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Gender and Income Tax Compliance Among Small and Medium Enterprises in Uganda

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This study sought to examine the association between gender and income tax compliance amongst sole proprietorship SMEs in the district of Soroti, Uganda. Literature was reviewed as directed by the specific objectives. The study was supported by the benefit theory and the Fischer tax compliance model. The study adopted the explanatory and descriptive research designs. The study picked 384 participants from the target population of 2,590 owners of SMEs. Data was gathered using questionnaires and analyzed using cross tabulation and inferential statistics. Hypotheses were tested at 5 percent significance and normality test conducted. Study findings disclosed that gender has insignificant relationship with filing of returns of income tax and prompt discharge of income tax. The study concluded that gender differences do not explain decisions of owners of SMEs to file returns of income tax and pay income tax promptly. The study recommended that policy makers should consider demographic background of individual taxpayers in mapping out strategies to improve individual income tax compliance.

1. Introduction

1.1 Background

According to Rahayu *et al.* (2017) compliance with income tax is a situation where taxpayers effectuate their commitments relating to income tax and also execute their taxation rights. Compliance with income tax has remained a pressing disquiet and a prime area of research particularly in countries that are developing, as governments look for ways of raising the much-needed revenue used for financing their budgets (Awang and Amran, 2014). According to Passant (2016), taxation is twofold in that, it is a cause and a consequence of revolts. In particular, in the matter of income tax, it is an outcome of capitalist expansion and growth, together with the hardships moving along with that expansion and growth.

Despite the disquiets relating to income tax compliance, taxation remains the primary contribution of shifting non-public wealth to citizenry benefit and as a consequence a revenue source for governments to use to finance their massive public costs. As put by Gaisbauer *et al.* (2015) taxation is believed to be in the list of the most essential and powerful postulations in modern civilization. They add to posit that, compliance with income tax aids in raising indispensable revenue source used to finance public services and goods, secure social prosperity, ensure stability and secure national security. According to Gobena & Van Dijke (2016), taxation falls among the soundest ways

of mobilizing resources adopted by most regimes.

The role played by SMEs in developing and in developed economies cannot be overlooked. Small and medium enterprises are the most outstanding business income tax payers in several developing states, making their income tax compliance status directly have an impact on tax revenue collections of the state (Maseko, 2014). According to Muriithi (2017), over 90 percent of business firms in the African region are SMEs and contributing well above 50 percent to the GDP. Fiseha & Oyelana (2015) state that in the South Africa case, small and medium firms constitute 90 percent of the enterprises registered, creating about 60 percent employment opportunities in the country and making a contribution of almost 34 percent to the Gross Domestic Product. While in Kenya, the Kenya National Bureau of Statistics (2016) report reveals that small and medium businesses make up 90 percent of the establishments licensed in all counties. Statistics in Uganda as well, show that SMEs provide employment opportunities to more than 90 percent of the population working, while contributing 20 percent to the Gross Domestic Product (Uganda Investment Authority, 2016; MTIC, Uganda, 2015). While globally, SMEs have been praised for their role in provoking sweeping economic development, creating opportunities for employment and promoting reduction of inequalities in income among world communities (OECD, 2017).

Whereas the benefaction of SMEs globally has been treasured, several studies carried out to assess rates of compliance with income tax among SMEs world over indicate differing rates of income tax compliance by SMEs in the developing economies plus developed economies. For example, Kamleitner *et al.* (2012) revealed that the rate of income tax compliance for SMEs in Western Europe and Northern America was as high as 60-80 percent. Meanwhile, studies carried out in less developed economies disclose low-income tax compliance rates among SMEs. Abiola and Asiweh (2012) state that in Nigeria, the rate of income tax compliance for SMEs was 26 percent; Maseko (2014) as well disclosed that in Zimbabwe SMEs rate of compliance with income tax was 21, and Kayaga & Lahey (2007) revealed that in Uganda the SMEs rate of income tax compliance was 16 percent.

