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Tax Practitioners: Advocates of Compliance or Avoidance?

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Abstract

Tax practitioners alongside taxpayers and tax authorities are the major actors in a tax compliance system. They assist the government to enforce tax law when it is unambiguous but exploit tax law to the detriment of compliance when the tax rules are ambiguous. Using a sample of 13 Nairobi Securities Exchange-listed manufacturing firms over the period 2000 to 2013, we exploit the introduction of transfer pricing rule to investigate how tax laws and tax practitioners have influenced corporate tax compliance in Kenya. The introduction of transfer pricing rule reduced corporate tax avoidance; however, the reduction in tax avoidance was partly offset by the action of the tax practitioners. Audit firms capacity, as measured by size, seems to matter in helping clients in tax planning. To tame tax practitioners, tax advisory services should be licensed and regulated. Furthermore, mechanism to identify and seal any possible loopholes should be instituted in the legislation process.

JEL classification codes: H2, H26

Keywords: Tax Compliance, Tax Avoidance, Transfer Pricing, Practitioners, Kenya

1. Introduction

Enforcement is the most commonly used strategy to enhance tax compliance. Strategies adopted to enhance tax compliance include: deterrence of tax evasion by detecting and punishing non-compliant taxpayers; simplifying procedures for tax compliance; appealing to taxpayers' social commitment or the importance of their tax payments and indirectly by working with the tax practitioners (Blumenthal et al., 2001). Tax authorities employ a mix of these strategies in their quest to enhance tax compliance; however, some of these strategies work to offset the effect of other strategies. For instance, tax practitioners might direct their professional skills to exploit loopholes in tax law to serve their clients' interests (Klepper et al., 1991; Klepper and Nagin, 1989).

Previous studies have examined the tax consequences of the interaction of tax practitioners and tax law; however, with little success. The results are mixed. Some studies suggests that when the law is ambiguous, tax practitioners are advocate of tax avoidance, while others find evidence that regardless of the ambiguity in the tax law, tax practitioners are advocates of tax compliance. Previous studies also used survey data collected in regions falling within one jurisdiction and within the same year of income. Furthermore, previous studies have only considered individual taxpayers with corporate taxpayers receiving little attention, if any. Corporate, unlike individual taxpayers have the ability to use complex tax planning schemes designed and operated by high end tax practitioners; services that might not be available with the lower end tax practitioners. Tax planning by multinational enterprises results in shifting of billions of dollars in profits from various

countries to tax havens. Against this background, it is natural to ask: what is the effect on corporate tax compliance of tax laws and tax practitioners in Kenya.

In a tax compliance system, tax practitioners alongside taxpayers and tax authorities are the major actors (Marshall et al., 1998). Tax practitioners assist the government to enforce tax law when it is unambiguous but assist taxpayers to exploit tax law to the detriment of compliance with negative consequences for tax equity and efficiency when the tax rules are ambiguous (Tan, 1999; Klepper et al., 1991). Ambiguity arises if a tax law is open to different interpretation leading to differences in tax consequences (Givati, 2009).

If the law provides for itemized deduction, targeted provisions or allowances and multiple tax rates that vary from product to product and across product at different stages of value addition, then tax liability can be minimized by choosing to sell the product at the stage of value addition that has the lowest tax rate. For example, evidence show that an additional tax rate in a VAT law increases tax evasion by 7 percent (Agha and Haughton, 1996).

Some studies have shown that tax practitioners lead to greater non-compliance and aggressive tax avoidance strategies (Erard, 1993; Hite & Sawyer, 1998; Klepper & Nagin, 1989; Sakurai & Braithwaite, 2003) while others have countered this findings (Finn et al., 1988; Marshall, Smith, & Armstrong, 1997). Tax practitioners' role on tax compliance seems to be driven by the taxpayers' tax compliance desires (Attwell and Sawyer, 2001). For instance, a tax practitioner might respond to a taxpayer's expectations to minimize tax liability by deciding on how much risk to take in interpreting the law to suit the need of the client, and not in the spirit in which it was intended. If the tax practitioner does not meet the client's expectation, then it faces the risk of losing the client to the competition. Thus, competition might drive tax practitioners to respond to taxpayers demand and if the tax law is open to different interpretation and professional regulation is weak, this behavior is likely to generate widespread non-compliance.

Most studies examining the effect on tax compliance of tax practitioners have used survey data collected from a single tax jurisdiction within the same tax-law regime, and hence facing the same tax law. If the role of tax practitioners in tax compliance depends on how ambiguous the tax law is, then estimating the effect on tax compliance of tax practitioners in one tax-law regime or one jurisdiction might produce unreliable results.

To avert this problem, this study exploits changes in tax-law regime. In particular, this study examines how the introduction of Transfer pricing rules in 2006 affect the role of tax practitioners in tax compliance. The policy implication of the results of this study is immediate since the aim of any tax system is to minimize non-compliance and reduce tax gap. Therefore, determining how simplifying tax laws and procedures affect tax compliance is critical.

