Effect of Bank Specific Characteristics, Capital Adequacy on Dividend Policy: Mediation Approach

Kibet K. Buigut[1]; Neddy Soi[2]

Abstract:

Purpose: The purpose of this paper was to establish the mediating effect of capital adequacy on relationship between firm characteristics and dividend policy. The study anchored on the buffer theory of capital adequacy.
Material/methods: This study followed positivism approach while employing longitudinal research design. Data was collected from a census of forty-three (43) commercial banks registered by Central Bank of Kenya (CBK) and Nairobi Securities Exchange (NSE). Content analysis of 10 years was conducted. Mediated approach under panel data framework was used to test the hypotheses.
Findings: The findings showed that capital adequacy partially mediate the relationship between bank ownership and leverage. This infers that with higher capital adequacy the less the bank specific variables affect dividend policy. Thus, capital adequacy might hinder or improve the effect of bank concentration ownership and leverage on dividend policy.
Theoretical and managerial implication: Based on the findings the study recommends that introduction of capital adequacy should be carefully implemented with agreement from private sector particularly banking sector. Further, the study provides a mediation framework of capital adequacy on relationship between concentration ownership, and leverage dividend policy which has been less studied in emerging economies like Kenya. Further, introduction of fixed minimum requirements for banks should be competitive to relative to other forms of intermediation.

Keywords: Leverage, Liquidity, Dividends Policy

Paper Type: Research Article

[1] *PhD Student, Department of Finance, School of Business and Economics, Moi University,*
*Email:*buigutkibet@gmail.com*; ORCID ID:* *https://orcid.org/0000-0002-2524-0997*

[2] *PhD Student, Department of Finance, School of Business and Economics, Moi University,*
*Email:*neddysoi@gmail.com

1. Introduction

Dividend policy has engaged managers since the birth of the modern commercial corporations. Surprisingly, dividend policy remains one of the most contested issues in finance. Dividend policy has captured the attention of finance scholars since the middle of the last century. They have attempted to understand several issues pertaining to dividends and formulate theories and models to explain corporate dividend behaviour. The dividend enigma has not only been an enduring issue in finance, it also remains unresolved. Allen, Bernardo and Welch (2000) have stated that although a number of theories have been put forward to explain their pervasive presence, dividends remain one of the thorniest puzzles in corporate finance.

According to Megginson et al., 2008, a firm's dividend policy refers to its choice of paying out cash to shareholders and in what pattern and size. The most obvious and important aspect of this policy is a firm's decision whether to pay a cash dividend, how large the cash dividend should be, and how frequently it should be distributed. In a broader sense, dividend policy also encompasses decisions such as whether to distribute cash to investors via share repurchases or specially designated dividends rather than regular dividends, and whether to rely on stock rather than cash distributions. Non-traditional forms of dividend payments, especially share repurchases are much more commonly used today, and so the dividend decision is much more complex and difficult than in the past. Also, there are many categories of shareholders who must be satisfied.

A firm may decrease its dividend payout and use the retained funds to expand its capacity, to pay off some of its debt or to increase investment. In this way, the firm's dividend policy is closely related with the firm's investment and financing decisions. Determining the part of earnings to be distributed as dividends is a key decision that affects the value of firm's common stock in the market place. Similarly, the retained earnings are considered to be the most convenient internal source available for financing corporate growth. Thus, every corporate firm should establish and implement an effective dividend policy that leads the firm to stockholders wealth maximization. It should be recognized that a firm's dividend payout ratio depends on many factors such as leverage, profitability, liquidity, ownership among others.

For example, A company's leverage has been analysed in the literature as an important factor for the dividend policy decisions. Rozeff (1982) argues that high leverage increase the transaction costs and the risk of the firm. Firms with high leverage ratio have high fixed payments for using external financing. Therefore the higher the leverage ratio, the lower the chance for dividend as a consequence leverage is negatively related to dividends. This result is supported by the agency cost theory of dividend policy. Liquidity condition of a firm is affected but also affects dividend decisions. Firms with higher cash availability are more likely to pay dividends than firms with insufficient level of cash. Therefore, the likelihood a firm will pay cash dividends is positively related to liquidity. This positive relationship is supported by the signaling theory of dividend policy (Ho, 2003). Profitability has been found as one of the most important determinants of dividend policy. The pecking order theory, which explains how companies prioritize their financing sources, states that firms prefer to use internal funds. When internal funds are insufficient to meet financial needs, firms turns to debt (first to risk free, then risky debt), and finally equity (Myers