In an attempt to check the low-income tax compliance rates among SMEs a number of developing economies have taken on several tax reforms, including; creating Revenue Authorities that are Semi-Autonomous, introducing improved methods of administering revenue and the introducing Value Added Tax (Moore, 2014). The author indicates that Uganda took on the three tax reform categories. According to Manwaring (2017), the International Growth Center calls attention to tax reforms undertaken by Uganda spearheaded by URA, as a case to be followed by others, largely because of the success achieved in conveying revenue administration services that are client friendly. Kangave and Katusiimeh (2015) as well detail that tax reforms by Uganda resulted into increased collections of revenue, raised domestic revenue contribution to the national budget from 52.06 percent when the latest reforms started to 67.7 percent in the financial year 2013/2014.

Notwithstanding the ostensibly efficacious tax reforms taken on by the government of Uganda over the last 30 years to grow tax revenue through increasing compliance with income tax, URA annual reports (2018-2019) and MoFPED (2014) show that the tax to GDP ratio of Uganda evened out to about 13 percent in the period 2004-2019, which is far much below the mean among the other Sub-Saharan countries in Africa approximated at 20.28 percent (ICTD/UNU WIDER, 2019). The stunted rates of compliance with income tax amongst SMEs in less developed countries in spite of significant reforms embraced by these countries (Ayoki, 2007; James *et al.*, 2007) motivated the study to carry out an investigation on how far gender differences justify the low measures of compliance with income tax among sole proprietorship SMEs in the district of Soroti, Uganda.

Gender

The connection betwixt gender and compliance with income tax has attracted quite a lot of research that in return has provided quite a lot of literature. As Erat and Gneezy (2012) put it, a majority of the studies on gender and income tax compliance tend to furnish results indicating that women manifest compliant etiquette than men. Various studies continue to show varied evidence on how gender of taxpayers influences compliance with income tax. Tehulu and Dinberu (2014) state that one pronounced variable impacting compliance with income tax is gender, and with regard to that, it needs to be accorded concern whensoever issues of compliance with income tax are debated. Latest studies including D'Attoma *et al.* (2017) disclose that dissimilarities in compliance with income tax levels betwixt males and females are diminishing mainly due to the unfolding of an independent and freethinking generation of women. This study measures gender with regard to being female or male.

1.2 Income Tax Compliance

Atawodi and Ojeka (2012) posit that compliance with income tax is measured by; eligible taxpayers voluntarily registering for income tax, filing of returns of income tax within the stipulated spell, pronouncement of allowable deductions and authentic income, and prompt disbursement of income taxes determined or evaluated. According to Kirchler et al. (2009), compliance with income tax is the aptness and readiness of the taxpayer to obey their commitments relating to income tax, including making correct reports, submitting their income tax returns, and paying promptly their income tax. Empirical literature furnishes evidence that suggests that, compliance with income tax is affected by numerous factors (Antwi et al., 2015). In addressing the provocations originating from income tax compliance, it is helpful to comprehend the variables that affect an individual's decisions to adhere to the laws of income tax (Palil and Mustapha, 2011).

Ross and McGee (2012) reveal that, low levels of compliance with income tax have an effect to both developed and developing economies world over. However, according to Umar et al. (2017), the levels of compliance with income tax in developing economies, have remained lower than levels of compliance with income tax in the developed economies. Income tax compliance in developing and developed countries is salient as it aids in raising higher amounts of revenue required for financing recurrent and development spending (Obara and Nangih, 2017). Dwarfish levels of compliance with income tax amongst SMEs have been attributed to several variables, such as; bad attitude regarding compliance with income tax, corruption, low incomes, ambiguous tax laws, compliance costs, and demographic differences (Elmi et al., 2015; Bauer, 2016). Compliance with income tax in this study is proxied as filing of returns of income tax and prompt remittance of income taxes.