1.1. Tax Law Reforms in Kenya

Transfer pricing, in the absence of tax laws prohibiting its use, is probably the biggest means of avoiding taxes. Transfer pricing is deliberate intraparty or interparty shifting of portable profits to a tax jurisdiction with a lower rate, through non-arm's length transactions with the intention of

minimizing the overall tax liabilities. Intraparty shifting occur within the same organization but across different departments or the same departments of an organization in different tax jurisdictions while interparty transactions occur between related parties across different tax jurisdictions. Kenya loses approximately 50 billion Kenya shillings (550 million US dollars) in transfer pricing. To curb these losses in tax revenues, Kenya introduced Transfer Pricing rules to supplement the Income Tax Act.

Kenya introduced Transfer Pricing rules in 2006 empowering the commissioner of domestic taxes to adjust profit accruing to resident companies from intercompany transactions with related parties, so as to reflect the profit that would have accrued had the transactions been conducted by independent parties at arm's length. Figure 1 presents the trend of the Tax Due-Tax Paid Ration as measures of tax avoidance.

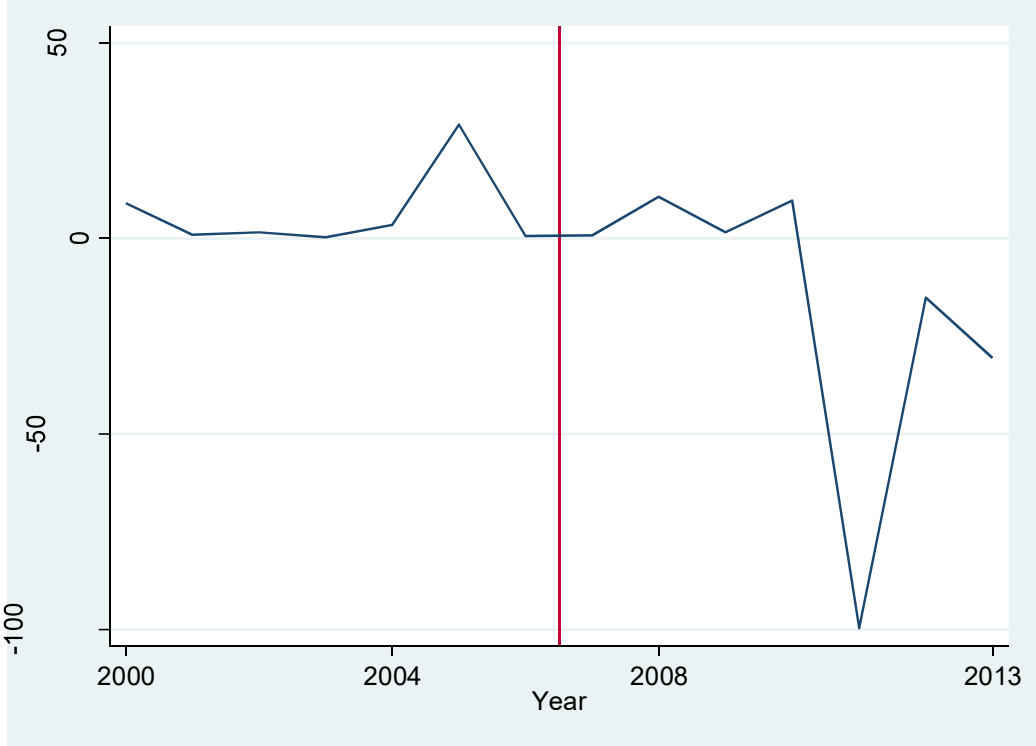

Figure 2: Trend of average tax avoidance in Kenya (1999-2013)

Accounting profit converges to the taxable profit if their ratio equals one. Therefore, the introduction of transfer pricing rules should bring the book-tax ratio closer to one. However, in practice due to changes in generally accepted accounting practices as well as differences in treatment of income, expenses, liabilities and assets for tax reporting or shareholders, the book-tax ratio might not converge to one. Tax avoidance as measured by Tax due to Tax paid shows a declined in the period following the introduction of transfer pricing rule. This implies an increased tax payment relative to tax due.

1.2. Objectives of this study

The overall objective of this study was to explore how tax laws and tax practitioners have influenced tax compliance and estimate the revenue potential and required reforms in Kenya. Specifically, this study sought to:

i. Investigate the effect on corporate tax avoidance of introduction of Transfer Pricing rules in Kenya.

ii. Investigate how tax practitioners reacted to the introduction of Transfer Pricing Rules and their effect on tax compliance in Kenya

iii. Draw policy recommendations.

2. Literature Review

This section presents both theoretical and empirical literature on the effects of tax preparers, and/or ambiguity of tax law on tax avoidance.

2.1. Theoretical Framework

Full compliance to tax law will be achieved if tax avoidance and tax evasion is kept at zero. Tax avoidance and tax evasion constitute an attempt by the taxpayers to minimize the tax liability, albeit legally and illegally, respectively. In particular, tax avoidance entails exploiting loopholes in the tax law in order to reduce one's tax liability (Sandmo, 2005). It consists in actions that do not change the individual's consumption basket (Slemrod and Yitzhaki, 2002). Previous theoretical analysis focused mainly on tax evasion with tax avoidance receiving very little attention, if any.

