




CEO CHARACTERISTICS AND FIRM PERFORMANCE: EVIDENCE FROM TOURISM AND FINANCIAL FIRMS LISTED ON BOTSWANA STOCK EXCHANGE

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ABSTRACT

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The paper examined the effect of Chief Executive Officers' characteristics on the performance of listed tourism and financial firms in Botswana, for the period of 2009 to 2019. The Chief Executive Officers' gender, tenure, nationality, share ownership, and board directorship were the independent variables while Return on Assets and Return on Equity being proxies of profitability, formed the dependent variables. Firm's size and leverage were the control variables. Quantitative research design was employed and panel data from annual reports was analysed using correlation and regression techniques. Tenure and share ownership had a significant positive association with Return on Assets while gender, nationality and directorship had a significant negative correlation. No single independent variable had a significant association with Return on Equity. Regression results revealed that nationality had a significant negative effect on Return on Assets while share ownership had significant positive impact. The results of regression also indicate that tenure had a significantly positive influence on Return on Equity. Gender and board directorship of Chief Executive Officers did not appear to have a role in influencing the performance of firms. These results have implications on where firms' Chief Executive Officers should be sourced, how they should be remunerated and how long they should be kept on the position.

Contribution/Originality: This is the only study that has investigated the effect of CEOs' characteristics on firm performance in the financial and tourism sectors in Botswana. The two sectors have been identified as instrumental in driving economic diversification in the country that makes the contribution of this study to literature notable.

1. INTRODUCTION

Chief executive officers (CEOs), managers who hold the most senior and highest paid position in a firm, play a significant function in the success of the firm. The attributes of CEOs, their gender, citizenship, education, or length of service, have been found to have some effect on firm performance in many studies. For example, the effect of CEO attributes on firm performance, also referred to as the CEO effect explained 38.5 per cent of the variance in return on assets (ROA), 35.5 per cent of variance in return on sales (ROS) and 46.4 per cent of variance in market-to-book value of common stock (MTB) in a study by Hambrick and Quigley (2014). Although other studies found no effect from some of the attributes such as gender (e.g. Kaur and Singh (2018)) or working tenure (e.g. Li and Singal (2017)), these contradictions have been attributed in part, to differences in a firm's internal variables. Internal

variables that include, firm size and the ability of capital (Fujianti, 2018), and entrenched cultures (Hambrick & Quigley, 2014) constrain the CEOs' actions.

Although studies on CEO effects are well-documented in extant literature (Li & Singal, 2017), and are gaining traction, based on the assumption that CEOs play key strategic roles in the performance of the firm (Kokeno & Muturi, 2016), no study has yet determined the influence of CEO attributes on firm performance in the financial and tourism sectors in Botswana. Financial services (banking, insurance, and business services) and tourism (comprised of trade, hotels, and restaurants) are considered important sectors, earmarked for driving economic diversification efforts in Botswana. The two sectors have consistently averaged around 10 per cent contribution to Gross Domestic Product from the year 2005 (Sekwati, 2010). The banking sub-sector, for instance, which dominates the financial sector, has been the driving force in the growth of the Botswana Stock Exchange (BSE) (Moffat, 2009). The sector leads in market capitalization, sustaining profit growth in the financial sector (Moffat, 2009).

Alternatively, the tourism sector in Botswana is one of the fastest growing sectors in the country (Stone, Stone, & Mbaiwa, 2017). Because the sector faces higher risks and uncertainty compared to other economic sectors (Williams & Balaz, 2015) in general, and also relies on discretionary spending, which is sensitive to economic downturns (Li & Singal, 2017), now fuelled by COVID-19, a global respiratory pandemic, amongst other factors, the role of the CEOs in driving financial based performance is vital.

Given the increasing relative contribution to the economy of the financial and tourism sectors, the expectation would be that the firms within the two sectors would identify further sources of growth to sustain their operational performance and expand their profit levels.

