



## Determinants of Tax Morale: Cross-Sectional Evidence from Africa

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**Abstract:** The article provides a comparative analysis of the determinants of tax morale in South Africa and Zimbabwe, as neighbouring countries. In this quantitative research, data were collected using questionnaires from the 2010–2014 and 2017–2020 World Values Survey. For Zimbabwe, Wave 6 and Wave 7 had a sample size of 1 500 and 1 200, respectively. The study concludes that governments must understand tax morale and its determinants to boost voluntary compliance. Despite their lower standards of living, Zimbabweans have higher tax morale than South Africans. The determinants of tax morale differ between economic situations and countries. Corruption, prevalent in both countries, influences tax morale. All the models show that demographic factors have little effect on tax morale. In the analysis of the determinants of tax morale, hunger was introduced as an important variable. Although this variable was insignificant for South Africa, the study showed that in Zimbabwe, there is a negative relationship between hunger and tax morale in both economic situations. Policy-makers should consider eradicating corruption and hunger to boost tax morale to improve tax compliance. Continued tax education and improvements to the perceptions of democracy should be included in the mix of tax compliance enhancement strategies.

**Keywords:** Determinants; Tax morale; Order Logit Model; South Africa; Zimbabwe

**JEL Classification:** H26

### 1. Introduction

In developing countries, especially African countries, tax revenue contributes more than 90% of the total revenue accruing to governments. Research by Ndedzu et al. (2013, p. 144) found that tax revenue, as a percentage of total revenue, for the Zimbabwean government has reached a maximum point of 98%. Thus, in Zimbabwe, tax revenue is government revenue (Bonga et al., 2015, p. 25). According to Kołodziej (2011, p. 22), taxes are obligatory monetary contributions to the state's revenue fund and are assessed and imposed by a government agency on the activities, enjoyment, expenditure, income, occupation, privilege, and property by individuals and organizations.

Kundt et al. (2017, p. 1) highlighted that the mobilization of domestic resources in developing countries, principally through transparent, fair, and efficient tax systems, is regarded as a central means of achieving the Sustainable Development Goals (SDGs), especially SDG number 16, which deals with peace, justice, and strong institutions. Over the decades, tax has continued to be an indispensable facet of public policy, both as a way of financing government expenditures and finance

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the livelihoods of the low-income population (Chen et al., 2017, p. 72). More so, taxation plays a vital role in developing economies by reducing inequalities of income, improved social welfare, and poverty eradication (Maboshe & Woolard, 2018, p. 14). Moreover, taxation plays a strategic role in building up institutions, markets and democracy by making governments accountable to taxpayers.

The concept of tax morale resulted from the failure of previous research to explain why people pay taxes even when the tax rates and probability of audit are low and the differences in tax compliance rates among nations (Torgler et al., 2007, p. 2). Luttmer and Singhal (2014, p. 2) define tax morale as the non-monetary factors that motivate tax payment. Research has shown that tax morale is positively correlated with tax compliance and tax effort (Ali et al., 2013; Cummings et al., 2009; Fagbemi & Abogun, 2014).

At an intrinsic level, tax morale is based on the assessment of state legitimacy, credibility and political ratification, as well as the perceived fairness and effectiveness of the state and its institutional environment (corruption, tax justice and application of the rule of law) (Dickerson, 2014; Everest-Phillips, 2010). Thus, this study will look at tax morale at an intrinsic level, as there is a need to determine how the political, legal and regulatory environment has affected the taxation levels within the South African and Zimbabwean context.

The connection between tax morale and compliance indicates the effect of the former on tax revenues. Torgler et al. (2008, p. 318) found that low tax morale results in the overstating of expenses and underreporting of income, which ultimately means little will be going to the fiscus. More so, Sebele-Mpofu (2020) also indicated that there is a causal relationship of some sort, perhaps two connections, between the vicious and virtuous cycles of governance, tax morale and tax compliance.

As such, there is a need to determine the direction and strength of the relationship within the South African and Zimbabwean context between tax morale and tax compliance. Research has shown that tax morale in African countries is generally lower than in developed and transition countries. The Organization of Economic Co-operation and Development, OECD (2019, p. 13) noted that countries with low levels of tax revenue as a percentage of GDP have low levels of tax morale, possibly because third-world countries have challenges with regard to the provision of public service, voluntary tax compliance, and fiscal stability. It is against this background that this research intends to examine tax morale and its indicators in South Africa and Zimbabwe so that African governments can step up their strategies to increase tax compliance.

The article is divided into five sections, including the introduction and concluding remarks. The second section discusses the differences between the tax cultures in South Africa and Zimbabwe. South Africa has been chosen as an example of a middle-income and Zimbabwe as a low-income country bordering each other. The third section provides the research methodology, and the fourth section presents the results with concluding and advisory remarks.