1984, Myers and Majluf 1984). Myers (1984) suggests that this behavior may be due the cost of issuing new equity. This theory predicts that the relationship between profitability and leverage is negative. Firms with higher profitability generate sufficient amount of earnings and are more able to have retained earnings. Regarding the pecking order theory the firms with higher profitability, which use retain earnings as capital sources would pay less dividends

However, corporate dividend policy can be affected indirectly by some factors in firm characteristics. Obadan (2004) stated that there are other critical factors, which combined with capital adequacy, would influence divided policy in the banking sector. Capital adequacy is the level of capital necessary for a bank as determined by the regulatory and supervisory authorities to assume the banks financial health and soundness (Ejoh, 2014). Adequate capitalization is an important variable in business, and is more so in the business of using other peoples' money such as banking. According to Onoh (2002), a bank capital fund is considered adequate if it is enough to cover the banks operational expenses satisfy customers with dual needs and protect depositors against total or partial loss of deposits in the event of liquidation or loss sustained by a bank. Abreu and Mendes (2002) and Naceur (2003) agree that well capitalized banks have less need for external funding and lower bankruptcy and funding costs; and this advantage translates into profitability. According to CBN (2004) report, the quality of management influences outsider' perception of capital adequacy because, if management is good, the bank will be profitably, and efficiently operated and there will be no need to rely unduly on capital to cushion disaster; a bank carrying good quality and adequate liquid assets will not be in danger of prolonged and damaging illiquidity. Nevertheless, no empirical study has used capital adequacy as a mediator on the relationship between bank specific variables and dividend policy.

The banking industry in Kenya has grown over the years since the Central Bank of Kenya put up measures to regulate banks in order to streamline the activities and more so to prevent the collapse of the banking industry as had happened previously. Banks expand internationally by establishing subsidiaries and branches or taking over established banks. This internationalization of banking systems has been encouraged by the liberalization of international financial markets (Muthungu, 2003).

The sector's capital adequacy, which is measured by the ratio of Total Capital to Total Risk Weighted Assets, decreased from 23% in December 2012 to 21% in December 2013, but was way above the statutory minimum of 12.0%. The banking sector is expected to maintain its growth momentum supported by the rollout of full file credit information sharing, regional integration initiatives, advances in information and communications technology and the introduction of the devolved governance system in Kenya (CBK, 2013). The determinants of dividend payout in the banking industry are to a large extent complicated by regulations and insurance (Al-Malkawi, 2007). The Central Bank of Kenya has made capital adequacy a regulatory factor for banks in order to streamline their activities and more so to prevent the collapse of the banking industry as had happened before. In view of the above challenges, there is need to research and establish on the relationship between firm characteristics, capital adequacy and dividend policy. Few studies have been conducted on the determinants of dividend policy of regulated industries (Onali, 2014). Most authors proved a positive association between firm characteristics such as profitability, liquidity and the payment of dividends in different countries. Therefore, this same directional

relationship will be checked for Kenya to consider whether dividend policies in Kenyan companies are also affected positively by various bank characteristics like other countries or not. Furthermore, firm characteristics affect stability of banks in the form of capital adequacy yet there are limited studies explaining this relationship. Thus, this article determines how capital adequacy mediates the relationship between bank specific variables and dividend policy.

2. Theoretical and Literature Review

2.1. Buffer Theory

The buffer theory of Calem and Rob (1996) predicts that a bank approaching the regulatory minimum capital ratio may have an incentive to boost capital and reduce risk in order to avoid the regulatory costs triggered by a breach of the capital requirements. However, poorly capitalized banks may also be tempted to take more risk in the hope that higher expected returns will help them to increase their capital. This is one of the ways risks relating to lower capital adequacy affects banking operations. Vojta (1980) opined that adequate capital provision against excess loss permits a bank to continue operations in periods of difficulty until a normal level of earning is restored. The benchmark of bank capital set by regulators sometimes differs from those of the bankers. This has led to questions as to whether or not standards of capital adequacy set by regulators are effective. Aggressive banks may try to extend the frontiers of "imprudent management policy" by operating with less capital base, often in violation of the regulatory guidelines. But the supervisory agencies usually stand their ground by resisting decline of capital to avoid bank failure with the concomitant high cost to the society. Based on this theory the author argues that government capital regulation may affect the payout policy of banks (Rozeff, 1982; Bessler and Nohel, 1995). In other words, banks would consider cutting or omitting dividend to improve their financial strength and satisfy the government capital requirement regulation.

