez-Caro (2012) also provide a comprehensive review of VAT compliance costs studies which focus mainly on the European Union (EU). The study identified 30 published VAT compliance costs studies that have been conducted globally between 1980 and 2014. Of these studies, 29 took place outside Africa, while only six were carried out within African borders. Evans (2008) affirms that the compliance costs of taxes (such as personal income tax, corporate income tax and VAT) typically range between 2% and 10% of the revenue yield of those taxes and up to 2.5% of GDP in some countries. In Canada (CFIB, 1991) and Slovenia (Klun, 2003), the compliance costs of VAT are found to be well over 10% of VAT revenue.

2.3.1 Value Added Tax (VAT) Compliance Costs Studies

A study by the CFIB (1991) used 25,362 respondents to investigate the impact, 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. Around 70% of the respondents indicated that GST has a negative impact on their business, while 85% report increases in costs due to GST implementation. The survey findings also illustrate the

regressive nature of the GST where around 82% of the costs are incurred by 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 most likely contain some learning curve costs.

Plamondon and Associates Inc. (1993) examined the GST compliance costs for small businesses in Canada. It is estimated that the gross GST compliance costs in Canada is less than 0.5% of business revenue. Their findings also reveal that the participants who make use of computers in their daily accounting functions have compliance costs that are 20 to 40% lower than similar businesses that use manual accounting systems . The study by Plamondon and Associates Inc. did 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 limits the generalization of their findings. The methodology used by Plamondon and Associates Inc. has been analysed and critiqued at length by Wurts (1995) and Sandford (1995a).

Furthermore, the total compliance costs of GST are estimated at 7.3% of GST revenue, with nearly 60% of these costs falling on businesses with a turnover below NZ\$250,000 in New Zealand (Sandford & Hasseldine, 1992). The compliance costs of the smallest firms are estimated as being almost 500 times those of the largest (Sandford &

Hasseldine, 1992). Sandford and Hasseldine 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% of GDP. Furthermore, compliance costs are very regressive, individually and collectively, falling with disproportionate severity on smaller businesses (Sandford & Hasseldine, 1992).

The New Zealand study by Colmar Brunton (2005), commissioned by Inland Revenue, estimated 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 were estimated at NZ\$1,852 (Colmar Brunton, 2005). With regard to psychological costs, the study found that owners/partners, managers, clerks and unpaid family or friends report higher levels of stress associated with GST compliance (Colmar Brunton, 2005). 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).

A study was conducted by Sandford, Godwin, Hardwick and Butterworth (1981) (VAT 1) in the UK; it was estimated that VAT compliance costs was £392 million, representing 9.26% of VAT revenue. As a proportion of turnover, VAT compliance costs are 1.17% for small businesses with annual turnover below £50,000; and 0.04% for those with annual turnover above £1 million. Small businesses with an annual turnover below

£50,000 carry 43% of total VAT compliance costs. It is also reported that the net cash flow benefits, estimated at £73 million, favor the large firms and increase the regressivity of VAT compliance costs. The net VAT compliance costs are estimated at £319, representing 7.53% of VAT revenue. As a percentage of annual turnover, net VAT compliance costs are 1.69% and 0.03% for the smallest and largest businesses, respectively (Sandford et al., 1981). Overall, the compliance costs exhibit an extremely regressive pattern.

Similarly, another study by Sandford et al. (1989) (VAT 2) emphasises the existence of regressivity (the economies of scale effect) of tax compliance costs. Total VAT 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% and 0.98%, respectively. VAT compliance costs as percentages of taxable turnovers range from 1.48% for the smallest firms to 0.05% for the larger ones (Sandford et al., 1989). 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).

A succeeding major study by Sandford, known as the VAT 2 study, followed in 1989. In the VAT 2 study, the researchers investigated 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 1% of GDP, while tax operating costs as a whole were around 1.5% of GDP (Sandford et al., 1989). The findings of both VAT 1 and VAT 2 studies however establish what has become a common finding in many tax compliance costs studies worldwide; that tax compliance costs are regressive and fall with disproportionate severity on small businesses.

The UK's National Audit Office (NAO) estimate the costs of VAT compliance at £1.6 billion (NAO, 1994). 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% 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% for the smallest traders to 0.3% 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).

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 counterintuitive finding, that businesses that use computerized systems for VAT record-keeping incur higher compliance costs than the businesses that do not (Hasseldine & Hansford, 2002).

Bannock and Albach (1989) compared the compliance burden of VAT on small firms in the UK 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 the UK than in West Germany. They report that dissatisfaction with the VAT system is greater among smaller firms in the UK 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 1% for firms with a turnover of £2 million or more to 2.5–8.0% for firms with a turnover of £15,000 and below 0.53 Overall, businesses regard VAT as more costly and troublesome to a greater extent in the UK than in West Germany (Bannock & Albach, 1989).

In addition, a recent UK study was carried out by Hansford & Hasseldine (2012). The outcomes with respect to the VAT division of this study states that 219 hours on average

is spent annually on VAT compliance. This equates to more than half of the in-house time spent on tax compliance. On average, VAT compliance costs are approximated to be £6,062, representing more than 40% of the internal tax compliance costs.

In the Netherlands, VAT is found to be the second most expensive tax to comply with, with its costs of compliance is estimated at 6% of VAT revenue (Allers, 1994). Another high costs:revenue ratio for VAT is reported by Malmer (1995). The Swedish VAT compliance costs are estimated at 2.5% 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).

In addition, 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). 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.

Glover and Tran-Nam (2005) estimated 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). The findings in this study are based on a very small number of 22 case studies.

Blažić, (2004) investigated the VAT compliance costs in Croatia. Blažić (2004) used 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% of VAT revenue. The findings of the study also indicate that out of all the taxes surveyed, VAT is the most costly (Blažić, 2004).

In Slovenia, Klun (2003) conducted a survey on a random sample of 750 VAT taxpayers, with an 11% response rate, to estimate the compliance costs of VAT. Aggregate VAT compliance costs are estimated at 25% and 2.5% of VAT revenue and GDP, respectively, when weighted by annual turnover. Klun (2003) 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.

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 to other countries. Companies in Ukraine spent, on average, 650 person-hours on VAT functions in 2007 (IFC, 2009a). 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 labor cost for all legal entities in Uzbekistan (IFC, 2010b).

VAT 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 spent, on average, 108 hours searching, studying and analysing VAT legislation in 2009 (IFC, 2011a). 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). Furthermore, VAT compliance costs are found to be high for businesses that partially outsource tax compliance services (IFC, 2012a).

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%, to investigate the tax compliance costs of those businesses. GST was found to be the most time consuming of all taxes. A total of 287 hours were estimated as Internal GST compliance time and this is estimated to be equivalent to AU\$11,950. This cost is higher than other monetary costs since it represents about half of the total internal costs.

Generally, the outcomes of the VAT compliance costs researches from developed nations reveal that tax compliance cost is regressive in nature and this is in line with previous research findings from developing countries outside Africa. Another conclusion reached by previous studies is that VAT is more burdensome than other taxes. Furthermore, when VAT compliance services are outsourced, it tends to lead to higher compliance cost. Overall, VAT compliance costs are high (whether incurred internally or externally) and more burdensome for smaller businesses.

Furthermore, the study on tax compliance costs in African countries is very small with largest percentage of it coming from 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). However, other African tax compliance costs studies have been carried out in Tanzania, Ethiopia and Mauritius (e.g., Shekidele, 1999; Pillai, 2000; Yesegat, 2009). Studies on tax compliance burden and its incidence

are very essential as there appears to be a paucity of relevant literature in Africa (Rametse, 2010).

Pillai (2000) conducted a study in Mauritius. The study was conducted by surveying 82 hotels with a 26.9% response rate. As a percentage of annual turnover, regular costs of running the small hotels were estimated to be ten times larger than those of large hotels at an average of 0.40% and 0.04% turnover, respectively. It is therefore suffice to say that compliance costs of VAT, as a percentage of total turnover, in the Mauritian hotel industry exhibit severe regressivity (Pillai, 2000).

In addition, a South African study was conducted by the Small Business Project (SBP) in 2005 for the purpose of determining the compliance level of VAT and other tax costs. The SBP employed a survey of 1,800 private sector enterprises in order to estimate the regulatory compliance or 'Red Tape' cost in South Africa. Additionally, the study sought to uncover the most troublesome and costly regulations for South African firms, as well as the impact of regulations on businesses' plans to grow and expand employment. In this study, the overall regulatory compliance costs was approximated at ZAR79 billion or 6.5% of GDP (SBP, 2005). 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% 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).

A similar result was also reported by South Africa's Foreign Investment Advisory Service [FIAS] (2007). The FIAS, in its study, surveyed 3,429 tax practitioners and estimates that average fee which tax practitioners charge their small business clients for rendering tax compliance related service is high. The outcomes of the study suggest that the business organizations incur more costs in employing the assistance of tax practitioners for VAT returns than other taxes. The total outsourcing costs per business are estimated at ZAR7,030. The cost share of VAT represents 42% of this cost at ZAR2,975 (FIAS, 2007).

Furthermore, a recent study that was conducted by Yesegat (2009) examined the intentional compliance and operating costs of VAT in Ethiopia for the fiscal year 2005/06. The study employed structured interviews for the purpose of collecting data from 29 tax practitioners and 193 business organizations in Ethiopia. In this study, the recurrent compliance cost of VAT is estimated at 0.13% and 2.04% of GDP and VAT revenue, respectively. The outcomes of the research state that the tax compliance cost of VAT in Ethiopia is as low as 56%. However, small enterprises bear the severe burden of the tax compliance costs (Yesegat, 2009).

The regressive nature of tax compliance costs is also confirmed in another study that was recently conducted by Smulders, Stiglignh, Franzsen & Fletcher (2012) in South Africa. The study which forms part of an international research project, asserts that the average of internal VAT compliance costs is R7,415. It is also contained in the study that taxpayers also bear heavy burden at an estimated 38% of internal time costs (Smulders et al., 2012).

In totality, the tax compliance costs literature, especially from African countries, confirms the long-standing regressive nature of tax compliance costs as established by the ealier 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.

Based on the extensive review of VAT literature across the countries, it is discovered that studies that delve into VAT compliance cost are very scarce in Algeria. It is in this regard that this study intends to fill the gap as its findings shall help to improve VAT administration and management in Algeria and across the globe.

2.4 Summary of the Chapter

In this chapter, the discussions were about the definition of tax compliance and VAT compliance, in some different point of view from Economic perspective toward tax compliance costs and VAT compliance costs. Similarly, the chapter includes different cost burden that grounded toward tax compliance costs and VAT compliance costs as the internal and the external costs of SMEs. Therefore the study will help to understand the factors that influence the Algerian SMEs in compliance of VAT and help the government to derive the policies that minimize the compliance cost to that SMEs get more motivated toward compliance of VAT.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter explains the methods and procedures used to conduct this study. The chapter consists of method of data collection, questionnaire design, pilot study, population of the study, sampling technique, method of data analysis and research model.

3.2 Method of Data Collection

There are many ways through which research can be conducted: quantitative, qualitative and mixed mode methods. This research uses quantitative method for the purpose of determining the compliance cost among the SMEs in Algeria. For this study, data is collected through primary sources using questionnaire survey.

3.3 Questionnaire Design

This study uses questionnaire survey to collect data from the respondents for the purpose of investigating the VAT compliance cost in Algeria. The design of the questionnaire that this study employs is adopted from previous studies that were conducted in other countries.

The questionnaire in this study uses close-ended and a five-point Likert scale adopted from Nahida (2013); and Hafizah & Mustafa (2008). The questionnaire has 29 items and was personally administrated to SME (selected respondents) operators in Adrar State, Algeria. The questionnaire is divided into three sections: Section A consists of general information on SMEs; section B relates to external compliance cost of VAT; and section C focuses on internal compliance cost of VAT and Secation D Others. Primary data is used since there is no existing or sufficient secondary data to substantiate or support the study.

