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Influence of Industry and Firm Characteristics on Share Price Movement in Nairobi Securities Exchange, Kenya

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Abstract:
The study examined the influence of firm characteristics on share price movement (SPM) at Nairobi Securities Exchange, Kenya. The features selected for the study were firm size, product variety, firm age, Earnings per Share (EPS), ownership and corporate social responsibility (CSR). From the population of sixty-seven listed firms at the bourse as of December 2018, a purposive sample of 47 firms was extracted from the Main Investment Market Segment (MIMS). Secondary data for the period 2000-2018 was collected from the listed company's annual financial statements, company websites, the Capital Markets Authority and NSE Handbooks. The relationship among firm size (using sales revenue as proxy), product variety, age of the firm, EPS, ownership and CSR on SPM was determined from the unbalanced panel data comprising 777 observations. Econometric statistical analysis tools were used on ordinary least squares model that possessed explanatory power 54.7% for the SPM. Firm size (ρ=0.0384), ownership (ρ=0.034) and product variety (ρ=0.043) were significantly related to share price movements, whereas firm age, EPS and CSR impact were insignificant. The association of the combined predictors for each separate sector to SPM was also examined and found to be significant in the sectors of construction allied (ρ=0.024), telecommunications and technology (ρ=0.0323), investments (ρ=0.037) and commercial services (ρ=0.041). However, agriculture, automobiles, banking, energy, manufacturing and insurance sectors were statistically insignificant with ρ≥ 0.05.

Keywords: Firm characteristics, Nairobi securities exchange, industrial sector, share price movement

1. Introduction

Empirical research has over the years accumulated scholarly works attempting to explain the forces behind share price movements. For this purpose, various firm characteristics have been considered encapsulating certain aspects of the stock market, accounting assumptions and estimates, governance, stakeholder interests and behaviour both at firm and macro levels. Chaopricha, Chan and Pollard (2007) make specific mention of features that impact share prices in particular markets, the most outstanding being market-to-book value. On the whole, no unanimity is established for a particular characteristic(s) or composite thereof to perfectly globally elucidate stock returns or share price movements, which leaves concerned academicians and investors to seek the most appropriate alternatives in their research settings and the features they should consider to work best for them (Chaopricha *et al.*, 2007).

In addition, Tahir *et al* (2013) outline how companies can be differentiated based on different non-financial and financial characteristics, including size, value, profitability, structure, etc. These characteristics are specific to specific companies and generate a perception in the minds of users of information with regard to the performance and future of the company. In the modern world, in which all the critical decisions of the running of a company reach the markets and users of information quickly, a major problem related to financial research is the impact of these characteristics on share price movement, market efficiency phenomenon. The leads as to the best investment portfolio include growth and value stocks, whereby the simplest way to measure firm value is to use market capitalization which is the product of issued shares and market price per share. The stock exchange is extremely fluid, dynamic and attracts thousands of transactions as market players strive to outperform each other in order to exploit the market. Transactions are based on the scrutiny of a variety of theoretical models or mood of the market as new information on the firm's actionable changes becomes available (Tahir *et al.*, 2013).

The Fama and French (1992) 3-factormodel conveyed a strong association amongst firm size and profitability eventually affecting share price movements. Small businesses seemed to make bigger profits than large ones, which also

seems controversial. However, small business over performance could even be seen as incompetence, although risk-taking often turns out to be compensated. Yet, small companies are more prone to economic surprises than big companies.

From the market perspective on the other hand, Fama and French (1992), aver that the link between market value (MV) and book value (BV)is itself a measure of risk and so the highest returns obtained from stocks with low MV/BV are merely a risk compensation, whereas low MV/BV firms could be headed to financial distress. Profitability is a key company attribute with EPS conveying performance level. Thus, the higher the EPS of the company, the higher the market adjusted return and the abnormal return that investors consider essential currently and for future earnings potential, stability and profitability of the company. They also base decisions on the financial situation that affects the company's ability to pay dividends and avoid bankruptcy (Tahir *et al.*, 2013). The current study focuses on SPM and characteristics of firms listed in the Nairobi Securities Exchange (NSE).