Therefore, the role of the CEO in this regard, prompted the current empirical investigation. By using the upper echelon theory (UET) as the theoretical background, this study investigated the effect of CEO attributes on the performance of firms in the two sectors. Specifically, the study examined: (1) the attributes of CEO experience, measured by gender, tenure, ownership, nationality, and directorship, in the two sectors, and (2) the effect of these attributes on firm performance (measured by ROA and ROE). The annual reports of two firms in the tourism sector and five firms in the financial sector that are listed on Botswana's Stock Exchange were used as the sample for consideration. The years of performance considered were from 2009 and 2019.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1. Upper Echelon Theory

Hambrick and Mason (1984) seminal upper echelon theory (UET) guided the theoretical background of this study. The theory advances that the characteristics of senior management or top management teams (TMTs) (also known as the upper echelon of a firm), can influence the decisions made and practices adopted by the organization (Hambrick & Mason, 1984; Oreg & Berson, 2018). Proponents of the theory have used it at two levels (Oreg & Berson, 2018). Studies based on the first view, postulate that senior leaders' 'make decisions based on their personal interpretations of the organization and its environment.

These decisions, in turn, shape the organization and influence its performance' (Oreg & Berson, 2018) or strategic choices (Hambrick & Mason, 1984). This view articulates the influence of senior leaders' characteristics, such as demographic profiles, on organizational performance, amongst other outcomes (Hambrick & Mason, 1984). The second set of studies suggests that senior leaders influence the process by which employees are recruited in the organization (Oreg & Berson, 2018).

According to Oreg and Berson (2018), leaders' influence the attraction, selection, and turnover decisions in the organization. Despite the importance of both approaches in upper echelon literature, the former view of the theory, which dominates studies in this field, was used as it is relevant to the current study, looking at the influence CEOs have on financial performance.

2.2. Firm Financial Performance and CEO Attributes

In examining firms' financial performance, scholars often use accounting-based measures of profitability, such as return on assets (ROA), return on equity (ROE) or net profit margin (NPM), market-based measures (e.g. Tobin's Q and stock return) or growth measures (e.g. sales growth) (Combs, Crook, & Shook, 2005).

Although the three measures are widely used indicators of financial performance, which represent distinct dimensions of firm performance (Li & Singal, 2017), this study focused only on the two accounting measures of ROA and ROE, for analyzing the past performance of firms in the tourism and financial sectors of Botswana. Accounting-based measures reveal the past or short-term financial performance of a firm (Combs et al., 2005). ROA is a ratio used to measure the ability of a firm to generate profits. The larger the value of ROA, the greater the profits realized (Satriyo & Harymawan, 2018). In most cases, it is calculated as net income divided by total assets (Jewell & Mankin, 2012). Despite being calculated differently, ROA is one of the most popular and useful financial ratios (Jewell & Mankin, 2012). Alternatively, ROE is a ratio used to assess the net profit generated in comparison to the capital invested by the firm (Satriyo & Harymawan, 2018). The ratio measures the ability of a firm to generate income from the capital invested by its shareholders. Both ratios are useful to this study as they measure the ability of a firm's profitability performance in past years as reflected in the firms' annual reports. The two ratios have been used elsewhere to assess firm performance in the tourism sector (e.g. (Li & Singal, 2017; Madanoglu & Karadag, 2008)) and in the financial sector (Davydenko, 2010; Dawood, 2014; Saidu, 2019; San & Heng, 2013; Sayilgan & Yildirim, 2009).

In this study, the effect of five key CEO attributes, namely, gender, tenure, nationality, ownership, and directorship, (moderated by leverage and firm size) on ROA and ROE was investigated.

