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The State and Drivers of Corruption in the Ethiopian Revenue Sector

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ABSTRACT

This study was initiated with the objectives of identifying the prevalence and drivers of corruption in the tax revenue sector in Ethiopia. The study adopted a combination of descriptive and explanatory research designs. Primary data were collected from 747 taxpayers drawn using stratified sampling procedure. Thirty-six key informants working in sector were interviewed. Qualitative data were analyzed using thematic analysis and narration stories. Quantitative data were analyzed using mean, frequency, standard deviation and the ordered logit model. Corruption is prevalent in the tax revenue sector in Ethiopia. About 78% of the respondents rated the prevalence in a range of severe to extremely severe. About 58% of the firms reported that they paid a bribe to receive services from public servants. From this proportion, 65% of the taxpayers were supply-side bribers, and 35% of them were demand-side bribers. None of the business firms were incorruptible taxpayers. Lack of transparency, limited accountability, informal competition, using own source of money for working capital, profit level of firms and greed of public servants for money significantly increased prevalence of corruption. Improving transparency of the tax system; making public servants and business owners accountable; and working to create corrupt-free citizens who will be tomorrow's public servants and business owners are recommended.

KEY WORDS

Corruption; revenue sector; demand-side corruption; supply-side corruption; accountability; transparency; Ethiopia

1. INTRODUCTION

1.1 Background of the study

Ethiopia's economy experienced an astonishing growth, on the average of 9.4% a year, from 2010/11 to 2019/20, despite its real Gross Domestic Product (GDP) is affected by the COVID 19 pandemic and slowed down to 6.1% in 2019/20 (World Bank, 2021). The economic growth of the country is affected by several other challenges. Among them, corruption, inflation, volatility of foreign exchange (forex) rate, forex shortage, increasing burden of foreign debt, and increasing disparity between domestic saving and investment can be mentioned (Hailu,

2018). In 2020/21 fiscal year, the Council of Ministers of Ethiopia approved a total of ETB 476 billion budget (Ethiopian Monitor, June 6, 2020). But the Ministry of Customs and Revenue collected only ETB 279 billion in tax revenue (Ethiopian Monitor, July 23, 2021), covering only 58.6% of approved budget. Aspiring to be a middle-income country by 2025, the Ethiopian government embarked on a series of reforms and strategies to boost tax revenues. Although tax collection increased from year to year, revenue gains lagged economic growth and the need for development finance (Schreiber, 2018).

In developing countries, the revenue collection sector is amongst the most corrupt sectors (Transparency International, 2010a). Corruption negatively affects the levels of tax revenue collected in a country (Transparency International, 2010b). More specifically, corruption

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lowers down the tax revenue which is measured based on tax-GDP ratio and causes long-term damage to the economy by detracting investment, increasing the size of the informal economy, distorting tax structures and the morality of taxpayers. All these, in turn, reduce the long-term revenue mobilization potential of the economy. In Ethiopia too, custom clearance, tax and revenue collection areas are amongst the sectors that experience high prevalence of corruption (Kilimanjaro International, 2012).

Prevalence of corruption in the public sector is judged in terms of frequency and reach. It could be either episodic (happening only sometime) or systemic (happening frequently over time). When the prevalence of corruption is pervasive or systemic, its negative impacts on the performance of the economy will be far reaching as it erodes public trust in the government and damages policy integrity (UNODC, 2019). According to the World Economic Forum (2016), the tax regulation of Ethiopia is mentioned as problematic for doing business, which in turn, has impaired investment and economic growth in the country. Additionally, the Ethiopian tax administration is at a high risk of corruption manifested in the form of bribe and irregular payments and gifts to tax officials, which are common practices in the making of tax payments (World Economic Forum, 2015). Therefore, doing business in Ethiopia is a challenge due to the tax sector's vulnerability to corruption. Ethiopia's tax to GDP ratio is lower compared to the sub-Saharan average which might be affected by the level of corruption. The current understanding of the vulnerability of the tax revenue sector is incomplete. Therefore, the prevalence of corruption in the tax revenue sector and the sector's vulnerability to corruption need to be investigated.

Corruption in the tax administration in Ethiopia is rampant and manifested in the form of bribes, irregular payments, gifts to tax officials and facilitation payments, among others. The same report described the Ethiopian Revenues and Customs Authority as the most corrupt public institutions in the country (GAN Integrity, 2020). The World Bank (2018) report prepared based on the 2017 TRACE Bribery Risk Matrix put Ethiopia under high-risk category in which the country was ranked 178th from 200 surveyed countries. Beyond describing the state Muchie, of corruption, some studies (e.g., 2015; Gebreamanuel, 2018; Schreiber, 2018) attempted to pinpoint the causes of corruption in Ethiopia in a more general terms and by adopting a qualitative research approach. This study adds to the existing knowledge base by trying to shed some light on sector specific causes of corruption in the Ethiopian revenue sector to come up

with sector specific policy recommendation. In addition to this, it tries to fill up the methodological gap by adopting a mixed research approach in which the driving forces of corruption in the revenue sector are explained using both qualitative evidence and quantitative approach.

1.2 Objective of the study

The general objective of the study was to evaluate the prevalence and drivers of corruption in the revenue sector in the Federal institutions and in the Addis Ababa City Administration. More specifically, the study had the following objectives:

- 1. to describe the prevalence of corruption in the Ethiopian revenue sector.
- 2. to investigate the manifestations of the Ethiopian revenue sector to corruption; and
- to identify the driving causes of corruption in the sector.

This study is limited in its geographical scope. It was implemented at the federal level and in Addis Ababa City Administration. Conceptually, the study examined selected revenue sources and 'category C, B, and A' taxpayers of the federal and the Addis Ababa City Administration. Corruption in the customs sector is not included in this study. As corruption is an illegal practice, its direct observation and objective measurement is very difficult. The measurement of prevalence of corruption in the revenue sector is based on perception of the target population. However, perception can systematically vary from actual experiences which is one of the major limitations of this study. To minimize the divergence between perception and actual experience, respondents were asked to rate the prevalence of corruption in the sector based on their actual experiences, and based on what they perceive. Perception is presumed to be shaped by both actual experiences and observation as well as a hearsay of the practices of corruption.

2. LITERATURE REVIEW

2.1 The concept of corruption

The term corruption is defined as the misuse of resources or power for private gain (Svensson, 2005). Transparency International defined corruption as "the abuse of entrusted power for private gain" (Kolstad *et al.*, 2008). Similarly, the World Bank (1997) defined corruption as the abuse of public office for

private gains. The UN Convention against Corruption (UNCAC) does not provide a single definition. Corruption can be categorized as bribery, embezzlement; facilitation of payment; fraud; collusion; extortion; and patronage, clientelism and nepotism (Johnson, 2014; World Bank, 2011). Some authors classify corruption as top-down and bottom up. Bottom-up corruption is when low level officials collect bribes and share with superiors to get protection from firing and prosecution. Top-down corruption occurs when the contract is decided by superiors, and the inputs are given by the subordinates, and when top-level officials fear subordinates about denouncing the behavior (Rose-Ackerman 1999).

Corruption can also be broadly categorized as political corruption and bureaucratic corruption (Andvig & Fjeldstad 2001). Political corruption occurs at the highest level which involves politicians, government ministers, senior civil servants and other elected, nominated or appointed senior public office holders. Whereas bureaucratic corruption occurs during the implementation of government policies. Bureaucratic corruption involves extra payment for the provision of government services; facilitation payments to accelerate bureaucratic procedures; or pay bribes to allow actions that violate rules and regulations. However, political and bureaucratic corruption is inter-related. Studies have indicated that corruption prevails in many developing countries. The empirical evidence witnessed that the impact of corruption on economic growth inconclusive. Corruption has exacerbated problems of unemployment and income inequality increases poverty rates and reduces foreign direct investment (Alm & Liu, 2018). Similarly, the tax sector is also vulnerable to corruption; perhaps taxation and corruption have endogenous relations. Existence of corruption in the tax system creates conflict among honest and corrupt officials, reduces effectiveness in the tax administration,

negatively affects entrepreneurship and reduces tax revenue in the economy (Antonakas *et al.* 2013)

2.2 Theories relevant in the study of corruption

Several theories explain corruption. These include principal-agent theory, collective action theory, institutional theory, and game theory. A brief account of the theories is presented below.