The NSE started in early 1954 as a mutual club of stock brokers and became self-listed in September 2014. There were 67 listed companies in the NSE on December 31, 2018with 22 brokers. The daily trading volume is approximately USD 10 million and about USD 23 billion in total market capitalization. Apart from equities, Government and corporate bonds are traded as well on the NSE (NSE Website).

Volatility is common for trading volumes and stock prices the capital market of Kenya. Market sentiments have been observed to fluctuate greatly from positive to negative in short periods of time, leading to fluctuations in trading volumes and market capitalization. This can be attributed to behavioral factors between its various stakeholders and the changing economic environment (Nyamute, 2016; NSE Website).

Initial public offerings (IPOs) for example used to attract interest in opposite directions from expected market fundamentals, leading to under or over-subscriptions, such as the NSE IPO, which had over 700% subscriptions and outperformed the market. In the first trading month there was investor over reaction leading to a subsequent big drop, the NSE has since experienced an IPO drought with some companies failing to meet their obligations, such as the timely release of annual reports. The diminishing performance of the NSE has failed to attract new companies as products fail to excite the public (Nyamute, 2016).

Investors require to go through stock brokers to buy or sell shares; the brokers can also act as advisors to investors. The 22 brokers need to serve a total of more than 2.4 million retail investors, in addition to other institutional investors, which workload makes it hard for brokers to offer ample advice and education to their clients. Else, this is being addressed by the relevant organs (Nyamute, 2016).

Literature on the effects of various firm characteristics impact on returns and therefore share price movement in the two scenarios has grown over time (Simlai, 2009). The NSE listed companies can also be differentiated based on a variety of financial and non-financial factors, including valuation, earnings per share, size of business, and business structure, among others. These factors are peculiar across the firms and attract users' perception of information availed on each firm's performance and future. In fact, critical decisions of the company's management quickly reach the market and investors receive information which ultimately reflects in the share prices. Tahir, Sabir, Alam and Ismail (2013) indicate that, if properly segregated, the critical sources of average performance are the size of the company, the value of the company (from book to market), past profits earnings momentum, dispersion, additions, credit risk, profitability and accruals, among others (M'muriungi *et al.*, 2019).

From the foregoing, researchers of SPM have placed more focus on the financial aspects of the firm leaving out the non-financial variables or inadequately addressing them. Therefore, the lacuna in the literature extends from the exclusion of non-financials as well as considering the firm itself and within its industry, which variables Asness *et al* (2000)had identified to be the 'within industry' and 'across industry'. This study addressed aspects of this gap through the following objectives.

The study first of all, analysed firm characteristics without excluding the economic significance of non-financials in listed firms' share price movement and the challenge to EMH theory in the current dynamic stock markets scenario. Secondly, the study fills the gap in the literature regarding effects on share price movements which are found to be sector-specific. The findings will be of interest to various stakeholders for example to help them decide on disclosures, provide investment options, make investing decisions and regulatory considerations, among others.

2. Review of Related Literature

Sing and Rajkumar (2019) confirmed that extensive research studies have tested the efficient market hypothesis (EMH) which states that the share price captures all information about the share. The results have generated new theories both directly and indirectly such as CAPM or APT. Such outcomes have been so mixed that, financial traders, academic researchers and analysts could continuously question the efficiency or inefficiency of stock markets. Smiles (2013) opines that technical analysis furnishes all investors with the same level of information such that they all make the same amount of profit, nevertheless arbitrage profit can be earned by fund managers and other investors if they had a previous research advantage. The growing importance of behavioural finance added to the controversy around EMH. Furthermore, on added challenges to EMH, Almail and Almudhaf (2017) have documented some academicians' suggestion to regulate the market's efficiency since traders earn abnormal profits by exploiting its loop holes. Ultimately EMH is considered in three forms: Weak form efficiency, Semi-strong form efficiency and Strong form efficiency. Studies carried out in various parts of the world employing diverse methodology identify the first two forms of efficiency as well as the Adaptive Market Hypothesis which Andrew Lo advocated in 2004 (Sing and Rajkumar, 2019).