2.2.1. CEO Gender and Firm Performance

The gender of the CEO is a widely studied attribute in UET literature. However, the results suggest conflicting conclusions. Some studies have reported no significant effect of gender on ROA (Amran, Yusof, Ishak, & Aripin, 2014). Kaur and Singh (2018) for instance, studied the performance of 329 Indian firms between 2012 and 2016, and found no significant effect of gender on ROA. On the other hand, gender had an impact on organizational performance in studies by Khan and Vieito (2013) and Amran (2011). For example, Amran (2011) reported that male CEOs in listed family businesses increased firm value than female CEOs, whilst Khan and Vieito (2013) concluded that female CEOs were associated with reduced firm risk levels. Satriyo and Harymawan (2018) also found that during 2014-2015, female CEOs had significantly negative effect on the performance of firms listed on the Indonesian Stock Exchange. According to Fujianti (2018), women have a high caution attitude, tend to avoid risk and are more precise and their presence in top management helps lower risky decision making, which could hamper firm performance. As such, this study posited H_{11} and H_{12} as follows:

H₁₁: CEO gender has a significantly positive effect on ROA of firms in in the tourism and financial sectors.

H₁₂: CEO gender has a significantly positive effect on ROE of firms in the tourism and financial sectors.

2.2.2. CEO Tenure and Firm Performance

Tenure is considered as the length of time a CEO has occupied this position in a firm (Wang, Holmes, Oh, & Zhu, 2016). Although Li and Singal (2017) failed to observe any significant influence of tenure on firms in the hospitality industry, CEO tenure is an important indicator of CEO experience widely studied in UET research (Wang et al., 2016). Previous research supports the observation that early in their tenure, CEOs are at higher risk of dismissal and are thus motivated to demonstrate their competence by investing in major strategic decisions that influence firm performance (Shen & Cannella, 2002). By so doing, CEOs accumulate power to resist dissent from other stakeholders and skills to initiate new strategic actions (Wang et al., 2016). However, as tenure increases, CEOs lose their willingness to initiate or support new strategic actions or risky investments that could threaten

their legacies (Matta & Beamish, 2008). As such, longer tenured CEOs are least likely to support risky firm actions than their short-tenured counterparts. As a result, this study posited that:

H.3: CEO tenure has a significantly positive influence on the ROA of firms in the tourism and financial sectors.

H.4: CEO tenure has a significantly positive influence on the ROE of firms in the tourism and financial sectors.

2.2.3. CEO Nationality and Firm Performance

Jalbert, Chan, Jalbert, and Landry (2007) found evidence that suggested that Central and South American born CEOs of some of the largest firms listed in Forbes Magazine under the Forbes 800, a list of 800 CEOs, and Australian and New Zealand born CEOs, for example, earned a higher ROA than other CEOs. However, Kaur and Singh (2018) advanced that CEO nationality has a significantly negative impact on ROA. However, this study therefore hypothesized that:

H.5: CEO nationality has a significantly negative influence on ROA of firms in the tourism and financial sectors.

H.6: CEO nationality has a significantly negative influence on ROE of firms in the tourism and financial sectors.

2.2.4. CEO Share Ownership and Firm Performance

CEO ownership is recognized as one of the sources of power important for board decisions such as selections and remuneration, amongst others (Saidu, 2019). Unlike age or gender, CEO ownership is rarely considered in extant literature (Saidu, 2019). Despite, its low occurrence in extant literature, the effect of CEO ownership on firm performance has received mixed opinions. Saidu (2019) attributed such inconsistencies to differences in culture, customs, and practice, also stating that results differ across industries. Fahlenbrach (2009) and Kaczmarek, Kashdan, Drązkowski, Bujacz, and Goodman (2014) for example, reported that CEO ownership has negative impact on firm performance. Haniffa and Hudaib (2006) also found a significant negative relationship between managerial shareholding of the five largest shareholders in Malaysia, and ROA. To the contrary, Adams and Mehran (2012) and Saidu (2019) identified positive effects. Using a sample of firms in the financial sector listed on the Nigerian Stock Exchange from 2011 to 2016, Saidu (2019) found a positive correlation between CEO ownership and ROA.

This study therefore proposed that:

H.7: CEO ownership has a significantly positive influence on the ROA of firms in the tourism and financial sectors.

H.8: CEO ownership has a significantly positive influence on the ROE of firms in the tourism and financial sectors.

