

EFFECT OF TAXATION ON BUSINESS FORMALIZATION IN RWANDA

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Abstract: Raising more domestic revenue is a priority for most sub-Saharan African countries (Drummond & al., 2012). Mobilizing revenue is a way for governments to create fiscal space, provide essential public services. However, the domestic tax bases in most African countries are undermined by widespread tax avoidance and evasion. This study determined to assess the effect of taxation on business formalisation in Rwanda. To achieve this, the study was guided by the following specific objectives; to determine the effect of business owners' attitude towards government spending on business formalization in Rwanda; examine the level of trust in Tax Authority on business formalization in Rwanda; to analyse the effect of attitude towards tax information on business formalisation in Rwanda and to assess the effect of fiscal (tax) burden on business formalisation in Rwanda. This study adopted a descriptive research design. The target population was 137,699 informal enterprises. The sampling technique employed was simple random sampling and the sample size was 399 respondents. Primary quantitative data was collected by use of self-administered structured questionnaires. The researcher also used secondary data . The data collected was analysed, with respect to the study objectives, using both descriptive and inferential statistics. The data was analysed using descriptive statistics such as percentages. Multiple regression analysis was employed to determine relationship between taxes and business formalisation in Rwanda. Data was presented in tables, charts, figures and frequency tables. The findings that study that attitude towards government spending, level of trust in tax authority and tax burden had had had effect on business formalisation while attitude towards tax information does not influence business formalisation. This is due to the fact that informal business owners do not interact with educators from Rwanda Revenue or Private Sector Federation because these bodies always target formal business.

Keywords: Business formalisation, Tax burden, Tax compliance.

1. INTRODUCTION

1.1 Background of the study

Any government of the world needs financial resources to play a role that is expected from it by the public. It makes every effort to achieve development goals which they set on Annual budget of the country. Williams & Besnik , (2017) illustrate that taxes are collected fund the provision of collective public goods and services such as transport, defence, healthcare and education systems. However, all societies also suffer from a significant level of non-compliance so far as paying taxes owed are concerned.

For the countries to achieve the goals there is need for huge capital expenditure to be met from taxation and other revenue sources. To examine the issues of tax compliance, several academics and practitioners observe from various angles including the behaviour of the taxpayer (D'Arcy, 2011). However, the extent to which the taxpayers perceive a tax system to be fair influences their attitude to pay their taxes. It is postulated that, a taxpayer whose motive is to demonstrate his beliefs in a system will evaluate the fairness of the systems with objectivity whereas the taxpayer whose attitude is motivated by what benefit to derive from the system may label the tax system fair only if he is benefiting from it. Tax non-compliance from this perspective is thus viewed as arising when the intrinsic motivation to pay taxes is low (Alm & al., 2011).

With the dominance since the 1970s of the rational economic actor approach, the social actor approach which focuses upon improving tax morale was largely neglected. Since the turn of the millennium, however, tax morale has started to

become a key issue once again in recent research on tax compliance (Kirchler, E & al., 2008). Until now however, Eurasian governments have remained largely entrenched in a rational economic actor approach, which seeks to increase the penalties for tax non-compliance and risks of detection (Williams & Krasniqi, 2017).

The Government of South Africa is committed to encouraging the growth of entrepreneurship in the country, including the formalization of informal firms. To this end, the National Treasury (NT) and the South Africa Revenue Service (SARS) have been developing tax policy and tax administration reforms, including a “tax amnesty” for many previous informal firms and a concerted effort to reduce the tax compliance burden on Small, Medium, and Micro Enterprises (SMMEs). (Coolidge & Domagoj, 2009). This was to encourage informal sector to formalise its business.

The East African Community countries have been implementing various tax reforms since the 1990s aimed at broadening tax bases, enhancing compliance and improving other aspects of tax revenue administration, and rationalizing taxes to improve the investment climate. However, domestic resource mobilization via taxation is still low. For instance, between 2006 and 2008, tax-to-GDP ratios in the region ranged from 12.3% to 22.1% compared to 25.4% for South Africa and an average of 35.6% for the Organizations ‘studies identify low compliance levels, tax evasion and difficulties with tax administration as major challenges impeding domestic revenue mobilization in the EAC (AfDB, 2011). The low compliance of taxes in East Africa implies that the formalisation of business is not vibrant yet.

