

Effect of Dynamic Capabilities on Performance of Commercial Banks

Nefa Chiteli Odwaro, Beatrice Abongo, and Jairo Kirwa Mise

ABSTRACT

The Kenyan banking industry contributes significantly to the government revenues yet financial reports indicate that Kenya's listed banks recorded a negative EPS (earnings per share) growth of 0.8% in the financial year 2017, compared to average positive growth of 4.4% in the financial year 2016. Kenya's listed published their financial year 2018 performance, with an average growth a share, of 13.8%, compared to a 1.0% decrease the past year. All quoted banks in Kenya gave their financial year 2019 reports, realizing average core earnings per share growth of 9.9%, in comparison to 13.8% growth, in the past year. This trend indicates a decline in the growth of the core earnings per share. Previous studies on dynamic capability and performance dwelt on sensing capability, coordination, learning, sensing, seizing, transforming and IC. However, this study focused on all dynamic capabilities. Past studies on the moderator influence focused on alliance management capability, resource planning capability, and environmental dynamism as moderators. However, this study focused on all the dynamic capabilities of the moderator. This demonstrates that dynamic capability is still a plausible moderator. This study focused on the listed banks currently 11 in number. This is because their operations and records were declared by law to the public. Objective one was regressed from the dependent and the independent variables. In objective two, the dynamic capabilities variable was introduced to establish its effect on the outcome. Objective three combined the dependent, independent variables and the potential moderating variable. The study applied the resource base theory because it looks at the role of internal aspects – resources and capabilities – of the organization during change. Also, the configuration theory because it believes in organizational rejuvenation and restructuring of their core structures to achieve success. Cross-sectional survey design and correlational was done of the eleven listed commercial banks in Kenya. The respondents comprised 68 heads of departments, 11 CEOs, 29 regional heads, and 145 regional managers. Primary data collection was done via a questionnaire. Reliability was ascertained using Cronbach's alpha test. The performance scale should indicate a Cronbach alpha of at least 0.7. Face validity was ensured by administering the questionnaire to two senior bank managers. Construct validity was established. Content validity was ascertained through subjecting a pool of questions to experts. Data analysis was done using descriptive and inferential statistics. The results discovered that generic strategies by Porter, affected commercial banks' performance, ($\beta=0.645$, $p=0.000$) and accounted for 41.6% variance, dynamic capabilities positively affect performance ($\beta=0.364$, $p=0.000$) and accounts for 12.9% and dynamic capabilities are a positive moderator of the relationship between Porter's generic strategies and performance ($\beta=0.030$, $p=0.010$) with a percentage increase of 1.5%. It is concluded from the findings that Porter's generic strategies and dynamic capabilities positively affect commercial banks' performance while dynamic capabilities moderate the relationship. It was recommended from the findings that companies improve more on the cost strategy and dynamic capabilities to realize better performance. The study would contribute to the existing literature by adding the moderating effect of dynamic capabilities. The study will help bankers to focus on dynamic capabilities while studying performance. The academia will benefit from this study as well.

Keywords: Dynamic Capabilities, Performance of Commercial Banks.

I. INTRODUCTION

Dynamic capabilities (DC) and performance interconnection have not been studied in Kenya. Imperative parameters in the association between DC and profitability are underexplored. Most of the previous studies have only

explored a few aspects of DC and their impact on financial performance. As a result, inadequate attention has been given to dynamic capabilities and listed commercial banks. In addition, dynamic capabilities moderating role in the association between Porter's generic strategies (PGS), and

Submitted : March 30, 2022

Published : June 07, 2022

ISSN: 2507-1076

DOI: 10.24018/ejbmr.2022.7.3.1384

N. C. Odwaro *

Department of Business Administration,
Maseno University, Kenya.

(e-mail: nefachiteli@gmail.com)

B. Abongo

Maseno University, Kenya.

(e-mail: abdaves@yahoo.com)

J. K. Mise

Department of Business Administration,
Maseno University, Kenya.

**Corresponding Author*

output in the listed banks in Kenya has not been investigated.

Literature on DC performance relationship has revealed knowledge gaps. Studies found that one aspect of DC enhances performance. Previous studies have tended to focus on qualitative research whose flaws could account for the inconsistent findings. In the existing literature, DC implementation has been approached rather narrowly. In addition, a significant gap existed in linking PGS and performance.

