# MARKET STRATEGY AND CORPORATE PERFORMANCE: THE CONTEXTUAL APPLICATION OF PIMS PRINCIPLES IN KENYA

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The influence of market strategy on corporate performance has been and still is a central issue in Strategic Management Discipline. In spite of immense academic curiosity in this area, exemplified by extensive empirical research, results still remain inconclusive. Some argue that performance differences across firms is as a result of strategic choice the firm makes regarding the market and its subsequent positioning while others argue that firm performance is influenced by the context within which it operates. Besides, empirical studies that forge these propositions in an African setting, and specifically in Kenya using empirically grounded PIMS (Profit Impact of Market Strategy) principles, are scanty. This study examined the influence of PIMS principles on corporate performance in Kenya. Both primary and secondary data were collected from Listed Companies in Kenya. Primary data were collected vide a structured close ended Likert type questionnaire administered to all 56 CEOs of quoted companies in a census survey. Secondary data were collected on financial performance of the same companies for a period of five years between 2002 and 2006. Data were analyzed using descriptive and multivariate techniques. Theory testing show that Kaplan and Norton's Balanced Score Card (BSC) conforms to Kenyan context and remains a viable measure of Corporate performance. Further, the study provides additional support for the linkages between PIMS principles and corporate performance, suggesting that PIMS principles are generalizable across a broad spectrum of contexts though the veracity of prediction varies across the principles and the model is also context specific. In Kenyan context, the PIMS model explains up to 53.9% (Adj.R<sup>2</sup> =0.539) of variation in corporate performance. These findings hold implications for corporate managers. They should pay special attention to market positioning strategies especially product quality and market share. These strategies should be specifically targeted to cash generating portfolios calibrated in such a manner as to avoid investment intensity that acts as a drag to profitability. Future studies should seek to replicate the findings of this study to Small and Micro Enterprises. Also open to further study is extension of this study results by employing optimization methodology procedures to address the limitation of spuriousness.

Keywords: PIMS, Corporate Performance, Contextual Application, Kenya

# INTRODUCTION AND RESEARCH OBJECTIVES

Performance, which is an outcome of a given market strategy (Hax & Majluf, 1991), is the ultimate test for any institution whether profit making or non profit making (Kotler, 1991).

This is because the relationship between market strategy and performance can contribute to greater effectiveness for individual firms and entire economies

(Buzzell & Gale, 1987). According to Montgomery (1979) empirical work designed to explore the relationships between various strategic variables and corporate performance can provide valuable insights into optimal strategy for a business firm. A major initiative in studies connecting market strategy and performance has been PIMS (Profit Impact of market Strategy) project (Meng Leong, 2001). The PIMS principles are discovered by documenting actual experiences of many businesses operating in many different kinds of markets and competitive settings (Buzzell & Gale, 1987). These principles can help managers understand and predict how strategic choices and market conditions will affect performance (Buzzell & Gale, 1987).

# **The PIMS Principles**

Extensive research by Strategy Planning Institute (SPI) launched in 1972 culminated in some general strategy principles (Buzzell & Gale, 1987; Kotabe, Dale, Smith & Wilson, 1991; Meng Leong, 2001). Studies involving PIMS data base began in USA and were later extended to Lately the veracity of these US Europe. derived PIMS principles have been assessed in Japan and Singapore (Meng Leong, 2001). These studies have identified a set of business principles regarding the relationship between performance and strategy (Buzzell & Gale, 1987; Kotabe et al. 1991; Meng Leong, 2001).

PIMS programs are designed to explore many possible diversions of strategy and the market environment that might influence performance. Some of these principles apply to virtually all kinds of businesses while others apply only to specific types or certain conditions (Buzzell & Gale, 1987). PIMS project and its associated research address generally the relationships between market structure, market strategies and business performance (Kotabe et al. 1991). However, extensive work with PIMS data base by

Buzzell and Gale (1987) specified six basic principles with predictive value on corporate performance. These include product/ service quality, market share, investment intensity, business portfolio, vertical integration and long-term value. These are the principles which will be employed in this study as the predictor variables.

# The Link between PIMS Principles and Corporate Performance

There has been considerable interest in establishing the relationship between PIMS principles and corporate performance (Meng Leong, 2001). Craig, Douglas and Reddy (1987) observed that high market share was related to high return on investment (ROI) among US businesses serving other world markets, although different factors appeared to be related to market share and ROI in different markets. Differences were also observed in magnitude of these effects in different geographic markets. Szymanski, Baradarawaj and Varadarajan (1993)expounding on Craig, Douglas and Reddy (1987) study by adding more marketing mix variables, found that with few exceptions, the effects of competitive strategy and market structure variables generalize across the US, UK, Canadian and Western European Markets.

Kotabe et al (1991) assessed the veracity of the US derived PIMS principles in a study of Japanese executives and found that most of the PIMS principles with predictive value on performance, were perceived by Japanese executives to apply in Japan but the level of veracity differed between the Japanese and the American contexts. Jain (1989) supposed that in theory business strategies and their effect on firm performance should generalize across national markets that are economically and culturally similar. Thus the differences revealed in Kotabe et al. (1991) research may be attributed to such market variations.

Similarly the findings in Szymanski, Baradarawaj and Varadarajan (1993) research may be explained by evidence suggesting US, UK Canadian and Western European markets are economically, politically and culturally similar (Meng Leong, 2001).

Meng Leong (2001) replicated Kotabe et al. (1991) study in Singapore, but this time he expanded the population to include not only marketing executives but also sales people and business undergraduate students who had no management experience. Results indicated Singaporean marketing manager's perceptions were in line with those of American and Japanese counterparts. The veracity perceptions of Singaporean sales people and business undergraduates were also found to be positively correlated with those of Singaporean, American and Japanese managers. This made him to conclude that PIMS principles were relevant across markets and have sufficient initiative appeal to be predicted similarly by individuals of varying expertise.

This paper sought to determine the influence of PIMS market principles on corporate performance in Kenya, since the Kenyan context is different from the one where PIMS were discovered and subsequently replicated. In order to meet this objective, six hypotheses were formulated regarding the six key empirically ground PIMS principles (see Buzzell & Gale, 1987):

Ho<sub>1</sub>: There is no positive relationship between corporate performance and product/ service quality.

Ho<sub>2</sub>: There is no positive relationship between market share and corporate performance.

Ho<sub>3</sub>: Investment intensity does not have a negative relationship with corporate performance.

Ho<sub>4</sub>: There is no relationship between business portfolio (based on BCG model) and corporate performance.

Ho<sub>5</sub>: There is no negative relationship between vertical integration and corporate performance.

