THE IMPACT OF CORRUPTION ON TAX MORALE: A STUDY OF SELECT BUSINESS ORGANIZATIONS IN ADDIS ABABA, ETHIOPIA

Abebe Bayu Chariye
Dr.
University of South Africa (UNISA), School of Economic and Financial Sciences
South Africa
Email: chariab@unisa.ac.az

Abstract

The overall purpose of this study is to assess the impact corruption on tax morale. The researcher used survey method for the study. Data for the survey study were collected from the target populations by means of self-administered questionnaire. From the populations, the sample was select by using stratified sampling to obtain a representative sample from taxpayers of business organization. An ordered probit model is employed to analyze the impact of corruption on tax morale. The results showed that tax morale (dependent variable) is correlated at -0.3093 with corruption at 5 percent significance level and there is a significant negative correlation between corruption and tax morale at a p value of 0.048. Citizens feel cheated if corruption is widespread, their tax burden is not spent well, and that they are not protected by the rules of law. Therefore, the government should work a lot to combat corruption and balance government service and the paid tax.

Keywords: *Tax morale, Corruption.*
JEL Classification: H20,H26,H32

1. INTRODUCTION

Since nobody likes paying taxes even though everybody knows taxes are essential to the government, traditionally revenue authorities have been focusing on fear or enforcement as the motivation for compliance (Torgler and Schaltergger, 2007). This enforcement procedure affects taxpayers' attitudes towards compliance in two ways. First, it determines the actual probability that a sanction will be imposed on evaders and, possibly, innocent taxpayers; and second, it may affect the degree of "hostility" in taxpayers' perception of the system (Luigi Alberto Franzoni, 2008). On top of this, there is considerable evidence that enforcement efforts can increase tax compliance.

However, there must be other forces at work because observed compliance levels cannot be fully explained by the level of enforcement actions typical of most tax authorities (Cummings et al, 2006). Moreover, conducting a universal enforcement strategy is connected with high costs and cannot be achieved unless there is a tax administrator under every bed (Torgler and Schaltergger, 2007).

Enforcing a tax system is neither an easy nor a static task. It is especially difficult in the dynamic environments prevailing in developing countries. Unless this task is approached professionally and with consistency, even a well-designed tax system will fail to produce good results (Bird and Zolt, 2003). This is especially evident at local government level where tax collectors seldom use the available enforcement mechanisms provided by law, or where they do enforce inappropriate mechanisms are sometimes used. Empirical research has repeatedly demonstrated that compliance is not fully explained by the punishments imposed through tax rates, fines and others penalties or the probability of audits. This implies that tax enforcement is always imperfect.

Thus, the question arises whether there are alternative strategies that help to increase tax compliance. Many researchers have stressed that tax morale, seen as the individuals' willingness to pay taxes or, the intrinsic motivation to pay taxes or an attitude towards paying tax, or in other words, the moral obligation to pay taxes or the belief in contributing to the society by paying taxes, is a key instrument that helps to explain tax compliance (Frey and Torgler, 2004). Further, Torgler (2001) stated that tax morale can help to explain the high degree of tax compliance. So that, when the tax morale is high, tax compliance will be relatively high too. Erard and Feinstein (1994) stress the relevance of integrating moral sentiments into the models to provide a reasonable explanation of actual compliance behavior.

As it affects tax compliance, it is important to identify factors that shape or affect tax morale. Tax morale has many features which are influenced by a variety of aspects. Various studies identified various factors that affect tax morale. One of the factors is corruption. Corruption generally undermines the tax morale of the citizens, because they get frustrated. Furthermore, there might be a crowding-out effect of morality among the tax administrators when there are a great number of corrupt colleagues. Taxpayers will feel cheated if they believe that corruption is widespread and their tax burden is not spent well. Corrupt bureaucracy will not award the services to the most

efficient producers, but to the producer who offers the larger bribes. Thus, corruption reduces the efficiency of allocation and produces delays in transactions to acquire additional payments (see, e.g., Rose-Ackerman, 1997; Jain, 2001).