DC is a firm's behavioural orientation to constantly reconfigure, integrate, renew, and recreate its resources and capabilities, most importantly, upgrading and reconstructing its core capabilities in response to the changing environment, to attain and sustain CA, Teece *et al.* (1997); Eisenhardt and Martin (2000). DC are not simply processed but embedded in processes that develop with time vide complex interactions among the firm, and as noted by Makadok (2001), DC is developed other than bought in the market.

DC emphasizes a firm's relentless effort to renew, reconfigure and re-create resources, capabilities, and core capabilities to address environmental change. Collis (1994) explicitly points out that DC governs the rate of change of capabilities. Learning plays a significant role in the creation and development of DC. Also, learning is viewed as a DC itself, other than an antecedent of DC. Therefore, learning is considered a process of repeating and experimenting to enable better and quicker task execution, Teece *et al.* (1997). Eisenhardt and Martin (2000); Zollo and Winter (2002) posit that learning is core to dynamic capabilities and determines their evolution. In conclusion, capability possession, deployment, and upgrading are important for the success of organizations.

According to Nelson (1991), CA sustainability depends on the extent to which a firm develops capabilities for innovation. Specifically, in sustainable innovations, firms face different challenges at each stage and must develop new capabilities to tackle them, Nidumolu *et al.* (2009). Nidumolu's suggestions relate to suggestions by Penrose (1959), who postulated that resources and capabilities form the basis for innovations. In the suggestions, a set of in-house resources and capabilities, broadly defined to incorporate inelastic productive resources, gives rise to intra-industry heterogeneity and idiosyncratic-firm-specific sources of CA.

Wang and Ahmed (2007) define adaptive capability as, a firm's ability to identify and capitalize on the emerging market. They stress that adaptive is different from adaptation and that measures in the literature of the former are multidimensional, as those proposed by Oktemgil and Gordon (1997) including the ability of a firm ability to take in their product market scope to respond to external opportunities; to respond to changing market conditions in a speedy manner to scan the market; to monitor customers and competitors and allocate resources to marketing activities; and those proposed by Gibson and Birkinshaw (2004), evaluating whether firm's management systems lead the firm to adapt to market changes and evolve rapidly in response to shifts in its business priorities.

Cohen and Levinthal (1990), defined absorptive capability as the ability of a firm to realize the value of new, external information, assimilate it, and apply it to the commercial end, they also emphasize that the ability to evaluate and utilize

outside knowledge is largely a function of the level of prior knowledge. And the development of this capacity depends on continuous investment by a firm to maintain technical capacity in that area. The absorptive capacity is often demonstrated through a firm's innovativeness and ability to exploit new knowledge, (Zahra & George, 2002), and is pivotal to the firm's innovative activities, (Cohen & Levinthal, 1990). This idea has been widely researched at the level of firms, sectors, regions and nations as it represents a wide consensus (Abreu *et al.*, 2007).

The ability to combine external and internal knowledge absorbing it for internal use by a firm is the ultimate goal for absorptive capability. The processes of coordination, learning strategic competitive response and absorption are important activities that facilitate change within an organization, and are understood as sub-dimensions of a more complex, abstract construct representing dynamic capabilities. Therefore, they may contribute to a better understanding and measurement of the composite concept of dynamic capabilities.

Innovative capability is the firm's ability to come up with new products and or markets, through the matching of strategic innovative orientation with innovative behaviours and processes, (Wang & Ahmed, 2004). Additionally, Dodgson *et al.* (2008), defines IC as bundles and patterns of skills used by firms to formulate and implement an innovation strategy involving the creation, extension and modification of those resources used for innovation. Bell (2009), defined innovative capabilities as the capabilities needed to imagine, develop, and implement new configurations of product and process technology and to implement changes and improvements to technologies already in use. According to Pekka and Thomas (2006), besides technological capabilities, innovative capabilities also cover management aspects in an organization to move from technological chance to innovation. The scholars add that the innovative capability of a firm relies on its innovative system, embedded in the firm's resource base, management system, organizational structures and business routines. Therefore, the preconditions for innovativeness demand more than Research & Development activities. IC are the firms' capabilities to generate customer value by developing and introducing new products and services to the market or reducing the costs induced by the value creation process, (Pekka & Thomas, 2006).