In Rwanda, the post genocide period was characterized by the increased year on year of the share of tax revenue in total national budget whereby in 1995, this share was 35% and projected to be 55% per cent in 2015/2016. This noteworthy increment can be explained mainly by: the widened tax base resulting from the good performance of the economy, improved fiscal policies and positive change in taxpayer compliance behaviour (MINECOFIN, 2014). This improvement in tax base can be associated with government will to formalise businesses with aim to widen tax base.

Researchers from Rwanda Revenue Authority (RRA), the International Centre for Tax and Development (ICTD), and the African Tax Administration Forum (ATAF) provided comprehensive analysis of the Rwandan tax system, including quantifying audit probabilities, compliance gaps, and tax burdens, for which there was previously little evidence. They found that Rwanda’s tax revenue is highly reliant on large taxpayers located in Kigali, with about 85 corporations contributing more than half of total corporate income tax revenue, and 86% of revenue coming from taxpayers registered in Kigali. They found that many taxpayers declare non-positive income, and evidence that noncompliance is substantial, with low audit rates, particularly for small taxpayers located outside of Kigali (RRA; ATAF; ICTD, 2016). Noncompliance of taxes and low audit rates explain the ineffectiveness of business formalization process.

1.2 Statement of the problem

Raising more domestic revenue is a priority for most sub-Saharan African countries (Drummond & al., 2012). Mobilizing revenue is a way for governments to create fiscal space, provide essential public services, and reduce foreign aid as single resource dependence.

However, the domestic tax bases in most African countries are undermined by widespread tax avoidance and evasion (IMF, 2011). Furthermore, taxpayer non-compliance is a continual and growing global problem (McKerchar & Evans, 2009), many indications suggest that developing countries, many of them in Sub-Saharan Africa, are the hardest hit (Fuest & Riedel, 2009).

The fairness view is supported by a more recent literature which indicates that the concept is purely rational shown empirically where fairness motives are likely to affect individual decision policy preferences (Heinemann *et al*; 2009). The extent which the tax payers perceive a tax system to be fair influences their attitude to pay their taxes (Coskun, 2009; Alm, et al., 2011). Alabede et al. (2011) postulated that, a tax payer whose motive is to demonstrate his beliefs in a system will evaluate the fairness of the systems with objectivity whereas the taxpayer whose attitude is motivated by what benefit to derive from the system may label the tax system fair only if he is benefiting from it.

In Rwanda, the survey carried out on Integrated Business Enterprise (IBES) 2014 revealed that they are not registered for tax purposes; the actual total number of such enterprises in Rwanda is difficult to estimate with certainty (NISR, 2016). MSMEs operating in the informal sector account for 46% of GDP (ATAF, 2016). Moreover, in 2013 the property tax collected nationally (the vast majority from Kigali) was just 0.018 % of GDP. Though, Rwanda made more effort to increase tax to GDP ratio from 15.3% in the 2014/2015 fiscal year to 16.1% fiscal year 2015/16 (RRA, 2016). this ratio is still low comparing to the tax to GDP ratio of sub-Saharan African countries which is equal to 22% in 2014 (IMF, 2015). The tax to GDP ratio will significantly increase if there is mobilisation of the informal sector. Based on the taxes issues prevailing in Rwanda, this study pushes the researcher to assess the effect of attitude towards taxation on business

2. RESEARCH METHODOLOGY

2.1 Research Design

The study adopted a descriptive research design, which according to Kothari (2004), is used when the problem has been defined specifically and where the researcher has certain issues to be described by the respondents about the problem. The researcher used also linear regression to examine the significance of the relationship between independent variable and dependent variable. This researcher used both quantitative and qualitative methods in data collection and data analysis.