Theoretical analysis of tax evasion started with Allingham and Sandmo (1972) the followed by the work of Srinivasan (1973) and Yitzhaki (1974). These authors applied the simple model of rational crime of Becker (1968) to analyze tax evasion where tax evasion is taken as a strategic choice under uncertainty. The rational choice models under uncertainty posit that the taxpayer's decision to comply or not is based on a comparison of costs and benefits. If costs in the form of penalties and fines imposed if detected is greater than benefits that is savings made due to lower taxes paid, then taxpayers chooses to comply, otherwise they will not comply.

Other factors that drive compliance have been identified. Although there is no quid pro quo in taxation, the presence of government expenditures, especially those geared towards the provision of goods and services demanded by the taxpayers, may drive taxpayers to comply. Social norms such as attitudes towards tax evasion can influence tax compliance behavior. If tax evasion is condemned as immoral by the society, then taxpayers will tend to comply. A tax system that ensures equity and fairness in the treatment of taxpayers may motivate taxpayers to comply, while unfairness in the treatment of taxpayers may cause noncompliance.

2.2. Empirical Review

Tax compliance is likely to be lower in a tax jurisdiction where competition among tax practitioners is high and the tax law is open to different interpretation leading to differences in tax consequences. These are opportunities for the tax practitioners to create value for their clients, in terms of reduced tax burden, on which they compete on. Plumley (2002) also finds significant negative relationship between the use of tax preparers and compliance in a study with aggregated data.

Preparers promote tax compliance; however, greater ambiguity is related to greater non-compliance. Practitioners are operating in a competitive market, and while tax law is sufficiently ambiguous to allow them to use the law to suit their client's purpose of tax avoidance. Practitioners will direct their professional skills to exploiting legal loopholes to serve their clients' interests (Klepper et al., 1991; Klepper and Nagin, 1989).

Graham et al. (2013) investigates firms' incentives and disincentives to tax avoidance through tax sheltering by analyzing survey responses from about 600 corporate executives. They found that reputation, cash tax payment, earnings per share, and financial accounting incentives are some of the key factors in explaining why firms do or do not adopt a potential tax planning strategy.

Francis et al. (2014) investigates the effect of CFO gender on corporate tax aggressiveness. Using, among other measures, the discretionary permanent book-tax differences to measure tax aggressiveness, they documented evidence that female CFOs are associated with less tax aggressiveness as compared to their male counterparts.

Gupta et al. (2014) investigates the effect of accounting standards on multistate income tax avoidance. They found that both firm-level state income tax expense and aggregate state-level income tax collections increased following changes in accounting standards, suggesting a link between mandatory financial reporting disclosures and tax compliance behavior.

Atwood et al. (2012) examines the impact of tax system characteristics on corporate tax avoidance across countries. They found that tax avoidance is lower when required book-tax conformity is high, a worldwide approach is used, and tax enforcement is stronger. This results hold even after controlling for firm-specific factors and for country-specific factors. They control for factors affecting tax avoidance such as: performance, size, operating costs, leverage, growth, the presence of multinational operations, and industry. Country level factors used include: statutory corporate tax rates, earnings volatility, and institutional factors.

Lee et al. (2014) examine the effects of societal trusts on corporate tax avoidance and found that trusts negatively affect corporate tax avoidance, even after controlling for other determinants. The effect of trust is stronger when institutional characteristics associated with investor protection, disclosures and tax enforcement are weak.

Literature shows that the following factors: reputation, cash tax payment, earnings per share, and financial accounting incentives, CFO gender, required book-tax conformity, strength of tax enforcement, performance, size, operating costs, leverage, growth, the presence of multinational

operations determine tax avoidance. The studies reviewed did not take into consideration the possibility that tax practitioners can be advocates of either compliance or tax avoidance. This study seeks to fill this knowledge gap.

3. Methodology

3.1. The Model Specification

The overarching objective of this study is to explore how tax laws and tax practitioners have influenced revenue collections and estimate the revenue potential and required reforms in Kenya. The overall goal of this study is addressed through two specific objectives. The first objective is to investigate the effect on corporate tax avoidance of changes in Transfer Policy rules, and the second objective is to investigate how tax laws and tax practitioners affect corporate tax avoidance in Kenya. To address the first specific objective, this study exploits the discontinuity occasioned by the introduction of transfer pricing rule in 2006. To this end, regression discontinuity design is used.

Modeling the effect of tax laws and procedures on tax compliance is complex when it operates through an additional channel such as tax practitioners. Simplifying procedures for tax compliance affect tax compliance directly and indirectly through tax practitioners. Empirical evidence shows that the role of tax practitioners in tax compliance depends on the ambiguity of the tax laws. They are advocates of tax compliance when tax law is unambiguous but are advocates of the taxpayers' tax avoidance strategies when tax law is ambiguous.

