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THE DETERMINANTS OF TAX COMPLIANCE ON CORPORATE INCOME TAX IN RWANDA

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Abstract: **Rwanda, as any other country in the world needs resources to finance national expenditure for economic development. Tax collection is perceived to be the highest contributing factor to this achievement. For efficient and effective collection of taxes, Rwanda has moved away from administrative assessment system to a system of self-assessment which relies on most taxpayers to voluntarily comply with their tax obligations to register, keep proper records, file correct returns and pay tax on time. Therefore, this study was aimed at assessing the determinant of tax compliance on corporate income tax in Rwanda amongst corporate enterprises to determine what encourage or discourage taxpayers to register, to file and pay to the tax authority the accurate tax and at the right time. According to the literature review, four main factors influence tax compliance namely: economic, institutional, social and individual factors. A sample size of 396 taxpayers grouped into large, medium and small taxpayers was randomly selected and participated in this study. Primary and secondary data was used in this research. Data was collected with the help of a structured questionnaire. Descriptive statistics were presented in forms of tables, frequency, and percentage. The empirical analysis used multinomial regression model and correlation coefficient analysis. The study results show a statistically significant relationship between tax knowledge, tax law, tax rates, enforcement, tax penalties, tax attitudes and perceptions and tax compliance level. With tax knowledge that knowledge as an important factor influencing tax compliance among taxpayers in Rwanda. The results show that 56.3 % of respondents are not informed of their tax rights and obligations, while 57.7% have not received trainings or any other information regarding how to use RRA electronic filling and payment system. This may pose some taxpayer educational challenges for RRA. The study results can assist the policy makers and the tax administration to address the root causes of non-compliance to eradicate once for all the non-tax compliance among taxpayers.**

Keywords: **Tax compliance, Corporate income tax, Tax avoidance, Tax evasion, Rwanda Revenue Authority.**

1. INTRODUCTION

1.1 Background

A country's economic performance as indicated by the Official Economy (OE) is known as the GDP. When comparing tax collected to Gross Domestic Product, low-income countries typically collect taxes of between 10 to 20% of GDP, while the average for high-income countries is more like 40% (James, 2012). This is an indication that there is much tax revenue not collected in developing countries than in developed counties, which lead most of undeveloped countries to budget deficit and therefore unable to sustain their economic development.

According to the African Economic Outlook (2015), tax to GDP ratio for Rwanda was 13.9% (2013) and 14.8% (2014) against a target of 14.9% and 15.4% respectively. Which is low when comparing with other Sub Saharan Africa average of 20%. The East African region target is 25% (2014). East African Countries like Kenya registered a tax to GDP ratio of 20.1% (2014), Tanzania 18.6% (2014). This shows that the tax to GDP ratio for Rwanda is low amongst east African countries. As governments around the world are under great pressure to raise revenue to balance the budgets (Adams & Webley, 2001), tax is the most important source for public revenue (Saleemi, 2014). The mission of a revenue agency is to collect proper amount of tax revenue to the public at the least cost (IRS, 1988). Sometimes this objective may not be achieved due to tax gaps. Tax gap consist of unpaid individual and business income taxes. The gap exists because some individual and businesses underestimate income, overstate deductions on the tax returns they submit to the tax administration. It also exists because some do not file their tax returns, and because others do not pay the taxes they reported (IRS, 1988).

Both Tax evasion and avoidance were recognized to be obstacles to the socio-economic development of countries, particularly for developing ones. In the Western industrialized countries evaded taxes appear to be between 5% and 25% of potential tax revenue, with higher figures of up to 30-40% for less developed countries (World Bank, 2010). In the United States for the tax (calendar) year 2006, The IRS estimated a tax gap of $450 billion which was relating to a noncompliance rate of 16% involving underreporting tax liability of $376 billion, non-filing tax returns of $28billion and underpayment of taxes of $46 billion (Bickley, 2012). Rwandan challenge for taxation like other sub-Saharan countries is to raise domestic revenues from consenting citizens, which constitute tax compliance (Fjeldstad & Rakner, 2003; Fjeldstad & Heggstad 2012). Tax compliance can be simply defined as the full payment of all taxes due (Kamleitner, Kirchler & Korunka, 2012). Which is explained by the taxpayers' ability and willingness to comply with tax laws which are determined by ethics and legal environment. (Palil & Mustapha, 2011). Therefore, a "compliant" taxpayer is one that: registers for tax purposes; files tax returns by the date required in the law; correctly reports tax liabilities; and Pays the tax by the date required in the law (LPFM, 2013).