Ho<sub>6</sub>: Long term value indicated by strategic factors that enhance total return and

Market value is not positively correlated with corporate performance.

Ho<sub>7a</sub>: There is no positive relationship between corporate performance and PIMS principles as a composite variable.

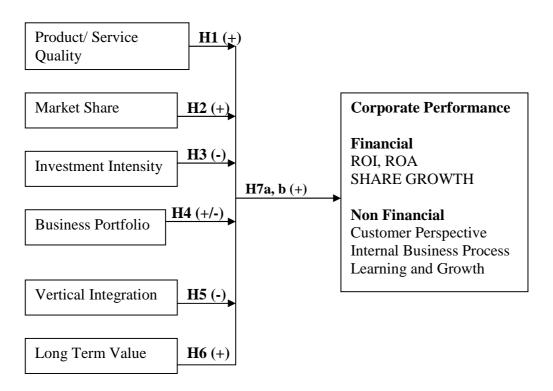
Ho<sub>7b</sub>: PIMS principles have no significant predictive power on corporate performance

## THEORETICAL BACKGROUND

PIMS competitive strategy paradigm views corporate performance as a function of three major sets of factor: (1) the characteristics of the market in which a firm competes, (2) its competitive position in the market place and (3) and the strategy it pursues. Each of these classes of performance is posited to have direct effects and interactive effects (Buzzell & Gale, 1987; & Jaworski, 1989). Six PIMS principles identified by Buzzell and Gale (1987) have received praise from other scholars like Kotabe, et al. (1991) and Meng Leong (2001) as excellent predictors of corporate performance. They include product/ service quality, market share, investment intensity. business portfolio. vertical integration and long term value. These PIMS principles constitute predictor variables for this study and are discussed below. Figure1 shows the relationships between PIMS principles and corporate performance. The hypothesized directions of these relationships are also shown in figure

1.

**Figure 1:** The relationship between PIMS Principles and Corporate Performance.



# **Service/ Product Quality**

Zeithaml, Parasuraman and Berry (1990) observed that leading US service companies with obsessed service excellence. Excellent service is a key to being different, productive, and efficient, and it can pay off richly (Chang & Chen, 1998). Empirically PIMS studies by Buzzell and Gale (1987) and Phillips, Chang and Buzzell (1983) have demonstrated the relationship between quality and profitability. Buzzell and Gale (1987) suggested that achieving superior quality has three competitive advantages: (1) premium price, (2) resources for R&D, and (3) better customer value.

Building on the PIMS data base, Philips, et al. (1983) demonstrated that quality of products and services is the most important factor affecting performance. They suggested that superior quality yields higher profits via premium prices and is an effective way for

business growth. Buzzell and Gale (1987) further reported that quality is related not only to profitability but also to growth because of the impact of quality on perceived value. Zeithaml, et al. (1996) found that service quality has a strong effect on behavioral intentions: subject's loyalty to the company (+), propensity to switch (-), willingness to pay more (+), and external response to problem (-). Rust, Zahorik and Keiningham (1995) proposed a model of service quality improvement and profitability. Based on their model, service quality improvements lead to higher customer satisfaction and retention rate, generate greater revenue and market share, achieve cost reduction, attract new customers and yield greater profitability. Chang and Chen (1998) concluded that superior service quality has a positive effect on business profitability. It is expected that superior product/ service quality has positive effect on corporate performance in Kenya.

#### **Market Share**

To achieve a high profitability, selecting the right markets in which to compete is not enough; a high market position is also necessary (Jaworski, 1989). Buzzell and Gale (1987) posit that market share has much more dramatic effect on ROI than market concentration when both factors considered together and, on average market share leaders are more profitable than their smaller share rivals. Businesses with large market share benefit from economies of scale resulting in lower per unit cost than that of competitors with smaller market share (Buzzell & Gale, 1987).

Market leaders not only command higher prices, but also maintain their leadership position by offering products and services that are superior to those of their competitors (Buzzell & Gale, 1987). Though low market share businesses may exhibit superior profits, Buzzell and Gale (1987) posit that they are favorably positioned on most other key strategic dimensions such as product/ service investment intensity, quality, productivity and market growth rate. It is therefore, expected that market share is positively correlated to performance in Kenya.

# **Investment Intensity**

PIMS businesses with investment to sale ratios of 20% or less earn ROI that are dramatically greater than those of businesses with investment to sales ratios of 80 % or more (Buzzell & Gale, 1987). Among the reasons offered for the negative relationship between investment intensity and profitability are that (1) capital intensity leads to aggressive and often destructive competition, (2) heavy capital investment often acts as a barrier to exit from an unprofitable business, (3) managers sometimes set a normal profit-to-sales target for businesses that have heavier than normal investment- to-sales ratio and (4) capital intensive businesses may

be less efficient in using fixed or working capital than competitors (Buzzell & Gale, 1987; & Jaworski, 1989).

Buzzell and Gale (1987) do note, however, that capital investments can pay off if the discounted cash flow plus the discounted future market value of a strategy exceeds the current market value of investment. Investment intensity is expected to be negatively correlated to performance in Kenya. This is because as investment intensity rises there is moderate rise in profits and since the base is rising ROI falls.

## **Business Portfolio**

Business portfolio analysis is based on the premise that high growth market segments require cash investments and products/ services with higher market shares generate cash. Based on the market growth and relative market share, a business portfolio can be classified into four categories in what is known as BCG (Boston Consulting Group) growth share matrix. These categories are cash cow, Star, Question mark and Dog (Buzzell & Gale, 1987; & Kotler, 2000).

Cash cows have large market shares and operate in slow growth market segments and are therefore cash generators. Stars have large market shares and operate in fast growth market segments and though they generate cash they also consume it. Question marks have low market shares and operate in fast growth markets and are therefore net cash users. Dogs have low market shares and operate in low market segments and therefore net cash users (Buzzell & Gale, 1987). Business portfolio could therefore be either negatively or positively correlated corporate performance in Kenya depending on the cash flow characteristics.

# **Vertical Integration**

PIMS results on vertical integration suggest that (1) there is no difference in profit

margins up to a value added per sales ratio of 60% but, from that point onward, profit raises consistently with increasing integration, (2) either a very low or a very high level of integration yields an above average ROI whereas profit is lowest in the middle, (3) for both consumer and industrial manufacturing processes, ROI is usually enhanced by a high degree of backward integration but there is no connection between ROI and different degrees of forward integration, and highly integrated businesses generate more new products in mature as well as growth markets (Buzzell & Gale, 1987; & Jaworski, 1989).