Principal-agent theory: The complex relationship between individuals and the state can be presented using the principal agent theory. In the principal-agent model, the agents are public servants who are entrusted with the responsibility of protecting the interests of the principal (the state) by providing services to the public ethically. However, due to informational asymmetry, the public servants (according to this theory the Agents) choose to engage in corrupt behavior despite the principal's (the Government) prescription of the payoff rules in the principal-agent relationship (Groenendijk 1997). The model suggests that the principal should design incentives and schemes to limit the Agency problem of the Agent. In the context of a revenue sector, the Ethiopian Ministry of Revenue should design a scheme/system of monitoring corrupt practices of the agents (in this case public servants) and should put in place incentive mechanisms for the employees so that they will not engage in corrupt behavior.

Collective action theory: In recent years studies adopt collective action theory in explaining persistent/systemic nature of corruption despite the presence of laws and anti-corruption institutes that make corruption illegal. The theory emphasizes the importance of trust and reciprocity in transactions. Persson et al. (2013) argue that systemic corruption is a collective action problem in which it has become a social norm in society where everyone considers giving bribery as the way of getting things done. According to this theory, people who engage in corrupt practice are fully aware of the negative consequences of their corrupt behavior but continue to behave in the same way on the belief that to be honest in a corrupt system doesn't make sense or doesn't bring meaningful change (Marquette & Peiffer, 2015). In this regard, anti-corruption measures based on the principal-agent model will not be effective. Rather, collective action initiatives are the means to redress the problem of corruption in a society. This theory will be used in this study considering corruption as a

collective action problem. When society acts collectively, corrupt practices can be minimized.

Institutional theory: the theory "examines the processes and mechanisms by which structures, schemas, rules, and routines become established as authoritative guidelines for social behavior" (Scott 2004). According to this theory, the prevalence of corruption depends on how countries put in place effective laws and regulations, the way they inculcate anti-corruption norms and the strengths independent anti-corruption institutions along with enforcement mechanisms. Hence, it gives due emphasis on the design and transparency of the political system and its institutions as well as on the relationship between corruption, institutions, political systems, culture and gender (Debski et al. 2018; Stensöta et al. 2015). This theory will be used in this study to examine if system-related variables are relevant in explaining prevalence of corruption in Ethiopia.

Game theory: Game theory is also used by researchers to examine and explain the prevalence of corruption in the public sector, more specifically in public procurements. A prisoner's dilemma of either defecting or cooperating among market actors who are not sure about the action of their competitors is used to explain corruption practices in the public sector (Macrae 1982). In the area of public procurement, where private sector actors are unsure of the actions of others in the competition, they fear of being outdone by competitors acting illegally by bribing public sector officials, and thus will be motivated to engage in procurement corruption. This theory will be used in this study to explain if there exists supply-side driven corruption in the revenue sector in Ethiopia.

2.3 Measuring corruption

The literature provides three categories of measuring corruption: survey-based measures of corruption, indices of global governance, and indices of state capacity (Malito 2014). A brief account of the three ways of measuring corruption is presented below.

Measuring corruption using survey tools first emerged in the 1990s. Transparency International, the European Bank for Reconstruction and Development & the World Bank, the International Budget Partnership, Gallup International and the Business International are among the organizations that adopted survey-based measures of corruption. For example, Transparency International developed *the Corruption Perceptions Index*

(CPI), the Bribery Perception Index (BPI) and Bribe Payers Index. The European Bank for Reconstruction and Development and the World Bank jointly conducted the Business Environment and Enterprise Performance Survey (BEEPS) to measure corruption, and the Business International issued the Corruption Experience Index and the Business International Index. Malito (2014) provided a summary of indicators of corruption calculated by indices of governance which were developed in the mid-1990s. This includes the World Bank Governance Indicators Database; the International Country Risk Guide; the Global Competitiveness Report; the Executive Opinion Survey; the World Competitiveness Yearbook; the Global Competitiveness Report, the Nations in Transit, the World Value Survey; the International Crime Victimization Surveys; the Global Integrity; Global Insight and the WB Country Policy and Institutional Assessment.

Since the 2000s, a third group of corruption indicators emerged to safeguard the integrity of government responsibilities. Indicators of corruption within state-capacity indexes include, the State Capacity Survey developed by Columbia University; the State Fragility Index published by the Center for Systemic Peace and Center for Global Policy at George Mason University (Goldstone et al., 2010); the Sovereignty Index elaborated by the joint-venture between the Brookings Institution, the Institute for State Effectiveness, , and the Australian National University (Ghani et al. 2005); the Country Indicators for foreign policy project delivered by the Canadian International Development Agency (Carment et al., 2006; the World Bank, 1997); the Political Instability Task Force launched by the Centre for Global Policy at George Mason University (Goldstone et al., 2010), the Index of State Weakness in the Developing World published by the Brooking Institute (Rice & Patrick, 2008); the Failed States Index produced by the Fund for Peace and published by Foreign Policy (Haken et al., 2012) and the list of Low Income Countries Under Stress (LICUS) countries (Chase, 2002), generated by the World Bank.

The above indicators of corruption are most frequently used in cross-country corruption studies. In general, the measurement of corruption is based on two methodological orientations: indices based on subjective data and measurement of corruption based on objective data (direct method). In the latter case the level of corruption is computed either through direct observation or by using records of corruption crimes related to judicial prosecution (Goel & Nelson, 2005) or by objectively observing the behavior of public servants who receive

While the direct method of corruption measurement is the best approach, acquisition of data is very difficult (Olken and Pande, 2012). In connection with the measurement of the magnitude of corruption Olken and Pande (2012) presented four different measurement approaches: survey-based (questionnaire survey to rate the actual magnitude of corruption), perception-based (again a questionnaire survey but respondents are asked to reflect on their perceptions on the magnitude of corruption, direct observation and graft estimation technique. According to Burguet et al. (2016), measuring corruption through survey-based approach in which respondents are asked to indicate the actual bribes they paid, there could be high probability of underreporting. In reducing the probability of under-reporting, studies (e.g. Svensson, 2003; Swamy et al., 2001) propose to design the questionnaire in a way that doesn't allude to respondents. On the other hand, perceptionbased corruption studies may suffer from bias and thus actual corruption may not correlate with the individual's perception about the magnitude of corruption (Olken and Pande, 2012). Some studies (e.g., Cameron et al., 2009) also adopted an experimental methodology to analyze corruption behavior, but such studies are seldom common. In this study, the prevalence of corruption in the Ethiopian revenue sector was measured using the surveybased approach. Firms were asked to provide information about whether they gave a bribe at least once in the form of money or gifts to a public servant. The study measures corruption both from demand-side (customers paying bribes upon request by the public servant) and from supply-side (customers pay bribes to public servants to face less red tape, to pay less tax, etc.). In this regard, as presented in Table 1, Gautheir et al. (2020:10) categorized non-bribe paying firms as "incorruptible" (those non-complying to requests for bribes by officials) and "nonpayers" (those which neither experienced a request for a bribe nor paid a bribe).

Table 1: Classification of firms' bribe paying behavior

	Bribe paid						
Bribe requested	Yes	No					
Yes	Demand side	Incorruptible					
No	Supply side	Non-bribe payers					

Source: Adopted from Gautheir et al. (2020:10)

2.3 Empirical literature on the drivers of corruption

Studies on the determinants of corruption can be studies at global, national, firm and micro-levels (Kaffenberger, 2012). So far the literature on the studies of the determinants of corruption are dominated at cross-country level (Svensson 2003; Reinikka & Svensson 2006) and little evidence are found at firm and micro level (Hietikko 2016; Islam & Lee 2016; Razafindrakoto & Roubaud, 2007).