Tax non-compliance may be referred to as any difference between the actual amount of taxes paid and the amount of taxes due (Kamleitner *et al.,* 2012). Whereas though there is no universally accepted definitions of tax avoidance and tax evasion, may be defined as an activity attempted with the purpose of reduction of person's or business tax in a way oppose to the spirit and the purpose of the law, without being strictly illegal (Fjeldstad, Schulz-herzenberg & Sjursen, 2012). It was suggested that economic and psychological variables need to be taken into consideration in order to understand compliance (Beesoon *et al.*, 2016). Factors that may affect tax compliance can be: Tax Rates, Tax audits, Efficiency of the Tax Authority and tax return system complexity, Perceptions of Government Spending, tax knowledge. These should be taken into consideration while thinking about promoting tax compliance amongst citizen.

Tax compliance can be achieved in two ways; either by encouraging voluntary action which depend on trust in authorities or by enforcing compliance which depend on the (perceived) power of authorities. In other words, maximum tax compliance, regardless of whether voluntary or enforced, can therefore be achieved by high trust and/or high power (Mascagni, 2016). However, in Rwanda, the RRA is aiming at promoting the voluntary compliance by encouraging taxpayers to think that their taxes as an opportunity to contribute to the development of the nation and the nation's fiscal independence, rather than as an unwanted obligation (RRA, 2017). However, it has been shown that increasing tax compliance is particularly challenging for low-income countries. The reasons for this challenge are: low capacity, a large informal sector and widespread poverty (Muehlbacher & Kirchler, 2011).

As tax authorities around the world are becoming more assertive while they seek to improve compliance and increase revenue collection. Rwanda has not been left behind. The Government of Rwanda is committed to accelerate economic development, by becoming a middle-income country by 2020, and reduce external economic dependency through attracting foreign direct investments and enhancing internal capacity. It has also enacted tax laws to facilitate the collection of taxes and enhance compliance with tax laws (PWC, 2015). Therefore, the present study attempts to find out factors affecting tax compliance decisions amongst Rwandan corporate enterprises registered on corporate income tax. It will identify the extent and root cause of tax non-compliance so as to serve as a basis to improve tax compliance in Rwanda.

1.2 Problem Statement:

The requirement to make tax payments based on some form of liability has been a fact of life since before biblical times. Tax, in the simplest form, is explained as economic obligations imposed by the governments on natural and legal persons (i.e individual and corporate enterprises) (Tuay & Güvenç, 2007). While tax was collected to finance public spending originally, it has been used for economic and social objectives starting in early 21st century (Çiçek, 2006). Taxpayer's motive for maximum income with minimum expenditure (Olowookere & Fasina, 2013) causes concern for the tax paid and friction between state and taxpayer as well. This can lead to a struggle between state objectives to raise up tax revenue and that of the citizen to minimize tax incidence.

Rwanda, a developing country which is striving to escape from economic dependency to economic independency, voluntary tax compliance was found to be the pillar of self-reliance. Though RRA is encouraging taxpayer to feel the need of taxes so that tax compliance can be achieved via voluntary actions, there still some challenges in tax compliance such as some taxpayers still have poor compliance where they do not declare and pay their taxes; taxpayers declare but do not pay on time or intentionally lower their taxable income to evade taxes. Some taxpayers are still reluctant to use Electronic Billing Machines, which is one of the most effective tools to collect accurate tax information in real time. In addition, the culture of requesting for tax invoices by most Rwanda consumers is still very low (RRA, 2017).

Tax noncompliance in Rwanda is also explained by the fact that the rate of filing is still low. 42,279 taxpayers registered for CIT and PIT did not file their annual returns for the financial year ended 31 December 2016 (Auditor General, 2017). 40,647 taxpayers were inactive since their registration. 14,957 registered taxpayers since 2006 never filed their returns with RRA (Auditor General, 2017). 857 VAT registered taxpayers were recorded as non-filers. 6,232 VAT registered taxpayers do not have EBMs (Auditor General, 2017). 92 dormant VAT taxpayers had activated Electronic Billing machines (EBM) which had EBM turnover of Frw 4,828,056,424 and related VAT totalling Frw 807,511,609 (Auditor General, 2017). This is indicator that the use of the EBM machines is still low and hence RRA still has challenges of minimizing loss of tax revenue from undeclared revenue.

Despite RRA efforts made in recovering for unpaid taxes, there still exists a large amount of unrecovered tax arrears. Total domestic tax arrears (in SMTO and LTO) at the end of the 2016/17 fiscal year amounted to Rwf 138.1 billion. This represents a year-on-year growth of 7.3% from the Rwf 128.7 billion stock of arrears at the end of 2015/16 (RRA, 2017). This increase in the debt portfolio is an indicator that non-compliance of taxpayers grew by the rate of growth in tax arrears. Increased tax arrears stock resulted from taxpayers who failed to file their tax returns, taxpayers filed their tax returns but did not pay the tax they declared, and tax payers filed and paid the wrong taxes amount and tax audits charged them the tax not declared. The total tax arrears resulting from non-compliance is displayed in the table 1 below.