1.3 Small and Medium Enterprises in Uganda

Several authors and organizations have attempted to define what an SME is, and most of these definitions are based on variables such as number of employees and sales/turnover. For example, in the USA, an SME is defined as an entity that is independently owned and operated and which does not dominate in its field of operation (Hisrich *et al.*, 2004). According to OECD (2017), SMEs are business enterprises with up to 250 employees, these being categorized as; 'small' 10 to 50 employees and 'medium' 51 to 250 employees. In the case of South Africa an SME is expounded as any business enterprise having not more than 200 workers, having yearly turnover of not more than 5 million ZAR, having capital assets of not more than 2 million ZAR and with owners involved directly in management of the business (Nieman *et al.*, 2008). In Uganda, SMEs are taken to include business firms having employees numbering from 5 up to 100 and realizing revenue in sales ranging betwixt 10 and 360 million of Uganda shillings (Ayoki, 2007). According to Uganda Investment Authority (2016), SMEs stand for businesses that have annual revenue in sales ranging from 10 to 99 million Uganda shillings and having 5 to 49 employees on full-time for Small Enterprises; and enterprises having annual

sales revenue of the range from Uganda shillings 100 million to 360 million and having 50 to 100 full-time employees for Medium Enterprises.

According to Colombo *et al.* (2014), globally small and medium enterprises continue to play a key responsibility in propelling economic growth and economic development, by their benefaction to mobilization of revenue and creation of employment. Rupasingha and Goetz (2013) posit that SMEs are the largest employers in developed economies exceeding multinational organizations. In most economies that belong to OECD, SMEs represent over 95 percent of business enterprises and generate 50 percent of private sector employment (Reserve Bank of Zimbabwe, 2009). According to Hatega (2007), on top of contributing to 75 percent of the GDP, making up 90 percent of the commercial sector and creating chances for employment to no less than 2.5 million people, SMEs in Uganda have as well revamped the living standards of the populace and also made sure of political and with social steadiness. Small and medium enterprises can be run in any form of business firms including; the sole proprietorship businesses, the partnership businesses and the private limited company businesses, notwithstanding that partnership businesses and the private limited company businesses normally account for a trivial segment of SMEs (Makina *et al.* 2015).

1.4 Statement of the Problem

In the recent past, interest in income tax compliance of SMEs' studies has been on the rise. Several justifications have been attributed to this and prominent among them is the falling income tax compliance levels of most SMEs, particularly in developing states (James *et al.*, 2007). In Uganda, despite the importance of income tax compliance, studies conducted on income tax compliance of SMEs still point towards low-income tax compliance levels (Ayoki, 2007). Literature as well manifests that whilst the net tax to GDP ratio as an indicator tax compliance surged from 12.84 percent in the 2014/2015 Financial Year to 15.11 percent in the 2018/2019 Financial Year, it still remains low compared to other sub-Saharan African countries; Namibia having 31 percent, Kenya having 21.2 percent, Burundi having 19 percent and Ghana having 17.2 percent (URA annual report, 2018/2019). For the case of Soroti district, SMEs' income tax compliance has comparatively remained low. Federation of Small and Medium Enterprises' Annual report for the year 2020 while reciting data furnished by Uganda Revenue Authority, stated that the district of Soroti had just one SME amongst a list of 1000 top most income tax compliant small and medium enterprises in Uganda. While the Uganda Revenue Authority 2020 bulletin indicated that, out of the 50 upmost SMEs compliant with income tax in eastern Uganda, Soroti district had just five SMEs.