3.4 Pilot Study

For the purpose of ensuring the reliability of the questionnaire items in this study, a pilot study was carried out on 30 UUM students two weeks prior to the actual data collection. The respondents (students) in the study were former employees of SMEs in Algeria. Comments and suggestions made by the respondents were used to improve the questionnaire. With regards to the validity of the questionnaire, tax professionals were asked to review the questionnaire in order to ascertain its face validity. All necessary steps were taken to ensure that the final survey instrument could be clearly understood by the respondents.

3.5 Population of the Study and Sample Size

In this study, the researcher focuses on the SME operators within Adrar state which include partnerships, sole proprietorship and limited liability enterprises. The SMEs were

identified by the number of employees (not more than 250 employees) and their fixed capital which ranges between DZD 200 million to 2 billion.

In Algeria, irrespective of its legal establishment, a SME is defined as “*any business producing goods and services and employing one to 250 persons, with annual turnover not exceeding DZD 2 billion or total balance sheet not exceeding DZD 500 million*” (MISMEPI, 2012a). Importantly, this definition clearly differentiates between SMEs and micro-enterprises based on three criteria: number of employees; total turnover; and total balance sheet (See Table 1)

Table 3.1
Definition of SMEs in Algeria

Business Size	Number or Employees	Total Turnover (DZD)	Total Balance Sheet
Micro	1 - 9	≤ 20 million	≤ 10 million
Small	10 - 49	≤ 200 million	≤ 100 million
Medium	50 – 250	100 million - 2 billion	100- 500 million

1US\$ = 75 DZD. Source: MISMEP (2012a)

For this study, the populations consists of 2,164 private sector SMEs (MCISME, 2012). Based on Krejcie and Morgan (1970), the appropriate sample size for this study is 327. This is also in line with the sample size proposed by Sekaran (2013).

3.6 Sampling Technique

Sampling is a process that allows the researcher to select sufficient number of elements from the entire population for the purpose of generalizing the results to the entire population (Sekaran, 2013). The sampling process of this study is based on simple random sampling technique. The researcher collected 327 samples from the entire population. Tax collecting workers in Adrar state were requested to distribute and collect the questionnaires from the targeted population to make sure the higher response rate, as SMEs have to visit the tax office on regular basis at-least once a month. A total Number of 327 representing the 96.7% were dully completed and returned accordingly.

3.7 Measurement of Compliance Costs

Previous studies have come up with the way and manner in which tax compliance costs should be defined and measured. This study follows Evans (2013) in splitting down the gross tax compliance costs into three broad categories as follows:

- Explicit costs which represent monetary values that are paid to external parties, such as tax advisers and tax agents;
- Implicit costs which represent the time spent by the unpaid helpers, taxpayers and internally paid employees; and
- Incidental costs (non-labor costs) which refer to the overhead costs incurred by the business enterprises, including costs of computers, equipment, travel expenses, stationery, etc.

3.7.1 Section A of Questionnaire

This is a general information section for the demographic background of the respondents: the designation of the respondent; the sector; number of employees; the turnover; the years of experience in paying VAT, the total turnover; and the rates of VAT being paid.

3.7.2 Section B of Questionnaire

Section B focuses on external costs. In this part, information is about external costs, which covers questions on external advisors handling VAT matters for the SMEs. This part does not focus on monetary costs (estimated fees for VAT matters) but contains the questions on management and consumption trends between the SMEs and external advisors. The questions cover category of external advisor and how the SMEs utilize the external advisor's expertise.

3.7.3 Section C of Questionnaire

This section focuses on internal costs. It relates to some questions regarding number of staff that deal with VAT matters, salary paid to accountants, managers, accounting staff and computer officers and time spent by all the employees on VAT issues. This section also gathers information on the scope of VAT (e.g., tax advice, tax preparation schedule and tax planning). The section also contains questions on non-labor costs, internal-labor costs and type of accounting software used in managing tax matters and costs incurred for installing such a system.

3.7.4 Section D of Questionnaire

This section is designed to test the perceptions of SMEs operators with regards to their VAT compliance. It gets information about the level and percentage of burden that VAT compliance poses to the operators of SMEs. The essence of this is to ascertain the level of consciousness of SMEs as taxpayers with regards to the costs incurred in order to comply with VAT requirement.

3.8 Method of Data Analysis

For the purpose of analyzing the data gathered from VAT compliance costs of Adrar State SMEs, the researcher uses (SPSS). Descriptive analysis is used to analyze the findings.

3.9 Descriptive Analysis

This study uses descriptive analysis to summarize and describe the data collected and calculate standardized values. Basically, descriptive analysis is used to ensure the mean, percentages, frequencies and cross-tabulations of the data.

3.10 Research Model

Tax Compliance Cost for this study is as follows:

$$TCC = ICC + ECC$$

TCC = Total compliance costs

ICC = Internal compliance costs

- Collecting, remitting and accounting for VAT.
- Wages and salaries of employees who prepare VAT returns.
- Training of employees to acquire VAT knowledge

ECC = External compliance costs

- The costs of acquiring the services of lawyers, accountants and investment advisers from outside the company.

3.10 Summary

There are many ways of collecting data. For this study, data is collected from the Algerian SMEs through questionnaire survey to access their VAT compliance costs. The questionnaire used in this study is based on a five-point Likert scale developed by Evans (2013). Pilot study was carried out on 30 students from UUM and analyzed to access the face validity. After pilot study, the questionnaire was filled by the Algerian SMEs; these SMEs were differentiated on the basis of three criteria: number of employees, total turnover and total balance sheet. The questionnaire consists of four sections: section A designed to access the demographic characteristics; section B for measuring the external compliance cost of VAT; section C for measuring the internal compliance cost of VAT; and section D to explain the analysis of compliance cost for VAT

CHAPTER FOUR

FINDINGS AND DISCUSSION

4.1 Introduction

This chapter consists of four major analyses on: 1) profile of respondents; 2) external tax compliance costs; 3) internal tax compliance costs; and 4) additional analysis. The results from the analyses are compiled based on the questionnaire on VAT compliance cost by SMEs in Algeria.

For this purpose, questionnaires were distributed to the targeted sample of SMEs in Adrar State of Algeria. A total of 360 participants were selected to answer the questionnaire. However, 22 SMEs could not be contacted due to some communication problems; hence only 338 SMEs were surveyed out of which 11 SMEs declined to respond, resulting in 327 questionnaires returned to the researcher. The response rate of the survey is summarized in Table 4.1.

Table 4.1
Response Rate for VAT Compliance Cost Survey: Response Rate

	Respondents
Sample Selected	360
Questionnaire Distributed	338
Questionnaire Returned	327
Response Rate	96.7%

4.2 Demographic Background of the Respondents

Table 4.2 shows the demographic characteristics of the respondents with regards to their position in the SMEs. It shows that 185 (56.4%) respondents are owners/directors/trustees of the SMEs; 31 are manager or other than proprietor (e.g., finance managers); 50 respondents are accountants; 50 are other employees; and 11 are employees of the SMEs but performing duty as accountants.

A total of 45 of the respondents in this study belong to the industrial products sector; 129 from trading SMEs; 113 from services industry; and 40 from construction companies. From the total of 327 respondents, 22 respondents are from the SMEs which have more than or equal to DZD 20 million of turnover; while 174 and 131 of the SMEs have turnover of \leq DZD 200 million and between DZD 100 million to DZD 2 billion,

respectively. A total of 51 SMEs from the total of 327 recruited 1-9 employees in 2014; while 185 and 91 SMEs recruited 10 - 49 and 50 - 20 employees, respectively.

Among the surveyed respondents, only 19 SMEs have been paying VAT for more than 10 years; while 51, 103, 120, 34 have been paying VAT for 4 to 6 years, 1 to 3 years, 3 to 4 years and less than 1 year, respectively.

The survey on the rate of VAT for the SMEs shows that 100 respondents are paying 7% rate for VAT; while the other 227 are paying 17% rate for VAT. The amount of VAT paid by 110 SMEs was more than DZD 100,001; 137 SMEs paid DZD 60,001 to 100,000; 60 SMEs paid DZD 30,001 to 60,000; 18 SMEs paid DZD 10,001 to 30,000; and only 2 SMEs paid less than DZD 10,000.

Table 4.2
Demographic profile of respondents

Characteristics	Numbers	Percentage (%)
Position		
Owner/director/partner/trustee	185	56.44
Manager other than proprietor (e.g. financial manager)	31	9.5
Accountant employee of the business	50	15.33
Other employee	50	15.33
Accountant not employee of the business	11	3.4
Other (please describe)	0	0
Total	327	100
Sector		
Industrial products	45	13.9
Trading	129	39.4
Services	113	34.5
Construction	40	12.1
Properties	0	0
Total	327	100
Turnover of Business		
≤ DZD 20 million	22	5.3
≤ DZD 200 million	174	54.1
DZD 100 million - DZD 2 billion	131	40.6
Total	327	100

Continue Table 4.2

Number of Full-Time Employees		
1 - 9	51	15.5
10 - 49	185	56.6
50 - 250	91	27.8
More than 250 (Not SMEs)	0	0
Total	327	327
Years of experience in paying VAT		
Less than 1 year	34	10.4
1 to 3 years	120	36.7
4 to 6 years	103	31.5
7 to 9 years	51	5.6
10 Years and above	19	4.8
Total	327	100
VAT Rate paid by SMEs		
0%	0	0
7%	100	30.6
17%	227	69.4
Total	327	100
Monthly VAT		
Under DZD 10,000	2	0.6
DZD 10,001- 30,000	18	5.5
DZD 30,001- 60,000	60	18.3
DZD 60001- 100,000	137	41.9
DZD More than 100,001	110	33.6
Total	327	100

The results show that 227 (69.4%) of SMEs pay the VAT at the rate of 17%, while the rest of the SMEs pay the VAT at the rate of 7%. The upper limit of VAT of more than DZD 10,000 is paid by 33.6% of SMEs; while the majority of SMEs (41.9%) pay tax between DZD 60,001- 100,000.

4.3 External Tax Compliance Costs

One of the objectives of this study is to identify and measure the external tax compliance costs of Algerian SMEs via quantitative method (monetary cost and time spent). These findings are summarized in Table 4.3:

Table 4.3

External Advisor Compliance Cost of VAT

Q. 1: Do you employ an advisor in private practice (such as tax agent) to do VAT compliance related work?

External advisor	Frequency	Percentage
Yes (group 1)	122	37.3
No (group 2)	205	62.7
Total	327	100

Q. 2: Please provide the reason for not using an external advisor for VAT compliance:

Reason	Frequency	Percentage
Expensive	12	5.5
Have own accountant	193	94.5
Others	0	0
Total	205	100

Continue Table 4.3

Q No. 3: The source of the external advice is:

Sources	Frequency	Percentage
Accounting firm	92	75.4
Legal advisor	0	0.0
Fiscal Consultant	30	24.6
Others	0	0
Total	122	100

Q No. 4: How long has the company been using external adviser for VAT?

Years	Frequency	Percentage
Less than 1 year	14	11.5
1 to 3 years	59	48.4
4 to 6 years	37	30.3
7 to 9 years	12	9.8
10 years and above	0	0.0
Total	122	100

Q. 5: The category of external advisor is:

Category	Frequency	Percentage
'Big 4' Group	1	0.8%
Non 'Big 4' Group	121	99.2%
Total	122	100

Q. 6: The VAT related work (s) of the external advisor include/s:

Tasks	Frequency	Percentage
Taxation only.	8	6.7%
Accounting and taxation	114	93.4%
Other work	0	0.0%
Total	122	100

Continue Table 4.3

Q. 7: The external advisor's charges based on VAT related work (s)?

Answer Options	Less than DZD 10,000	DZD 10,001 to 20,000	DZD 20,001 to 30,000	More than DZD 30,001	Rating Average	Response Count
Accounting	12	66	34	3	2.35	122
Taxation	21	86	12		1.98	122

Q. 8: The scope of work (s) related to VAT matters:

Task	Frequency	Percentage
Tax advise	0	0.0%
Tax planning	1	0.8%
Tax preparation and computation	121	99.2%
Other scope of work	0	0.0%
Total	122	100

Q No. 9: Did external advisor's charges differ from the previous year?