TABLE 1: DOMESTIC TAX ARREARS BY TAX OFFICE AND AGE, IN RWF BILLIONS

Age of domestic tax arrears	LTO domestic tax arrears at end of 2016/17	SMTO domestic tax arrears at end of 2016/17	Total domestic tax arrears at end of 2016/17	Total domestic tax arrears at end of 2015/16	Year-on-year growth
Less than 3 months overdue	11.7	17.6	29.3	27.2	7.8%
Between 3 and 6 months overdue	3.2	8.6	11.8	9.4	25.8%
Between 6 and 12 months overdue	12.8	9.9	22.7	8.0	183.4%
More than 12 months overdue	17.1	57.1	74.3	84.1	-11.7%
Total	**44.8**	**93.3**	**138.1**	**128.7**	**7.3%**

Source: RRA annual report, 2017

Following the above stated issues of non-compliance, the researcher asked herself why the tax noncompliance is growing like this and generate such a huge of billions of taxes not paid which if paid should have contributed to finance government expenditure. We may also ask ourselves: What influence the thousands of taxpayers not to file tax returns for such a long period? What stimulate filers not to pay the tax they declared themselves? What are the reasons that cause taxpayers to file and pay the wrong amount of taxes to the tax authorities? Economic and psychological factors were identified by previous research to have high influence on taxpayer's tax compliance.

Some measure were undertaken by the RRA to address taxpayer compliance such as taxpayer education, use of electronic billing machines, introduction of compliance monitoring function, and many others (RRA, 2017). However, the level of tax compliance remains questionable. It is in this context that this study came in. The study figured out what encourage and/or discourage the taxpayers to file the tax returns, make tax payment to the public treasury on time, and provide necessary records as provided by the articles n◦12 and 43 of law n◦16/2005 of 18/08/2005 on direct taxes on income. Since there are no academic research conducted for that purpose, this study was proposed with the intension to bridge this gap, so that the determinant of tax compliance on corporate income tax in Rwandan tax system are assessed.

1.3 Research Objective:

1.3.1 General Objective:

The general objective of this study was to assess the determinants of tax compliance of corporate income tax in Rwanda.

1.3.2 Specific objectives:

The specific objectives concerned by this study were:

(i) To establish the determinants of tax compliance in Rwanda;

(ii) To establish the level of corporate income tax compliance in Rwanda;

(iii) To establish the relationship between the determinants of tax compliance and the level of corporate income tax compliance in Rwanda.

2. CONCEPTUAL FRAMEWORK

The figure 1.1, illustrates the proposed conceptual framework model that was followed in this study. Even if some researchers had expanded the tax compliance model from other theories by adding one or more variables to meet their environmental needs (Chau & Leung, 2009). It was suggested that tax compliance behaviour is influenced by several factors, which are yet to be captured in the model. This encourages the need for further expansion of the model in the line with the demand of circumstances and environmental reality (Alabede *et al.*, 2011). It is in context that this study proposed an expansion to the model.

The model proposed in this study was made up of variables from the tested models of the previous studies. It is a casual model that shows factors of tax compliance which act as definers of tax compliance. The independent variable of the study was factors for tax compliance while the dependent variable was tax compliance. Tax compliance which is defined as factors that motivate taxpayers to pay or not to pay taxes therefore affect tax collectable. Of these factors, tax laws, tax rate; tax penalties, enforcement measures, and behavioral attitudes and perception of tax payers were adopted from previous studies (Chan *et al.*, 2000; Richardson, 2006; Baube, 2011; Muehlbacher & Kirchler, 2011; Saad, 2014) and these factors are believed to have influence on individual and corporate taxpayers' compliance behaviour in Rwanda. Between the two variables, there are intervening variables used to achieve tax payer's decision to comply or not to comply, these intervening variables are tax evasion and tax avoidance.

The variable considered under this study as the independent variable is the determinants of tax compliance, which contains the following elements:

Tax laws, tax rate, tax penalties, enforcement measures, and taxpayers' attitudes and perception

The dependent variable is tax compliance which include:

Registration compliance, timely filing compliance, timely tax payment compliance and correct reporting.

The intermediating variables considered in this study:

Underreporting taxable income, overstating tax claims, deliberate non – payment and loopholes in tax laws. The following figure shows the conceptual framework of this study:

FIGURE 1.1. Conceptual Framework Adapted From The Financial Self-Interest Model Theory.