Hagedoorn and Duysters (2002) emphasize that IC concerns itself with specific expertise and competence related to the development and introduction of new processes and products. In turn, Subramanian and Youndt (2005), Sen and Egelhoff (2000) classify IC as either incremental or radical. Incremental IC is focused on making better existing products and processes, while radical IC is concerned with developing new products and processes based on entirely different concepts and theories. Therefore, banks must embrace the role of technology to enhance the sustainability of innovation.

Learning/Innovative capability is the principal means of attaining strategic renewal. Renewal requires that organizations explore and learn new ways while at the same time exploiting what they have already learned. Teece *et al.* (1997) see learning as an important process through which experimentation and repetition yield better and quicker resolution to problems enabling firms to realize new production opportunities. Learning processes are dynamic

and multi-level. Although insight and innovative ideas may occur to individuals, the individually generated knowledge is shared within the organization's context and then some of it becomes institutionalized as organizational artefacts.

Coordination/integration capability is the firm's ability to weigh existing resources' value and integrate them to shape new competencies. Moreover, the implementation of new configurations of functional competencies lies in the effective coordination of a variety of tasks and resources and the synchronization of different activities (Helfat & Peteraf, 2003). The coordination process connects and integrates single routines through communication, scheduling, and task assignment. Teece *et al.* (1997) maintain that a lack of efficient coordination and a combination of different resources and tasks explains why slight technological changes overwhelmingly affects a firm's competitive position in a market.

Strategic competitive response/sensing capability involves the creation of market change as well as the response to exogenous change (Helfat *et al.*, 2007). This capability is conceptualized as the capacity of a firm to examine the environment, recognize new opportunities, examine its competitive ability, and respond to competitive strategic moves. However, it is often difficult to respond effectively to a need for change in shifting environments, even with established organizations, even though this capability to notice and respond strategically to environmental challenges is of utmost importance because it enables the firm to reconfigure certain competencies before they become core rigidities (Eisenhardt & Martin, 2000).

The studies of Osioma *et al.* (2016), Protogerou *et al.* (2008), Gathungu and Mwangi (2012), Kihara (2016), and Albeshar (2014) looked at some of the aspects of dynamic capabilities. The research of Osioma *et al.* (2016) mainly looked at only one aspect of dynamic capabilities which is the sensing capability and its impact on the performance of two commercial banks and it used descriptive design. The study of Protogerou *et al.* (2008) employed survey as the methodology and viewed dynamic capabilities as a multi-dimensional construct of three factors and they have a significant effect on performance. Gathungu and Mwangi (2012) in specific look at the nature of the sensing, seizing, transforming and managerial dynamic capabilities. The study of Kihara (2016) emphasised on dynamic capabilities and their influence on aspects such as return on equity, return on assets and profit before tax. The study adopted a cross-sectional research design and descriptive survey design. The study of Albeshar (2014) concentrated on innovative strategies. The researcher adopted mixed methods approach for the research design. All the above studies did not focus on all aspects of dynamic capabilities. The studies largely employed descriptive design which is considered inferior. The current study seeks to understand how dynamic capabilities influence commercial banks' output.

A. Objectives of the Study

To determine the effect of dynamic capabilities on the performance of commercial banks.

B. Research hypothesis

H₀₂ dynamic capabilities do not have a significant effect on the performance of commercial banks in Kenya.

II. THEORETICAL LITERATURE REVIEW

A. Configuration Theory

According to Mintzberg and Miller (1970), there are ten schools of thought for strategy formulation also known as schools of thought in management. The ten schools of strategy formulation are as follows: configuration, design, power, planning, positioning, cognitive, learning, cultural, entrepreneurial, and environmental.

One of the most preferred among the ten schools of thought on strategy for this study is the configuration school. The configuration school of thought emphasizes the essence of configuring a need, as need configuration enables firms to progress step by step, graduating from one level to another through a simple set of values. With time, organizations are able to have various sets of values that need transformation if the organization aims at reaching the point it desires (Mintzberg & Miller, 1970).