Micro-level corruption studies focus on either the supply side (giving of bribes) or demand side (request for bribes) of corruption. The behavior of individuals who give bribery to influence the behavior and decision of public servants can be studied from the supply side of corruption. Similarly, the behavior of public servants who seek bribery in a bid to provide public services is studied from the demand side of corruption. To fully address the problem of corruption both supply-side and demand-side determinants should be examined. Gautheir et al. (2020) studied the demand and supply-side determinants of corruption using a survey data of 18,005 firms in 75 developing countries and argued that corruption in the revenue sector in those countries is more of a demand-side than a supply side issue. On the other hand, their studies on the procurement sector showed that corruption is more of a supply-side issue in which firms bribe government officials to win contracts. Evidences on the supply-side determinants of corruption behavior at micro-level show that variables such as age (Torgler & Valey, 2006; Gutmann et al., 2014; Hernandez & McGee, 2013; Hunt, 2004), sex of service seeker (Hernandez & McGee, 2013; Cameron et al. 2009; Mocan, 2008; Razafindrakoto & Roubaud, 2007; Torgler & Valey, 2006; Swamy et al. 2001; Deininger Mpuga, 2004), marital status (Mocan 2008; Swamy et al. 2001; Torgler & Valev 2006), household income (Mocan 2008; Ivlevs & Hinks 2015; Deininger & Mpuga, 2004; Islam & Lee, 2016; Razafindrakoto & Roubaud 2007; Liu & Peng 2015; Hunt & Laszlo 2012), educational attainment (Mocan 2008; Razafindrakoto & Roubaud, 2007); Deininger & Mpuga 2004; Islam & Lee, 2016), type of settlement (Mocan, 2008; Hunt 2004; Deininger & Mpuga, 2004) and employment status (Torgler & Valey, 2006; Deininger & Mpuga, 2004) and confidence in public institutions (Ivlevs & Hinks, 2015; Razafindrakoto & Roubaud, 2007; Liu & Peng, 2015) are important in explaining significantly the magnitude of corruption.

Due to endogeneity, it is difficult to differentiate between causes and consequences of corruption. Alm and

Liu (2018) stated that drivers of corruption are macroeconomic which includes: government size and its spending, press freedom, economic freedom and others. More specifically, Plummer (2012) described the drivers of corruption in the construction sector of Ethiopia as lack of accountability which make corruption happen; lack of capacity that make corruption possible and lack of trust which make corruption to take root. Accountability includes transparency, professional standards and role of civil society; capacity includes people, procedure and practice; and trust includes relationships, contracts and communications. However, the potential drivers of corruption in the tax administration are penalty system (Impunity), political intervention, the culture of the civil servant, the standards of values, the way civil servants are recruited and promoted and level of salaries (Antonakas et. al. 2013). Enste & Heldman (2017) also presented size and structure of government, recruitment and salary level of civil servants, democracy and political system, quality

of institutions, press freedom & judiciary, and cultural factors as drivers of corruption.

2.5 Conceptual framework for the study

Based on the theoretical and empirical literature, the study developed a conceptual framework that will guide the entire study (Figure 1). The principal-agent, collective action, institutional and game theories that were used in past studies to examine and explain corrupt behavior of public officials were used to develop the conceptual framework of this study. The variables were identified based on literature and presented in Figure 1 as supplyside, demand-side and system-related.

Figure 1: Conceptual framework for the study Source: Researchers' construction (2022)

Drivers of corruption (Independent variables) Demand-side drivers of corruption (bribee-initiated) Dependent variable: Greed for money/ desire for money of civil servants Societal perception/saying against corrupt behavior. Prevalence of **Supply-side determinants (briber-initiated)** corruption Firm owners characteristics (age and sex of owner(s)) Firm's facing informal competition. Source of working capital (own vs borrowed) Profit level Investment capital Size of the firm: Small (Category 'C'), medium (Category 'B') or large (Category 'A') **System-related determinants** • Perverse incentive • Lack of transparency • Limited accountability • Number of days of inspection by tax authority

3. METHODOLOGY OF THE STUDY

3.1 Research design and approach

The study employed both descriptive and explanatory research designs to examine the prevalence and driving causes of corruption in the revenue sector of Ethiopia. A mixed method research approach was adopted since the objectives of the research can be best addressed through this method. The concurrent mixed research approach was specifically used in the analysis and interpretation of the quantitative and qualitative data.

3.2 Variables, sources of data and methods of data collection

Both primary and secondary data were collected. Legal documents (e.g., Proclamation No. 1236/2021) as well as corruption cases that constitute objective manifestations of corruption were collected from relevant secondary sources. Primary data were collected from federal taxpayers, tax clients of the city municipalities and officials of ethics and anti-corruption offices. Respondents for this study were selected from the Federal Revenue Authority and Addis Ababa City Administration Revenue Bureau. Following Cochran sample size determination formula (Cochran, 1963), the study selected 384 firms from Federal Revenue Authority and 384 firms Addis Ababa City Administration Revenue Firms were categorized as 'category A', 'category B', and 'category C', and the total sample size was distributed across the categories based on proportional to the size of the strata techniques. The final respondents (firms) from each category was drawn randomly after acquiring sampling frames from the relevant government offices. Standard questionnaire was adapted following instruments used globally to measure corruption. Direct methods of measuring corruption using experience and perception indicators were developed and used to measure prevalence, manifestations and actual experiences of corruption in the revenue sector. The survey-based indicators/items that are included to measure prevalence and vulnerability was measured in five-point Likert scale as 'Extremely severe', 'Severe', 'Moderate', 'Minor', and 'Insignificant'. The items were adapted from studies that adopted survey-based indicators of corruption. Supply and demand-side as well as systemrelated determinants of corruption were included in the survey-based data collection instrument.

The interview was conducted to collect qualitative data from officials of tax revenue, and ethics and anti-corruption offices. In this regard, anti-corruption officials from the Federal Revenue Authority and from the Addis Ababa City Administration (such as Tax Intelligences, Prosecutors, Investigator Police) were interviewed. A total of 36 key informants were contacted and interviewed using a key informant checklist designed for this purpose. The data were collected over a monthlong fieldwork between February and March 2022.

3.3 Hypotheses

Based on previous studies and theories, fourteen variables were identified and measured using levels of measurements that fit to the characteristics of the variables. The expected signs along with the expected signs are presented in Table 2.

Table	2.	Variabl	es and	expected	sions
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SN	Variables	Description	Measurement	Expected sign
1	Prevalence of corruption	Dependent variable	Ordinal scale	
2	Perverse incentives	Items measuring government policies, processes and/or working procedures unintentionally creating opportunities for corruption	Ordinal scale	+

3	Lack of transparency	Items measuring when the public does not have clear access to or understanding of how government policies or processes are conducted	Ordinal scale	+
4	Limited accountability	Items measuring if the consequences for corruption are weak or non-existent	Ordinal scale	+
5	Inspection days	Number of days of inspection by tax authority	Number of days	-
6	Mean age of firm owner(s)	Measures the average age of the firm owners	Years	-
7	Sex of owner	Measures the sex of the firm's owner	Dummy variable (0= Male; 1=Female	-
8	Own capital	Measures if the firm's working capital is from own source	Dummy variable (0=Working capital from sources other than commercial bank; 1=From own source)	+
9	Borrowing from commercial bank	Measures if firm's working capital is from commercial bank	Dummy variable (1=Working capital from own source; 1=Working capital is from commercial bank)	-
10	Tax status	Measures the taxpayer category	Categorical variable (0= Category C; 1= Category B; 2= Category C	+/-
11	Profit	Measures the profit level before tax per annum	In ETB	+
12	Investment capital	Measures the initial investment capital	In ETB	+
13	Informal competition	Measures if the firm faces informal competition from those that are not paying taxes	Dummy (0= No competition; 1= face competition)	+
14	Greed	Measures the greed for money by the civil servant	0= No greed; 1=Greed	
15	Culture	Measures perception in the society about corruption	0=Corruption is not a collective action problem; 1=Corruption is a collective action problem	+

3.4 Methods of data analysis

The quantitative data were analyzed using descriptive and inferential statistics with the help statistical software

package called STATA (version 14.2). Prevalence of corruption is measured using ordinal scale data. Therefore, it was analyzed using descriptive statistics (such as median and percentages) and the ordered logit

regression model. Regarding analysis and management of qualitative data, the data were documented using verbatim; note-taking was undertaken where this was not possible. The data were then transcribed and translated into English after which they were transferred into a Microsoft Office Excel Data Entry Temple, ensuring first the accuracy, and completeness of the data. The data were then processed, coded and thematized using MAXQDA 2020. Coding, using initial guiding key issues, was undertaken to index the content and generate useful ideas. The coded data were then further analyzed thematically to identify major issues aligning with the main research questions and key themes employed in the checklist.

4. RESULTS AND DISCUSSIONS

4.1. Descriptive statistics on system-related factors

The data for this study came from 747 taxpayers with a 97.3% response rate. Of which, 70.8% of them were 'category C' taxpayers, and 'category A' and 'category B' taxpayers constituted 14.6% each.

1) Perverse incentives: When government policies, processes and/or working procedures unintentionally create opportunities for corruption.