The study has also considered the use of the theory of portfolio regulation to gauge the performance of banks. The theory considers the regulation of banks as necessary in order to maintain safety and soundness of the banking system. In this connection it is imperative for the regulatory authorities to compel greater solvency and liquidity on individual banks than making it optional. This theory captures LAD i.e. Liquid Assets (LA)/ Bank Deposit (BD) and depicts the liquidity position of the banks. The higher this ratio, the better liquidity and solvency a bank. According to Peltzman (1970), if the asset portfolio is deemed too risky or capital inadequate, the relevant supervisory agency will attempt to compel a change.

2.2. Hypothesis Development

This section focuses on the applicable empirical proof, expansion of the study theories and operationalization of the research variables that supports determinants of dividend policy. Banks capital adequacy not only contributes to fund business but also has other important roles like bank ownership and the amount of dividend policy paid by the firm. Allen and Santomero (1999) stated that bank capital is protective security. It provides protection to shareholders and depositors against temporary loss or unexpected loss through dividend policies. Capital can serve as a tool used by a bank to provide a signal

to public about their financial profitability, and could also become a good consideration for competitors, customers, and agency as a proxy of strength or health. It is an indication of shareholder value (Jorion, 2001).

Bank's capital adequacy existence has strategic aspects related to operational sustainability, profitability and bank safety net toward risk taking and bank ownership and the amount of dividend policy. Relationship between capital and risk adjustments depend on bank retained capital exceeds minimum capital reserves (Cai and Wheale, 2009).

Strategic role of bank capital adequacy in business operations, especially as it relates to specific characteristics of banking business, influences the level of dividend policy paid out to the shareholders. Banks and other financial institutions are specialized businesses where capital structure is influenced by a number of unique conditions such as government regulation and access to government safety net which includes insured deposits and loans (Kwan, 2009). Incentive regulation imposed by rules determines a unique interaction between banks capital and their behavior (Marques and Coutinho dos Santos, 2004). In addition, a bank's operations are based on precautionary principle. Banks as financial intermediaries operationally borrow funds from one agency and then lend again to other agents. Consequently, banking institutions tend to have higher debt levels due to security and its intermediary function. Banking institutions also must operate under a strict regulatory environment that differs even among different banks. Minimum capital adequacy ratio is one important tool for regulators to maintain stability of financial system.

Starting from the seminal paper Modigliani and Miller (1958) on the irrelevance of financial structure and capital adequacy, there is extensive literature on dividend policy that has tried to shed light on the rationale behind dividend policy. La Porta et al., (2000) offer an explanation on the determinants of dividend policy based on agency theory. Fama and French (2001) found out that for firms, size, growth opportunities and profitability influence dividends. DeAngelo and DeAngelo (2006) suggest that dividend policy is determined by the need to distribute free cash flow. Ownership concentration as one of the determinants of dividend policy has been tested but normally on listed industrial firms (Goergen et al., 2005; Foerster and Sapp, 2006; Denis and Osobov, 2007; Kouki and Guizani, 2009; Ramli, 2010).

While there are studies which explore the role of banks capital adequacy in the dividend distribution decisions of firms (Gugler, 2003; Allen et al., 2009) there are few theoretical or empirical studies which focus on the determinants of bank dividends (Dickens et al., 2002; Onali, 2009).

In capital constrained industries, such as banking, dividend policy is particularly important and in addition to the normal signaling and free-cash flow distribution views other aspects might influence pay-out decisions. This includes the need to comply with regulations to reach or maintain minimum capital requirements or countercyclical allocation to reserves to build up capital base at the time of high income. Ownership concentration also probably impacts on dividend pay-out decisions since it is the shareholders' meeting which resolves upon the allocation of income to reserves and

dividend payments. Where there is a concentrated shareholder base, dividend decisions will reflect the preferences of the majority shareholders. When majority shareholders want to maintain control also new capital issues will pass only if the majority shareholder has the possibility of subscribing the new shares (Gugler, 2003). Similarly, Shehzad et al.,(2010) found out that concentrated ownership significantly increased the capital adequacy ratio. There is also anecdotal evidence that suggests the role of shareholder base in dividend pay-out and recapitalization decisions. As mentioned, the possibility of improving capital adequacy to permit more ambitious expansion strategies were among the reasons for the progressive privatization of the banking system in Italy starting from the 1990s.