Studies conducted earlier to ascertain the connection betwixt gender and compliance with income tax have confirmed a synergy connection betwixt gender and compliance with income tax (Defitri and Fauziati, 2018). Several of these studies nonetheless, were carried out in the developed countries, except for a few (Alabede, 2014; Mustapha, 2017) that were carried out in the developing countries, consequently fashioning a contextual gap. It is as well paramount to note that studies on gender and income tax compliance in both developing and developed countries conceptualize SMEs in a different way. Only few studies have focused on establishing the extent to which gender influences income tax compliance decisions specifically, among sole proprietorship SMEs. Studies carried out on gender and compliance with income tax in Uganda, have not tackled income tax compliance of sole proprietorship SMEs. For instance, Nyenje (2012) established the determinants tax noncompliance among corporate firms. Most studies have not considered establishing how gender influences income tax compliance of sole proprietorship SMEs, hence raising a matter of empirical gap.

This unpredictability emerging from contextual and empirical hitches put forward a justification to carry out an investigation on how gender and compliance with income tax relate amongst sole proprietorship SMEs in the district of Soroti, Uganda.

1.5 Research Objectives

- i. To assess the relationship betwixt gender of owners and filing of returns of income tax amongst sole proprietorship SMEs in the district of Soroti, Uganda.
- ii. To establish the relationship betwixt gender of owners and prompt payment of income tax among sole proprietorship SMEs in district of Soroti, Uganda.

1.6 Study Hypotheses

 \mathbf{H}_{01} : Gender of owners has insignificant relationship with filing of returns of income tax amongst sole proprietorship SMEs in the district of Soroti, Uganda.

 H_{02} : Gender of owners has insignificant relationship with prompt payment of income tax amongst sole proprietorship SMEs in district of Soroti, Uganda.

1.7 Significance of the Study

The study findings will make a contribution towards formulation of policy on tax in the Ministry of Finance, Planning and Economic Development. The results of this study can help government in ratifying taxation laws. The study findings can help government come up with decisions that will lay out an environment favourable for growth and expansion of SMEs hence leading to improvement of the Gross Domestic Product. The results of the study can also aid makers of policy attain a superior comprehension of gender as an indicator of compliance with income tax amongst sole proprietorship SMEs and hence be able to formulate policies that can avail a conducive environment for SMEs operated as sole proprietorship businesses to operate.

2. Literature Review

2.1 Theoretical Review

The Benefit Theory

Benefit conjecture was developed in 1776 by Smith and reviewed later in 1994 by Cooper. This theory propounds that tax should be imposed based on the assistance an individual receives from the government. This theory submits that if an individual receives more benefit from government activities, the more an individual of that nature should pay in form of tax, and if an individual receives less benefit from government activities, the less an individual of that nature should pay in form of tax (Elmi *et al.*, 2015). The authors further posit that taxpayers should remit taxes in a measure proportional to benefit they derive from government activities. The difficulty arising from this theory is, usually in every community, individuals that receive more benefit from activities of government do have certain demographic features like; gender and old age. Babatunde *et al.* (2017) also argue that, benefit theory is challenging to put into practice largely because of the difficulty in establishing the amount of benefit an individual derives from activities of the regime including such assistances as defense accorded to each native and non-native individual. The authors further reveal that most of the costs settled by the state covers provision of benefit to its natives in general, hence it is not easy to estimate how much assistance falls every year to specific individuals.

Fischer Tax Compliance Model

Put forward by Fischer et al. (1992) Fischer model of tax compliance propounds that, earnestness by taxpayers

to bow to laws of income tax is conditioned by demographic variables including gender (Chau and Leung, 2009). Fischer model of tax compliance is regarded as a panoptic model, which incorporates sociological, psychological, economic and demographic variables in exploring income tax compliance etiquette. Saeed et al. (2020) state that Fischer et al. (1992) in apprehending income tax etiquette, cited fourteen variables that they regroup into four groupings to comprise taxpayers' demography, the noncompliance opportunity, the structure of the tax system, and perceptions and attitudes. Fischer's model submits that demographic variables affect taxpayers' compliance with income tax indirectly through their ability to influence attitudes, perceptions and noncompliance opportunities. Fischer's model is also supported by Schoeman (2022) who posits that gender among other demographic factors is vital variable that affect the taxpayer tax compliance practices.