## **2. Differences between Tax Cultures in South Africa and Zimbabwe**

Ngwenya et al. (2014, p. 4) found that the Zimbabwean tax system is complex, leading to taxpayers exhibiting non-paying tax behavior. There should be a mutual and respectful relationship between taxpayers and the tax agencies to promote a culture of paying tax. Frey and Feld (2002, p. 97) cemented this proposition by stating that the taxpayer's willingness to pay tax is centered on how the tax authority treats taxpayers. The differences between the Zimbabwean and South African tax

cultures were indicated by Naidoo (2005, p. 13), who argued that South African taxpayers often believe that they are being treated as criminals. South African taxpayers do not appreciate the heavy-handed approach of the South African Revenue Service (SARS), which is accompanied by threats if non-compliance is found, which is often based on technicalities.

The Zimbabwean tax system differs from the South African system. Owing to the complexity of the Zimbabwean tax system, there are incongruities in the interpretation of the tax laws (Ngwenya et al., 2014:04). However, Zimbabwe Revenue Authority (ZIMRA) has implemented procedures to help its officers execute their duties with fewer hurdles. In Zimbabwe, the tax acts are periodically amended to align with contemporary trends, government policies and to tighten loopholes attributable to tax evasion/avoidance (Sebele-Mpofu, 2020, p. 2).

In South Africa, the complexity of the tax system is an important factor affecting tax compliance. South African tax legislation is so complex that the ordinary person has trouble understanding it. Feddersen (2018) noted that complex tax processes can overwhelm taxpayers, making it cumbersome and difficult to pay their taxes. Importantly, Feddersen (2018) suggested that SARS can reduce the complexity of tax compliance processes by using plain language in communications and simplifying the forms and tax laws where possible.

A comparison of the levels of corruption in South Africa and Zimbabwe found that Zimbabwe is ranked among the most corrupt countries in the world, with the latest ranking being 157 out of 180 countries (Transparency International, 2020). ZIMRA (2017, p. 34) noted that the most dominant areas of corruption in ZIMRA are undervaluation of goods, especially motor vehicles, false removal in transit acquittals, the facilitation of smuggling, tax evasion and fraud, bribery, and collusion. Corruption in the tax administration in South Africa remains a fundamental barrier to effective and fair taxation and building trust between government and citizens.

Zimbabwe has more challenges related to political legitimacy than South Africa does, and this affects tax compliance. It has been found that taxpayers who are aware of significant levels of corruption and uncertain whether their paid levies are being utilized to fund public goods and services will be more likely to sidestep the payment of tax liabilities. Oberholzer and Stack (2014) in South Africa observed that over half of the respondents (58.46%) believe that the government uses a large proportion of taxes purposelessly, significantly affecting tax compliance.

Zivanai et al. (2016, p. 1554) concluded that taxpayers' non-compliance in Zimbabwe is driven by the high tax rates, low perceived risk of detection, the perception that fellow informal traders are not paying taxes, and corruption within the government. Kwaramba and Mudzingiri (2016, p. 12) and Nyakuenda (2014, p. 50) found that in Zimbabwe, a decrease in tariff rates is associated with a reduction in tax evasion. Their studies corroborate other studies undertaken in other African countries. However, Ali et al. (2013, p. 10) found that in South Africa, people who are quite happy to utilize various government services, for example, obtaining identity documents and police services, are bound to have a tax-compliant attitude.

Although the Zimbabwean Income Tax Act stipulates that penalties are charged at 100%, there are still many tax evasion cases. Nyakuenda (2014, p. 50) found that Zimbabweans generally view the penalty associated with tax evasion as a small penalty. Thus, it is cheaper to evade tax than to comply with tax laws. In South Africa, Naidoo (2005, p. 13) further argues that those who diligently pay their taxes and comply to the best of their ability with the tax laws want to be treated with respect by the revenue

authorities. As previously stated, South African taxpayers often feel that they are being treated as criminals by SARS.

South Africa represents a middle-income and Zimbabwe is a low-income developing country, as specified by the World Bank. Both South Africa and Zimbabwe have autonomous revenue authorities, which collect taxes on behalf of the government. South Africa's tax regime is set by the National Treasury and managed by SARS. ZIMRA derives its mandate from the Revenue Authority Act, passed by the Parliament of Zimbabwe in 2002.

South Africa and Zimbabwe have different rates for income tax, PAYE and VAT, and the same tariffs for capital gains tax, as shown in Table 1 below.

**Table 1. Tax Rates between South Africa and Zimbabwe**

Country	South Africa	Zimbabwe
Value added tax	15%	14.5%
Capital gains tax	Max 20%	Max 20%
Income tax	28%	24%
PAYE	Max 45%	Max 40%

*Source: ZIMRA and SARS*

Income tax in South Africa was first introduced in 1914 with the Income Tax Act No 28, an Act that had its origins in the New South Wales Act of 1895. Income tax, also known as corporate tax, was introduced in Zimbabwe (then Southern Rhodesia) in 1918, but the current legislation was enacted on 1 April 1967.