According to Brogi, (2010) Ownership concentration could therefore lead to diverse attitudes to dividend distribution and the choice between reduction of risk-weighted assets or retained earnings as a means to improve capital adequacy. In addition, Dividend policy is at the crossroads between capital adequacy and corporate governance which are two of the three pillars for sound and prudent bank management (Brogi, 2010). Dividend policy is decided by the shareholders' meeting upon proposal of the Board of directors. Capital adequacy and dividend policy and corporate governance are therefore closely entwined

Brogi (2010) argues that even though capital adequacy, measured in terms of capital ratios, did not worsen, capital quality worsened as equity instruments were progressively replaced in regulatory capital by instruments less similar to capital. However, the financial crisis and the proposed changes in bank regulations that ensued seem to have changed the trend of declining capital ratios and lower quality capital base which had emerged from 2005 to 2007. Thus, the study hypothesized that:

$H_{O1:}$ *Capital adequacy has no significant mediating effect on relationship between ownership concentration and dividend policy.*

$H_{O2:}$ *Capital adequacy has no significant mediating effect on relationship between leverage ownership and dividend policy.*

Control variables

Big companies are more likely to pay dividends due to easy access to capital markets (Ho, 2003; Aivazian, Booth and Cleary, 2003). According to the agency charge theory, the widespread ownership arrangement in larger companies lessens shareholders' abilities to run financing activities, causing in more asymmetric information and higher agency charges. Al-Malkawi (2007) therefore recognizes company's size as an important factor of dividend strategy. Al-Najjar (2011) and Bokpin (2011) castoff any important effect of company size on corporate dividend strategy. However, Harada and Nguyen (2011) recognize company size as an adverse factor in the Japanese setting. Patra et al. (2012), Kuzucu (2015) and Yusof and Ismail (2016) recognize company size as a positive factor of dividend strategy.

3. Material and methods

This research adopted longitudinal research plan which involves tracking changes over time on a broad range of population members. The objective population included 43 banks under central bank of Kenya. Empirical analysis is of 10 years period from 2005 to 2015. A census approach was used, and thus the sampling frame of 43 banks from 2005-2015. Ultimately, 430 firm-year data of 43 banks were included in the sample (unbalanced panel data). An unbalanced panel is one where there are a different number of observations for each cross-section unit (or vice versa). These observations may be contiguous, or there may be holes in the data (Kwak, 2011). That is, for the example dataset, the study used seven years of data for First Community Bank (2008 to 2015) and six years for UBA Kenya Bank Limited (2009 - 2015). The data collection instrument to be used in this study was content/document analysis guide. The study was conducted using secondary sources which were achieved by analyzing the content of financial reports of 43 banks quoted in NSE and registered with Central bank of Kenya. This was suitable for this study because all the audited information about the companies will be readily available for the public as required by the company law of Kenya Act.

3.1. Measurement of Variables

According to Hussainey *et al.,* (2011), dividend payout ratio is the ratio of dividends per share to earnings per share for all available years. Salari *et al.,* (2014) also calculated dividend payout ratio by dividing dividends per share to earnings per share and the average is taken.

Ownership   was a proxy of ownership concentration and measured by the percent of shares owned by the five largest shareholders (TOP5) (Harada and Nguyen, 2011) and Khan , 2006).

Leverage (LEV) is total debt divided by book value of total assets. Since firms with higher debt are more likely to be financially constrained and should be less able to pay dividends, a negative relationship between leverage and dividend payments is expected accordingly ((Thanatawee, 2013).

Banks, capital adequacy is measured as a percentage of a bank's risk weighted exposure; also known as "capital to risk- weighted assets ratio (CAR).

$$\text{CAR is calculated as;} = \frac{\text{Tier One Capital } + \text{ Tier Two capital Risk}}{\text{Weighted Assets}} \times 100$$

Firm size (SIZE) is the logarithm of total assets. Compared with smaller firms, larger firms tends to be more mature, have higher free cash flows, and are more likely to pay higher dividends. Thus, a positive relationship between firm size and dividends is expected (Thanatawee, 2013). Firm age will be measured using firm age foundation or incorporation (Albitar, 2015).

Table 1: *Measurement of Variables*

Variables	Indicators	Measurement	References
Dependent Variables			
Dividend Payout Policy	DIV	This is the ratio of dividends per share to earnings per share for all available years	(Hussainey *et al.* 2011
Independent Variables			
Firm Characteristics			
Leverage	LEV	Total debts / total asset	Thanatawee (2013)
Ownership Concentration	OC	ownership concentration is measured by the percent of shares owned by the five largest shareholders (TOP5)	Harada and Nguyen (2011) and Khan (2006)
Mediating variable			
Capital Adequacy	CA	measure of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposures	Djankov and Murrell (2002).
Control Variables			
Firm Size	FS	Natural log of total assets	Thanatawee (2013)
Firm Age	FA	Years since incorporation	Albitar, 2015