CT postulates, that environment and organizational design determine the performance of an organization. Basically, CT assumes that the best output is achievable when organizational structures are in tandem with external contingency factors. Organizations aligning their operations to the prevailing environment reap the maximum benefit. CT's general model presumes that to be effective, an appropriate match between structure, strategy and environmental context must be there in organizations (Fincham & Rhodes, 2005).

CT school emphasizes the need for organizational rejuvenation and restructuring of basic structures for success in the business (Mintzberg & Ahlstrand, 2002). Nevertheless, CT faces limitation because not all organizational structures are appropriate and restructuring and rejuvenation concepts meaning majorly depend on managers' perception.

Going by the configuration school, the strategy must consider so many things that are likely to go wrong because they are not derivable from a simple set of values. Organizations develop different sets of values with time, and these values need transformation if the organization is to maximumly achieve its desires. Therefore, justification of the configuration theory as one of the research theories is because over time application of PGS by banks, likely results in strategy configuration employed by the commercial banks, so that the strategies formulated are configured over and over to reach the desired outcome. The study's first objective, the effect of porter's generic strategies on performance- is anchored on this theory.

III. EMPIRICAL LITERATURE REVIEW

Osioma *et al.* (2016) concentrated on the dynamic capabilities and performance of some commercial banks in Awka-Anambra State, Nigeria. The general objective of this study was to find out the type of association existing between sensing capability and output of selected banks, adopting a descriptive survey design. Data were collected using structured questionnaires and a correlation coefficient was used to determine the correlation between the dependent and independent variables. The study findings revealed a positive relationship between sensing capability and output of two commercial banks in Awka. This particular study only looked keenly at one aspect of dynamic capabilities; sensing

capability, and its impact on the performance of two commercial banks and it used descriptive design.

The study on dynamic capabilities and their indirect impact on firm performance by Protogerou *et al.* (2008) employed a large-scale survey as the methodology. By using data from manufacturing firms, the study views dynamic capabilities as a multi-dimensional construct with three factors as follows coordination, learning and strategic competitive response. Findings suggest dynamic capabilities are catalysts to functional competencies which consequently significantly affect performance. 271 questionnaires were filled out and collected from the respondents. The study employed survey as the methodology and viewed dynamic capabilities as a multi-dimensional construct of three factors and they have a significant effect on performance.

Gathungu and Mwangi (2012) studied dynamic capabilities, talent development and firm performance, by looking at the interconnectivity of various clusters of dynamic capabilities and their influences on firm performance. In specific, it investigates the nature of the sensing, seizing, transforming and managerial dynamic capabilities. The study emphasised dynamic capabilities and competitive advantage, dynamic capabilities and resources, and perspectives of firm competitiveness under dynamic capabilities.

Kihara (2016) investigated the influence of strategic contingency factors on the performance of large manufacturing firms in Kenya and had the following findings that dynamic capabilities have a positive and significant influence on the performance of large manufacturing firms in Kenya. The study emphasised dynamic capabilities and their influence on aspects such as return on equity, return on assets, and profit before tax. These are basically financial measures. The study adopted a cross-sectional research design and descriptive survey design. The study population study was 499 large scale manufacturing firms and a sample size of 217 firms was selected. Data were collected through the administration of questionnaires to operations managers.

Albeshar (2014) examined synergies of Firms' Innovation Dynamic capabilities and Information Technology. Data was collected from 203 Saudi firms registered at the Riyadh chamber of commerce and industry. The researcher adopted mixed methods approach for the research design. The results suggest that innovative strategies are significant to increasing firms' overall innovative performance. This study concentrated on innovative strategies.

Rehman *et al.*, (2015), studied the impact of dynamic capabilities on firm performance: the moderating role of organizational competencies. The study observed the phenomenon of organizational performance under dynamic capabilities. It investigated how dynamic capabilities influence organizational performance, taking organizational competencies as a moderating variable with a focus on the paper industry in Lahore Pakistan. Empirical Research's empirical data posits that dynamic capabilities directly impact the organizational performance of the firm. Also, it proved that organizational competencies have positively moderated the association between organizational performance and dynamic capabilities.