Vertical Integration may result in either positive or negative correlation with performance in Kenya, depending on the circumstances under which it's achieved. If increased vertical integration leads to higher investment intensity as firms acquire suppliers or/ and intermediaries, it will be negatively correlated to performance, otherwise the reverse of this will lead to positive correlation.

## Long term Value

Long-term value is positively correlated to corporate performance. This is because factors that enhance long term value also enhance ROI e.g. strong initial competitive positions, high employee productivity and cost advantages relative to competitors (Buzzell & Gale, 1987).

#### **METHODOLOGY**

A census survey was used to collect primary data and secondary data from the population of interest. All Companies listed at the Nairobi Stock Exchange (NSE) formed the population of interest. Currently, 56 companies are listed on NSE (see appendix B). Four justifications were used to settle on a census of NSE. Firstly, the financial data required for this kind of study was readily obtained at NSE. When Aosa (1992), attempted to collect financial data from

private non quoted Manufacturing Companies in Kenya, he was unsuccessful because respondents considered this kind information confidential. Secondly, a census provides a useful resource with which to compare or set in context research findings (Saunders, Lewis & Thornhill, 2007). Third, the quoted companies are relatively few and concentrated in Nairobi area, and therefore, it is appropriate to include all of them in the study. Finally, with such few units of study, if sampling was used and there was a large non this would greatly quantitative data analysis used.

## Instrumentation

The study constructs are based on theory of corporate performance (Hax & Majluf, 1998; Kaplan & Norton, 1996; Nelson, 1994; Porter, 1994; Rumelt, 1991; & Williams, 1994) and PIMS principles (Buzzell & Gale, 1987; Kotabe, et al. 1991; & Meng Leong, 2001). Review of theory of corporate performance and PIMS principles found existing scales for measuring the variable's underlying constructs. Relevant measurement scales for corporate performance were identified and grouped into two categories, that is, financial measures and non financial measures. Financial measures were largely adopted from studies by Montgomery (1979), Hax and Mailuf (1988) and Desarbo, et al. (2005). Non financial measure scales were adopted from Kaplan and Norton's (1996) Balanced Score Card (BSC) to include customer, internalbusiness-processes and learning and growth perspectives. PIMS scales were identified from Buzzell and Gale (1987) and PIMS data bases. Six PIMS principles specified by Buzzell and Gale (1987) and demonstrated to predictive value on performance have been adopted for this study.

All the above described construct measure scales, with the exception of financial category of corporate performance were incorporated in a three section questionnaire.

Section A collected general demographic information regarding the respondents and their organizations. Section B collected data relating to non financial aspect of corporate performance while section C collected data on PIMS principles.

# Instrument Pre-testing and Revision

Construct measures were adopted from studies conducted in America. To avoid American bias, the questionnaire was pretested with 6<sup>th</sup> cohorts of Executive Master of Business Administration (EMBA) students of Moi University, Nairobi campus. To qualify as an EMBA student of Moi University, one requires an undergraduate degree or its equivalent and at least five years management experience. The students were therefore presumed to have sufficient management skills necessary for instrument pre-testing. DeSarbo, et al. (2005) used EMBA students to validate their measures in a similar study. The questionnaire was administered to 50 students specializing in Strategic Management. These students were presumed sufficient management skills considered necessary for pre testing. A total number of 32 questionnaires representing a response rate of 62% were returned.

# **Measures of Validity**

Data analysis for the purpose of testing instrument validity and revision was performed in three phases. The first phase was to inspect the data using descriptive statistics such as frequency distribution, percentages, the mean and standard deviation. Skew ness, kurtosis and cross tabulations were also applied. The second phase involved use of factor analysis procedures. Principal component with Kaiser Normalization was used. Varimax rotation method was employed and iteration transformations performed. Finally, reliability assessment of internal consistency of items was performed using cronbach alpha coefficient.

# Variable Operationalization

This study has two sets of variables: Corporate performance is the criterion variable, PIMS principles is the predictor variable, operationalized as per the table 1 and table 2.

**Table1:** Criterion Variable

Category	Item	Operationalization	Measure(s)
Financial	Investment	Net income A.T. + Interest Shareholders equity + L.T. debt	Return on Investment (ROI)
	Assets	Net income A.T. Total assets	Return on Asset (ROA)
	Share growth	100 <u>XN - XI</u> N X1	Average percentage growth in earnings per common share (GEPS)
Non-financial (customer perspective)	Market share	Management's perception on organization's market share to that of three close competitors	Sum of management judgments on 1-5 scales
FF	Customer retention	Customer retained by the organization	Sum of management judgments on 1-5 scales
Internal-business- process perspective	Research	Profit before tax Total R&D	Return on research and development (RR&D)
perspective	Process efficiency	Amount of waste, scrap, rework and returns	Sum of management judgments on 1-5 scales
	Service delivery	Waiting times, information accuracy, service accessibility, transaction fulfillment, communication, customer PR	Sum of management judgments on 1-5 scales
Learning and growth	Employee retention	Staff turnover Number of staff	Rate of staff turnover (RST)
	Staff contribution to revenue	Total revenue Number of employees	Revenue per staff (RPS)
	Employee empowerment	Employee involvement with decision making, reskilling, recognition, access to information, encouragement and support, reward structure.	Sum of management judgments on 1-5 scales
	Process efficiency	Process redesign and reengineering	Sum of management judgments on 1-5 scales

 Table 2: Predictor Variable

Category	Item	Operationalization	Measure(s)	Hypothesized direction of predictor
Product/ service quality	Price ratio	Sales revenue Direct costs	Relative price ratio (RPR)	Positive
	Product innovation	Investment in research and development of new products/services, expenditure in product/service enhancement, marketing expenditure	Sum of management judgments on 1-5 scales	Positive
	Pricing advantage	Ability to command higher relative price without effecting market share, cushioning against price vulnerability due to price wars.	Sum of management judgments on 1-5 scales	Positive
Market share	-	Proportion of market share relative to three close competitors	Sum of management judgments on 1-5 scales	Positive
Investment intensity	Investment	Total assets–Current liabilities Sales	Amount invested to sales (INSA)	Negative
Investment Intensity	Working capital	<u>Current assets-current Liabilities</u> sales	Amount of working capital to sales	Negative
	Plant and equipment	Gross book value of P&E sales	Investment in plant and equipment	Negative
	Labor costs	Total Assets-current liabilities Labor costs	Investment per labor cost	Negative
Business portfolio	Cash cow	Business portfolio with large relative market share in a slow growth market	Sum of management judgments on 1-5 scales	Positive
	Star	Business portfolio with large market share in a high growth market	Sum of management judgments on 1-5 scales	Negative/ Positive
	Question mark	Business portfolio with low relative market share in a high growth market	Sum of management judgments on 1-5 scales	Negative/ Positive
	Dog	Business portfolio with low relative market share in a slow growth market	Sum of management judgments on 1-5 scales	Negative/ Positive
Vertical integration	Value added	<u>Sales – purchases x 100</u> Sales	Percentage value added	Positive/ Negative
	Adjusted value added	ROI Invested capital	ROI per invested capital in value chain acquisition	Positive/ Negative