Residence taxation of income is based on the principle that people and firms should contribute toward the public services provided for them by the country where they live and is based on all their income, wherever it comes from. By contrast, source taxation is justified by the view that the country which provides the opportunity to generate income or profits should have the right to tax it. Economists tend to favor residence jurisdiction, both because they consider the source of income hard to pin down (income often has more than one source) and because they think residence jurisdiction promotes economic efficiency since the decision where to invest should be unaffected by the tax rate. South Africa uses the resident-based tax system, while Zimbabwe uses the source-based tax system.

The South African tax system uses turnover tax, which is meant for small businesses, and a small business is taxed like any other tax-registered company. However, the Zimbabwean tax system uses presumptive tax, which is meant to bring informal traders into the tax net.

Empirical studies have thus revealed that low tax compliance is more evident in developing countries, mainly because of low tax morale, poor public governance quality, ineffective tax systems, perceptions of corruption, and the recent growth in the 'hard-to-tax' informal sectors (Musimenta et al., 2019, p. 25; Badaoui & Magnani, 2013, p. 2). Despite the significance of taxes, governments in developing countries are faced with challenges of low tax compliance. As it relates to the quality of governance, tax morale is the least understood but most fundamental dimension of tax compliance (Sebele-Mpofu, 2020, p. 2). Thus, there is a need to determine the extent to which the different time scales (namely, the pre-Government of National Unity (GNU), GNU, and post-GNU era) within the Zimbabwean landscape have affected tax morale. In other words, the pre-GNU period also corresponds to the pre-dollarization period, while the GNU period also stands for the dollarization phase and the post-GNU phase also equates to the post-dollarization period. The pre-dollarization period is when the Zimbabwean economy was under hyperinflation. Dollarization is the period in

which the Zimbabwean adopted the multi-currency regime and post-dollarization is the period in which the multi-currency was phased out in favor of the local currency. Furthermore, it is also necessary to make a comparative analysis of the tax morale in South Africa and Zimbabwe so that the individual governments can step up their strategies to increase tax compliance.

### 3. Research Methodology

The study used a quantitative research design to understand the determinants of tax morale in South Africa and Zimbabwe. The main source of data for the study was Wave 6 (2010–2014) and Wave 7 (2017–2020) of the World Values Survey (WVS). Wave 6 involved both South Africa and Zimbabwe, while Wave 7 involved Zimbabwe only. The WVS investigates socio-cultural and political change, and collects comparative data on values and belief systems. It is based on representative national samples of at least 1 000 individuals. The WVS is conducted worldwide and covers quite a large number of countries. For Zimbabwe, Waves 6 and 7 had a sample size of 1 500 and 1 200, respectively. Wave 6 survey for South Africa had 3 531 participants. The survey interviewed participants who were above 18 years of age, regardless of gender. The participants were also drawn from all the provinces in South Africa and Zimbabwe, as well as from both rural and urban areas. The WVS data is reliable, and it has been used by many researchers in the field of tax morale, including eminent tax morale scholars like Benno Torgler. The reliability of the study was measured in terms of Cronbach's alpha ( $\alpha$ ). The scale items were regarded as reliable as Cronbach's alpha ( $\alpha$ ) values were greater than 0.70. The data were analyzed using an ordered logit model. The dependent variable was tax morale, and the independent variables were marital status, age, income level, employment, religion, and hunger. The WVS dataset commonly used a 10-point Likert Scale approach to collect data on tax morale from the respondents. Tax morale was captured by compressing the 10-point Likert Scale into a 4-point scale in this paper. The 4-point scale developed for this study adopted values ranging from 3 for never justifiable, denoting high tax morale, and 0 for always justifiable, meaning low tax morale. Values 1 and 2 represent mid-low and mid-high tax morale, respectively.

As the study's dependent variable, tax morale is qualitative and has more than two categories, therefore necessitating an ordered logistic model. Ordered logistic regression is employed when dependent variables involve three or more categories (Ari, 2016).

The empirical model is specified as follows:

$$\text{Tax morale} = F(\text{Age, gender, edu, ms, es, reli, inc, hu, corr, tp, happ, SD, Prid, aw})$$

or equivalently:

$$\begin{aligned} P(\text{TMorale} = 1/X) \\ = \beta_0 + \beta_2 \text{age} + \beta_3 \text{gender} + \beta_4 \text{edu} + \beta_5 \text{ms} + \beta_6 \text{inc} + \beta_7 \text{reli} + \beta_8 \text{corr} \\ + \beta_9 \text{happ} + \beta_{10} \text{hu} + \beta_{11} \text{es} + \beta_{12} \text{SD} + \beta_{13} \text{Prid} + \beta_{14} \text{aw} + \beta_{14} \text{TP} + \mu_i \end{aligned}$$