Eight items measuring the conceptual dimensions of perverse incentive were included to assess if government policies, processes and/or working procedures under implementation by the tax revenue sector in Ethiopia unintentionally created the opportunity for corruption (Table 3). As presented in Table 3, business firms rated perverse incentive with a mean score of 2.91 with a variability in their responses with a value of 0.9 revealing that government policies, processes and/or working procedures created opportunities for public servants as well as for business firms to engage in some kind of corrupt practices. In this respect, 81.23% of the respondents rated the eight items from agree to strongly agree with only 5.61% of the respondents rated them differently (i.e strongly disagree, disagree and not applicable combined together).

Table 3: Descriptive statistics on perception of taxpayers about perverse incentive of the tax revenue sector in Ethiopia

SN	Items for Limited Accountability	Mean	St. Dev.	Strongly Agree	Agree	Moderately Agree	Other responses
1	The working procedures to estimate annual income creates opportunities	2.81	0.83	293	334	95	25
	for corruption			(39.22%)	(44.71%)	(12.72%)	(3.35%)
2	The working procedure to settle	3.1	1.06	224	338	113	72
	complaints in relation to annual income estimation creates opportunities for corruption			(29.99%)	45.25%)	(15.13%)	(9.63%)
	The working procedure to settle	3.07	1.09	251	310	113	73
	complaints in relation to declaring annual income of you firms creates opportunities for corruption			(33.6%)	(41.5%)	(15.13%)	(9.77%)
4	The working procedure to settle	3.06	1.06	248	320	105	74
	complaints in relation to annual expenditure estimation creates opportunities for corruption			(33.2%)	(42.84%)	(14.06%)	(9.9%)
5	The working procedure to estimate	2.80	0.79	290	343	95	19
	the tax payable creates opportunities for corruption			(38.82%)	(45.92%)	(12.72%)	(2.54%)
6	The policies about the time to pay	2.84	0.84	283	335	103	26
	estimated income taxes payable to			(37.88%)	(44.85%)	(13.79%)	(3.48%)

	Overall mean	2.91	0.91	36.63%	44.60%	13.17%	5.60%
	opportunity for taxpayers to engage in corrupt behavior			(38.82%)	(47.93%)	(10.31%)	(2.94%)
8	The working procedures creates	2.78	0.78	290	358	77	22
	creates opportunity for employees to engage in corrupt behavior			(41.5%)	(43.78%)	(11.51%)	(3.21%)
7	The working guidelines/procedures	2.78	0.81	310	327	86	24
	the government in Ethiopia creates opportunities for corruption						

Note: 7=Strongly Disagree; 6= Disagree; 5= Moderately Disagree; 4= Moderately Agree; 3= Agree; 2= Strongly Agree; and 1= Not Applicable/I don't know

Source: Authors' analysis from survey data (2022)

2) Lack of transparency: When the public does not have clear access to or understanding of how government policies or processes are conducted.

Business firms which were the subject of this study have the view that corruption in the tax revenue sector in Ethiopia was prevalent due to lack of clear access to or understanding of the government policies, or how the workflows/process happen. More specifically, they agreed that the processes of estimating annual incomes and expenses of business firms (for those firms that don't keep records), the procedures and/or processes of estimating annual income tax, and the ways of handling complaints lacked transparency. In terms of ratings, the overall mean score for the problem of transparency was 2.6 with a variability of 0.73. In the same vein, most of the respondents (91.41%) either strongly agreed or agreed that the tax revenue sector in the country has a problem of transparency (Table 4).

Table 4: Descriptive statistics on perception of taxpayers about transparency of the tax revenue sector in Ethiopia

SN	Items for Lack of Transparency	Mean	St. Dev.	Strongly Agree	Agree	Moderately Agree	Other responses
1	The tax revenue sector lacks transparency in estimating annual income	2.6	0.73	380 (50.94%)	292 (39.14%)	64 (8.58%)	7 (1.34%)
2	The tax revenue sector lacks transparency in estimating the total tax payable to the government	2.54	0.72	410 (54.89%)	278 (37.22%)	49 (6.56%)	10 (1.33%)
3	The tax revenue sector lacks transparency in handling complaints related to Business's annual income estimation	2.6	0.70	377 (50.47%)	306 (40.96%)	57 (7.63%)	7 (1.34%)
4	The tax revenue sector lacks transparency in handling complaints related to business firm's annual expenditure estimation	2.61	0.74	375 (50.2%)	376 (40.96%)	55 (7.36%)	7 (1.34%)

5	The tax revenue sector lacks	2.61	0.77	373	304	52	18
	transparency in handling complaints related to the estimation of total tax payable to the government			(49.93%)	(40.7%)	6.96%)	(2.4%)
	Overall mean	2.59	0.73	50.43%	40.98%	7.30%	1.29%

Source: Authors' analysis from survey data (2022)

Understanding the existing condition of transparent practices that are devised to contain the problem of corruption is very important. Our study also explored how informants evaluated the existing conditions of transparency through qualitative investigation. We explored whether and to what extent relevant policy instruments, guidelines and work procedures are in place to deal with corruption in the sector. Analysis of responses to the relevant questions respecting these matters shows, overall, there are problems of transparency on the one hand and, on the other, in recent years, there are some positive indications of emerging transparency practices. Informants generally reported that the sector has put in place relevant policies and work procedures to make the service delivery in the sector open and transparent. Yet, as a key informant noted, "the main challenge is inability of the sector to enforce existing work procedures, policies and guidelines." In some cases, informants noted that some tangible, concrete guidelines and policy instruments are missing.

An important theme emerging from the analysis is that, in fact, there are several guidelines, policies, and work rules that cascaded down from the "authority" but the main problem is "many employees are not very much aware of the policies and guidelines" and some of the protocols and procedures are often very "difficult to understand" and hence employees "often resort to learning from the established organizational work cultures which basically involves "learning from experiences of senior employees." Learning from such experiences might, unfortunately, involve dangers as well, as one informant noted: ".... So, every employee accomplishes activities based on experience learned from senior employees. So, if there is bad/wrong practice, it continues to be transferred from experienced staff." In relation to this, thus, there are problems of proper implementation of the rules and policies as one informant reported,

There is income tax, excise tax, ToT and VAT proclamations, which are clear and transparent. However, there are follow up regulations that came out following the proclamations which are

sometimes overlapping, and sometimes not clear. However, employees do not make themselves familiar with them and do their job based on customary practices (i.e., working procedures transferred from experienced staff members) (Interview\KII_012: 8-10)

A key related problem reported as the main explanation for the less transparency and low implementation problem, and resorting to traditional practices, is low level of awareness creation training opportunities on the policies, laws and regulations related to tax and revenues. One key informant thus argued: "there is no training in areas of the policies, processes, regulations and working procedures which makes it difficult for everyone to have equal understanding. So, they are less transparent. The regulations are manual as well as unclear. As a result, everyone implements following traditions and subjective judgments." The informant further noted that there are a lack of uniform understandings regarding the proper interpretation of the various tax and revenue laws and proclamations. As an instance, the informant mentioned a specific Tax Proclamation and argued:

Tax proclamation 983/2008 No. 85 states that if the higher official of the revenue sector believes that there are errors in the auditing process (say if s/he believes there were expenses not considered by the auditor), the whole process can be reversed after auditing is completed. This happens due to problems related to interpretations of regulation (Interview\KII_015: 7-9).

It is interesting to note that such worrying issues of transparency, clarity and openness problems in the revenue sector respecting the various rules, laws and proclamations are persisting among both taxpayers and employees. The level of confusion is thus worrying. An informant's view explains this problem very well:

...Both taxpayers and employees mention that regulations are not clear and transparent. Confusing and

contradictory regulations and circulars are very many. They are not transparent enough and thus create opportunities for employees to manipulate them for negotiation. In Tir 2014 EC [January 2022] a regulation stating if firms don't bring bank statement (for those who report zero or loss), they will not get services.' Firms then bring their own personal expenses as part of the statement since the regulation is not clear and transparent. Earlier they used to bring at the end of the budget year, but now they are asked to bring every There confusion.... month. is (Interview\KII 019: 9-11)

Figure 2 summarizes the key limitations and gaps in the areas of transparency, policies, guidelines and work procedures in the revenue sector. As the chart shows, openness and transparency have been jeopardized due to what informants described as "too many circulars and"

guidelines" cascading down and these often are "contradictory with each other", and thus such a state of affairs have often paved ways for traditional experiences, and "manual-based operations" that do not implement the noble intent of the policies or circulars, but rather are often found to be promoting subjective operations, which are open to corruption gains and manipulations. Thus, the issue of "too many circulars" was being talked about the most by several informants, indicating how this aspect is important to address as a policy intervention matter. Transparency is also at stake as 'manual based work procedures' still predominate the sector. Similarly, informants emphasized the problem of "unclear" and "contradictory" guidelines, thus contributing towards lowered transparency and a conductive, fertile ground for thriving of corruption in the sector. While public sector organizations often engage in training workshops for their employees, which might also be the case in the revenues sectors, the fact that lack of proper trainings about the policies, and proclamations and other rules, still being talked about as a key issue is very worrying.