2. LITERATURE REVIEW

Corruption considered one of the most challenging obstacles to economic development and growth. The World Bank estimates that over one trillion dollars are paid in bribes worldwide and that 25% of African states' GDP is lost to corruption each year (World Bank Institute). Thus, the presence of corruption undermines tax morale of the citizens who become frustrated and undermines confidence in the tax system, affects willingness to pay taxes, and reduces a country's capacity to finance government expenditures (Fjeldstad 2005).

Perceptions about high levels of corruption in government will likely impact on the perceptions of local taxpayers, government service delivery and possible foreign investment. Hence it impacts on tax compliance. Wang (2010) concludes that taxpayers' confidence is largely dependent on the efficiency and efficacy of government services, i.e., whether the services provided are cost-efficient (i.e. perceived to represent "value for money") and whether the revenue is appropriately spent in a transparent and accountable manner; and the perceived level of fraud and corruption in the government, and whether government is serious in combating fraud and corruption.

In countries where corruption is systemic and the government budget lacks transparency it cannot be assumed that the obligation of paying taxes is an accepted social norm. The consequences of corruption are obvious. It is a cancer that destroys the organization itself and undermines all other aspects of society. It erodes confidence in the tax system and encourages evasion. It increases the costs of doing business and distorts the level playing field that should be available. And to the extent that there is a political limit as to the amount of tax that people will bear in developing countries like Ethiopia, it reduces the amount of formal tax that can be collected. In Ethiopia, the corruption increased because of the lacking rule of law and accountability of the governance (Abed and Gupta, 2002).

3. Research Methods

3.1 Research objectives and Hypothesis

Before selecting the research method adopted it is important to see the objective and hypothesis of the research. The major objective of this thesis is to assess the impact corruption on tax morale over the case of selected business organization, in Addis Ababa City Administration.

Ho: No statistically significant impact exists between corruption and tax morale.

3.2 Research approaches

The inquiry paradigm used in research is generally influenced by a researcher's ontological and epistemological beliefs. These beliefs represent how the researcher views and seeks to understand the world. The two extremely contradicting paradigms are post positivism and constructivism. Thus, post positivist researchers normally adopt quantitative methods and constructivist researchers adopt qualitative methods. The other paradigm is combination of post positivism and constructivism (that is mixed method). Thus the researcher use quantitative methods than qualitative methods. This is mainly due to the fact that, quantitative methods enable the researcher to use smaller groups of people to make inferences about larger groups that would be prohibitively expensive to study (Baarttlletttt, Kottrlliikk, and Hiiggiinss, 2001). Besides, quantitative methods has been selected because the methods are essential for analyzing relationship between variables systematically and help to analyze questions, which makes this method better than other methods to achieve the objective of the paper. Under quantitative method survey method was used.

3.3 Sample Design

Sampling frame is a complete list of the study population. For this study, the sampling frame was all business profit taxpayers in Addis Ababa City Administration. There are 409,077 business profit taxpayers in Addis Ababa City Administration as the information gathered from Ethiopian Revenue and Custom Authority in June 2013.

Another point in sample design is the sample size. Yaro Yamani formula is used in determining the population size.

According to Yamani, (1964) $n = N/[1+ (Ne^2)]$

Where n = is the sample size

N = is the population

e = is the error limit (0.05 on the basis of 95% confidence level). Therefore, n = 409,077 /1 + 409,077 (0.05)2

n = 409,077 /1023 n = 400

The researchers added hundred (100) in to the sample size acquired by Yaro Yamani formula. Therefore a sample size of 500 was feasible from the 409,077 Addis Ababa City Administration business profit taxpayers. Stratified random sampling is applied to conduct this research work.

3.4 Unit of Analysis

Each business taxpayer was considered as an independent entity. Hence, the data collection was made at firm level. Therefore, enterprises were the unit of analysis for this study.

3.5 Sources of Data

Primary data collection is necessary when a researcher cannot find the data needed from secondary sources, especially when the researcher is interested in primary data about demographic/socioeconomic characteristics, attitude/opinion/interest, awareness/knowledge, intentions, motivation and behavior. The study adopted the primary sources of data collection by survey research design.

3.6 The Survey Instruments

Data for the survey study were collected from the target populations by means of self-administered questionnaire. Close ended questionnaires were used so that, the variables can be ranked to measure the degree of their agreement or the disagreement of the respondents with the variables can be elicited. In order to measure the items, the researcher was used a five point Likert type-scale. (i.e., “Strongly disagree, disagree, neutral, agree and strongly agree).

