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DOES INDUSTRY STRUCTURE AFFECT THE RELATIONSHIP BETWEEN FIRM CHARACTERISTICS AND PERFORMANCE OF LAW FIRMS IN KENYA?

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Abstract

Explaining and often predicting organizational performance is a primary research objective in the field of strategic management that need to be addressed because performance improvement is at the heart of strategic management. The study argues that the role of industry structure in the relationship between firm characteristics and performance has not received conclusive empirical backing. The study was contextualized in law firms in Kenya in which these variables have not been empirically tested. The main objective of this study was to determine the influence of industry structure on the relationship between firm characteristics and performance of law firms in Kenya. To achieve this objective, the corresponding hypothesis was formulated and tested at 95 percent confidence level. The study was guided by resource based theory, the institutional theory and industrial organizational theory. Through a cross-sectional descriptive survey, data was obtained using a semi-structured questionnaire. The questionnaire was administered to a sample of 379 law firms spread across the country out of which 356 were filled and returned, representing a response rate of 93.93 percent. The hypothesis was tested using the hierarchical analysis used to test moderating effects. The findings show that industry structure significantly moderates the relationship between firm characteristics and performance. Results of industry structure independently on performance were also statistically significant. The study contributes to managerial practice and offer direction for policy makers and the owners of the law firms in Kenya since managers will use the findings of this study to monitor the crucial performance drivers in their law firms with regard to industry structure and strategy. The study therefore recommends that future studies should consider utilizing multiple methodologies such as applying mixed methods of research to help identify the key factors of firm strategy and operationalize their study in a different approach. The aim behind using different statistical techniques and /or plural methodologies is to validate and further strengthen the existing research findings.

Key words: Firm Characteristics, Industry Structure, Firm Performance, Law firms in Kenya

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1. INTRODUCTION

Organizational performance is the primary concern in practice and research of strategic management (Ombaka, Muindi & Machuki, 2015). Industry structure is defined as a set of factors that directly influences a firm and its competitive actions as well as responses. Galbreath and Galvin (2008) argued that industry structure has a strong influence in determining the competitive rules of the game as well as strategies potentially available to the firm. The combined effect of firm characteristics, strategy and industry structure on organizational performance is the main focus of this study.

Porter (2007) suggests that industry structure is manifested in the strength of five competitive forces which include threat of new entrants, threat of substitute goods, bargaining power of suppliers as well as customers and rivalry among existing competitors. These forces determine an industry's long-run profit potential because the forces shape the division of value among industry actors—whether profit is constrained by substitutes or new entrants, bargained away by customers or suppliers, or competed away by rivals. By studying these forces, a firm finds a position in an industry where it can influence the forces in its favor or buffer itself from the power of the forces (Hitt, Ireland & Hoskisson, 2011).

An industry has a direct effect on the firm's strategic competitiveness and ability to earn above average returns (Grant & Jordan, 2012). The arena in which competition takes place is the industry in which a company and its rivals vie for business. Each industry has a distinctive structure that shapes the nature of competitive interaction that unfolds there. Understanding the underlying structure of a company's industry, now and in the future, is a core discipline in strategy formation (Galbreath & Galvin, 2008).

Law firms in Kenya operate in the legal profession as an industry constituted as a sole proprietorship or partnership. This industry is guided by rules and regulations that inform their conduct. However, different firms which can be pure partnership or limited partnership are characterized by different attributes including size, ownership structure, age and even the services they render. There is variation in organizational performance across the industry. While some law firms have been performing well, others have found it difficult to operate in the industry leading to their dissolution and in some cases debarment (LSK, 2015). The law firms are faced with a myriad of challenges, key among them are the emergence and the entry of foreign law firms necessitating adoption of strategic management practices within the industry (Brock, Yaffe & Dembovsky, 2006). There is evidence of crafting and implementing of strategies such as mergers and acquisitions, outsourcing, diversification and marketing strategies that have also been employed by various law firms.

Several past studies (Umukoro, 2009; Kisengo & Kombo, 2012; Demsetz & Villalonga, 2001) have been done along varied conceptualization of the variables in the current study, but there are still several conceptual, contextual and methodological gaps that this study seeks to address. Conceptually, the debate on the influence of industry structure on the relationship between firms characteristics and organizational performance is inconclusive given that empirical studies have yielded inconsistent results ranging from negative (Umukoro, 2009) to positive (Kisengo & Kombo, 2012). Contextually, several studies of how firm characteristics influence organizational performance have been done. Globally, strategic management research in the legal profession is rare. Few of these studies (Baker & Parkin, 2006) are conceptual

reviews of literature on globalization of the legal profession.