2.2 Empirical Review

Several studies have been carried out to determine tax compliance attitudes between men and women. This studies' findings remain contradicting although a number of them suggest women manifest more honest etiquette in relation to tax than men do (Brañas-Garza *et al.*, 2018; Erat and Gneezy, 2012). This assumption though, has been questioned by some studies (Biziou-van-Pol *et al.*, 2015) which suggests that the debate on differences in gender and honesty is not yet over.

D'Attoma et al. (2017) did a study examining the differences betwixt females and males in the UK, Sweden, Italy and the U.S. Tax reporting in the study was treated as a lone factor with peculiar values for an experimental period. The authors contend that gender is a noteworthy variable affecting tax compliance. Their results showed men are more probable to dodge taxes than their women counterparts are over differing countries and cultures. Past studies have shown that women are more motivated to pay taxes than men (López-Luzuriaga & Scartascini, 2023). Although the findings of the prior studies are mixed, most recent studies provide evidence of significant relationship between gender and tax compliance (Amalia, Susilawati & Herwinarni, 2023; Deyganto, 2018; Gylfason, Arnardottir and Kristinsson, 2013). According to Sunardi et al. (2022), firms run by top managers who are female are more probable to respect their obligations related to tax than firms run by top managers who are male.

Yimam & Asmare (2020) in their study on "gender and tax compliance", investigated whether gender distresses in enterprise tax compliance behaviour. In their findings they observed that enterprise compliance behaviour is significantly affected by their gender and that, female owned enterprises are more likely to be tax compliant than those owned by men. However, Houston and Tran (2001) conversely report contradictory findings. The authors reveal that females tend to evade tax more than their male counterparts. This is accordant with findings of a study conducted by Cyan *et al.* (2016) whose findings claimed that older women have nether tax optimism than older men. Ameyaw & Dzaka (2016) also state that there are no significant gender differences in tax compliance. The disharmony in findings is what entices this study to conduct further exploration as to whether gender differences have an effect on the income tax compliance choices of taxpayers.

3. Conceptual Framework Gender Income Tax Compliance Male Female Filing of Income Tax Returns Prompt Payment of Income Tax

4. Methodology

Considering the kind of this study, that intended to ascertain the association betwixt gender and compliance with income tax, the study adopted explanatory and descriptive research designs as the most suitable research designs. Because of its binary nature, the study as well adopted the logistic regression model. In this model, taxpayers were considered to either be compliant with income tax represented as Y_i=1, for success and/or noncompliant with income tax represented as Y_i=0, for failure. The population targeted by the study was 2,590 taxpayers owning sole proprietorship SMEs in the district of Soroti, Uganda. Respondents (384) were selected using proportionate stratified sampling and simple random technique of sampling. The sample size of the study of 384 respondents was determined using the Cochran (1977) formula for determining the size of the sample. The study collected data using self-administered survey questionnaires that comprised both closed-ended questions and open-ended questions. Data analysis was done using cross tabulation and techniques of inferential analysis (logistic regression) with the aid of SPSS.

5. Results and Discussion

Response Rate

The study forwarded 384 questionnaires to the respondents as per the study sample size. Out of the total number forwarded, 354 respondents responded which constituted a response rate of 92.2 percent.