2.2.5. CEO Board Directorship and Firm Performance

The presence of CEOs on the management board or board sub-committees is a proxy of CEO power (Evans & Truong, 2020). The agency theory suggests that such an arrangement can compromise a board's monitoring role of the CEO (Harjoto & Jo, 2009), since the CEO has the power to direct board discussions towards their personal interests (Li, 2013). Alternatively, the stewardship theory supports this arrangement as it encourages unity of leadership and control (Harjoto & Jo, 2009). Latif, Kamardin, Mohd, and Adam (2013) argue that the inclusion of CEOs is worthwhile, since they have more experience and knowledge of the industry and can make informed decisions. They are also considered as influential sources of industry related information, including new policies and trade secrets (Haniffa & Hudaib, 2006) and their presence as board members, could be influential in firm performance. Li (2013) confirmed that publicly listed firms in New Zealand with CEOs on the board have higher ROAs than firms with CEOs off the board, between 1997 and 2008. Li (2013) also found a statistically significant positive relationship between CEOs board membership (referred to as board directorship in this study) and ROE.

This study therefore proposed that:

H.9: There is a significantly positive relationship between CEO membership on board and ROA.

H.10: There is a significant positive relationship between CEO membership on board and ROE.

Despite the inconsistencies in literature, this study investigated the five CEO attributes and their effects on firm performance (measured by ROA and ROE), to provide an informed analysis of the tourism and financial sectors in Botswana. The methodology employed to achieve the aim of the study is detailed in the subsequent section.

3. METHODOLOGY

3.1. Empirical Design

A quantitative approach using ordinary least squares regression models, was used to measure the effect of five CEO attributes of gender, tenure, nationality, ownership and directorship on performance. Data was collected from the annual reports of 2009 to 2019, of all tourism firms (two) and financial firms (five) listed on Botswana’s Stock Exchange, by June 2021. A total of 77 observations were used.

3.2. The Independent and Dependent Variables

The independent variables were gender, tenure, nationality, share ownership and board directorship whilst the dependent variables were Return on Assets (ROA) and Return on Equity (ROE). These were operationalized as described in Table 1.

Table-1. Operationalization of variables.

Variable Type	Variable Name	Measure Description	Variable Name in Model
Independent	Gender	Dummy variable with 1 being male and 0 being female,	CEOG
	Tenure	CEO’s years of employment as CEO at the focal firm during year	CEOT
	Nationality	CEO is a Botswana citizen 1, otherwise 0	CEON
	Share Ownership	CEO has <i>n</i> number of direct shares in focal firm, otherwise 0	CEOO
	CEO Directorship	The CEO is a member of the board of directors in the focal firm 1, otherwise 0	CEOD
Dependent	Return on assets	Profit before tax / Average total assets	ROA
	Return on equity	Net profit after tax/ Average equity	ROE

3.3. Control Variables

The study controlled for firm size (SIZE) and leverage (LEV). The two are common control variables that have been used in similar studies (Ghardallou, Borgi, & Alkhalifah, 2020). Firm size is measured by the natural logarithm of total assets at the year end. Leverage, which is long term debt over equity, is a representative of the financial status of the firm and, thus, essential when firm performance is evaluated (Bhagat & Bolton, 2008). Velnampy and Nimalathan (2010) reported a positive relationship between firm size and profitability in commercial banks in Sri Lank. Work by Hossain and Saif (2019) also suggested that total assets, number of employees and number of branches of banking firms in Bangladesh positively influenced firms’ profitability. In support of this view, Kipesha (2013) established a positive effect of firm size on the performance of the Microfinance Institutions in Tanzania. Studies by Ilyukhin (2015) in Russia, Ahmed, Awais, and Kashif (2018) in Bangladesh and Iqbal and Usman (2018) in Pakistan reported a significant influence of financial leverage on firm’s performance. Ilyukhin (2015) observed that the link between a firm’s financial leverage and performance, stems from the fact that the former can be used to discipline management.