Jorge and Luiz (2020) looked at, dynamic capabilities, creativity and innovation capability and their impact on

competitive advantage and firm performance: The moderating role of entrepreneurial orientation. In the context of a Portuguese economy and from a strategic process perspective, this study defines dynamic capability as the potential to systematically solve problems enabled by its propensity to sense opportunities and threats to make timely decisions. From an empirical study of 387 enterprises in Portugal it was found that dynamic capabilities, creativity, and innovation competencies do positively affect performance.

Baia and Ferreira (2019) studied dynamic capabilities and performance, and how the relationship has been assessed? Looking at the literature review of 92 quantitative articles, the study wanted to explore how DC performance relationship has and should be assessed in the future. The most promising approach seems to be indirect as it appears that DCs primarily causes change and intermediate outcomes, though far from being the most hypothesized relationship.

IV. RESEARCH METHODOLOGY

Both correlational and cross-sectional designs of banks in Kenya were employed to undertake this research. Cross-sectional design aided in acquiring statistics simultaneously. Cross-sectional studies can be carried out by means of any approach to collecting data, including mailed or self-administered questionnaires (Creswell, 2003).

A. Model

It introduced dynamic capabilities in order to establish their effect on performance.

The model for the regression analysis is as shown:

$$Y = \beta_0 + \beta_1 Z + \epsilon$$

where

Y = dependent variable (organizational performance);

Z = theoretically defined moderator variable (dynamic capabilities);

B₀ = y intercept in the equation;

B₁ = size and direction of the causal effect of Z the independent variable (dynamic capabilities) on Y the dependent variable (organizational performance);

E = residual in the equation;

i = number of firms under consideration (respondents).

V. RESULTS AND DISCUSSION

The study's second objective sought an understanding of the extent of the practice of dynamic capabilities among commercial banks under study. In art to achieve this, the study designed questions consisting of aspects of dynamic capabilities which were administered to the respondents on a five-point Likert scale. Findings are shown in Table I.

Table I indicates the effect of dynamic capabilities on the performance of commercial banks. The findings revealed a neutral response 73(30.7%) regarding whether there were new products launched every quarter of the year and agreed by 60(25.2%), however, there was an indication that they did not experience the launch of substitute products where the majority 63(26.5%) strongly degreed that they experienced

TABLE I: DYNAMIC CAPABILITIES AMONG COMMERCIAL BANKS

Dynamic Capability	SD	D	N	A	SA	M	STD
There are new products launched every quarter of the year	45(18.9)	20(8.4)	73(30.7)	60(25.2)	40(16.8)	3.13	1.325
The bank experience launches of substitute products	63(26.5)	41(17.2)	58(24.4)	51(21.4)	25(10.5)	2.72	1.340
The bank's customers have access to a wide range of products	22(9.2)	21(8.8)	49(20.6)	57(23.9)	89(37.4)	3.71	1.300
Existing products are being modified to be relevant to customers' demands	18(7.6)	47(19.7)	37(15.5)	62(26.1)	74(31.1)	3.48	1.333
There is competitive pricing for new and existing products	18(7.6)	43(18.1)	22(9.2)	69(29.0)	86(36.1)	3.68	1.328
There is wide use of technology to simplify banking processes for the clients	27(11.3)	55(23.1)	44(18.5)	56(23.5)	56(23.5)	3.25	1.344
There is wide use of technology to simplify working processes for bank staff	34(14.3)	47(19.7)	18(7.6)	77(32.4)	62(26.1)	3.36	1.419

Source: Study Data, (2022).

the launch of substitute products. In addition to that, it was strongly agreed by a majority of the respondents 89(37.4%) that their clients had access to a variety of products and the existing products were being modified to be relevant to customers' demands as shown by the majority of those interviewed who agreed strongly, 74(31.1%). The findings further pointed out that there was competitive pricing for new and existing products for most of the banks as strongly agreed by the majority 86(36.1%). Wide use of technology to simplify banking processes and working processes of the bank was being incorporated as agreed by the majority 56(23.5%) and 77(32.4%) respectively.