2.2 Target Population

The target population of the study was 137,699 informal enterprises.

2.3 Sampling frame

The sample of the study was composed of business owners who were to give their perception on taxation system in Rwanda and how it affects business formalization.

2.4 Sample and sampling techniques

2.4.1 Sample

The sample size was composed of informal business owners in Rwanda. This was determined using the sampling formula of Yamane(1967) by taking into account the total population(definite number of population), the sampling error(Error Margin) is 5% which is equals to 0.05, implying that the level of reliability is 95% . The Sample size was computed as follows:

$$n = \frac{N}{1+Ne^2} = \frac{N}{1+N.(e)^2} = \frac{137,699}{1+137,699*0.05^2} = 399 \text{ respondents}$$

Where **n** is the sample size, **N** is the size of the population and **e** is the margin error. Therefore, data will be collected from a sample of 399 respondents.

2.4.2 Sampling technique

In this perspective, purposive sampling was applied due to the fact that the researcher does not believe that all businesses owners will be open to provide information. At this stage, the researcher used snowball method whereby one respondent will be entrusted to help the data collector identify other potential respondents. The sample of this study was be composed of owners of informal business in Rwanda.

2.5 Data collection Instruments

The study was based on a mix of quantitative and qualitative approach and will focus on taxation and business formalization. Two main methods or data collection instruments used: The review of documents and questionnaire.

Questionnaire

Traditionally, a questionnaire was addressed to a group of individuals in order to collect their opinions, perceptions, knowledge and testimonies on a given phenomenon. In the context of this study, it was administered to the owners of the small and medium enterprises in Rwanda. The first section composed of questions related to respondents' profile, the second section was made up of questions related to taxation which was the independent variable while the third section was composed of questions regarding business formalisation which was the dependent variable. 3.7 Data collection procedure

The researcher relied on primary data that were collected through questionnaires. The questionnaire sheets were physically distributed to respondents by enumerators in 11 districts of Rwanda.

2.6 Data analysis and presentation

Data analysis was subjected to SPSS 20 software. Other programs such as Microsoft Word were used for text treatment and Microsoft Excel for graphics and tables. Data for this study was analysed quantitatively using percentages, frequencies, mean. Descriptive analysis of a four point Likert scale was used to assess the attitude of business owners towards taxes and how they perceive business formalization in Rwanda. Each indicator in this study was interpreted in accordance with the answers (scores) provided on its respective question.

2. 7 Model specification

The linear regression model was used where $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$. Where: β_0 is Constant, X_1 is Attitude towards government spending index, X_2 is Level of trust in Tax Authority index, X_3 is attitude towards tax information index, X_4 is Fiscal burden index, $\beta_1; \beta_2; \beta_3; \beta_4$ is regression coefficient.

3. RESEARCH FINDINGS AND DISCUSSION

3.1.1 Types of business

The study indicated that majority(88.2%) of business activities were in General trade, 10.3% of businesses sold services , 1.3 % of respondents run other activities while the smallest proportion (0.3%) of businesses is for manufacturing.

Table 3.1: Distribution of respondents by main business activity

Business activity	Frequency	Percent
Manufacturing	1	0.3%
General Trade	351	88.2%
Services	41	10.3%
Other	5	1.3%
Total	398	100%

3.1.2 Legal status of the business

The result indicated that the majority (85.7%) of respondents were those who own sole proprietorship business while 14.3% owned partnership business.

Table 3.2: Distribution of respondents by legal status of your business

Type	Frequency	Percent
Sole proprietorship	341	85.7%
Partnership	57	14.3%
Total	398	100.0%

3.1.3 Business size

It was found that majority(42%) of businesses are sized between Rwf 100,000 and Rwf 500,000, this proportion is followed by 36% of businesses sized between Rwf 500,000 to Rwf 5,000,000. It was found that 15% of respondents own business which have value less than Rwf 100,000. Owners of business sized between Rwf 5,000,000 and Rwf 15,000,000 is 7% while those who have businesses with value more than Rwf 15,000,0000.