In this context, to capture the influence of tax practitioners in specific, or more generally tax law and procedures, on tax compliance, the advocacy role of tax practitioners in the tax system need to be taken into consideration. This type of model allow for examination of how tax practitioners behave given the ambiguity of tax law and procedures. Thus, the model to be estimated is of the form:

$$R_{it} = \alpha_0 + \alpha_i + \alpha_t + \beta_1 X_{it} + \beta_2 P_{it} + \beta_3 Z_{it} + \beta_4 Z_{it} P_{2it} + \xi_{it} \qquad \textbf{3.1}$$

where R is a measure of corporate tax avoidance, X is a vector of firm and institutional characteristics that drives tax compliance, Z is a measure of simplification of the tax law and tax procedures following the introduction of transfer pricing rules and P is a measure ranking the tax practitioners based on size. α_i is the industry fixed effects while α_t is the year fixed effects. $\alpha's$ and $\beta's$ are parameters to be estimated. Z take the value of zero if the tax law is complex and one, elsewhere.

This is a difference in difference approach and the coefficient of interest is β_3. A positive and significant value implies that revenue collection grows with the increase in utilization of tax practitioners and it is faster for countries with simplified tax procedures and laws. Equation (3.1)

will be fitted for sub-Saharan African countries and a comparison group of selected developed and developing countries as per the World Bank classification.

The second step entail using the estimated equation of benchmarking countries to project the amount by which tax compliance and revenue collection will increase if the utilization of tax practitioners is enhanced in Kenya, for instance, through reforms in tax or regulations of tax practitioners as well as tax laws and procedures. It is appropriate to benchmark Kenya against upper middle income countries since it is envisaged in Vision 2030 that Kenya will transform herself into a middle income country with her citizens enjoying a high quality of life.

3.2. Measuring Tax Avoidance

Tax avoidance has been identified as one of the major cause of the gap between accounting profit and taxable income (Plesko, 2004). The book-tax gap have been broken down into the component attributable to accounting accruals and that attributable to tax avoidance (Desai and Dharmapala, 2006). Atwood et al. (2012) measured corporate tax avoidance as the difference between the statutory corporate tax rate times pre-tax earnings before exceptional items and the current taxes paid. We use the component of book-tax gap that is attributable to tax avoidance as well as the measure proposed by Atwood et al. (2012).

3.3. Data

The data for this study was drawn from Capital Market Authority (CMA), and the World Bank. The data was collected from published financial statements for each listed manufacturing firms in Nairobi Securities Exchange for every year over the period 2000 to 2013. This gives 182 observations or firm-years for regression analysis. World Bank World Development Indicators provide other macroeconomic control variables such as GDP deflator and consumer price index (CPI). Focusing on manufacturing firms eliminate industry related bias such as industry specific tax incentives (investment allowances) as well as ensure a sample with similar characteristics consisting of firms that follow the same or related accounting principles as well as receive the same tax incentives.

3.4. Definition and Measurement of Variables

The variables defined hereunder were used in this study.

Dependent variable

Corporate tax avoidance is the difference between the statutory corporate tax rate times pre-tax earnings before exceptional items and the current taxes paid. This measure of corporate tax avoidance captures the deviations from the fair share of tax payable. A fair share is computed as the statutory tax rate times a reasonable estimate of the firm's taxable profits. For the second measure see section 3.2.

Independent variables

Independent Variables	Measurement	Expected Sign	Literature Source
Performance	Log of profit after tax	Negative	Atwood et al. (2012), (Lee et al., 2014)
Size	Log of book value of assets	Positive	Atwood et al. (2012), (Lee et al., 2014)
Operating costs	Log of the operations cost	Positive	Atwood et al. (2012), (Lee et al., 2014)
Leverage	Measured as the ratio of debt capital to equity capital.	Positive	Atwood et al. (2012), (Lee et al., 2014)
Growth	Is the annual percentage change in sales	Negative	Atwood et al. (2012), (Lee et al., 2014)
Multinational operations	Dummy variable taking the value of one if foreign shareholding exceeds 21% and zero, otherwise.	Negative	Atwood et al. (2012), (Lee et al., 2014)
Social trust	Three dummies: first, a dummy to capture regime change in 2003, second, a dummy to capture constitutional referendum in 2005 and lastly, a dummy to capture 2007 post-election violence.	Negative	(Lee et al., 2014)

4. Results and Discussions

This section discusses the empirical results of this study. The sample used in the analysis consists of all manufacturing firms listed in Nairobi Securities Exchange over the period 2000 to 2013. It starts with descriptive statistics, followed by regression analysis.

4.1. Summary Statistics

Table 1 presents summary statistics for the variables used in this study.