Furthermore, Shah, Isah and Zulkernine (2019) contend that no investor can make an informed stock market forecast against the general principles of the fundamentally random stock markets. The many variables that can be incorporated to predict share prices further complicate the forecast exercise. The short run voting-machine-like

behaviour of the market which in the long run portrays a weighing machine-like character implies that it is possible to predict the market movements in the long term. The intrinsic value of a firm's share can be substantially different from its market price, alienated by market sentiments and instability in the short term. Yet the company's fundamentals eventually converge market price to its true value with the kicking in of the weighing machine character of the market. The intrinsic or correct value of the firm's share price may not be correctly stated in the short run but over the long run periodic movements even out. Thus, it is possible to have more robust results over a long study period, in this research study the period 2000-2018(see Shah *et al*, 2019).

Research studies confirm that information can possess the potential to add value if movements in share prices can be attributed to its announcement (Ramasawmy and Ramen, 2010; Soewarno and Utami, 2010).In particular, the use of accounting information –which according to Aveh and Awunyo-Vitor (2017) was originated by Ball and Brown in 1968 – explains the linkage of a company's financial statements content and returns made by investing in its shares. Scholarly work that followed the Ball and Brown methods to test the association between accounting information and stock prices confirms that indeed the two are associated even though different studies yielded mixed results from diverse settings of models (Ramasawmy and Ramen,2010; Soewarno and Utami,2010; Aveh and Awunyo-Vitor, 2017).

By using a case study of Indonesian banks Soewarno and Utami (2010) studied the significance of accounting data to assess the relationship of book to market values. They regressed market share prices against cost efficiency, risk and earnings as accounting information of the banks and reported that risk and stock price were significantly positively influenced by earnings. However, a negative effect on market share prices emanated from cost efficiency. This outcome reinforces the opinion that accounting information significantly bridges the gap among book and market prices (Soewarno and Utami, 2010).

Following the same line as the abovementioned, the study by Abuzayed *et al*. (2009) examined accounting information and share prices for 15 Jordanian listed commercial banks for the years 1993-2004 using regression analysis. They reported that measures for operational efficiency and earnings appropriately explained the periods' market price movements. This and the above studies hinge on the variables used in the current study that is Price Earnings Ratio (P/E Ratio), Market to Book ratio (MTB)and dividend policy that is firm driven and more often dictated by the firm's net profit (Abuzayed *et al*., 2009)

To complement the above-mentioned accounting information bases, Hartono (2004) and Docking and Koch (2005) examined the impact of dividend and earnings on stock prices and found significant positive impact on equity prices if positive earnings information occurs after negative dividend information. A significantly negative impact occurs in equity pricing if positive dividend information is followed by negative earning information. Locally at NSE, shares which represent high underlying performance dividend paying firms such as East African Breweries, the Nation, BAT, Kakuzi, Standard Chartered and Bamburi commanded high share prices and low volatility and coefficient of variation. During the COVID19 crisis in the first half of 2020 Safaricom, internet related products thrived as TPSEA in the hospitality/entertainment industry business plummeted (the *East African* business news, 2020).

The analysis model used in the current study is reinforced by Adedoyin (2011) on the stock price movement and the characteristics of the company in the examining the significance of the effect by characteristics of corporate companies on determining the share price movements of listed in the Nigeria Stock Exchange. Adedoyin panel data analysis was done on 72 companies for 2004-2009. The process of ordinary least squares (OLS), the fixed effect and the random effects were used in the examination with Gretel's econometric analytical tool. The result indicated that the size of the company, like in the current study, had the most significant effect in determining the share price in the two models adapted for the study. It was recommended that investors be critical and objective when considering the company's factors when making investment decisions.