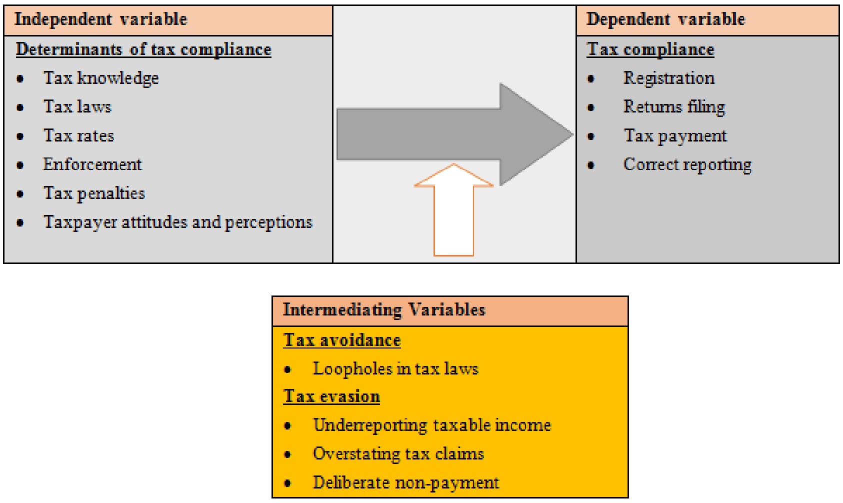

Figure 2: Conceptual framework

Source: Richardson *et al.*, (2014)

2.1 Target population:

Population is all items which fulfil the described criteria for selection of a study group concerned by the study (Kothari, 2004). The study population concerned with this study consist of 177,564 active taxpayers within the RRA taxpayer registry as reported by the tax administration annual report at the end of fiscal year 2016/17. The target population is 41,234 taxpayers registered on corporate income tax under the domestic taxes department. This population comprised a proportion of 344 large taxpayers, 743 medium and 40,243 of small taxpayers, operating in Kigali city.

2.2 Sample size:

The appropriate sample size was statistically determined with help of Slovin formula which is the most appropriate for this study. Sample size calculation with Slovin's formula is as follows:

$$n = \frac{N}{1 + N\,(e)^2}$$

Where n = the desired sample size

e = Margin of error

N = the estimate of the population size

Using the above formula, the sample size is calculated as follows;

e = 5%

N = 41,234

$$n = \frac{41{,}234}{1 + 41{,}234\,(0.05)^2} = 396.166 \;\cong 396$$

Almost 396 corporate taxpayers registered as enterprises on corporate income tax working in Kigali City were invited during this study. The desired sampling size computation for each category of taxpayers is the proportional to the total number of taxpayers of each category.

TABLE 2: Sample Size and Sampling Proportions

Group	Total taxpayers	Proportionate Sample
Large taxpayers	344	3
Medium taxpayers	743	7
Small taxpayers	40,147	386
Total	**41,234**	**396**

2.3 The level of corporate income tax compliance

To assess the level of corporate income tax compliance was the first objective the examined in this study. The research results are presented in the following subheadings.

2.3.1 Registration compliance

According to the USAID (2013) the principles and tax codes must clearly cite and describe the basic provisions of taxation to provide the basic legal authority to the tax administration to collect taxes. The basic principles and the starting point is the legal requirement for taxpayers to register with the tax administration and to acquire a tax identification number for tax purposes. The operating business must comply with the legal requirement and register for tax purposes in 7 days from the beginning of the business or activity or the establishment of the company according to article 10 of law n◦ 16/2005 (RRA, 2014).

Concerning the registration compliance on corporate income tax in Rwanda, taxpayers were asked to mention whether they were registered on CIT at their start-ups and whether all companies operating in the same areas are registered with the tax administration at their start-ups. The study results indicate that 36.6 % of the respondents disagree with the fact that all similar business is registered for corporate income tax, while 63.4% agree that all business is registered for Corporate income tax. The identified results may be an indicator that there may be unregistered businesses of 36.6%, thus an informal sector in business.

2.3.2 Filing compliance

According to Soos (1991) tax compliance may be classified in four types: Failing to file a tax return; Underreporting of taxable income; Failing to make timely payment of tax liability; Overstating tax claims such as exemptions, expenses etc. Alabede (2011) found that non-compliance with tax requirements may occur through failing to file the tax returns, inaccurate reporting of taxable income or overstating deductions from the tax due. To investigate the filing compliance level component amongst corporate enterprises registered for income tax, respondents were asked to respond to the question of whether their company declares and submit the tax returns on timely basis. The study findings displayed in the figure below shows that 88.3% of the respondents agreed that they declare and submit their tax returns on time, while 11.6 disagreed with the above statement. This means that 11.6% represent the number of none and late filers.