Response	Frequency	Percentage
Yes	16	13.2
No	106	86.8
Total	122	100

Q. 10: Frequency of meeting with the external advisor over VAT related matters:

Number of Meetings		Duration of Meeting	
Number of Meetings	Frequency	Duration	Frequency
1 to 3 times per year	1	Less than 30 Minutes	41
4 to 6 times per year	9	30 Minutes to 1 Hour	75
7 to 9 times per year	16	More than 1 Hour	6
10 to 12 times per year	64	??	
More than 12 times per year	32	??	
Total	122	Total	122

Continue table4.3

Q. 11: The frequency of contact (phone-call) with the external advisor for VAT matters:

Number of Meetings		Duration of Meeting	
Number of Meetings	Frequency	Duration	Frequency
1 to 3 times per year	0	Less than 10 Minutes.	98
4 to 6 times per year	2	10 Minutes to 30 minutes.	24
7 to 9 times per year	11	More than 30 minutes.	0
10 to 12 times per year	61		
More than 12 times per year	48		
Total	122	Total	122

Question 1 of Table 4.3 shows that, 62.7% of the respondents have not employed any external advisors to handle the tax related matters and only 37.3% have employed an external advisor to handle the tax related matters.

Question 2 in Table 4.3 shows that a big percentage of SMEs (94.5%) have their own internal tax advisors and the remaining 5.5 percent of the SMEs do not hire an external tax advisor because they think it is expensive to hire an external advisor as compared to having internal tax advisor.

Response for question 3 in Table 4.3 shows that the biggest source of external advisor for Algerian SMEs is accounting firms; 75.4% of SMEs have hired external advisors from the accounting firms, while fiscal consultants are the second priority. No SME has hired a legal advisor as external advisor for VAT tax compliance.

Results of question 4 show that a big percentage (48.4%) of SMEs have started to use external sources for tax advice, which is 1 to 3 years. No firm in Algeria has been using external tax advice for more than 10 years. A total of 30.3% of the respondents have been using external advisors for 4 to 6 years; while 9.8% have been using for 7 to 9 years.

Results for question 5 show that out of 122 respondents, only 0.8% hire an external tax advisor from the 'Big 4' group of companies that provide tax advice; the remaining 99.2% (121 SMEs) hire external tax advisors from the non-'big 4' group.

Responses for question 6 show that 93.4% of SMEs hire an external advisor to do the accounting and taxation tasks; while only 6.7% hire external advisors to focus on taxation-related activities only.

Question 7 in Table 4.3 shows how much is charged by the external advisor for different tasks they perform. Based on the 122 responses, of the external advisors who perform accounting activities for the SMEs, 66 (54%) charge a fee between DZD 10,001 to DZD 20,000; 34 SMEs (28%) charge DZD 20,001 to DZD 30,000; while only 10 (8%) charge more than DZD 30,001.

Of the 122 responses for question 7 for taxation activities, the results show that 21 external advisors charge less than DZD 10,000, but 86 external advisors (70%) charge

DZD 10,001 to 20,000. Only 12 (12%) charge between DZD 20,001 to 30000; 3 respondents said that the external advisors charge more than DZD 30,000. These results indicate that most of the external advisors hired for either taxation or accounting or for both accounting and taxation charge between DZD 10,001 to 20,000.

Responses for question 8 show the scope of the work related to VAT done by external advisors hired by the SMEs only for taxation. This Table indicates that only 0.8% (1) of the advisors are engaged in tax planning; while the rest of the 99.2% (121) are hired for tax preparation and computation.

Responses for question 9 show that 86.8% of the external advisors charged more compared to previous year for providing their services; only 13.2% provided their services for the same fee as charged in the previous year.

Question number 10 is on the frequency of meetings in a year with the external advisor over VAT related matters and the duration of the meeting. A total of 32% of the respondents indicated that the meeting with external tax advisor for discussing the matters related to tax is more than 12 times; 64 respondents said that in their organization, frequency of meetings in a single year is 10 to 12 times; 16 organizations held meetings 7 to 9 times; 9 organizations said 4 to 6 times; and only 1 organization for 1 to 3 times.

The duration of these meetings is 30 minutes to 60 minutes (1 hour) for 71 SMEs; while 41 SMEs said that these meetings are for 30 minutes or less than 30 minutes. Only 6 respondents said that these meetings exceeded 1 hour.

Results for question number 11 show the frequency of contact with the external advisor in a year over VAT related matters and the duration of the contact. Results show that 50% (61) of the organizations made contact 10 to 12 times with the external advisor by phone; while 48 said that the contact was for more than 12 times; 11 SMEs between 7 and 9 times; and only 2 SMEs between 4 to 6 times.

4.3 Internal Tax Compliance Cost

Another objective of this study is to identify and measure the internal tax compliance costs of the Algerian SMEs via quantitative method (monetary cost and time spent). The findings are summarized in Table 4.4

Table 4.4
Internal Compliance Cost of VAT

Q. 1: Does your company have its own internal advisor who manages VAT related matters?					
Response	Frequency		Percentage		
Yes	205		61.7		
No	122		38.3		
Total	327		100		

Q. 2: How many internal staff are involved in managing VAT related matters?			
Options	Average staff	Total employees count	Response count
Numbers	5.15	1,062	205

Q. 3: (a): Salary received and proportion of time spend on VAT related activity out of total working time:					
Designation	Less than DZD 10,000	DZD 10,001 to 20,000	DZD 20,001 to 30,000	More than DZD 30,000	Total
Manager	14	184	7	0	205
Accountant	1	71	105	28	205
Account staff	35	139	30	1	205
Clerk (computer, data entry)	111	91	3	0	205

Continue table 4.4

Q. 3: (b): Proportion of total time (176 total hours) on VAT related activities by staff holding different positions:

Designation	Less than 10%	10% to 20%	30% to 40%	50% and above	Total
Manager	21	179	5	0	205
Accountant	2	81	122	0	205
Account staff	40	153	12	0	205
Clerk (computer, data entry)	111	94	0	0	205

Q. 4: Scope of work (s) related to VAT matters:

Designation	Computation	Advice	Planning	Total
Manager	1	122	82	205
Accountant	2	107	96	205
Account staff	169	36	0	205
Clerical staff	203	2	0	205

Q. 5: Does the company provide computerized facilities to manage VAT related matters?

Computerized facility	Frequency	Percentage (%)
Yes	201	98.4
No	4	1.6
Total	205	100

Q. 6: Please provide the name of the software used and the costs incurred (approximate) regarding VAT related matters:

Software	EXCEL	PC Compta	Cielcompta	Sage Compta	Elbassit	Total
Number of user SMEs	6	112	40	3	40	201
Percentage	2.9	55	20	1.5	20.6	100%

Q. 7: Costs borne by SME for use of software:

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Answer Options	Less than DZD 50,000	From DZD 50,000 to 100,000	From DZD 100,001 to 150,000	From DZD 150,001 to 200,000	More than DZD 200,001	Total
Number of SMEs	1	10	110	81	3	205

Results for question 1 of Table 4.4 show that out of 327 SMEs, 205 SMEs have their own internal management which manages VAT related matters which is 61.7% of total SMEs; while 122 SMEs do not have any internal tax manager.

Results for question 2 show a total response for the question, “how many internal staff are involved in managing VAT related matters” of 205 and the average staff is 5.15, rounded up to 5 employees in one SME on average.

Response for question 3 (a) shows the salary received by persons holding different positions in the SME. The results reveal that most are managers, totalling 90% (184) who receive a salary of DZD 10,001 to 20,000; while 7% (14) managers receive less than DZD 10,000; and 3.5% (7) SME managers receive salary of DZD 20,001 to 30,000.

Salary received by 51% (105 respondents) working as accountant ranges from DZD 20,001 to 30000; 34% (71) of the accountants received salary between DZD 10,001 to

20000; and about 14% of the accountants engaged in VAT related activities, while only 0.47 percent (1 respondent) received a salary of less than DZD 10,000.

As for accounts staff, 67% (139) received a salary from DZD 10,001 to 20000; 16% (35) received less than DZD 10,000; 15% (30) received DZD 20,001 to 30000; while only 0.5% (1) received more than DZD 30,000.

Answers for question 3(b) in Table 4.4 show that 87% (179) of the managers spend 10 to 20% of their total time on VAT related work; 10% managers (21) spend less than 10% time; and only 2% (5) employees spend 30 to 40% of their time on VAT related activities.

A total of 59% (122) accountants spend 30 to 40% of their time on VAT related activities, 40% (81) spend 10 to 20% time; and 0.5% (2) spend less than 10% time on VAT related activities.

For accounts staff, 74% (153) spend 10 to 20% time; 19% (40) spend less than 10% of their total time; and only 6% (12) spend 30 to 40% of their time on VAT related activities. Clerical staff seem to be less concerned with VAT related activities: 54% (111) spend less than 10% of their time on VAT related activities; while the remaining 46% (94) spend 10 to 20% time on VAT related activities.

Response for the question 4 shows that 40% of the managers (82) spend their time on planning; 61% (122) managers spend their time in advising; and only 0.5% spend their time in computational work. A total of 47% (96) of accountants spend time in planning; 52% (107) in advising; and only .93% (2) in computation. Accounts staff are mostly involved in computation work. The Table shows 82% (169) of clerical staff are busy in computational work, and the remaining 18% (36) participate in advising; for planning, no one from the clerical group participated. A total of 99% (203) of the clerks only do computational work and only 1% (2) participated in advising.

Results for question 5 show that 98.4% of SMEs provide computerized work for VAT related tasks; while 1.6% do not have any such facility.

Answers by the respondents for question 6 indicate that 2.9% of SMEs use excel; 55% use PC Compta; 20% use CielCompta; while 20.6% SMEs prefer Elbassit; while only 1.5% use Sage Compta in calculating and estimating VAT.

Responses for question 7 show that 54% of SMEs spend DZD 100,001 to 150,000 on software that is used for compliance of VAT; 39% SMEs spend DZD 150,001 to 200000; and 1.5% spend more than DZD 200,001 on the software for handling VAT compliance.

4.4 Additional Analysis

This section provides additional information about the compliance of VAT by the Algerian SMEs.

Table 4.5

Additional analysis on cost of VAT compliance

Q 1: Are VAT compliance costs a burden to your company?		
Response	Frequency	Percentage
Yes	316	96.9
No	11	3.1
Total	327	100
Q 2: The percentage of VAT compliance costs' burden to your company:		
Percentage burden	Frequency	Percentage
10% - 20%	20	6.1
21% - 30%	174	53.2
31% - 40%	133	40.7
41%- 50%	0	0
More than 50%	0	0
Total	327	100
Reason based on the percentage for Question 2 above:		
Factor that influences most	Response Percent	Frequency
VAT law complexity	46.5%	153
VAT is a monthly tax to pay	23.2%	75
VAT takes more time than other taxes	30.3%	99
Others (please specify)	0.0%	0
Total	100	327

Continue Table 4.5

Q 3: Reason of burden based on percentage:

Factors that influence most	Frequency	Percent
VAT law complexity	151	46.5%
VAT is a monthly tax to pay	75	23.2%
VAT takes more time than other taxes	101	30.3%
Others (please specify)	0	0.0%
Total	327	100

In Table 4.5, Question 1 shows that about 96.9% think that VAT compliance cost is a burden for their SMEs; while 3.1% oppose this opinion.

Results of question 2 show that 53.2% of SMEs think that VAT compliance cost is 21 to 30% burden for them; while 40.7% said its 31 to 40% burden; while 6.1% of SMEs stated that it is 10 to 20% extra burden for them.

Results for question 3 indicate that 46.5% of SMEs think VAT law complexity is the reason for feeling the VAT compliance is a burden; while 30.3% blame it on VAT taking more time than other taxes; and 23.2% think that because VAT is a monthly tax to pay, that is the reason it takes more time and frequency.

Table 4.6

Influence of the level of tax compliance costs to the business.