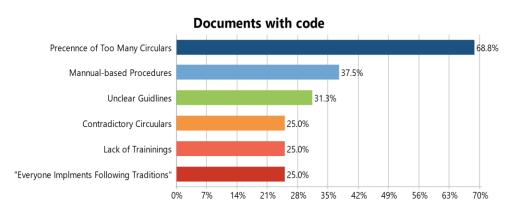


Figure 2: Themes summarizing the state of transparency of polices guidelines and work procedures in the review sector.

Source: Authors' analysis from qualitative data (2022)

3) Limited accountability: When the consequences for corruption are weak or non-existent.

A third system related factor that may affect the prevalence of corruption in the tax revenue sector is the mechanisms of making employees as well as business firms accountable when they are objectively engaging in corrupt practices. Most of the business firms (80.42%) agreed and strongly agreed that there are limitations in making revenue sector employees as well as business firms accountable when found in corrupt practices. More specifically, the problem was pointed out in both having relevant and effective regulations as well as in enforcing existing regulations that make people accountable for their wrong deeds (Table 5).

Table 5: Descriptive statistics on accountability in the tax revenue sector in Ethiopia

SN Items for Limited Accountability	Mean	St.	Strongly	Agree	Moderately	Other
		Dev.	Agree		Agree	responses

	Overall mean	2.72	0.9	46.85%	33.57%	14.93%	4.65%
	firm's accountable when found engaged in corruption is weak			(42.7%)	(39.76%)	(13.25%)	(4.28%)
4	The enforcement of the regulations of the tax authority to make business	2.75	0.88	319	297	99	32
	the tax authority to make employees of the revenue sector accountable when found in corrupt practices is weak			(49.13%)	(30.92%)	(16.06%)	(3.88%)
3	The enforcement of the regulations of	2.71	0.90	367	231	120	29
	make business firm's accountable when found engaged in corruption is weak			(48.73%)	(29.32%)	(16.33%)	(5.62%)
2	The regulations of the tax authority to	2.73	0.94	364	219	122	42
	make employees accountable when found in corrupt practices is weak			(46.85%)	34.27%)	(14.06%)	(4.82%)
1	The regulations of the tax authority to	2.69	0.88	350	256	105	36

Source: Authors' analysis from survey data (2022)

A key informant working in the Ethics Office of the Tax Revenue sector in Addis Ababa revealed that the problem of accountability was much pronounced after the government's decision of dissolving the earlier structure and responsibility of the Revenue sector Prosecutors, and giving the entire mandate of prosecution to the Police when firms and individuals employees are found in corrupt practices. Findings from qualitative interviews similarly reveal that there is a very low sense of accountability in the sector. As a key informant reported, "[There is] a very low sense of accountability, and an increasing culture that tolerates corruption; and a very low level of control and law enforcement that often easily exonerates those engaging in corruption..."

4.2. Prevalence of Corruption in the Tax Revenue Sector in Ethiopia

The prevalence of corruption in the tax revenue sector in Ethiopia was assessed using a survey instrument that included five-items measured in a five-point Likert scale (5= Extremely severe; 4= 'Sever'; 3= 'Moderate'; 2= 'Minor'; and 1= 'Insignificant'. The results of the rating showed that it is close to sever in all the dimensions of the tax revenue sector workflows such as annual income

estimations of taxpayers, annual expenditure estimation (for those firms that don't keep transaction records), and in handling complaints lodged by taxpayers.

Our study had an emphasis on understanding the current prevalence of corruption in the revenue sector. As presented in Table 6, the quantitative survey data analysis revealed that the overall prevalence of corruption in the tax revenue sector in Ethiopia is severe (with a mean score of 4.04 with a variability of only 0.79 from the mean score value). Most of the respondents (77.62%) rated corruption in the tax revenue sector in a range of severe to extremely severe calling for remedial attention to the sector. Not surprising, only 3.16% of the respondents had the opinion that the prevalence of corruption in the tax revenue sector is minor to insignificant. More specifically, corruption is more prevalent when business firms lodge complaints to the Offices handling different types of complaints (with a mean score of 4.3 with a variability of 0.67 from the mean score when rating of this item). Business firms lodge complaints that include the following: 'the estimated tax amount requested by the Office is exaggerated', 'expense of my business firm is not taken into account', and 'the estimation on the annual revenue of my business firm is exaggerated', etc. (Table 6).

Table 6: The prevalence corruption in the tax revenue sector in Ethiopia

Items Measuring Prevalence of	Mea	Std.	Frequency (%)				
Corruption	n	Dev.		4	3	2	1
			3	7	3	4	1

Overall mean	4.04	0.79	30.52%	47.1%	19.22%	2.49%	0.67%
			(31.46%	(45.92%	(19.81%)	(2.41%)	(0.40%)
In your view what is the overall prevalence of corruption ?	4.06	0.80	235	343	148	18	3
complaints?)))))
What is the extent of corruption in relation to handling	4.30	0.67	311 (41.63%	354 (47.39%	79 (10.58%	2 (0.27%	1 (0.13%
			(28.51%	(47.39%	(19.81%	(3.08%	(1.20%
What is the extent of corruption in relation to tax estimation ?	3.99	0.85	213	354	148	23	9
expenses?			(25.17%	(46.59%)	(25.43%	(3.75%)	(1.07%)
What is the extent of corruption in relation to estimation of	3.91	0.85	188	348	175	28	8
in relation to income estimation?			(25.84%)	(48.19%)	(22.49%	(2.95%)	(0.54%)
What is the extent of corruption in relation to income estimation ?	3.96	0.80	193	360	168	22	4

Source: Authors' analysis from survey data (2022)

Qualitative information on this theme was generated through analysis of the interview responses. A range of nuanced expressions were employed by the informants to provide their estimate of the prevalence of corruption in the sector. Informants often employed indicative expressions to designate this phenomenon. A common argument was that corruption was pervasive at all levels, in the different work processes, directorates, and jurisdictions of the sector. A related key argument originating from the analysis was that "corruption has become 'a day-to-day reality", and that "almost all employees of the sector engage in some form of

corruption." Some other interesting themes that manifest the prevalence of corruption in the sector were also employed, including expressions such as "common', "high", and "frequent". Informants talked very much about the commonplace nature of corruption, with hinting of key hotspot areas where such phenomenon are more prevalent, including the practice of 'false tax returns', 'lowering tax returns', and 'reflected in all aspects of the work process'. Qualitative indicators of the prevalence were determined through frequency running in the MAXQDA 2020 software where over 44% of informants talked about how "prevalent', "how "high" and "common" the problem was.

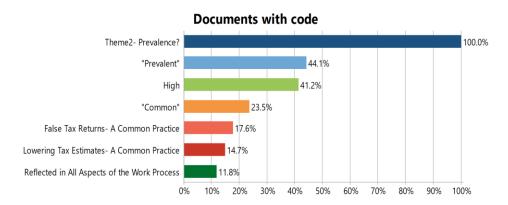


Figure 3: Themes indicating prevalence of corruption in the revenue sector in Ethiopia.

Source: Authors' analysis from qualitative data (2022)

4.3. Demand and supply-side of corruption in the tax revenue sector in Ethiopia

After quantitatively describing and acquiring qualitative expressions about the prevalence of corruption in the tax revenue sector in Ethiopia, the study attempted to quantitatively describe the demand and supply side of corruption in Ethiopia. We have adopted the classification of Gautheir *et al.* (2020:10) in understanding who initiated corruption in the sector in Ethiopia. Of the total surveyed firms (with 734 valid responses4), 58.2% (427 firms) of the firms responded

that they paid some form of bribe to get services from the public sector. The bribe is sometimes initiated by the business firm itself (supply-side) as they do not have the trust and confidence that they can receive requested services from the civil servants working in different capacities in the Ethiopian tax revenue sector without paying a bribe. About 21% of them reported that they were requested for a bribe by a public servant, and they received the service by paying what they were requested. The survey result revealed that up to a maximum of ETB 250,000 (USD 4,720.37)5 was asked by a civil servant with a mean bribe amount of ETB 5089 (USD 96.09).