Table 3.3: Distribution of respondents by business size

Business size	Frequency	Percent
Less than Rwf 100,000	58	15%
Rwf 100,000 to Rwf 500,000	167	42%
Rwf 500,000 to Rwf 5,000,000	142	36%
Rwf 5,000,000 to Rwf 15,000,000	29	7%
More than Rwf 15,000,0000	2	1%
Total	398	100%

3.1.4 Duration of business

It was found that business with less than 1 year Nineteen percent (19%) of respondents indicated that their businesses had the experience less than 1 year, the same percentage with those who affirmed that their businesses had the experience between 4 and 6 years while 7 % which the smallest proportion of respondents indicated that their businesses had an experience more than 6 years.

Table 3.4: Distribution of respondents by duration of business

Type	Frequency	Percent
Less than 1 year	74	19%
1-3 Years	223	56%
4-6 Years	75	19%
More than 6 Years	26	7%
Total	398	100%

3.1.5 Business turnover per year

The study sought to determine the business turnover per year where the majority of business were found ranged between Rwf 100,000 and Rwf 500,000. Table 4.5 indicates that majority (41%) of business has a turnover ranged between Rwf 100,000 and Rwf 500,000, this proportion is followed by those which earn less than Rwf 100,000 per year. It was found that 19% respondents affirmed that the turnover per year is ranged between Rwf 500,000 and Rwf 5,000,000 while 1% of respondents argued that their businesses are ranged between Rwf 5,000,000 and Rwf 15,000,000 and more than Rwf 15,000,000.

Table 3.5: Distribution of respondents by business turnover per year

	Frequency	Percent
Less than Rwf 100,000	154	39%
Rwf 100,000 to Rwf 500,000	164	41%
Rwf 500,000 to Rwf 5,000,000	76	19%
Rwf 5,000,000 to Rwf 15,000,000	2	1%
More than Rwf 15,000,000	2	1%
Total	398	100%

3.2 Attitude towards government spending on business formalisation

3.2.1 Descriptive analysis of attitude towards government spending

The study indicated that 49% of the respondents agreed while 32% strongly agreed with the statement that the government utilizes enough money to handle socio-economic problems faced by the population, 3% strongly disagreed, and 16% disagreed with the statement. It was found that the majority respondents did not agree with the fact that the population takes part on budget elaboration, because 38% strongly disagreed while 24% of respondents disagreed with the statement. Only 27% agreed with the statement while 11% strongly agreed. The table 4.6 also shows that 21% of the respondents strongly agreed with the statement that money from taxes are more spent in social welfare than administration issues, 49% just agreed with the statement while 6% strongly disagreed, and 24% disagreed with the statement. Regarding the statement that the amount of taxes collected is proportional to the quality of the services provided to the people, 48% agreed, 20% of respondents strongly agreed. Twenty five percent (25%) disagreed and 7% of respondents strongly disagreed with the statement. It was found the majority (42%) of respondents strongly agreed and 35% of respondents agreed with the statement that the government is strict against any illegal spending of public fund. Just 18% disagreed and 5% strongly disagreed with the statement. The positive attitude towards government spending is associated with the fact that the government is considered as a wise spender of tax revenues. This can be associated by what found in the study on citizens' attitudes towards taxation in Kenya, Tanzania, Uganda and south Africa where tax-compliance

Attitude was found positively correlated with the provision of public services in the four countries (Fjeldstad, Schultz, & Sjurse, 2013). This was also proved by Munyentwari (2015) where his study on perception of government spending was found statistically significant to influence tax compliance behaviour in Rwanda.