	Backward integration	Organization acquisition of suppliers	Sum of management judgments on 1-5 scales	Positive/ negative
	Forward integration	Organization acquisition of intermediaries	Sum of management judgments on 1-5 scales	Positive/ Negative
Long term value	Total return	$\frac{\sum divided \ paid + net \ \Delta \ in \ stock}{Stock \ beginning \ value}$	Percentage total return (TR)	Positive
	Market value	Market value of equity Book value of equity	Market to book value (MB)	Positive

Note. A.T. = after tax; L.T. = long term; R&D = research and development; P&E = plant and equipment; PR = Public relations. BK = book value.

## **RESULTS**

# **Descriptive Results**

This section presents descriptive statistics on study variables. Mean being the most robust statistic for interval and ratio data, has been employed to measure central tendency. Range has been used to show the spread between the minimum score and the maximum score while standard deviation has been employed as the measure of dispersion. Standard deviation has been chosen because of its stability (e.g. Gall, Gall & Walter, 2005).

The analysis begins by examining the characteristics of corporate performance. Measures of financial performance when aggregated and per sector are first examined. Next, Non financial measures of performance

are examined. This is followed by PIMS principles.

# **Corporate Performance**

As mentioned earlier, corporate performance was assessed using both financial and non financial measures. As shown on table 3, quoted companies in Kenya have an average Return on Investment (ROI) of 10.27%. This however, ranges from a minimum of negative 66.92% to a maximum of 55.98% indicated by a dispersion of SD 16.00. On average these companies have Return on Assets of 4.97 ranging from a minimum of negative 14.84% to 18.08% with a standard deviation of 6.51. In terms of share growth, the companies registered a mean of ln 5.57%, ranging from ln – 2.89 to ln 8.54% with a SD of 2.24.

**Table 3:** Measures of Financial Performance

Performance			Minimu	Maximu		Std.
Indicators	N	Range	m	m	Mean	Deviation
Return on	54	122.90	-66.92	55.98	10.2672	16.00484
Investment	34	122.90	-00.92	33.96	10.2072	10.00464
Return on Asset	54	32.86	-14.84	18.02	4.9657	6.50850
Share Growth	44	11.43	-2.89	8.54	5.5723	2.23503

Note: Natural logarithm, ln was used to transform share growth data

On the basis of NSE sector grouping, financial and investment sector is the best performer in terms of ROI with an average of 14.55% and dispersion of SD 7.90. This sector is closely followed by Industrial and Allied with an average of 12.74% and a higher dispersion of SD of 9.49. Commercial services sector follow with an average ROI of 11.13% and the largest dispersion of

SD=29.97. Agriculture sector had a relatively low ROI of 4.77%, although this closely distributed among the companies within the sector with SD=3.98. The worst performer in terms of ROI is the Alternative sector with negative 3.16%, implying that companies in this sector are loss makers on average. However the dispersion in performance is relatively high with SD of 8.73.

**Table 4:** Financial Performance by Sector

NSE Grouping		<b>Return on Investment</b>	Return on Asset	<b>Share Growth</b>
Agricultural	Mean	4.7725	3.8375	5.4175
	n	4	4	4
	Std. Deviation	3.98425	2.99337	1.21859
Commercial and services	Mean	11.1318	6.7009	4.9100
	n	11	11	7
	Std. Deviation	29.97397	8.11846	3.47535
Financial and Investment	Mean	14.5593	3.0893	6.4755
	n	15	15	11
	Std. Deviation	7.90499	2.09609	.70456
Industrial and Allied	Mean	12.7412	8.6171	6.2931
	n	17	17	16
	Std. Deviation	9.49157	5.94970	1.25964
Alternative Investment	Mean	-3.1571	-1.9629	2.8700
	n	7	7	6
	Std. Deviation	8.72782	6.80113	2.99483
Total	Mean	10.2672	4.9657	5.5723
	n	54	54	44
	Std. Deviation	16.00484	6.50850	2.23503

Note: Natural logarithm ln used to transform share growth data

In terms of ROA Industrial and Allied sector registered the highest average score of 8.62% with a dispersion of SD=5.95. This was followed by Commercial and services sector with an average score of 6.70% with a wide distribution of SD=8.12. Agricultural sector came next with an average ROA of 3.84% distributed closely around SD of 2.99. Financial and investment sector followed closely with an average of 3.09% also distributed closely within SD of 2.10. Again, Alternative investment sector registered the least ROI of negative 1.96% widely dispersed with SD= 6.80. Since ROA is an indicator of

growth, this would imply the Alternative sector shrank by 1.96%.

Generally, NSE listed companies registered phenomenal average share growth of ln5.57% which translates to 262.43% between 2002 and 2006. Financial and investment sector recorded the highest share growth rate of ln6.48% closely distributed about SD of ln0.70. This was closely followed by Industrial and Allied sector with an average of ln6.29% dispersed about SD of ln1.26. Agricultural sector had share growth of ln5.42% dispersed about SD of ln1.22. Then follows Commercial and services with an

average of ln4.91% with SD of ln3.48 and finally alternative Investments with an average of ln2.87 with SD of ln2.99.

To assess the non financial measures of performance respondents were asked to evaluate on a five point likert scale how well or poorly they believed their companies performed on predetermined indicators in comparison with three close competitors, whereby 1=much worse, 2=worse, 3=neither worse nor better, 4=better, 5=much better. Table 5 show the descriptive statistics on the respondent's opinions.

**Table 5:** Non Financial Measures of Performance

					Std.
Variable Construct	N	Minimum	Maximum	Mean	Deviation
Market Share	43	2	5	3.84	.871
Overall Customer Retention	43	2	5	3.95	.872
Retention of Major Customers	43	2	5	4.23	.751
Customer Acquisition	43	1	5	3.81	.906
Resource Utilization	43	2	5	3.95	.754
Waiting Time	43	2	5	3.77	.718
Information Accuracy	43	3	5	4.16	.615
Service Accessibility	43	2	5	4.12	.793
Transaction Fulfilment	43	2	5	3.88	.823
Lead Times	43	2	5	3.72	.766
Yields	43	2	5	4.05	.785
Throughput Time	43	2	5	3.60	.849
Employee involvement in Decision Making	43	1	5	3.72	.934
Employee Training	43	2	5	3.95	1.045
Employee access to information	43	2	5	3.88	.905
Employee Creativity	43	1	5	3.91	.895
Continuous Process Improvement	43	2	5	4.21	.742

The result shows that on average respondents generally believed that their companies performed better than the competition on all the non financial measures of performance. The scores were closely distributed with SD<1, except for employee training that had SD of 1.045.