2.3.3 Payment compliance

Marti (2000), argues that tax system is there to force individuals and organizations to give part of their income to the government as tax payment. And it is said that the goal of tax administration is to foster voluntary compliance (Silvani, 1992).

To investigate the payment compliance level, respondents were also asked whether companies registered for corporate income tax pay the taxes as per the prescriptions of the tax laws. The study findings revealed that 77.5% agreed that companies pay taxes as per the prescriptions of tax laws, while 22.5% disagreed that companies do not pay corporate income taxes as per the prescriptions of the tax laws and regulations. 22.5% indicates the late payers and nonpayers of corporate income tax. A study by (RRA survey, 2016) found that 8% of the population at least knew one non-compliant taxpayers in terms of taxes and fees payment. For the purpose of this study, the level of compliance regarding timely payment of corporate income tax is 77.5% on corporate enterprises. This means that 22.5% represent noncompliance with regard to timely tax payment.

2.3.4 Correct reporting compliance

Soyode and Kajola (2006), explained tax evasion in terms of deliberate and willful practice of not disclosing full taxable income, or reduce tax liability or by making untrue claims on the income tax form. Whiteman and Wheat Craft (1965) explained the same tax evasion in terms of reduction of tax liability by omitting certain items from returns. This is achieved through incorrect tax reporting and reduces the taxpayers' tax liability.

Correct reporting compliance level was investigated trough a question asking whether taxpayers registered for corporate income tax report the correct data and information to RRA when filling their tax returns. 63.7% of the respondents agreed that the taxpayers report accurate information when filing their tax returns. Whereas 36.4% disagreed with the above statement. The study results reveal that the tax reporting compliance level is 63.7% while 36.4% translate into inaccurate tax reporting therefore a threat to tax noncompliance.

To further assess the tax compliance level in relation with tax filing and payment, respondents were asked questions to evaluate whether revenue online corporate income tax declaration forms are easy to understand and to complete. This is to investigate the Silvani and Baer (1997) finding who are of the view that taxpayers will be encouraged to file the tax return if the tax return and declaration system are easy and simplified. The study found that 64.6% consider that the forms for declaring corporate income tax are easy to complete and to understand, while 36.4% said that the forms for corporate income tax returns are not easy to complete and to understand. This is a challenge as the tax administration expect a 100% of compliance on filing of tax returns, while 36.4% do not know how to fill the CIT declaration forms.

When there is a considerable number of late filers, late payers, wrong submitted returns, it means taxpayers experience a number of problems when declaring and paying the taxes. It is in this regard that the study further investigated the question in relation with how many problems taxpayers encounter when declaring and paying the tax returns. Slemrod (1989) was of the view that simple tax return and simpler tax regulations will increase tax compliance in a self-assessment system of declaration. Regarding the number of problems taxpayers face during tax return filing and payment, 17.9% of respondents indicate that they face many problems, 40.2% of respondents indicate they face few problems while 40.9% of respondents indicate that they face no problems at all. As longer as the taxpayers still face problem at the time of filing and payment, the chances of unintentional noncompliance increase.

Further, respondents were requested to indicate the main problems they face during return filing and payment. Beesoon *et al.*, (2016) found difficulties to file the return online time consuming to prepare a return, difficulties in interpreting the accompanying instructions and language issues as major problems taxpayers encounter when filing the tax returns in Mauritius. This particular study results reveals that the main problems taxpayers face when declaring their taxes include language issues representing 66.4%, system issues 65.7% and financial cash flows constraint 66.4%. While 70.5% of respondents said that keeping and submitting records for tax purposes is not an issue, and 36.9% found it is time consuming.

2.4 Correlation coefficient analysis

Correlation analysis was conducted to empirically measure the level of relationship between tax compliance level and the determinants of tax compliance.

2.4.1 Registration

Table 3: Correlation of Registration Compliance

	regist~n	age	educat~n	financ~l	taxkno~e	rratra~s	loopho~s	curren~e	ta~hment
registration	1.0000								
age	0.1353	1.0000							
education	0.1282	-0.1571	1.0000						
financial	0.2060	-0.0535	0.0536	1.0000					
taxknowledge	-0.0556	-0.0582	-0.1209	-0.0606	1.0000				
rratrainings	0.2586	0.4093	0.0333	0.0202	0.2440	1.0000			
loopholesi~s	0.0124	0.1669	-0.0503	0.0398	0.1060	0.0653	1.0000		
currenttax~e	-0.1911	0.2315	-0.2473	-0.0389	0.2803	0.1721	0.1940	1.0000	
taxadm~hment	-0.2450	0.2532	-0.0978	-0.0092	-0.0661	0.2454	0.2154	0.5781	1.0000
taxadm~ement	-0.0822	0.1829	-0.1979	-0.0327	0.2478	0.2536	0.2580	0.6452	0.5940
taxadminis~y	-0.2488	0.1486	-0.0391	-0.1487	0.1744	-0.0196	0.0764	0.1235	0.2412
taxpenalties	0.3213	0.0862	-0.2175	0.0777	0.2221	0.1613	-0.0711	0.0522	-0.3938
taxadminis~s	0.0222	-0.2608	-0.1623	0.0643	0.0746	0.0819	-0.0697	0.3185	0.2494
taxofficer~t	-0.2448	-0.0095	-0.1676	-0.0153	-0.1090	0.2136	-0.0940	0.1846	0.3069