The legal profession in Kenya continues to grow and the industry faces a myriad of managerial challenges. However, very little strategic management research is documented in the industry.

The debate on the moderating role of industry structure on the relationship between firm characteristics and performance is yet to receive much empirical attention. These are the gaps that this study sought to address by answering the question as to what is the influence of industry structure on the relationship between firm characteristics and organizational performance of Law firms in Kenya.

2. Literature Review

This study was anchored on the Resource Based theory (Wernerfelt & Montgomery, 1988) institutional theory (North, 1991; Scott, 2004), and the Industrial organizations economics theory (Bain, 1951). Institutional theorists postulate that structures, schemes, rules, norms and routines become established as authoritative guidelines for social behavior and combined in particular patterns may lead to performance. Further, Budiman, Lin, & Singham (2009) theorize that if an organization is to perform well, its structures, strategies, systems, shared values, skills, staff as well as styles need to be aligned and mutually reinforcing. The industrial organization economics theory which informs the structure-conduct-performance (SCP) paradigm, (Mason, 1939; Bain, 1951) suggests that the industry structure in which an organization operates influences the conduct of the firms which in turn influences performance. The SCP paradigm has an equivalent of the Environment-Strategy-Performance (ESP) paradigm which as such is anchored in the organization strategy theory.

Empirical evidence has been sought from previous works on the key research variables. Ogollah et al., (2011) argues that understanding the forces that shape competition in an industry is the starting point for developing strategy. It reveals the most salient aspects of the competitive environment and the crucial constraints to overall profitability. It highlights the industry changes that pose the greatest threats and opportunities. Industry structure also provides a baseline for sizing up a company's strengths and weaknesses (Brock et al., 2006): where does the company stand versus buyers, suppliers, entrants, rivals, and substitutes?

Porter(2007) gives an overview of how understanding of industry structure guides managers toward possibilities for strategic action, including positioning the company vis-à-vis the current competitive forces; anticipating shifts in the forces and exploiting them; shaping the balance of forces to create a new more favorable structure or one that favors the company. Industry structure reveals insights for positioning. Here, strategy can be viewed as building defenses against the competitive forces or as finding a position in an industry where the forces are weakest.

Spanos, Zaralis and Lioukas (2004) argues that while the industry in which an organization operates influences its performance, firms in the same industry perform differently due to individual firm characteristics. Organizational internal competences, resources, shared values, skills, knowledge and structures will play a pivotal role in crafting strategy that enables organizations perform better than competition. It can thus be argued that industry structure has a moderating role on the relationship between firm characteristics and strategy.

3. Methodology

The study was a descriptive cross sectional survey. Descriptive cross sectional surveys are types of research designs where data is be collected across a number of organizations at one point in time. These studies are carried out once and represent a snap shot of one point in time. The target population of this study consisted of all Law firms in Kenya as at 30th December 2015. According to the Law Society of Kenya (2015) there were 7132 law firms in Kenya, practicing in various counties. These law firms practice in different areas of law.

For this study, the sample size for such cross sectional survey was determined according to three factors (Kate, 2006). These are the estimated percentage prevalence of the population of interest-10%, the desired level of confidence and

the acceptable margin of error. In a study involving a simple stratified random sample, as indicated by (Yamane 1967), where the sample size had an error of 5% with a confidence coefficient of 95%, the sample size required can be calculated according to the following for formula below.

$$n = N / [1 + N (e)^2]$$

$$n = 7,132 / [1 + 7,132 * 0.05^2]$$

$$n = 379$$

Where:

N= Target Population

n=required size

e= margin of error at 5% (standard value of 0.05)

Table 1: Sample Size

Strata	Target population	Percentage	Sample size
47 counties in Kenya	7132 law firms	100	379 law firms

Source: LSK, (2015).

The study applied computer to generate random numbers in order to obtain sample size that is applicable to draw conclusions since high population was involved. This study collected primary data. The data was largely quantitative in nature. The data was collected using a semi structured questionnaire. Tests of statistical assumptions tested for regression assumptions to establish if the data met the normality, linearity, independence, homogeneity and collinearity assumptions in this study. Multiple regression was used to test the relationship between two variables.