3.2. Model Specification

Baron and Kenny's (1986) regression approach under panel data framework was used to test the hypotheses. Baron and Kenny (1986) proposed a four step approach in which several regression analyses are conducted and significance of the coefficients is examined at each step. Step 1 Conduct a simple regression analysis with X predicting Y to test for path *c* alone, *Step 2* Conduct a simple regression analysis with X predicting M to test for path *a*, *Step 3* Conduct a simple regression analysis with M predicting Y to test the significance of path *b* alone, *Step 4* Conduct a multiple regression analysis with X and M predicting Y

According to Baron and Kenny (1986) for mediation to occur a significant relationship from steps 1 – 3, led to step 4. Step 4 model, was necessary to ascertain if a full or partial mediation occurred. According to Baron and Kenny (1986) a full mediation occurs if the effect of mediating variable (CA, path c) remains significant after controlling for independent variable (for example SO). On the other hand, a partial mediation is deemed to have occurred if the relationship between the independent variable and the dependent variable is still significant after controlling for the effects of the mediating variable (that is, both SO construct and CA significantly predict DP).

4. Findings and Discussion

This section presents the results from all those procedures and analyses. The results presented here are organized under five key sections: descriptive statistics, diagnostic tests, correlation analysis, and hypothesis testing.

4.1. Descriptive Statistics

The data comprised of 42 banks observed over a period of ten years that is from the year 2006 to 2016. The findings are as presented in Table 2. Basing on the results in the table, the dividends paid out to shareholders relative to the company's net income was at a mean of 0.5965 with a maximum value of 3.87. The minimum profit level was 0.18 while the maximum was 9.4. Furthermore, leverage levels ranged between 0.2 and 31.63 with an overall mean of .083.

Table 2: *Descriptive Statistics*

	N	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
Dividend payout	499	0.00	3.87	0.60	0.55	2.14	5.96
IO	454	0.00	97.54	20.35	17.69	0.95	0.60
Lev	490	0.00	31.63	0.83	3.14	7.05	54.43
Capital adequacy	490	2.00	22.00	17.12	11.73	2.00	1.78

4.2. Diagnostic Tests

Prior to selecting which panel regression model to use, and in order to identify potential endogenous variables, some robustness tests have to be carried out, such as a normality tests, multicollinearity, unit root test, test for heteroscedasticity, autocorrelation test ad specification error test OS, LV.

In this study, Leven, Lin and Cho, and Harris-Tzavalis tests together with Fisher-type unit-root test was used to determine the presence of unit root in panel data. As shown in Table 3, the significance level is less than 5% for stationary testing of all variables, therefore, it can be implied that the research variables are stationary at a confidence level of 95%. Skewness/Kurtosis shows the number of observations which are 160 and the probability of skewness which is 0.0223 implying that skewness is not normally distributed (p-value of skewness < 0.05). However, Pr(Kurtosis) indicates that kurtosis is asymptotically distributed (p-value of kurtosis > 0.05). Finally, chi (2) is 5.29 which is greater than 0.05 meaning that the null hypothesis cannot be rejected. Therefore, according to SK test for normality, residuals show normal distribution.

For the Jarque-Bera Test, if the p-value is lower than the Chi (2) value then the null hypothesis cannot be rejected. It can, therefore, be concluded that the residuals are normally distributed. The chi (2) is 0.065 which is greater than 0.05 meaning that the null hypothesis cannot be rejected. The implication is that there is no violation of the normal distribution assumption of error terms as the residuals are coming out to be normal. Shapiro Wilk Normality test was also used to test the assumption of normality. As depicted in table 4.10, the p-values of the Shapiro-Wilk's tests are computed under the assumption that the residuals showed normal distribution. Since the p-value (0.0514) is larger than 0.05, the hypothesis of normality cannot be rejected.

The study used Breusch and Pagan Lagrangian Multiplier test to identify the presence of heteroscedasticity. The null hypothesis for the test is homoscedasticity and

alternative hypothesis suggest heteroscedasticity. Since the p values are 0.72, we accept the null hypothesis. Thus, the model does not suffer from the problem of heteroscedasticity. based on the mean VIF (1.350) and the individual VIF of the independent variables as shown in table 3, depicts no multicollinearity is present. In this study, the null implies no Autocorrelation. From the findings in table 3 showed p-value of 0.5652 hence the null hypothesis of no autocorrelation cannot be rejected at 5% level of significance.