	ta~ement	taxadm~y	taxpen~s	taxadm~s	taxoff~t
taxadm~ement	1.0000				
taxadminis~y	0.3649	1.0000			
taxpenalties	0.0025	-0.3465	1.0000		
taxadminis~s	0.2080	-0.2231	-0.0245	1.0000	
taxofficer~t	0.2233	-0.1528	-0.0526	0.3519	1.0000

The table 3 above shows the correlation between tax registration compliance and its determination. As the table indicates tax registration is positively correlated with age, education level and financial constraints of the Taxpayer. Tax registration is also positively correlated with RRA trainings, loopholes in tax laws, tax penalties and tax administration fairness. This indicates that increased trainings results in increased compliance, while more aged taxpayers are found to be more compliant. The table also shows that tax registration is negatively correlated with tax knowledge, current tax rate, tax administration punishment, tax administration enforcement and tax officers' treat. It is not a surprise to note that the study shows that current tax rate is negatively correlated with registration, which means that increased tax rate decreases tax registration compliance, and increased tax administration punishment also reduces tax registration compliance. This is in line with the study conducted by (Beeson & Hemavadi, 2016) who found that an increase in income tax rate would lead taxpayers to reduce the Income tax rate they declare. Also it was evidenced that marginal tax rate has a significant effect on underreporting tax liability (Slemrod, 1985).

2.4.2. Filling

Table 4: Correlation of Filing Compliance

	filling	age	educat~n	financ~l	taxkno~e	rratra~s	loopho~s	curren~e	ta~hment
filling	1.0000								
age	0.2103	1.0000							
education	0.0699	-0.1571	1.0000						
financial	0.1359	-0.0535	0.0536	1.0000					
taxknowledge	0.0456	-0.0582	-0.1209	-0.0606	1.0000				
rratrainings	0.3942	0.4093	0.0333	0.0202	0.2440	1.0000			
loopholesi~s	0.2219	0.1669	-0.0503	0.0398	0.1060	0.0653	1.0000		
currenttax~e	0.3963	0.2315	-0.2473	-0.0389	0.2803	0.1721	0.1940	1.0000	
taxadm~hment	0.3146	0.2532	-0.0978	-0.0092	-0.0661	0.2454	0.2154	0.5781	1.0000
taxadm~ement	0.4346	0.1829	-0.1979	-0.0327	0.2478	0.2536	0.2580	0.6452	0.5940
taxadminis~y	-0.2658	0.1486	-0.0391	-0.1487	0.1744	-0.0196	0.0764	0.1235	0.2412
taxpenalties	0.1178	0.0862	-0.2175	0.0777	0.2221	0.1613	-0.0711	0.0522	-0.3938
taxadminis~s	0.1670	-0.2608	-0.1623	0.0643	0.0746	0.0819	-0.0697	0.3185	0.2494
taxofficer~t	-0.1318	-0.0095	-0.1676	-0.0153	-0.1090	0.2136	-0.0940	0.1846	0.3069

	ta~ement	taxadm~y	taxpen~s	taxadm~s	taxoff~t
taxadm~ement	1.0000				
taxadminis~y	0.3649	1.0000			
taxpenalties	0.0025	-0.3465	1.0000		
taxadminis~s	0.2080	-0.2231	-0.0245	1.0000	
taxofficer~t	0.2233	-0.1528	-0.0526	0.3519	1.0000

The table above shows the correlation between tax filling and its determinants. The table shows that there is a positive correlation between tax filling and almost all its determinant except tax administration capability and tax officers' treat. This means that an amount of increase in knowledge, trainings results in increased timely filing compliance. There are other factors that are highly correlated with tax filing compliance, which include age, education, tax administration treat. An increase in tax officer unfair treatment results in reduced filing compliance level. The results is in line with other previous studies which documented that taxpayers comply because they are afraid of punishment. For example Nicoletta (2011) reported that taxpayers with positive attitude towards taxes will comply more. Eriksen and Fallan (1996) claimed that a successful means of preventing tax evasion is to work on attitude towards taxes (RRA, 2016)