In sum, the above analyses endorse the influence by financial information on market share price movements. Yet to set up a more comprehensive analysis of determinants of share price movements scholars could also incorporate non-financials into the equation. This is precisely what the De Klerk *et al*. (2015) study has done by integrating corporate governance or CSR among the factors for share price movements. The authors aver that CSR is a recent development that has been implemented in developed markets such as UK (De Klerk et al., 2015). Hence, governance reports, corporate social responsibility (CSR), environmental sustainability and changes in top management studies showed significant relation to SPM (see also other studies e.g. Dahyaa, *et al*., 2000; Hussainey, Elsayed and Razik, 2011; Walker, 2013; Nthoesane and Kruger, 2014). The aspect firm's repute originated from loss of business ethics, top managers' malpractices in creative accounting that compelled regulators to enact laws such as the Sarbanes Oxley Act (Rockness and Rockness, 2005; Ball, 2009; Agrawal and Cooper, 2017). CSR is considered pivotal in influencing the firm's performance and resultant market valuation subject to the firms' ownership, size and number of products.

Furthermore, Maher and Andersson (2000) categorize corporate governance and CSR by the outsider system with dispersed ownership and insider systems having concentrated ownership. The former system prevails mainly in UK and US where shareholders are weak and widely dispersed whereas Japan and Germany presented cases of the insider system. Conflict of interest is more likely for insiders to disadvantage the feeble minority shareholders. Hence, transparency, openness and coherent decision-making balanced to meet various stakeholders' interest should be the main purpose for good corporate governance (Ong'wen, 2010). Ong'wen demonstrated a positive link between CSR elements and the performance of the firm at the NSE. Hussainey and Elsayed (2011), basing on the Egyptian case, report that CSR research in emerging markets is superseded by financial information hence its abysmal link with SPM. More so for Kalunda (2012) CSR reporting by NSE listed firms is unreliable, incomplete, of low quality and inconsistent. Its focus is mainly to report charitable events undertaken by firms captured in annual reports, implying CSR aspects had low impact on SPM. Nevertheless, Rostami *et al* (2016) found mixed results for different CSR components and SPM in Tehran Stock Exchange

by using six different components. The present study sought to establish if the firm performance through its various characteristics including CSR is related to SPM.

This research is based on the efficient market hypothesis (EMH) propagated by Fama (1965) and refined in Fama (1970). But it has also been suggested that variations in prices of assets can be caused by key shifts in market information secured by the stake holders according to the EMH (Nageri and Abdulkadir, 2019). Nageri and Abdulkadir assessed the market efficiency of the Nigerian Stock Exchange using data for the period 2010- 2016 and utilising 3-error distributional GARCH models, the market was reportedly semi strong inefficient post the 2008 economic crisis, but its weak form inefficient before the crisis. Minimization of gossip by traders needs to be addressed by prompt relay of market news by listed companies. The finding is relevant to the current research as some NSE listed firms have experienced audit-related delays to release 2019 annual financial results. Asien (2019) attributes such postponements, also in Nigeria, to release listed firm's financial statements to delays by the management, committees and external auditors (Asien, 2019; Muchira, 2020). From the literature reviewed above the following research hypothesis has been formulated.

- H_0: The characteristics of the firm and its industrial sector do not influence share price movements for firms listed in Nairobi Securities Exchange

3. Data and Methodology

3.1. Data

The population of study constituted the firms listed in Nairobi Securities Exchange, Kenya which totaled 67 as at 31 December 2018 (NSE business, 2018; CMA Report, 2017). Purposive sample size of 47 actively trading firms in the Main Investment Market Segment (MIMS) was selected. This is because the analysis captured only firms that had the information required for the research study (Creswell, 2005; Harrison *et al.* 2020). The Sample is appropriate because firms in MIMS are the key drivers of volume of activities and market capitalization at NSE (Nzomoi and Ikikii, 2013) and it is also the main listing market with more rigorous eligibility, registration and disclosure requirements (Wagacha, 2001). Table 1 below shows the sampling frame used in the study.