Factor Effecting VAT Compliance cost	Frequency					Total	Mean (S.D.)	R a n k
	Strongly effect 1	2	Natural	4	Slightly effect 5			
Business location	2	5	113	145	62	327	65.4	1
	1%	2%	35%	44%	19%	100%	(.64)	
Business size	121	177	12	14	3	327	65.4	2
	37%	54%	4%	4.1%	1%	100%	(.79)	
Business type	75	177	67	6	2	327	64.5	3
	23%	54%	20%	2%	1%	100%	(.71)	
Category of external advisor	99	174	48	5	1	327	64.5	4
	30%	53%	15%	2%	0%	100%	(.72)	

With regards to responses for the main factor contributing to resistance to comply with VAT by the SMEs, 19% of the respondents think that business location does not influence the level of tax compliance cost; 44% said it can affect slightly; 35% were neutral; only 2% said business location influences; while 1% said business location affects adversely. The mean score for the response is 64.5 and standard deviation is 0.64.

A total of 37% respondents think that business size strongly influences SMEs' compliance of VAT; 54% said it has an effect; 4% seemed to be neutral; 4% and 1% think that it slightly affects or has no effect on VAT compliance cost, respectively. The mean for the response is 64.5% with standard deviation of 0.72.

For business type influence on cost of VAT compliance, 23% of respondents said it has strong effect on VAT compliance cost; 54% said it has an effect on the compliance cost of VAT; 20% remained neutral; 2% and 1% said it has no effect on VAT compliance cost, respectively. The mean value for the response is 64.5 with standard deviation of 0.71.

A total of 30% respondents of the study said that category of external advisor can strongly influence the VAT compliance cost of the SMEs; 53% said it has an effect but these effects are not strong, while 2% remained neutral; and 2% said it has no effect. The mean value for the responses is 64.5 with standard deviation of 0.72.

Table 4.7

The relationship between complexity of VAT law, compliance costs and non-compliance

Factors	Frequency					Total	Mean (S.D.)	R a n k
	1	2	3	4	5			
Others taxes are less burdensome than VAT.	0 0%	0 0%	44 13.6%	135 41.2%	148 45.2%	327 100	64.5 (.71)	1
The VAT compliance costs of our business are insignificant.	92 28%	195 59%	35 10.5%	4 1%	1 0.5%	327 100	64.5 (.81)	2
Simplified VAT law and reasonable compliance costs would increase voluntary compliance among SME VAT payers in Algeria	0 0%	1 0.3%	17 5.7	175 53%	134 41%	327 100	64.5 (.82)	3
Compliance with VAT law is excessively burdensome and costly for SME taxpayers	0 0%	1 0.5%	4 1%	159 48.5%	163 50%	327 100	64.5 (.87)	4
The burden of compliance costs discourages the owners to fulfill VAT obligations.	0 0%	1 0.3%	7 2.6%	223 68%	96 29%	327 100	64.5 (.96)	5

Responses to the question “compliance with VAT law is excessively burdensome and costly for SME taxpayers”, shows that 50% of the respondents strongly agree; 48.5% agree; 1% remain neutral; and 0.5% disagree with this fact. The mean value for response is 64.5 with standard deviation value of 0.87.

In response to the question whether the compliance cost is insignificant, only 0.5% of the respondents strongly agree that the VAT compliance costs of their business are insignificant; 1% agree; 10.5% were neutral; 59% disagree; and 28% strongly disagree. The mean value for response is 64.5 with standard deviation value of 0.81.

A total of 41% of the respondents strongly agree that 'simplified VAT law and reasonable compliance costs would increase the voluntary compliance amount that SME VAT payers pay in Algeria; 53% respondents agree; 17% said that it does not matter; and only 0.3% disagree with this. The mean value for response is 64.5 with standard deviation value of 0.82.

'Other taxes are less burdensome than VAT' is strongly agreed to by 45.2%; 41.2% agree with this; and 13.6% remain neutral. The mean value for response is 64.5 with standard deviation value of 0.719.

4.5 Cross-Tabulation Analysis

Cross-tabulation analyzes the relationship between the respondents' demographic background and various issues concerning VAT compliance cost.

Table 4.8

Cross-tabulation between position and VAT cost (VAT Compliance Cost is Burdensome and Costly).

Position of the Respondent	VAT Compliance Cost is Burdensome and Costly					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
Accountant employee of the business	0	0	0	23	27	50
Percentage	0.00	0.00	0.00	46.00	54.00	100
Accountant not employee of the business	0	0	0	3	8	11
Percentage	0.00	0.00	0.00	27.27	72.73	100
Manager other than proprietor (e.g., financial manager)	0	0	0	13	18	31
Percentage	0.00	0.00	0.00	41.94	58.06	100
Other employees	0	0	0	22	28	50
Percentage	0.00	0.00	0.00	44.00	56.00	100
Owner/director/partner/trustee	3	1	4	97	80	185
Percentage	1.62	0.54	2.16	52.43	43.24	100
Total	3	1	4	158	161	327

The above results show that 54% of accountant employees strongly agree that VAT compliance cost is a burden for the SMEs of Algeria; 72.73% of accountants from outside, 58.06% managers and 56% of other employees strongly agree that compliance cost is a burden for the business; and 52.43% of owners consider this as a burden to the business.

Table 4.9

Cross-tabulation between position and VAT cost (VAT cost Insignificant for Business).

Position of the Respondent	VAT cost Insignificant for Business					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
Accountant employee of the business	15	30	3	1	1	50
Percentage	30.00	60.00	6.00	2.00	2.00	100
Accountant not employee of the business	5	6	0	0	0	11
Percentage	45.45	54.55	0.00	0.00	0.00	100
Manager other than proprietor (e.g., financial manager)	9	17	4	0	1	31
Percentage	29.03	54.84	12.90	0.00	3.23	100
Other employees	13	29	8	0	0	50
Percentage	26.00	58.00	16.00	0.00	0.00	100
Owner/director/partner /trustee	149	12	20	3	1	185
Percentage	80.54	6.49	10.81	1.62	0.54	100
Total	191	94	35	4	3	327

All of the respondents think that VAT compliance cost is not insignificant for their businesses: 60% accountant employees; 54.45% outside accountants; 54.84% managers; 58% managers; and 58% other employees disagree that compliance cost is insignificant.

. Table 4.10

Cross-tabulation between position and VAT cost (High compliance costs discourage the owners).

Position of the Respondent	High compliance costs discourage the owners					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
Accountant employee of the business	0	0	1	34	15	50
Percentage	0.00	0.00	2.00	68.00	30.00	100
Accountant not employee of the business	0	0	0	7	4	11
Percentage	0.00	0.00	0.00	63.64	36.36	100
Manager other than proprietor (e.g., financial manager)	0	0	0	22	9	31
Percentage	0.00	0.00	0.00	70.97	29.03	100
Other employees	0	1	1	27	21	50
Percentage	0.00	2.00	2.00	54.00	42.00	100
Owner/director/partner/trustee	3	0	5	131	46	185
Percentage	1.62	0.00	2.70	70.81	24.86	100
Total	3	1	7	221	95	327

The cross-tabulation shows that majority of the respondents agree with the fact that compliance costs for VAT discourage the owners to invest in SMEs: 68% of the accountant employees; 63.64% outside accountants; 70.97% of managers; and 70.81% owners agree that compliance cost discourages owners to invest in SMEs.

Table 4.11

Cross-tabulation between position and VAT cost (Low compliance costs encourage voluntary compliance).

Position of the Respondent	Low compliance costs encourage voluntary compliance					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
Accountant employee of the business	0	0	2	28	20	50
Percentage	0.00	0.00	4.00	56.00	40.00	100
Accountant not employee of the business	0	0	0	4	7	11
Percentage	0.00	0.00	0.00	36.36	63.64	100
Manager other than proprietor (e.g., financial manager)	0	0	1	18	12	31
Percentage	0.00	0.00	3.23	58.06	38.71	100
Other employees	0	0	4	17	29	50
Percentage	0.00	0.00	8.00	34.00	58.00	100
Owner/director/partner/trustee	3	1	10	107	64	185
Percentage	1.62	0.54	5.41	57.84	34.59	100
Total	3	1	17	174	132	327

A total of 56% of the accountants from inside; 58.06% of managers; and 57.84 % of owners agree on the statement that low compliance cost will encourage the owners to pay VAT on time; while 63.6% of the accountants from outside; and 56% of other employees of the SMEs strongly agree with the above mentioned statement.

Table 4.12
Cross-tabulation between position and VAT cost (Other tax compliance cost is less expensive).

Position of the Respondent	Other tax compliance cost is less expensive					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
Accountant employee of the business	0	0	2	19	29	50
Percentage	0.00	0.00	4.00	38.00	58.00	100
Accountant not employee of the business	0	0	0	5	6	11
Percentage	0.00	0.00	0.00	45.45	54.55	100
Manager other than proprietor (e.g., financial manager)	0	0	3	11	17	31
Percentage	0.00	0.00	9.68	35.48	54.84	100
Other employees	1	1	9	24	15	50
Percentage	2.00	2.00	18.00	48.00	30.00	100
Owner/director/partner/trustee	3	0	30	74	78	185
Percentage	1.62	0.00	16.22	40.00	42.16	100
Total	4	1	44	133	145	327

This Table shows that 58% of the accountants of the company strongly agree that in Algeria, the compliance cost of VAT is higher than the compliance cost of other taxes; 58% internal accountants; 54.5% accountants from outside; 54.8% of outside accountants; 48% of other employees; and 42% of owners strongly agree with this statement.

Table 4.13

Cross-tabulation between turnover and VAT burden (Burdensome and Costly).

Turnover	Burdensome and Costly					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
≤ DZD 20 million	1	2	5	8	6	22
Percentage	4.55	9.09	22.73	36.36	27.27	100
≤ DZD 200 million	2	2	4	94	72	174
Percentage	1.15	1.15	2.30	54.02	41.38	100
DZD 100 million - 2 billion	1	0	2	52	76	131
Percentage	0.76	0.00	1.53	39.69	58.02	100
Total	4	4	11	154	154	327

This Table shows that the 36.36% of the respondents from SMEs having turnover less than DZD 20 million believe that VAT compliance cost is a burden for their organization; 58% of the employees agree that this is burden for a firm having ≤ 200 DZD million of turnover; and SMEs with DZD 100 million to 2 billion strongly agree.

Table 4.14

Cross-tabulation between turnover and VAT cost (VAT cost is insignificant).

Turnover of SME	VAT cost is insignificant					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
≤ DZD 20 million	2	12	3	2	3	22
Percentage	9.09	54.55	13.64	9.09	13.64	100
≤ DZD 200 million	50	97	21	2	4	174
Percentage	28.74	55.75	12.07	1.15	2.30	100
DZD 100 million - 2 billion	37	80	10	3	1	131
Percentage	28.24	61.07	7.63	2.29	0.76	100
Total	89	189	34	7	8	327

This Table shows that 40% of the respondent from SMEs having turnover of less than DZD 20 million; 70% think that VAT compliance is a burden to the SMEs; 56% with turnover of more than DZD 200 million strongly agree; and 62% also strongly agree for SMEs having turnover of DZD 100 million - 2 billion.

Table 4.15

Cross-tabulation between turnover and VAT cost (Burden and Costly).

Turnover	Burden and Costly					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
≤ DZD 20 million	2	2	3	14	1	22
Percentage	9.09	9.09	13.64	63.64	4.55	100
≤ DZD 200 million	3	1	2	119	49	174
Percentage	1.72	0.57	1.15	68.39	28.16	100
DZD 100 million - 2 billion	2	1	3	83	42	131
Percentage	1.53	0.76	2.29	63.36	32.06	100
Total	7	4	8	216	92	327

Table 4.15 shows that 80% of the SMEs with less than DZD 20 million think that VAT compliance cost discourages the investors; 71% of SMEs with more than DZD 200 million; and 66% of the big SMEs think the same.

Table 4.16

Cross-tab between turnover and VAT cost (Low compliance cost encourages voluntary compliance).