Table 1: Descriptive Statistics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	**N**	**Mean**	**Median**	**SD**	**Min**	**Max**	**Skewness**	**Kurtosis**
Performance	162	9.152	8.894	1.551	5.203	12.18	0.0752	2.514
Size	176	10.34	10.17	1.425	7.490	12.63	-0.150	1.875
Operating Cost	162	9.457	9.202	1.315	4.820	12.02	-0.278	3.913
Leverage	176	13.43	11.90	10.21	-1	49.39	1.264	4.780
Growth	162	0.0855	0.0929	0.185	-1.071	0.597	-1.453	11.96
Foreign Ownership	182	29.25	23.36	26.01	0.890	77.20	0.890	2.289
Real GDP Growth	169	12.25	11.86	5.862	1.474	27.40	0.742	4.550
Book-Tax Paid Gap	175	14.04	14.14	1.546	-4.882	15.55	-10.53	129.9
Book-Tax Due Gap	182	0.614	0.514	0.244	0.473	1.205	1.969	5.002
Number of Firms	13	13	13	13	13	13	13	13

The mean performance of a firm is 9.15 with a standard deviation of 1.56 while the median performance is 8.9. The average size of a firm is 10.34 with the median being 10.17. Performance is slightly more dispersed than size. This suggests that, even though, there are differences in return to assets, firms do not deviate much from an average firm in terms of size and performance. In addition, an average firm closely matches the median firm in term of size and performance.

Operating costs follow the same pattern as the performance. The average operation cost is 9.5, which is slightly higher than the median. The mean leverage is 13.45 and the median leverage is 11.9. Leverage is widely dispersed implying that debt capital vary significantly across firms. The growth in sales of the median firm is 9.29 percent, which is slightly higher than the growth in sale of an average firm which is about 8.55%. The average book to tax paid gap is about 14.04 while the average book to tax due gap is about 0.614.

Table 2 presents the pair-wise correlation matrix for the independent variables used in this study.

Table 2: Correlation Matrix

	Audit Size	TP Rule	Related Party	Perform-ance	Size	Operation Cost	Leverage
Audit Size	1						
TP Rule	-0.22	1					
Related Party	0.03	-0.07	1				
Performance	0.22	-0.01	-0.33	1			
Size	0.40	-0.05	-0.13	0.87	1		
Operation Cost	0.13	0.02	-0.03	0.73	0.73	1	
Leverage	-0.12	0.42	-0.31	0.26	0.25	0.06	1
Growth	0.20	0.05	-0.15	0.09	-0.03	0.02	0.11

The following pair of variables: firm size and audit firm size, firm size and performance, operation costs and performance, operation costs and size has a correlation coefficient of 0.4 and therefore are highly correlated. This is a pointer of multicollinearity problem among these variables. Multicollinearity among these variables was confirmed by the variance inflation factor (VIF).

4.2. Model Estimation

The first objective of this study is to investigate the effect on corporate tax avoidance of changes in Transfer Pricing rules. To this end, regression discontinuity design is used to examine the changes in tax avoidance for firms with and without related parties' transactions following transfer pricing rule. Related party transactions are any non-arm length intercompany sales, purchases, lease, loans and asset swaps that offer a channel through which transfer pricing can occur. Figure 2 plot the regression discontinuity for the entire sample, Figure 3 presents the regression discontinuity plot for firm-years with related party transactions while Figure 4 graphs the regression discontinuity plot for firm-years without related party transaction.