Industrial Sector	Firms listed	Sampled
Agriculture	6	2
Automobiles and Accessories	3	2
Banking	11	11
Commercial and Services	12	6
Construction and Allied	5	5
Energy and Petroleum	5	5
Insurance	6	6
Investment	5	1
Investment services	1	1
Manufacturing and Allied	10	7
Telecommmunications and Technology	1	1
Real Estate Investment Trust	1	0
Exchange Traded Funds	1	0
Total firms	67	47

Table 1: Sampling Frame
Source: Researcher, 2019

The type of data used was quantitative secondary data for the period 2000-2018. The unbalanced panel data – comprising time series and cross-sectional data–analysed in the study was obtained from Nairobi Securities Exchange (NSE) handbooks and database, the Kenya Capital Markets Authority (CMA) library, annual reports and websites of the selected firms.

3.2. Methodology

The preferred model used to investigate the industry and firm characteristics on SPM was similar to Serife and Ugun (2012) which was the ordinary least squares using Equation 1 below:

$$Y_{it} = a + \sum_{t=1}^{19} b_{it} x_{it} + \varepsilon$$

Where Y_{it} is the share price movement (SPM), x_{it} embodies the independent variables of P/E ratio, market-to-book value, sales revenue, payout ratio and dividend yield for firm 'i' in year 't', a represents the intercept and ε is the error term. The model estimation is depicted by Equation (1):

$$SPV = a + b_1 PE + b_2 MTB + b_3 LnSIZE + b_4 DPO + b_5 DY + \varepsilon. \dots \dots \dots \dots \dots \dots \dots \dots \text{(Equation 1)}$$

3.2.1. *PE (Price/Earnings)*

Price Earnings Ratio is the firm's share price to earnings per share after tax. The ratio shows how many times shareholders can compensate the corporation's annual earnings (Chaopricha *et al.*, 2007; Karki, 2018)

3.2.2. MTB (Market to Book value)

This represents the ratio of market price per share to par value per share. In some studies, the impact of MTB for smaller firms had substantial explanatory influence in specific markets especially for June and January. (Chaopricha *et al.*, 2007; Tahir *et al.*, 2013)

3.2.3. SIZE (The Proxy for Size Is Natural Log of Sales)

The proxy for Size is Total sales which are deemed most relevant to the market for produce and are historical (Pervan & Višić, 2012; Dang *et al*, 2018). According to Pervan and Višić (2012) to gauge the firm size the researcher could use that measure which reveals its performance, efficiency and profitability. The measure that achieves the three objectives in this study is sales revenue from among the alternatives in empirical studies. This also conforms to Dang *et al* (2018) whereby empirical research that requires using 'firm size' should justify the option that represents size (Dang *et al.*, 2018).According Osborne (2002) the study could use the total sales in form of the transformed natural logarithm, which is applied in the model (See also Fama and French, 1992).

3.2.4. DPO (Dividend Payout)

Dividend per share divided by Earnings per share after tax (Zainudin et al, 2018; Cyril et al, 2020)

3.2.5. DY (Dividend Yield)

Dividend per share as a ratio of market price per share (Zainudin et al, 2018; Cyril et al, 2020)

Other terms used in analysis of the survey instrument
- Products variety: This refers to product diversification or cases where a firm undertakes multiple businesses or many products (Saganga, 2017; La Rocca, *et al.* 2009)
- Firm age: Refers to the number of years a listed firm had been in business (Bandarchuk & Hilscher, 2013; Paseda, 2016)
- Ownership: Refers to the nature and concentration of shareholdings of a listed firm (Rostami *et al.*, 2016)
- CSR Impact: The effect the extent to which a firm demonstrates, reports and practices Corporate Social Responsibility (de Klerk *et al.*, 2015)

Validity and reliability of the data was done using multiple sources for secondary data, supplemented by a survey. The study model was also checked for robustness. Sales revenues were transformed to natural logarithms and thereafter, auto correlation, normality and heteroscedasticity checks were done on the data to ensure robust results from the data analysis model. Features of the various sectors such as CSR impact, product diversification, firm age and ownership were summarized by means of a survey that was later analysed using econometric data analysis tools.