3.4. The Econometric Models

The study has two ordinary least squares regression models of ROA and ROE as follows:

$$ROA_{it} = \beta_0 + \beta_1CEOG_{it} + \beta_2CEOT_{it} + \beta_3CEON_{it} + \beta_4CEOO_{it} + \beta_5CEOD_{it} + \beta_6LEV_{it} + \beta_7SIZE_{it} + \epsilon_{it} \quad (1)$$

$$ROE_{it} = \beta_0 + \beta_1 CEOG_{it} + \beta_2 CEOT_{it} + \beta_3 CEON_{it} + \beta_4 CEOO_{it} + \beta_5 CEOD_{it} + \beta_6 LEV_{it} + \beta_7 SIZE_{it} + \varepsilon_{it} \quad (2)$$

Equation 1 tests the effect of CEO gender (CEOG), CEO nationality (CEON), CEO share ownership (CEOO), CEO membership in the board of directors (CEOD), firm leverage (LEV) and firm size (SIZE) on the return on assets.

Equation 2 tests the effect of CEO gender (CEOG), CEO nationality (CEON), CEO share ownership (CEOO), CEO membership in the board of directors (CEOD), firm leverage (LEV) and firm size (SIZE) on the return on equity.

Where:

ROA_{it} represents the return on assets of firm i at the end of year t,

ROE_{it} represents the return on equity of firm i at end of the year t,

β_0 represents the value of ROA or ROE when all independent and control variables are equal to zero,

β_1 represents the quantified effect that the CEOG has on ROA or ROE,

β_2 represents the quantified effect that the CEOT has on ROA or ROE,

β_3 represents the quantified effect that the CEON has on ROA or ROE,

β_4 represents the quantified effect that the CEOO has on ROA or ROE,

β_5 represents the quantified effect that the CEOD has on ROA or ROE,

β_6 represents the quantified effect that the LEV has on ROA or ROE,

β_7 represents the quantified effect that the SIZE has on ROA or ROE and

ε_{it} represents the error terms.

4. RESULTS

The results of this study were analyzed using descriptive, correlation and regression statistics.

4.1. Descriptive Statistics

For the period under study, the results of analysis of the characteristics of the top managers of the sampled firms which were coded as pseudonyms show that 78 per cent of CEOs of sampled firms were males and 22 per cent of them were female; 43 per cent were locals and 57 per cent were non-locals. While 47 per cent of CEOs owned shares in the firms they lead, 53 per cent of them had no ownership in those firms, and 94 per cent of CEOs participated in the board of directors as directors, whilst 6 per cent were non-directors.

The descriptive statistics of other variables are depicted in Table 2

Table-2. Descriptive Statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
CEO Tenure	77	0.5	37.0	7.666	10.6382
Leverage	65	0.0149	4.6238	0.728594	0.9572702
Size	77	11.5476	17.0569	15.087701	1.8777859
Return on Assets	77	-0.0161	0.3058	0.100882	0.0889771
Return on Equity	77	-0.2108	0.6649	0.241705	0.1283581

According to Table 2, the average tenure of CEOs was 8 years with a maximum of 37 years and a minimum of half a year. The debt-to-equity ratio of sampled firms had an average of 73 per cent with a minimum of 1.5 per cent and a maximum of 462 per cent. Amongst the 7 firms examined, one firm which was in the tourism sector had no debt in its capital structure while another firm from the financial sector held a debt of up to 462 per cent of equity.

The firms' size as measured by the natural logarithm of average total assets, had an average of ln15.09 with a maximum of ln17.06 and a minimum of ln11.55.

While the average return on assets of sampled firms was 10.08 per cent with a minimum of negative 1.61 per cent and a maximum of 30.58 per cent, the average return on equity was 24.17 per cent with a minimum of negative 21.08 per cent and a maximum of 66.49 per cent, implying overall good performance.

4.2. Correlation and Regression Analysis

Pearson’s correlation analysis was used to assess the relationship between firm variables and performance. Table 3 shows that ROA had a significant positive association with CEO’s tenure at 1 per cent level ($r = .532, p = <.001$) and share ownership at 5 per cent level ($r = .255, p = .025$), but it had a significant negative correlation with CEO’s gender ($r = -.375, p = <.001$), nationality ($r = -.595, p = <.001$) and directorship ($r = -.283, p = <.013$).