## **PIMS Principles**

PIMS principles were assessed on both ratio and interval scales. Items on ratio scale were

ratios computed from the financial statements of the participating companies while interval data was generally gathered from respondents vide a five point likert scale questionnaire. Table 5.6 summarizes descriptive results on PIMS principles. Other than price ratio (M=1.81, SD=1.12), investments to sales (M=1.53, SD=2.79) and investment in plant and equipment (M=0.44, SD=0.53), that have close dispersion, other ratio measures of PIMS principles have wide range and SD ranging from 9.83 to 26.37. This implies that

investment per labour cost, total return and market to book value among NSE listed

companies are heterogeneous.

**Table 6:** Means and Standard Deviations for Measures of PIMS Principles

Variable constructs	N	Minimum	Maximum	Mean	Std. Deviation
Price Ratio	51	-1.29	6.25	1.8141	1.11891
Investment to Sales	55	-2.79	15.79	1.5285	2.78944
Investment in Plant and Equipment	50	.00	3.27	.4350	.53263
Investment per Labour Cost	53	-4.99	188.84	11.7304	26.37243
Total Return	42	09	52.45	7.8921	9.83401
Market to Book Value	44	.46	126.29	17.0105	23.32959
Market Share	42	2	5	3.83	.881
Investment in Research	42	1	5	3.81	1.153
Product Enhancement	42	2	5	3.81	.890
Premium Pricing	42	2	5	3.52	.917
Market Share Improvement	42	1	5	3.93	1.091
Price Discounting	42	1	5	2.83	1.208
Business Portfolio	41	1	4	1.95	.805
Forward Integration	41	1	5	2.76	1.356
Backward Integration	40	1	5	2.43	1.318

On market share (M=3.83, SD=0.881), respondents believed they are better than the competition. When they were asked to indicate the amount of emphasis they put on investment in research and development (M=3.81, SD=0.881), product enhancement (M=3.81,SD=1.153), premium (M=3.52,SD=0.92) and market share improvement (M=3.93, SD=1.09) the results reveal that the participating companies put more emphasis on these product related principles. However, respondent's opinions were not well formed regarding the emphasis companies participating put on discounting (M=2.83, SD=1.21). The results further reveal that on average NSE listed companies have their dominant portfolio in the category of stars (M=1.95, SD=0.81). Finally, when respondents were asked the extent to which they agreed their companies engaged in vertical integration, there was no formed opinion on whether the companies engaged on forward integration (M=2.76,

SD=1.356) and they tended to disagree that they engaged in backward integration (M=2.43, SD=1.318).

# TEST OF HYPOTHESES Results of the Tests of Hypothesis 1 to 7 on the Link between PIMS

# **Principles and Corporate Performance**

This section addresses objective one by presenting results on tests of hypotheses 1 through to hypotheses 7 a, and 7b. Correlation statistics namely, Pearson's product moment correlation analysis was employed to test hypotheses 1 to 7a, while stepwise estimation regression was employed to test hypothesis 7b. Results on correlation analysis are presented in table 7 while results of stepwise estimation are presented in table 8.

Table 7: Correlations between PIMS principles and corporate performance

Variable construct	Statistic	Product/ Service Quality	Market Share	Invest ment Inten sity Index	Business Portfolio	Vertical Integrati on Index	Long Term Value Index	PIMS Principles Index	Corporat e performa nce
Product/	Pearson	-							
Service	Correlatio	1							
Quality	n Sig. (1- tailed)								
	N	43							
Market Share	Pearson Correlatio n	.358(**)	1						
	Sig. (1-tailed)	.009							
	N	43	43						
Investment Intensity Index	Pearson Correlatio n	005	.055	1					
	Sig. (1-tailed)	.487	.364	•					
	N	43	43	43					
Business Portfolio	Pearson Correlatio	386(**)	325(*)	002	1				
	n Sig. (1- tailed)	.005	.017	.495					
	N	43	43	43	43				
Vertical Integration Index	Pearson Correlatio n	113	.036	.028	.042	1			
11100.1	Sig. (1-tailed)	.235	.410	.430	.395				
	N	43	43	43	43	43			
Long Term Value Index	Pearson Correlatio n	.203	.176	091	056	.070	1		
11100.1	Sig. (1-tailed)	.096	.129	.281	.360	.327			
	N	43	43	43	43	43	43		
PIMS Principles Index	Pearson Correlatio n	.149	.181	.830( **)	035	.126	.474(**)	1	
	Sig. (1-tailed)	.170	.123	.000	.411	.211	.001		
	N	43	43	43	43	43	43	43	
Corporate performan	Pearson Correlatio	.646(**)	.585(**)	101	337(*)	202	.300(*)	.100	1
ce	n Sig. (1- tailed)	.000	.000	.260	.014	.096	.025	.263	
	N	43	43	43	43	43	43	43	43

<sup>\*\*</sup> Correlation is significant at the 0.01 level (1-tailed).

<sup>\*</sup> Correlation is significant at the 0.05 level (1-tailed). 2-tailed test between business portfolio/corporate performance (r=0.337, p=0.027)

Hypothesis Ho1: There is no positive relationship between corporate performance and product/service quality

In order to establish the strength, direction and significance of the relationship between the product/ service quality and corporate performance, Pearson's product moment correlation was employed and the results are shown in the table 5.19. The results reveal that there is a strong positive correlation between product/ service quality corporate performance (r=0.646, p=0.000). Since p<0.05 there is no support for the null hypothesis. We therefore reject the null the hypothesis and accept alternative hypothesis. Thus, "there is a significant positive relationship between corporate performance and product/ service quality.

The above finding is not surprising since many PIMS studies such as Buzzell and Gale (1987); Kotabe et al. (1991) and Meng Leong (2001) among others, have rigorously demonstrated this relationship. This study therefore replicates this relationship in Kenyan context implying that the principle of product/ service quality is robust and can be generalized across different markets.

Hypothesis Ho2: There is no positive relationship between market share and corporate performance

To test this null hypothesis, Pearson's product moment correlation analysis was employed and results presented in the table 5.19. Results show that market share is positively correlated with corporate performance (r=0.585 p = 0.009). The relationship is quite strong since the correlation is above 0.5 mid point and significant at p< 0.01. This implies that there is no support for the null hypothesis. Thus we reject the null and accept the alternative hypothesis, implying, "there is significant positive relationship between market share and corporate performance".