Table 3: Diagnostic Tests

			DP	OS	LV	CA
Unit root test		Statistic-				-1.09
	Levin-Lin-Chu	Adjusted t*	-42.53	-9.97	-10.2	
	unit-root test	p-value	0.00	0.00	0.00	0.00
	Harris-Tzavalis	Rho	-0.16	-0.14	-.41	-.66
	unit-root test	p-value	0.00	0.00	0.00	.00
		Inverse chi-			101.0	69.0
	Fisher-type unit-	squared(54)	314.81	271.59	0	5
	root test	p-value	0.00	0.00	0.00	0.00
Normality	Skewness/Kurtosis	chi2(2)	5.29			
	tests	Prob>chi2	0.07			
		normality				
	Jarque-Bera	test	5.47			
	Shapiro-Wilk W test for normal data	Prob>z	0.05			
Heteroscedasticity	Breusch-Pagan / Cook-Weisberg	chi2(1)	0.13			
	test	Prob > chi2	0.72			
Multicollinearity	VIF	Mean VIF	1.35			
Autocorrelation	Wooldridge test	F(1, 18)	0.34			
	for autocorrelation	Prob > F	0.57			

4.2. Baron and Kenny Mediated Regression Model

It is necessary for mediation studies to show that the predictor variables or their constructs do have some relationships with the mediating variables (Baron & Kenny, 1986). This section provides such linkages. The study tests the mediating effect of income diversification on the relationship between intellectual capital and financial performance nexus. According to Baron and Kenny (1986), the process of testing for mediation is to estimate the indirect effect of the independent variable on the dependent variable by controlling for the mediator. They specify four steps in the measurement of a mediation effect:

Step 1: Indicate that the predictor variable is significantly associated with the outcome variable.

Step 2: Indicate that the predictor variable is significantly associated with the mediator.

Step 3: Indicate that the mediator is significantly associated with the outcome variable.

Step 4: Indicate that the mediator completely or partially mediates the relationship between the predictor variable and the outcome variable (Baron and Kenny, 1986).

Step 1 is tested through the use of a regression analysis in which the outcome measure is included as the dependent variable, and the predictor is included as the independent variable (Baron and Kenny, 1986). Statistical significance with regard to the regression coefficient would serve to indicate that there is a significant association between these two measures. If bank specific variable ($\beta1 = 0.525$, $\beta2 = 0.327$, $\beta3 = 0.105$ and $\beta4 = 0.313$) this is found to be the case, a second regression analysis is then conducted in order to test Step 2. This step is also tested variable through the use of a regression analysis, with the mediator included as the dependent variable in this analysis, and the predictor included as the independent variable. Again, statistical significance with regard to the regression coefficient associated with the predictor variable would serve to support the fact that there is a significant association between the predictor and the mediator is the case in this study (See Table 4). Step 3 and 4 would then be tested if statistical significance was in fact found. Both of these steps are tested using a single regression analysis in which the mediator and the predictor are both included as independent variables in the analysis, with the outcome variable included as the dependent variable. A comparison of the coefficients associated with the predictor variable between the first and third regression model would then serve to determine whether partial or full mediation is present.

The initial test of mediation conducted focuses specifically on Hypothesis 5a, b, c, d which hypothesizes that income diversification will mediate the effect of CO, LV on DP. In the first step of mediation, the relationship between CA and ROA was calculated.as such the step 4 Baron and Kenny's (1986) was carried out to explore whether the CA fully mediates the relationship between OC, LV and DP or only partially (although this can be deduced from the table above as the regression coefficient is substantially reduced at the final step, but remains significant), a set of multi regression analyses were conducted. In this step some form of mediation would be supported if the effect of OS and LV and DP reduces and remains significant after controlling for CA.

H_{01} *Capital adequacy does not mediate the relationship between Ownership concentration and dividend policy.*

Based on the findings in Table 4, the $\beta = 0.051$ of effect between liquidity and dividend policy reduces after mediation of capital adequacy $\beta = 0.05$ but remaining significant (p=0.00). This shows that the study reject null hypothesis and concludes that capital adequacy adversely mediate the relationship between liquidity and dividend policy.

H_{02} *Capital adequacy does not mediate the relationship between leverage and dividend policy*

According on the findings in Table 4, the $\beta = 0.431$ of effect between leverage and dividend policy reduces after mediation of capital adequacy $\beta = 0.372$ but remaining significant (p=0.00). This shows that the study reject null hypothesis and concludes that capital adequacy adversely mediate the relationship between leverage and dividend policy.