In regard to the analysis of means and standard deviation, an indicator of highest performance was based on the best dynamic capabilities that led to better performance of the commercial banks. Banks (M=3.13, STD=1.325) launched new products and substitute products (M=2.72, STD=1.340) every quarter of the year. In addition, they allowed their clients to access a variety of products (M=3.71, STD=1.300) and modified the existing products to be relevant to customers' demands (M=3.48, STD= 1.333). Competitive pricing for new and existing products (M=3.68, STD=1.328) was employed. There was the use of technology to simplify banking processes for the clients (M=3.25, STD=1.344) and working processes for bank staff (M=3.36, STD=1.419) so as to improve their performance.

Further findings on summary statistics on the average and SD of dynamic capabilities and performance of commercial banks were carried out as shown in Table I.

The findings show that dynamic capabilities were largely practiced by commercial banks (M=3.369) as compared to the performance of commercial banks mean (M=3.143) with low standard deviations of 0.847 and 0.754, respectively. These means were used to explore the correlation between the two variables using Pearson product-moment correlation, to establish whether they were associated. The findings on the bivariate correlation between DC and commercial banks' performance are in Table II.

The findings in Table III give a positive and significant correlation between dynamic capabilities and the performance of commercial banks in Kenya ($r=0.364$, $p=0.000$). This correlation coefficient is however low. This implies that the performance of commercial banks is positively associated with banks' dynamic capabilities to a low level. There is therefore evidence of some efforts by commercial banks to integrate, reconfigure, renew, and recreate their resources and capabilities, upgrading and reconstructing their main capacity in response to the changing environment to attain and sustain competitive advantage and better performance. These findings are supported by studies by Osisiom et al. (2016), who found a positive relationship between dynamic capability (sensing capability) and the

output of two commercial banks in Awka, Nigeria.

TABLE II: SUMMARY DESCRIPTIVE FOR DYNAMIC CAPABILITIES AND PERFORMANCE

	Mean	Std. Deviation	N
Performance	3.143	0.754	238
dynamic capabilities	3.369	0.847	238

Source: Study Data, (2022).

TABLE III: CORRELATION BETWEEN DYNAMIC CAPABILITIES AND PERFORMANCE OF COMMERCIAL BANKS

	performance	dynamic capabilities
Pearson Correlation	Performance	1.000
	dynamic capabilities	0.364
Sig. (1-tailed)	Performance	0.000
	dynamic capabilities	0.000

Source: Study Data, (2022).

A. Effects of Dynamic Capabilities on Performance of Commercial Banks

To establish the causal effects of banks dynamic capabilities on their performance, a simple linear regression model adopted from Fairchild and Mackinnon (2009) was used. The model was designed as:

$$Y = \beta_0 + \beta_1 Z + \epsilon$$

where

Y = dependent variable (organizational performance);

Z = theoretically defined moderator variable (dynamic capabilities);

B₀ = y intercept in the equation;

B₁ = size and direction of causal effect of Z the independent variable (dynamic capabilities) on Y the dependent variable (organizational performance);

E = residual in the equations;

i = number of firms under consideration (respondents).

Commercial banks' performance subscale was therefore regressed against banks' dynamic capabilities. The model coefficient findings are presented as shown in Table IV.

The model predictor variable (dynamic capabilities) is presented as shown in Table IV under Model column. The findings indicate that there is some performance of commercial banks without the introduction of any variable as shown by a constant term (B=2.051), which is significant at 0.01 and 0.05%. However, introducing dynamic capabilities in the model, it indicates a positive effect (B=.324) on performance. Of more importance is the use of standardized coefficients which enables comparison in the case of other variables. The findings show that Dynamic capabilities uniquely and positively or affect the performance of commercial banks ($\beta=0.364$) which is significant ($p=0.000$). This evidence is also affirmed by observing the t values whose values are above 2, i.e., $t(1) = 6.010$.

TABLE IV: EFFECT OF DYNAMIC CAPABILITIES ON PERFORMANCE OF COMMERCIAL BANKS (COEFFICIENT)

Model	Unstandardized Coefficients		Standardized Coefficients Beta	T	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
	B	Std. Error				Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2.051	0.187	10.937	0.000	1.681	2.420		
	dynamic capabilities	0.324	0.054	6.010	0.000	0.218	0.431	1.000	1.000

a. Dependent Variable: performance.

Source: Study Data, (2022).