4. Summary of Main Results

Among the three main options to denote firm size –Sales revenue, Market capitalization and Total assets – the study chooses sales revenue whose descriptive statistics are displayed by Table 2 below for the listed companies according to sector. The

Sector	Minimum	Mean	Maximum	Range
Agricultural	848,445	3,781,098	4,201,195	3,352,750
Automobiles &Access	436,741	3,821,361	10,079,734	9,642,993
Investment	124,375	2,995,681	24,165,074	24,040,699
Insurance	128,852	9,819,088	31,273,148	31,144,296
Banking	95,318	15,494,721	71,804,099	71,708,781
Manufacturing &Allied	155,474	11,376,202	73,456,832	73,301,358
Commercial &Service	829,574	16,807,618	114,185,000	113,355,426
Telecommunications	61,369,408	135,659,009	233,717,000	172,347,592
Construction &Allied	358,161	17,295,204	830,169,792	829,811,631
Energy &Petroleum	6,565,948	169,198,026	1,493,232,000	1,486,666,052

Table 2: Descriptive Statistics for Sales Revenue per Sector (KES 000's)
Source: Researcher, 2020

Telecommunications and technology sector achieved the mean sales revenue of KES 135.66 billion during the study period whereas the investment and investment services sector achieved the lowest mean sales revenue of KES 3.00 billion. The widest sales revenue range of KES 1,487 billion is recorded in the energy and petroleum sector portraying the mixed fortunes in that sector with the least range of KES 3.4 billion reported in agriculture. Minimum revenue is reported in banking whereas maximum is recorded by the energy firms. The natural logarithm of sales revenue is used as proxy for firm size in the study to assess the linkage with share price variation.

Table 2 below shows the outcomes of the regression model run in Eviews-10 for companies listed in the Nairobi Securities Exchange (NSE) during the years 2000 to 2018. Correlation was carried out to check for heteroskedasticity of the variables that yield a R-square of 0.547 meaning that they are able to explain about 55% of the share price movements at NSE as displayed in Table 3. Two of the five variables captured to explain SPM in Table 2 (size and dividend pay-out) are significant at 1% whereas Price to Earnings Ratio is significant at 10% and market to book ratio and dividend yield are insignificant.

The coefficients of Price/Earnings Ratio, Sales Revenue are positive meaning that they are positively associated to SPM. The implication here is that the firm's management should pay attention to improve sales revenue to boost its market share prices positively. Market to book value, dividend yield and pay-out are negatively associated with SPM. Pay-out is significant at 1% level which result suggests the firm's dividend decision motivates investors and the influence of a generous dividend causes a reduction in SPM for companies listed in NSE. This outcome corroborates the findings in Hussainey et al., (2011) and Kenyoru et al (2013).

Dependent Variable: S_PRICE__MOVT Method: Least Squares Date: 04/29/20 Time: 23:33 Sample: 1 777 Included observations: 751				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
P_E_RATIO	0.001554	0.000801	1.941617	0.0526**
MKT_TO_BK_VALUE	-5.69E-05	0.000379	-0.150024	0.8808
LNSALES_REV	0.015894	0.001208	13.15438	0.0000*
DIVIDEND_YIELD	-0.000138	0.001132	-0.122066	0.9029
PAYOUT_RATIO_	-0.120098	0.040945	-2.933178	0.0035*
Adjusted R-squared	0.547150			
F-statistic	14. 844283			
P(F-statistic)	0.0000			

Table 3: Regression Results for the Independent Variables
Source: Researcher. 2020
*Note * ** *** Indicates Significance At 1%, 5% And 10% Level Respectively*

Table 4 below displays the correlation matrix which shows that the residuals of the study variables do not have multicollinearity issues. This was both at level and with variables in their transformed state. Therefore, the correlation between the variables was found to be below the threshold of 70% suggested by Dury (2008) and Aveh and Awunyo-Vitor (2017). Price Earnings Ratio and Pay-out have the correlation coefficient close to book value to earnings per share which is above 40% and this can be attributed to the common dependency on computations from the firms' accounting records (Zakaria et al, 2012).