Table 7: Firms' bribe paying behavior in the tax revenue sector in Ethiopia.

Bribe requested	Bribe paid			
	Yes	No		
Yes	Demand side bribers	Incorruptible		
(n=151; 20.6%)	(n=151; 35.36%)	(n=0; 0%)		
No	Supply side bribers	Non-bribe payers		
(n=583; 79.4%)	(n=276; 64.64%)	(n=307; 35.36%)		
Total (n=734; 100%)	Total (n=427; 100%)			

Source: Authors' survey result (2022)

According to the classification of Gautheir *et al.* (2020:10), as presented in Table 7, none of the business firms were incorruptible taxpayers as all of them who were requested to pay a bribe actually paid the bribe to receive the services. The remaining 79% of the taxpayers (n=583) were not requested to pay a bribe for the services they were looking for. However, although they were not requested for a bribe, a big share of them (n=276; 65%) actually paid a bribe, which are classified as supply-side bribers as per the classification of Gautheir *et al.* (2020:10). While there are no taxpayers who declined to bribe after they were requested for a bribe by a civil

servant, about 35% of the taxpayers (n=307) who were not requested for a bribe, they received the services without paying a bribe, which according to Gautheir *et al.* (2020:10), are classified as non-briber payers. The bribe paying behavior of the taxpayers depicts that prevalence of corruption in the tax revenue sector is the result of unethical behavior by both the civil servants as well as the business firms (taxpayers) which suggests working on both parties.

5One USD is exchanged with ETB 52.9619 on 18 November 2022

(https://www.combanketh.et/en/exchange-rate/)

⁴ As the question was sensitive in nature, 743 firms responded to the item with a response rate of 95.6%, compared to the responses to other questions with a 97.3% response rates.

4.4. Determinants of the prevalence of corruption in the tax revenue sector in Ethiopia

The estimation result of the ordered logit model revealed that several of the variables hypothesized to affect vulnerability to corruption of the tax revenue sector in Ethiopia to be statistically significant. The performance of the model was acceptable. The Likelihood Ratio (LR) chi² test value was 633.76, which is significant at p<0.01 revealing that the model fits the data well compared to the null. The signs of the variables entered the model were as per the theoretical and empirical expectations further revealing the correctness of the functional form of the model to the data. As presented in Table 8, variables related to the tax system such as transparency of the rules and regulations and accountability of the civil servants as well as the business firms when found guilty of corrupt behavior were both found to be statistically determining the vulnerability of the sector to corruption.

Lack of transparency: The estimation result for this variable indicated that lack of transparency of the tax revenue sector significantly determined the vulnerability of the sector to corruption at p<0.01. With a one unit increase in lack of transparency, we expect a 0.63 increase in the long odds of being in a higher level of corruption, given all the other variables in the model held constant. The descriptive statistics result showed that the variable has an overall mean value of 2.6 which shows that the respondents agree with the items measuring lack of transparency in the tax revenue sector in the country. More specifically, the respondents were in moderate to strong agreement to the lack of clear access to or understanding of how government policies or processes are conducted with respect to annual income estimation by the revenue sector for tax estimation purpose, total tax estimation payable to the government, and in handling complaints.

Limited Accountability: The ordered logit model estimation results also revealed that limited accountability of public servants working in the tax revenue sector in Ethiopia to their corrupt behavior as well as those of business firms engaged in a similar practice to have increased the log odds of falling into high level of corruption, which is significant at p<0.05. The overall mean score for the item's measuring accountability was 2.71 indicating that respondents agreed for the limited accountability of the sector in making revenue sector employees and business firms accountable when found in corrupt practices. The respondents moderately to strongly agreed that the regulations of the tax revenue sector in the country are weak and don't make employees as well as business firms found in corrupt practices accountable. The enforcement of the regulations developed by the sector is also argued to be weak. Because of these two reasons corrupt practices have increased significantly. Past studies (see for example, Enste & Heldman 2017) that focused on macro-level variables also revealed that poor quality of institutions as drivers of corruption. Lack of transparency and limited accountability (which both are significant in increasing the prevalence of corruption in the Ethiopian revenue sector are closely related to the poor quality of institutions that the country has. Theoretically, the findings are supported by institutional theory (see for example, Debski et al., 2018; Stensöta et al., 2015), which argues quality of institutions determine prevalence of corruption. Further, the Principal-Agent theory explains corruption increases when the principal (in this case the Government) has limitations in designing appropriate monitoring system on the activities/actions of tax officials (in this case the Agents) while serving the interest of the principal (see Groenendijk, 1997).

Table 8: Results of the Ordered Logit Model for the Determinants of Prevalence of Corruption in the Tax Revenue Sector in Ethiopia

Ordered logistic regression

Number of obs=736

Log likelihood = -455.7313

LR chi2(17) =633.76

Prob > chi2=0.0000

Pseudo R2=0.4101

Predictor variables	Coef.	Std. Err.	Z	[95% Conf.	Interval]
Perverse Incentive	0.12	0.12	1.00	-0.35867	0.116224

Lack of Transparency	0.63	0.18	3.49***	-0.98405	-0.27662
Limited Accountability	0.23	0.13	1.70*	-0.4853	0.034202
Working capital from own source	0.62	0.17	3.55***	0.27721	0.958623
Working capital from Commercial Banks	-0.60	0.18	-3.43***	-0.94736	-0.25866
Profit level	1.08E-07	5.90E-08	1.83*	-7.50E-09	2.24E-07
Investment capital	8.62E-09	2.18E-08	0.4	-3.41E-08	5.14E-08
Inspection days	-0.67	0.072	-9.32***	-0.81	-0.52857
Sex of owner	-1.26	0.22	-5.87***	-1.68462	-0.84078
Informal competition	0.27	0.14	1.89*	-0.00981	0.54253
Greed for money	0.38	0.15	2.47**	0.078355	0.676458
Culture about corruption	0.13	0.20	0.63	-0.26202	0.513002
Tax category (Firm size)	-0.02	0.13	-0.13	-0.26599	0.232644
Mean age of owner	-0.03	0.01	-2.3**	-0.05334	-0.00424
/cut1	-16.55	1.77		-13.0891	-20.0154
/cut2	-16.04	1.70		-12.7155	-19.3547
/cut3	-7.46	1.34		-4.83771	-10.0741
/cut4	-2.82	1.28		-0.32071	-5.32687

Note: Dependent variable is 'Prevalence of Corruption' and *** p<0.01; **p<0.05; *p<0.1

Source: Authors' calculation based on survey data (2022)

Source of working capital: The ordered logit estimation results confirmed that the log odds of prevalence of

corruption increases when firm's working capital is sourced from own means, which is statistically significant at p<0.01. However, when the source of working capital is from commercial banks, the log odds of prevalence of corruption declines.

Profit level: The log odds of prevalence of corruption increases with firms whose profit level is higher compared to those firms earning low profit level at p<0.1. This could be because tax officials will intensify the demand-side bribery on those high profit earning firms as they will be more attractive for corruptive practices than low profit earning firms.

Inspection by tax official: The results of the ordered logit model revealed that as inspection of business firms by tax officials increase by one unit, the log odds of prevalence of corruption decrease by 0.67, which is significant at p<0.1. Monitoring of the practices of doing business by

respecting country's laws and regulations is expected to minimize corruptive behavior and this is supported by our study's findings. Frequency of inspection is a variable related to the system put in place by the revenue authority, and it is supported by the institutional theory (see Debski *et al.*, 2018; Stensöta *et al.*, 2015).

Sex of firm owner: The analysis result showed that being a female owner decreases the log odds of prevalence of corruption in the tax revenue sector by 1.26 unit, which is significant at p<0.01. Previous studies (Hernandez & McGee, 2013; Cameron *et al.*, 2009; Mocan, 2008; Razafindrakoto & Roubaud, 2007; Torgler & Valev, 2006; Swamy *et al.*, 2001; Deininger & Mpuga, 2004) also support our findings that sex of service seeker determines prevalence of corruption.