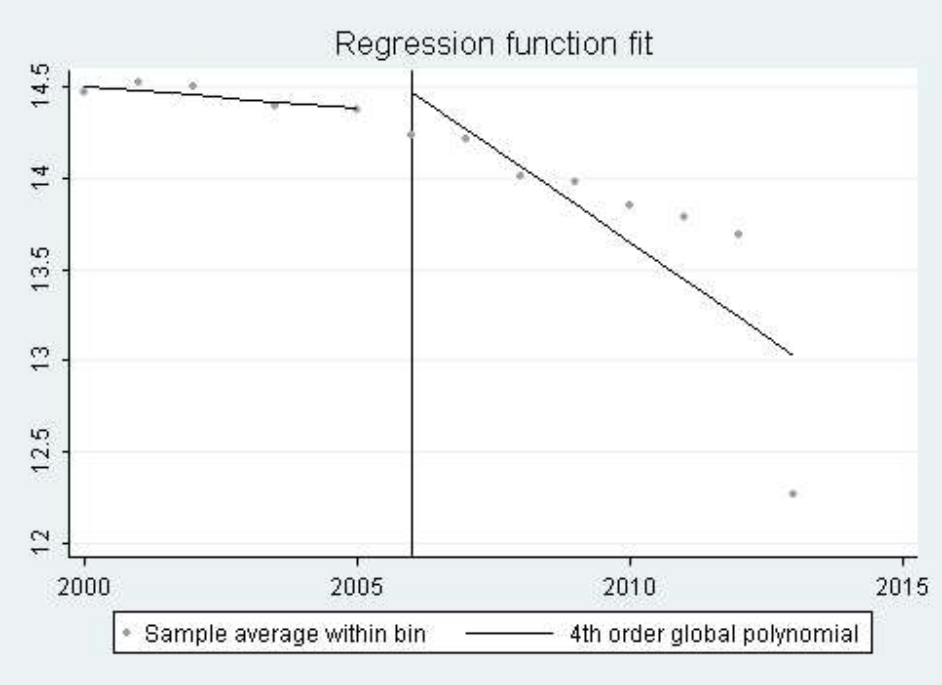

Figure 2: Regression Discontinuity Design for all firms

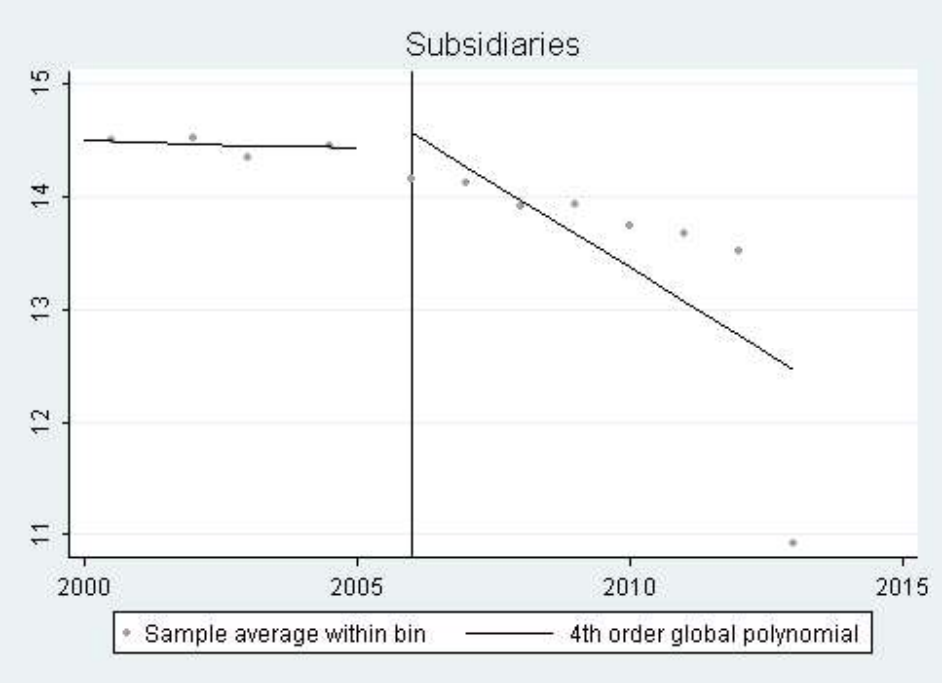

Figure 3: Regression Discontinuity Plot for firms with Related Parties

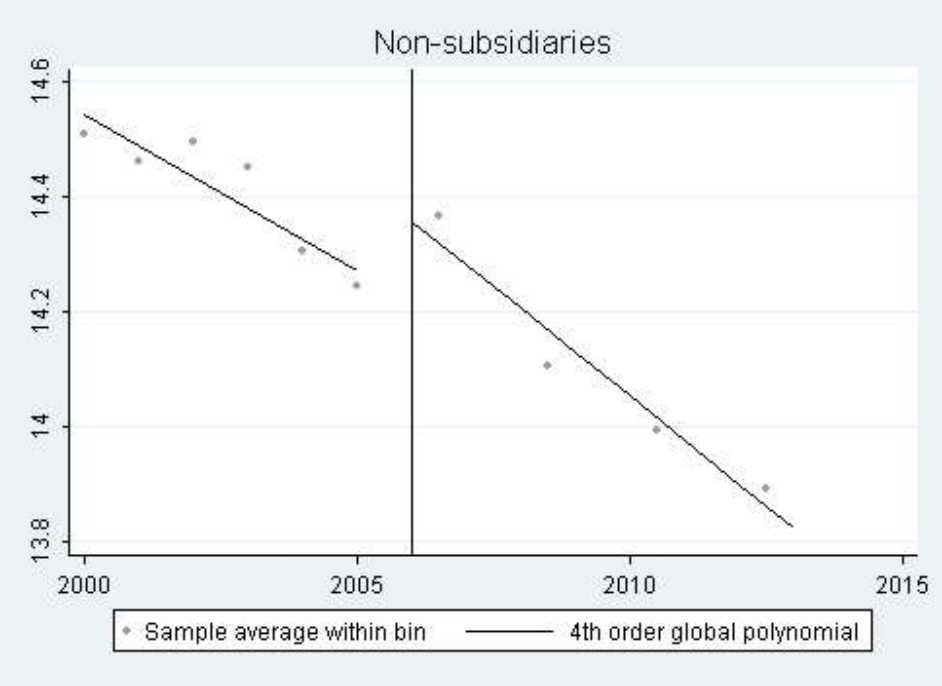

Figure 4: Regression Discontinuity Plot for firms without Related Parties

Figure 2 present regression discontinuity for the entire sample and it shows a decline in tax avoidance following the introduction of transfer pricing rule. This reduction in tax avoidance becomes more apparent when we consider only firms with related parties (such as subsidiaries, associates, parent companies, etc.) as shown in Figure 3. Figure 4 on the other hand presents the results of firms without any associated companies, implying that they might not be able to shift profit since they do not have any related parties.

Clearly there is a reduction in tax avoidance following the introduction of transfer pricing rule. This reduction is more pronounce for firm-years with related party transactions and less pronounced for firm-years without related party transactions. The regression discontinuity plot for the entire sample shows a reduction, however, this effect is watered down by firm-years without related party transactions. Thus, on average, the introduction of transfer pricing rule led to a decline in tax avoidance.