The above result is also an expected outcome extensively corroborated by PIMS studies. PIMS studies suggest that market leaders not only command higher prices, but also maintain this leadership leading to superior performance (Buzzell and Gale, 1987).

Hypothesis Ho3: Investment intensity does not have negative relationship with corporate performance

This hypothesis was tested using Pearson's product moment correlation analysis. As shown on table 5.19, there is a weak negative correlation between investment intensity and corporate performance (r = -0.101, p = 0.26). Although the results are in the hypothesized direction, there is evidence in support of the null hypothesis, hence we reject the alternative hypothesis and accept the null hypothesis above.

The foregoing result implies that in the Kenyan context, high investments in working capital, plant and equipment, workers and labour costs, does not necessarily act as a drag to corporate performance. Although this is inconsistent with PIMS principles, companies in Kenya that seem to invest heavily in plant and machinery, operations and in employees for example Safaricom and East African Breweries, are also doing very well in terms of profitability. This principle is further revisited under the discussion section.

Hypothesis Ho4: There is no relationship between business portfolio (based on BCG model) and corporate performance.

This hypothesis sought to establish whether there is a relationship between business portfolio (based on the BCG model) and corporate performance. In order to test this hypothesis Pearson's product correlation analysis was employed. results in table 5.19 show that there is a negative relationship between portfolio and corporate performance (r= -0.337, p= 0.027) albeit weak.

In order to assess characteristics of individual business portfolios, descriptive statistics were used. In this study, respondents were asked to classify their dominant business portfolio along the BCG growth share matrix classification. Twelve (27.9%) classified their dominant portfolio as "cash cow", twenty three (53.5%) classified their dominant portfolio as star, six (14 %) classified their dominant portfolio as "question mark" while two (4.7%) classified their dominant portfolio as "dog". From theoretical foundations, "question marks" are cash users as they require to be propped to weather the competition in high growth markets. This implies increased marketing expenditures resulting in higher operating costs and consequently lower profit margins. Given the proportion of these cash consumers is 67.5% as opposed to 42.5% of cash generators, it is in order, for the correlation between business portfolio and corporate performance to be negative.

Although in the above test the correlation is weak (r= -0.337, P=0.027), it is significant at P<0.05, implying there is a relationship between business portfolio and corporate performance. Although this is contrary to the PIMS principles, the hypothesis compares with BCG theorem. It appears, therefore, that Kenyan firms tend to subscribe to the BCG theorem as opposed to PIMS principles.

Hypothesis Ho5: There is no negative relationship between vertical integration and corporate performance

To test this hypothesis, Pearson's product moment correlation technique was used and the results are presented in table 5.19. The results reveal that there is a weak negative correlation between vertical integration and corporate performance (r = -0.202, P=0.096). Although the results are in hypothesized direction, the p value is greater than 0.05, implying that there is support for the null hypothesis. We thus reject the alternative

hypothesis and accept the null hypothesis. This suggests that there is no relationship between vertical integration and corporate performance.

Previous studies based on PIMS principles have demonstrated that ROI is usually enhanced by high degree of backward integration but not by forward integration. Descriptive statistics in table 5.6 show that there are no formed opinions on whether companies in this study engaged in forward integration (M=2.76, SD=1.356) and respondents tended to disagree that their companies engaged in backward integration (M=2.43, SD=1.318). This could explain the reasons why this null hypothesis is not rejected.

Hypothesis Ho6: Long term value indicated by strategic factors that enhance total return and market value is not positively correlated with corporate performance

To test this hypothesis, Pearson's product moment correlation analysis was used and the results are presented on table 5.9. The results show that there is a relatively weak relationship between long term value and corporate performance (r =0.300, P=0.025). However, since P<0.05 there is no support for the null hypothesis. We therefore reject the null hypothesis and accept the alterative hypothesis indicating that "long term value indicated by strategic factors that enhance total return and market value is positively and significantly correlated with performance". This is in support of PIMS studies. This means that factors that enhance long term value of the firm also enhance performance in the long run.

Hypothesis Ho7a: There is no positive relationship between PIMS principles as a composite variable and corporate performance

This hypothesis was intended to establish whether there is a significant relationship

between corporate performance and PIMS principles when aggregated and addressed jointly. To test this hypothesis, all the PIMS principles/ constructs were summated into a composite score. This score was then correlated with performance vide Pearson's product moment correlation and the results are presented in table 5.19.

The results show a positive correlation between PIMS composite score and corporate performance (r= 0.236, P=0.263). Although the correlation is in the hypothesized direction, it is weak and the p value of 0.236 implies support for the null hypothesis. We therefore reject the alternative hypothesis and accept the null hypothesis. This implies that the relationship between composite measure principles **PIMS** and corporate performance though positive it is not significant at P<0.05. PIMS theory suggests that PIMS principles have predictive power corporate performance. We expect therefore, to find significant relationship between composite score of PIMS principles and corporate performance. However, by lumping all the principles together in one score, the underlying relationships may be influenced by variance inflation factor (VIF) thus suppressing the relationship. This is evident from the descriptive statistics of PIMS principles index (M=55.6437, SD=35.5516) showing a very large standard deviation around the mean. To determine the predictive power of PIMS principles on corporate, we need to assess hypothesis Ho7b.

# Hypothesis Ho7b: PIMS principles do not have predictive power on corporate performance

To test this hypothesis, stepwise regression was employed. Hair et al. (2006) posit that stepwise estimation maximizes the incremental variance explained in each step of model building. The relationship between PIMS principles and corporate performance is captured by equation number 3 explained under model formulation and estimation on page 101. Based on results of Pearson's product moment correlation presented on table 5.19, product/ service quality has the highest correlation with performance (r =0.646, P=0.00) and was therefore selected to enter the estimation equation in the first step. Results of this estimation are presented on table 5.20.