TABLE V: SUMMARY SIMPLE EFFECT OF DYNAMIC CAPABILITIES ON PERFORMANCE OF COMMERCIAL BANKS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	0.364 ^a	0.133	0.129	0.70434	0.133	36.121	1	236	0.000	2.068

a. Predictors: (Constant), dynamic capabilities.

b. Dependent Variable: performance.

Source: Study Data, (2022).

Additional results under collinearity statistics show the model diagnostics, which implies that there is no multi-collinearity since the Tolerance value is above 0.1 while Variance Inflation Factor is less than 10, such as 1. From these findings, it appears that a one standard deviation increases in dynamic capabilities (3.369) led to a 0.364 SD unit increase in profits of commercial banks. A deeper exploration of these findings was done by multiplying the dynamic capabilities standard deviation by the performance of commercial banks' sub-scale standard deviations ($0.754 \times 0.364 = 0.2745$). This implies that if banks put more effort into dynamic capabilities, then it realizes 27 shillings for every 100 shillings, which they add towards realizing dynamic capabilities. However, normally, the percentage change in performance of commercial banks explained by dynamic capabilities results is shown in Table IV.

Table V shows moderate multiple correlations between dynamic capabilities and profitability of commercial banks ($r=0.364$). The model further shows that a 13.3% change in commercial banks' performance (R square = 0.133) is explained by dynamic capabilities. The findings are significant at 0.05, i.e., $F(1, 236) = 36.121$, $p=0.000$, implying that dynamic capabilities account for a 13% change in performance which is supported by sufficient evidence. Among the major contributors of dynamic capabilities on performance are access to various products by consumers, competitive pricing for new and existing products, and wide use of technology to simplify working processes for bank staff and processes for clients. The findings are in line with Albsher's (2014) studies on interactions of firms' innovation dynamic capabilities and information technology which revealed that innovative strategies significantly increase firm's overall innovative performance. The model equation on the findings is also presented as shown in the following equation:

$$Y = 2.051 + 0.324X$$

The above equation implies that there is some performance that is experienced without incorporating dynamic capabilities. However, dynamic capabilities improve performance.

This study has received enormous support from theoretical literature. As indicated: dynamic capabilities are not simply processes but embedded in processes that are developed over

time through complex interactions among the firm, and as noted by Makadok (2001) dynamic capabilities are built rather than bought in the marketplace. Dynamic capabilities are a firm's behavioural orientation to constantly integrate, reconfigure, renew and recreate its resources and capabilities, and most importantly, upgrade and reconstruct its core capabilities in response to the changing environment to attain and sustain competitive advantage (Teece *et al.*, 1997; Eisenhardt and Martin, 2000).

DC utilization seems to have resulted in improved performance by a significant margin as evidenced by the following empirical findings: Protogerou *et al.* (2008) suggested that DCs are qualifiers to functional capabilities which as a result, significantly affect output. This research was based on survey data from 203 Saudi firms registered at the Riyadh chamber of commerce and industry. The results suggested that innovative strategies are significant to increasing firms' overall innovative performance. The study by Osisioma *et al.* (2016) looked at DC and the performance of selected commercial banks in Awka, Anambra State, Nigeria. The findings of the study revealed a correlation between sensing capability and the performance of two commercial banks in Awka. This is also supported by studies of Gathungu and Mwangi (2012) as well as Kihara (2016) who revealed that DC have a positively and significantly influence the performance of large manufacturing firms in Kenya.

Joan Bii and Robert Onyango (2018) did a study on Moderating Effect of Dynamic Capabilities on the Relationship between Entrepreneurial Orientation and Business Performance of Small and Medium Enterprises, reviewed past literature to establish trends in the published literature on DC, entrepreneurial orientation (EO) and business performance of Small and Medium Enterprise's (SMEs). They concluded that there are mixed results in the relationship between EO and business performance, however effective integration and implementation of EO and DC would help the organization secure a competitive advantage in the face of a dynamic business environment to foster high profits.

Mwazumbo (2016) observed that there are various factors that determine performance, core amongst them being organizational resources (OR). The study revealed that OR significantly influences OP. OR has significantly influenced DC; external dynamism does not have a significant moderating influence on the relationship between

organizational resources and DC; the joint effect of organizational resources, dynamic capabilities and environmental dynamism on organizational performance is significantly different from the independent effect of each study variables.