Turnover	Low compliance cost encourages voluntary compliance					Total
	Strongly Disagree	Disagree	Neutral/ Not Sure	Agree	Strongly Agree	
≤ 20 million	1	3	3	9	6	22
Percentage	4.55	13.64	13.64	40.91	27.27	100
≤ 200 million	2	1	12	103	56	174
Percentage	1.15	0.57	6.90	59.20	32.18	100
100 million - 2 billion	1	2	3	58	67	131
Percentage	0.76	1.53	2.29	44.27	51.15	100
Total	4	6	18	170	129	327

The results for this Table show that 40.91% of the respondents from the SMEs having turnover of more DZD 20 million, agree that low compliance cost will encourage the SMEs to voluntary compliance of VAT, less than DZD 200 million turnover is favored by 59.20%; and from DZD 100 million to 2 billion, the rate of strongly agree is 51.15%.

Table 4.17

Cross-tab between turnover and VAT cost (Other tax compliance cost is less expensive)

Turnover	Other tax compliance cost is less expensive					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
≤ DZD 20 million	2	2	5	9	4	22
Percentage	9.09	9.09	22.73	40.91	18.18	100
≤ DZD 200 million	2	2	25	68	77	174
Percentage	1.15	1.15	14.37	39.08	44.25	100
DZD 100 million - 2 billion	2	2	13	53	63	133
Percentage	1.50	1.50	9.77	39.85	47.37	100
Total	6	6	43	130	144	329

The above results indicate that SMEs with less than DZD 20 million agree on the statement that other tax compliance cost is less expensive compared to VAT; 40.91% of SMEs of more than DZD 200 million agree; and 44.25% of SMEs having turnover of DZD 100 million to 2 billion strongly agree.

Table 4.18

Cross-tabulation between full-time employees and VAT cost (Burdensome and costly)

Number of full-time employees	Burdensome and costly					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
1 - 9	1	1	3	25	21	51
Percentage	1.96	1.96	5.88	49.02	41.18	100
10 - 49	3	1	1	90	90	185
Percentage	1.63	0.54	0.00	48.91	48.91	100
50 – 250	1	2	0	40	48	91
Percentage	1.09	2.17	1.09	43.48	52.17	100
Total	5	4	4	155	159	327

Results of this Table show that 49.02 and 48.91% of the SMEs with 1 to 9; and 10 to 49 permanent employees agree on the statement that compliance cost is burdensome for the SMEs; while 52.17% of the SMEs with 50 to 250 permanent employees strongly agree on this statement..

Table 4.19
Cross-tabulation between full-time employees and VAT cost (VAT cost of compliance is insignificant)

Number of full-time employees	VAT cost of compliance is insignificant					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
1 - 9	10	35	0	2	4	51
Percentage	19.61	68.63	0.00	3.92	7.84	100
10 - 49	60	95	24	2	4	185
Percentage	32.43	51.35	12.97	1.08	2.16	100
50 – 250	18	60	8	3	2	91
Percentage	19.78	65.93	8.79	3.30	2.20	100
Total	88	190	32	7	10	327

Results of this Table indicate that 68.63, 51.35 and 65.93% of the SMEs with 1 to 9, 10 to 49 and 50 to 250 permanent employees strongly agree that cost of VAT compliance is insignificant.

Table 4.20

Cross-tabulation between full-time employees and VAT cost (High Compliance cost discourages the owners)

Number of full-time employees	High Compliance cost discourages the owners					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
1 - 9	0	0	1	37	12	50
Percentage	0.00	0.00	2.00	74.00	24.00	100
10 - 49	3	3	5	120	54	185
Percentage	1.62	1.62	2.70	64.86	29.19	100
50 – 250	2	0	2	60	28	92
Percentage	2.17	0.00	2.17	65.22	30.43	100
Total	5	3	8	217	94	327

This Table shows that 74, 64.86 and 65.22% of the SMEs having 1 to 9, 10 to 49 and 50 to 250 employees agree that compliance cost for VAT discourages the owners.

Table 4.21

Cross-tab between full-time employees and VAT cost (Low compliance cost encourages voluntary compliance).

Number of full-time employees	Low compliance cost encourages voluntary compliance					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
1 - 9	1	1	2	33	14	51
Percentage	1.96	1.96	3.92	64.71	27.45	100
10 - 49	3	2	13	96	71	185
Percentage	1.62	1.08	7.03	51.89	38.38	100
50 – 250	0	1	3	43	44	91
Percentage	0.00	1.10	3.30	47.25	48.35	100
Total	4	4	18	172	129	327

Results for this Table show that 64.7 and 51.89% of the SMEs having 1 to 9 and 10 to 49 employees, respectively agree that low compliance cost encourages voluntary compliance; while 48.35 % of the 50 to 250 employees group strongly agree with this.

Table 4.22

Cross-tab between full-time employees and VAT cost (Other tax compliance cost is less expensive)

Number of full-time employees	Other tax compliance cost is less expensive					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
1 - 9	1	1	8	26	15	51
Percentage	1.96	1.96	15.69	50.98	29.41	100
10 - 49	3	2	27	67	86	185
Percentage	1.62	1.08	14.59	36.22	46.49	100
50 – 250	1	0	10	36	44	91
Percentage	1.10	0.00	10.99	39.56	48.35	100
Total	5	3	45	129	145	327

Results show that about 51% SMEs with 1 to 9 permanent employees agree that compliance cost for other taxes are relatively less as compared to VAT compliance cost; while 46.49 and 48.35% of the SMEs with 10 to 49 and 50 to 250 employees strongly agree with this fact.

Table 4.23

Cross-tab between full-time employees and VAT cost (Burdensome and Costly)

Years of experience in paying VAT	Burdensome and Costly					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
Less than 1 year	2	3	3	53	59	120
Percentage	1.69	0.85	2.54	44.92	50.00	100
1 to 3 years	0	0	0	8	11	19
Percentage	0.00	0.00	0.00	42.11	57.89	100
4 to 6 years	1	0	2	43	57	103
Percentage	0.97	0.00	1.94	41.75	55.34	100
7 to 9 years	0	1	0	29	21	51
Percentage	0.00	3.77	1.89	54.72	39.62	100
More than 10 years	1	0	1	21	11	34
Percentage	2.94	0.00	2.94	61.76	32.35	100
Total	4	3	7	154	159	327

Results of this Table show that 50% of companies with life of less than one year; 57.89% with life of 1 to 3 years; and 55.34% with life of 4 to 6 years strongly agree that VAT compliance cost is burdensome and costly for the SMEs; while 54.72% and 61.76% of SMEs agree with this statement.

Table 4.24

Cross-tab between full-time employees and VAT cost (VAT compliance cost is insignificant),

Years of experience in paying VAT	VAT compliance cost is insignificant					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
Less than 1 year	4	29	0	0	1	34
Percentage	11.76	85.29	0.00	0.00	0.3	100
1 to 3 years	40	73	3	2	2	120
Percentage	33.33	60.83	2.50	1.67	1.67	100
4 to 6 years	25	73	2	2	1	103
Percentage	24.27	70.87	1.94	1.94	0.97	100
7 to 9 years	19	28	2	1	1	51
Percentage	37.25	54.90	3.92	1.96	1.96	100
More than 10 years	6	13	0	0	0	19
Percentage	31.58	68.42	0.00	0.00	0.00	100
Total	94	216	7	6	4	327

This Table shows that SMEs with less than 1 year life is 85.28 %, 1 to 3 years life is 60.86 %, 4 to 6 and 7 to 9 year of paying the VAT is 70.87 and 54.90%, respectively; and 68.42% SMEs have been paying VAT for more than 10 years. All agree that high VAT compliance cost discourages the investors to invest in SMEs

Table 4.25

Cross tab between fulltime employee and VAT cost (Burdensome and Costly).

Years of experience in paying VAT	Burdensome and Costly					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
Less than 1 year	6	24	3	0	0	33
Percentage	18.18	72.73	9.09	0.00	0.00	100
1 to 3 years	31	68	14	3	3	119
Percentage	26.05	57.14	11.76	2.52	2.52	100
4 to 6 years	27	58	13	1	2	101
Percentage	26.73	57.43	12.87	0.99	1.98	100
7 to 9 years	14	30	5	2	1	52
Percentage	26.92	57.69	9.62	3.85	1.92	100
More than 10 years	12	7	0	3	0	22
Percentage	54.55	31.82	0.00	13.64	0.00	100
Total	90	187	35	9	6	327

Results in the above Table show that 72.73% of SMEs with less than 1 years' life; 57.14 % of SMEs paying VAT for 4 to 6 years; 57.43 % of SMEs paying VAT from 7 to 9 years; and 54.55% of SMEs paying VAT more than 10 years agree with the question, VAT compliance cost is burdensome; while 57.43% of SMEs with 4 to 6 years of paying VAT strongly agree.

Table 4.26

Cross-tab between full-time employees and VAT cost (Other tax compliance cost is less expensive)

Years of experience in paying VAT	Other tax compliance cost is less expensive					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
Less than 1 year	3	0	5	18	7	33
Percentage	9.09	0.00	15.15	54.55	21.21	100
1 to 3 years	0	1	0	111	7	119
Percentage	0.00	0.84	0.00	93.28	5.88	100
4 to 6 years	1	0	12	43	45	101
Percentage	0.99	0.00	11.88	42.57	44.55	100
7 to 9 years	0	2	6	17	27	52
Percentage	0.00	3.85	11.54	32.69	51.92	100
More than 10 years	1	1	2	9	9	22
Percentage	4.55	4.55	9.09	40.91	40.91	100
Total	5	4	25	198	95	327

Results for this Table show that 54.55, 93.28, 44.55 and 51.92% of the SMEs which have been paying VAT for less than one year, 1 to 3 years, 4 to 6 years and 7 to 9 years agree that other compliance costs are less expensive compared to VAT; while 40.91% of the SMEs with more than 10 years paying of VAT strong agree and same parentage are strongly agree on this.

Table 4.27

Cross-tab between full-time employees and VAT cost (Low compliance cost encourages voluntary compliance).

Years of experience in paying VAT	Low compliance cost encourages voluntary compliance					Total
	Strongly Disagree	Disagree	Neutral/Not Sure	Agree	Strongly Agree	
	Less than 1 year	1	1	1	19	
Percentage	3.03	3.03	3.03	57.58	33.33	100
1 to 3 years	2	1	5	62	49	119
Percentage	1.68	0.84	4.20	52.10	41.18	100
4 to 6 years	2	4	4	49	44	103
Percentage	1.94	3.88	3.88	47.57	42.72	100
7 to 9 years	2	0	2	29	19	52
Percentage	3.85	0.00	3.85	55.77	36.54	100
More than 10 years	1	0	0	12	6	19
Percentage	5.26	0.00	0.00	63.16	31.58	100
Total	8	6	12	171	129	326

Low compliance cost can increase the voluntary compliance: 57.58, 52.1, 47.57, 55.77 and 57.6% of SMEs which have been paying VAT for less than 1 year, 1 to 3 years, 4 to 6 years, 7 to 9 years and more than 10 years, respectively all agree with that statement.

4.6 Discussion

This part provides a discussion on the results presented in the previous chapter. This chapter discusses the results of internal and external VAT compliance costs, with reference to the literature, logic and argument based on justification if required for the SMEs operating in Algeria. Before starting discussion on the results, it is worth reiterating briefly the objectives of the study.

The principle objective of this study is to investigate VAT compliance costs of SMEs of Adrara State in Algeria for the assessment year 2014. More specifically:

1. To investigate and measure the internal labor & non-labor tax compliance costs of VAT for SMEs in Algeria.
2. To investigate and measure the external advisors compliance costs of VAT for SMEs in Algeria.

4.6.1 External Tax Compliance Cost

This section discusses the cost of external advisors employed for accounting and tax purposes by SMEs in Algeria. According to Howlett et al. (2014), companies are required to pay 29 different types of taxes to the Algerian Government and it is ranked at 174th position in overall tax paying ranking. To achieve the aforementioned objective regarding external tax compliance cost of SMEs in monetary terms, a questionnaire was used to collect data from 327 SMEs operating in Algeria. Out of these 327 questionnaires, 122 (37.32%) SMEs reported that they use the services of external advisors; whereas 205¹ (62.12%) of the firms claimed that they utilize their own staff to carry out these accountancy and tax related matters. Klassen, Mescall and Lisowsky (2012) claim that tax environment in any country is very uncertain and that creates numerous challenges in terms of planning and compliance. Therefore, SMEs normally outsource their accountancy and tax matters to different consultants and accounting firms because they believe that these firms have in-depth knowledge of the technical and legal framework of the country for efficient law compliance (Mustapha & Jeyapalan, 2001). It is worth mentioning here that around 90% of the firms, which are utilizing the services of external consultants, started this practice over the last 6 years.