2.4.3 Payment

Table 5: Correlation of Payment Compliance

	payment	age	educat~n	financ~l	taxkno~e	rratra~s	loopho~s	curren~e	ta~hment
payment	1.0000								
age	0.0386	1.0000							
education	0.0940	-0.1571	1.0000						
financial	-0.0082	-0.0535	0.0536	1.0000					
taxknowledge	0.1655	-0.0582	-0.1209	-0.0606	1.0000				
rratrainings	0.3512	0.4093	0.0333	0.0202	0.2440	1.0000			
loopholesi~s	0.0297	0.1669	-0.0503	0.0398	0.1060	0.0653	1.0000		
currenttax~e	0.4612	0.2315	-0.2473	-0.0389	0.2803	0.1721	0.1940	1.0000	
taxadm~hment	0.3291	0.2532	-0.0978	-0.0092	-0.0661	0.2454	0.2154	0.5781	1.0000
taxadm~ement	0.4886	0.1829	-0.1979	-0.0327	0.2478	0.2536	0.2580	0.6452	0.5940
taxadminis~y	-0.1464	0.1486	-0.0391	-0.1487	0.1744	-0.0196	0.0764	0.1235	0.2412
taxpenalties	0.0682	0.0862	-0.2175	0.0777	0.2221	0.1613	-0.0711	0.0522	-0.3938
taxadminis~s	0.3606	-0.2608	-0.1623	0.0643	0.0746	0.0819	-0.0697	0.3185	0.2494
taxofficer~t	0.1237	-0.0095	-0.1676	-0.0153	-0.1090	0.2136	-0.0940	0.1846	0.3069

	ta~ement	taxadm~y	taxpen~s	taxadm~s	taxoff~t
taxadm~ement	1.0000				
taxadminis~y	0.3649	1.0000			
taxpenalties	0.0025	-0.3465	1.0000		
taxadminis~s	0.2080	-0.2231	-0.0245	1.0000	
taxofficer~t	0.2233	-0.1528	-0.0526	0.3519	1.0000

2.4.4. Accurate reporting

Table 6: Correlation of Accurate Reporting Compliance

	acurat~g	age	educat~n	financ~l	taxkno~e	rratra~s	loopho~s	curren~e	ta~hment
acuraterep~g	1.0000								
age	-0.0358	1.0000							
education	0.0273	-0.1571	1.0000						
financial	0.1007	-0.0535	0.0536	1.0000					
taxknowledge	0.2392	-0.0582	-0.1209	-0.0606	1.0000				
rratrainings	0.3769	0.4093	0.0333	0.0202	0.2440	1.0000			
loopholesi~s	-0.0508	0.1669	-0.0503	0.0398	0.1060	0.0653	1.0000		
currenttax~e	-0.0514	0.2315	-0.2473	-0.0389	0.2803	0.1721	0.1940	1.0000	
taxadm~hment	-0.0159	0.2532	-0.0978	-0.0092	-0.0661	0.2454	0.2154	0.5781	1.0000
taxadm~ement	0.0693	0.1829	-0.1979	-0.0327	0.2478	0.2536	0.2580	0.6452	0.5940
taxadminis~y	-0.4009	0.1486	-0.0391	-0.1487	0.1744	-0.0196	0.0764	0.1235	0.2412
taxpenalties	0.3085	0.0862	-0.2175	0.0777	0.2221	0.1613	-0.0711	0.0522	-0.3938
taxadminis~s	0.3398	-0.2608	-0.1623	0.0643	0.0746	0.0819	-0.0697	0.3185	0.2494
taxofficer~t	0.1936	-0.0095	-0.1676	-0.0153	-0.1090	0.2136	-0.0940	0.1846	0.3069

	ta~ement	taxadm~y	taxpen~s	taxadm~s	taxoff~t
taxadm~ement	1.0000				
taxadminis~y	0.3649	1.0000			
taxpenalties	0.0025	-0.3465	1.0000		
taxadminis~s	0.2080	-0.2231	-0.0245	1.0000	
taxofficer~t	0.2233	-0.1528	-0.0526	0.3519	1.0000

The table above shows the correlation between accurate reporting and its determinants. The table indicates that there is a positive correlation between accurate reporting and education level of the Taxpayer, financial constraints, tax knowledge, RRA trainings, tax administration enforcement, tax penalties, tax administration fairness and tax officers' treat. This means that an increase in taxpayer education will increase the level of accurate reporting. An increase in enforcement and tax penalties result in increase of correct reporting. An increase in tax administration fairness and tax officers' treat will also increase the accurate tax reporting. This study have similarity with the studies conducted by Mohani and Sheehan (2004); Mohini, (2001) who found that people who face personal financial constraints are likely to be more disposed to evade tax when compared to people in less financial difficulties.