Mean age of firm owners: As the mean age of the owner(s) increases by one unit, the log odds of prevalence

of corruption decreases by 0.03 unit, which is significant at p<0.05. Our finding with the age variable is also consistent with past studies (see for example, Torgler & Valev, 2006; Gutmann *et al.*, 2014; Hernandez & McGee, 2013; Hunt, 2004).

Facing informal competition: The analysis result revealed that firms facing informal competition are more likely to engage in corruptive practices. This was statistically significant at p<0.1 level. Business firms expecting to face informal competition by those firms that avoid tax bribing tax officials will do the same, which will increase prevalence of corruption in the revenue sector. This is in line with game theory (see Macrae, 1982) that argues private sector actors that are in competition with others is unsure of the actions of others business firms whether they are properly paying tax to the government. Thus, they fear being outdone by competitors acting illegally by bribing public sector officials. As a result, they will be motivated to engage in corruption.

Greed of tax officer for money: The greed of tax officials for money increases the demand side of corruption. The variable was found to be statistically significant in increasing the log odds of prevalence of corruption at p<0.05 level. A related micro-level studies (see Mocan, 2008; Ivlevs & Hinks, 2015; Deininger & Mpuga, 2004; Islam & Lee 2016; Razafindrakoto & Roubaud ,2007; Liu & Peng, 2015; Hunt & Laszlo, 2012) also support our findings that income level of tax officials determine prevalence of corruption. As presented below, the qualitative data analysis results also brought economic factors as the first from the lists in determining prevalence of corruption.

Firm size (**Tax category**): Our analysis result showed that there is no statistically significant difference in the prevalence of corruption among the tax groups ('A', 'B', and 'C' category taxpayers) suggesting that the Authority should work in reducing corruption in all business firms.

The qualitative analysis result on the drivers of corruption goes in line with the findings of the quantitative estimations. Below are some of the drivers emerged from the qualitative responses. While commonsense tells us that there are interrelated and complex causes that lead both the taxpayer and the revenue sector employees to engage in corruptive behaviors, it is important to understand what key issues emerge as causes and exacerbating factors of such a phenomenon. Analysis of the responses to the questions of causes and factors promoting corruptive behaviors may be generally

categorized into based on the opinions of the tax sector employees, as follows:

- → economic factors (as a justification to cope with high rising living costs).
- → progressively declining ethos of morality and ethics in the society itself, a drastic shift from a culture that eschews of honesty to a culture that now belittles it.
- → ever increasing and complicating nature of the corruption.
- → very low sense of accountability, and an increasing culture that tolerates corruption.
- → a growing culture of speedy shift in economic gains and material conditions emanating from corruption that this serving as an enticing factor to attract others to engage in similar actions.
- → very low level of control and law enforcement that often easily exonerates those engaging in corruption.
- → very low level of commitment from political leaders.
- → an entrenched culture of manual work procedures, subjective, experience-based work processes that open roads widely to manipulations, corruptive negotiations and illegal practices; and
- → low level of awareness and knowledge about the various policies, guidelines and rules (both among taxpayers and tax employees).

Thus, as one key informant summarized, the major causes and instigating factors of corruption in the sector are related to issues of lack of strict punishments against corruption encouraging others to engage in it; increasing cost of living; greedy behaviors of employees; everincreasing sophistication and stratagems being developed to evade tax and engage in corruption; and involvement of a complex chain of command in the corruption involving those in the echelons of the government, down to the grassroots. A key informant enumerates as follows:

... There is no action taken against other workers who have committed corruption and there is a perception that 'I will not be harmed [if I am got caught engaging in corruption]'. The cost of living; employee greed (personal behavior); taxpayers' competition perspective (instead of paying taxes to the government, give half to tax workers and do the rest for themselves); corruption is becoming a legal practice; a sophisticated corruption strategy is

constantly being developed; corruption is rampant in the chain of command from the top official to the lower-level officers (Interview\KII 008: 5).

Some informants talked about certain tangible causal factors, that indeed are very serious and some of these are rooted in the societal, cultural context itself. Thus, as a key informant argued, the culture itself is a major hotbed for the proliferation of corruption. The informant referred to a salient proverbial saying of the country that has been in use for millennia "Sishom yalbela sishar yiqochewal," which roughly translates as, "One who does not take bribes when in appointment position will regret when he is removed from the position." This ethos still reigns rampant, even more so, so much so that public service organizations and appointments in higher positions have become avenues for windfalls of short-cut economic gains for many.

Another informant enumerates some tangible causal factors that need due policy intervention:

Prevalence of illegal receipts issuance; perceptions held by the community: [grab and get rich while in power and get away...]; auditing is based on subjective judgment than objective assessment; lack of capacity from the part of intelligence; lack of adequate and qualified auditors; determination process group is unclear and taking long process that makes tax payers to negotiate; absence of practice... performance audit (Interview\KII_012: 20-26).

It is interesting to note that some of these factors are related mainly to lack of transparent, institutionalized and modern technology-supported practices. Further, many of the factors (at least immediate ones) link to problems in the tax auditing system where there is lack of professional experience and capacity. In summary, it may be possible to categorize the major causes and factors prompting corruption in the tax revenue sector, based on what our informants opined, as follows:

1. *Manual based work process created opportunity* to manipulations and corruption: this is an important cause, an immediate one that often has created opportunities for corruption. This is a major problem throughout the public sector in Ethiopia. The fact that a transparent, technology supported system, if put in place, might overrule the usual, traditional procedures and expose potential corruptive practices

- is well understood and it is often reported that there is often resistance to the installment of paper-less service delivery procedures. Thus, our informants mentioned this as a major causal factor in the manifestation and the rising level of corruption is a very important point.
- Loose tax law enforcement by the government. As one informant reported, which is also supported by others and confirmed through experiential observations, there is a lax law enforcement system in the revenue sector, despite progressively improving trend. There is a lack of consistent, transparent application of rules and laws irrespective of time, place and persons. As reported by our informants, tax employees are often very lax in their approaches, especially at certain times of the day. For example, as an informant noted, "Especially starting from 3 p.m. in the afternoon, transactions are made without issuing receipts since businesspeople/firms know that there are no government bodies who monitor after mentioned time." This is a crucial observation of policy intervention importance.
- 3. Lack of uniform application of rules and laws: Another major causal factor reported by one informant and in various ways supported by others is the fact that there is lack of strict and uniform application of laws and rules in the sector. "For similar business transactions, different tax is levied by the government. This created window of opportunity for corruption," noted a key informant, which is a keen observation indeed. The lack of uniformity in applying the rule might derive from other deep-going factors, such as lack of technologysupported, solidly institutionalized work procedures. Depending on the whims of the employee, or any other opportune circumstances, a tax office staff may thus fail to use similar rules for similar cases. This is thus a major pushing factor in enhancing corruptive practices. If taxpayers are aware that such misapplication and irregular employment of rules are possible, then they might be tempted to engage in corruption.
- 4. Awareness problems: There is a major factor that touches on the issue of appropriate level of awareness, knowledge or capability on the part of both taxpayers and tax office staff, which is thus a major encouraging factor for corruption. Tax office staff might want to exploit the lack of proper

- awareness and knowledge on the part of the taxpayers to corruptive gains either through misleading, coercing or cheating. On the other hand, tax office staff might engage in corruptive practices out of lack of awareness of proper laws and procedures.
- 5. Peer pressure by corrupt employees: a tax office employee often learns both bad and good experiences from their peers. Peer pressure is a major force affecting both the taxpayer and tax office staff. The pressures might come from the fact that there is a sense that pervades the atmosphere, like a moto: "everybody does it! It is a new normal". Thus, many might succumb to peer pressures to engage in corruptive practices. Taxpayers with experience in the rules of the games might thus influence others who otherwise are law -abiding. Similarly, and more often, experienced tax office staff might influence novice employees in the rules of the game. The peer pressure dimension is a very powerful factor in another related dimension as well. As informants keenly observed, some employees who chose to engage in ethical, professional manner, shunning corruptive practices have often been warned by thugs from the "networks of corruption circles", to the point of life-threatening attacks if the ethical employee does not cease from being an obstacle to the corruption. This is a powerful peer pressure indeed promoting proliferation of corotation in the sector.
- 6. Salary and benefits of tax employees: while the argument that low salary and inadequate benefit packages lead to corruption is not often scientifically tenable, there is, nonetheless, this pervasive opinion among the public sector employees that the increasing level of poverty and rising cost of living, coupled with the allurement of windfall, speedy climbing to the economic ladder often incites tax employees to engage in corruption. Thus, our informants cited this as a fact, reporting that "the salaries of the employees don't go with the high costs of living, [increasing] vulnerability to corruption."
- 7. *The political situation in Ethiopia*: The political and social climate is obviously a key factor that serves as an underlying casual force in promoting corruption in the country in general. Our informants noted that the political instability and the shaky public sector and speedy changes in the institutions has encouraged growth of corruption, as employees, often are tempted to think that the shaky political situations

will not provide the government conducive ways to monitor and oversee illegal practices. Thus, some informants noted that corruptive practices in the sector have grown particularly, since the 2018 reform, although such common observations might need to be further supported through scientific studies.