The second objective is to investigate how tax laws and tax practitioners affect corporate tax avoidance in Kenya. This objective is implemented using a difference in difference approach. Least squares dummy variable regression with year effects were used to estimate equation 3.1. Heteroskedastic robust standard errors clustered at industry level are reported. The result of this estimation is presented in Table 4.3.

Table 3: Empirical Results

	(1)	(2)	(3)	(4)
VARIABLES	Book-Tax Paid Gap	Book-Tax Paid Gap	Book-Tax Due Gap	Book-Tax Due Gap
Transfer Pricing Rule	-1.072***	-1.247***	-0.712***	-0.709***
	(0.117)	(0.154)	(0.00470)	(0.00555)
Interaction	0.0116	0.0149	0.00197*	0.00193*
	(0.0276)	(0.0325)	(0.00106)	(0.00104)
Related	-0.0299	-0.0408	-0.00748	-0.00731
	(0.152)	(0.147)	(0.00796)	(0.00807)
Performance	0.0672***	0.0670***	-0.000965	-0.000949
	(0.0193)	(0.0191)	(0.00167)	(0.00177)
Size	-0.0728**	-0.0782**	-0.00800***	-0.00789***
	(0.0365)	(0.0368)	(0.00224)	(0.00256)
Operating Cost	-0.235***	-0.209***	-0.00152	-0.00185
	(0.0416)	(0.0383)	(0.00496)	(0.00517)
Leverage	0.0115***	0.0111***	0.000761***	0.000765***
	(0.00341)	(0.00339)	(8.69e-05)	(8.76e-05)
Growth	0.0864	0.0986*	-0.00947***	-0.00956***
	(0.0591)	(0.0532)	(0.00314)	(0.00324)
Audit Firm Size	0.0728**		-0.00175*	
	(0.0358)		(0.000942)	
Audit Firm Size = 1		-0.323**		0.0244***
		(0.141)		(0.00506)
Audit Firm Size = 2		0.249**		0.0162**
		(0.108)		(0.00791)

Audit Firm Size = 3		-0.134		0.0202***
		(0.222)		(0.00598)
Audit Firm Size = 4		0.281*		0.0143***
		(0.145)		(0.00540)
Constant	16.25***	16.26***	1.322***	1.300***
	(0.752)	(0.632)	(0.0105)	(0.0142)
Observations	115	115	117	117
Number of Firms	13	13	13	13
Overall R-sq	0.978	0.980	0.992	0.992

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Column 1 and column 2 present the results for regression using Book to Tax Paid gap as a measure of tax avoidance. Column 3 and 4 presents the regression results where tax avoidance is proxied using Book to Tax Due gap. The introduction of transfer pricing rule has effect on tax avoidance regardless of the proxy of tax avoidance used. However, when Book-Tax Paid gap is used to measure tax avoidance, the effect of the introducing of transfer pricing rule on tax avoidance is slightly higher. In contrast, using Book-Tax Due gap to proxy tax avoidance gives slightly lower coefficients. These effects are significant at 1 percent level of significance. The results based on Book-Tax Due gap as proxy tax avoidance should be treated with caution since tax due is volatile as firms that overpay in one year will have lower tax due in subsequent year(s). Thus, this measure is likely to be erratic and might not reflect the actual changes in tax liabilities.

The introduction of transfer pricing rule reduced tax avoidance, on average, by between 0.71 to 1.25 percent. This translates to a reduction in tax avoidance of between Kenya shilling 2 million to Kenya shillings 3.5 million per firm[1]. These gains are higher the smaller the size of audit firms as shown by the interactions of transfer pricing and audit size, which is positive. This suggests that large tax practitioners reacted to the introduction of transfer pricing rule; hence part of the gain from the introduction of transfer pricing rule was offset by these reactions. These reactions cost about one million Kenya shillings per firm in lost revenues[2].

[1] The estimates is computed using exp(0.71*1) and exp(1.25*1).

[2] This estimates is based on the average interaction term of 1.43 and is computed as exp(1.43*0.0019).

The effect of audit firm size is not clear and it depends on the proxy of tax avoidance used. When book to tax due gap is used as a proxy of tax avoidance audit firm size has a negative effect when included as a categorical variable. When audit firm size is included as dummies, older firms' categories relative to the youngest firms' category has a positive effect on tax avoidance. Compared to the youngest firm category, the effects are higher for audit firms in size category 1 and 3 compared to firms in audit size category 2 and 4. This suggests non-linearity in the effect when audit firm size is included as dummies instead of categorical variable.

When the book to tax paid gap is used, the audit firm size (as a categorical variable) has a positive effect on tax avoidance. When it is included as dummies, firms in category 2 and 4 relative to youngest firms' category have a positive effect on tax avoidance. However, firms in category 1 and 3 compared to youngest firms' category have a negative effect on tax avoidance. Thus, the effect of tax practitioners on tax avoidance is not clear. This could be due to tax practitioners' role as advocates of either tax avoidance or tax compliance.