Correlations	BOOK__VALUE	DIVIDEND_YIELD	EARNINGS_PER_SHARE	LNSALES_REV	MKT_TO_BK_VALUE	P_E_RATIO	PAYOUT_RATIO	S_PRICE__MOVT	SHARE__PRC
BOOK__VALUE	1								
DIVIDEND_YIELD	0.0323	1							
EARNINGS_PER_SHAI	0.4093	0.3649	1						
LNSALES_REV	0.0547	0.2367	0.1612	1					
MKT_TO_BK_VALUE	-0.1830	-0.0173	0.1401	0.1944	1				
P_E_RATIO	-0.0382	-0.0512	-0.0298	0.0093	0.1335	1			
PAYOUT_RATIO	-0.0484	0.1372	0.0221	-0.0354	0.1512	0.4246	1		
S_PRICE__MOVT	0.1645	-0.0149	-0.0455	0.0208	-0.0054	0.0270	-0.0908	1	
SHARE__PRC	0.1366	-0.0387	0.3465	0.1427	0.3520	0.1565	0.1852	-0.0023	1

Table 4: Variables Correlation Matrix
Source: Researcher, 2020

Table 5 summarizes the analysis results which incorporate the survey completed on primary data to supplement the examination of secondary data on firm and industrial sector features. Consequently, Table 5 summarizes the output from the composite industry variables in Table 4 on the overall influence on related SPM for firms clustered per industrial sector.

Model		Coefficient	Std. error	t-value	Sig.
1	Constant	589.41	418.871	1.407	0.16
	Size -Sales Rev	2.63732	1.6373	-1.637	0.03837**
	Products variety	3.983	0.814	-0.743	0.043**
	Firm Age	0.0003	0.004	0.673	0.8434
	EPS	-0.000962	0.001175	-0.818236	0.4135
	Ownership	-2.432	1.832	0.432	0.034**
	CSR impact	0.6742	1.064	-1.954	0.784

Table 5: Coefficients for Firm and Industry Features on Movement of the Share Prices
Source: Researcher, 2019
Note * ** *** Indicates Significance At 1%, 5% and 10% Level Respectively

The model presented in Table 5 showed that fifty percent of the firm and industry characteristics variables are significant at 5% level. Firm size and product diversification both have a significant positive relationship with SPM with ρ-value ≤ 0.05 which suggests that the bigger the size of the firm and the more diversified its products the higher the likelihood of fluctuation in its share price. Firm ownership is also significantly related to SPM (ρ-value ≤ 0.05) but the association is negative. This implies that the firm's ownership structure or ownership concentration prescribe its management systems hence the ability to control factors in the firm's share price movement. This outcome is consistent with Rostami *et al* (2016).Institutional ownership is prominent in listed firms that were previously state corporations such as Kenya Power, Kenya Airways and Kenya Re. Earnings per share (EPS), age of the firm and CSR had insignificant association with share price movement (ρ≥ 0.05), whereby EPS was negatively linked to SPM and age and CSR had positive association with SPM. These results are in line with Chaopricha *et al* (2007) but contrasts the findings in de-Klerk *et al* (2015), Tahir *et al* (2013) and Sun *et al*(2011) in the UK, Pakistan and Chinese stock markets respectively.

Segment	Coefficients	Std. Err.	Sig.
Agriculture	-8.152	5.922	0.169
Automobile and accessories	0.0034	0.002	0.3432
Banking	-2.849	1.975	0.149
Commercial and services	-2.704	3.719	0.041**
Construction and allied	-0.00007298	0.002	0.024**
Energy and petroleum	0.7434	3.543	0.632
Insurance	0.0005902	0	0.951
Investment and Investment services	-8.152	5.922	0.037**
Manufacturing and allied	0.2843	2.534	0.08323***
Telecommunications & Technology	-0.005	0.03	0.0323**

Table 6: Coefficients on Industrial Affiliation and SPV
Source: Researcher, 2019
Note: * ** *** Indicates Significance at 1%, 5% and 10% Level Respectively