Where:

$P(\text{Tax Morale} = 1/X)$  is the probability that an individual is willing to pay tax, given the vector of observable demographic, economic, and institutional characteristics;

$\beta_0$  is a constant,

$\text{age}$  is the age of the respondent;

*gender* is the sex of the respondent;

*educ* is the education of the respondent;

*ms* is marital status;

*es* is employment status for the respondent;

*inc* is the income of respondent;

*reli* is the religion of respondent;

*hu* is the level of hunger of the respondent;

*corr* is corruption perception;

*TP* is trust in parliament

*SD* is the level of satisfaction with democracy in Zimbabwe/South Africa;

*Prid* is the level of the respondent's pride with Zimbabwe/South Africa;

*aw* is the level of awareness;

*Happ* is the level of happiness;

$\mu_i$  is an error term.

The first diagnostic test carried out was a multicollinearity test used to check linear dependence between explanatory variables, during which a correlation test was carried out.

A correlation matrix is generally computed, and if explanatory variables are correlated, this may indicate the problem of multicollinearity, resulting in biased results. One of the variables should be dropped to solve this problem. The Ramsey Regression Equation Specification Error Test (RESET) for misspecification is then carried out. The test detects omitted variables and the incorrect functional form of the model.

Thereafter, the log-likelihood ratio test was used in the Likelihood Ratio Chi-Square test to test whether all predictors' regression coefficients in the model were simultaneously zero. These are related to the test statistics and p-value, respectively, for the null hypothesis that an individual predictor's regression coefficient is zero, given that the rest of the predictors are in the model.

#### 4. Results and Discussion

Table 2 presents the ordered logit model analysis results for the three periods of relevance to the study. The first column from the left shows the variables in the empirical model, the second column shows the regression results for Zimbabwe in the post-dollarization period, the third column shows the results for Zimbabwe during the dollarization period, and the fourth column shows the results for South Africa.

The empirical analysis of the determinants of tax morale during and after dollarization shows that marital status does not explain tax morale in the post-dollarization period. However, those who are separated and single indicated high tax morale during the dollarization period. While being separated is significant at a 10% significance level, with a z-statistic of 1.92, single is significant at 5% level with a z-statistic of 2.11. The results indicate that being separated relative to being divorced increases

the probability of high tax morale by 12.8%, while being single relative to being divorced increases the probability of high tax morale by 10.7%. The perceptions related to democracy were found to influence tax morale in both periods. Nonetheless, the results for democracy in the post-dollarization period are quite surprising as they contradict the theoretical prediction. Theory predicts that people who believe the country is being democratically governed are expected to have high tax morale; however, the study's results show the opposite. The regression results indicate that complete democracy is negative and statistically significant at a 10% significance level. The results further indicate a z-statistic of -1.70. The results show that complete democracy, relative to no democracy, reduces the chances of high tax morale by 4.6%. Further indications are that mid-low democracy and mid-high democracy are positive and statistically significant during the dollarization period, both at 10% level of significance, with z-statics of 1.74 and 1.72, respectively. This implies that mid-low and mid-high democracy, relative to no democracy, increased tax morale during the dollarization period by 5.9% and 6%, respectively.

Table 2. Ordered Logit Regression Results

Variables		Code	Zimbabwe: Post-dollarization		Zimbabwe: Dollarization		South Africa	
			Coefficients (Z-Statistic)	Margin al Effects	Coefficients (Z-Statistic)	Margin al Effects	Coefficients (Z-Statistic)	Margin al Effects
Marital Status	Married	1	.0094171 (0.02)		.4284091 (1.37)		.0282913 (0.06)	
	Living together as married	2	.5800356 (0.69)		.1178515 (0.24)		.2380607 (0.49)	
	Divorced (Base)	3	-----		-----		-----	
	Separated	4	-.0012551 (-0.00)		.8663057 (1.92)*	-.127697	.1551589 (0.20)	
	Widow	5	.0083608 (0.02)		.4275914 (1.14)		.5079204 (0.94)	
	Single	6	.338936 (0.70)		.7066226 (2.11)**	-.107106 1	.2297962 (0.50)	
Democracy	Not at all democratic (Base)	1	-----		-----		-----	
	Mid-low democracy	2	.110642 (0.52)		.4001373 (1.74)*	-.059380 6	-.3517803 (-1.17)	
	Mid-democracy	3	.1914844 (0.92)		.1943138 (0.87)		-.3687031 (-1.47)	
	Mid-high democracy	4	-.0627083 (-0.21)		.4026221 (1.72)*	-.059723 1	-.4444814 (-1.81)*	.045274 1
	Completely democratic	5	-.4123182 (-1.70)*	.046232 8	.238582 (0.90)		-.5372669 (-1.78)*	.055032 4
Religion	A religious person (Base)	1	-----		-----		-----	