Osisoma *et al.* (2016) concentrated on one aspect of DC which is the sensing capability and its impact on the performance of two commercial banks. In his study, Albeshier (2014) concentrated on innovative strategies, making it difficult to generalize their results. Protogerou *et al.* (2008) employed survey as the methodology, and Kihara (2016) adopted descriptive survey design. Albeshier (2014) adopted a mixed methods approach for the research design, while Osisoma *et al.* (2016) used descriptive design which is regarded as not being a better way to establish cause and effect relationship. The current study has made a major milestone towards new knowledge by investigating the effect of DC and its impact on the profits of quoted commercial banks.

VI. SUMMARY OF FINDINGS

Study's objective two sought to understand dynamic capabilities' effects on commercial banks' performance. Preliminary findings of the practice of dynamic capabilities by the banks revealed that the launching of new products and substitute products every quarter of the year were the main factors that drove dynamic capabilities. In addition, banks allowed their clients to access a wide range of products, modifying the existing products to be relevant to customers' demands. Competitive pricing for new and existing products was also employed as well as the use of technology to simplify banking processes for the clients and working processes for bank staff so as to improve their performance. Pearson product-moment correlation results revealed that the performance of commercial banks was positively associated with dynamic capabilities. Simple linear regression revealed a positive and significant effect of dynamic capabilities on the performance of commercial banks.

VII. CONCLUSIONS

From the findings in the second objective, it is evident that commercial banks constantly launched new and substitute products and practised competitive pricing for new and existing products in order to respond to the changing environment and attain sustainable competitive advantage. Additionally, the use of technology was highly adopted to facilitate the commercial banks to respond to the varying market demands and upgrade their core capabilities. These dynamic capabilities that were put into consideration had a positive and significant effect on the performance of commercial banks. The finding contradicted the null hypothesis that dynamic capabilities do not have a significant effect on the performance of commercial banks in Kenya hence rejected and the alternative hypothesis acknowledged.

VIII. RECOMMENDATIONS

From the conclusion of the second objective, it can be recommended that commercial banks in Kenya focus much on pricing competition and technology adoption to help them respond to the ever-dynamic environment and gain sustainable market competition.

REFERENCES

- Cohen, W. M., Levinthal, D. A. (1989). Innovation and learning: the two faces of R&D. *Econ. J.*, 99(397).
- Collis, D. J. (1994). Research Note: How Valuable are Organisational Capabilities? *Strategic Management Journal. Winter Special Issue*, 15(1), 143–152.
- Fincham, R., & Rhodes, P. (2005). *Principles of organizational behaviour* (5th ed.). New York: Oxtford University Press.
- Gathungu, J. M., Mwangi, J. K. (2012). Dynamic capabilities, Talent development and Firm performance. *DBA Africa Management Review*, 2(3), 83–100.
- Kihara, A. S. N. (2016). Influence of strategic contingency: Factors on performance of large manufacturing firms in Kenya. Unpublished PhD Thesis. Nairobi: Jomo Kenyatta University.
- Makadok, R. (2001). Toward a synthesis of the resource-based and dynamic-capability views of rent creation *Strategic Management Journal*, 22(5), 387–477.
- Mintzberg, H. (1979). *The structuring of organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Mwangi, J. K. (2010). Drivers of competitive advantage and performance of commercial banks in Nairobi County, Kenya. Unpublished PhD Thesis. Nairobi: Kenyatta University.
- Osisoma, H. E., Nzewi, H. N., Mgbemena, I. C. (2016). Dynamic capabilities and performance of selected commercial banks in Awka, Anambra state, Nigeria. *European Journal of Business and social sciences*, 4(10), 98–110.
- Protogerou, A., Caloghirou, Y., Lioukas S. (2008). Dynamic capabilities and their indirect impact on firm performance. *Industrial and corporate change journal*, 2, 180–183.
- Subramanian, R. & Gopalkrishna, P. (2001). The market orientation-performance relationship in the context of a developing economy: An empirical analysis. *Journal of Business Research*, 53, 1–13.
- Teece, D. J., Pisano, G., Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.