Cross Tabulation

Table 1: Relationship Between Gender of Owners of SMEs and Filing of Income Tax Returns

		Disagree	Sometimes	Agree		
Question Item	Gender	(n/%)	(n/%)	(n/%)	X^2	p-value
I submit my returns of income tax as	Male	60(23.0)	28(10.77)	172(66.1)	0.14	0.933
required by the tax law	Female	20(21.2)	10(10.64)	64(68.09)		
I am morally compelled to submit	Male	76(29.2)	41(15.77)	143(55)	8.86	0.012
my returns of income tax	Female	21(22.3)	6(6.38)	67(71.28)		
I file my income tax returns	Male	71(27.3)	54(20.77)	135(51.9)	8.45	0.015
voluntarily	Female	24(25.5)	8(8.51)	62(65.96)		
I report all my income from business	Male	73(28.0)	28(10.77)	159(61.1)	2.831	0.242
in my income tax return	Female	22(23.4)	6(6.38)	66(70.21)		
Fear of penalties compels me to file	Male	130(50)	60(23.08)	70(26.92)	18.05	0.000
my income tax returns	Female	45(47.8)	6(6.38)	43(45.74)		
I give correct information in my	Male	53(20.2)	36(13.85)	171(65.7)	2.13	0.344
income tax returns	Female	23(24.4)	8(8.51)	63(67.02)		

^{***} p<.01, ** p<.05, * p<.1

Source: Study data

The findings in table 1 disclose that for three question items; "being morally compelled to file income tax returns" having a chi-square of 8.86 and a p-value 0.012, "voluntary filing of returns of income tax" having a value of chi-square of 8.45 and a p-value of 0.015 and "being compelled to file income tax returns for fear of penalties" with a value of chi-square of 18.05 and a p-value of 0.000, the association between gender of owners and their compliance with income tax represented as filing of returns of income tax is significant, since their p-values are < 0.05. These findings agree with Febrian & Islami (2020) who in their study revealed that gender

has a significant influence on income tax compliance behaviour. However, these findings are not accordant with Kum-Lung and Teck-Chai (2010) who in their findings stated that gender has an insignificant relationship with compliance with tax.

The results in table 1 further show that for other three question items: "filing of income tax returns as required by the tax law" with a value of chi-square of 0.14 and a p-value of 0.933, "reporting all business income in the income tax return" with a value of chi-square of 2.831 and a p-value of 0.242, and "providing correct information in the income tax returns" with a value of chi-square of 2.13 and a p-value of 0.344, the relationship betwixt gender of owners and compliance with income tax represented as filing of returns of income tax is insignificant, since their p-values are > 0.05. The study findings support the findings of Nyamapheni and Robinson (2021) who in a study carried out in Zimbabwe and South Africa, revealed that gender is statistically insignificant to explain tax compliance. These findings however refute Apriani *et al.* (2018) whose findings indicated gender having a statistically notable ramification on compliance with tax of individual taxpayers.

Table 2: Relationship Between Gender of Owners of SMEs and Prompt Payment of Income Tax

		Disagree	Sometimes	Agree		p-
Question Item	Gender	(n/%)	(n/%)	(n/%)	X^2	value
I pay my income tax whenever it	Male	49(18.85)	30(11.54)	181(69.62)	0.5073	0.776
is due	Female	16(17.02)	9(9.57)	69(73.4)		
Penalties compel me to pay my	Male	129(49.62)	62(23.85)	69(26.54)	14.49	0.001
income tax promptly	Female	41(43.62)	10(10.64)	43(45.74)		
Delaying income tax payment is a	Male	126(48.46)	37(14.23)	97(37.31)	7.5634	0.023
culture in Uganda	Female	42(44.68)	5(5.32)	47(50)		
In paying income tax promptly, I	Male	110(42.31)	39(15)	111(42.69)	0.1385	0.933
lose freedom to use my income as						
I choose	Female	39(41.49)	13(13.83)	42(44.68)		
I feel guilty if I do not pay	Male	84(32.31)	53(20.38)	123(47.31)	6.0356	0.049
income tax promptly	Female	31(32.98)	9(9.57)	54(57.45)		
Probability of detection in case of	Male	199(76.83)	28(10.81)	32(12.36)	1.7917	0.408
delayed payment of income tax is						
low	Female	67(71.28)	15(15.96)	12(12.77)		