	Not a religious person	2	-.7335665 (-1.90)*	.0907069	.0053336 (0.02)		.0792352 (0.46)	
	An atheist	3	.6162435 (0.34)		.3044273 (0.48)		-.8141056 (-1.01)	
Pride	Very proud (Base)	1	-----		-----		-----	
	Quite proud	2	-.1004705 (-0.48)		.3117794 (2.09)**	.0439014	.0221562 (0.14)	
	Not very proud	3	.0585046 (0.22)		.6611218 (2.02)**	.0871073	-.1571131 (-0.54)	
	Not at all proud	4	-.2050597 (-0.75)		.295523 (0.35)		.8442434 (1.59)	
	Not Zimbabwean	5	.2323125 (0.14)		2.572998 (1.31)		1.612976 (1.63)	
Employment Status	Fulltime employment	1	.107675 (0.40)		.0616993 (0.33)		-.1385578 (-0.42)	
	Part-time	2	.2338453 (0.69)		-.0288444 (-0.12)		.2147279 (0.54)	
	Informal employment (Base)	3	-----		-----		-----	
	Unemployed	4	.0498386 (0.28)		-.2014747 (-1.22)		.051405 (0.15)	
Income Level	Lower class	1	- .2748208 (-1.24)		-.0207662 (-0.12)		-.0321773 (-0.14)	
	Middle class (Base)	2	-----		-----		-----	
	Upper class	3	-.2818131 (-1.65)*	.026263	.0419559 (0.31)		.10676 (0.62)	
Gender	Male	1	-----		-----		-----	
	Female	2	.0491599 (0.30)		.0816332 (0.64)		-.1236725 (-0.87)	
Age	16-25	1	-.2498024 (-1.14)		-.1299971 (-0.85)		-.2016365 (-1.02)	
	26-59 (Base)	2	-----		-----		-----	
	60+	3	.1030589 (0.43)		.138532 (0.603)		-.5580614 (-1.93)*	.0587591
Corruption	Not justifiable	1	-.3453783 (-1.07)		2.195754 (12.47)**	.4409008	3.530923 (18.28)**	-.6836837
	Somehow justifiable	2	-----		-----		-----	
	Always justifiable	3	-.5053274 (-2.31)**	.0434272	-1.177363 (-2.75)***	.2276915	-2.595797 (-4.31)***	.1806592
Happiness	Very happy	1	.0646672 (0.30)		.3763216 (2.83)***	.0540867	.2453901 (1.57)	
	Rather	2	-----		-----		-----	

	happy (Base)							
	Not very happy	3	-.1826793 (-1.01)		-.0809876 (-0.45)		.303385 (1.47)	
	Not happy at all	4	.1188297 (0.51)		.7712259 (2.03)**	.1028253	.0881281 (0.22)	
Awareness	Daily	1	.118984 (0.61)		-.0779138 (-0.52)		.0672562 (0.36)	
	Weekly (Base)	2	-----		-----		-----	
	Monthly	3	.2156289 (0.68)		-.2028686 (-0.73)		.2017922 (0.62)	
	Less than monthly	4	.6343276 (1.72)*	.0524198	-.4065117 (-1.82)*	.0611601	.1264609 (0.35)	
	Never	5	-.0199096 (-0.09)		.0491861 (0.22)		-.0375302 (-0.11)	
Education	Below primary level	1	.0098071 (0.02)		.2609935 (0.78)		.2819304 (0.71)	
	Primary level	2	.9135844 (2.40)**	.1146986	.2588695 (1.16)		.0679388 (0.28)	
	Secondary level	3	.884962 (2.35)**	.11209	.3959813 (2.03)**	.0595341	.2540358 (1.15)	
	University level and above (Base)	4	-----		-----		-----	
Hunger	Often	1	.2133399 (1.00)		-.4476147 (-1.67)*	.0687196	-.6798816 (-1.53)	
	Sometimes	2	.5817029 (2.74)***	.0573949	-.2346452 (-1.37)		-.21434 (-0.97)	
	Rarely (Base)	3	-----		-----		-----	
	Never	4	.454632 (2.21)**	.046878	.0752659 (0.52)		-.0102093 (-0.05)	
Trust	A great deal	1	-.0841116 (-0.36)		.1805055 (0.90)		-.1280422 (-0.51)	
	Quite a lot (Base)	2	-----		-----		-----	
	Not very much	3	.3487155 (1.76)*	.0306221	.0600668 (0.43)		.0635737 (0.37)	
	None at all	4	-.1631792 (-0.75)		-.0223649 (-0.12)		-.437466 (-2.16)	.0458695
Number of observations			1 215		1 215		1 215	
LR chi2(41)			56.39		305.46		856.29	
Prob > chi2			0.0553		0.0000		0.0000	
Pseudo R2			0.0335		0.1081		0.3160	

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Specification Test: Linktest, a simplified version of the Ramsey Regression Equation Specification Error Test (RESET)**

**Table 3. Linktest: South Africa**

<i>taxmorale</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>z</i>	<i>P&gt; z </i>
<i>_hat</i>	1.098868	.3559542	3.09	0.002
<i>_hatsq</i>	-.013203	.0466016	-0.28	0.777

As the prediction squared has no explanatory power, the regression model shows no evidence of misspecification.