3.7 Validity and Reliability of nstrument

Table:3.2 Reliability Statistics

Variable	Cases	Number	Cronbachs Alpha	Number of Items
Tax Morale	Valid	500	.828	7
Corruption	Valid	500	.825	4

Source: Field results SPSS computation.

The Cronbach alpha coefficient of scale stipulated a standard of above 0.70 for reliability test. The reliability ratio for this work showed that all the research questions in the questionnaire hang together and have internal consistency in solving distress problems.

3.8 Method of data analysis

An ordered probit model is employed in this section to analyze the impact of corruption on tax morale. An ordered probit model is used to estimate relationships between an ordinal dependent variable and a set of independent variables. The models are very useful to analyze dependent variables of tax moral containing ordering information. The statistical package for social sciences (SPSS) and STATA were employed in the different analyses conducted.

Model

$$y_i^* = \alpha O \beta CO + \varepsilon$$

Where:

y_i^* = Tax Morale (TMOR)

CO = Corruption

4. FINDINGS AND DISCUSSION

4.1 Correlations Analysis

Pearson's Correlation analysis is used for data to see the relationship between variables such as between tax morale and Corruption

Table 4.1 Correlation Matrix of tax morale and explanatory variable

```
. correlate TMORA CO
(obs=500)

             |    TMORA       CO
-------------+------------------
       TMORA |   1.0000
          CO |  -0.3093   1.0000
```

The correlation matrix in Table 4.1 shows that tax morale (dependent variable) is correlated at -0.3093 with corruption at 5 percent significance level.

4.2 Regression Analysis

For the purpose of identifying the important variables impacting the dependent variable the researcher has used the regression analysis.

For the fact that scaled ranking information of the dependent variables, the researcher use ordered probit estimation. However, because in ordered probit the estimating equation has a nonlinear form, we can interpret directly only the sign of the estimated coefficients and not their size. The marginal effects need to be calculated explicitly they indicate the change in the dependent (or the probability) when the independent variable increases by one unit. In the results both the coefficients and marginal effects are presented.

Regression Model: Ordered Probit Model

$$y_i^* = \alpha O\ CO + \varepsilon$$

In this model, the researcher obtains the following results (presented here exactly as in the STATA output): These results are presented in table one and table two. Five predict outcome come under table two. Table one is a coefficient from ordered probit and it is difficult to interpret. Table two gives the marginal effects on the probability of assenting and their standard errors for each coefficient.

Table 4.2.1 Ordered Probit Model results

```
. oprobit TMORA CO

Iteration 0:   log likelihood = -1436.6596
Iteration 1:   log likelihood = -1417.4287
Iteration 2:   log likelihood = -1417.4242
Iteration 3:   log likelihood = -1417.4242

Ordered probit regression                       Number of obs   =        500
                                                LR chi2(1)      =      38.47
                                                Prob > chi2     =     0.0000
Log likelihood = -1417.4242                     Pseudo R2       =     0.0134
```

TMORA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
CO	-.3916841	.0632516	-6.19	0.000	-.5156551	-.2677132
/cut1	-3.25187	.2336895			-3.709893	-2.793847
/cut2	-3.027003	.2200265			-3.458247	-2.595759
/cut3	-2.711428	.2053775			-3.11396	-2.308895
/cut4	-2.540638	.1992267			-2.931115	-2.15016
/cut5	-2.454639	.196586			-2.83994	-2.069337
/cut6	-2.414555	.1953645			-2.797462	-2.031647
/cut7	-2.351852	.1935515			-2.731206	-1.972498
/cut8	-2.271323	.1914054			-2.646471	-1.896176
/cut9	-2.238906	.1905828			-2.612442	-1.865371
/cut10	-2.217901	.1900604			-2.590413	-1.84539
/cut11	-2.177136	.1890549			-2.547677	-1.806595
/cut12	-2.128127	.187831			-2.496269	-1.759985
/cut13	-2.109118	.1873593			-2.476335	-1.7419
/cut14	-2.09044	.1869005			-2.456758	-1.724122
/cut15	-2.05401	.1860174			-2.418597	-1.689423
/cut16	-1.967925	.184028			-2.328613	-1.607236
/cut17	-1.919238	.1829663			-2.277845	-1.56063
/cut18	-1.842572	.181446			-2.198199	-1.486944
/cut19	-1.722289	.1793658			-2.073839	-1.370738
/cut20	-1.592335	.1774024			-1.940037	-1.244633
/cut21	-1.329701	.1743159			-1.671354	-.988048
/cut22	-1.121569	.1727719			-1.460196	-.7829425
/cut23	-.8698773	.1719534			-1.2069	-.5328548
/cut24	-.6274937	.1718408			-.9642955	-.290692
/cut25	-.3736183	.172283			-.7112868	-.0359498
/cut26	-.1550429	.1733712			-.4948443	.1847584
/cut27	.0426676	.1747782			-.2998914	.3852266
/cut28	1.695715	.2851864			1.13676	2.254671
/cut29	1.915342	.3484825			1.232329	2.598356