¹ Firms (94.44%) not utilizing the services of external consultants have their own strong accounting system while rest considered it costly

Table 4.28
External Advisor Cost

Particular	Less than 10000 DAZ	10 001 to 20000 DAZ	20 001 to 30000 DAZ	Above 30000 DAZ	Total Cost
Accounting	90000 3.90%	990000 42.95%	850000 36.87%	375000 16.26%	2305000 55.34%
Taxation	157500 8.46%	1290000 69.35%	300000 16.12%	112500 6.04%	1860000 44.65%
					4165000²
<i>For Example = Number of respondents x 7500 (10000* -.25)</i> <i>1st column 7500 * 12 =90000</i>				Grand Total	

(All the costs are on annual bases)

Results obtained from the questionnaire reveal that the 122 SMEs (38.32%) which hire external experts either utilize the services of different accounting firms or individual consultants. Furthermore, hiring well-known accountants and consultants is not a common practice in Algeria. External consultants and accountants provide different compliance services, like tax computation, tax advice and compatibility of financial statements with national and international standards. The SMEs who acquire the services of external accounting firms or consultants are likely to employ them for tax matters alone (6.67%) or both accounting and taxation matters (93.33%). According to the results, SMEs in Algeria, spend an amount of DZD 4,165,000 per year in terms of external compliance cost. Out of this total, 55.34% (DZD 2,305,000/year) is incurred for the compatibility of tax with the national and international standards; whereas it is 44.65% (DZD 1,860,000/year) in case of taxation. This high cost of compliance

² The idea of calculation is taken from (Howlett et al., 2014)

discourages voluntarily compliance behavior among managers, accountants and owners of SMEs. Moreover, meeting cost, both virtual and face-to-face, with external advisor, on average, for SMEs operating in Algeria is DZD 17,522 per year for accounting compliance; while it is DZD 15,000 per year for tax matters. Likewise, around 95% of the respondents, both managers and accountants, agreed that this high cost of compliance discourages the employers to invest their money in SMEs in Algeria, which is the major contributor (60%) and employer (1.85 million employees) in the economy.

Results confirmed the findings of Evan (2008), as majority of the respondents highlighted that tax compliance cost is very high. Sandford and Hasseldine (1992); and Sandford et al. (1989) emphasize that compliance cost is very high and regressive in nature as almost 99% respondents disagree on the fact that compliance cost is insignificant. In addition, they highlight that this compliance cost is higher for small business as compared to large ones. In the same manner, the study of the IRB of Algeria (2010) found that compliance cost increases with business size. A total of 87.5% of the respondents in Algeria reported that cost of consultants and accountants has not changed from the previous year. This result is in contradiction with the findings of Evans (2008), that consultants and accounting firms, increase their charges on an annual basis. This might be so because as mentioned above, Algerians are dissatisfied with the VAT system prevailing in the country, and therefore, are unwilling to pay VAT. They try to conceal their tax liability and hire consultants and accountants whose service fee is cheaper than others (Bannock and Albach, 1989). The study of Sandford et al. (1989) found a similar result that overall compliance cost, especially for small businesses, does not change every year. In addition,

majority (98%) of the respondents viewed tax compliance as an additional burden, which discourages investment in the SMEs sector that is vital for the Algerian economy, therefore, they will try to control this cost by employing low cost consultants rather than well-known and costly ones.

4.6.2 Internal Tax Compliance Cost

This section discusses the research objective of measuring the cost of hiring internal accounting staff, mainly for accounting and tax purposes by SMEs in Algeria. . Organizations are required to comply different national and international tax and accounting laws. Therefore, organizations need to maintain plenty of documentation for domestic (tax department & stock exchange etc) and other international bodies for example International Federation of Accountants (IFAC). There are two possible ways available for organizations to successfully complying these national and international requirements, either they can employ the services of external advisors who frequently (weekly, monthly, quarterly etc) visit and look into matters related with tax and accounts or organization develop their own tax and accountancy staff. Building own internal tax and accountancy staff has advantage over external advisors because internal staff on the regular bases maintain record of all the accounting and tax matters and update the company's financial statements that are required by national and international organizations for different purposes. In addition, there is an ancient saying that "*prevention is better than cure*"; this phrase provides the reason to justify why 62.12% companies have full-time VAT compliance employees. Companies with this mind-set

believe that preventive measures should be in place to reduce the danger of non-compliance at the end of the year and external consultants and accounting firms charge based on their time spent. If firms do not implement efficient control mechanisms, then at the end of the year, external advisors might charge higher because of numerous errors and time spent.

Table 4.29
Internal Salary

Particular	Less than 10000 DAZ	10 001 to 20000 DAZ	20 001 to 30000 DAZ	Above 30000 DAZ	Total Cost
Manager	105000 VAT-11812	2760000 VAT-402750	175000 VAT-43750	0 VAT-0	3040000 VAT-458312 % of Total- 15.07
Accountant	7500 VAT-1125	1065000 VAT-182250	2625000 VAT-1067500	1050000 VAT-0	4747500 VAT-1250875 % of Total- 26.34
Account Staff	262500 VAT-472500	2085000 VAT-344250	750000 VAT-105000	37500 VAT-0	3135000 VAT-921750 % of Total- 29.40
Clerk	832500 VAT-124875	1365000 VAT-211500	75000 VAT-0	0 VAT-0	2272500 VAT-336375 % of Total- 14.80
Q3- (Hourly Rate x number of hours devoted for VAT x number of respondents)					13195000 VAT-2967313
Hourly rate = salary / 176					Grand Total
Number of hours VAT = 176 x time spend on VAT					
1st column Hourly rate 7500/176 = 42.61					
Number of Hours VAT = 176 * 7.5% =13.2					
42.61 * 13.2 = 562.45 (one respondent)					
562.45 * 21 = 11812					

Monthly Bases

Results obtained from the questionnaire reveal that the sampled SMEs operating in Algeria spend DZD 13,195,000 per month for the accounting and tax employees for compliance purposes. Out of this total cost, DZD 2,967,313/month per /month is for accounting and tax matters; and remainig for external compliance cost. In addition, four main categories are identified through the questionnaire, which are involved in the internal control system, i.e., manager; accountant; accounting staff; and clerks. The percentage of total salary they receive for accounting and tax is DZD 458,312 (15.07%); DZD 1,250,875 (26.34%); DZD 921,750 (29.40%), and DZD 336,375 (14.80%) for manager, accountant, accounting staff and clerk, respectively. Furthermore, it is obvious from the results that accountant and account's staff spend almost 25% of their time for taxation and compliance purpose whereas managers and clerk spends 40% less time on taxation and accounting matters as compared to accountant and account's staff.

Table 4.30
Internal Tax Compliance Cost

Particular	Less than 10 hours	10 to 20 hours	30 to 40 hours	Above 50 hours	Total Cost
Manager	277.2	4725.6	308	0	5310.8 % of Total hours-10.93
Accountant	26.4	2138.4	7515.2	0	9680 % of Total hours-14.71
Account Staff	528	4039.2	739.2	0	5306.4 % of Total hours-26.82
Clerk	1465.2	2481.6	0	0	3946.8 % of Total hours-14.70
Time spend on VAT * number of respondents 13.2 * 21 = 277.2				Grand Total	24,244

Hours/month

Results obtained from the questionnaire reveal that accounting and tax department employees of sampled SMEs, on average, spend 24,244 hours/month, of their work hours, for accounting and tax matters only. Out of the total hours, the value is DZD 2967313/month (22.24%) for the accounting and tax matters; whereas the percentages are 15.07%, 26.34%, 29.40%, and 14.80% respectively for manager, accountant, accounting staff and clerk. The result is in accordance with Balzic (2002) that managers spend almost half of their time as compared to accountants for tax and accounting compliance because managers believe that accountants are better equipped to handle such types of matters. Managers spend as much time (10.93%) as accounting staff (14.71%) for the compliance matters.

According to Howlett et al. (2014), Algerian companies, on average, spend 451 hours/annum for tax compliance only. The structure in Algeria keeps on changing every year. Therefore, organizations need to devote special resources to comply with the tax laws prevailing in the assessment of at particular year and compliance with the law requires almost double the resources as compared to computation. Similarly, results reveal that of the managers' and accountants' time spent on accounting and tax compliance, only 14.42 hours (0.04%) is devoted for computation; 1774 hours (59.70%) for advice; and the rest for planning purposes. On the other hand, accounting staff and clerks spend most of their time of around 82% and 98%, respectively for computation, data entry, clerical and non-managerial tasks and keep way from tax advice or planning by the management.

Internal compliance cost can be categorized into two parts (i.e., internal labour cost and internal non-labor cost). Non-labor cost normally comprises cost of computer software (Pope and Ariff, 2002). Authors, like Blazic (2002) emphasize that cost of computer software and hardware should be computed while studying the cost of internal tax compliance cost. She suggested that software can lower the human effort and time for the computation of accounting and tax related matters, but is costly. Therefore, authors should incorporate the cost of this software. The results obtained from the questionnaire are in line with the findings of Horizon Accounting System (1998) that firms usually utilize low cost software to control the overall compliance cost as 60% of the respondents said that their software cost is up to DZD 1,250,000 on an annual basis.

4.7 Cross Tabulation Analysis

A total of 96.9% respondents in the survey revealed that they considered VAT compliance as burdensome because of higher tax compliance fees and time. The finding is in line with the SBP (2005), which concluded that majority of the taxpayers believe that tax compliance is an extra burden on their companies. In addition, 93.9% respondents highlighted that they need to incur around 20-40% additional tax compliance cost due to complexity (46.5%); 94% respondents said that reducing the complexity will increase the tax compliance rate; time spent (30.3%); and periodic payments (23.2%). Results also highlight that 63% respondents agreed on the point that location of business is not a major factor contributing the higher tax compliance cost. This might be true because certain locations are specifically devoted for the SMEs and the government

provides special discount, rebates and tax concession if a business is operating in that specific area. This finding is in accordance with the findings of Erard (1997). In addition to this, 96.2% respondents emphasized that other taxes are also significant for SMEs operating in Algeria.

However, 77%, 83% and 91% respondents reported that type of business, category of external advisor and business size, respectively significantly affect tax compliance cost in Algeria. This finding is aligned with the previous studies of Erard (1997); Rametse and Pope (2001), and Mustapha and Jeyapalan (2001), respectively. They found in their studies that VAT cost is influenced by the category of external advisors, business size and most importantly, the type of business carried out by the SMEs.

In addition, results based on small (\leq DZD 20 million); medium (\leq DZD 200 million); and large (DZD100 million to 2 billion) SME classification also confirms that tax compliance cost is significant and an extra burden on the company, which discourages owners to invest in SMEs. The government needs to either reduce or provide subsidies to boost this sector.

In the same manner, another classification has been made on the bases of number of employees working in SMEs, 1-9 person working in an SME is categorized as small, 10-49 as medium, and between 50-250 as large SME. Based on the results all small,

medium, and large SMEs also confirmed that tax compliance cost is significant in value and an extra burden on the company, which discourages owners to invest in SMEs. The government needs to either reduce or provide subsidies to boost this sector. Furthermore, similar conclusion can be drawn based on number of years the SMEs have been operating in Algeria

4.8 Summary of the Chapter

This chapter discusses the respondents' profile and their responses towards the external and internal VAT compliance cost. This chapter shows that most of the respondents are owners and accountants. Most of the SMEs are from trading and services having turnover of \leq DZD 200 million (medium size SMEs). Majority of SMEs say they do not hire any external advisor as they have their own internal advisors and the SMEs which hire the external advisors do not come from big accounting firms. These advisors are mainly hired for accounting and tax services. Number of meetings in a year is 8 to 10 times. The data also shows that most of the SMEs depend on their own staff for handling the matters related to VAT. The average number of staff for the SMEs is about 5.28, and these are staff earning above DZD 10,000. Internal advisors are provided with computer facilities and many of the SMEs use special software for the computation of the VAT.