Table-3. Correlation analysis.

		CEOG	CEOT	CEON	CEOO	CEOD	LEV	SIZE	ROA	ROE
CEOG	Pearson Correlation	1								
	Sig. (2-tailed)									
CEOT	Pearson Correlation	-0.208	1							
	Sig. (2-tailed)	0.069								
CEON	Pearson Correlation	0.0298**	-0.307**	1						
	Sig. (2-tailed)	0.008	0.007							
CEOO	Pearson Correlation	0.066	0.391**	-0.075	1					
	Sig. (2-tailed)	0.568	<0.001	0.516						
CEOD	Pearson Correlation	0.140	0.138	0.228*	0.247*	1				
	Sig. (2-tailed)	0.224	0.233	0.046	0.030					
LEV	Pearson Correlation	0.125	0.139	0.030	0.085	0.183	1			
	Sig. (2-tailed)	0.323	0.270	0.812	0.503	0.145				
SIZE	Pearson Correlation	0.393**	-0.554**	0.539**	-0.046	0.434**	0.250*	1		
	Sig. (2-tailed)	<0.001	<0.001	<0.001	0.694	<0.001	0.045			
ROA	Pearson Correlation	-0.375**	0.532**	-0.595**	0.255*	-0.283*	-0.225	-0.759**	1	
	Sig. (2-tailed)	<0.001	<0.001	<0.001	0.025	0.013	0.071	<0.001		
ROE	Pearson Correlation	0.075	0.006	-0.061	0.129	0.030	-0.106	0.132	0.094	1
	Sig. (2-tailed)	0.518	0.961	0.596	0.263	0.795	0.399	0.252	0.415	

Note:

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 3 also shows that ROA had an insignificant negative association with the firms’ leverage level ($r = -.225, p = <.071$), while it had a significant negative relationship with the firms’ size ($r = -.759, p = <.001$). However, as depicted in Table 3, ROE did not appear to have any significant relationship with either independent variables or control variables.

As per Table 4, the combination of independent variables of CEO’s gender, tenure, nationality, share ownership and directorship together with firm leverage and size as control variables, had a significant positive effect on performance as measured by Return on Assets. The aggregate of the independent and control variables produced an R² of 65.5 per cent, signifying that almost 66 per cent of the changes in return on assets could be explained by the change in those variables. The F factor of 15.428 with a p value of <.001 also supported the evidence that the ROA model in this study was a good predictor of firm performance.

According to Table 4, the CEO’s nationality of the firms examined, had a statistically significant negative effect on ROA ($\beta_3 = -.267, p = 0.003$), tending to favour the non-national CEOs. Table 4 further shows that the CEO’s ownership of shares in the firm had a significant positive impact on performance as represented by ROA ($\beta_4 = .278, p = 0.001$).

Moreover, Table 4 provides evidence that size, as measured by average total assets of the firm had a significant negative impact on ROA ($\beta_7 = -.634, p = <.001$), implying that as total assets increase, return on assets would decrease.

Table-4. Regression correlation results of ROA and ROE models.

Model		B	Std. Error	Beta	t	Sig	
ROA	(Constant)	0.582	0.071		8.204	<0.001	
	CEOG	-0.015	0.015	-0.083	-0.997	0.323	
	CEOT	0.002	0.001	0.099	1.240	0.220	
	CEON	-0.042	0.014	-0.267	-3.050	0.003	
	CEO	0.045	0.013	0.278	3.392	0.001	
	CEOD	0.006	0.030	0.022	0.211	0.834	
	LEV	-0.007	0.007	-0.090	-1.096	0.278	
	SIZE	-0.031	0.006	-0.634	-5.444	<0.001	
	R ² = 0.655; Adjusted R ² = 0.612; F = 15.428, Sig. = <0.001 ^b						
	ROE	(Constant)	0.013	0.191		0.068	0.946
CEOG		0.022	0.041	0.070	0.537	0.593	
CEOT		0.007	0.004	0.254	2.024	0.048	
CEON		-0.052	0.037	-0.192	-1.395	0.168	
CEO		0.055	0.036	0.198	1.537	0.130	
CEOD		-0.029	0.081	-0.057	-0.354	0.725	
LEV		-0.028	0.018	-0.196	-1.523	0.133	
SIZE		0.015	0.015	0.178	0.975	0.334	
R ² = 0.151; Adjusted R ² = 0.047; F = 1.454, Sig. = <0.202 ^b							