^{***} p<.01, ** p<.05, * p<.1

Source: Study data

It is evident from the results in table 2 that for three question items; "being compelled to pay income tax promptly because of penalties" with a chi-square value of 14.49 and p-value 0.001 at 5 percent significance level, "delay to pay income tax is a culture in Uganda" with a chi-square value of 7.563 and p-value 0.023 at 5 percent significance level, and "feeling of guilt if I don't pay income tax promptly" having a value of chi-square of 6.0356 and a p-value of 0.049 at 10 percent significance level, there was a significant relationship between gender of owners and compliance with income tax represented as timely remission of income tax. These results confirm findings of Yimam & Asmare (2020) who asserted that enterprises' tax compliance behaviour is significantly affected by their owners' gender. The findings however contradict Fitriyani *et al.* (2014) who revealed in their findings that there is an insignificant relationship between gender and income tax compliance attitude.

The findings in table 2 as well indicate that for the other question items: "payment of income tax whenever it is due" with a value of chi-square of 0.5073 and a p-value of 0.776, "loss of freedom to use my income the way I choose because of prompt payment of income tax" having a value of chi-square of 0.1385 and a p-value of 0.933 and "probability of detection if payment of income tax is delayed is low" with a chi-square value of 1.7917 and p-value 0.408, there was insignificant relationship betwixt gender of owners and their compliance with income tax represented as prompt remission of income tax since their p-values are > 0.05. These findings are similar to Kakunsi *et al.* (2017) who stated that gender does not affect income tax compliance. However, the same findings are not consistent with the results of Amalia *et al.* (2023) who revealed in their study that there is a significant relationship between gender and tax compliance.

Normality Test

The test of normality is carried out to establish whether the sample data was gathered from a population that was distributed normally (Siddiqi, 2014).

Table 3: Shapiro-Wilk Test for Normal Data

Variable	N	W	V	Z	Prob>z
Filing of Returns of Income Tax	354	0.996	0.871	-0.326	0.628
Prompt Remission of Income Tax	354	0.993	1.824	1.421	0.078

Source: Study data

In table 3 it is evident that the p-values were more than 0.05, 0.628 for filing of returns of income tax, 0.078 for prompt remission of income taxes. These results indicate that the data used was normally distributed. The study therefore fails to reject the null hypothesis that the residuals are insignificantly different from a distribution that is normal. This concludes that the residuals are from a population that is distributed normally and the assumption of normality was not breached rendering the statistical results accurate (Ghasemi and Zahediasl, 2012).

Hypotheses Testing

Table 4: Logistic Regression of Filing of Income Tax Returns on Gender

Variable		OR	Coef.	St. Err.	p-value
Gender	Female	1.36	0.31	0.37	0.404
Mean dependent var			0.743	SD dependent var	0.438
Pseudo r-squared			0.305	Number of obs	354
Chi-square			123.03	Prob > chi2	0.000***
Akaike crit. (AIC)			300.5	Bayesian crit. (BIC)	339.196

^{***} p<.01, ** p<.05, * p<.1

Source: Study data

Hypothesis 1

H₀₁: Gender of owners has insignificant relationship with filing of returns of income tax amongst sole proprietorship SMEs in the district of Soroti, Uganda.

With regard to hypothesis 1 gender was analyzed on the basis of owners being either male or female. The logistic regression findings presented in table 4 show that the odds ratio of female owners is 1.36 and it is statistically not significant at 5 percent having a p-value of 0.404 which is higher than 0.05. The coefficient of 0.31 indicates a positive relationship. These results indicate a positive insignificant association between female

owners and compliance with income tax represented as filing of returns of income tax and that female owners had 1.36 chance of filing income tax returns than their male counter parts.