CHAPTER FIVE

CONCLUSION, RECOATMMENDIONS AND LIMITATIONS

5.1 Conclusion

This study aims to explore the VAT compliance costs on SMEs of Adrar State in Algeria for the assessment year 2014. SMEs play a vital role in the development of any country. For instance, in Algeria, the contribution of SMEs to GDP for 2012 was 60%; and SMEs approximately employ 1.86 million workers. As taxes are the major source of revenue for the government, tax compliance is currently a topical policy issue, especially in developing countries as governments seek ways to improve efficiency in tax revenue collection to finance their budgets. SMEs are the majority business taxpayers in most developing countries and as such, their compliance levels directly influence government tax revenue collection (Nelson, 2014).

To answer the research questions regarding VAT internal and external compliance costs in terms of money and time spent by SMEs operating in Algeria, a self-administered questionnaire was used to collect data from 360 SMEs operating in Adara state of Algeria. Out of these 360 questionnaires, 327 completed questionnaires were received representing a response rate of 90.83%. A descriptive and cross-tabulation analyses were used to exact meaningful insights from the data. Results obtained from these analyses confirmed the findings of Evans (2008); Sandford and Hasseldine (1992); and Sandford et al. (1989), who found that external tax compliance cost is significant and regressive in

nature. Results reveal that all SMEs, in terms of sales and number of employees, believe that VAT compliance cost is very high in Algeria and this high cost of compliance discourages owners from investing in SMEs that contribute a larger share of GDP in Algeria. Results show that SMEs in Algeria spend DZD 4,165,000 per annum in terms of external compliance cost. Of this total, 53.85% (DZD 2,135,200) is cost incurred for compatibility with the national and international standards; whereas 46.15% (DZD 1,830,000). Moreover, meeting costs, both virtual and face-to-face, with external advisors, on average, for SMEs operating in Algeria, is DZD 17,522 per annum for accounting compliance; while it is DZD 15,000 per annum for tax matters. However, majority (87.5%) of the respondents in Algeria reported that cost of consultants and accountants has remained constant; this is in contradiction to the findings of Evans (2008), who claimed that tax compliance cost is increasing every year due to the volatile and complex nature of tax laws. Author also found that internal VAT compliance cost is higher than external advisory and this finding is in line with Hasseldine et al., (2012).

In addition, author found that Algerian SMEs, on average, spend 24,244 hours/month, or approximately 10%³ of their work hours for accounting and tax matters only. Of this total hours, the value is DZD 1,375,869 (10.56%) as salary, especially for accounting and tax work. Similarly, this study found that SMEs normally use low cost software to control the overall compliance cost as 60% of the respondents said that their software cost is up to DZD 1,250,000 on an annual basis.

³ Total working hours has been computed by multiplying 176 hours/month by number of questionnaires.

5.2 Recommendations

Taxes and duties remain the major source of revenue of any government irrespective of country. The revenue the government receives through different taxes is utilized to support different public projects, i.e., roads, universities, hospitals, etc. Hence, the nature, type and location of a business should be considered when formulating tax policies or legislation. SMEs in Algeria are the backbone of the Algerian economy, contributing almost 60% to GDP; however, the rate of tax and the compliance cost for this sector is very high and discourages investors to start new SMEs. Therefore, the government needs to review the tax policy, structure, and legislation, with a view to either reducing the tax rate or providing subsidies to boost confidence of investors in the SME sector. In addition, as majority of respondents reported that tax compliance is very complex, paper based, and time-consuming activity in Algeria, Government need to make it easier, paper less, and one click activity to improve self tax compliance rate and revenue.

5.3 Limitations and Suggestion for Future Research

There are certain limitations of this research that have to be acknowledged. First, data was collected from one state while other states might differ in their business prospective. Second, due to time and resources limitation, VAT compliance cost as percentage of GDP or total tax compliance cost has been ignored in this study. Future studies can be conducted by making the GDP as base for the percentage of expenses incurred on compliance cost. Moreover, future studies can use different ways to collect data, including quantitative and qualitative methods. Future studies can expand the population to all Algerian states so that the result could be better generalized to the whole of Algeria.

REFERENCE

- Abdul-Jabbar, H. & Pope, J. (2008a). The effects of the self-assessment system on the tax compliance costs of small and medium enterprises in Malaysia. *Australian Tax Forum*, 23(3), 289–307.
- Abdul-Jabbar, H. & Pope, J. (2008b). Exploring the relationship between tax compliance costs and compliance issues in Malaysia. *Journal of Applied Law and Policy*, 1(1), 1–20.
- Abdul-Jabbar, H. (2009). *Income tax non-compliance of small and medium enterprises in Malaysia: Determinants and tax compliance costs*. PhD Thesis, Curtin University of Technology, Perth.
- Adereti, S.A., Sanni, M.R., & Adesina, J.A. (2011). Value added tax and economic growth of Nigeria. *European Journal of Humanities and Social Sciences* 10(1) 456-471.
- Akinboade, O. A. (2014). Determinants of tax compliance behaviour of small and medium size businesses in Cameroon's Littoral and Central Provinces. *Niğde Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 7(1), 397.
- Alink, M., (2010). *Looking beyond the border: Recent developments in micro and small business taxation in other regions*. Presentation at the OECD Conference on Taxing Micro and Small Businesses, Manila, March 2-5.
- Allers, M. (1994). *Administrative and compliance costs of taxation and public transfers in the Netherlands*. Groningen, The Netherlands: Wolters-Noordhoff.
- Alley, C., Maples, A., Veal, J., Polson Higgs., & Co. (2004), *New Zealand taxation* (1st ed.). Wellington: Brookers Ltd.
- Americans for Fair Taxation (2007). *What the federal tax system is costing you – besides your Approach*. Sixth edition. Willey.

- Ariff, M., & Pope, J. (2002). *Taxation & compliance costs in Asia Pacific economies*. Penerbit.
- Atil, A. (2009). Environmental Responsibility among Algerian SMEs: Opportunities and Obstacles of their Integration. In *International Conference on the Social Responsibility among Businesses*. February 26-28.
- Bannock, G., & Albach, H. (1989). The compliance costs of VAT for smaller firms in Britain and West Germany. *Governments and Small Business*, Paul Chapman, London, 182-228.
- Barbone, L., Bird, R. M., & Vázquez Caro, J. (2012). The costs of VAT: A review of the literature. *Case Network Reports*, (106).
- Bhatia, H. L. (2009). *Public finance*. Vikas Publishing House PVT Ltd.
- Binti Mansor, M., & Pantamee, A. A. (2015). Tax Evasion and Nigeria Tax System: An Overview. *Research Journal of Finance and Accounting*, 6(8), 202-211.
- Bird, R., Martínez-Vázquez, J., & Torgler, B. (2005). Value-added taxes in developing and transitional countries: lessons and questions. *ITP paper*, 505.
- Blažić, H. (2004). Tax compliance costs of companies in Croatia. *Ekonomický časopis*, 52(06), 723-738.
- Brunton, C. (2005). Measuring the tax compliance costs of small and medium-sized businesses—a benchmark survey. *Final Report*. [Online] Available from: <http://taxpolicy.ird.govt.nz/publications/files/sme-compliance-costs.pdf> [Accessed: 2008-01-30].
- BusinessNZ, K. P. M. G. (2008). *Summary Report of the Business New Zealand-KPMG Compliance Cost Survey*.
- Canadian Federation of Independent Business. (1991). *The GST: A national tragedy*. Toronto, Canada.

- Canadian Federation of Independent Business. (2008). *The hidden tax burden. A business perspective on the cost of complying with taxes*. Canadian Federation of Independent Business.
- Capgemini, Deloitte & Ramboll Management, (2010) *EU Project on Baseline Measurement and Reduction of Administrative Costs: Final Report, incorporating report on Module 5.2 – Development of Reduction Recommendations*.
- Capgemini, Deloitte & Ramboll Management, (2010) *EU Project on Baseline Measurement and Reduction of Administrative Costs: Final Report, incorporating report on Module 5.2 – Development of Reduction Recommendations*.
- Chamberlain, D. & Smith, A. (2006). *Recent findings on tax-related regulatory burden on SMMEs in South Africa. Literature review and policy options* .Working Paper. Available at SSRN 967635.
- Charlet, A., & Butdens, S. (2012). The OECD International VAT/GST Guidelines: past and future developments. *World Journal of VAT/GST Law* 1(2):175-184.
- Charron, L., Chow, G., & Halbesma, J. (2008). *The Hidden Tax Burden: A business perspective on the cost of complying with taxes*. Canadian Federation of Independent Business.
- Chattopadhyay, S., & Das-Gupta, A. (2002). The income tax compliance cost of Indian corporations. *National Institute of Public Finance and Policy, New Delhi*.
- Chittenden, F., Kauser, S., & Poutziouris, P. (2003). Tax regulation and small business in the USA, UK, Australia and New Zealand. *International Small Business Journal*, 21(1), 93-115.
- Cnossen, S. (1993). Issues in adopting and designing a value added tax. *Key Issues in tax reform, organizado por C. Sandford. Barth: Fiscal publications*.

- Coolidge, J. (2012). Findings of tax compliance cost surveys in developing countries. *eJournal of Tax Research*, 10(2), 250-287.
- Coolidge, J., Ilic, D., & Kisunko, G. (2009). Small businesses in South Africa: who outsources tax compliance work and why?. *World Bank Policy Research Working Paper Series*.
- DeLuca, D., Guyton, J., Lee, W. L., O'Hare, J., & Stilmar, S. (2007, June). Aggregate estimates of small business taxpayer compliance burden. In *IRS Research Conference*.
- Djankov, S., Porta, R. L., LopezdeSilanes, F., & Shleifer, A. (2000). *The regulation of entry* (No. w7892). National Bureau of Economic Research.
- Ebrill, L. P. (2001). *The modern VAT*. International Monetary Fund.
- Eragbhe, E., & Omoye, A. S. (2014). SME characteristics and value added tax compliance costs in Nigeria. *Mediterranean Journal of Social Sciences*, 5(20), 614.
- Evans, C. (2008). Taxation compliance and administrative costs: an overview. *Tax compliance costs for companies in an enlarged European community*, 447-468.
- Evans, C. (2013). *Tax compliance costs for the small and medium enterprise business sector: Recent evidence from Australia*, Australian School of Business Research working paper, 1-34.
- Evans, C., Ritchie, K., Tran-Nam, B. & Walpole, M. (1997). *A Report into taxpayer costs of compliance*. Canberra, Australia: Australian Government Publishing Service.
- Faridy, N. VAT Compliance Costs and VAT Evasion of Small and Medium Enterprises (SMEs) Sectors in Bangladesh: Is there a Link?