On the effect of industry structure on the relationship between firm characteristics

and organizational performance, the following analytical model was used;

$$S = \beta_{01} + \beta_1 X + \beta_2 Z + \beta_3 X.Z + \epsilon_1 \dots \dots \dots (ii)$$

Where,

S=Performance

$\beta_0, \beta_1, \beta_2$, are coefficients

β_2 = coefficient of interaction term

X_1 = firm characteristics,

XZ = interaction term (firm characteristics*industry structure)

ϵ_1 = error term.

4. Results

The moderating effect was determined by testing the effect of the independent variable on the dependent variable when the moderator is introduced. However, prior to performing this analysis, the direct link between industry structure and performance was first established. Therefore, the second hypothesis of this study was broken down into two parts – the first part (**H_{2a}**) sought to establish if industry structure has a statistically

significant effect on performance, while the second part (**H_{2b}**) sought to determine if the moderating effect of industry structure on the association between firm characteristics and performance is statistically significant.

The effect of industry structure on performance was established through simple linear regression using the composite indices computed for both industry structure and performance. The results were as presented in Table 2.

Table 2: Regression Results of Industry Structure and Performance

a) Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
Industry structure	.523 ^a	.274	.272	.58386		
b) ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
Industry structure	Regression	47.032	1	47.032	137.967	.000 ^b
	Residual	124.768	354	.341		
	Total	171.800	355			
c) Combined coefficients						
Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	1.109	.170			6.522	.000
Industry structure	.686	.058	.523		11.746	.000

a. Dependent Variable: Performance

a. Predictors: (Constant), Industry structure

Source: Field Data, (2018)

The results in the model summary show that R=.523 suggesting that there exists a moderate relationship between industry structure and performance. Coefficient of determination $R^2=.274$ implies that industry structure influence performance

by 27.4% with other factors not considered in the model influencing 72.6%. This is significant since $p\text{-value} < 0.05$ at 95% confidence level. The F value is 137.967 and $p=0.00 < 0.05$ depicting a significant model. Results of the coefficients shows that a unit increases in industry structure will cause .686 increase in performance.

This implies industry structure is a good predictor of performance of law firms in Kenya. The findings, thus, were sufficient to support the influence of industry structure on performance, thus the sub-hypothesis (H_{2a}) was supported.

The regression equation can be written as follows;

$$Y = 1.109 + .686IS$$

Where Y = Performance, IS= Industry structure

After establishing the direct effect of industry structure on performance, the study next sought to determine the extent to which these industry structure influence the association between firm characteristics and performance through

the hypothesis that **H_{2b}: Industry structure have a statistically significant moderating effect on the association between firm characteristics and performance of law firms in Kenya.** The composite index was computed for both firm characteristics, industry structure and performance and the hypothesis tested through Hierarchical regression analysis. In step one, firm characteristics was regressed on performance. In step two, firm characteristics were regressed on industry structure. In step three the interaction term between firm characteristics and industry structure was introduced. The moderation effect is confirmed when the effect of interaction term is statistically significant. The results were as presented in Table 3.

Table 3: Moderation Results of the Effect of Industry Structure on Firm Characteristics and Performance

a) Model Summary										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1 Firm Characteristics	.439 ^a	.192	.190	.61573	.104	1.856	3	352	.150	
2 Firm Characteristics, Industry structure	.523 ^a	.274	.272	.58386	.281	4.634	2	353	.150	
3 Firm Characteristics, Industry structure interaction	.761 ^a	.579	.578	.39456	.385	6.490	5	350	.000	
b) ANOVA										
Model		Sum of Squares		df	Mean Square	F	Sig.			
1	Firm Characteristics	Regression	3.048	1	1.016	1.856	.030			
		Residual	26.277	354	.547					

		Total		29.325	355			
2	Firm Characteristics ,Industry structure	Regression		14.961	2	4.980	8.823	.000
		Residual		22.007	353	.446		
		Total		28.967	355			
3	Firm Characteristics, Industry structure interaction	Regression		14.349	5	1.794	6.490	.000
		Residual		14.975	350	.348		
		Total		29.325	355			
c) Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.803	.314		2.559	.013		
	Firm Characteristics	.360	.086	.426	4.192*	.000	.966	1.035
	Performance	.290	.106	.278	2.740*	.008	.966	1.035
2	(constant)	.740	.319		2.321*	.023		
	Firm characteristics	.357	.086	.421	4.148*	.000	.964	1.037
	Industry structure	.314	.108	.301	2.905*	.005	.925	1.081
	Firm Characteristics and industry structure interaction	.675	.068	-.354	-3.957*	.026	.958	1.044

a. Predictors: (Constant), Industry structure, firm characteristics

b. Predictors: (Constant), Industry structure, firm characteristics, Interaction term between industry structure and firm characteristics

c. Dependent Variable: Performance

Source: Field Data, (2019)