**Table 8:** Stepwise Estimation Model of PIMS Principles

Sten 1- Variable Entered: Product/ service quality

		Std.			P-	Zero-				
Variable construct	В	Error	Beta	t	values	order	Partial	Part	Tolerance	VIF
(Constant)	50.088	4.430		11.307	.000					
Product/ Service Quality	3.059	.565	.646	5.418	.000	.646	.646	.646	1.00	1.00
Model summary R=0.646, R <sup>2</sup> =0.403 Adj. R <sup>2</sup> =0.403, SE=6.82212									Model fit Regression $\chi^2$ =1366.269, Residual $\chi^2$ =1908.196, F=29.356, P=0.00	

Variables N	Variables Not Entered into the Estimation Model									
		Std.			P-	Zero-				
Constructs	В	Error	Beta	t	values	order	Partial	Part	Tolerance	VIF
(Constant)	59.443	6.746		8.812	.000					
Market Share	5.207	1.306	.514	3.986	.000	.585	.548	.477	.864	1.158
Business Portfolio	-1.679	1.426	149	-1.178	.247	337	190	141	.892	1.122
Investment	030	.034	104	862	.394	101	140	103	.985	1.015

Intensity										
Index										
Vertical										
Integration	829	.441	226	-1.880	.068	202	295	225	.990	1.010
Index										
Long Term	.097	.057	.208	1.697	.098	.300	.269	.203	.954	1.048
Value Index	.097	.037	.208	1.097	.098	.500	.209	.203	.934	1.048

Ston 2-	Variabla	<b>Entered:</b>	Market	chara
Steb 2-	variable	Enterea:	warket	snare

		Std.			P-	Zero-				
Construct	В	Error	Beta	t	values	order	Partial	Part	Tolerance	VIF
(Constant)	39.543	4.864		8.130	.000					
Market Share	4.114	1.137	.406	3.617	.001	.585	.496	.379	.872	1.147
Product/ Service Quality	2.371	.531	.501	4.464	.000	.646	.577	.468	.872	1.147
Model summary R=0.749, R <sup>2</sup> =0.561 Adj. R <sup>2</sup> =0.539, SE=5.99559									Model fit Regression $\chi^2$ =1836.580, Residual $\chi^2$ =1437.885 F=25.546, P=0.000	

Dependent Variable: Corporate Performance

The results reveal that product/ service quality explain up to 41.7% (R= 0.417, Adj.  $R^2 = 0.403$ of variation in corporate performance. However, when the coefficient of determination is adjusted for the sample size and degrees of freedom, the product/ service quality construct explains up to 40.3% of variation in corporate performance. The ANOVA analysis provides the statistical test for the overall model fitness in terms of the Fratio. Using product/ service quality construct reduces the error of criterion estimation and this is deemed significant with an F ratio of 29.356 and a significance level of 0.001. This implies the data set fits the estimation model. The value 3.059 is the regression coefficient for the product/ service construct. The predicted value for each observation is the intercept (50.088) plus the regression coefficient (3.059) times the value of the independent variable, product/ service quality (Y=50.088+3.059X).

The standardized regression coefficient value of 0.646 is the value calculated from the standardized data and aids comparison between independent variables. The standard error of product of the regression coefficient

of 4.430 is an estimate of how much regression coefficient will vary from sample to sample. The standard error of product/ service quality is 0.565 denoting that the 95% confidence interval for product/ service quality, would be 3.059±(1.96x0.565) or ranging from low of 1.9516 to a high of 4.1664. The value product/ service quality divided by the standard error is the calculated t value for a t test of hypothesis (i.e. 3.059/0.565 = 5.414). The t measures the significance of the partial correlation of the variable reflected in the regression coefficient. In this case, the t value is significant at 0.000 implying that there is no support for the null hypothesis relating to product/ service quality construct. We therefore reject the partial null hypothesis and accept the partial alternative hypothesis. Thus product/ service quality has significant predictive value of 40.3% on corporate performance.

With the first step of the stepwise procedure completed, the next step is to evaluate the variables not in the equation and determine whether another variable meets the criteria for addition into the regression model. Hair et al. (2006) sets the criteria for addition as partial correlation great enough to be significant at specified level of significance of between 0.05 and 0.1. For this study a significance of 0.05 will be used to determine whether a variable will be added or dropped from the equation.

Table 5.20 shows that market share has the highest partial correlation of 0.585 among the constructs unrepresented in the first step of the equation, and it is the only one that is significant at p<0.05. Market share is therefore added into the equation in step two and all other variables dropped from further consideration since they are not significant. Results are presented in table 5.20. The multiple R, R<sup>2</sup> and the adjusted R<sup>2</sup> increased with the addition of market share. The R<sup>2</sup> increased by 0.144 from 0.417 to 0.561 and the adjusted  $R^2$  increased by 0.136 from 0.403 to 0.539. Standard error of estimate decreased from 6.82212 to 5.99559. The three measures demonstrate the improvement in the overall model fitness after the addition of market share construct, while controlling product/ service quality.

The predictive power of the new model is therefore 53.9% as adjusted for the number of variables with the additive explanatory power of market share being 13.6%. The regression coefficient for market share is 4.114 and the beta weight is 0.406 thus market share has a substantial impact on overall regression model. The coefficient is statistically significant at p<0.01 and multicolinearity is minimal. Thus, tolerance is quite acceptable with a value of 0.872 and VIF of 1.147 indicating that only 12.8% of either variable is explained by the other. Market share therefore has a significant predictive power of on corporate performance. partially supports the alternative hypothesis, "that PIMS principles have predictive power on corporate performance". However, only product quality and market share among PIMS principles, have significant predictive

power on corporate performance, explaining up to 53.9% of variance in corporate performance when adjusted for number of variables and degrees of freedom.

The other PIMS principles including long term value, vertical integration, business portfolio and investment intensity, do not have significant predictive power in an aggregated composite model. This therefore implies that the alternative hypothesis stating "PIMS principles have significant predictive power on corporate performance" is only partially supported. This is not since some surprising **PIMS** recognize that it is product quality and market share that have rigorously been linked with corporate performance (Shoeffler, 1977).

#### DISCUSSIONS

Buzzell and Gale (1987), Kotabe et al. (1991) & Meng Leong (2001) have demonstrated that a firm's performance is influenced by PIMS Principles. This study provides additional support for these previous findings implying that **PIMS** principles generalizable across a broad spectrum of countries including developing ones like Kenya. Correlation results are largely in the predicted direction and do conform to PIMS studies as summarized by Buzzell and Gale (1987). Except for investment intensity (r = -0.101, p = 0.260) and vertical integration (r = -0.202, p = 0.096), other PIMS principles show significant associations with corporate performance, thus corroborating studies.

The first hypothesis (H<sub>o1</sub>) suggested that high performing firms have quality products and services. That their quality products/services are characterized by innovation and investments in research and development aimed at product enhancements. This finding is consistent with PIMS findings (Buzzel and Gale 1987, Kotabe et al, 1991, Meng Leong, 2001) and cuts across markets and countries.

The second Hypothesis  $(H_{02})$  relating to market share and corporate performance, as expected revealed that market share is strongly and positively correlated to corporate performance. This is again corroborated by PIMS studies that suggest market leaders not only command higher prices but also maintain this leadership by offering high quality products that are superior to their competitors.