Table 3.6: Descriptive Statistical Analysis of respondents' attitude towards government spending

Government spending	SD		D		A		S A		Total		Mean	Std. Dev
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)		
The government utilizes enough money to handle socio-economic problems	12	(3)	64	(16)	193	(49)	129	(32)	398	(100)	3.10	.772
The population takes part on budget elaboration	153	(38)	95	(24)	108	(27)	42	(11)	398	(100)	2.10	1.035
Money from taxes are more spent in social welfare than administration issue	25	(6)	96	(24)	194	(49)	83	(21)	398	(100)	2.84	.823
The amount of taxes collected is proportional to the quality of the services	26	(7)	101	(25)	192	(48)	79	(20)	398	(100)	2.81	.825
The government is strict against any illegal spending of public fund	21	(5)	73	(18)	140	(35)	164	(42)	398	(100)	3.12	.891

3.2.2 Regression analysis of effect of attitude towards government spending on business formalization

Basing on regression analysis of effect of attitude towards government spending on business formalization, the results revealed that attitude towards government spending affects business formalization in Rwanda as shown by table 4.7. The first hypothesis of this research indicated that there was the strong and significant association between government spending and business formalization where attitude towards government spending affects positively business formalization ($\beta = 0.157$, $t = 3.11$, $P < 0.10$) which supports the proposed hypothesis (H1) acceptable. This implies that the government utilizes enough money to handle socio-economic problems and it is strict against any illegal spending of public fund hence, business formalization.

Table 3.7: Regression analysis of effect attitude towards Government spending on tax affects business formalization

Formalisation	Coef.	Std. Err.	t	P>t	[90% Conf. Interval]	
Government spending	0.157	0.050	3.11	0.002	0.074	0.240

3.3 Effect of level of trust in Tax Authority on business formalization in Rwanda

3.3.1 Descriptive analysis of attitude towards trust in tax authority

The study indicated that majority of the respondents have negative attitude towards the statement that the tax authority levies tax after consulting tax payers where the majority(66%) of respondents strongly disagreed and 17 % of the respondents disagreed with the statement while only 12% agreed and 5% strongly agreed. In case of inconvenience for not paying timely, the RRA facilitates him/her to pay in instalments. Regarding the statement that penalties applied to fiscal malpractices are reasonable, majority (41%) of respondents strongly agreed with the statement and 39% of respondents just agreed while 15% disagreed and 5% strongly disagreed with the statement. It was found that majority did not agree with the statement that RRA is more sensitive on educating taxpayers than using coercive measures, where 35% of respondents strongly disagreed and 33% of them disagreed with the statement while 25% of respondents agreed and 7% strongly agreed with the statement. Forty two percent(42%) of respondents agreed with the statement that RRA consults its clients before implementing any tax policy, 10% strongly agreed while 26% disagreed and 22% strongly disagreed. At this stage, it is clear that the trust on tax authority is still low due to the fact that Rwanda Revenue Authority is considered as punisher rather than a partner for national development.

Table 3.8: Descriptive Statistical Analysis on Respondents' attitude towards trust in Tax Authority

Trust on tax authority	SD		D		A		SD		Total		Mean	Std. Dev
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)		
The tax authority levies tax after consulting taxpayers	264	(66)	66	(17)	48	(12)	20	(5)	398	(100)	1.56	.890
In case of inconvenience for not paying timely, the RRA facilitates him/her to pay in instalments	226	(57)	113	(28)	38	(10)	19	(5)	398	(100)	1.62	.847
Penalties applied to fiscal malpractices are reasonable	21	(5)	60	(15)	155	(39)	16	(41)	398	(100)	3.16	.859
RRA is more sensitive on educating taxpayers than using coercive measures	138	(35)	131	(33)	102	(25)	27	(7)	398	(100)	2.05	.935
RRA consults its clients before implementing any tax policy	89	(22)	105	(26)	167	(42)	37	(10)	398	(100)	2.38	.933

3.3.2 Regression analysis of effect of attitude towards trust in tax authority on business formalization

The results of regression analysis proved that attitude towards trust in tax authority affects positively business formalization in Rwanda. The second hypothesis of this research showed that there was a strong relationship between attitude towards trust in tax Authority and business formalization where tax Authority affects positively business formalization ($\beta = 0.091$, $t = 1.79$, $P < 0.10$) which supports the proposed hypothesis (H1) acceptable. These results support Nicoletta (2011) who asserted that taxpayers with positive attitude to the tax authorities or trusting tax authorities will consequently be more compliant.