**Table 4. Linktest: South Africa**

<i>taxmorale</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>z</i>	<i>P&gt; z </i>
<i>_hat</i>	1.080475	.1129599	9.57	0.000
<i>_hatsq</i>	-.0262682	.0324203	-0.81	0.418

As the prediction squared has no explanatory power, the regression model shows no evidence of misspecification.

**Table 5. Linktest Post-Dollarization**

<i>taxmorale</i>	<i>Coef.</i>	<i>Std. Err.</i>	<i>z</i>	<i>P&gt; z </i>
<i>_hat</i>	1.165055	.2125178	5.48	0.000
<i>_hatsq</i>	-.1420445	.1433924	-0.99	0.322

As the prediction squared has no explanatory power, the regression model shows no evidence of misspecification.

The empirical analysis of the determinants of tax morale for South Africa and Zimbabwe shows that marital status does not explain tax morale in South Africa. However, those who are separated and single have high tax morale in Zimbabwe. The coefficients of separated and single are positive and significant at 10% and 5% significant levels, respectively. Being separated, relative to being divorced, increases the probability of high tax morale by 12.8%, while being single, relative to being divorced, increases the probability of high tax morale by 10.7%.

The results contradict assumptions that expected married people to have higher tax morale. These results could result from the fact that divorced and separated persons have fewer responsibilities than married people. The current study suggests that married people are more concerned about the future of their children. As such, they mostly focus on planned investments for them, sometimes by sending them to good schools and investing in businesses. Married people are pessimistic about whether the government would provide social nets for their children, should they not be around anymore. As such, they are more willing to secure a tangible legacy for their children at the expense of tax payments.

Democracy is statistically significant in explaining tax morale in both South Africa and Zimbabwe. The Zimbabwean sample shows that those who believe that the country's governance is reasonably democratic (mid-low and mid-high democracy) have high tax morale. These results show that mid-low and mid-high democracy, relative to no democracy, increase tax morale by 5.9% and 6%, respectively.

The results differ from those found in South Africa. While the theory predicts high morale in tax payment for people who perceive the country to be democratically governed, the South African results show the opposite. The results are negative, suggesting that complete democracy and mid-high democracy, relative to no democracy, reduce tax morale by 5.5% and 4.5%, respectively. This study suggests that the people of the Republic of South Africa abuse the democratic space in their country. They interpret tax payment not as an obligation but an option.

The study results contradict the findings that show that tax morale is positively correlated with direct democracy. This may be explained by differences in the fairness of tax administration, perceived equity of fiscal exchange, attitude toward respective governments, and cultural differences, which also interact with demographics and trustworthiness (Kemme et al., 2020). Feld and Frey (2002) emphasized the role that politics and the perception of democracy play in tax morale. Thus, tax morale is enhanced if the political processes are perceived as fair and legitimate.

The evidence from previous studies showed that citizens of democratically governed countries have greater tax-paying morale. Torgler and Shaltegger (2006, p. 413) confirmed that a higher pro-democratic attitude leads to higher tax morale in Latin America and in transition countries. The inclusion and broad participation of the public (public participation) in the tax and expenditure policies in democratic countries affect the individual's willingness to pay tax. Oftentimes, taxpayers construe being asked about their policy preferences as a signal that government considers them to be partners in governance, and they will, in turn, reciprocate that treatment by being willing to comply with their tax obligations. Consistent with previous studies, this study expected tax morale to increase with the level of democracy.

Religion, income level, gender and employment status are statistically insignificant to explain tax morale for both South Africa and Zimbabwe. The study results agree with Ristovskaa et al. (2013, p. 177), who found that demographic factors are less significant than non-demographic factors in determining Macedonians' willingness to pay tax.

Researches have identified age as an important demographic factor that determines tax morale. Torgler (2007, p. 12) and Bilgin (2014, p. 67) found that age is positively correlated with tax morale. Torgler (2011, p. 15) used the justifiability of cheating taxes as a proxy for tax morale and found that in Western Europe, women do not vindicate cheating of taxes. Alm et al. (2005, p. 17) found that gender does not significantly affect tax morale in Russia. Furthermore, Deyneli (2014, p. 61) found that countries with a high male population have corresponding higher levels of tax morale. In Spain, religious people have higher tax morale than those who do not attend religious gatherings (Bilgin, 2014, p. 67). However, Kanniainen and Pääkkönen (2007, p. 20) found no difference in the catholic and protestant faiths on tax morale in Europe. Similarly, Torgler (2006, p. 22) had results showing that church attendance has no significant influence on tax morale in Spain.