3. CONCLUSIONS

This study investigated the determinants of tax compliance on corporate income tax in Rwanda. It was conducted in Kigali city, where the majority of taxpayers registered on corporate income tax operate. A sample size of 396 companies was selected to participate in this study. The study used a questionnaire with the objectives to assess the determinants of corporate income tax compliance; to assess the level of corporate income tax compliance; and to establish the relationship between the determinants of corporate income tax compliance and the level of corporate income tax compliance in Rwanda. Four quantitative models were tested in this research, after the analysis of the questions from the questionnaire. The research findings suggest that corporate income tax compliance is highly affected by tax penalties, tax knowledge, enforcement, tax laws, taxpayer attitudes and perceptions and tax rates. With tax knowledge as the greatest determining factor according to the study results.

4. RECOMMENDATIONS

Based on the research findings the recommendations are put forward to help increase the tax compliance level on corporate income tax as the tax administration endeavor to increase the status of tax compliance level on all tax heads, so as to be able to raise to the Government the required tax revenue to finance National expenditure. The recommendations from this study include but not limited to:

4.1. Recommendation to the tax administration (RRA) and tax policy makers

1. To increase the provision of information to taxpayers regarding taxpayers' obligations and entitlements as the number of taxpayers who have enough tax knowledge is below the average. The obligation to register with RRA after 7 days if the companies started operations, obligations to file the tax returns and submit accompanied documents before the deadlines, obligation to pay the tax declared before the deadlines. The improvement of tax knowledge to taxpayers may be achieved through continuous trainings targeting special groups of taxpayers; for example, new registered taxpayers, less and non-compliant taxpayers, accountants and tax advisors. RRA should also increase taxpayers' knowledge is through public announcements of any changes regarding tax laws and tax procedures.

2. Education of the importance of taxes in primary and secondary schools as a course or a subject. There is a need for inclusion of tax courses in the course subjects taught at primary and secondary schools and even at university. It would be good to form a good and informed taxpayer since young age. As the education that we have is a result from a good tax system. So, children at school should be taught that public schools are there because of taxes, hospitals are there, because of taxes, security, roads, electricity and so on are fruits from taxes. Education of this subject to people at a young age will motivate the person to become a good taxpayer at a later period. If this is put in practice, can be a strategy to eradicate once for all the lack of knowledge of tax matters amongst Rwandan taxpayers.

3. RRA should initiate partnership with the churches to help in educating the taxpayer's obligations. Since payment of taxes is a word of God. And the majority of Rwandans are Christians.

4. To improve the online tax filing and payment system, by simplifying the online declarations forms. RRA should make the online declaration forms easy for the taxpayers to understand and to complete; to avail the declaration forms in the three languages that are allowed to be used in Rwanda so that each taxpayer can complete it in a language that is easy for each of them. To solve the system issues, network issues by accommodating a four or a five G network.

5. To improve the tax administration's capability to enforce and reach on timely basis the noncompliant taxpayers by increasing the number of tax officers in charge of enforcement of taxes, as the number of taxpayers is quite high. And consider enforcement and follow up of the taxes as a priority over audits efforts as this can quickly increase compliance than audits can do.

6. The tax administration should promote tax accountants, tax advisors and tax consultants, professionals as the tax advisors play vital role to help taxpayers to comply with their tax obligations. By reviewing the technical requirements to improve the quality of tax advisors and consultants we have so as to improve the level of tax compliance.

7. To clarify, simplify and to improve the tax legislations by reviewing the tax laws especially in relation with filing and payment, so that the companies are not confused of who is qualified to register as a company, when taxpayers are required to file their tax returns. The tax laws and company laws should complement each other to allow qualified taxpayers to be registered as a taxable company.

8. Revision of the corporate income tax rate and penalties rates to be fair and to consider that part of taxpayers who breach the tax law unwillingly or unintentionally.

4.2. Recommendation to the taxpayers

Taxpayers are recommended to comply with tax laws and regulations, in order to contribute to the development of their country, and to avoid fines and penalties that can be applied to them while breaching tax laws.

4.3. Study limitations and further research

The study is subject to some limitation. The questionnaire was responded to by 396 taxpayers on one type of tax i.e CIT in Kigali city. The results may not convey a whole picture of all taxpayers in Rwanda. Other studies may come in and fill this gap by attempting other tax types such as VAT and PAYE. This research used open ended questionnaires. Future research may opt to conduct similar study using in-depth interview with taxpayers. As interviews with the taxpayers may provide a deeper understanding of results. Also conducting this research with view of other stakeholders especially the tax administration may provide another valuable view on different aspects of tax compliance addressed in this study.

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