Notes: Dependent variable: tax morale on a five-point scale. In the reference group is (ATGL): attitude of taxpayers towards government and legal system. (Coef): coefficient, (Std.Err): standard error, Significance levels: p< 0.05.

Table 4.2.2 Marginal Effects

```
. mfx, predict(outcome(1))

Marginal effects after oprobit
      y  = Pr(TMORA==1) (predict, outcome(1))
         =  .01299235
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.      z    P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
      CO |    .0131051      .00434     3.02   0.003   .004609   .021602     2.618
------------------------------------------------------------------------------

. mfx, predict(outcome(2))

Marginal effects after oprobit
      y  = Pr(TMORA==2) (predict, outcome(2))
         =  .00995247
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.      z    P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
      CO |    .0052912      .00249     2.12   0.034   .000402   .010181     2.618
------------------------------------------------------------------------------

. mfx, predict(outcome(3))

Marginal effects after oprobit
      y  = Pr(TMORA==3) (predict, outcome(3))
         =  .00418405
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.      z    P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
      CO |    .0017606      .00128     1.38   0.168  -.000744   .004265     2.618
------------------------------------------------------------------------------

. mfx, predict(outcome(4))

Marginal effects after oprobit
      y  = Pr(TMORA==4) (predict, outcome(4))
         =  .09507136
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.      z    P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
      CO |    .0161274        .004     4.03   0.000   .008283   .023972     2.618
------------------------------------------------------------------------------

. mfx, predict(outcome(5))

Marginal effects after oprobit
      y  = Pr(TMORA==5) (predict, outcome(5))
         =  .13948562
------------------------------------------------------------------------------
variable |      dy/dx    Std. Err.      z    P>|z|  [    95% C.I.    ]      X
---------+--------------------------------------------------------------------
      CO |   -.0844776      .01488    -5.68   0.000  -.113637  -.055318     2.618
------------------------------------------------------------------------------
```

As shown in table 4.2.2, the results of the ordered probit model are presented. In this model, the coefficients, their standard errors, the z-statistic, associated p-values, and the 95% confidence interval of the coefficients are calculated. In this table the second column indicate coefficient for each independent variable. The coefficients cannot be directly interpreted since the model is non-linear. Yet the signs of each coefficient can be evaluated. In the third and

fourth columns, there are associated standard errors and z-statistics for each variable respectively. The statistical significances of the variables are determined by using the z-statistics. It needs the marginal effects to interpret the results of ordered probit effectively. The marginal effects show how the probabilities of each outcome change with respect to changes in regressors. It shows the change in probability when the predictor or independent variable increases by one unit. Therefore, the marginal effects are calculated in table 4.2.1 in different outcomes. Moreover, the prob > chi^2 are given at the upper section of the coefficient shows that the model is statistically significant since the probability value of chi-square is much less than 0.01.

The findings indicate that there is a significant negative correlation between corruption and tax morale. An increase in the corruption scale by one point decreases the share of subjects indicating the lowest tax morale by more than -.0253779 percentage points. This result is consistent with Fjeldstad (2005) argument' that the presence of corruption undermines tax morale of the citizens who become frustrated and undermines confidence in the tax system, affects willingness to pay taxes, and reduces a country's capacity to finance government expenditures.