The results in Table 3 on the moderating effect of industry structure on the association between firm characteristics and performance was computed using three steps. In model one the result shows that the association between firm characteristics and performance was significant ($R = .439^a$, $R^2 = 0.192$, $F = 1.856$, $P\text{-value} < 0.05$). In model two ($R = .523^a$, $R^2 = 0.274$, $F = 8.823$, $P\text{-value} < 0.05$) which was significant and in model three ($R = .761^a$, $R^2 = 0.579$, $F = 6.490$, $P\text{-value} < 0.05$) which is significant, suggesting that there

was a progressive increase in the value of the coefficient of variation in each step thus portraying an influence of industry structure.

Coefficient of determination $R^2 = 0.579$ implies that industry structure influence the association between firm characteristics and performance by 57.9%, suggesting a positive and strong moderating influence. The value of the interaction term (FC * IS) had a significant influence ($\beta = .675$, $t = -3.957$, $P < 0.05$) thus confirming a moderation effect of industry structure on the association between firm

characteristics and performance. The study therefore supports the hypothesis that industry structure moderates the effect of firm characteristics on performance of law firms in Kenya.

The moderating equations for firm characteristics, industry structure and performance can thus be written as:

$$Y = .803 + .360X_1$$

$$Y = .740 + .357X_1 + .314Z$$

$$Y = .803 + .360X_1 + .314Z + .675X.Z$$

Where: Y = Performance; X= Firm characteristics ; Z=Industry structure; X.Z= Firm characteristics and industry structure interaction.

The study supported the hypothesis that the industry structure moderate firm characteristics and performance relationship. The relatively high change in R^2 was an indication that the interaction term had significant effect to explain the relationship. While the industry in which an organization operates influences its performance, firms in the same industry perform differently due to individual firm characteristics (Spanos, Zaralis, & Lioukas, 2004). Organizational internal competences, resources, shared values, skills, knowledge and structures will play a pivotal role in crafting strategy that enables organizations perform better than competition.

The findings support the industrial organization economics theory which postulates that the industry in which a firm operates dictates the strategy to be chosen by a firm thus influencing performance (Barney, 1991). An industry has a direct effect on the firm's strategic competitiveness and ability to earn above average returns (Grant & Jordan, 2012). Therefore understanding the underlying structure of a company's industry, now and in the future, is a core discipline in strategy formation (Galbreath & Galvin,

2008). In order to achieve this objective, a corresponding hypothesis H_2 which states that industry structure moderates the effect of firm characteristics on the performance of law firms in Kenya was stated and tested.

Weerawardena, O'Cass and Julian (2006) findings supports the current study by arguing that firms operating within a competitive industry tend to pursue innovative ways of performing value-creating activities, which requires the development of learning capabilities. It can therefore be argued that industry structure of the firm plays a key role in the relationships between firm characteristics and firm performance especially the law firms in Kenya. Therefore, the current study concludes that industry structure has a moderating role on the relationship between firm characteristics and firm performance. This implies that firm characteristics depend on industry structure in determining the performance of law firms in Kenya.

5. Conclusions

The objective was to determine the influence of industry structure as a moderating factor on the relationship between firm characteristics and performance. Generally it is concluded that there was a significant evidence to support the fact that industry structure is a key moderating factor to be considered by a firm that has an objective of fostering its performance. This is as shown by its significant values of measurement. The study contributes to policy implications in terms of decision making in all law firms in Kenya and even operating at international level. Legal industry policy makers like the government and non-governmental bodies should consider firm characteristics, industry structure and strategy to improve the performance of law firms since the integration of the three factors were found to be significant in influencing performance. Law firms in

Kenya contribute to economic growth, creates employment and in the provision of justice in the legal industry and, therefore, the results of this study will assist policymakers to make sound decisions regarding which variables to focus on in order to improve performance.

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