Contrary to the expectation this study offers some support to the null hypothesis H<sub>03</sub>, implying that in Kenya, high investments in working capital, plant and equipment, workers and labour costs, does not act as a drag to corporate performance. Although this is inconsistent with PIMS studies, a Kenyan would not be surprised to find that investment intensity does not drag profitability. This is because companies that invest heavily in plant and machinery, operations and in employees like Safaricom and East African Breweries (EABL) are also doing very well in the market in terms of profitability. Safaricom has consistently ploughed back its profits as retained earnings and is now currently reported to be the most profitable company in East and Central Africa and has also won the title of the most respected company in East Africa.

Some of the reasons that have been advanced under PIMS studies to support negative relationship between investment intensity and profitability are that (1) capital intensity leads aggressive and often destructive competition and capital (2) intensive businesses may be less efficient in using fixed and working capital than competitors (Buzzel and Gale, 1987 and Jaworski, (1989) among others. If the two examples of Safaricom and EABL were to be considered, it can be inferred among others that the two companies are superior performers because they have not had very serious local competition in the last five years. In fact, EABL has been a near monopoly in malted beer market after the exit of South African Breweries (SAB) from the Kenyan market in 2001. Their brands are also perceived by Kenyans to be of high quality and they have therefore managed to acquire market leadership. In Kenyan context it can therefore, be argued if a company produces quality products and it is a market leader, market intensity will not act as a drag to its performance. However, this cannot be said to apply to other companies that do not have quality products and a sizeable market share.

Hypothesis H<sub>04</sub> was accepted implying that corporate performance depends on the dominant business portfolio. Though this position is consistent with BCG (Boston Consulting Group) assertions on business portfolio, PIMS studies show that while market growth and relative market share are linked to cash flows, many other factors also influence this dimension of performance. As a result, forecasts of cash flow based solely on the growth – share matrix are often misleading (Hambric & Macmillan, 1982, Gale and Branch, 1981, and Buzzell and Gale, 1987).

In this study respondents were asked to classify their dominant business portfolio along the BCG growth Share Matrix Classification. Twelve (27.9%) classified their dominant portfolio as a cash cow, 23 (53.5%) as a star, 6 (14.0) as a question mark and 2 (4.7%) as a dog. One tailed correlation test revealed negative correlation between business portfolio and corporate performance (-0.337, p = 0.014) significant at P<0.05. Given the proportion representation of stars and question mark portfolios in this study it is not surprising that business portfolio tend to be negatively associated with performance. From the BCG model, stars and question marks have heavy cash requirements. This would correspond in increased marketing expenditures resulting in lower margins. This study therefore tends to lend support to BCG market share / market growth

business portfolio models. Though PIMS studies tends to repudiate BCG underpinnings, in Kenyan context BCG model tends to hold, although from the analysis the relations presented are quite complex and perhaps further studies modeling business portfolio are required.

The findings of this study tend to support null  $H_05$ meaning hypothesis that vertical integration is negatively correlated with performance. According to PIMS results, ROI is usually enhanced by a high degree of backward integration but there is no connection between ROI and different degrees of forward integration. The findings of this study are inconsistent with those of PIMS studies. In this study, backward integration is negatively correlated with performance (r = -0.356, p = 0.019) and the association is significant at P<0.05. Forward integration is also negatively correlated to performance (r= -0.026, P = 0.868) although the association is not significant.

As predicted in the conceptual framework, vertical integration may result in either positive or negative correlation in Kenya, depending on the circumstances under which it is achieved. If vertical integration leads to higher investment intensity as firms acquire suppliers and or/ intermediaries, it will be negatively correlated to performance, as the incremental returns are not sufficient to offset the capital outlay. This tends to be the case in Kenyan context.

As expected the hypothesis  $H_{06}$  was accepted implying that long term value indicated by total return and market to book value is positively correlated to performance. This is because the constructs that measure long term value also reinforce corporate performance. This implies that managers should not sacrifice long term objectives in pursuit of short term quick fixes.

Generally, the result of this study suggests that market strategies, in this case represented **PIMS** principles positively significantly influence firm performance accounting for up to 55.6% of variation in corporate performance. This study therefore lends further support to the body of literature on PIMS principles, especially regarding the relationship between market share, product quality and performance. This study further confirms that the relationship between PIMS principles is interactive. This is demonstrated by the positive association between market share and product/ service quality (r=0.358, P=0.019) with the correlation significant at P< 0.05 (see table 5.19). The study supports Kotabe et al. (1991) and Meng Leong (2001) studies that concluded PIMS have predictive effect Principles corporate performance across different markets. This implies therefore, PIMS principles, especially those relating to product/ service quality and market share, can be applied in Kenya to inform strategic decisions.

## CONCLUSIONS

The key findings as they relate to study objectives and hypothesis are as follows: The first objective seeking to establish the link between PIMS principles and corporate performance, had six hypotheses each relating to six principles that have been extensively grounded on theoretical and empirical literature. As expected, product/ service quality and market share are strongly and positively correlated to corporate performance with significance at P < 0.01. Contrary to PIMS findings investment intensity does not act as a drag to corporate performance in Kenya. This could be explained by the fact that companies in Kenya that have invested heavily on plant and equipment, working capital and labor costs, are near monopolies and as such have high market share and their products are perceived as being of high quality. Regarding business portfolio, the

study findings are in support of the BCG underpinnings and therefore inconsistent with PIMS studies that have tended to dismiss BCG business portfolio relationship (e.g. Hambric & Macmillan, 1982; Gale & Branch, 1981; & Buzzell & Gale, 1987). The findings of hypothesis testing also revealed that there is no significant negative relationship between vertical integration and corporate performance in Kenya. From PIMS arguments, if vertical Integration leads to high investment intensity as a firm acquires suppliers and or intermediaries it acts as a drag to profitability. However, the findings of this study showed little vertical integration among the population of study. As expected value enhances long term corporate performance.

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When the six PIMS principles, were aggregated and the composite score correlated to corporate performance, the correlation was found to be positive, although not significant at p<0.05. This could be attributed to variance inflation factor (VIF) suppressing the individual relationships between the PIMS corporate performance. principles and However, on their own, PIMS principles were found to account for 55.6% of variation in corporate performance among companies listed on NSE, with product/ service quality accounting for 53.9% of variation among the study population. It can therefore concluded that **PIMS** principles predictive power on corporate performance in Kenya. It can further be concluded that product/ service quality and market share are more important in predicting corporate performance in the Kenyan context.

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