Table 4: *Baron and Kenny Mediated Regression Model*

	Path A (BSP→CA)	Path B (CA→DP)	Path C Path B (BSF→DP	Path C' (BSF→ CA→DP)
	Coef.	Coef.	Coef.	Coef.
ROA	0.525(.042)**		0.09(.023)**	0.08(.021)**
OS	0.105(.035)**		0.051(.017)**	0.05(.015)**
LV	0.313(.059)**		0.431(.035)**	0.372(.026)**
CA		0.202(.249)		(-0.039(.045)
FS	(-0.322(.088)**	0.134(.062)*	(-0.14(.069)*	(-0.239(.039)**
LS	(-0.447(.184)*	(-0.381(.14)**	(-0.146(.081)	(-0.215(.272
_cons	(-0.096(.647)	(-2.856(.435)**	(-0.87(.399)**	
sigma_u	0.13	0.16	0.14	0.07
sigma_e	0.38	0.29	0.16	0.16
Rho	0.11	0.22	0.46	0.18
R-sq: within	0.63	0.01	0.73	0.72
Between	0.57	0.36	0.82	0.88
overall	0.60	0.14	0.74	0.79
Wald chi2(7)	477.65	16.13	91.62	907.60
Prob > chi2	0.00	0.00	0.00	0.00

**p<.01. *p<.05

5. Conclusion and Recommendations

This paper describes the relationship between bank specific characteristics and dividend, the relationship with the adoption of capital adequacy. The main findings are that the entire named variable influences the dividend policy positively and to a greater extent as shown above. However, the researcher assumed that only those four factors (Ownership concentration and leverage) are the main ones that influence the dividend policy of banks in the country. Some of the findings of the study are that bank capital adequacy enhances reduces Ownership concentration and leverage.

From the established findings of this study the following recommendations are formulated. Banks and other sectors should invest in profitable with capital adequacy that will yield higher returns in the future to enhance their financial performance that will pay better dividends that will attract investments in the future. The management of the banks should ensure that adequate capital is used in projects that will yield higher profits and better financial performance and also should ensure better dividend policy are introduced to attract investors. From the research findings, there was no weighty impact of Ownership concentration on the dividend policy thus investors should not rely on the amount loans acquired to ascertain the financial stability of the firms and its dividends payout. Similarly, there was a negative impact of leverage on the dividend policy thus investors should not rely on the amount loans acquired to ascertain the dividend policy of the firms.

6. Theoretical Implication

The research findings of this study have several implications for academics and others involved in theory building. Firstly, the research data strongly argue that for dividend policy to be successful, scholars must not focus on one particular mediator, but rather consider other mediator like financial literacy etc. Secondly, this study is one kind in

emerging economies to examine the relationship between conditional effects of mediating of capital adequacy on dividend policy. This means that the presence of high capital adequacy enhances the effect on dividend policy of banks in Kenya.

References

Abdelsalam, O., El-Masry, A.,& Elsegini, S., (2008). Board composition, Ownership concentration and dividend policies in an emerging market further evidence from CASE 50. *Managerial Finance*. 12, 953-964.

Al Masum A. (2014) Dividend Policy and Its Impact on Stock Price – A Study on Commercial Banks Listed in Dhaka Stock Exchange. *Global Disclosure of Economics and Business*. 3(1)

Albitar, K. (2015). Firm Characteristics, Governance Attributes and Corporate Voluntary Disclosure: A Study of Jordanian Listed Companies. *International Business Research,*8(3).

Al-Najjar, B. (2009). Corporate governance and institutional ownership: evidence from Jordan", Corporate Governance. *The international journal of business in society*, 10(2), 176– 190.

Anil, K.,& Kapoor, S. (2008). Determinants of dividend payout ratios – a study of Indian information technology sector. *International Research Journal of Finance and Economics*, 15, 63-71.

Baker, M., &Wurgler, J. (2004).A Catering Theory of Dividends. *The Journal of Finance*, 59(3), 1125-1165.

Bancel, F., Bhattacharyya, N., & Mittoo, U. R. (2009).*Cross-Country Determinants of Payout Policy: European Firms, in Dividends and Dividend Policy*. John Wiley & Sons, Inc., Hoboken, NJ, USA

Belden, S., Fister, T. & Knapp, B. (2005). Dividends and Directors: Do Outsiders Reduce Agency Costs?. *Business and Society Review*, 110 (2), 171-180.

Bhattacharya, S. (1979).Imperfect information, dividend policy, and 'the bird in the hand' fallacy. *The Bell Journal of Economics*, 10(1), 259.

Biwott, P. K. (2011). International Trade Liberalization and Economic Growth: The Role of Regulatory Policies. *Kenya Institute for Public Policy Research and Analysis (KIPPRA).*

Black, F. (1976). The dividend puzzle. *The Journal of Portfolio Management*, 2(2), 5–8.