Table 6 recaps the result from the composite industry variables given in Table 4 on the general effect on SPM for firms clustered in the stated industrial sector. The overall association of firm characteristics according to the NSE industrial/sector classification was different across the sectors (please see Table 5). Industrial affiliation and SPM were negative but significant relationship for firms in the construction and allied sector (ρ-value= 0.024), the telecommunications and technology sector (ρ-value=0.0323), investment and investment services (ρ-value =0.037) and commercial and services sector (ρ-value=0.041). Some firms in these sectors showed strong linkages for instance the share prices of KQ and ARM lacked resilience to adverse events befalling their sector, including the Ebola outbreak in West Africa in 2011 which dealt a blow to KQ share price movements as did boardroom wrangles in ARM. However, favourable SPM are achieved in telecoms and investment.

On the other hand, the link between industrial affiliation and SPM was insignificant for firms in agriculture (ρ-value= 0.169), banking (ρ-value= 0.149), automobile and accessories (ρ-value= 0.3432), energy and petroleum (ρ-value= 0.632), manufacturing (ρ-value= 0.08323) and insurance (ρ-value= 0.951). This implies that share price movement realized in the sectors was not linked with business environment or other dynamics, for example share price movements of tea firms, a key farm produce was more connected to dividend than key market or land tenure undercurrents. Similarly, the 2016 three-year banking law had insignificant effects on share price movements of listed banks. Manufacturing presents a complex combination of high performance and dividend payers such as BAT on the one hand and distressed firms like Mumias Sugar Plc. Overall, the link between industrial affiliation and SPM was insignificant (ρ-value= 0.732). This is consistent with Dahyaa *et al* (2000) and Ayako and Wamalwa (2015). Since half of the variables under firm's characteristics were significantly associated to SPM and also half the sectors significantly link to SPM, we concluded that firm and industry characteristics influence SPM for firms listed in Nairobi Securities Exchange.

5. Conclusion and Recommendations

Findings from the study indicate that, on average, the energy and telecommunications sectors earned the highest annual sales revenue during the period 2000-2018. The price earnings ratio, firm size (as reflected by sales revenue) and

dividend payout were significantly associated with SPM at NSE. Combined with market to book value, these variables possessed the ability to account for 55% of the share price movement at NSE. From the econometric models applied, the study found a positive significant link between firm size and product diversification and SPM from ρ-value ≤ 0.05 therefore predicting high SPM attributable to the firm size and its products range. Firm ownership was significantly negatively associated with SPM consistent with Rostami *et al* (2016). Institutional ownership is also key for listed previously state-owned firms like Kenya Power, Kenya Airways and Kenya Re. Earnings per share (EPS), age of the firm and CSR were insignificant in share price movement (ρ≥ 0.05); EPS was negatively linked to SPM while age and CSR were positively linked with SPM. This outcome agrees with Chaopricha *et al* (2007) but contrasted de-Klerk *et al* (2015), Tahir *et al* (2013) and Sun *et al* (2011) in the UK, Pakistan and Chinese stock markets.

Sector-wise analysis results deduced from size, age, product variety, ownership, CSR and earnings per share showed that industrial affiliation of different sectors had a distinct relationship with share price movement according to sector. Consequently, firms in construction, telecoms, investment and telecoms are SPM significant. The management should always consider key factors that affect SPM in their sector to enhance the firms' market value. However, share price movement is resilient in the face of environment and industry dynamics for agriculture, banking, automobiles, manufacturing and insurance. Firms' management effort should be to boost sales levels and product diversification. Ownership is also important and executives of the firm should uptake focus according to owners' interest. Investors considering building onto their portfolio also need to identify the main factors that relate to the risk return trade-off before investing in a specific firm or industry. In conclusion, the research can be extended in many directions or narrowed to one of the determinants or sectors such as comparing with other stock markets in Africa or a more focused study of the energy sector.

The conclusion is inclined to the fifty percent of the variables that were significantly associated to Share Price Movement meaning we reject the null in favour of the alternative hypothesis, if it is possible that additional factors could be included to increase the explanatory power of the model. Half of the firm and industry characteristics influenced SPM for firms listed in Nairobi Securities Exchange, Kenya.

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