Results in Table 4 also indicate that the CEO's gender and leverage each had an insignificant negative effect on ROA ($\beta_1 = -0.083$, $p = 0.323$; $\beta_6 = -0.090$, $p = 0.278$ respectively), while CEO's tenure and directorship each had an insignificant positive impact on ROA ($\beta_2 = 0.099$, $p = 0.220$; $\beta_5 = 0.022$, $p = 0.834$ respectively).

The ROA regression model reflected completely different results as compared to the ROE model. The ROE model produced an R² of 15.1 per cent implying that only 15 per cent of the changes in Return on Equity could be attributed to variations in independent and control variables. The insignificant F factor of 1.454 with a p value of <.202 confirmed that the ROE model was a bad predictor of firms' performance. In the ROE regression model only tenure, reflected a significant positive impact at 5 per cent level ($\beta_2 = 0.254$, $p = 0.048$). The rest of the variables, be it independent or control variables, did not have any significant impact on ROE.

Gender and ownership each reflected an insignificant positive effect on ROE ($\beta_1 = 0.070$, $p = 0.593$; $\beta_4 = 0.198$, $p = 0.130$ respectively). Both nationality and directorship of the CEO showed insignificant negative effect on ROE ($\beta_3 = -0.192$, $p = 0.168$; $\beta_5 = -0.057$, $p = 0.725$ respectively). Both control variables had insignificant effect on ROE, but leverage had negative impact ($\beta_6 = -0.196$, $p = 0.133$) while size had a positive influence ($\beta_7 = 0.178$, $p = 0.334$).

5. DISCUSSION AND IMPLICATIONS OF THE STUDY

5.1. Regression Overview

Overall, the Return on Assets (ROA) regression model was a better predictor of the performance of firms in the tourism and financial sectors of Botswana, between 2009 and 2019, than the Return on Equity (ROE) model. The ROA model accounted for an R² of 65.5 per cent, compared to the Return on Equity model which accounted for an R² of 15.1 per cent, on variations in both independent and control variables. The effects of the independent variables of gender, tenure, nationality, share ownership and directorship varied across the two models, having more effect in the ROA model than the ROE model.

5.2. CEO Gender and Effect on ROA and ROE

Whilst the results of ROE were not significant for gender, the results of the correlation and regression models for ROA, were significantly negative and insignificantly positive respectively. In this case, the study rejected both H_{1.1} and H_{1.2}. The results indicated that the gender of CEOs in the tourism and financial sectors had no role in achieving positive ROE and ROA. The ROA results supported the findings of [Amran et al. \(2014\)](#) and [Kaur and Singh \(2018\)](#), who found no relationship between gender and firm performance.

5.3. CEO Tenure and Effect on ROA and ROE

Although the correlation between tenure and ROE was not significant, the results of the regression tests were significantly positive for ROE at 5 per cent level and thus accepting H_{1.4}. The results imply that the length of service of CEOs in the two sectors, is capable of influencing profitability as measured by ROE. Longer tenured CEOs are more likely to influence the performance of the firms, as they are more competent and experienced, than their counterparts. The correlation result for ROA and tenure was significant but the regression result was insignificantly positive for ROA, hence rejecting H_{1.3}. The ROA model results from this study supported findings by [Arosa, Iturralde, and Maseda \(2013\)](#), who observed that the tenure of CEOs and directors of Spanish firms included in the Iberian Balance Sheet Analysis System (SABI) database for 2006, though long (average of more than 10 years), had no significant relationship with ROA. Similarly, the study confirms findings by [Ghardallou et al. \(2020\)](#) from Saudi firms listed on the Tadawul Stock Exchange from 2014 to 2017 and those of [Li and Singal \(2017\)](#) for hospitality firms, which indicated insignificant effect of tenure on ROA.