- Foreign Investment Advisory Service. (2007). *South Africa—tax compliance burden for small businesses: A survey of tax practitioners*. Washington DC: Author.
- France Treasury General Office (FTGO). (2012), *SMEs in Algeria and Policies to Support their Development*.
- Giles, D. E., & Caragata, P. J. (2001). The learning path of the hidden economy: the tax burden and tax evasion in New Zealand. *Applied Economics*, 33(14), 1857-1867.
- Glover, J. & Tran-Nam, B. (2005). The GST recurrent compliance costs/benefits of small business in Australia: A case study approach. *Journal of the Australasian Tax Teachers Association*, 1(2), 237–258.
- Göndör, M. I. H. A. E. L. A. (2011, November). SME's Fiscal Compliance Costs as a Matter of Common Concern. In G. Thomas, C. Fleaurant, T. Panagopoulos, E. Chevaussus-Loza, & J. Strouhal.(Eds.), *Recent Researches in Economics and Management Transformation. Proceedings of the 6th IASME/WSEAS International Conference on Economy and Management Transformation held in Angers, France* (163-167).
- Gupta, R., & Sawyer, A. (2014, January). Tax compliance costs for small businesses in New Zealand: Some recent findings. In *Australasian Tax Teachers' Association Conference, Griffith University, January*.
- Hansford, A., & Hasseldine, J. (2012). Tax compliance costs for small and medium sized enterprises: the case of the UK. *eJournal of Tax Research*, 10(2), 288-303.
- Hasseldine, J. & Hansford, A. (2002). The compliance burden of VAT: Further evidence from the UK. *Australian Tax Forum*, 17, 369–388

- Hasseldine, J., Evans, C., Hansford, A., Lignier, P., Smulders, S., & Vaillancourt, F. (2012, November). A comparative analysis of tax compliance costs and the role of special concessions and regimes for small businesses in Australia. In *Canada, South Africa and the United Kingdom, presented at National Tax Association Conference Providence, Rhode Island* (15-17).
- Howlett, N., Ramalho, R., Nasr, J., Paustian, N., Hanf, M., Deperon, V., Pan, J. (2014). *Paying Taxes 2014*. UK. Retrieved from <http://www.pwc.com/gx/en/paying-taxes/assets/pwc-paying-taxes-2014.pdf>
- Inland Revenue Department. (2010). *SME tax compliance costs 2009*. Evaluation Report
Retrieved from <http://www.ird.govt.nz/resources/2/1/21c7d68043c438479c019e4e9c145ab7/sme-tax-compliance-costs-eval-report-1.pdf>.
- International Finance Corporation. (2009a). *Doing business 2009: Country profile for Botswana* (Report No. 45716). Washington DC. Retrieved from http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2008/10/01/000333038_20081001005453/Rendered/PDF/457160WP0Box33120091BWA0Sept2912008.pdf.
- International Finance Corporation. (2010b). *The compliance and reporting costs for businesses in Uzbekistan*. Washington DC. Retrieved from www.ifc.org/uzbee.
- International Finance Corporation. (2011a). *doing business 2011, Botswana: Making a difference for entrepreneurs*. (Report No. 58396). Washington DC.
- International Finance Corporation. (2011b). *The costs of tax compliance in Armenia*. International Finance Corporation.
- International Finance Corporation. (2012a). *Doing business 2012, Botswana: Doing business in a more transparent world*. (Report No. 65237). Washington DC.
- International Monetary fund. (2006). *IMF Country Report: Algeria* No. 06/101.

- Jalata, D. M. (2014). The Role of Value Added Tax on Economic Growth of Ethiopia. *Science Technology and Arts Research Journal*, 3(1), 156-161.
- Jrbashyan, T., & Harutyunyan, D. (2006). Estimation of Transaction Costs during Tax Collection Process. *World Bank*.
- Khalil. A. (2006). *SMEs in Algeria: from Creation to Internationalizatio, (in french)*, 8th International Forum on internalisation of SMEs and the Consequences on the Entrepreneurial Strategies. Hion to aute école de gestion, fribourg, Suizerland.
- Klassen, K., Lisowsky, P., & Mescall, D. (2012). *Corporate tax compliance: The role of internal and external preparers*. Working Paper. University of Waterloo.
- Klun, M. (2003). Administrative costs of taxation in a transition country: The case of Slovenia. *Finance aUver*, 53(1-2), 75-84.
- Klun, M. (2004a). Compliance costs for personal income tax in a transition country: The case of Slovenia. *Fiscal Studies*, 25(1), 93-104.
- Lang, M. (2008). *Tax compliance costs for companies in an enlarged European community*, 19. Kluwer Law International. 447-468.
- Lignier P. & Evans C. (2012). The rise and rise of tax compliance costs for the small business sector in Australia. *Australian Tax Forum*, 27, 615-672.
- Lutfi Hassan Ali Al-ttaffi (2009) *Determinants of Tax Evasion: An Empirical Evidence from Republic of Yemen*. Unpublished Master of Science International Accounting Dissertation School of Business University Utara Malaysia.
- Malmer, H. (1995). The Swedish tax reform in 1990-90 and tax compliance costs in Sweden. In C. Sandford (Ed.), *Tax compliance costs measurement and policy* (226-261). Bath, England: Institute for Fiscal Studies, University of Bath.

- Mansor, H. A., & Hanefah, M. M. (2008). Tax compliance costs of Bumiputera small and medium enterprises in Northern Malaysia. *IJMS*, 15(1), 21-42.
- Maseko, N. (2013). *Determinants of Tax Compliance in Small and Medium Enterprises in Zimbabwe*. Available at SSRN 2237849.
- McKerchar, M. (2002). The effects of complexity on unintentional noncompliance for personal taxpayers in Australia. *Australian Tax Forum*, 17(1), 3-26.
- Middle East Partnership Initiative (MEPI). (2009). *Entrepreneurship and Innovation in the Maghreb*. Published by US Department of Commerce.
- Ministry of Industry, Small and Medium Enterprises and Promotion of Investissement (MISMEPI). (2012a). *Upgrading SMEs: creation of enterprises (in french)*.
- Nahida and Faridy, (2014). *VAT Compliance Costs and VAT Evasion of Small and Medium Enterprises (SMEs) Sectors in Bangladesh: Is there a Link?*
- National Audit Office. (1994). *HM Customs and Excise: Cost to business of complying with VAT requirements*. London, England: HMSO.
- National Office of Statistics (ONS). (2012). *Economic indicators from 2000 to 2011*. Available at:<http://www.ons.dz/-Tableau-Economique-d-Ensemble,60-.html>.
- National Office of Statistics (ONS). (2012). *Economic indicators from 2000 to 2011*.
- Pillai, K. V. (2000). The compliance costs of VAT in the hotel industry in Mauritius. *Social Sciences and Humanities and Law & Management Research Journal*, 3(7), 52–66.
- PKF Worldwide (2013). *Tax Guide. Algeria*.
- Plamondon & Associates Inc. (1993). *GST compliance costs for small business in Canada*. Ottawa, Canada: Department of Finance.

- Plamondon, R. E. & Zussman, D. (1998). The compliance costs of Canada's major tax systems and the impact of single administration. *Canadian Tax Journal*, 46(4), 761–785.
- Pope, J. (2009). Taxation compliance costs. In P. O'Hara (Ed.) (2009), *International encyclopedia of public policy, 2, Economic Policy (614–627)*, Perth, Western Australia: GPERU. Retrieved from <http://pohara.homestead.com/Encyclopedia/Volume-2.pdf>.
- Pope, J., Fayle, R. & Chen, D. (1993a). *The compliance cost of wholesale sales tax in Australia*. Sydney, Australia: Australian Tax Research Foundation.
- Pope, J., Fayle, R. & Chen, D. (1993b). *The compliance costs of employment related taxation in Australia*. Sydney, Australia: Australian Tax Research Foundation.
- Pope, J., Fayle, R. & Chen, D. (1994). *The compliance costs of companies' income taxation in Australia* (Research Study No. 23). Sydney, Australia: Australian Tax Research Foundation.
- Pope, J., Fayle, R. & Chen, D. L. (1991). *The compliance costs of public companies' income taxation in Australia 1986/87*. Sydney, Australia: Australian Tax Research Foundation.
- Pope, J., Fayle, R. D. & Duncanson, M. (1990). *The compliance costs of personal income taxation in Australia 1986/87*. Sydney, Australia: Australian Tax Research Foundation.
- Price Waterhouse Coopers (2010) The impact of VAT compliance on business. The assumptions used in gathering World Bank data are shown in the Annex to this article.
- Rametse, N. & Pope, J. (2002). Start-up tax compliance costs of the GST: Empirical evidence from Western Australian small businesses. *Australian Tax Forum*, 17(4), 407–422.

- Rametse, N. (2006). *Start-up compliance costs of the Goods and Services Tax (GST) for small businesses in Australia*. (Unpublished PhD Thesis). Curtin University of Technology, Bentley, Western Australia.
- Rametse, N. (2010). An international perspective on small business implementation costs of a new tax and managerial benefits derived. In E. Njiro & T. Mazwai (Eds.), *Transforming black townships into economic powerhouses. Proceedings of the Soweto international conference, held at the Soweto Campus, University of Johannesburg, January 27–28*. Retrieved from www.uj.ac.za.
- Reekmans, C. & Simoens, G. (2010). *How high are the tax compliance costs for Belgian SMEs*. Faculty of Economics and Business, Ghent University. Retrieved from http://lib.ugent.be/fulltxt/RUG01/001/459/791/RUG01-001459791_2011_0001_AC.pdf.
- Sandford, C. (1995a). Improving the methodologies. In C. Sandford (Ed), *Tax compliance costs: Measurement and policy* (pp. 375–401). Bath, England: Institute for Fiscal Studies, University of Bath.
- Sandford, C. T., & Hasseldine, J. (1992). *The compliance costs of business taxes in New Zealand*. Wellington, New Zealand: Institute of Policy Studies.
- Sandford, C., Godwin, M. & Hardwick, P. (1989). *Administrative and compliance costs of taxation*. Bath, England: Institute for Fiscal Studies, University of Bath.
- Sandford, C., Godwin, M., Hardwick, P. & Butterworth, M. (1981). *Costs and benefits of VAT*. London, England: Heinemann Educational books.
- Schoonjans, B., Cauwenberge, P. V., Reekmans, C. & Simoens, G. (2011). *A survey of tax compliance costs of Flemish SMEs: Magnitude and determinants*. *Environment and Planning C: Government and Policy*, 29, 605–621.
- Sekaran U., and Roger B., (2013) *Research Methodology for Business: A Skill-Building Approach Sixth edition*. Willey.

- Shekidele, C. M. S. (1999). Measuring the compliance costs of taxation excise duties 1995-96. *The African Journal of Finance and Management*, 7(2), 72–84.
- Shenk, A., & Oldman, O. (2007). *Value Added Tax: A comparative Approach*. New York: Cambridge University Press.
- Shome, M. P. (2004). *Tax administration and the small taxpayer*. International Monetary Fund.
- Slemrod, J. & Blumenthal, M. (1996). The income tax compliance cost of big business. *Public Finance Review*, 24(4), 411–438.
- Slemrod, J. B., & Blumenthal, M. (1996). The income tax compliance cost of big business. *Public Finance Review*, 24(4), 411-438.
- Slemrod, J. B., & Venkatesh, V. (2002). The income tax compliance cost of large and mid-size businesses. *Ross School of Business Paper*, (914).
- Small Business Project. (2005). *Counting the cost of red tape for business in South Africa*. Johannesburg, South Africa.
- Smulders, S., Stiglingh, M., Franzsen, R. & Fletcher, L. (2012). Tax compliance costs for the small business sector in South Africa—establishing a baseline. *eJournal of Tax Research*, 10(2), 184–226.
- Susila, B. & Pope, J. (2012). The tax compliance costs of large corporate taxpayers in Indonesia. *Australian Tax Forum*, 27, 719–772.
- Tax Board. (2006). *Compliance costs of value-added tax in Sweden (Report 2006:3B)*. Skatteverket, Sweden. Retrieved from <http://www.skatteverket.se/download/18.906b37c10bd295ff4880002550/rapport200603B>.
- Vaillancourt, F., Clemens, J., & Palacios, M. (2008). Compliance and administrative costs of taxation in Canada. *The impact and cost of taxation in Canada: The case for flat tax reform*, Jason Clemens (ed.), 55-102.

- Vaillancourt, F., Clemens, J., & Palacios, M. (2008). Compliance and administrative costs of taxation in Canada. In J. Clemens, (Ed.), *The impact and cost of taxation in Canada: The case of a flat tax reform (55–102)*. Vancouver, Canada: The Fraser Institute.
- Vitek, L., and Pavel, M., (2008) *Analýza nákladů soukromého sektoru vyvolaných daňovým systémem (Translation: “Analysis of the cost to the private sector caused by the tax system”)* Ministry of Finance of the Czech Republic.
- Wallschutzky, I. G. & Gibson, B. (1993). Small business cost of tax compliance. *Australian Tax Forum*, 10(4), 511–543.
- Wurts, B. (1995). Report on the Plamondon compliance cost study for the Canadian goods and services tax. In C. Sandford (Ed.), *Tax compliance costs measurement and policy (pp. 299–319)*. Bath, England: Fiscal Publications, University of Bath.
- Yesegat, W. A. (2009). *Value added tax in Ethiopia: A study of operating costs and compliance*. PhD Thesis, University of New South Wales, Kensington, NSW.