5. CONCLUSION AND RECOMMENDATIONS 5.1 Conclusion

In conclusion, among the four theories presented in the literature section, the principal-Agent theory, Institutional theory, Game theory and collective-action theory explained the prevalence of corruption in the tax revenue sector in Ethiopia significantly. Collective-choice theory although it was supported by qualitative evidence in explaining prevalence of corruption in the sector, the ordered logit model showed that cultural variables are insignificant, implying that corruption is not yet considered by the society as a collective action problem calling for an urgent action in making it societal problem. The principal (in this case the Government) failed to introduce a strong monitoring system in making the Agent (in this case tax official) accountable to their corrupt behavior. Business firms (operating as game players in competitive markets) believed that they faced informal competition by those firms avoiding tax by bribing tax officials. As part of the game, they felt undone and hence joined corrupt behavior. Quality of institutions (the rule of law as in the case of transparency and accountability) are found to be important in determining prevalence of corruption in the tax revenue sector in Ethiopia. Therefore, in a bid to reduce prevalence of corruption, the government should work strongly along with what these theories argue.

5.2 Recommendations

Tackling corruption in the revenue sector: informants' views

It is important to collate insights from the tax sector employees who have had close encounters in the sector and observed the emerging, intensifying and growing issues of corruption on ways of alleviating the problem. Informants were thus asked to put forward what they thought might be the best ways of tackling corruptive practices in the sector. Some very useful recommendations were identified through analysis of the responses offered.

Our analysis identified the theme of 'the need for regular training and capacity building' as a key one in this line of recommendations. Our informants forwarded important ideas in this regard, suggesting that it is very crucial and urgent that the government intensifies awareness creation and capacity increasing training for both taxpayers and employees. Such training should be organized and offered in regular basis.

A second important theme that emerged as a major recommendation is the fact that the government should levy what some have called "educative, punitive measures" on those tax sector employees and the taxpayers who engage in economically and sociopolitically destabilizing and harmful corruptions. It is often not commensurate enough and this has often led to the thinking that "even if I get caught red-handed, I won't be that much punished." This sort of thinking has grown so much, and it behooves the government to brace up and engage in strong, educative punishments.

Related to this recommendation which many informants emphasized is holding accountable the sector staff, particularly the leadership position holders. As informants noted, there is a major concern and a growing trend whereby high-ranking officials are not being held accountable and commensurate measures are not being taken on those who engage in grand corruption cases. In the words of some informants, "high-profile leaders should be regularly investigated and held accountable," (Interview\KII_003: 6). Such high-profile officials are reported to be engaged in robbing the coffers of the country, engaging in a thick-networked corruption circle involving brokers, influential personages, investors and political leaders. There should be thus a bold, clear move that puts in place a system that openly and consistently monitors the behaviors of leadership position holders and makes them accountable.

A third key theme is related to the need for strengthening and updating the systems, rules and work procedures in the sector on a regular basis. This recommendation also links with the need for modernizing the system and comprehensive and complete installment of modern technology systems which would significantly enhance transparency and shut many loopholes that invite corruption. A key dimension thus is enhancement of ICT supported systems, a major component of which being modernizing the service delivery through technology, such as, for example, "Deploying an on-line payment and service system," (Interview\KII_009: 5), as argued by an informant.

A fourth recommendation may sound a usual cry from the public sector employees, namely, **the need for**

improving the living conditions of staff, providing salary schemes that are commensurate with the rising living conditions and facilitating various incentive schemes. As noted above, extrinsic motivation may not necessarily be an effective measure of curbing corruption and experiences show that people often engage in corruption not necessarily due to poverty or poor salary conditions. The allurement of corruption may go beyond simple increment of salary scales and provision of incentive mechanisms. This being stated, nonetheless, increasing the cost of living and the relatively low salary and incentive schemes in the country may be a definite push factor and thus improving the living conditions of employees may to some extent curb the problem.

A fifth recommendation, which is related to a theme discussed above, is the need for socio-cultural transformation of society to produce ethically sensible. morally strong generation. This is possible through strong campaigns and institutionalized education of the citizens. There are culturally embedded and deep-rooted mores that promote corruption and thievery as expressed in such well-known sayings as "Sishom yalbela sishar ygochewal" [One who has not made use of the opportunity to engage in corruption when in appointed positions will regret when he resigns from the position]; "meta meta aro zewor mallet" [Be smart, take as much as you can when possible and then depart]. These have encouraged immoral engagements and a culture that tolerates bribes and thievery. This requires long term engagements from the government through societal transformation works, educating the children and the youth, to produce a generation that despises corruption. This recommendation is in line with collective-choice theory. If corruption is considered by the society as a collective problem, then members of the society, instead of encouraging official to engage in bribes through the culturally embedded and deep-rooted expression, it would have discouraged those corrupt officials. So, it is important to work tirelessly to make corruption a collective-action problem.

A sixth recommendation may seem somewhat piecemeal and may involve encroaching on the human rights of citizens, but nonetheless makes a practical sense. Many informants suggested that the **government should intervene into the Ethio-telecom policy** that does not cooperate to yield data on employee conversations. It is recommended that this policy should be reformed and employees joining the tax and revenue sector should be willing to sign up to agreements that require their private data be available for investigation purposes if needed.

A final recommendation is a call for **promoting** professionalism and merit-based, political personnel recruitment and promotion system. Many informants have talked about the problem of nepotism, lack of political neutrality, exposure of the public service to influence of powerful networked alliances and ethnic based practices. The tax and revenue sector should be freed from political interventions, recruitment of employees should be completely based on professionalism, and assignment of staff to positions should be based on merit and professional capacity. This will be an important ingredient in the several toolboxes of instruments that might discourage corruption in the sector.

Tackling corruption in the revenue sector: researchers' view

- i. The principal-Agent theory, Institutional theory and Game theory supported our arguments that prevalence of corruption increased because of system-related variables. More specifically, limited efforts of the Principal (i.e. the Government) to institute, implement and enforce effective monitoring mechanisms of the activities of the Agent (i.e. the tax official); supply-side drivers of corruption by some business firms that increased informal competition (as explained by game theory) and the lack of effective rules that reduced accountability and the lack of system of work flow that reduced the transparency of tax official have all increased prevalence of corruption in the tax revenue sector in Ethiopia. Therefore, the government should work tirelessly to introduce a strong monitoring system and introduce a system of work that improve accountability and transparency of the sector.
- ii. A big share of the taxpayers who were not requested for a bribe by a civil servant did pay a bribe to get services from tax officials indicating that attitudinal change and legal measures should be taken not only from the demand-side, but also from the supply-side as well.
- iii. All the foregoing views of informants regarding what should be done to curb corruption in the revenue sector are indeed relevant and we, as researchers, recommend all the seven key areas of concern are taken seriously by the concerned party. More specifically, we recommend that the government should above all and urgently expedite the started and emerging paperless and digital service delivery in the revenue sector. This will cut across many problem areas including the

- problem of transparency, accountability, efficiency and value for money approaches. There is an equally urgent need to strengthen the rule of law, introduce and implement more stringent legislation to curb the loose sense of accountability in the sector.
- iv. There is, in line with what the informants suggested, a need for engaging in an exhaustive overhaul of the socio-cultural system that encourages corruption; to this end, the government should introduce a social transformation, education system to inculcate the values of work ethic, integrity, honesty and hatred for thievery. These values should be part of the curricula of the education system, from kindergarten to university levels.
- v. The knowledge, skill and professional capacity deficits on the part of the sector employees should be filled up through rigorous and regular system of trainings; taxpayers should also be exposed to systematic, regular awareness regarding the rules, laws, and legislations of the revenue sector.
- vi. Since this study is limited in spatial scope to the revenue sector at the federal and AACA, there is a need for further research of more comprehensive scale to produce a more representative, wider picture of the revenue and tax sector corruption problem in the country.

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