Brav, A., Graham, J. R., Harvey, C. R., &Michaely, R. (2005).Payout policy in the 21st century. *Journal of Financial Economics*, 77(3), 483–527.

Brealey, R. A., Myers, S. C., & Allen, F. (2006).*Principles of corporate finance*. New York, NY: McGraw-Hill/Irwin.

Breusch, T. S.,& Pagan, A. R.,(1979). A simple test for heteroskedasticity and random coefficient variation.*Econometrica,*47, 1287–1294.

DeAngelo, H., DeAngelo, L., &Skinner, D. (2004). Are dividends disappearing? Dividend concentration and the consolidation of earnings. *Journal of Financial Economics*, 72, 425–456.

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics*, 81, 227-254.

Fan, H. & Sundaresan, H. (2000). Debt Valuation, Renegotiation and Optimal Dividend Policy. *Rev. Financ. Stud.*, 13(4), 1057-1099.

Gordon M. J. (1963).Optimal investment and financial policy. *Journal of Finance*, 18(2), 264-272.

Ho, H. (2003). Dividend policies in Australia and Japan. *International Advances in Economic Research*, 9(2), 91-100.

Hsiao, C. (1986). *Analysis of panel data*. Cambridge: Cambridge University Press.

Hsiao, C. (2007). Panel data analysis—advantages and challenges. *Test*, 16(1), 1-22.

Hussainey, K., Mgbame, C. O., & Chijoke-Mgbame, A. M. (2011), Dividend policy and share price volatility: UK evidence. *The Journal of Risk Finance*, 12 (1), 57-68.

Jensen, G.R., Solberg D.P.,& Zorn T.S. (1992). Simultaneous Determination of Insider Ownership, Debt and Dividend Policies. *Journal of Financial and Quantitative Analysis.* 27, 247-263.

Khidmat, W.,& Rehman, M. (2014). Impact of Liquidity & Solvency on Profitability Chemical Sector of Pakistan. *Economics Management Innovation*, 6 (3), 3-13.

Kwak, D.O., (2011). Three essays on unbalanced panel data Models. *Unpublished Doctoral Dissertation*, Michigan State University.

Lee, S. (2008), Ownership concentration and Financial Performance: Evidence from Panel Data of South Korea. Department of Economics *Working Paper Series*

Li, K., & Zhao, X. (2008).Asymmetric information and dividend policy. *Financial Management*, 37(4), 673–694.

Lintner, J. (1962). Dividends, Earnings, Leverage, Stock Prices and the Supply of Capital to Corporations. *The Review of Economics and Statistics*, 44(3), 243.

Miko, N. U., &Kamardin, H. (2015).Ownership concentration and dividend policy of conglomerate firms in Nigeria. *Academic Journal of Interdisciplinary Studies*.

Miller, M. H., & Rock, K., (1985).Dividend Policy under Asymmetric Information. *The Journal of Finance*, *40*(4), 1031-1070.

Miller, M., & Modigliani, F. (1961).Dividend policy, growth, and the valuation of shares. *Journal of Business*, 34, 411-433.

Ofer, A. R., & Siegel, D. R. (1987). Corporate Financial Policy, Information, and Market Expectations: An Empirical Investigation of Dividends. *The Journal of Finance*, 42(4), 889.

Ongore, V.O. (2011).The relationship between Ownership concentration and firm performance: An empirical analysis of listed companies in Kenya. *African Journal of Business Management,* 5 (6), 2120-2128.

Salari, N., Abbasian, E., & Pakizeh K., (2014).Effect of Dividend Policy Measures on Stock Price volatility in Tehran Stock Exchange. *International Journal of Finance, Accounting and Economics Studies,* 2(1).

Sharma, D. K., &Wadhwa, R. (2013). Ownership concentration s and dividend policy - A study of Bombay stock exchange-500.*Global Journal of Management and Business Studies*, 3(4), 439–434.

Stouraitis, A., & Wu, L. (2004).The impact of Ownership concentration on the dividend policy of Japanese firms with free cash flow problem. Retrieved from http://www.affi.asso.fr/uploads/Externe/d0/CTR_FICHIER_114_1226315600.pdf

Thanatawee, Y. (2013). Ownership concentration and Dividend Policy*:* Evidence from Thailand. *International Journal of Economics and Finance IJEF*, 5(1).

Tsuji, C. (2010). A test of the catering theory of dividends: The case of the Japanese electric appliances industry. *Journal of Management Research, 2*(2).