Table 3.9: Regression analysis of effect of trust on tax authority on business formalization

Formalisation	Coef.	Std. Err.	t	P>t	[90% Conf. Interval]
Trust on tax authority	0.091	0.051	1.79	0.074	0.007 0.175

3.4 Effect of attitude towards tax information on business formalization in Rwanda

On the third objective, the study sought to determine the effect of tax information on business formalization in Rwanda.

3.4.1 Descriptive analysis of attitude towards tax information

The study indicated that 40% of informal business owners disagreed with the statement and 33% of respondents strongly disagreed while 25% disagreed and 2%. The study revealed majority of respondents did not agree with the statement that business owners are educated on rules and laws governing taxation in Rwanda, where 39% strongly disagreed with the statement 33% of them disagreed with the statement. It was also found that majority of respondents perceive positively the statement that business owners are educated on rules and laws governing taxation in Rwanda, where 53% of respondents agreed with the statement and 39% of them strongly agreed with the statement while 4% of respondents disagreed and 4% of respondents strongly disagreed with the statement. Regarding the statement that business owners are informed why they should pay taxes, a slight majority had positive perception where 39% of respondents agreed, then 15% strongly agreed with the statement while 23% disagreed and 24% strongly disagreed with the statement. Majority of respondents perceived negatively that the awareness on taxes carried out by RRA is adequate where 41% of respondents strongly disagreed and 35% disagreed with the statement while only 19% agreed and 5% of respondents strongly disagreed. The low perception of respondent's education on taxation in Rwanda is associated with the inadequate knowledge of taxpayers on taxation in Rwanda. Nevertheless, to be tax compliant, taxpayers need to be tax literate. At minimum level, individual taxpayers need to possess some basic knowledge on taxation (Choongand & Wong, 2011). Therefore, taxpayers in Rwanda should be informed about tax laws and policies to avoid prejudice against taxation system.

Table 3.10: Respondents' attitude towards tax information in Rwanda

Tax information	SD		D A		A		SA		Total		Mean	Std. Dev
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)		
Taxpayers are aware of different taxes levied in Rwanda	131	(33)	158	(40)	99	(25)	10	(2)	398	(100)	1.97	.824
Business owners are educated on rules and laws governing taxation in Rwanda	154	(39)	132	(33)	89	(22)	23	(6)	398	(100)	1.95	.917
Business owners are aware of the importance of taxes	15	(4)	16	(4)	211	(53)	156	(39)	398	(100)	3.28	.713
Business owners are informed why they should pay taxes	97	(24)	90	(23)	154	(39)	57	(15)	398	(100)	2.43	1.011
The awareness on taxes carried out by RRA is adequate	163	(41)	138	(35)	78	(19)	19	(5)	398	(100)	1.88	.886

3.4.2 Regression Analysis of effect of attitude towards tax information on business formalisation

Using regression analysis, the results proved that attitude towards tax information does not affect business formalization in Rwanda. The third hypothesis of the research was not supported by the regression and was found statistically insignificant ($P < 0.10$). The coefficient of tax information ($\beta = 0.0163$) were positively related but statistically ($t = 0.22$, $p > 0.10$) not significant related with business formalization. This result countered what was revealed by Fjeldstad and Sjurson (2013) where tax knowledge and awareness are found to be positively correlated with tax-compliance attitude.

Table 3.11: Regression Analysis on effect of attitude towards tax information on business formalisation

Formalisation	Coef.	Std. Err.	t	P>t	[90% Conf.Interval]	
Tax information	0.016	0.074	0.22	0.825	-0.105	0.138