5.4. CEO Nationality and Effect on ROA and ROE

National origin or birthplace is often used as a proxy, when studying the effect of nationality on firm performance. Nationality, in this study was operationalized in two ways, as Motswana (of Botswana origin) or other (non-national). The correlation and regression tests of nationality on ROE were both insignificantly negative (hence rejecting H_{1.6}), implying that CEO nationality had no effect on return on equity. However, both correlation and regression analysis of nationality revealed a significantly negative relationship with ROA implying that non-national CEOs are responsible for higher profit generation potential (thus accepting H_{1.5} which suggested a significant negative effect of nationality on ROA). This finding concurs with those of [Kaur and Singh \(2018\)](#) and [Jalbert et al. \(2007\)](#). From a managerial perspective, the evidence suggests that firms in the tourism and financial sectors in the country, could consider hiring managers from non-national backgrounds to produce higher profits from the available assets.

5.5. CEO Share Ownership and Effect on ROA and ROE

Whilst the relationship between share ownership by CEOs and ROE was positive but not significant (rejecting H_{1.8}), the influence of share ownership on ROA was significantly positive, thus supporting H_{1.7}. This study supports findings by [Saidu \(2019\)](#) who also noted a significantly positive relationship between CEO ownership and ROA and a non-significant but positive relationship between CEO ownership and ROE. The more shares a CEO owns in the firm, the more they are committed to better firm performance. From a practical perspective, it is advisable to ensure that CEOs in tourism and financial firms in the country own shares as an incentive for increased firm performance. However, this is an implication that raises issues of morality. Should CEOs be given or be expected to acquire higher ownership stakes as an incentive for increased firm performance? Arguably, this study supports this assertion, as much as [Von Lilienfeld and Ruenzi \(2014\)](#) did.

5.6. CEO Directorship and Effect on ROA and ROE

Li (2013) found that firms with better accounting firm performance (in the form of increased ROA and ROE) in New Zealand, tend to appoint their CEOs on the management board. However, this study, observed a non-significant relationship between CEOs on the board and ROE, thus rejecting H₁₀. The association between CEO board membership and ROA was significantly negative while effect was insignificantly positive (also rejecting H₁₉). The results imply that the presence of CEOs on the executive or management boards of the firms they control, leads to reduced profitability, possibly due to increased agency costs. The managerial implication of such a finding is for firms to re-consider the appointment of CEOs on their executive boards. It is advisable for tourism and financial firms not to appoint the CEO as a member of the executive board, as their presence has no effect on ROE and is adversely related to good returns on assets.

6. CONCLUSION

This study examines the impact of CEO gender, tenure, nationality, share ownership and board directorship on Return on Assets (ROA) and Return on Equity (ROE). The study used a sample of observations from the annual reports of tourism and financial firms listed on the Botswana Stock Exchange, given the importance of the two sectors to the country's economic diversification efforts. The findings indicated that ROA and not ROE, was a better predictor of firm performance in the two sectors over the period under observation. The findings indicated statistically significant negative effects of CEO nationality and significant positive effect of CEO share ownership on ROA. The findings further indicated a statistically positive impact of CEO tenure on ROE. Otherwise, gender, tenure, and board directorship had statistically insignificant effects on ROA. The findings are important for firms' CEO nomination (in terms of origin and duration) and remuneration policies.

7. LIMITATIONS OF THE STUDY AND RECOMMENDATIONS FOR FUTURE RESEARCH

Although the results of this study provided a new avenue for the consideration of the personal characteristics of CEOs in Botswana, it was limited by use of only seven firms over a limited time period, due mostly to the infancy of Botswana's stock exchange system. Future research could consider the entirety of publicly listed firms, to increase the observations. Alternatively, other attributes such as age, qualification and experience could be reviewed for the two sectors. More research is required particularly for hospitality related firms as the current literature is anecdotal (Li. & Singal, 2017).

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