4.3 Hypotheses Testing

No statistically significant relationships exist between corruption and tax morale.

As can be seen from table 4.2.2 above, there is a significant relationship between corruption and tax morale at a p value of 0.048. By this result, we reject the null hypothesis and accept the alternate. In other words, we accept that there is a statically significant relationship between corruption and tax morale.

5. CONCLUSION AND RECOMMENDATION

The findings show that there is a significant negative correlation between corruption and tax morale. The majority of the respondent believes that as most public officials are engage in corruption and bribe taking. Citizens feel cheated if corruption is widespread, their tax burden is not spent well, and that they are not protected by the rules of law. Therefore, the government should work a lot to combat corruption and balance government service and the paid tax. Taxpayers are more inclined to comply with the laws if the relation between the paid tax and the performed government services is found to be equitable.

REFERENCES

Aguilera, R. and A. Vadera(2008). 'The Dark Side of Authority: Antecedents, Mechanisms, and Outcomes of Organizational Corruption', *Journal of Business Ethics* , 77 (4), pp. 431-449.

Bird, R.M. and Zolt, E. (2003).*Introduction to Tax Policy Design and Development*. Notes for a course on Practical Issues of Tax Policy in Developing Countries,World Bank(see www1.worldbank.org/.../WBI%20Module%201(Bird&Zolt)April10.doc.)

Campos, J. E., D. Lien and S. Pradhan (1999), "The Impact of Corruption on Investment: Predictability Matters", *World Development* , 27 (6), pp. 1059-1067.

Cummings, Ronald G., Jorge Martinez-Vazquez, Michael McKee, and Benno Torgler. (2005). "Effects of Tax Morale on Tax Compliance: Experimental and Survey Evidence" Working Paper No 2005–29, *Center for Research in Economics, Management and the Arts, Basel*.

Erard, B. and J. S. Feinstein (1994),"The Role of Moral Sentiments and Audit Perceptions in Tax Compliance", *Public Finance*, 49, pp.70-89.

Fjeldstad, O-H. (2005). "Corruption in Tax Administration: Lessons from Institutional Reforms in Uganda", WP 2005:10, *CMI Working Paper*, Bergen.

Frey and Torgler (2004) "Taxation and Conditional Cooperation", *Institut d'Economia de Barcelona*, University of Barcelona.

Hall, R. E. and C. I. Jones (1999) "Why Do Some Countries Produce so Much More Output per Worker than Others?", *The Quarterly Journal of Economics* , pp. 83-116.

Levin, M. and Satarov, G. (2000). 'Corruption and Institutions in Russia', *European Journal of Political Economy*, 16, pp.113-132.

Luigi Alberto Franzoni (2008) "Tax Compliance", *Encyclopedia of Law and Economics* , University of Bologna, Italy, pp 21.

Mauro, P.(1995) "Corruption and Growth", *The Quarterly Journal of Economics* , 110 (3).pp 681-712.

Picur, R. and A. Riahi-Belkaoui(2006) "The Impact of Bureaucracy, Corruption and Tax Compliance", *Review of Accounting and Finance*, Vol. 5 No. 2, pp.174-180.

Rose-Ackerman, S. (1997). The Political Economy of Corruption', in Elliott, K. A. (ed.), *Corruption and the Global Economy*, Washington DC: Institute for International Economics, pp. 31-66.

Shleifer, A. and R. Vishny (1993), "Corruption", *The Quarterly Journal of Economics* , 108 (3), pp. 599-617.

Torgler B. and Schaffner (2007), *Causes and Consequences of Tax Morale: An Empirical Investigation*, Working Paper No. 2007

Torgler, B. (2001). Is Tax Evasion Never Justifiable?, *Journal of Public Finance and Public* Choice. XIX: 143.

Transparency International(2009). *Global Corruption Report* (Cambridge University Press).

Transparency International(2011). *Global Corruption Report*.

Wang, L. (2010). *A Review of the Determinants of Voluntary Compliance with Tax Laws by South African Taxpayers with Particular Reference to Businesses in South Africa*. Unpublished MPhil: Taxation mini-dissertation, University of Pretoria.

Yamane, Yaro (1964). *Statistics: An Introductory Analysis*, New York: Hamper.