3.5 Effect of attitude towards tax burden on business formalization in Rwanda

3.5.1 Descriptive Analysis on business owners' attitude towards tax burden

The study indicated that 52% of respondents strongly disagreed and 40% of them disagreed while just 6% agreed and 2% strongly agreed with the statement. Regarding the statement that the period dedicated for tax payment is reasonable, 43% agreed and 33% strongly agreed with the statement while 16% disagreed and 8% strongly disagreed with the statement, which meant that majority of respondents had positive attitude towards the statement. The results showed that majority of respondents had negative perception on the statement that business environment is favourable for tax compliance where 22% strongly disagreed 31% disagreed while 35% agreed and 12% strongly agreed with the statement. It was also found that 24% disagreed and 24% strongly disagreed with the statement that strict penalties make taxpayers more compliant while 35% agreed and 17% strongly agreed with the statement. Regarding the statement that business owners are able to implement tax reforms, 57% agreed and 16% strongly agreed while 19% disagreed and 8% strongly disagreed with the statement.

Table 3.12: Descriptive statistical analysis of attitude towards tax burden

Taxation burden	SD		D		A		SA		Total		Mean	Std. Dev
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)		
Tax rate imposed on business is realistic	207	(52)	161	(40)	23	(6)	7	(2)	398	(100)	1.57	.683
The period dedicated for tax payment is reasonable	33	(8)	63	(16)	169	(43)	133	(33)	398	(100)	3.01	.909
The business environment is favourable for tax compliance	88	(22)	124	(31)	138	(35)	48	(12)	398	(100)	2.37	.958
Strict penalties make taxpayers more compliant	98	(24)	95	(24)	138	(35)	67	(17)	398	(100)	2.44	1.038
The business owners are able to implement tax reforms	33	(8)	76	(19)	226	(57)	63	(16)	398	(100)	2.80	.802

3.5.2 Regression analysis of effect of taxation burden on business formalization

Basing on regression analysis of effect of taxation burden on business formalization, it was found Tax burden affects business formalization in Rwanda. The fourth hypothesis of the research showed that tax burden and business formalization are strongly correlated, and tax imposed on business affects significantly and positively business formalisation ($\beta = 0.136$, $t = 3.6$, $P < 0.10$). This supports the proposed hypothesis (H1) acceptable. These results supports the study carried in Ghana which revealed that the burden of taxes paid affects the attitudes of individuals and this consequently affects their compliance decisions. (Razak & Jwayire, 2013), while Lumumba & al. (2010) found that feeling that taxpayers are not paying a fair share of tax affects tax compliance..

Table 3.13: Regression analysis on effect of tax 9 burden on business formalization

Formalisation	Coef.	Std. Err.	t	P>t	[90% Conf.Interval]	
Tax burden	0.136	0.038	3.60	0.000	0.074	0.199

3.6 Regression Analysis summary of effect taxation on business formalisation

Given that the error margin of the analysis was 10%, the regression analysis proved that attitude towards government spending, attitude towards trust in tax authority and tax burden affects business formalisation in Rwanda while attitude towards tax information was rejected.

The regression result explored the necessary indicators of the effect of taxation on business formalization by using the variables identified in the model. As indicated in the model summary the appropriate indicators of the variable used to identify the formalisation process were explored.

Moreover, the model summary also shows the significance of the model by the value of F-statistics

($P = .000$) and $F = 8.43$ which implies that there were strong relationship between the predictors and the outcomes of the regression variables and are at best fit the model to the effect of taxation on business formalisation.

Given that the regression analysis of our study is built on $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + e$. The beta (β) sign as showed in table indicated all the independent variables shows the positive effect of the predicting dependent variable. That means, any increase in tax determinants lead to increase in business formalisation. Therefore, based on the coefficients of the dependent variable (β sign) all the hypotheses proposed by the researcher are acceptable because of all the four hypotheses proved positive relationship between tax and business formalisation. But based on the statistical

significances of the independent variable over the dependent variable at 10% level of significance, only three independent variables (B1, B2 and B4) are significantly contributed for the F1 at (P<0.10) level of confidence.

Thus, this implies the attitude towards government spending, level of trust in Tax authority and Taxation burden are the most important determinants of business formalisation. Besides this, even if their relationships are positive the remaining independent variables (tax information) have not significant contribution for the predicted dependent variable (business formalisation) because they have a sig. value of greater than 10%. The regression results obtained from the model were utilized to test these hypotheses. The hypotheses sought to test for a significant influence of Government spending (X1), Tax Authority (X2), tax information (X3) and Tax burden (X4) on business formalisation in Rwanda.