All the categories of pride are also statistically insignificant to explain tax morale in South Africa, while those who are quite proud and not very proud in Zimbabwe have high tax morale with a marginal effect of 4.3% and 8.7%, respectively. This study argues that, during the period under study, Zimbabwe's economy was on a recovery path after a long decade of deplorable recession. Even people who were not proud of being Zimbabweans because of the hard memories of the recession times were willing to show appreciation and solidarity with the government through paying tax.

The current study contradicts most of the research on the effect of pride on tax morale, especially Leonardo and Martinez-Vazquez (2016), who argue that people who are proud of their nationalities are often patriotic and are likely to pay their taxes. Research has shown that tax morale is affected by whether an individual is proud to be a citizen of a particular country. Torgler (2003, p. 295) and Sá et al. (2014, p. 114) found that in Canada and Portugal, pride has a significant effect on tax morale, corroborating Yew et al. (2014, p. 71) results in Russia.

The opportunity to evade tax also affects tax morale. Blaufus et al. (2014, p. 4) found that the more chances there are to evade tax, the lower the tax morale. The role of pride in tax matters has been

widely discussed in the literature. Interesting among the different schools of thought is that, eventually, they concur that national pride boosts the individual's morale to pay tax. According to Torgler (2004, p. 243) and Torgler and Shaltegger (2006, p. 412), pride stimulates cooperative behavior. Torgler (2003) and Tyler (2000) put forward that pride warrants love and support for the country. Previous studies by Leonardo and Martinez-Vazquez (2016) and Torgler (2004) confirmed the positive relationship between national pride and tax morale.

All age groups do not explain tax morale in Zimbabwe, while the age group 60+ has a negative and statistically significant effect on tax morale in South Africa with a marginal effect of 5.9%. This implies that being in the age group of 60+ in South Africa, relative to being between 26 and 59, reduces the probability of high tax morale by 5.9%.

The current study's findings contradict those of Gerstenbluth et al. (2012, p. 129) study in Latin America that found that age is a significant factor of tax morale, and more importantly, they found that tax morale increases with age. They also noted that gender, marital status and unemployment do not influence tax morale. However, Torgler (2004, p. 253) observed that in India, the oldest group of taxpayers exhibited the lowest tax morale. Similarly, Ibrahim et al. (2015 p. 409) investigated tax morale in Ghana and found that tax morale decreases with age. Ibrahim et al. (2015, p. 409) also concluded that in Ghana, the level of education, marital status, patriotism, sector of employment, and satisfaction with democracy do not influence morale. Notably, there is conflicting literature on the effects of age on tax morale. For example, while some studies endorsed a positive relationship between age and tax morale (see Torgler, 2007, p. 12 and Bilgin, 2014, p. 67), others concluded that younger people are more ethical, perhaps showing greater idealistic beliefs in their ethical responsibilities (McAuliffe, 2017). This study submits that as individuals grow older in stable economies with vibrant pension schemes and other social security systems, as in South Africa, they become more tax compliant and develop greater respect for authority/legislation/political responsibility. However, in unstable economies like Zimbabwe, where pension schemes and social security systems are poor and ineffective, people in the older age categories may not exhibit high tax morale.

Many studies have identified religion as a factor that affects tax morale. However, in the context of Latin American countries, Gerstenbluth et al. (2012, p. 129) found that religious service attendance does not affect tax morale. Moreover, Setyonugroho and Sardjono (2013, p. 85) used linear regression to test their hypotheses and found that in Indonesia, tax knowledge does not affect willingness to pay tax. Corruption has been established as a critical determinant of tax morale for both South Africa and Zimbabwe. Those who do not justify paying a bribe display high tax morale in both South Africa and Zimbabwe, with marginal effects of 44.1% and 68.4%, respectively. Those who always justify corruption in both South Africa and Zimbabwe present the negative and statistically significant effect of corruption on tax morale. The results indicate that people who always justify corruption in South Africa and Zimbabwe reduce the chances of paying tax by 22.8% and 18.1%, respectively. These results suggest that these people would rather prefer paying a bribe to avoid paying tax.

The findings of the current study contradict Aguirre and Rocha's (2010, p. 17) findings that corruption is insignificant in explaining tax morale in Latin American countries. Corruption is rife in developing countries, especially in Africa, where, according to Transparency International (2015) organization, the category of the top 20 corrupt countries consists of African countries. Jahnke (2014, p. 8) concentrated on the effects of corruption on tax morale in developing countries and found that corruption has a negative effect on tax morale. According to Horodnic (2018), higher GDP levels,

lower levels of systemic corruption, good social protection schemes, together with increased levels of trust in government departments and public expenditure, heighten tax morale levels, and ultimately, reduce tax non-compliance. The regression results also indicate that all categories of happiness do not explain tax morale in South Africa. In contrast, being “very happy” and “not happy at all” increases the probability of paying tax in Zimbabwe by 5.4% and 10.3%, respectively. The results are inconsistent with the theory that suggests that happy people have higher tax morale than unhappy people. Additionally, Lubian and Zarri (2011, p. 20) noted that the happiness of a taxpayer plays an important role in determining tax morale. Their study found that happy taxpayers have the highest tax morale.