On the basis of results in table 4, a conclusion is drawn that gender of the owners has positive insignificant association with compliance with income tax represented as filing of returns of income tax and that owners who are female are more income tax compliant than owners who are male. The study therefore, fails to reject the null hypothesis which states that gender of owners has insignificant relationship with filing of income tax returns amongst sole proprietorship small and medium enterprises in the district of Soroti, Uganda. These results corroborate with empirical findings obtained by Adimassu & Jerene (2016) who found out that gender does not significantly determine income tax compliance practices. The findings additionally corroborate with López-Luzuriaga & Scartascini (2023) whose findings revealed that taxpayers who are female are more income tax compliant than their male counterparts.

However, the results of the present study are inconsistent with empirical findings of Idowu *et al.* (2020) who stated that gender significantly affects taxpayers' compliance with income tax. The findings as well contradict Jeyapalan and Hijattulah (2006) whose results claimed that females and males have similar attitudes towards tax compliance. The inconsistency in findings is due to several factors including methodological differences because this study considered a relatively large sample size as opposed to the other studies.

Table 5: Logistic Regression of Prompt Payment of Income Tax on Gender

Variable		OR	Coef.	St. Err.	p-value
Gender	Female	3.42	1.23	0.32	0.417
Mean depend	dent var		0.54	SD dependent var	0.499
Pseudo r-	squared		0.03	Number of obs	354
Ch	i-square		14.615	Prob > chi2	0.002***
Akaike cri	t. (AIC)		493.916	Bayesian crit. (BIC)	532.609

^{***} p<.01, ** p<.05, * p<.1

Source: Study data

Hypothesis 2

 H_{02} : Gender of owners has insignificant relationship with prompt remission of income tax amongst sole proprietorship SMEs in the district of Soroti, Uganda.

With regard to hypothesis 2, gender was analyzed on the basis of owners being either male or female. The logistic regression findings presented in table 5 specify the odds ratio of female owners is 3.42 and it is statistically not significant at 5 percent having a p-value of 0.417 which is higher than 0.05. The coefficient of 1.23 indicates a positive relationship. These results indicate that there is no significant association between female owners and their compliance with income tax represented as timely remission of income tax and that female owners had 3.42 odds of paying income tax promptly than male owners.

Based on the results in table 5, a conclusion is drawn that gender of owners has no significant association with compliance with income tax represented as prompt remission of income tax and that owners who are female are more income tax compliant than owners who are male. Correspondingly, the study fails to reject null hypothesis that gender of owners has insignificant relationship with prompt payment of income tax amongst sole proprietorship small and medium enterprises in the district of Soroti, Uganda. These results are consistent with empirical findings obtained by Amina and Sniy (2015) who suggested gender insignificantly impacts on

taxpayers' compliance with income tax behaviour. The results are also consistent with Olowookere & Fasina (2013) who stated that women are more tax compliant than men.

However, the results of the present study are inconsistent with empirical findings of Prasetyo *et al.* (2020) who stated that gender significantly affects taxpayers' compliance with income tax behavior and attitude. The findings as well contradict Cyan *et al.* (2016) whose results claimed that elderly females are less compliant than elderly males. The inconsistency in findings can be attributed to several factors including contextual differences since this study was conducted in a developing economy while the other studies were conducted in developed economies.

6. Conclusion

Study findings on the relationship between gender of owners and income tax compliance show that gender of owners insignificantly relates with compliance with income tax of sole proprietorship SMEs in the district of Soroti, Uganda. The findings also show that female owners of SMEs were more income tax compliant than the male owners of SMEs. The study concluded that gender differences of owners do not significantly relate with compliance with income tax among SMEs run as sole proprietorships in district of Soroti, Uganda in filing returns of income tax and promptly paying tax from income. On the basis of the conclusions, study recommends that Uganda's policy makers in particular tax administrators, should pay attention to the demographic background of the individual taxpayers as they sensitize the non-compliant taxpayers on the need for compliance and as they map out better strategies towards improving individual income tax compliance etiquette among taxpayers in Uganda. the study further recommends that policy makers need to balance their policies on gender equality as they instill awareness on tax obligations.

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