As indicated in table 4.14 above the p value for the Government spending, Tax Authority and Tax burden are statistically significant at (p< 0.10) which suggests a strong support for hypothesis 1, 2 and 4; whereas, tax information is not supported the developed hypothesis (hypothesis 3) because it was statistically insignificant at (p > 0.10).

Table 3.14: Model summary of effect of taxation on business formalization

Business formalisation	Coef.	Std. Err.	t	P>t	[90% Conf.Interval]	
Government spending	0.157	0.050	3.11	0.002	0.074	0.240
Level of trust in Tax Authority	0.091	0.051	1.79	0.074	0.007	0.175
Tax information	0.016	0.074	0.22	0.825	-0.105	0.138
Tax burden	0.136	0.038	3.60	0.000	0.074	0.199
_cons	-0.111	0.084	-1.33	0.186	-0.250	0.027

4. CONCLUSIONS, AND RECOMMENDATIONS

4.1.1 Effect of government spending and how this is affecting business formalization

The first hypothesis of this research indicated that there was the strong and significant association between government spending and business formalization where government spending affects positively business formalization ($\beta = 0.157$, $t = 3.11$, $P < 0.10$) which supports the proposed hypothesis (H1) acceptable. This implies that the government is a wise spender of money from taxes and this raises the level of business formalisation in Rwanda.

4.1.2 Effect of Level of trust in Tax Authority on business formalization in Rwanda

From the study, it was found that there is a positive relationship between level of trust in Tax Authority and business formalization. The second hypothesis of this research showed that there was a strong relationship between tax Authority and business formalization where tax Authority affects positively business formalization ($\beta = 0.091$, $t = 1.79$, $P < 0.10$) which supports the proposed hypothesis (H1) acceptable.

4.1.3 The effect of attitude towards tax information on business formalisation in Rwanda

From this research, it was found that there is a positive correlation between tax information and business formalisation. However. The third hypothesis of the research was not supported by the regression and was found statistically insignificant ($P < 0.10$). The coefficient of attitude towards tax information ($\beta = 0.0163$) were positively related but statistically ($t = 0.22$, $p > 0.10$) not significant related with business formalization.

4.1.4 The effect of tax burden on business formalisation in Rwanda

The fourth hypothesis of the research showed that tax burden and business formalization are strongly correlated, and tax imposed on business affects significantly and positively business formalization ($\beta = 0.136$, $t = 3.6$, $P < 0.10$). This supports the proposed hypothesis (H1) acceptable.

4.2 Conclusions

That study concluded that attitude towards government spending, level of trust in tax authority and tax burden had effect on business formalisation while attitude towards tax information does not influence business formalisation. This is due to the fact that informal business owners do not interact with educators from Rwanda Revenue or Private Sector Federation because these bodies always target formal businesses. Oladipupo & Izedonmi (2013) captured these notions succinctly when he concluded in part “Every citizen is required to be conversant with the tax laws in operation. Such knowledge or

awareness has the tendency to promote voluntary tax compliance amongst the citizenry. Debere(2014) added that education and information programs on specific tax issues should be arranged with taxpayers to enhance their awareness and taxpayers.

4.3 Recommendation

Regarding to the attitude government spending, in descriptive results majority of respondents affirm that the government Rwanda spend wisely money for welfare of people but the majority indicated that government do not involve business owners in Budget planning. There is need for business owners to take part in budget elaboration to expect a successful business formalisation and tax compliance as well.

4.4 Suggestions for further research

The sample size used was not very large due to financial resource constraints. Further research could therefore be conducted into the phenomenon using a larger sample size. Preferably the study could be conducted across the provinces of Rwanda to find out whether there are regional differences in attitudes with regard to tax and business formalisation. This could be an important step is clarifying and updating extant knowledge about the tax culture and morale of Rwanda.

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