The results presented thus far suffer from multicollinearity problem as evidenced by high correlation coefficients in the correlation matrix in Table 2. Multicollinearity problem was confirmed using variance inflation factor (VIF). The problem of multicollinearity was addressed by centering the all the affected variables excluding the interaction term. However, this transformation did not address multicollinearity. Hence, variables with multicollinearity problems were dropped from the analysis. Table 4 present the regression results for the model that corrects for multicollinearity.

Table 4: Empirical Results with multicollinearity problem corrected

	(1)	(2)	(3)	(4)
VARIABLES	Book-Tax Paid Gap	Book-Tax Paid Gap	Book-Tax Due Gap	Book-Tax Due Gap
Transfer Pricing Rule	-0.811***	-1.134***	-0.699***	-0.699***
	(0.132)	(0.191)	(0.00462)	(0.00675)
Interaction	0.0320	0.0339	0.00214***	0.00221***
	(0.0461)	(0.0498)	(0.000780)	(0.000764)
Related	-0.128	-0.127	-0.00682	-0.00677
	(0.172)	(0.176)	(0.00480)	(0.00466)
Performance	0.0481**	0.0521**	-0.00141	-0.00130
	(0.0240)	(0.0208)	(0.00167)	(0.00173)

Leverage	0.00198	0.00231	0.000190**	0.000199**
	(0.00150)	(0.00183)	(8.09e-05)	(8.40e-05)
Growth	0.0102	0.0503	-0.00991	-0.00992
	(0.0666)	(0.0483)	(0.00615)	(0.00618)
Audit Firm Size	0.0194		-0.00189*	
	(0.0473)		(0.000981)	
Audit Firm Size = 1		-0.663***		0.00249
		(0.0778)		(0.00413)
Audit Firm Size = 2		0.0930		-0.00287
		(0.105)		(0.00313)
Audit Firm Size = 3		-0.586***		-0.00287
		(0.174)		(0.00701)
Audit Firm Size = 4		0.0125		-0.00486
		(0.150)		(0.00448)
Constant	13.81***	14.11***	1.230***	1.226***
	(0.243)	(0.148)	(0.0153)	(0.0154)
Observations	128	128	130	130
Number of Firms	13	13	13	13
Overall R-sq	0.966	0.971	0.990	0.990

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The regression results presented in Table 4 are substantively similar to those in Table 3. The introduction of transfer pricing rule reduced tax avoidance by between 0.7 to 1.1 percent, depending on the measure of tax avoidance used. Similarly the interaction term suggest that part of the gain from the introduction of transfer pricing rule was offset by the actions of tax practitioners.

When audit firm size is included as a categorical variable it is positive and insignificant under the book to tax paid gap measure of tax avoidance while it negative and significant at 10 percent for the book to tax due measure of tax avoidance. In contrast, when audit firm size is included in the regression as dummies the coefficients are only significant under the book-tax paid measure of tax avoidance. Audit firms in size category 1 and 3 compared to youngest firms' category have a negative relationship. In order to ensure that the results presented are robust, two measures of tax avoidance were used, multicollinearity was corrected and heteroskedasticity robust standard errors were reported. Thus, the results presented here are robust to different model specifications.

5. Conclusion and Policy Recommendations

5.1. Conclusion

This study had two objectives. The first objective was to investigate the effect on corporate tax avoidance of introduction of Transfer Pricing rules in Kenya. The second objective was to investigate how tax practitioners reacted to the introduction of Transfer Pricing rules and its effect on tax compliance in Kenya. Two measures of tax avoidance, book to tax paid gap and book to tax due gap, was used. The component of book to tax due gap related to tax avoidance was used.

To attain the objectives of this study, quasi-experiment methods, that is regression discontinuity design and differences in difference approach was used to analyses annual data of manufacturing firms listed in Nairobi Securities Exchange spanning the period 2000 to 2013. Generally, the model fit the data very well. The introduction of transfer pricing rule reduced tax avoidance for firms in our sample; however, these gains were partly offset by the reactions of tax practitioners to the changes in the tax law. This shows that tax practitioners are advocates of tax avoidance. Bigger audit firms tend to manifest this behavior than young audit firms suggesting that capacity is important in running tax avoidance or tax sheltering schemes.

5.2. Policy Recommendation

In view of the results documented in this study - that tax practitioners are advocates of tax avoidance - tax advisory services should, subject to further corroborating evidence, be licensed and regulated to rid off tax malpractices. In addition, tax legislation process should be reviewed with a view of including a pre-enactment stage where the proposed tax legislation is thoroughly reviewed to identify and seal any possible loopholes, remove any ambiguities and ensure that multiple interpretation of the law is minimized.

5.3. Limitation and areas for further research

This study has two limitations. First, the study used a sample of manufacturing firms listed in Nairobi Securities Exchange. This yielded a panel dataset with 13 firms observed over the period 2000 to 2013 giving 182 observations. Thus, the sample used is relatively small and the hypothesis examined here need to be reexamined with a larger dataset in order to confirm whether it can be generalized. Second, this study used audit firm size to proxy tax practitioners. This design might results in biased estimates of the effect of tax practitioners on tax avoidance. An approach that

estimate this effect by comparing a group that use tax advisory services with one that do not use, is likely to produce reliable estimates.

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