All categories of awareness, hunger and education are statistically insignificant to explain tax morale in South Africa. Nonetheless, the same factors have been empirically confirmed to determine tax morale in Zimbabwe. In contrast, “less than monthly” and “often” are categories under awareness and hunger, respectively; they are negative and statistically significant at 10%, “Secondary level,” a category under education, is positive and statistically significant at 5% level of significance. The results indicate that people who get radio information less than a month in Zimbabwe and often go without enough food to eat, reduce high tax morale by 6.1% and 6.9%, respectively. The results further indicate that people with secondary education, compared to university education, have an increased willingness to pay tax in Zimbabwe. According to Oberholzer and Stack (2009), as quoted in Pretorius (2015), educational level is a very powerful factor that influences attitudes toward tax compliance. According to McGee (2012), educational level is positively and negatively related to tax morale and tax evasion, respectively. McGee reasoned that educated people, unlike their uneducated counterparts, are likely to respect and uphold national rules, laws and regulations. This study concurs with McGee’s (2012) and Pretorius’ (2015) articulation that higher levels of education reduce the tax payer’s chances of evading tax.

Tax literacy is crucial in making tax decisions, especially tax planning. Educated people are likely to know the benefits and use of tax by the authorities. Given that the taxes are not abused by responsible authorities, highly educated people are likely to pay taxes. Generally, people have an inherent inclination to fend for themselves or their families before they consider someone else’s needs. Furthermore, whenever people become employed, they are more inclined to satisfy their personal desires before meeting national obligations such as tax payments. This study’s view is that a hungry person would seek to meet their personal cravings before thinking of paying tax. Thus, tax payment is seen as a secondary commitment that is only met after higher-order or primary obligations have been met. Therefore people who have never gone without enough food to eat have higher morale to pay tax, and a rational person, given insufficient resources, would evade tax. Consequently, people who often go without enough food to eat are likely to evade tax.

The empirical results further show that trust in the government is negative and statistically significant at a 5% significance level in South Africa. The results indicate that people without any trust in the South African government reduce the likelihood of having high tax morale by 4.6%. The role of public trust in government institutions, especially the three arms of government, namely, the legislature, the judiciary and the executive, has been emphasized by McAuliff (2017) as one of the crucial determinants of tax morale. Citizens frequently feel cheated if taxes are not spent efficiently (Cummings et al., 2005). Accordingly, citizen attitudes and trust toward the government in general and specific institutions matter. Citizens are reluctant to contribute to a tax that they believe is being misspent.

As such, the literature suggests that trust in public institutions, mostly the legislature, contributes positively to tax compliance. There should be no distrust in the government, and the public should not have any suspicions regarding the legitimacy of the tax laws and regulations of the government. Tax morale is also valuable in the economy because it reduces the cost of financing the public sector (Doerrenberg et al., 2012, p. 1). Doerrenberg et al. (2012, p. 1) further explain that a high level of tax morale will imply that the tax base is large, so tax rates can be reduced. It is also important to note that when tax morale is high, the tax distortions of economic activity are smaller and tax enforcement and administration costs are lower than in cases where tax morale is low. Alm (2019) highlighted that tax evasion reduces public revenue and the availability of public services while also discriminating against honest taxpayers.

## 5. Conclusions

The study concludes that an understanding of tax morale and its determinants is crucial for governments in their bid to boost voluntary compliance. Also, the different economic milieus of a country significantly affect the level of tax morale. Tax morale was high when Zimbabwe was experiencing economic growth due to the introduction of multi-currency, herein called the dollarization period, while the opposite was true for the post-dollarization era. However, the findings show that Zimbabweans have higher tax morale than South Africans, who have better living standards. In addition, the determinants of tax morale also differ from one economic situation to another and from one country to another. Corruption, which is a menace in both the countries, has proven to be an important factor influencing tax morale. The results of all the models show that demographic factors have little effect on tax morale. The study introduced the important variable of hunger in the analysis of the determinants of tax morale. Although the hunger variable was insignificant for South Africa, the study showed a negative relationship between hunger and tax morale for Zimbabwe in both economic situations. Based on the findings, policy-makers should consider eradicating corruption and hunger to boost tax morale to improve tax compliance. Continued tax education and improvements to the perceptions related to democracy should be included in the mix of enhancement strategies related to tax compliance.

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